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BEACH CHANGES BY WAVES

by

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ABSTRACT

Topographic changes occurring at the accretionary beach stages were examined in connection with nearshore wave and sediment dynamics. A field investigation was conducted on Naka Beach, Ibaraki Prefecture, Japan, with an interval of once or twice in a week during the period of two years from 1980 to 1982. Two dimensional wave flume experiments were also performed. This study discusses (1) condition for onshore bar-migration and the migration speed, (2) formative condition and the height of berms, and (3) condition for beach-cusp formation, extinction, and inactivation, and also the spacing of beach cusps.

The condition for onshore bar migration is found to be

$$5D/(H_b)_{\max} \leq (H_b)_{\max}/gT_{\max}^2 \leq 20D/(H_b)_{\max}$$

where $(H_b)_{\max}$ = maximum value of daily averaged breaker height during a survey period, T_{\max} = wave period of the day giving $(H_b)_{\max}$, D = grain size of beach sediment, and g = acceleration due to gravity. The average speed of onshore migrating bars, \bar{v} , can be described by

$$\bar{v} = 2 \times 10^{-11} (wD/b) (\bar{H}_b/D)^3$$

where w = fall velocity of sediment, b = bar height, and \bar{H}_b = time averaged breaker height during one survey interval.

The condition for berm formation in the laboratory is written as

$$1 \times 10^{-3} \leq H_b/gT^2 \leq 7 \times 10^{-3}$$

$$H_b/gT^2 \leq D/H_b$$

where H_b = breaker height and T = wave period, and the condition in the field is given by

$$3.5 D/\bar{H}_b \leq \bar{H}_b/g\bar{T}^2 \leq 10 D/\bar{H}_b$$

where \bar{T} = average wave period in one survey interval.

The berm height, B_h , is

$$B_h = 0.125 \bar{H}_b^{5/8} (g\bar{T}^2)^{3/8}$$

This relationship can be applied to both laboratory and field environments.

The condition for the beach cusp formation is given by

$$\bar{H}_b/g\bar{T}^2 \geq 9 D/\bar{H}_b$$

The condition for the beach cusp disappearance is shown by

$$\bar{H}_b / g \bar{T}^2 \leq 9 D / \bar{H}_b$$

Beach cusps become inactive when the following condition is fulfilled:

$$H_b^* / g \bar{T}^2 \leq 0.8 D / H_b^*$$

where H_b^* = wave height at the bar crest. Spacing of beach cusps, λ , is related to swash length, S_1 , as

$$\lambda = 1.5 S_1$$

where S_1 in the laboratory is expressed by

$$S_1 = [0.125 H_b^{21/8} (g T^2)^{3/8}] / (0.013 g D T^2 + 0.15 H_b^2)$$

and S_1 in the field is represented by

$$S_1 = 1.04 H_b^{9/8} (g T^2)^{1/8} D^{-1/4}$$

CHAPTER I

INTRODUCTION

Beach changes occur in response to the change of wave climate. Beaches are eroded by storm waves, and the beach material is transported offshore. In contrast to this process, post-storm waves gradually move the offshore-transported material to the shore and the beach is accreted and finally restored.

It has been found that the offshore-transported material by storm waves is deposited in the nearshore zone and a bar is formed (e.g., Sonu, 1968; Short, 1978, 1979). The bar gradually migrates onshore under the post-storm wave condition, and finally the bar runs up to the land and builds a berm (Sonu, 1968; Davis and Fox, 1972a,b, 1975; Hashimoto and Uda, 1977; Owens, 1977; Owens and Frobél, 1977; Short, 1978, 1979; Sasaki, 1979, 1982, etc.). While the bar migrates onshore, the change of beach and nearshore configurations occurs. A typical sequence of this change is illustrated in Fig. 1 (e.g., Short, 1978, 1979). When the bar exist at a certain distance from the shore, beach cusps are formed on the beach face, and rip channels develop across the bar (Fig. 1-(2)). As the bar approaches to the shore, beach cusps become inactive (Fig. 1-(3)). When the onshore

bar-migration still continues, the trough and the rip channels are buried and become extinct (Fig. 1-(4)); at this stage, the bar is called "welded bar" (e.g., Davis et al., 1972; Owens, 1977; Owens and Frobél, 1977; Short, 1978, 1979). A berm, which is a heap built up above high water level, is formed after the welded bar moves fully up onto the beach under favorable wave conditions (Fig. 1-(5)). At this time, beach cusps are again formed on the beach face, and the seaward edge of the beach face is characterized by a step-type topography.

Such a sequence of beach changes have recently been studied by Davis and Fox (1972a), Greenwood and Davidson-Arnott (1975), Owens (1977), Short (1978, 1979), Sasaki (1979, 1982), and many researchers have dealt with beach topographic features associated with the onshore bar-migration: bars (Evans, 1939, 1940; King and Williams, 1949; Sonu, 1968; Davis and Fox, 1972a, b, 1975; Davis et al., 1972; Greenwood and Davidson-Arnott, 1975, 1979; Kimura, 1976; Owens, 1977; Owens and Frobél, 1977; Short, 1978, 1979; Sasaki, 1979, 1982), berms (Johnson, 1919, p. 297; King, 1959, pp. 248-249; Williams, 1960, p. 108; Kemp, 1963), giant cusps (Brunn, 1955; Homma and Sonu, 1962; Mogi, 1963; Komar, 1971; Dolan, 1971), and beach cusps (Johnson, 1910; Butler, 1937; Evans, 1938, 1945; Krumbein, 1947; Mii, 1958; Mogi, 1959; Yamanouchi, 1960, 1963, 1978; Longuet-Higgins and Parkin, 1962; Russel and McIntire, 1965; Tazuke, 1970; Komar, 1973; Williams, 1973;

Dubois, 1978, 1981; Dean and Maurmeyer, 1980; Sato et al., 1981). However, all these studies were almost descriptive or qualitative. Few studies have attempted to investigate these problems on a dynamic basis.

Selecting a Pacific beach of Japan as a study area, this study purposes to discuss in connection with near-shore wave and sediment dynamics (1) condition for onshore bar-migration and the migration speed, (2) formative condition and the height of berms, and (3) conditions for beach-cusp formation, extinction, and inactivation, and also the spacing of beach cusps.

CHAPTER II

STUDY AREA

The field investigation was carried out at Naka Beach, Ibaraki Prefecture, Japan ($140^{\circ}35'E$, $36^{\circ}25'N$), facing the Pacific Ocean (Fig. 2). This beach, located between Tokai-Mura and Ajigaura, is an approximately straight, north-south oriented, open coast with a 5 km shoreline length. Behind the beach develops an upland with an altitude of about 30 m; the upland is composed of the Neogene basement (sedimentary rocks) and a sand and gravel layer overlain by volcanic ash. Sand dunes having a height of 20 to 30 m develop along the seaward boundary of the upland, located at 200 to 300 m from the shoreline. No man-made structures such as seawalls, groins, etc. have been constructed on the beach.

The source of supply of beach material is considered to be the Kuji River (Coastal Engineering Laboratory, 1972), whose mouth is located 5 km north of the northern end of this beach. The direction of long-term longshore sediment transport would be southward, but the onshore/offshore sediment transport dominates for short-term beach changes.

The beach sediment is composed of coarse sand in the northern part of the beach with a width of approximately

50 m, while of fine sand in the southern part where the beach width is 40 m on the average. The sand size is always larger in the northern area. The shoreline of the study area is stable on a long-term basis (Tanaka et al., 1973).

An outer bar is located 200 to 300 m offshore, nearly parallel to the shoreline; and water depth at the bar crest is 2 to 3 m. An inner bar only develops under certain physical conditions. As shown in Fig. 3, nearshore bottom contourlines run approximately parallel to the shoreline. The average bottom gradient to a water depth of 20 m is 0.011, and almost constant along the beach. No significant spatial difference in incident wave characteristics has been observed in the study area. Tides are mixed and have a maximum range of 1.4 m and a mean of 1 m.

Along this beach, three monitoring sites were established (Fig. 3). From the north they are named North, Central, and South sites with the first being of an alongshore length of 300 m and the other two having a length of 500 m each.

CHAPTER III

DATA ACQUISITION

1. MORPHOLOGIC DATA

At three sites shown in Fig. 3, beach monitoring was conducted during the period of two years from 28 August 1980 to 30 August 1982 with an interval of once or twice in a week. Reference stakes were installed along the shoreline on the highest part of the beach. The absolute altitude of each stake was determined by leveling based on a bench mark located near the study area. Sixteen stakes were set up at 20-m intervals at North site and eleven stakes were installed at 50-m intervals at Central and South sites (Fig. 4). Beach profiles were surveyed perpendicular to the general shoreline trend from each stake to the surf zone using a telescopic level, a surveyor's rod and tape. The survey was extended to the limit of wading; this limit is greatly controlled by wave and tidal conditions of the day. Underwater profiling was usually carried out at the time of low tide. During two years 132 survey data were obtained for each site. Based on these data, beach profiles (Appendix 1) and contoured beach maps were plotted. Long-term changes in shoreline position and volume of beach sand were also diagrammed in Appendix 2 as supplementary data.

Morphological features such as beach cusps, berms, scarps, steps, inner bars, and rip channels were observed, sketched, or measured (if necessary) at each survey time. Especially, during the term from 12 July to 7 September 1981, such observations or measurements were conducted almost every day with a special purpose of studying beach cusp development and berm formation.

2. SEDIMENT DATA

Sediment samples were collected on 23 October 1980, 5 April 1981, and 19 September 1981, from the beach face (mid-foreshore) at 200-m intervals along the shoreline of the study area. In the laboratory, they were washed, dried, and sieved; and the geometric mean diameter was obtained.

Figure 5 shows the mean diameter of all samples plotted as a function of alongshore distance from the southern end of Naka Beach for each sampling time. Although it is seen that the sediment grain size changes temporally as well as spatially, there exists a general trend that larger sediment is present in the northern part. One of the reasons for such considerable spatial fluctuation of grain-size is the presence of beach cusps. The data of 23 October 1980, 5 April 1981, and 19 September 1981 (Fig. 5) indicate that an average value for overall North site is 1.2, 0.73, and 0.34 mm, respectively. A representative sediment diameter for North site was found

to be 0.76 mm by averaging these three values. Similarly, a representative diameter was calculated to be 0.66 mm for Central site and 0.26 mm for South site.

An additional investigation on beach sediment grain size was conducted on 14 August 1981. The result will be used only for the analysis of the data on the daily reconnaissance of beach morphology carried out between 12 July and 7 September 1981. During this term, no significant temporal changes in grain size have occurred. The result of sieve analysis of the samples taken from only the three monitoring sites (three samples per one site) showed that the mean grain size was 0.34 mm for North site, 0.30 mm for Central site, and 0.28 mm for South site.

3. WAVE DATA

A wave measuring station is located at the Oarai Harbor located about 10 km south of the study area (Fig. 2). An ultrasonic-type wave gage was installed at a water depth of 21 m, about 5 km south-east of the harbor. Continual wave records of deep water significant wave height, $(H_0)_{1/3}$, and period, $T_{1/3}$, over 20 minutes for every two hours have been obtained. When this wave gage was out of order (only ten days in total during the two years), wave data recorded off the Cape Isozaki (Fig. 2) were used. The wave gage is an ultrasonic type, set up at a water depth of 30 m, about 3 km east of the cape.

Since the Cape Isozaki wave data provide us only maximum deep water wave height and period, these wave parameters were converted into significant wave parameters using the statistical relationship of $(H_0)_{\max} = 1.52(H_0)_{1/3}$ (Sato and Goda, 1972, p. 86) and assuming $T_{\max} = T_{1/3}$, where $(H_0)_{\max}$ = maximum deep water wave height and T_{\max} = maximum wave period. Daily averaged values of $(H_0)_{1/3}$ and $T_{1/3}$ will be used for this study. The wave data for the two years are plotted in Appendix 3.

CHAPTER IV

RESULTS AND DISCUSSION

1. ONSHORE MIGRATION OF INNER BARS

Storm waves transport beach material offshore causing beach erosion, and an inner bar forms. It has been found that post-storm waves gradually move the inner bar onshore, and finally build a berm on the beach. Many papers and reports have been published on the onshore bar-migration (e.g., Evans, 1939; King and Williams, 1949; Sonu, 1969; Davis and Fox, 1972a, b, 1975; Davis et al., 1972; Greenwood and Davidson-Arnott, 1975; Kimura, 1976; Owens, 1977; Owens and Frobel, 1977; Short, 1978, 1979; Sasaki, 1982). But few quantitative studies have been performed on the onshore bar-migration in connection with nearshore wave and sediment dynamics. Considering wave parameters and sediment properties, this section treats (1) a condition for onshore migration of inner bars and (2) the migration speed.

1.1 Condition for Onshore Migration of Inner Bars

According to Sonu and Russell (1965), bars begin to migrate onshore as soon as waves begin to decay. On the other hand, Davis and Fox (1975) observed offshore bar migration under stormy conditions. Such onshore or off-

shore bar-movements were also observed at Naka Beach. Figure 6 shows typical examples of onshore migration of inner bars. The bar migrates onshore with a marked slip-face. The onshore migration is brought about by onshore sediment transport, which usually causes beach accretion, as clearly shown in the lower two diagrams of Fig. 6. On the other hand, Fig. 7 shows some examples of offshore migration of inner bars. Such offshore migration is caused by offshore sediment transport, which gives rise to beach erosion as shown in Fig. 7.

Since the direction (onshore or offshore) of bar migration is closely related to the shoreline change, it may be considered that the relationship which gives the demarcation of beach erosion and accretion can be applied to that of bar migrating directions. The beach erosion-accretion relationship is given by Sunamura and Horikawa (1974) as

$$H_0/L_0 = C(\tan \bar{\beta})^{-0.27} (D/L_0)^{0.67} \quad (1)$$

where H_0 and L_0 = deep-water wave height and length, $\tan \bar{\beta}$ = average nearshore bottom slope, D = grain size of beach sediment, and C = dimensionless coefficient which demarcates beach erosion and accretion. This equation was originally derived on the basis of laboratory experiments; and the validity was checked using field data by Sunamura (1980a, b), so that it was found that

equation (1) is applicable to natural beaches, although C should take different values between laboratory and actual field environments.

Sunamura and Horikawa (1974) also proposed a relationship among breaker height, deep-water wave parameters, and nearshore bottom slope. This relationship is shown by

$$H_b/H_o = (\tan \bar{\beta})^{0.2} (H_o/L_o)^{-0.25} \quad (2)$$

where H_b = breaker height. There is the well-known relationship between deep-water wave length and wave period (e.g., Komar, 1976, p. 41):

$$L_o = 2\pi/gT^2 \quad (3)$$

where T = wave period and g = acceleration due to gravity. Using these three equations, the following equation can be derived:

$$H_b/gT^2 = KD/H_b \quad (4)$$

where K = dimensionless coefficient. In this derivation, the following approximations were used: $1.35 \approx 4/3$, $0.34 \approx 1/3$, and $0.67 \approx 2/3$. Equation (4) is basically the same as equation (1). But equation (4) is convenient to use in actual field situations, because H_b and

T can be easily measured using a surveyor's rod and stop-watch, although these measurements give only approximate values. In this study, H_b was calculated using equation (2); the calculation was based on (1) daily averaged deep-water wave parameters obtained from the wave records and (2) $\tan \bar{\beta} = 0.011$ which is averaged bottom-slope from shoreline up to a water depth of 20 m in the study area.

The measurements of the bar migration were conducted with an interval of once or twice in a week. Since temporal changes in wave climate exist even in such a short survey period, and also the topographic change is most sensitive to larger waves during this period, the following equation, instead of equation (4), will be used for the demarcation of bar migrating directions,

$$(H_b)_{\max}/gT_{\max}^2 = K_1 D/(H_b)_{\max} \quad (5)$$

where $(H_b)_{\max}$ = maximum value of daily averaged breaker height during a survey period, T_{\max} = average wave period of the day giving $(H_b)_{\max}$, and K_1 = dimensionless coefficient. This equation was obtained by substituting $(H_b)_{\max}$ and T_{\max} for H_b and T in equation (4), respectively. Using equation (5), the demarcation of bar migrating directions is plotted in Fig. 8. Kimura's (1976) data which were obtained at Tatado Beach, Shimoda, Japan are also plotted. Although some intricate zone in the data points is seen, the demarcation of migrating

direction can be described by the solid line. This line is given by

$$(H_b)_{\max}/gT_{\max}^2 = 20 D/(H_b)_{\max} \quad (6)$$

The dashed line would probably demarcate onshore migration and no migration of bars, although the data showing no-migration have not yet been obtained. The area below the dashed line indicates the predominancy of lower-energy waves, which are difficult to move bars onshore. The dashed line may be given by

$$(H_b)_{\max}/gT_{\max}^2 = 5 D/(H_b)_{\max} \quad (7)$$

Figure 8 indicates that a necessary condition for onshore bar-migration should be located in the area between the solid and the dashed lines.

1.2 Rate of Onshore Bar-Migration

Rates of onshore migration of bars have been measured at various beaches in the world; for example, a rate of 1 inch/30 min (1.2 m/day) has been reported by Evans (1939), 4 ft/hour (29.3 m/day) by Sonu (1969), 13 m/day by Sonu (1973), 9.23 cm/hour (2.2 m/day) by Hashimoto and Uda (1976), 13.7 cm/hour (3.3 m/day) by Hashimoto and Uda (1977), 0.83 to 10 m/day by Owens and Frobél (1977), 1 to 5 m/day by Fox and Davis (1978), and

4 to 5 m/day by Sasaki (1979). According to Owens and Frobel (1978), Hays (1972) stated that the size of the ridge (bar) and the rate of landward migration are given by a function of sediment grain size, nearshore gradient, wave conditions, and tidal range. However, there have been no studies which attempted to obtain a quantitative relationship between the rate of landward bar-migration and these parameters.

Figure 9 shows an onshore migrating bar. The bar is located in the right-hand side of this photo, and the trough is in the left-hand side. For such an onshore migrating bar, wave breaking always occurs over the gently seaward-sloping surface of the bar. Waves after breaking form bores which are advancing over the bar. Figure 10 is a closer look of the bores. The field observation indicates that such bores transport bar-forming material onshore across the gently sloping surface mainly in a bed-load manner, and eventually swamp the material at the steep landward edge of the bar, as is schematically illustrated in Fig. 11. This type of sediment transport and deposition on the slip face causes onshore migration of bars.

Simplifying the phenomena, the sediment dynamics near the bar crest was considered. Since the bed-load is dominant for this type of sediment transport, Shields parameter (e.g., Raudkivi, 1976, p. 22) would be useful, which is given by

$$\Psi = \tau_0 / (s-1) \rho g D \quad (8)$$

where Ψ = Shields parameter, τ_0 = bottom shear stress, $s = \rho_s / \rho$, ρ_s = sediment density, ρ = fluid density, g = gravitational acceleration, and D = sediment grain size. Shear stress, τ_0 , can be expressed by

$$\tau_0 = \frac{1}{2} f_w \rho u_o^2 \quad (9)$$

where u_o = maximum bottom velocity on the bar crest (Fig. 12) and f_w = wave friction factor. The maximum bottom velocity on the bar crest, u_o , is assumed here to be linearly related to the bottom velocity at the wave breaking point, $(u_b)_o$, (Fig. 12):

$$u_o = B (u_b)_o \quad (10)$$

where B = unknown dimensionless coefficient. Shallow-water wave approximation leads to

$$(u_b)_o = (H_b/2) \sqrt{g/h_b} \quad (11)$$

where h_b = depth of breaking (Fig. 12). The well-known breaking criterion (e.g., Komar, 1976, p. 56) is given by

$$H_b/h_b = 0.78 \quad (12)$$

Using equations (8) through (12), Shields parameter on the bar crest is obtained as

$$\Psi = 0.097 B^2 f_w H_b / (s-1) D \quad (13)$$

Part of sediment transported onshore across the bar crest is deposited on the landward steep slope. The remaining part is transported alongshore by longshore currents occurring in the trough. Denoting q_* as the depositional rate on the steep slope and q_0 as the net onshore sediment transport rate on the bar crest (Fig. 13), the following equation can be written:

$$q_* = A \cdot q_0 \quad (14)$$

where A = unknown dimensionless coefficient. This equation holds when two-dimensionality of sediment transport and of the resultant bar migration is maintained. It would be valid to further assume that the depositional area, which is shown by the hatched area in Fig. 13, can be expressed by the parallelogram in the short period of time. Then, the following relation is obtained:

$$\Delta S = b \cdot \Delta l \quad (15)$$

where ΔS = cross-sectional area, Δl = bar migration

distance, and b = bar height. Dividing both sides of this equation by the time interval, Δt , we have

$$\Delta S / \Delta t = b \cdot \Delta l / \Delta t \quad (16)$$

The left-hand side of this equation, i.e., $\Delta S / \Delta t$, should be equal to q_* which is the depositional rate, and $\Delta l / \Delta t$ in the right-hand side is the bar migration speed, which is denoted here by v . Then, the following equation can be written:

$$q_* = b \cdot v \quad (17)$$

Equations (14) and (17) lead to

$$q_0 = b \cdot v / A \quad (18)$$

Using the fall velocity of sediment, w , and sediment grain size, D , dimensionless transport rate, ϕ , is described by

$$\phi = q_0 / w D \quad (19)$$

According to the work of Madsen and Grant (1976a, b), ϕ is proportional to the third power of Shields parameter, ψ :

$$\Phi = c\Psi^3 \quad (20)$$

where c = unknown dimensionless coefficient. Using equations (13), (18), (19), and (20), we finally obtain

$$v/(wD/b) = Ac(0.097 B^2 f_w/(s-1))^3 (H_b/D)^3 \quad (21)$$

Assuming that all the coefficients involved in equation (21), i.e., A , B , c , f_w , and s , are constant, the following equation is written for the onshore migration speed of inner bars:

$$v/(wD/b) = k' (H_b/D)^3 \quad (22)$$

where $k' [= Ac(0.097 B^2 f_w/(s-1))^3]$ is an unknown constant. If sediment grain size, bar height, and breaker height are given, then the rate of onshore bar-migration can be given by equation (22). However, because of the existence of temporal changes in wave climate, instead of equation (22), the following equation will be used to examine the inner bar migration speed:

$$\bar{v}/(wD/b) = k(\bar{H}_b/D)^3 \quad (23)$$

where \bar{H}_b = time-averaged breaker height during one survey interval, \bar{v} = average speed of bar migration which can

be obtained from the beach profile records, and k = unknown constant. The bar height, b , is determined from the first beach profile of two successive surveys. The time-averaged mean grain size of foreshore sediment at each monitoring site is used for D , i.e., $D = 0.76$ mm for North site, $D = 0.66$ mm for Central site, and $D = 0.26$ mm for South site. The tidal effects have been neglected in the present analysis.

Using equation (23), the speed of onshore bar-migration was examined. Only the data which satisfy the following two conditions were used here: (1) migrating bars have strong two-dimensionality, and (2) the bar height does not significantly change on two successive beach profiles. Because equation (23) has been derived under these two conditions. Selected data (Table 1) are plotted on Fig. 14. Although some scatter in the data points is found, the average speed of onshore migrating bars can be well described by

$$\bar{v} = 2 \times 10^{-11} (wD/b) (\bar{H}_b/D)^3 \quad (24)$$

Thus, the speed of onshore migration of inner bars was formulated on the basis of nearshore sediment dynamics.

Equations (6) and (7) give respectively the upper and lower limits of the area showing onshore bar-migration (Fig. 8). The speed of onshore migrating bar is given by equation (24). Using equations (6), (7), and

(24), nomographs for the speed of onshore migrating bar can be plotted: Figs. 15, 16, and 17 are the nomographs for beaches with a sediment grain size of 0.2, 0.4, and 0.8 mm, respectively. These graphs were constructed for bars having a height of 0.5 and 1 m.

Assume, for example, that waves having a breaker height of 2 m and a wave period of 10 sec act on a beach composed of 0.4-mm sand. On Fig. 16, an intersecting point of two lines, i.e., $H_b = 2$ m and $T = 10$ sec, is located near the line showing 5 m/day for an 1-m bar height case or 10 m/day for an 0.5-m case. Namely, under such wave and sediment conditions, the average speed of onshore bar-migration is estimated at 5 m/day if the bar height is 1 m, or 10 m/day if the bar height is 0.5 m.

2. FORMATION AND HEIGHT OF BERMS

Due to post-storm wave action, an inner bar gradually migrates onshore, and finally the bar welds onto the beach and a berm is formed if a favorable wave condition continues. A berm is one of typical depositional landforms on sandy or shingle beaches. This landform has attracted the attention of many researchers (Johnson, 1919, p. 297; Bagnold, 1941; Savage, 1959; King, 1959, pp. 248-249; Williams, 1960, p. 108; Kemp, 1963; Sunamura, 1975; Komar, 1976, pp. 308-309). But there have been only a few quantitative studies. Kemp (1963) investigated

the height of berms formed on a British beach and found that the berm height is linealy related to a breaker height. It is questionable whether or not Kemp's finding can be applied to another beach. Sunamura (1975) examined a condition for berm formation in a wave flume environment and obtained an empirical relation giving the height of laboratory berms. No studies have been performed concerning a condition for berm formation in natural environments. This suggests that a further research on berm problems should be needed. The purpose of this section is to (1) elucidate a condition for the formation of berms, and (2) obtain a quantitative relation between a berm height and nearshore wave dynamics. These two points were examined on the basis of laboratory experiments and field surveys.

2.1 Laboratory Experiments

In order to understand the phenomena of berm formation, laboratory experiments have been made using a two-dimensional wave flume at the Environmental Research Center, University of Tsukuba. A grass-walled wave flume, equipped with a flap-type wave maker, was 21 m long, 0.5 m wide, and 0.7 m deep. An initial beach slope was uniform with a gradient of 1/10, and water depth at the horizontal part was 0.4 m. Three kinds of well-sorted sands, that is (1) mean grain size, D , = 1.3 mm (standard deviation, σ , = 0.22 mm), (2) D = 0.69 mm (σ = 0.15 mm), and (3) D = 0.22

mm ($\sigma = 0.04$ mm), were used for beach material. Four kinds of wave period ($T = 0.8, 1.0, 1.5,$ and 2.0 sec) were selected, and breaker height was ranged from 3 to 17.5 cm. Changing a combination of grain size of beach material, wave period, and breaker height, 62 runs were conducted (Table 2). A duration of wave action was one hour for each experiment. After wave action, beach profile was measured at the center of the beach.

Beach profiles were largely classified into three types (Fig. 18). Type-I berm has a sand pile above the water level and a bar is just located bellow the wave breaking point; and a shoreline tends to recede. Sunamura (1975) has pointed out the berm of this type is not stable, because the berm would be eroded away due to the shoreline recession if wave action continues longer. Type-II berm is of a typical depositional feature with a prograding shoreline. This type of berm is formed by notable onshore sediment transport. A marked step develops just bellow the water level. The berm is stable (Sunamura, 1975), because it attains an equilibrium state in 20 to 30 minutes after wave action. Type-III topography has neither a berm nor a bar, with little shoreline change. Only two minor beach changes on the initial beach slope were observed: (1) a small heap built up above the water level which may be considered as some sort of a swash mark (Bascom, 1964, pp. 205-206; Komar, 1976, pp. 363-365), and (2) a small step formed at

a place where uprush collides with backwash.

Because the formation of the stable berm (Type II) is closely related to the shoreline advance as just mentioned, it would be reasonable to explain the formative condition of berms in connection with the shoreline change. The relationship giving a demarcation between eroding and accreting beaches has been already derived (equation (4)). Using two nondimensional quantities, H_b/gT^2 and D/H_b , involved in equation (4), laboratory data (Table 2) are plotted in Fig. 19. The result shows that stable berm (Type II) appears when the following condition is satisfied:

$$\left. \begin{array}{l} 1 \times 10^{-3} \lesssim H_b/gT^2 \lesssim 7 \times 10^{-3} \\ H_b/gT^2 \lesssim D/H_b \end{array} \right\} \quad (25)$$

Kemp (1963) has found in the field that the maximum berm height is proportional to the maximum breaker height. Since berms are formed by swashes, the berm height should have a direct relationship with wave runup mechanism rather than breaker height, as Savage (1959) has pointed out in his laboratory experiment.

According to Hunt (1959), wave runup height, R , is given as follows:

$$R/H_0 = a(H_0/L_0)^{-0.5} \quad (26)$$

where a = nondimensional constant, called a reduction factor. Komar and Gaughan (1973) has given breaker height as

$$H_b/H_o = 0.563(H_o/L_o)^{-0.2} \quad (27)$$

Assuming that berm height, B_h , is proportional to wave runup height, that is:

$$B_h \sim R \quad (28)$$

the following equation can be derived from equations (3), (26), (27), and (28):

$$B_h \sim H_b^{5/8} (gT^2)^{3/8} \quad (29)$$

The data of stable berm height obtained from the present laboratory study are plotted against the parameter, $H_b^{5/8} (gT^2)^{3/8}$, on Fig. 20 where the previous available data are also plotted. All the data used here satisfy equation (25) which is the necessary condition for the stable berm formation. Figure 20 shows that stable berm height is given by the line:

$$B_h = 0.125 H_b^{5/8} (gT^2)^{3/8} \quad (30)$$

Namely, the berm height is given by a function of breaker height and wave period, independent of grain size of beach material.

2.2 Formation and Height of Berms in the Field

Field observations indicate that, under favorable wave conditions, berms are formed in one or two days. Such quick berm formation requires continual daily measurements, which were carried out during the period of about two months from 12 July to 7 September 1981.

Bars gradually migrate onshore under post-storm wave conditions and eventually weld onto the beach as schematically shown in the upper diagram on Fig. 21. A bar at this stage is called 'a welded bar' (Davis et al., 1972; Short, 1979). Due to wave conditions after this stage, three types of topographic changes occur: (1) the welded bar is eroded away and a new bar is formed offshore in the nearshore zone as a result of the action of waves with high energy (Fig. 21-(1)), (2) waves having moderate energy move the welded bar fully up onto the beach face, and form a berm (Fig. 21-(2)), and (3) the welded bar does not change its shape due to extremely small wave energy (Fig. 21-(3)).

Delimitation for these three types of topographic changes was examined by using the parameters, H_b/gT^2 and D/H_b , in equation (4). Since wave climate changes even in one or two days, however, the average breaker height, \bar{H}_b , and wave period, \bar{T} , through each survey interval were used as a substitute for H_b and T , respectively. Therefore, $\bar{H}_b/g\bar{T}^2$ and D/\bar{H}_b were the parameters to be

applied for this demarcation study. The result is shown in Fig. 22, which indicates that a condition for berm formation in the field (for the case shown in Fig. 21-(2)) is given by

$$3.5 D/\bar{H}_b \lesssim \bar{H}_b/g\bar{T}^2 \lesssim 10 D/\bar{H}_b \quad (31)$$

By substituting \bar{H}_b and \bar{T} for H_b and T in equation (30) respectively, the data of berm height in the field are plotted against the quantity, $\bar{H}_b^{5/8}(g\bar{T}^2)^{3/8}$, as shown in Fig. 23. The data used here were obtained from Naka Beach (present study, Table 3), Tatado Beach, Shimoda, Japan (Kimura, 1976), and Tamada Beach, Kashima, Japan (Sasaki, 1982). Since it can be regarded as $\bar{H}_b = H$ and $\bar{T} = T$ in a wave-flume environment, the laboratory data of Fig. 20 are also plotted in Fig. 23, together with the data of prototype experiments using a wave flume 205 m long, 3.4 m wide, and 6.0 m deep (Kashima et al., 1981). The result (Fig. 23) indicates that the berm height is given by the following relation:

$$B_h = 0.125 \bar{H}_b^{5/8} (g\bar{T}^2)^{3/8} \quad (32)$$

It should be noted that this equation can be applied not only to laboratory and prototype-experiment environments but also to actual field situations. Effects of tidal ranges upon the berm height would probably exist, but

the examination of the tidal effects was not possible in the present field study. Equation (32) should be used for micro-tidal (less than 2 m) or non-tidal environments.

3. FORMATION AND SPACING OF BEACH CUSPS

Crescentic shoreline landforms are common in coastal area composed of unconsolidated sediment. The cusped features are classified, according mainly to their along-shore length of periodicity, into beach cusps, storm cusps, and giant cusps. Beach cusps are the most common to be observed of all, and have been intensively studied by many researchers. Classical studies were summarized by Johnson (1910). After his work, the formation, morphology, and sedimentary processes have been examined on actual coasts (e.g., Krumbein, 1947; Mii, 1958; Yamanouchi, 1960, 1963, 1978; Longuet-Higgins and Parkin, 1962; Tazuke, 1970; Williams, 1973; Tamai, 1976, 1980; Dean and Maurmeyer, 1980), on lake beaches (e.g., Butler, 1937; Evans, 1938, 1945; Komar, 1973), and in the laboratory (e.g., Fleming, 1964; Gorycki, 1973; Tamai, 1974, 1975, 1977, 1980; Sunamura et al., 1977; Ann, 1979). Many of them, however, were descriptive or qualitative, and there have been only a few studies which attempted to quantitatively explore beach-cusp problems in connection with wave characteristics and sediment properties (e.g., Tamai, 1980; Guza and Bowen, 1981; Dean and Maurmeyer, 1980). Especially, no studies have been

performed concerning quantitative conditions for the formation and disappearance of beach cusps on natural beaches. Although the spacing of beach cusps has been discussed in connection with breaker height, edge waves, and swash length, no generally accepted explanations have been given. The present study attempts to investigate conditions for the beach-cusp formation, inactivation, and extinction based on the data obtained by the successive field surveys, and to explain a physical process controlling the beach cusp spacing based on the field and laboratory data.

3.1 Condition for Formation and Extinction of Beach Cusps

Johnson (1910) and Evans (1938) explained that beach cusps were formed by the differential erosion occurring in bays (located between two adjacent apexes), while Kuenen (1945) described that cusp horns were created by the accumulation of material which was transported from bay parts. Recently, however, precise field surveys of Sato et al. (1980) revealed that not only apexes but also bays were of depositional features when beach cusps were formed. It has also been reported that the formation of beach cusps was closely related to the formation of a berm (Russel and McIntire, 1965; Dubois, 1978, 1981).

Daily observations on beach cusps were conducted at Naka Beach during the period from 12 July to 7 September

1981. As described in 2 of Chapter III, mean grain size of beach material during this period was 0.34, 0.30, and 0.28 mm for North, Central, and South sites, respectively. It was found that beach cusps appeared at only two stages: (1) when berm-like sand humps were built up on the fore-shore during the inner bar migrates onshore, and (2) when the berm formation has completed after the onshore movement of welded bar. The field survey showed that the shoreline advance took place when beach cusps were formed. This fact suggests that equation (4) which gives the demarcation of shoreline erosion and accretion would be usefull to obtain a condition for beach cusp formation.

Time-averaged breaker height, \bar{H}_b , and wave period, \bar{T} , were substituted for H_b and T in equation (4), respectively. Using two parameters, $\bar{H}_b/g\bar{T}^2$ and D/\bar{H}_b , a condition under which beach cusps are formed or not was investigated on the basis of the data obtained from three sites on Naka Beach (Fig. 24). In this figure, open symbols denoted that beach cusps developed. Although some intricate zone in the data points is found, two areas are well separated by the straight line. Beach cusps are formed when the following condition is satisfied:

$$\bar{H}_b/g\bar{T}^2 \lesssim 9 D/\bar{H}_b \quad (33)$$

Figure 24 also shows that only one data point showing "nonoccurrence" of cusps (North-site data) is plotted

in the central part of "cusp occurrence" area. The reason for this will be explained later.

Russel and McIntire (1965) stated that beach cusps were commonly erased during transitions from summer- to winter-beach conditions. This strongly suggests that the disappearance of beach cusps is closely related to beach erosion. Actually, it was found at Naka Beach that the shoreline recession occurred whenever beach cusps disappeared. The two parameters, $\bar{H}_b/g\bar{T}^2$ and D/\bar{H}_b , were used again for the examination of condition for beach cusp extinction (Fig. 25). In this figure, open symbols indicate that beach cusps were not present. The condition of the beach cusp disappearance is given by

$$\bar{H}_b/g\bar{T}^2 \geq 9 D/\bar{H}_b \quad (34)$$

3.2 Condition for Inactivation of Beach Cusps

The field observation indicated that, under certain conditions, beach cusps become inactive in spite of the condition of cusp formation (equation (33)) being satisfied. Such inactive beach cusps were found when the inner bar is located very closely to the beach or almost welded onto the beach. In either case, a wide flat portion is formed in front of the beach (Fig. 26). Inactive cusps were observed at North site on 31 August 1981. This data was plotted on Fig. 24 with a solid

square symbol in the central part of "cusp occurrence" area.

Beach profile at this stage is schematically shown in Fig. 27. As the inner bar approaches closer to the beach, the trough becomes narrower and shallower, and the water depth over the bar crest becomes smaller. Waves, broken over the offshore slope of the inner bar, advance forming bores over the shallow and flattened bar crest, and finally reach to the beach. Waves lose too much energy due mainly to turbulence and bottom friction during this wave advance, to form beach cusps or to keep them active.

In order to determine a condition for beach cusp inactivation, it would be reasonable to use wave height over the bar crest rather than the first breaker height which has been used so far, because wave height attenuation greatly occurs inside surf zone. Wave height at the bar crest, H_b^* (Fig. 27), can be related to water depth at the bar crest, h_c , similar to equation (12):

$$H_b^* = 0.78 h_c \quad (35)$$

Substituting H_b^* for H_b in equation (4), a condition for beach cusp inactivation was obtained (Fig. 28). Because only one data was obtained during the period from 12 July to 7 September 1981, the data acquired in other periods than this were also used for plotting of Fig. 28. The result shows that beach cusps become inactive when

the following condition is fulfilled:

$$H_b^* / gT^2 \lesssim 0.8 D/H_b^* \quad (36)$$

3.3 Spacing of Beach Cusps

The spacing of beach cusps is one of the most interesting problems to coastal geomorphologists, sedimentologists, and coastal engineers, and many studies have been conducted on this problem and multiple assumptions or explanations have been proposed.

Johnson (1910) described that the cusp spacing has a direct relation to the height of breaking waves, and recently Yamanouchi (1960, 1963, 1978) confirmed this relationship using his own field data. On the other hand, Williams (1973) denied the cusp spacing vs. breaker height relationship. Spacing of beach cusps, λ , was plotted against breaker height, H_b , on Fig. 29 using available field and laboratory data. Although some positive correlation between λ and H_b is found, the result is not satisfactory. Especially, a tendency of laboratory data is different from that of field data.

Recent investigations have emphasized the role of edge waves, i.e., cusp spacing can be determined by the wavelength of edge waves (Komar, 1973, 1976; Guza and Inman, 1975; Huntley and Bowen, 1978; Sallenger, 1979; Guza and Bowen, 1981). But Longuet-Higgins and Parkin

(1962) and Dean and Maurmeyer (1980) have cast doubt on this idea.

Generally, the beach cusp spacing is compared with the wavelength of zero-mode edge waves. This wavelength, L_e , is given by

$$L_e = (gT_e^2/2\pi)\sin\alpha \quad (37)$$

where T_e = edge wave period and α = beach slope. Figure 30 shows the relationship between cusp spacing, λ , and wavelength of synchronous edge waves ($T_e = T$), L_e . As shown in this figure, λ is generally larger than L_e , and the correlation between λ and L_e is not good. The case of subharmonic edge waves ($T_e = 2T$) is shown in Fig. 31; λ is smaller than L_e in general. The correlation between the two is poor similar to Fig. 30.

In order to examine the relationship between cusp spacing and wavelength of edge waves, a laboratory study was performed using a wave flume (21 m long, 0.5 m wide, and 0.7 m deep) equipped with a flap-type wave maker. A model beach made of well-sorted sand (mean diameter = 0.69 mm and its standard deviation = 0.15 mm) was built with a uniform gradient of 1/10. Keeping wave period constant, i.e., $T = 1.0$ sec, two cases of experiments were conducted with different breaker height, i.e., $H_b = 2.0$ and 4.2 cm. Duration of wave action was one hour for each case. As shown in equation (37), if

α (beach slope), is constant, L_e (wavelength of edge waves) is given by a function of T_e (edge wave period) which is uniquely determined by T (wave period). Since α and T are kept constant in the present experiment, both cases should have the same value of L_e , i.e., $L_e = 16$ cm for synchronous edge waves and $L_e = 62$ cm for subharmonic edge waves. Actually, beach cusps with a spacing of 20 cm and 34 cm were formed in the cases of $H_b = 2.0$ cm and 4.2 cm, respectively. These results are plotted on Figs. 30 and 31 by solid square symbols with arrows. The data points on the left of the arrow indicate L_e calculated using the value of the initial beach slope, while those on the right of the arrow denote L_e estimated from the final foreshore slope ($1/4.55$ and $1/4.76$ for the cases of $H_b = 2.0$ cm and 4.2 cm, respectively).

The present experiments conducted with the same wave period clearly showed that the cusp spacings varied between two cases with different breaker heights. Similar phenomena have been observed in a three-dimensional wave basin test (Sunamura et al., 1977). Judging from (1) the result of these laboratory experiments and (2) scatter in the data points seen in Figs. 30 and 31, it would be adventurous to relate the cusp spacing solely to the wavelength of edge waves.

Longuet-Higgins and Parkin (1962), Williams (1973), and Dean and Maurmeyer (1980) have discussed the relationship between cusp spacing, λ , and swash length, S_1 ;

S_1 is given by the distance between the final breaking point and the maximum point of swash runup. Using available data of actually measured swash length, the relationship between λ and S_1 is plotted on Fig. 32. The degree of scatter in the data points is much smaller as compared with Figs. 29, 30, and 31. This suggests that λ has a close relationship to S_1 . However, the number of directly measured data of S_1 is limited and not enough to establish a generalized relationship. For this purpose, estimation of S_1 will be made first using the data of waves and beach material size. Next, the λ vs. S_1 relationship will be again investigated using the data of S_1 thus estimated.

As previously stated, beach cusps develop when berms or berm-like sand humps appear. The maximum elevation of beach cusps is determined by the maximum height of swash runup as mentioned by Dubois (1981). On cusp developing beaches (Fig. 33), a swash length, S_1 , is given by

$$S_1 = B_h / \sin \alpha \quad (38)$$

where B_h = berm height and α = beach slope. The quantity, B_h , has been given by equation (32), which can be used both in the field and in the laboratory. According to Sunamura (in preparation), beach slope, $\tan \alpha$, for the field is given by

$$\tan \alpha = 0.12 / (H_b / g^{0.5} D^{0.5} T)^{0.5} \quad (39)$$

and $\tan \alpha$ for laboratory beaches is given as follows:

$$\tan \alpha = [0.013 / (H_b / g^{0.5} D^{0.5} T)^2] + 0.15 \quad (40)$$

Since α is small,

$$\sin \alpha \approx \tan \alpha \quad (41)$$

Using equations (32), (38), (39), and (41), S_1 for the field is expressed by

$$S_1 = 1.04 H_b^{9/8} (gT^2)^{1/8} D^{-1/4} \quad (42)$$

Similarly, using equations (32), (38), (40), and (41) S_1 for the laboratory is given by

$$S_1 = [0.125 H_b^{21/8} (gT^2)^{3/8}] / (0.013 gDT^2 + 0.15 H_b^2) \quad (43)$$

Figure 34 shows the relationship between λ and S_1 ; all the data of S_1 are obtained using equations (42) or (43). Although some scatter in the data points is seen, λ has a better correlation with S_1 than H_b or L_e . This relationship can be expressed by the line:

$$\lambda = 1.5 S_1 \quad (44)$$

This equation can be applied to the laboratory as well as to the field. Equations (42), (43), and (44) show that the spacing of beach cusps can be described by breaker height, wave period, and grain size of beach material.

CHAPTER V

CONCLUSIONS

Beach changes were investigated in connection with nearshore wave and sediment dynamics. This investigation included the following studies: (1) condition for onshore bar-migration and the migration speed, (2) formative condition and the height of berms, and (3) conditions for beach-cusp formation, extinction, and inactivation, and the spacing of beach cusps. The beach monitoring was conducted at Naka Beach of Japan facing the Pacific Ocean with an interval of once or twice in a week during the period of two years from 28 August 1980 to 30 August 1982. Continual wave records were used for the data analyses. The wave flume experiments were also performed.

The conclusions are as follows:

(1) Demarcation of migrating directions of inner bars is shown in Fig. 8, on which a necessary condition for onshore bar-migration should be located in the area between the solid line (equation (6)) and the dashed line (equation (7)). The average onshore bar-migration speed is given by equation (24), which is a function of wave breaker height, grain size and fall velocity of beach material, and bar height.

(2) A condition for berm formation is expressed by equation (25) for the laboratory and equation (31) for the field. A berm height is given by equation (32), which is a function of breaker height and wave period, independent of grain size of beach material. This relation can be applied both to laboratory and to field environments.

(3) Conditions for beach-cusp formation and extinction are given by equations (33) and (34), respectively. Beach cusps become inactive when the inner bar is located very closely to the shore; a condition for the cusp inactivation is described by equation (36). Considering swash length (equation (42) for the field and equation (43) for the laboratory), the spacing of beach cusps was found to be given by equation (44) both for the laboratory and for the field.

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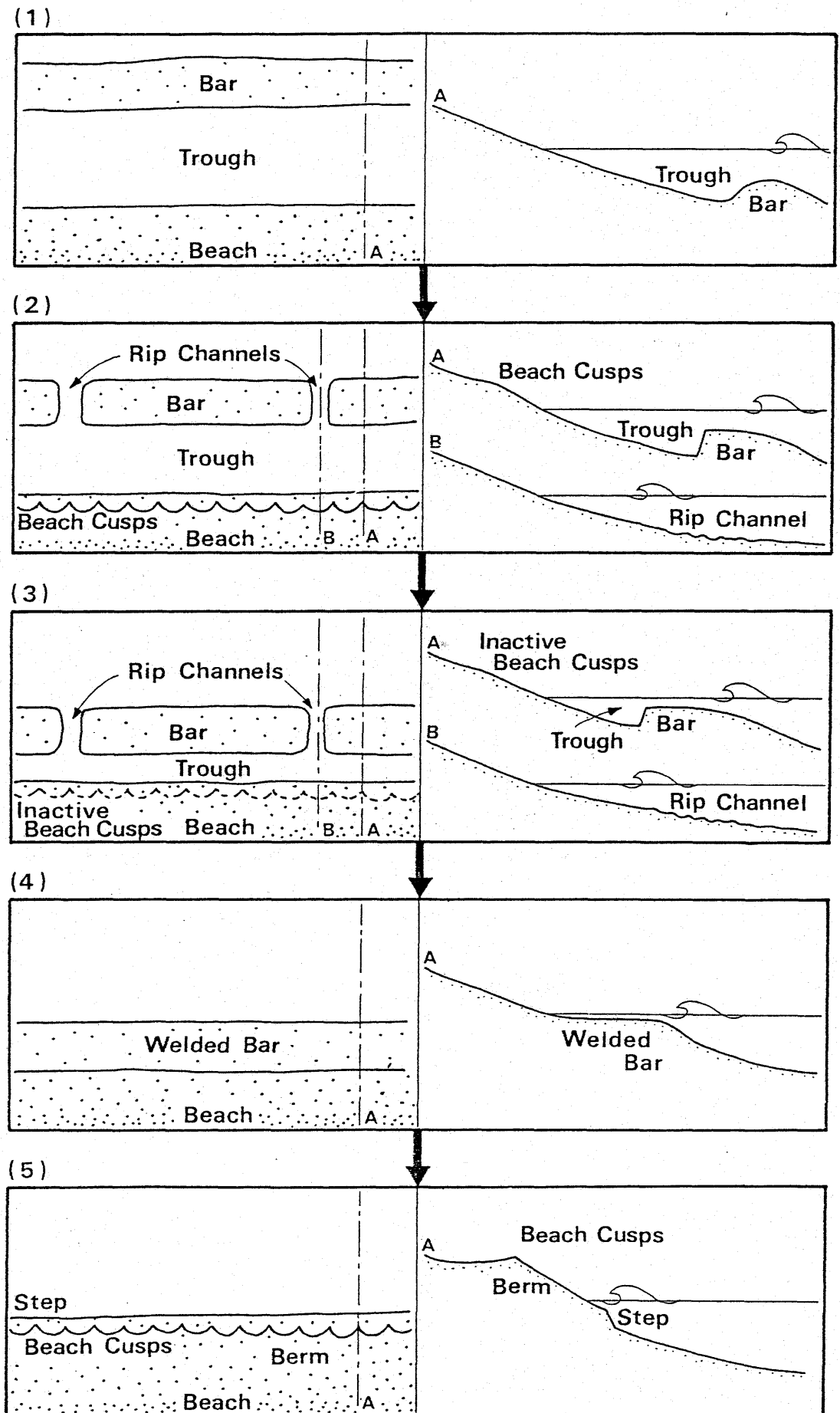


Figure 1. Three-dimensional beach change model
(modified from Short, 1979; Sasaki, 1982).

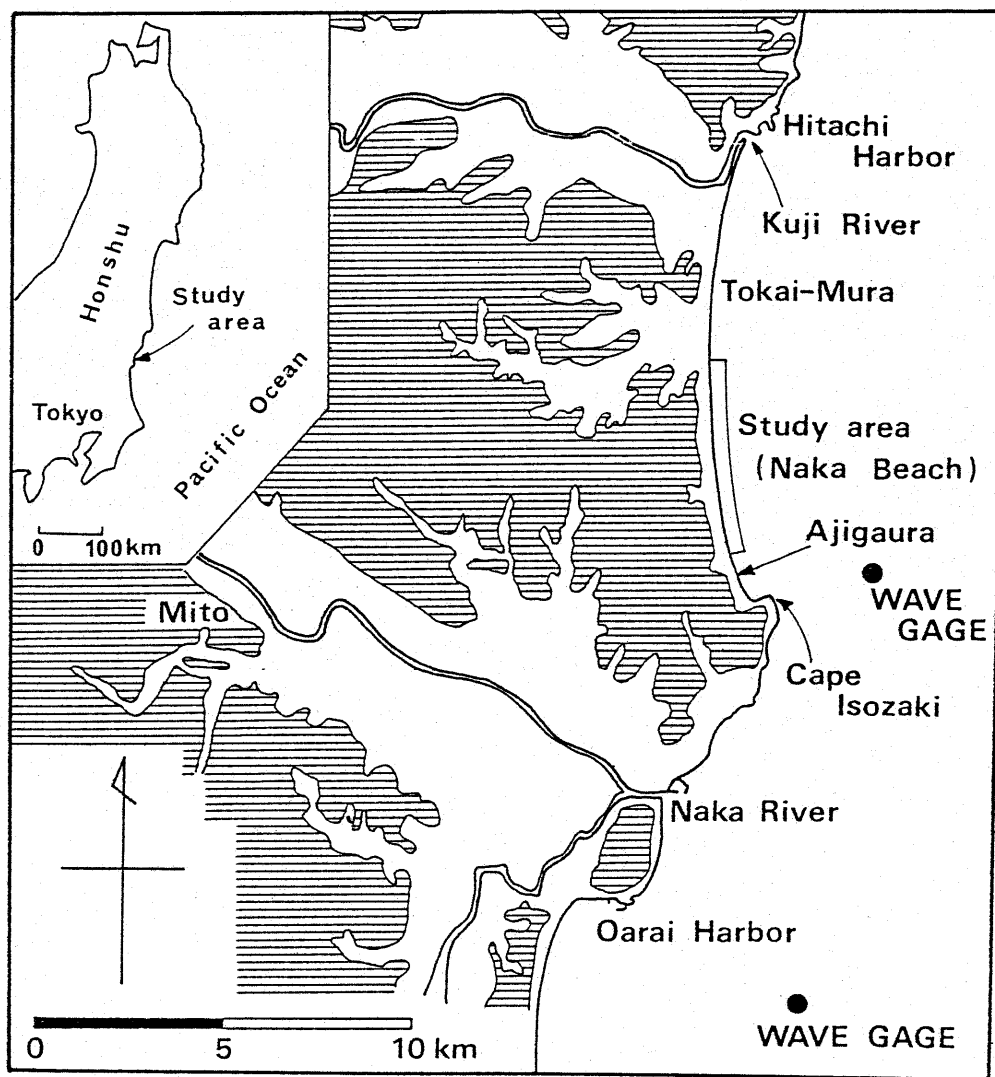


Figure 2. Study area (Naka Beach).

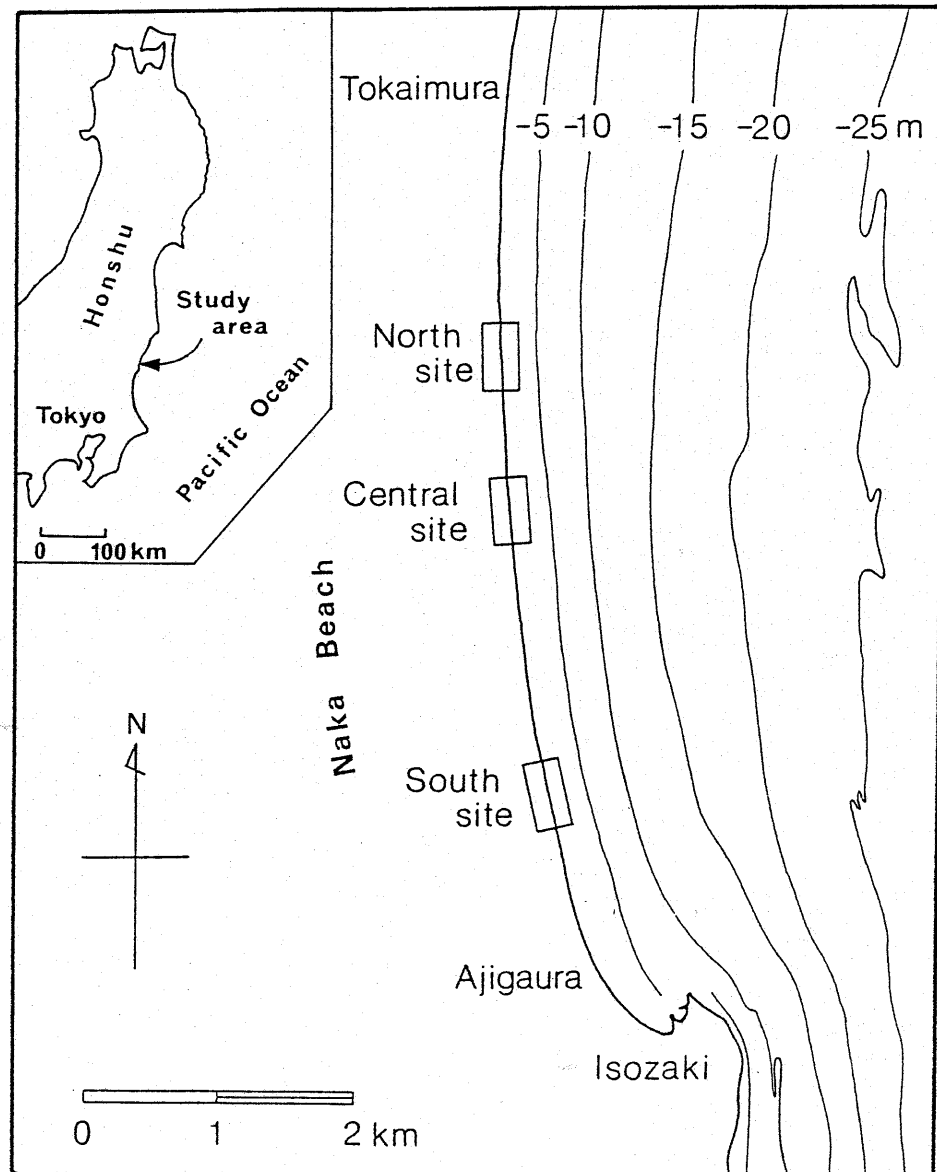


Figure 3. Study area and monitoring sites.

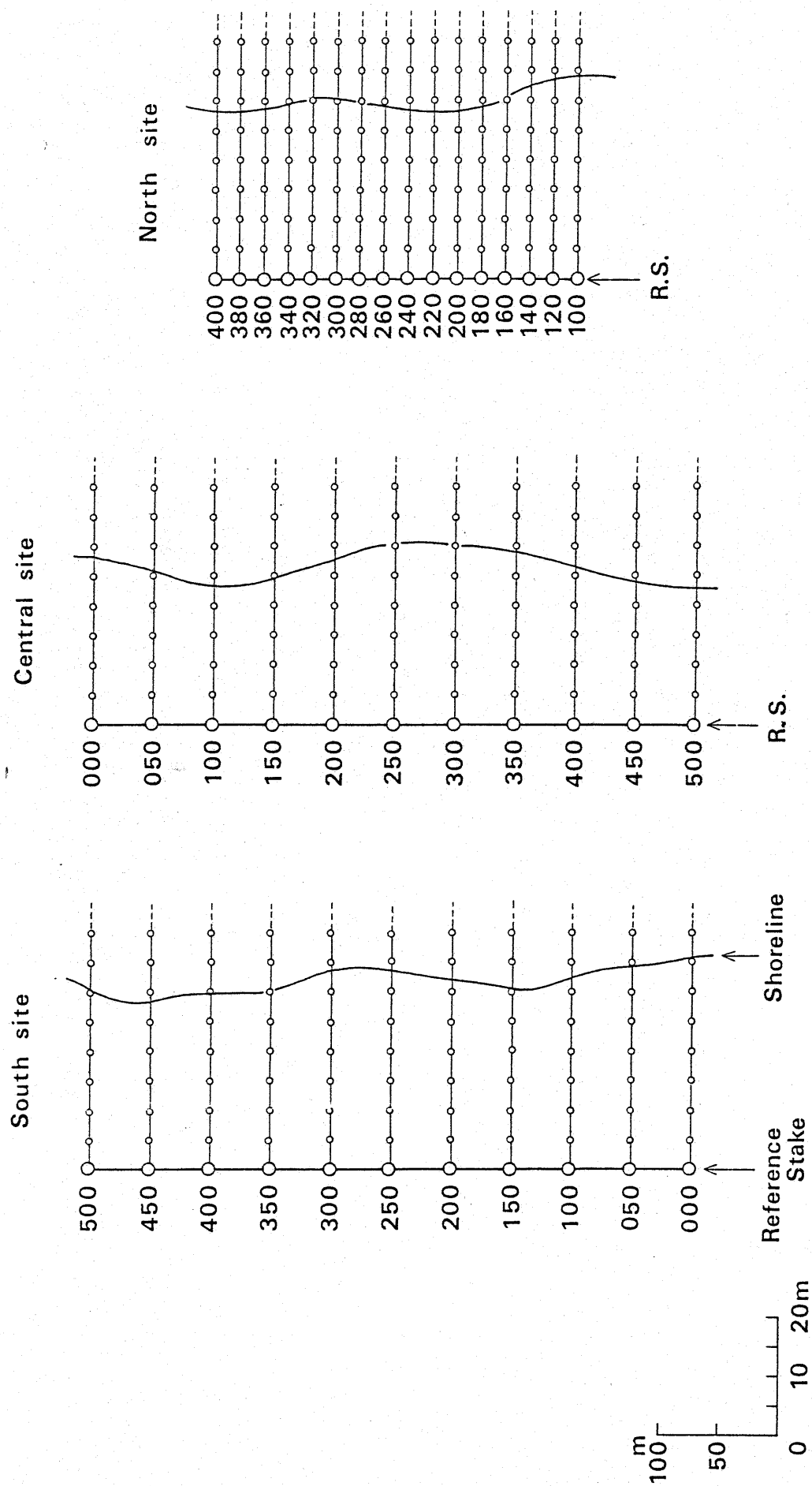


Figure 4. Survey area for each monitoring site.

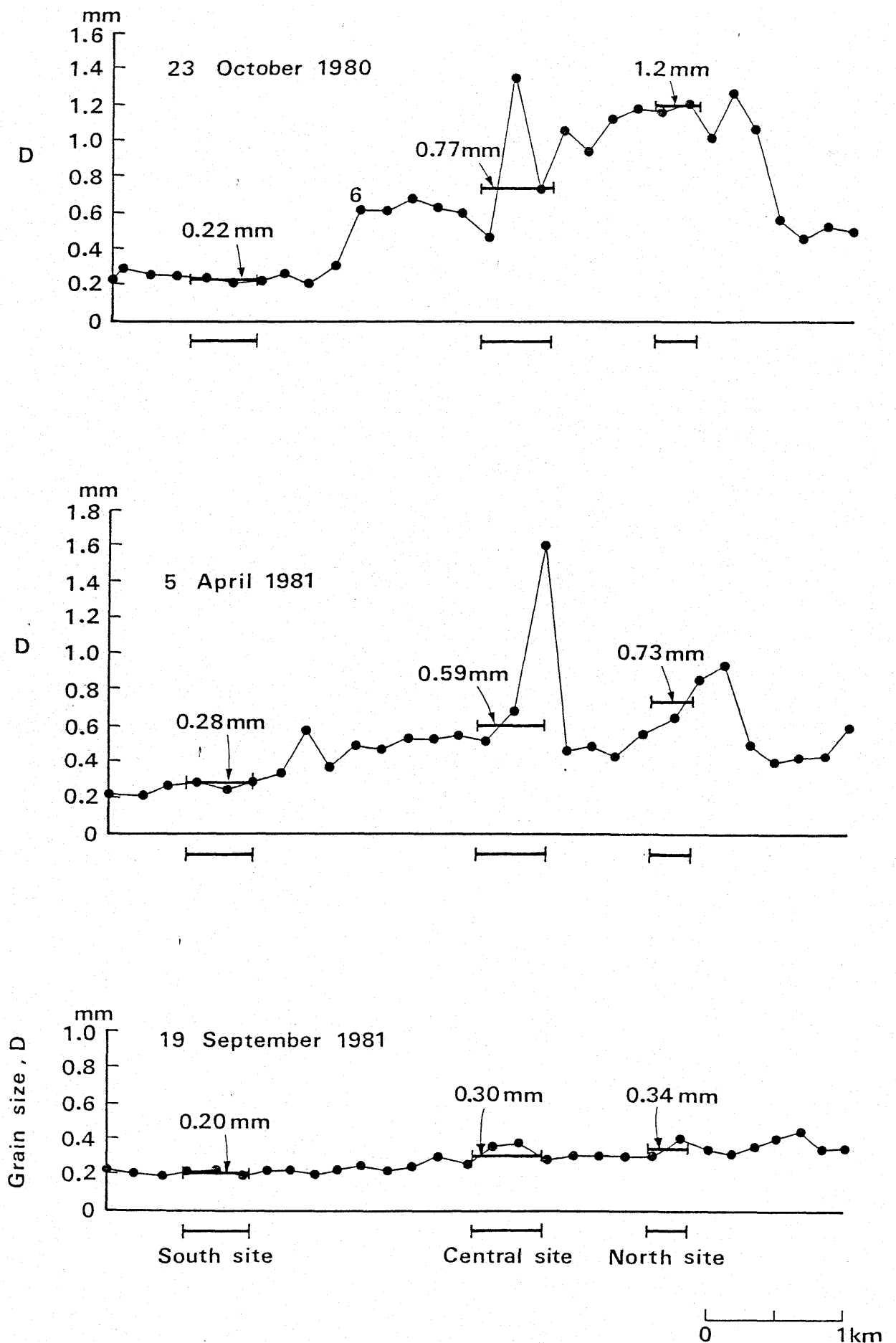


Figure 5. Sediment grain size on Naka Beach
at three different times.

Onshore migration

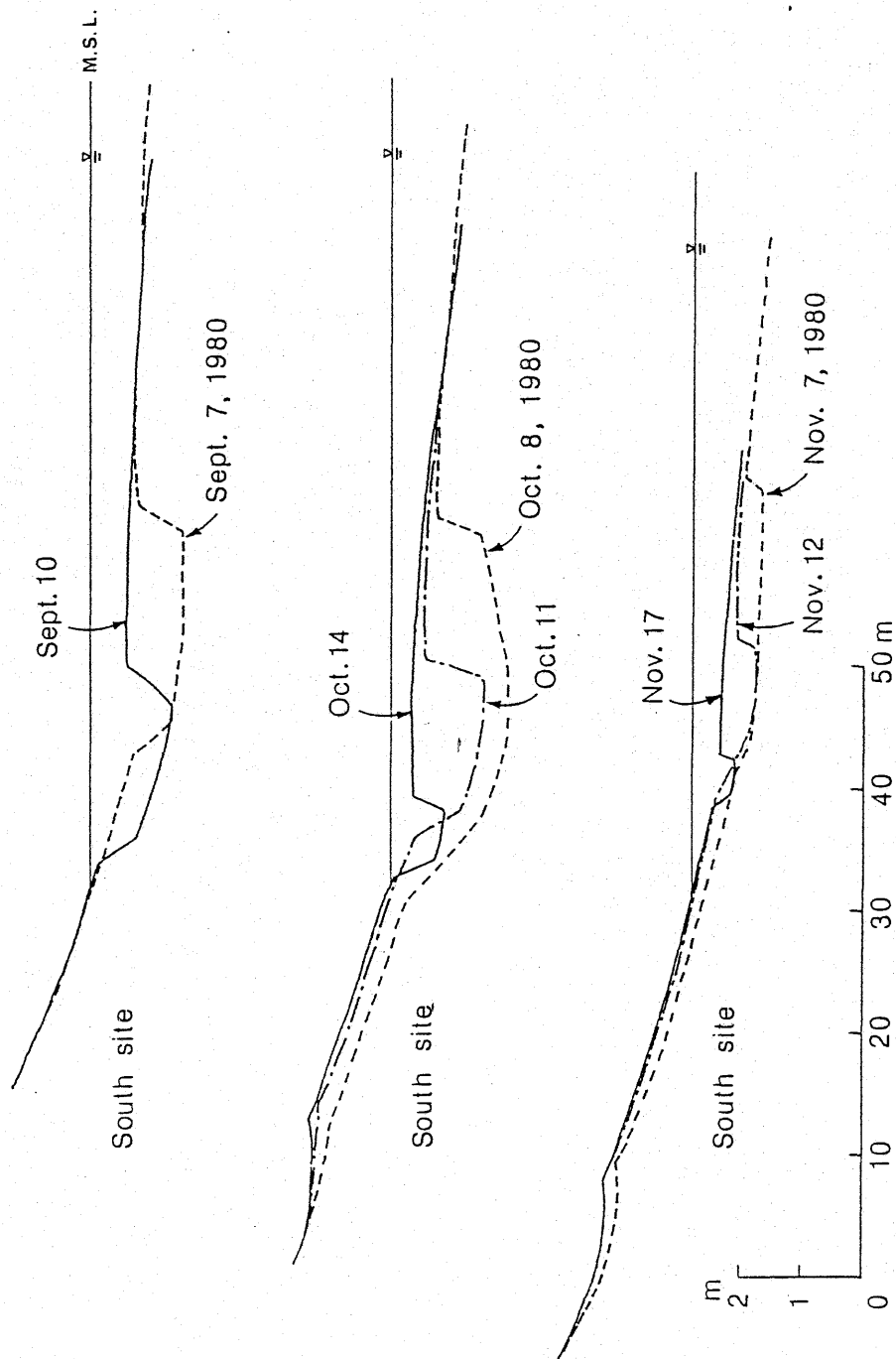


Figure 6. Typical examples of onshore bar-migration.

Offshore migration

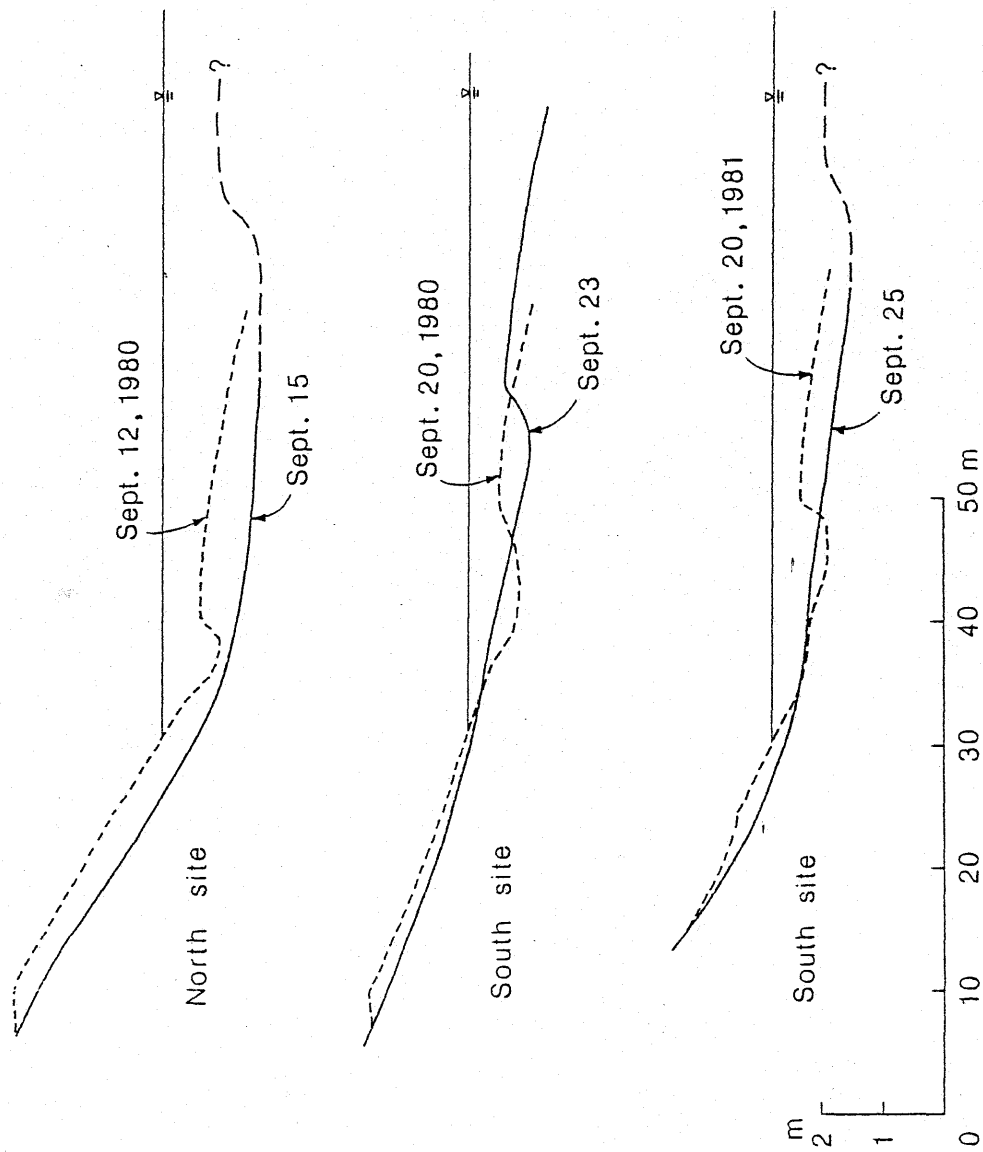


Figure 7. Typical examples of offshore bar-migration.

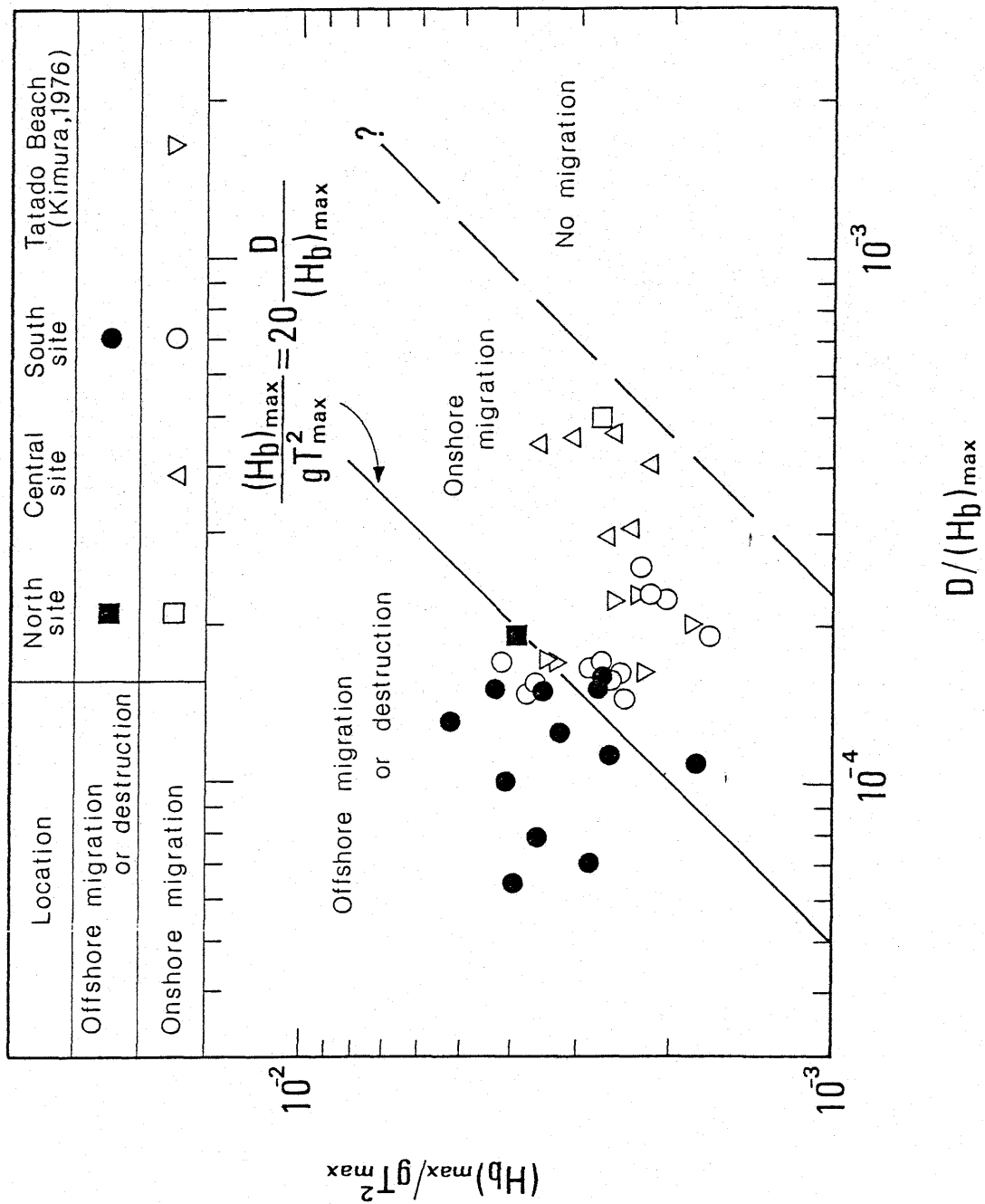


Figure 8. Demarcation of bar migrating directions.



Figure 9. Onshore migrating bar.



Figure 10. Closer look of bores on a bar crest.

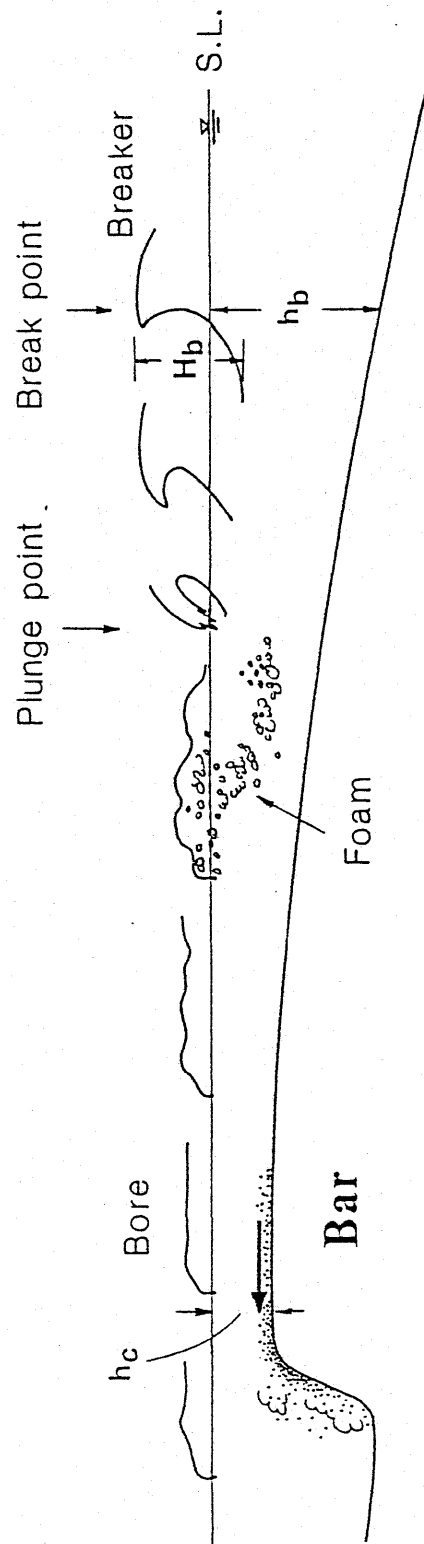


Figure 11. Schematic diagram of wave transformation over a bar.

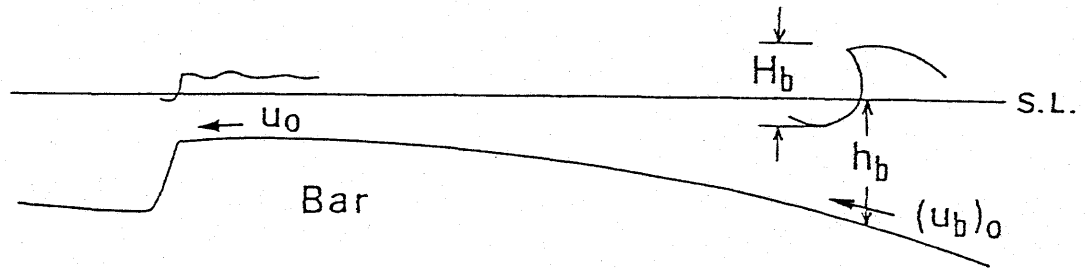


Figure 12. Schematic diagram for bottom velocity on a bar.

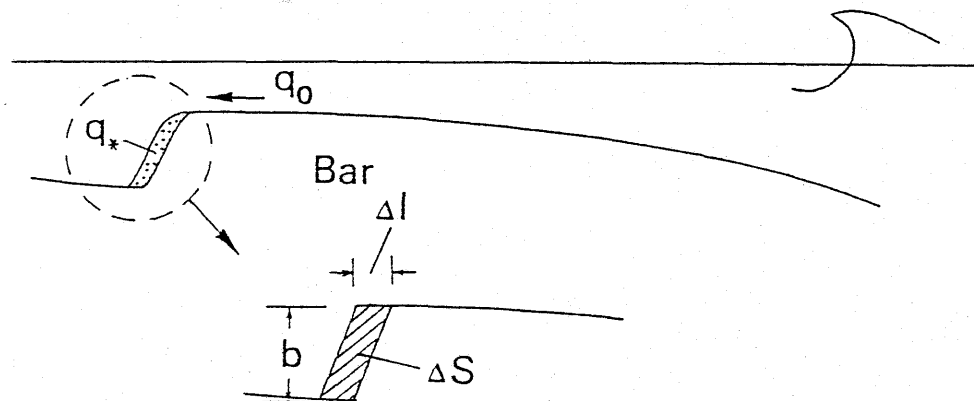


Figure 13. Schematic diagram of onshore migrating bar.

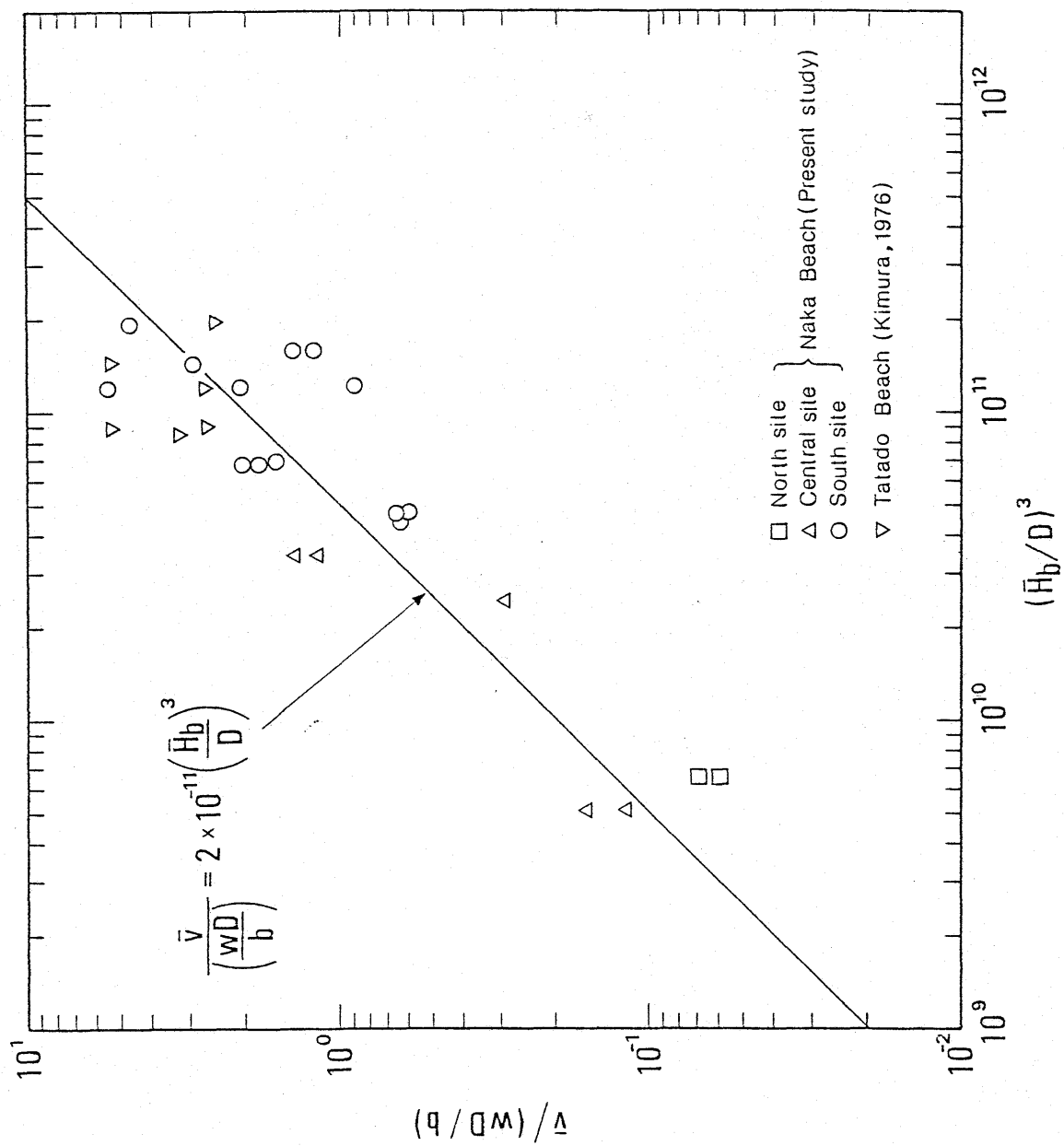


Figure 14. Normalized speed of onshore bar-migration.

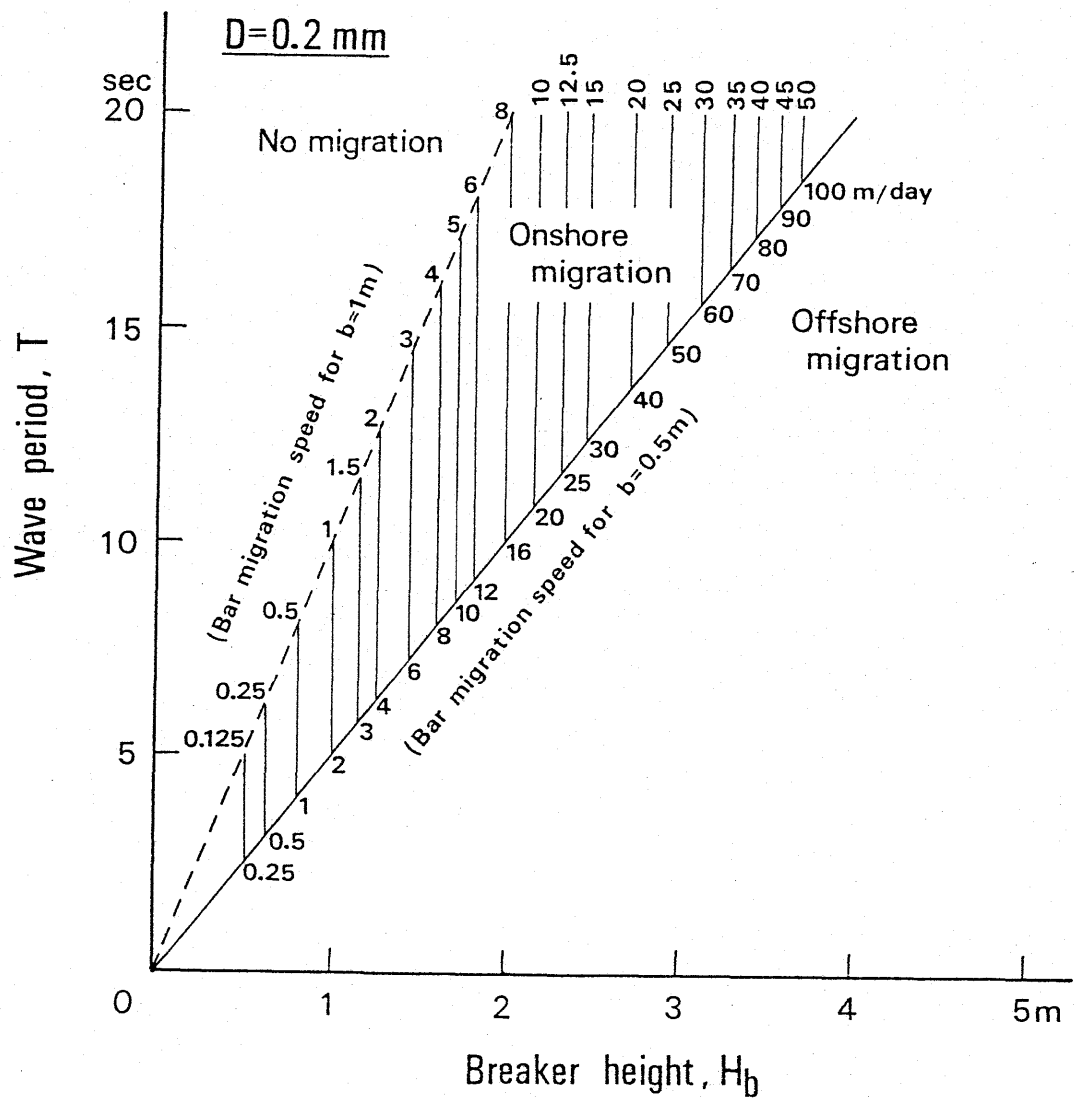


Figure 15. Nomograph of onshore bar-migration speed for sediment grain size, $D = 0.2 \text{ mm}$.

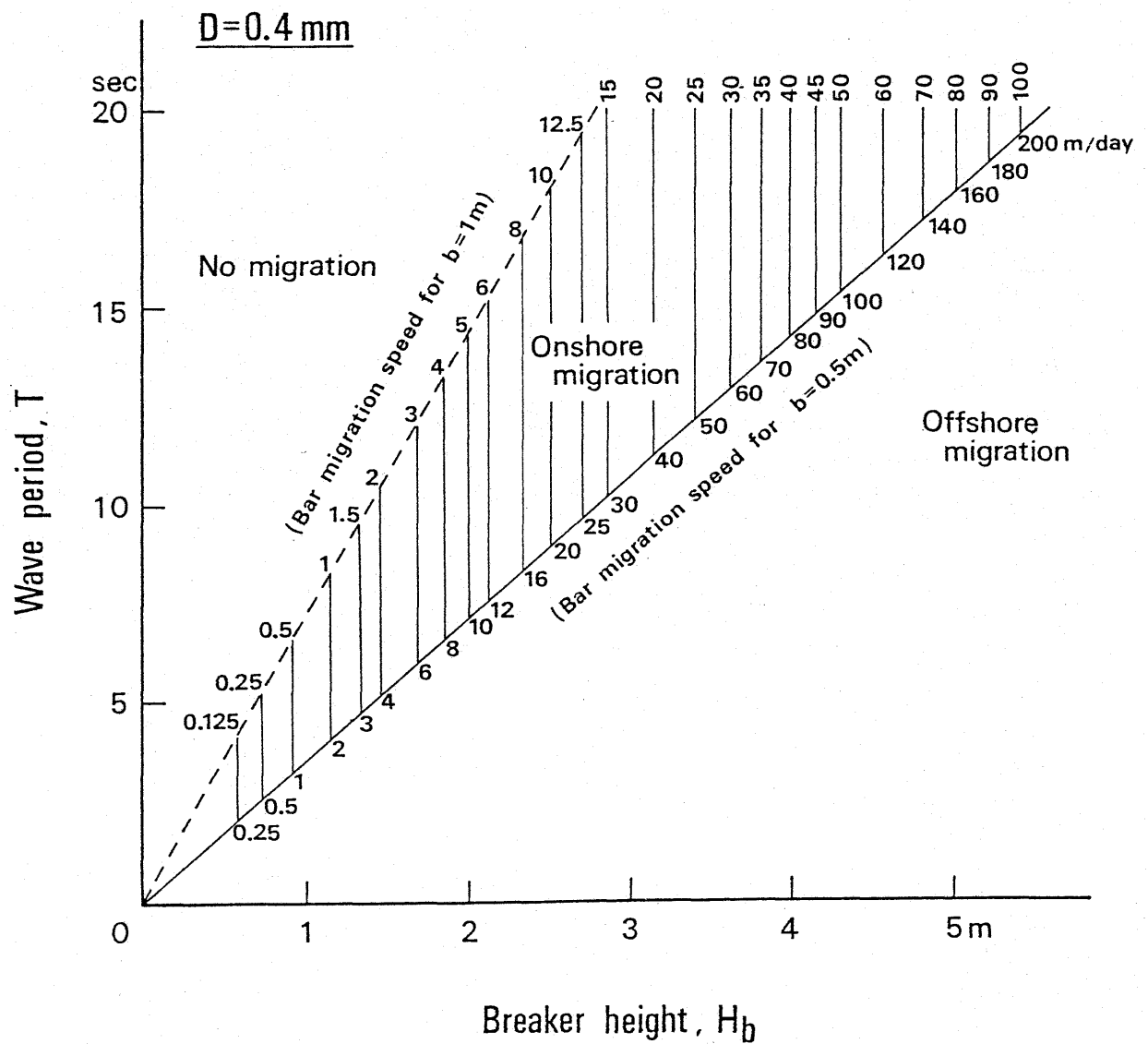


Figure 16. Nomograph of onshore bar-migration speed for sediment grain size, $D = 0.4 \text{ mm}$.

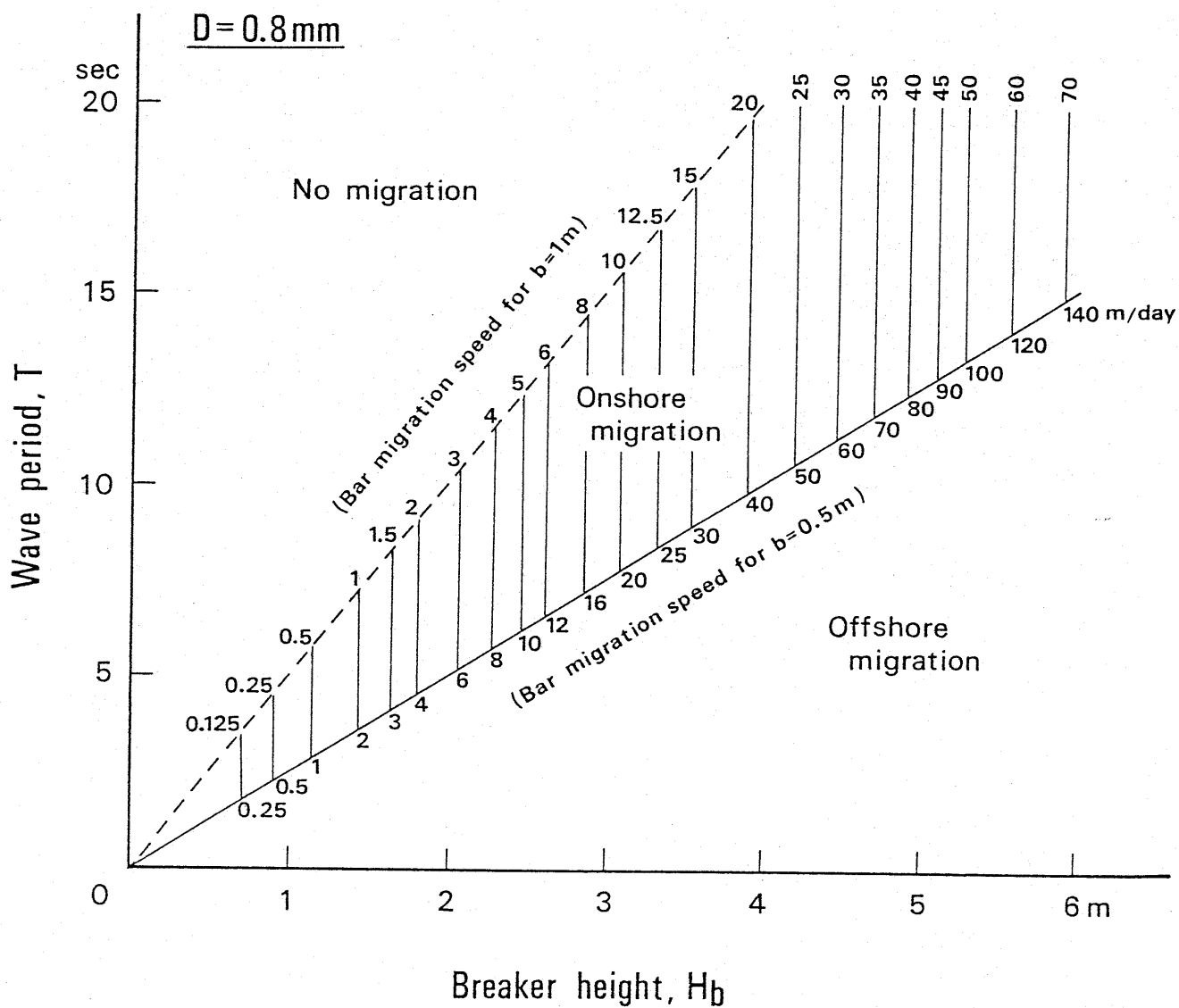


Figure 17. Nomograph of onshore bar-migration speed for sediment grain size, $D = 0.8 \text{ mm}$.

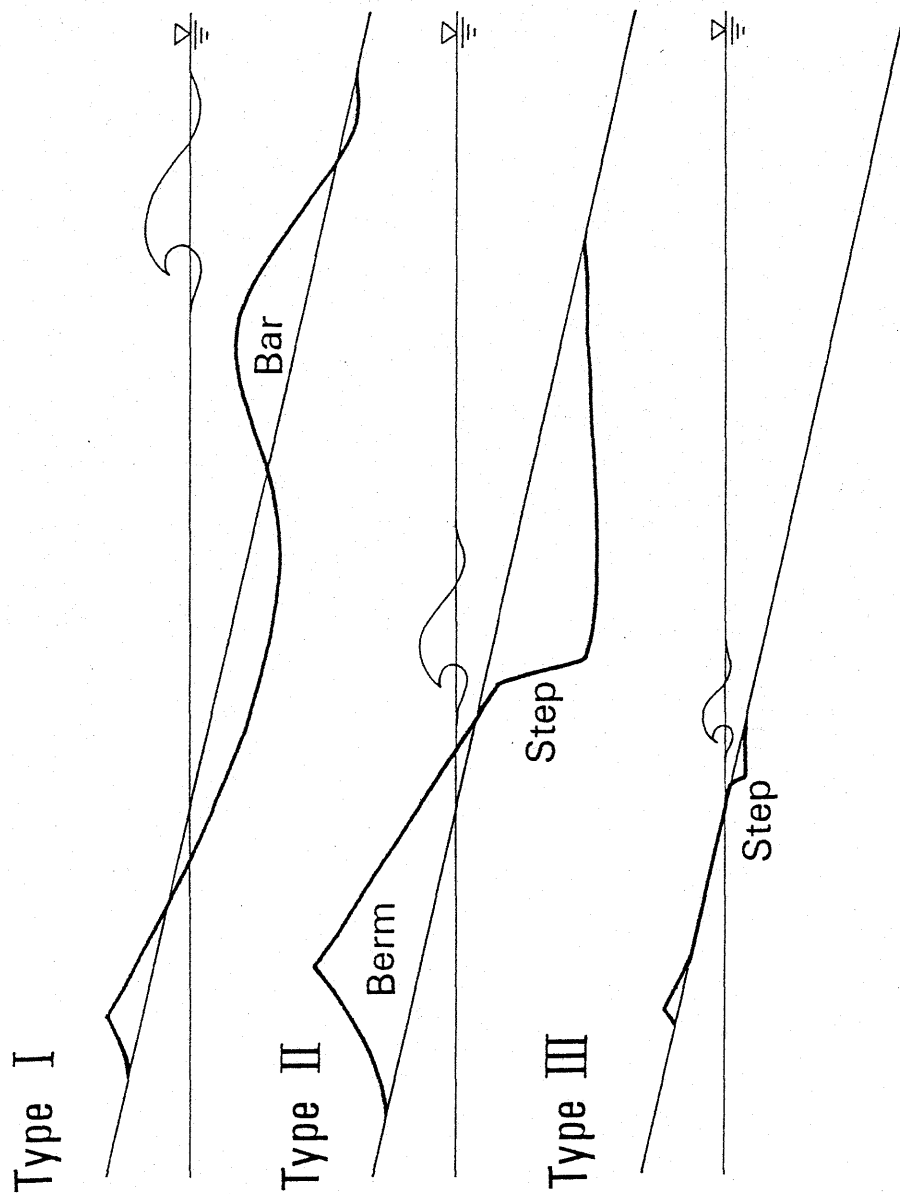


Figure 18. Schematic diagram of laboratory beach profiles.

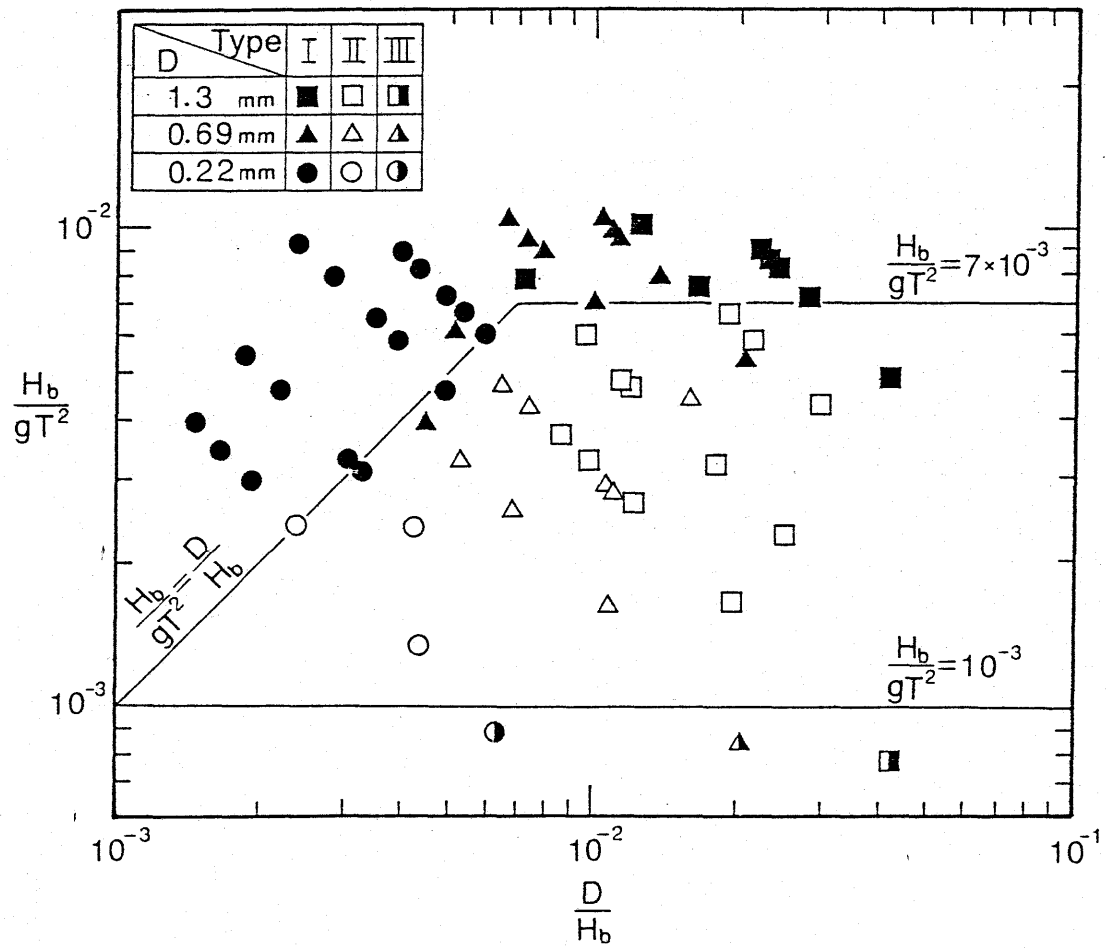


Figure 19. Demarcation of laboratory beach profiles.

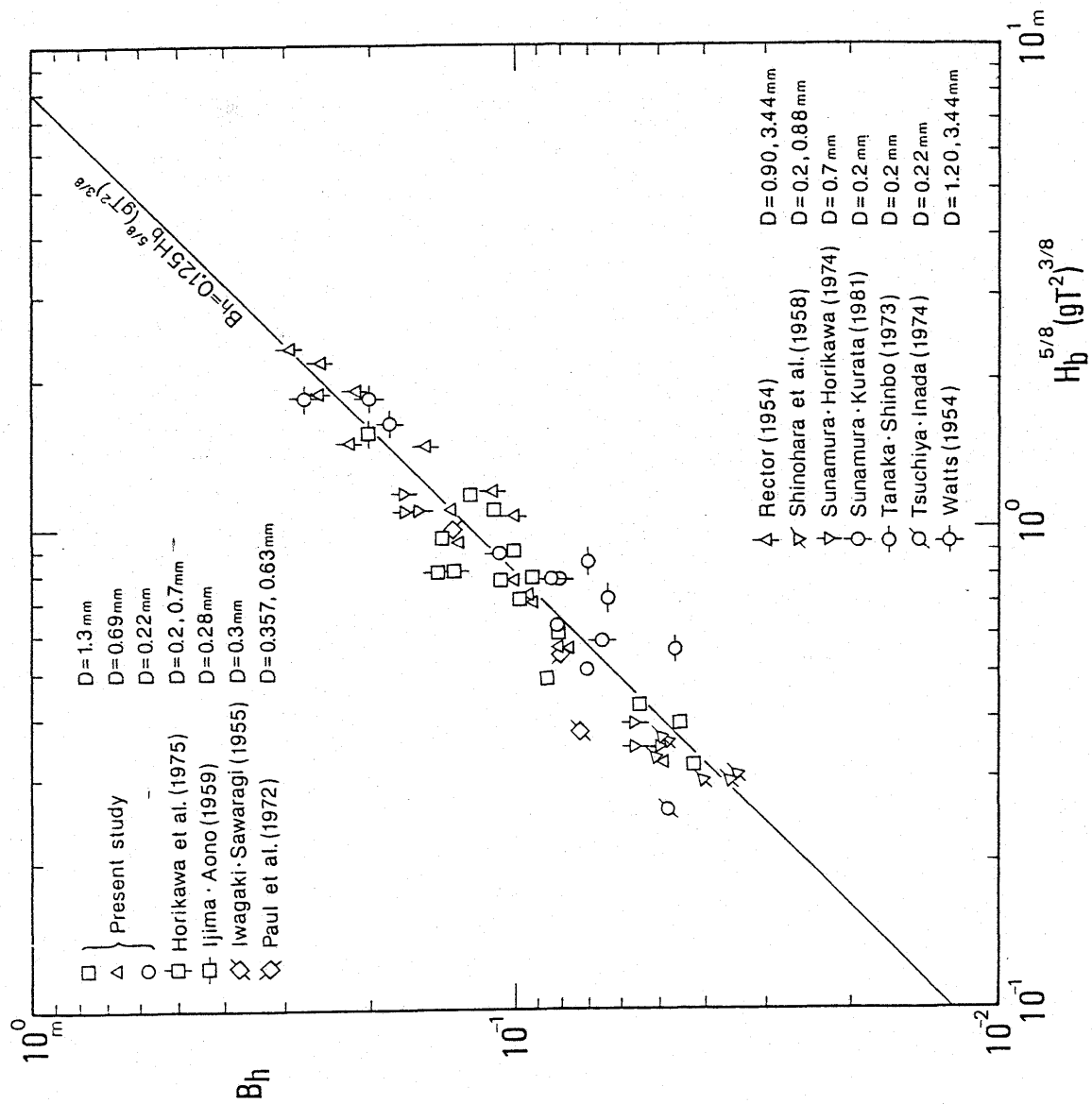


Figure 20. Height of stable berm in the laboratory.

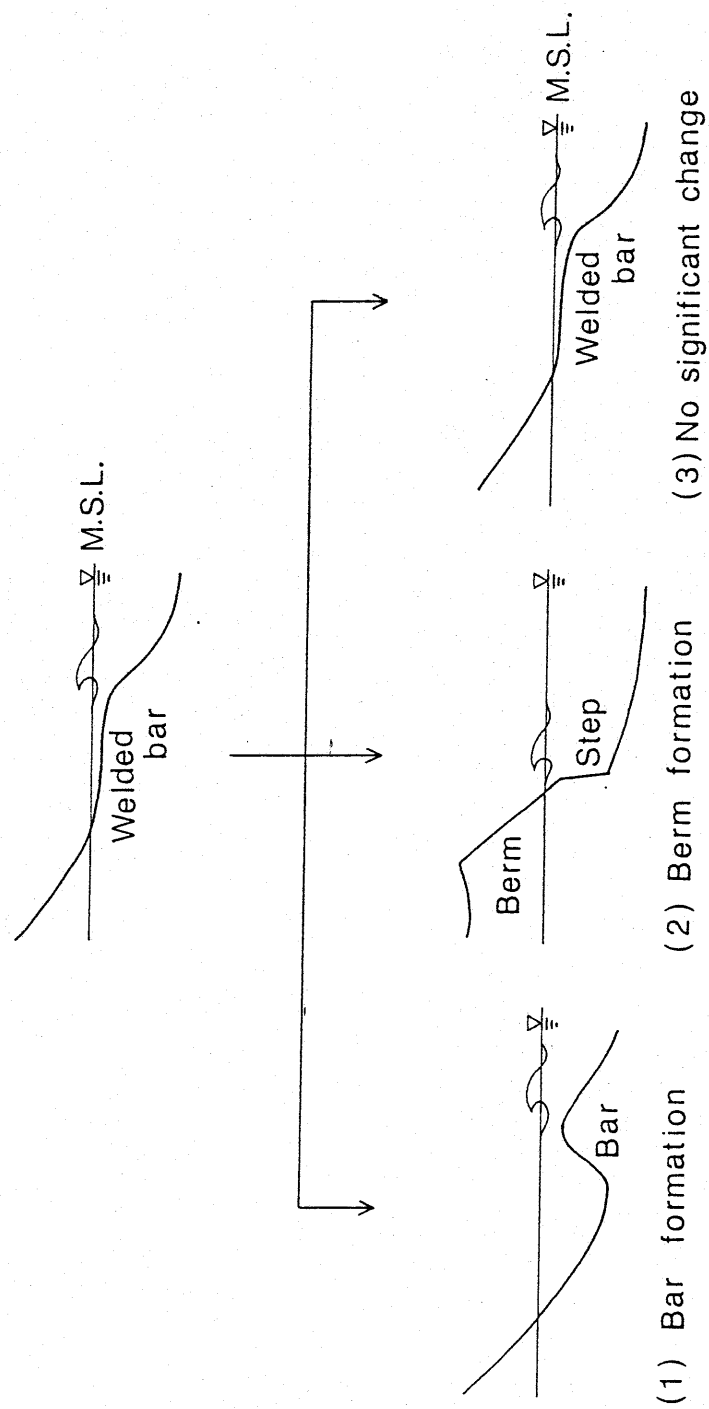


Figure 21. Schematic diagram showing three types of profile change.

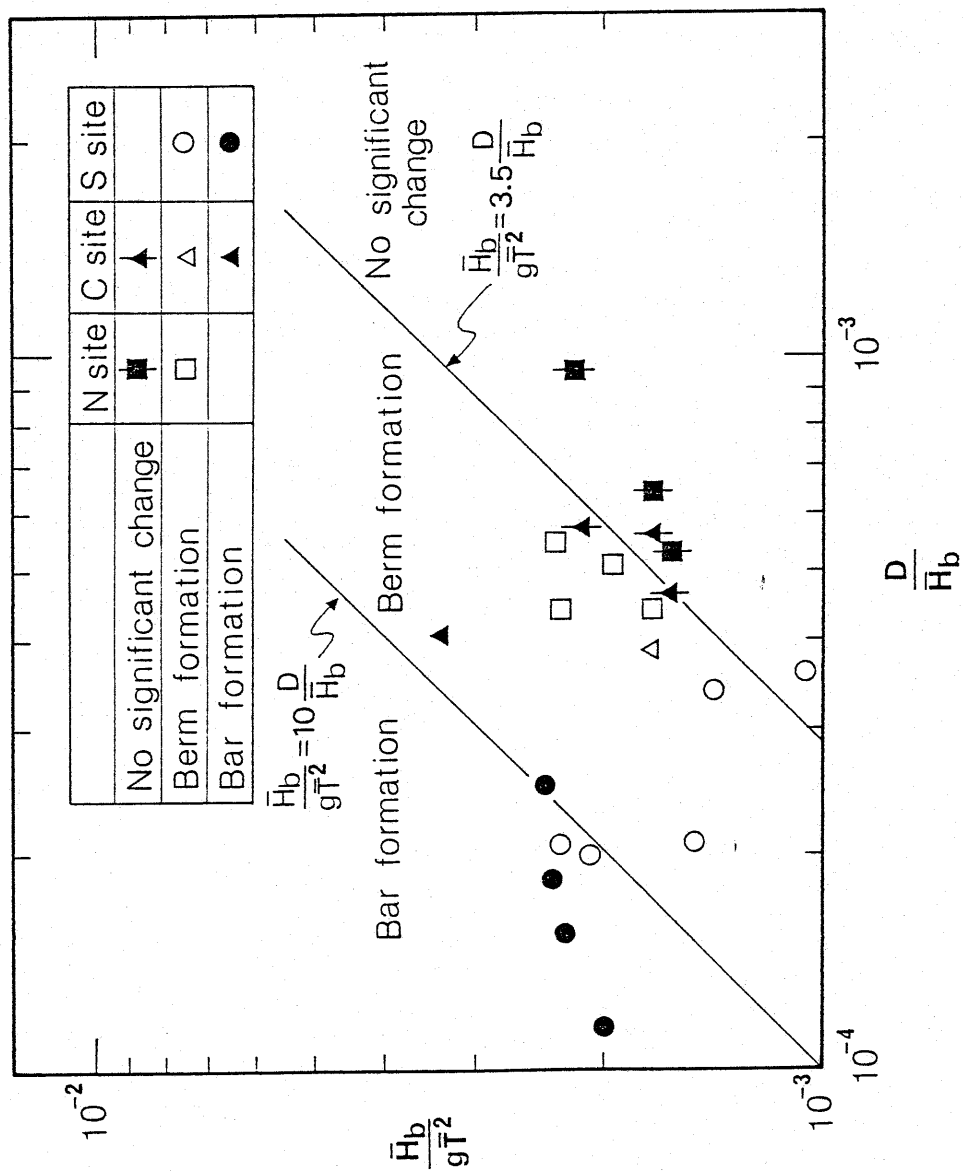


Figure 22. Demarcation of beach profile change shown in Fig. 21.

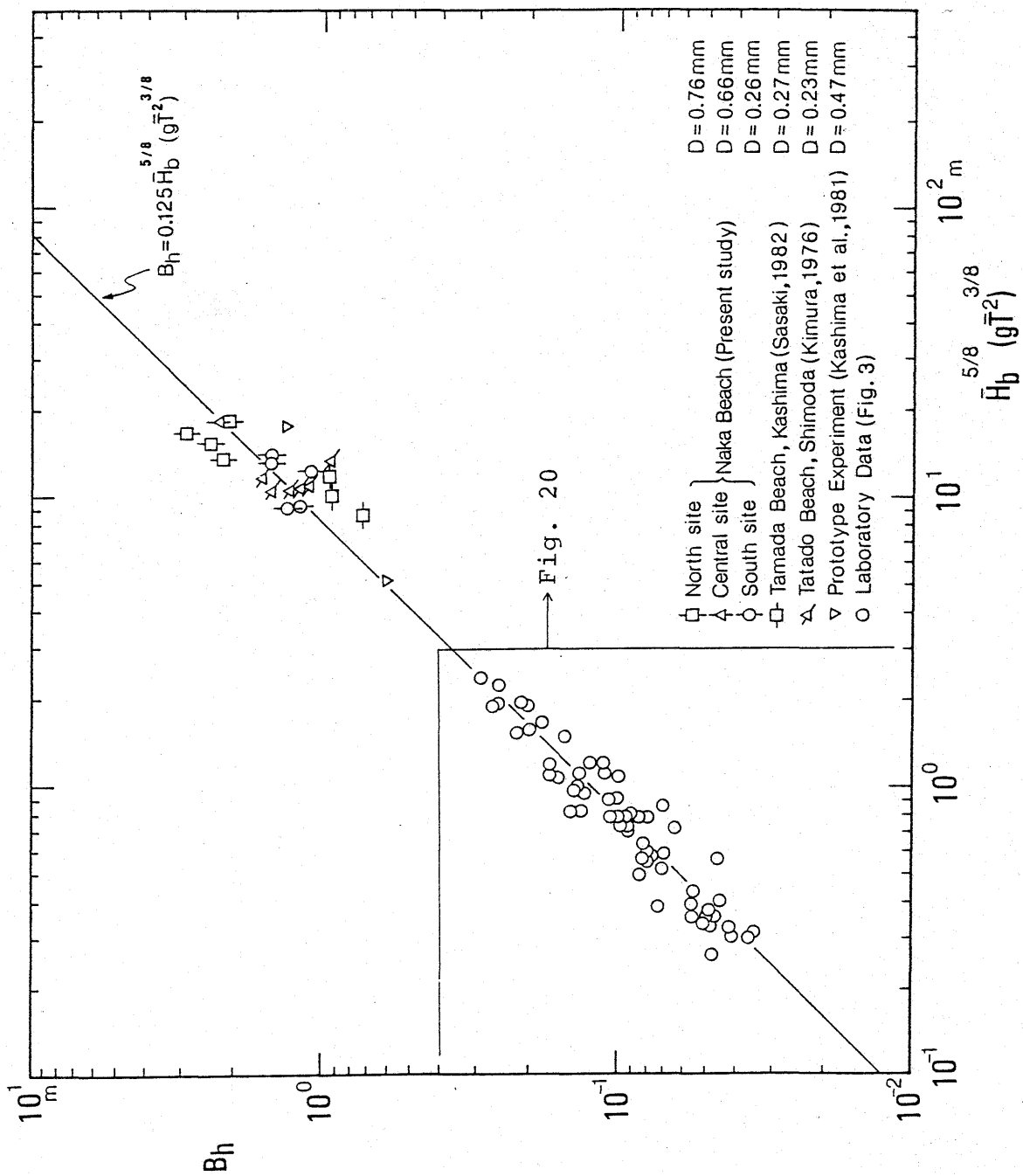


Figure 23. Berm height in the field and laboratory.

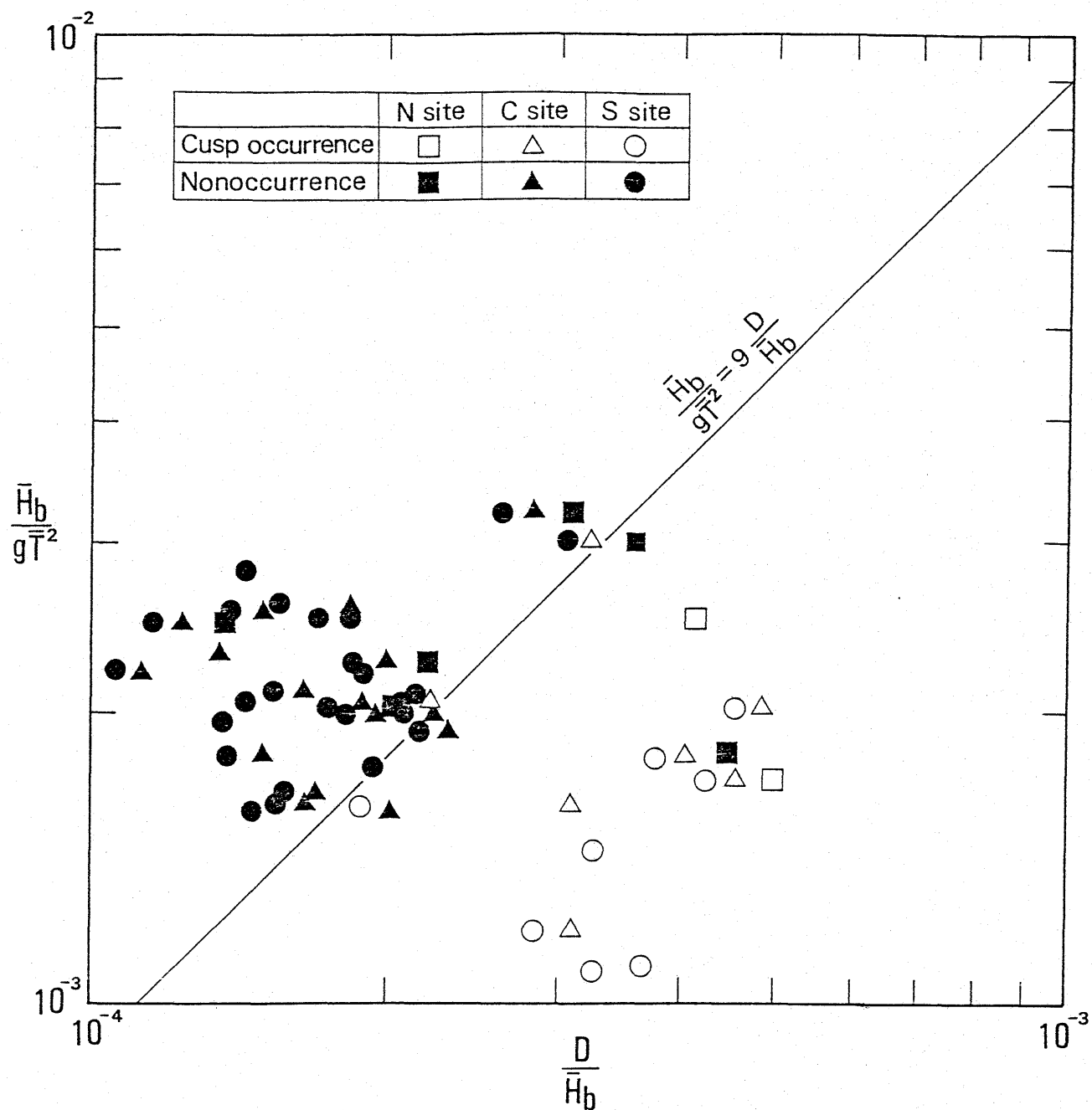


Figure 24. Demarcation of beach-cusp formation.

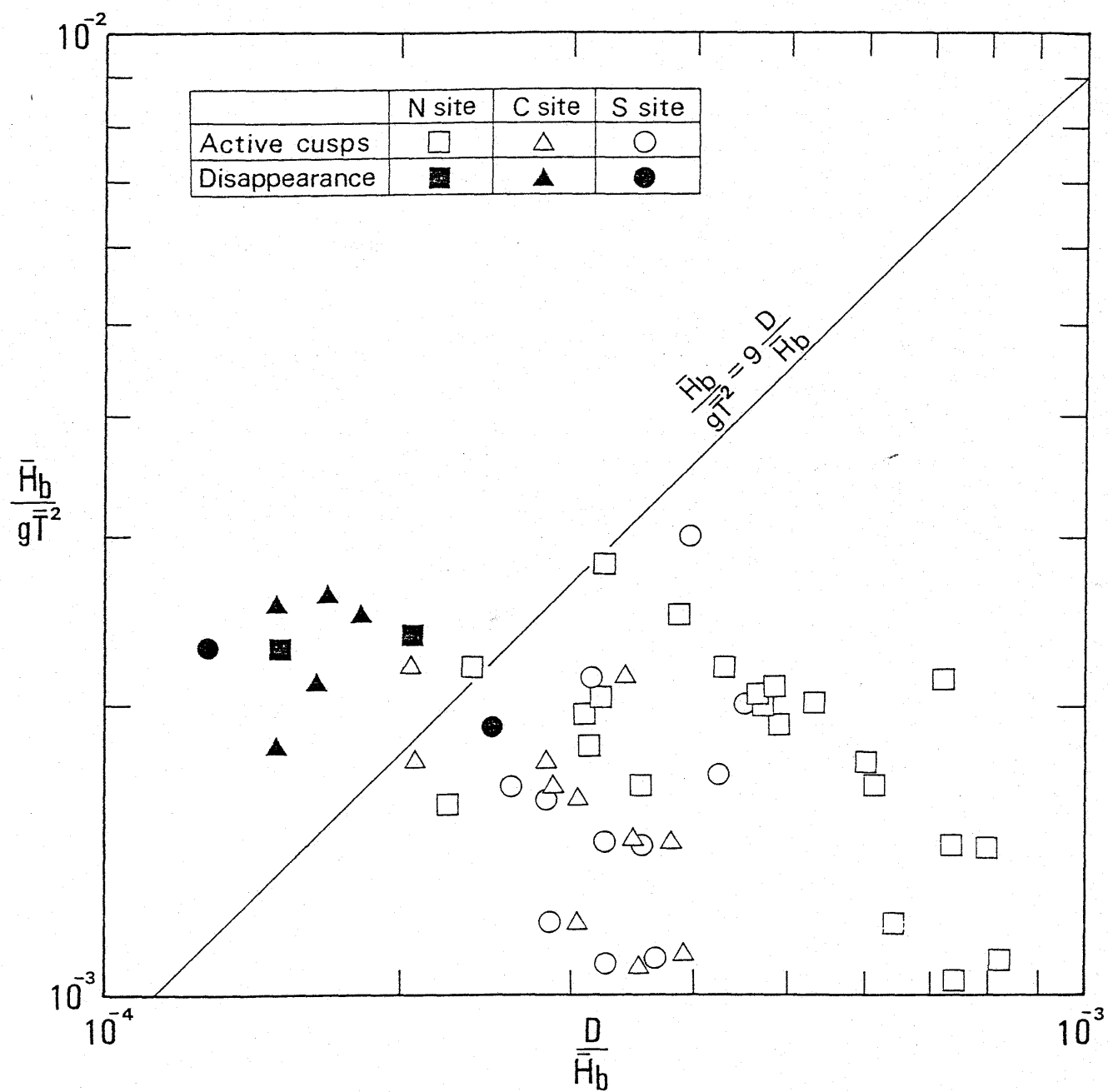


Figure 25. Demarcation of beach-cusp extinction.



Figure 26. Bar closely located to the shore.

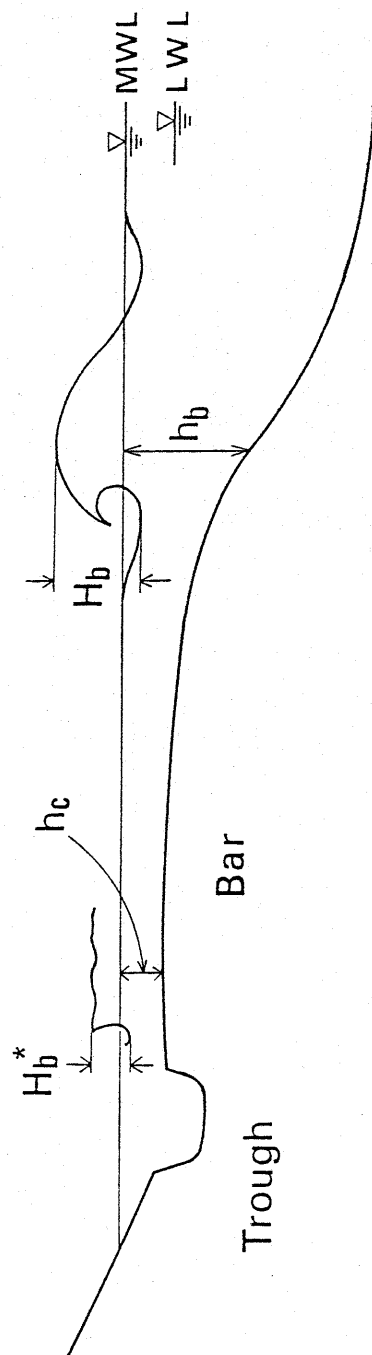


Figure 27. Schematic profile of bar closely located to the shore.

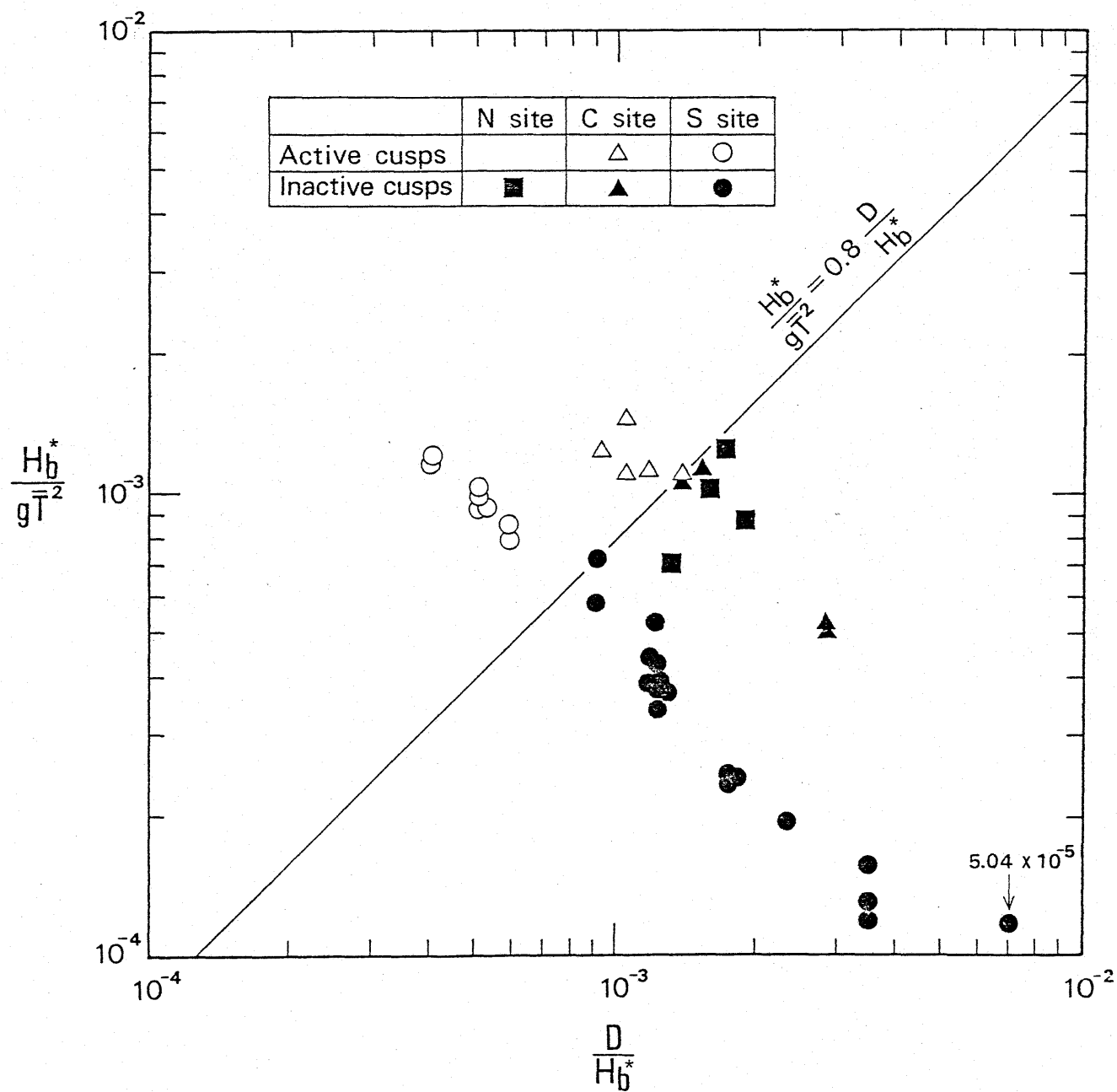


Figure 28. Demarcation of beach-cusp inactivation.

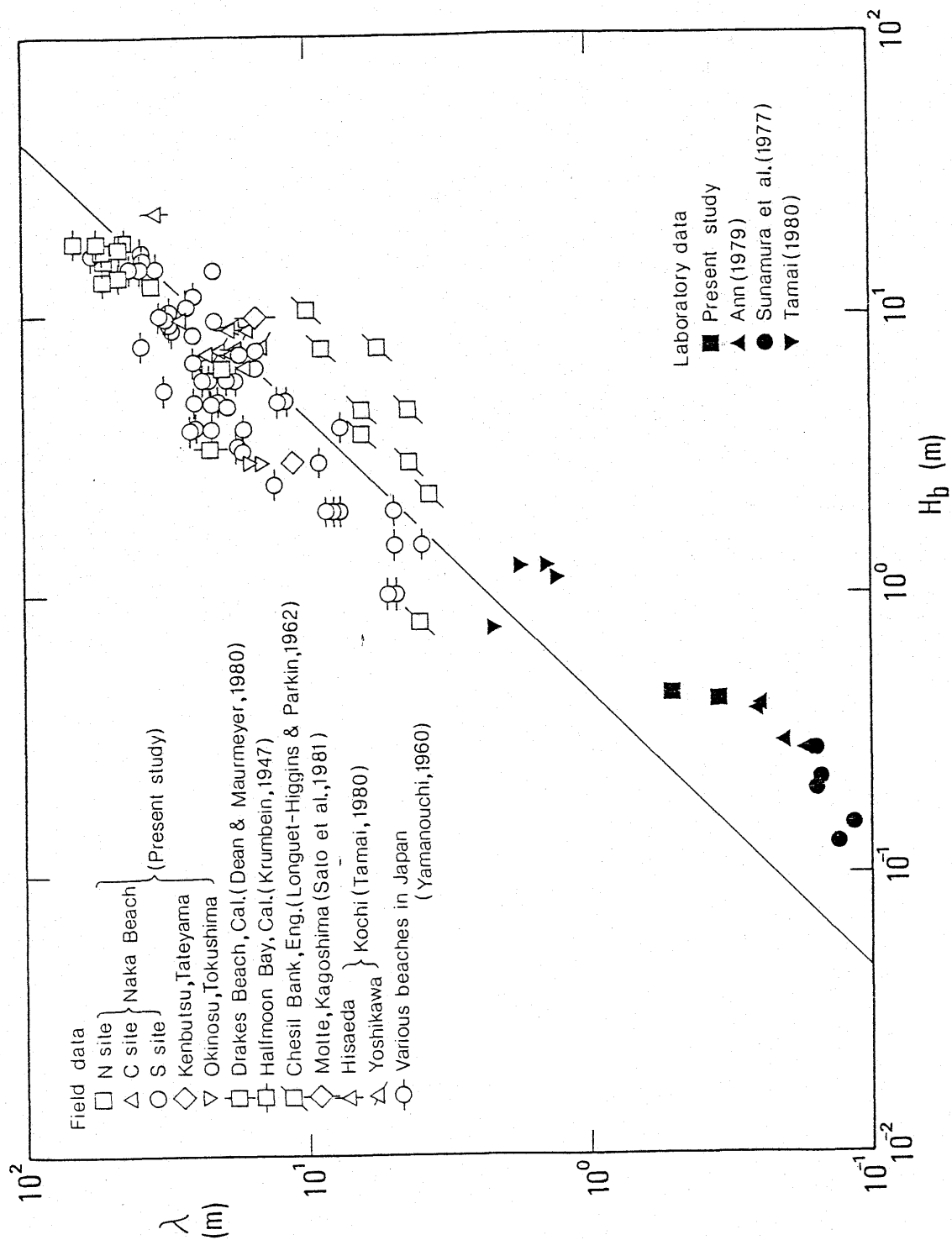


Figure 29. Relationship between beach-cusp spacing, λ , and breaker height, H_b .

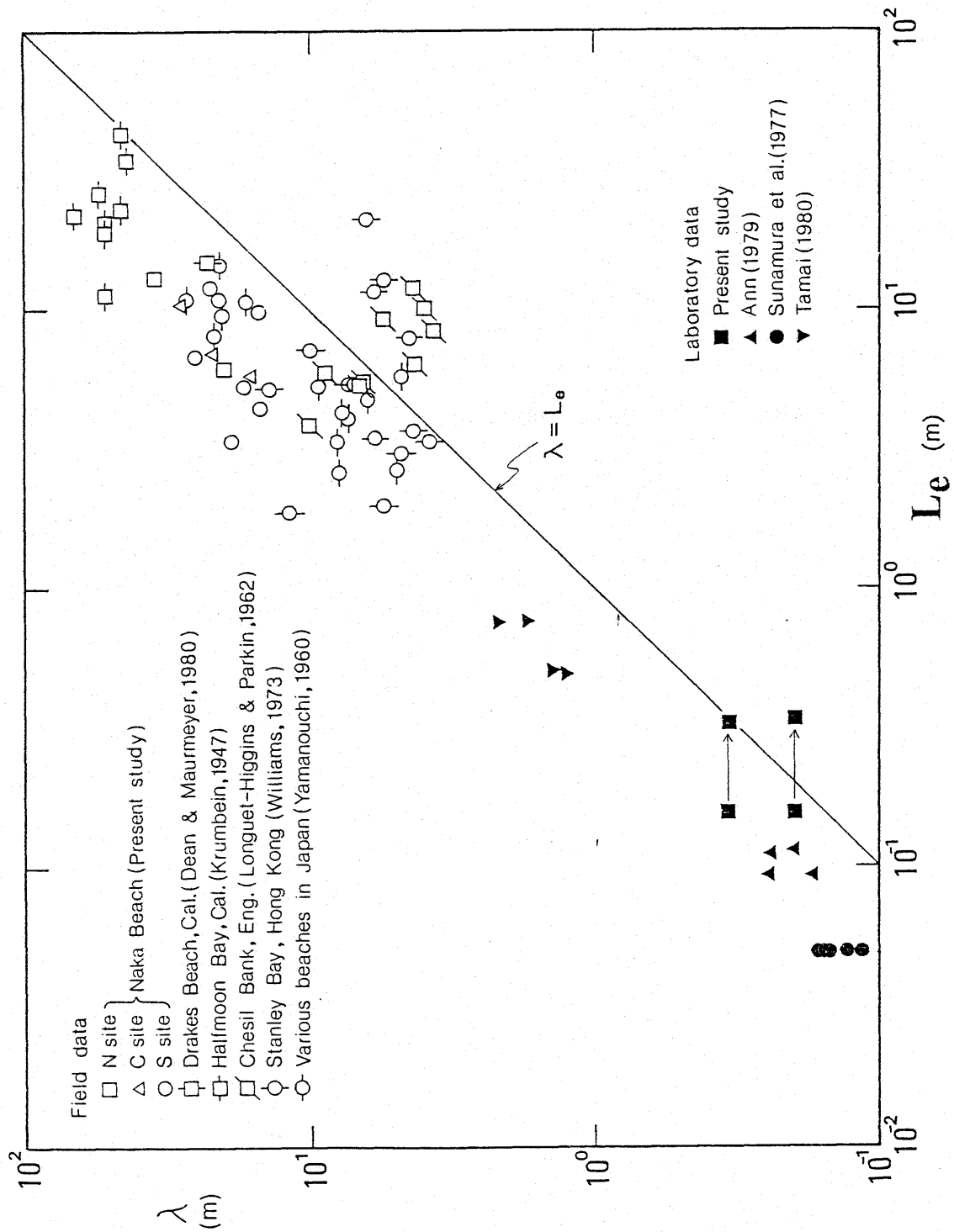


Figure 30. Relationship between beach-cusp spacing, λ , and wave length of synchronous edge waves, L_e .

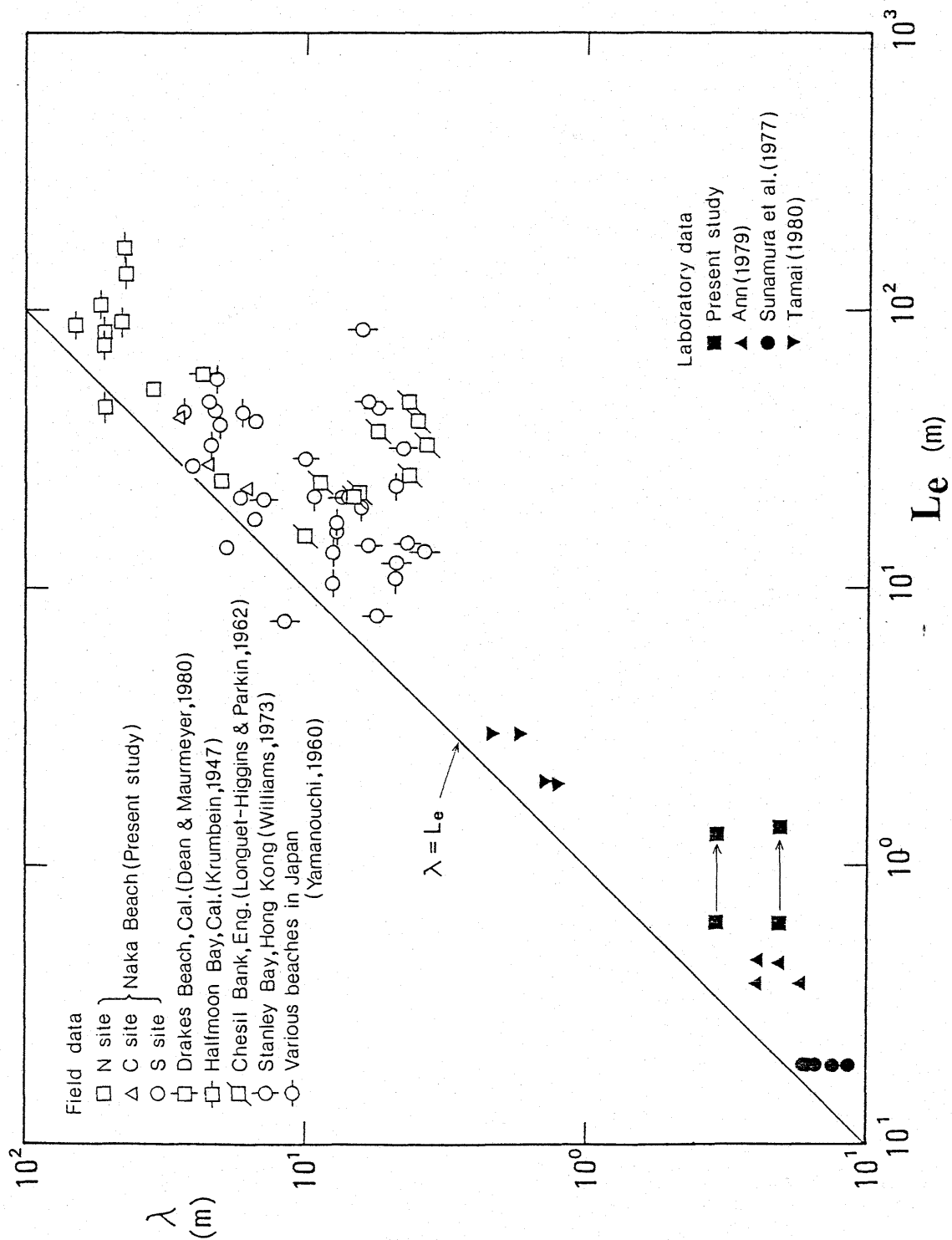


Figure 31. Relationship between beach-cusp spacing, λ , and wave length of subharmonic edge waves, L_e .

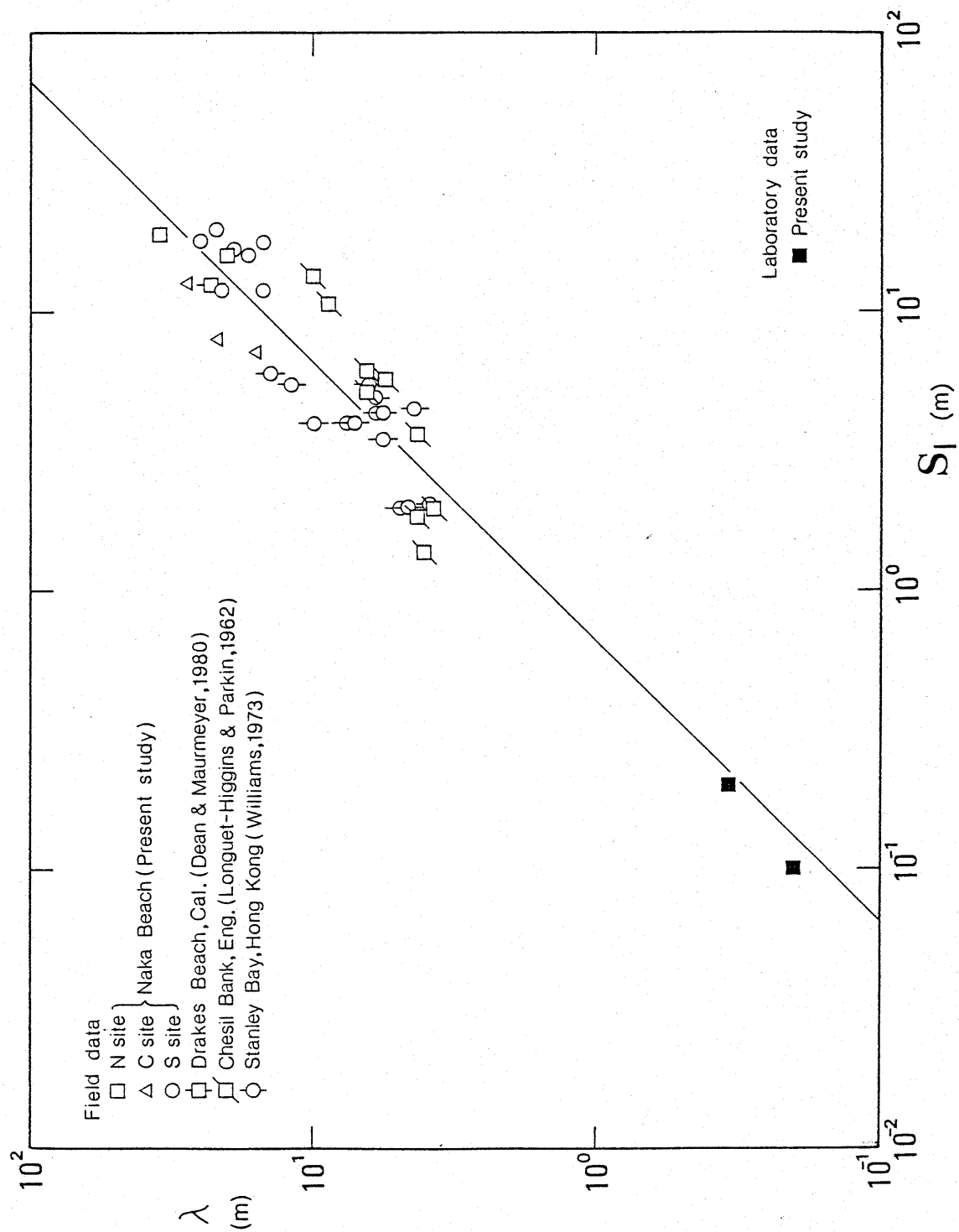


Figure 32. Relationship between beach-cusp spacing, λ , and swash length, S_l (directly measured).

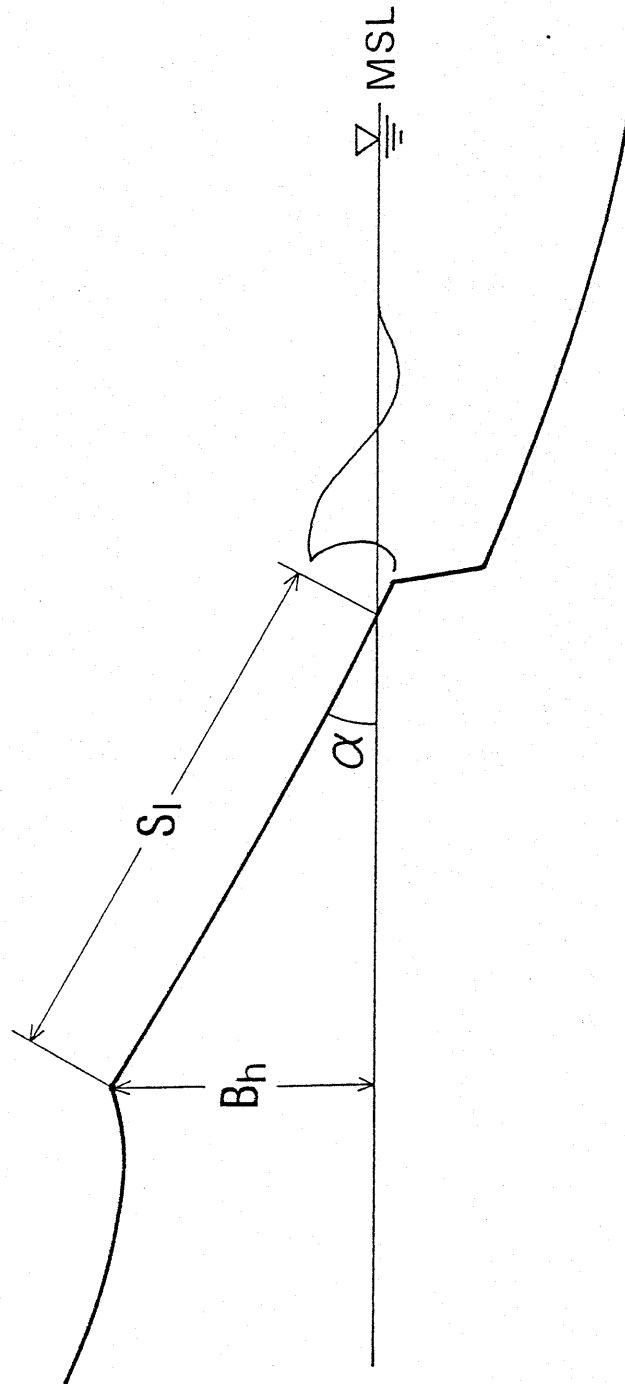


Figure 33. Schematic diagram of berm developing beach.

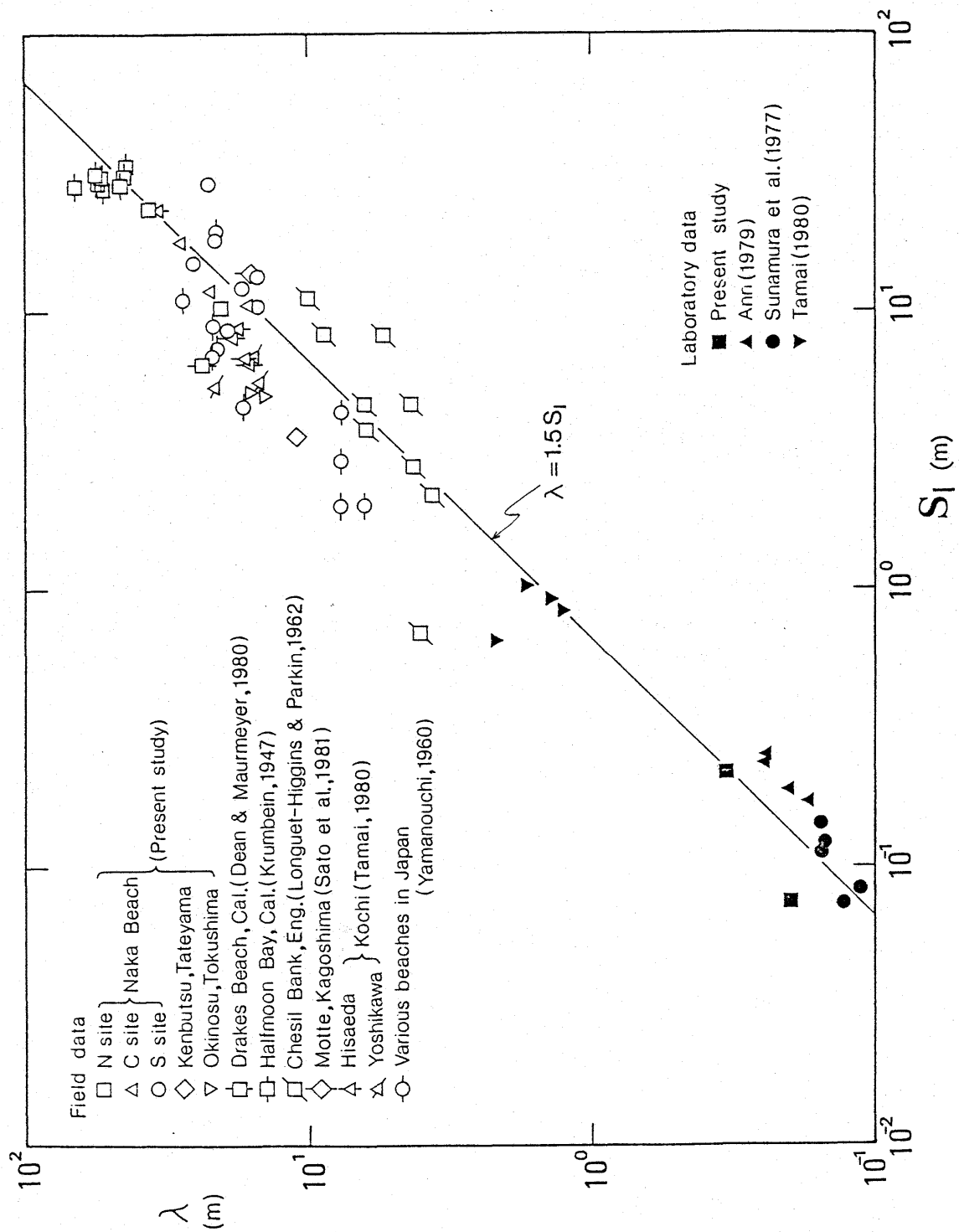


Figure 34. Relationship between beach-cusp spacing, λ , and swash length, S_l (calculated).

Table 1. Data of onshore bar-migration.

Site	Grain size	Mean breaker height	Bar height	Bar migration speed
	(D)	(\bar{H}_b)	(b)	(\bar{v})
North	0.76 mm	1.41 m 1.41	0.2 m 0.2	2.3 m/day 2.5
Central	0.66	2.16 2.16 1.94 1.14 1.14	0.8 0.7 0.5 0.2 0.4	8.5 11.5 3.3 3.3 2.3
South	0.26	1.28 0.94 1.29 1.28 1.36 0.94 1.06 0.94 1.06 1.06 1.50 1.41 1.41	1.1 0.2 0.3 0.5 0.8 0.2 0.3 0.4 0.4 0.4 0.8 0.3 0.4	3.7 2.2 2.2 3.0 2.7 2.4 5.0 1.2 3.0 3.3 4.3 3.0 2.6
Tatado Beach (Kimura, 1976)	0.23	1.34 1.21 1.03 1.01 1.03 1.13	0.4 0.6 0.6 0.5 0.5 0.4	3.5 5.0 5.0 3.5 3.0 3.8

Table 2. Experimental condition and results
[laboratory test for berm formation].

Run No.	Grain size (D)	Wave period (T)	Breaker height (H _b)	Profile type*	Berm height (B _b)
1	0.22 mm	0.8 sec	3.8 cm	I	-
2			4.2	I	-
3			4.5	I	-
4			5.2	I	-
5			5.6	I	-
6		1.0	4.5	I	-
7			5.7	I	-
8			6.4	I	-
9			7.8	I	-
10			9.3	I	-
11		1.5	5.3	II	7.0 cm
12			6.8	I	-
13			7.2	I	-
14			10.2	I	-
15			12.0	I	-
16		2.0	3.5	III	-
17			5.2	II	8.2
18			9.3	II	10.7
19			11.7	I	-
20			13.5	I	-
21			15.5	I	-
22	0.69	0.8	3.3	I	-
23			5.0	I	-
24			6.0	I	-
25			6.1	I	-
26			6.5	I	-
27		1.0	4.3	II	4.9
28			6.8	I	-
29			8.7	I	-
30			9.3	I	-
31			10.3	I	-
32		1.5	6.0	II	8.0
33			6.2	II	7.9
34			9.3	II	9.3
35			10.5	II	10.0
36			13.3	I	-
37		2.0	3.3	III	-
38			6.3	II	9.2
39			10.0	II	13.0
40			12.8	II	13.6
41			15.3	I	-
42	1.3	0.8	3.0	I	-
43			4.5	I	-
44			5.3	I	-
45			5.4	I	-
46			5.5	I	-
47		1.0	4.2	II	4.2
48			5.8	II	4.5
49			6.6	II	5.5
50			7.5	I	-
51			10.0	I	-
52		1.5	5.0	II	8.5
53			7.0	II	8.0
54			10.7	II	9.2
55			10.5	II	10.6
56			13.2	II	10.0
57		2.0	17.5	I	-
58			3.0	III	-
59			6.5	II	9.7
60			10.4	II	14.1
61			12.8	II	11.0
62			14.5	II	12.5

* see Fig. 1.

Table 3. Field data of berms.

Site	Grain size (D)	Mean wave - period (\bar{T})	Mean breaker height (\bar{H}_b)	Type of profile change*	Berm height (B_h)
North	0.76 mm	10.1 sec	1.72 m	2	2.1 m
		7.8	1.40	2	2.2
		8.8	1.49	2	2.4
		8.8	1.72	2	2.9
		9.5	1.43	3	-
		8.4	1.18	3	-
Central	0.66	6.1	0.80	3	-
		10.1	1.72	2	2.2
		7.0	1.62	1	-
		7.4	1.15	3	-
		9.5	1.43	3	-
		8.4	1.18	3	-
South	0.28	8.4	0.72	2	1.2
		7.5	0.77	2	1.3
		8.0	1.31	2	1.5
		9.2	1.24	2	1.5
		7.5	1.27	2	1.1
		6.6	1.03	1	-
		7.8	1.41	1	-
		8.7	1.68	1	-
		10.7	2.24	1	-

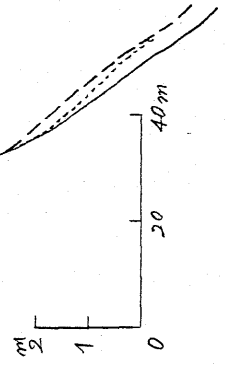
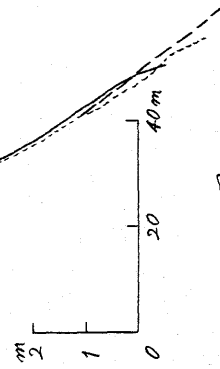
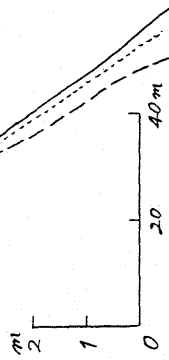
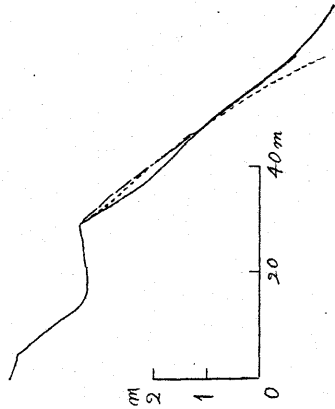
* see Fig. 21.

APPENDIX 1

BEACH PROFILES

North Site

N - 100 - 1



— 28/8/1980
- - - 30/8
- - - 2/9

\bar{V}

— 2/9
- - - 6/9
- - - 9/9

\bar{V}

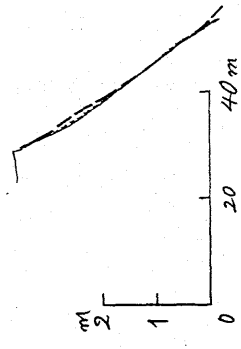
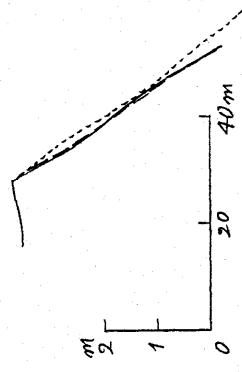
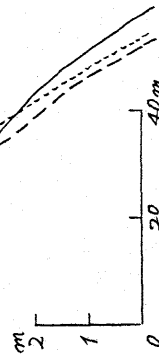
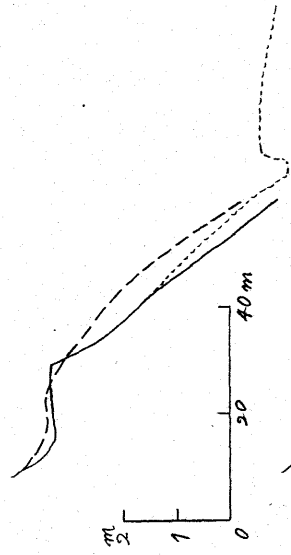
— 9/9
- - - 12/9
- - - 15/9

\bar{V}

— 15/9
- - - 19/9
- - - 22/9

\bar{V}

N - 100 - 2



— 22/9/1980
- - - 25/9
- - - 29/9

\bar{V}

— 29/9
- - - 3/10
- - - 7/10

\bar{V}

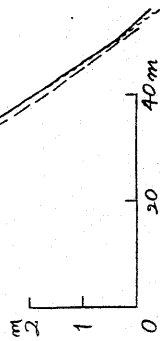
— 7/10
- - - 10/10
- - - 14/10

\bar{V}

— 14/10
- - - 15/10
- - - 18/10

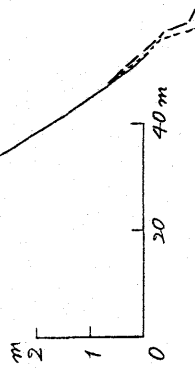
\bar{V}

N-100-3



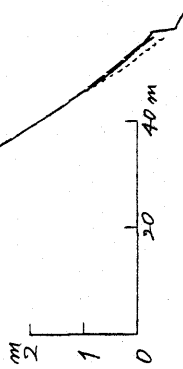
— 18/10/1980
- - - 22/10
- · - 27/10

\bar{V}



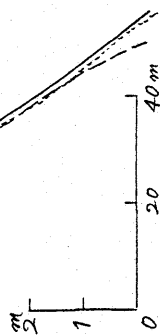
— 27/10
- - - 1/11
- · - 6/11

\bar{V}



— 6/11
- - - 11/11
- · - 16/11

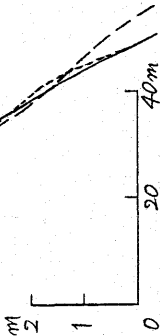
\bar{V}



— 16/11
- - - 21/11
- · - 26/11

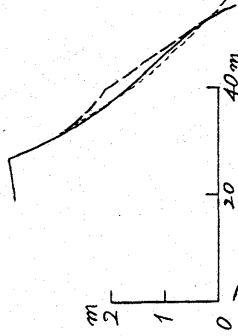
\bar{V}

N-100-4



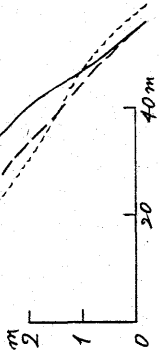
— 26/11/1980
- - - 1/12
- · - 8/12

\bar{V}



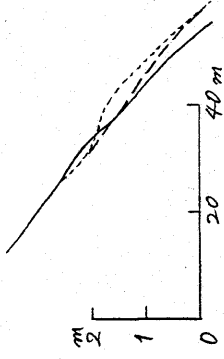
— 8/12
- - - 15/12
- · - 22/12

\bar{V}



— 22/12
- - - 24/12
- · - 6/1/1981

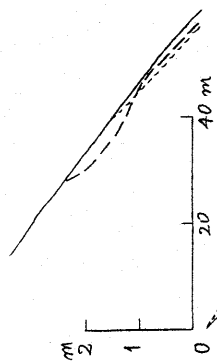
\bar{V}



— 6/1
- - - 12/1
- · - 21/1

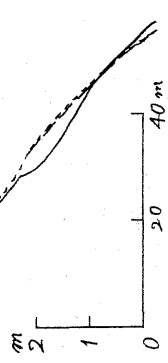
\bar{V}

N-100-5



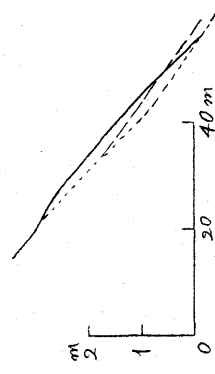
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{y}



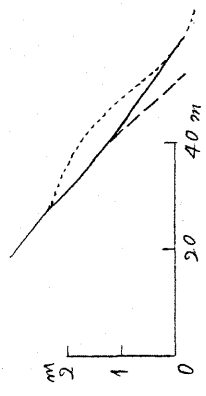
— 1/2
- - - 8/2
- · - 15/2

\bar{y}



— 15/2
- - - 22/2
- · - 28/2

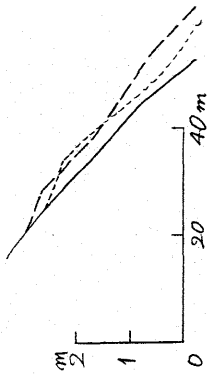
\bar{y}



— 28/2
- - - 8/3
- · - 15/3

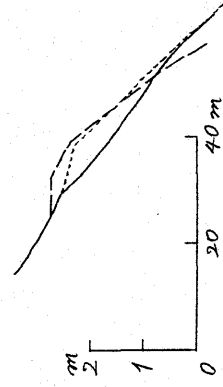
\bar{y}

N-100-6



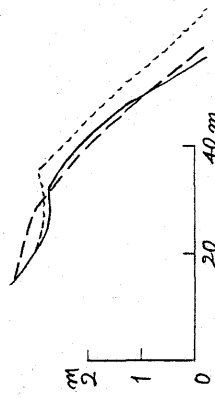
— 15/3/1981
- - - 22/3
- · - 29/3

\bar{y}



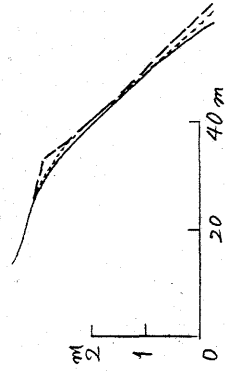
— 29/3
- - - 5/4
- · - 11/4

\bar{y}



— 11/4
- - - 19/4
- · - 26/4

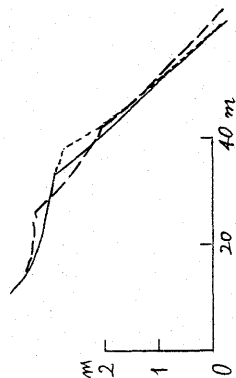
\bar{y}



— 26/4
- - - 3/5
- · - 11/5

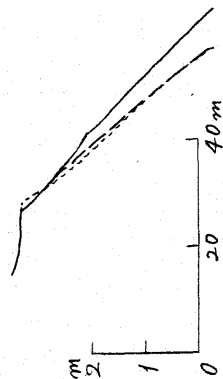
\bar{y}

N-100-7



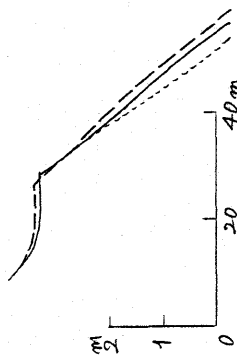
— 11/5/1981
- - - 17/5
- · - 24/5

\bar{V}



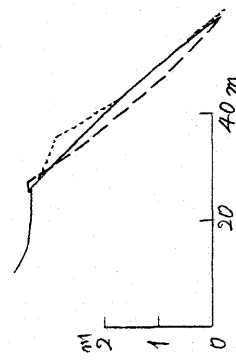
— 24/5
- - - 1/6
- · - 7/6

\bar{V}



— 7/6
- - - 15/6
- · - 21/6

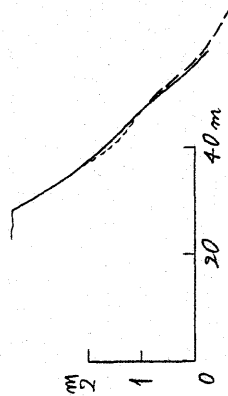
\bar{V}



— 21/6
- - - 28/6
- · - 6/7

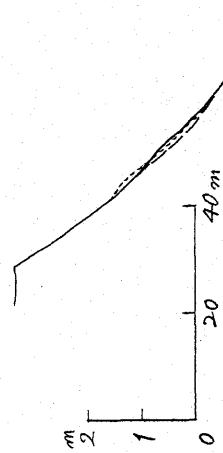
\bar{V}

N-100-8



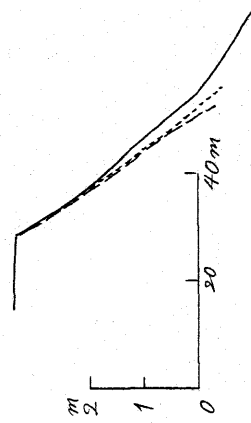
— 6/7/1981
- - - 9/7
- · - 13/7

\bar{V}



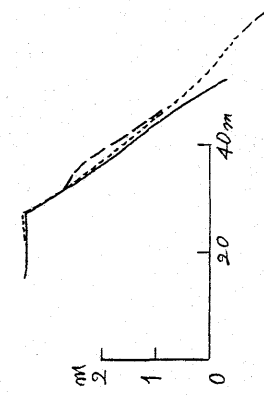
— 13/7
- - - 16/7
- · - 20/7

\bar{V}



— 20/7
- - - 23/7
- · - 27/7

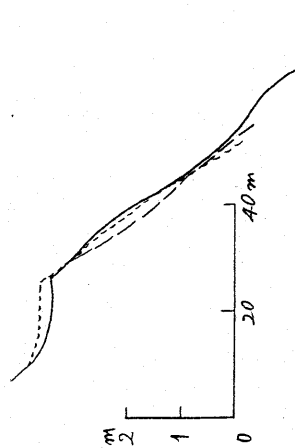
\bar{V}



— 27/7
- - - 30/7
- · - 3/8

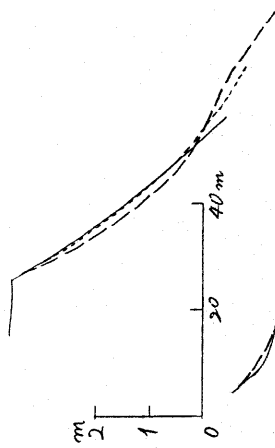
\bar{V}

N-100-9



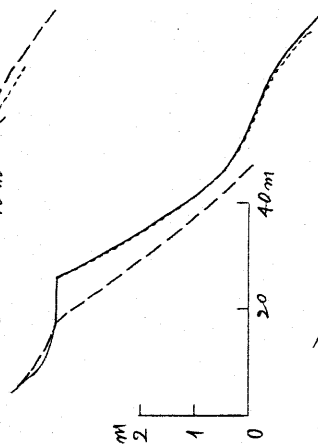
— 3/8/1981
- - - 6/8
- · - 11/8

\bar{V}



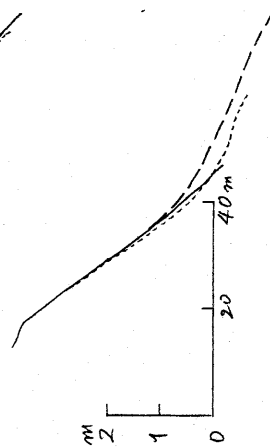
— 11/8
- - - 14/8
- · - 17/8

\bar{V}



— 17/8
- - - 19/8
- · - 23/8

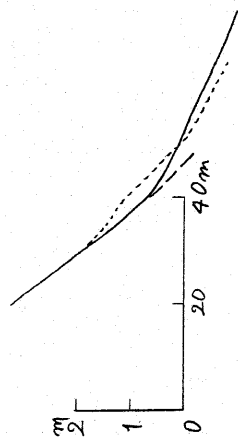
\bar{V}



— 23/8
- - - 26/8
- · - 31/8

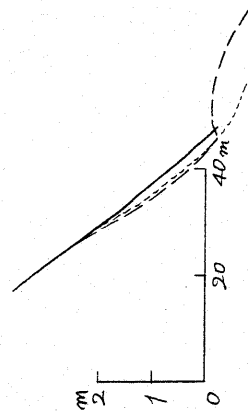
\bar{V}

N-100-10



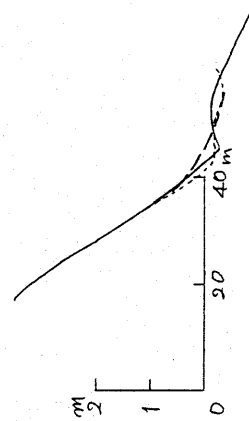
— 31/8/1981
- - - 3/9
- · - 7/9

\bar{V}



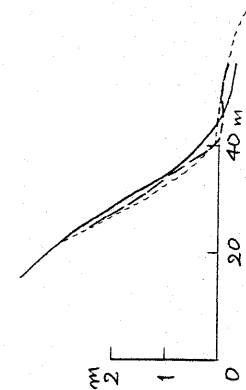
— 7/9
- - - 10/9
- · - 15/9

\bar{V}



— 15/9
- - - 19/9
- · - 24/9

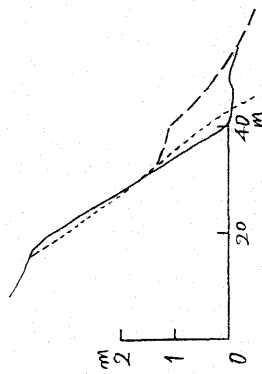
\bar{V}



— 24/9
- - - 28/9
- · - 1/10

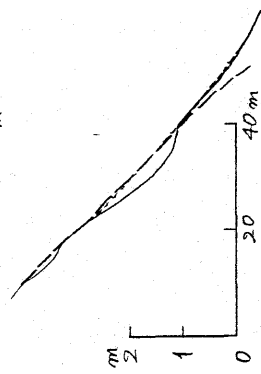
\bar{V}

N-100-11



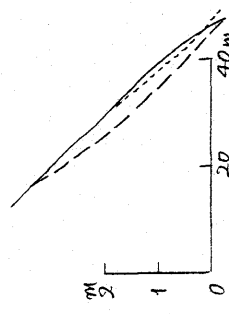
— 1/10/1981
- - - 6/10
- · - 12/10

\bar{V}



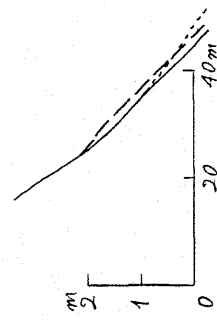
— 12/10
- - - 17/10
- · - 24/10

\bar{V}



— 24/10
- - - 28/10
- · - 2/11

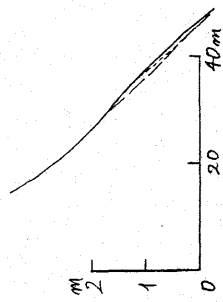
\bar{V}



— 2/11
- - - 8/11
- · - 15/11

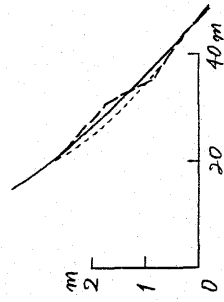
\bar{V}

N-100-12



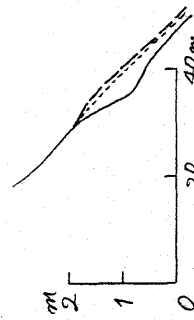
— 15/11/1981
- - - 19/11
- · - 23/11

\bar{V}



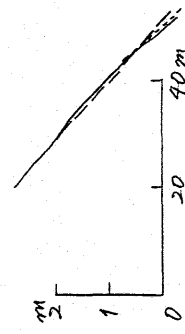
— 23/11
- - - 29/11
- · - 5/12

\bar{V}



— 5/12
- - - 12/12
- · - 15/12

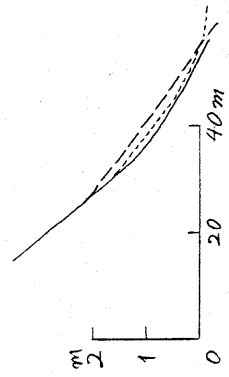
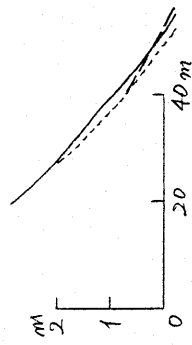
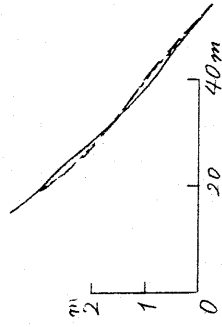
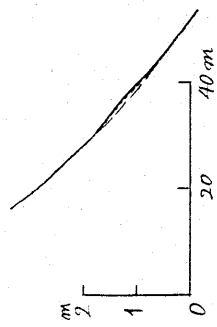
\bar{V}



— 15/12
- - - 22/12
- · - 29/12

\bar{V}

N-100-13



— 29/12/1981
--- 5/1/1982
--- 10/1

\bar{y}

— 10/1
--- 17/1
--- 24/1

\bar{y}

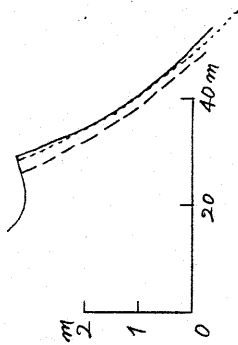
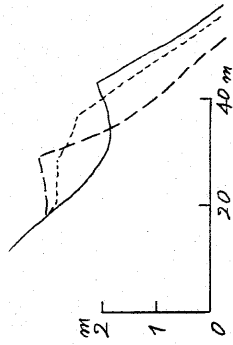
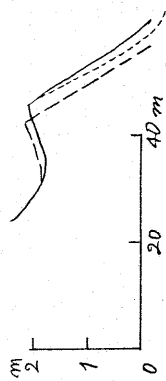
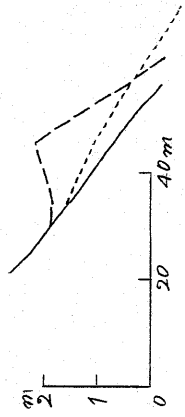
— 24/1
--- 31/1
--- 7/2

\bar{y}

— 7/2
--- 14/2
--- 21/2

\bar{y}

N-100-14



— 21/2/1982
--- 28/2
--- 6/3

\bar{y}

— 6/3
--- 13/3
--- 18/3

\bar{y}

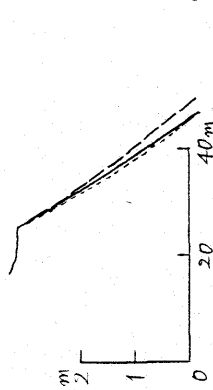
— 18/3
--- 24/3
--- 5/4

\bar{y}

— 5/4
--- 11/4
--- 18/4

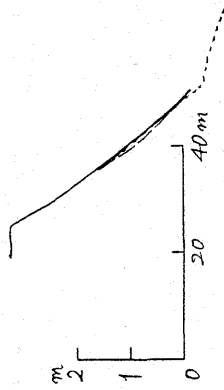
\bar{y}

N-100-15



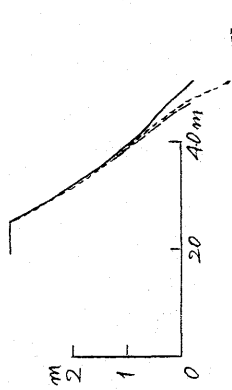
— 18/4/1982
--- 25/4
- - - 1/5

\bar{V}



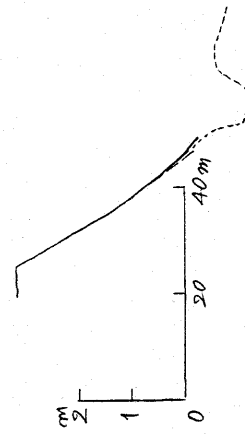
— 1/5
--- 10/5
- - - 17/5

\bar{V}



— 17/5
--- 24/5
- - - 31/5

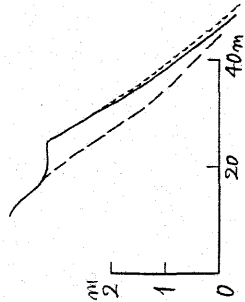
\bar{V}



— 31/5
--- 6/6
- - - 15/6

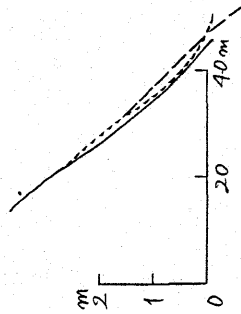
\bar{V}

N-100-16



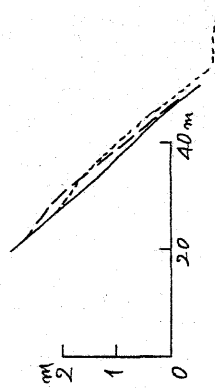
— 15/6/1982
--- 21/6
- - - 29/6

\bar{V}



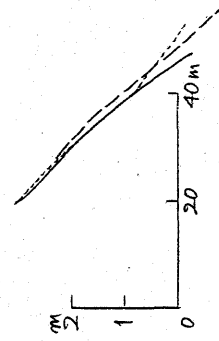
— 29/6
--- 5/7
- - - 12/7

\bar{V}



— 12/7
--- 20/7
- - - 27/7

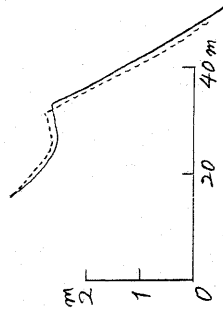
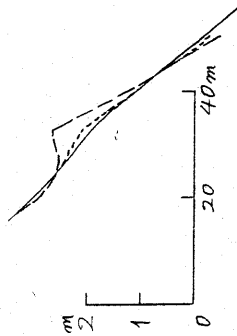
\bar{V}



— 27/7
--- 2/8
- - - 9/8

\bar{V}

N-100-17



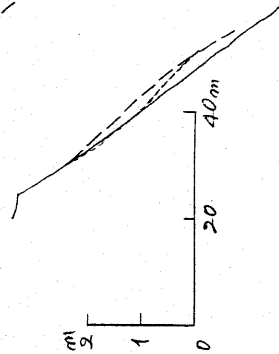
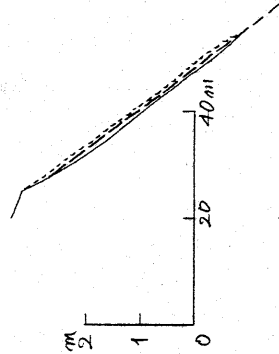
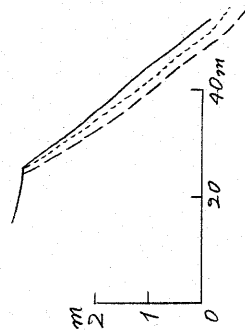
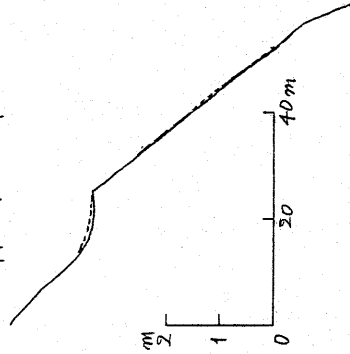
— 9/8/1982
 --- 15/8
 - - - 23/8

\bar{V}

— 23/8
 --- 30/8

\bar{V}

N-120-1



— 28/8/1980
 --- 30/8
 - - - 2/9

\bar{V}

— 2/9
 --- 6/9
 - - - 9/9

\bar{V}

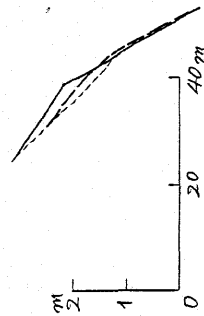
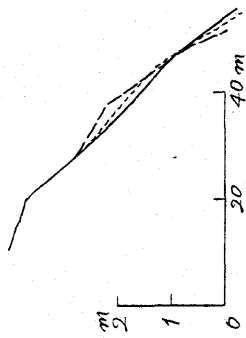
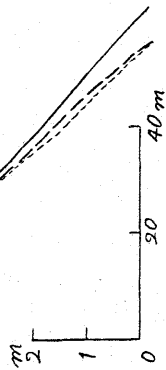
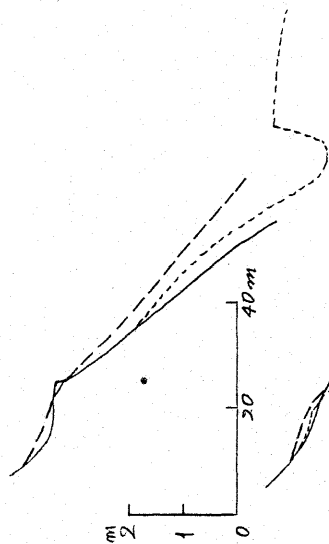
— 9/9
 --- 12/9
 - - - 15/9

\bar{V}

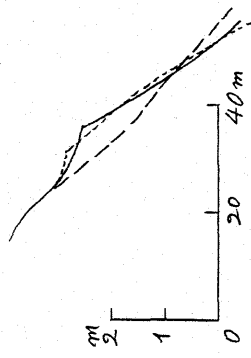
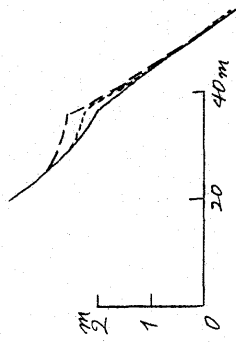
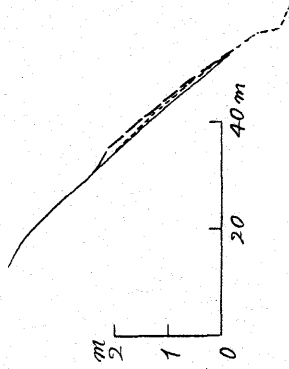
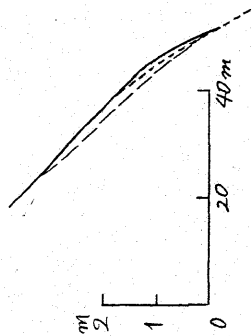
— 15/9
 --- 19/9
 - - - 22/9

\bar{V}

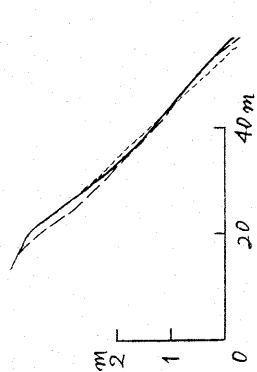
N-120-2



N-120-3

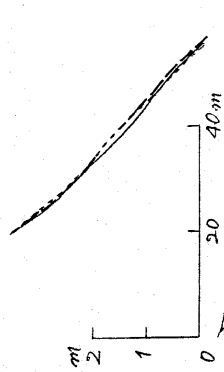


N-120-4



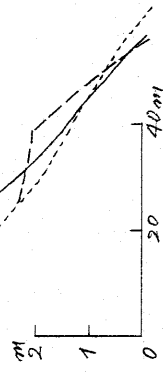
— 26/11/1980
 --- 1/12
 - - - 8/12

∇



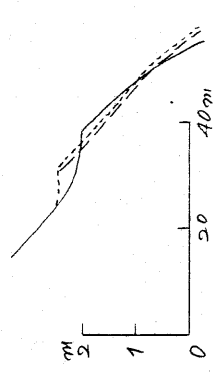
— 8/12
 --- 15/12
 - - - 22/12

∇



— 22/12
 --- 29/12
 - - - 6/1/1981

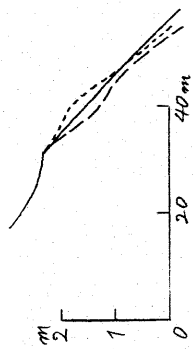
∇



— 6/1
 --- 12/1
 - - - 21/1

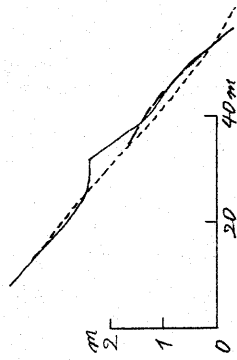
∇

N-120-5



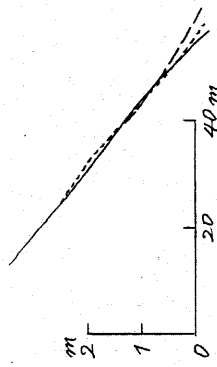
— 21/1/1981
 --- 25/1
 - - - 1/2

∇



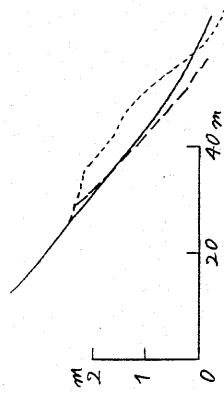
— 1/2
 --- 8/2
 - - - 15/2

∇



— 15/2
 --- 22/2
 - - - 28/2

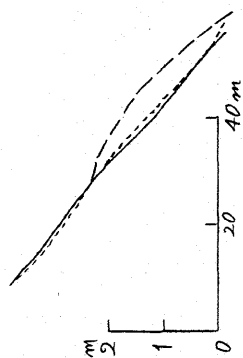
∇



— 28/2
 --- 8/3
 - - - 15/3

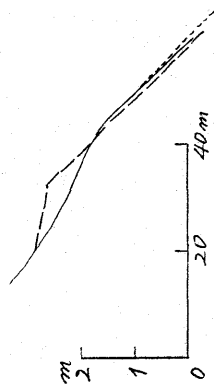
∇

N-120-6



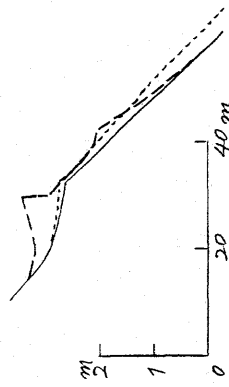
— 15/3/1981
- - - 22/3
- · - 29/3

▽



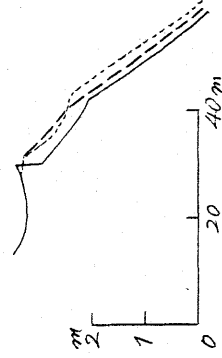
— 29/3
- - - 5/4
- · - 11/4

▽



— 11/4
- - - 19/4
- · - 26/4

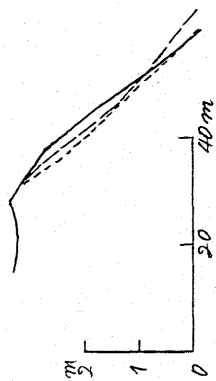
▽



— 26/4
- - - 3/5
- · - 11/5

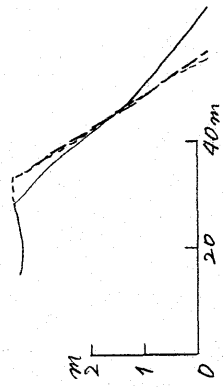
▽

N-120-7



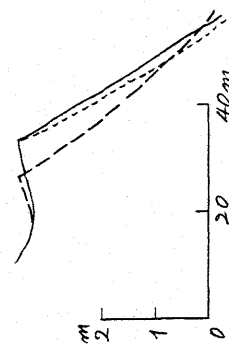
— 11/5/1981
- - - 17/5
- · - 24/5

▽



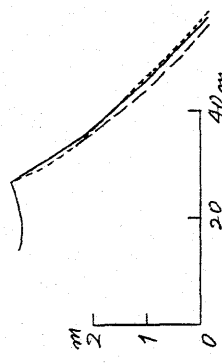
— 24/5
- - - 1/6
- · - 7/6

▽



— 7/6
- - - 15/6
- · - 21/6

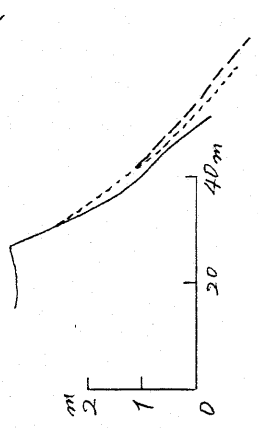
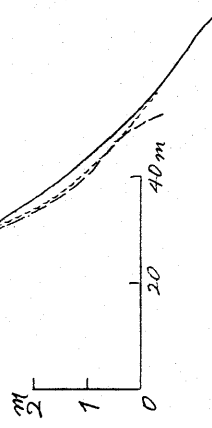
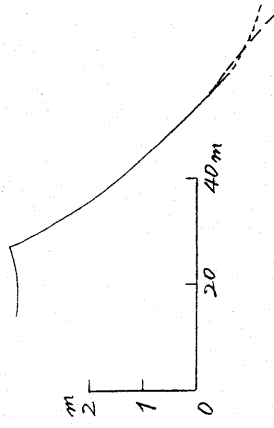
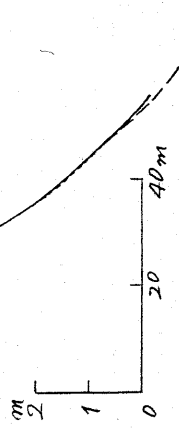
▽



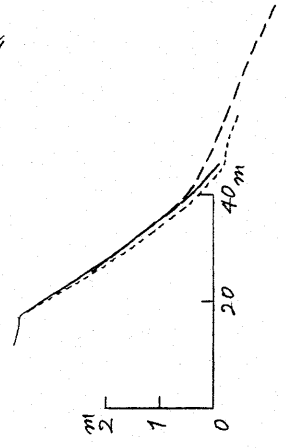
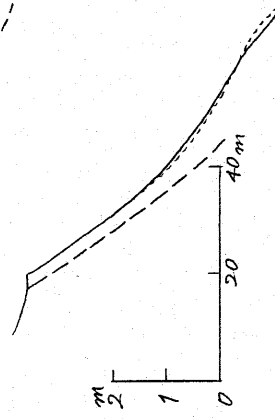
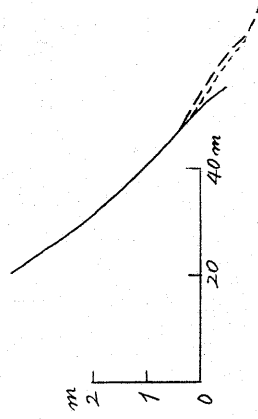
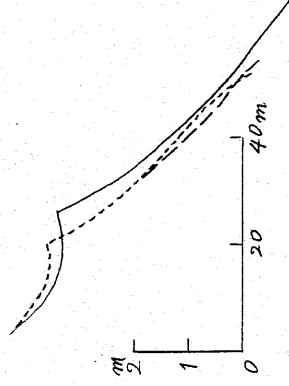
— 21/6
- - - 28/6
- · - 6/7

▽

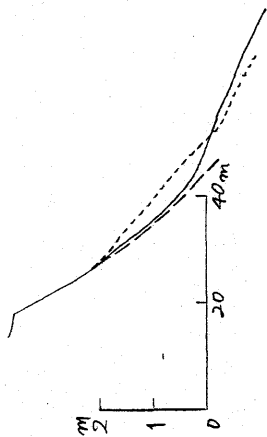
N-120-8



N-120-9

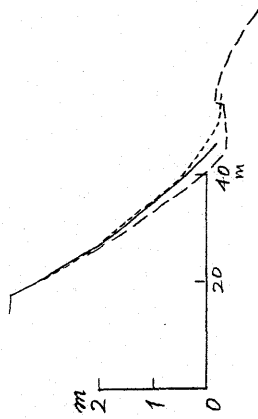


N-120-10



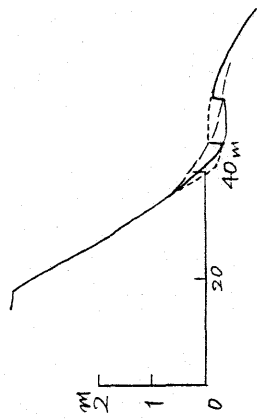
— 31/8/1981
- - - 3/9
- · - 7/9

∇_{II}



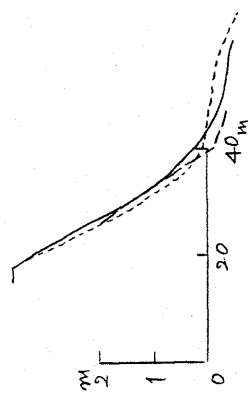
— 7/9
- - - 10/9
- · - 15/9

∇_{II}



— 15/9
- - - 19/9
- · - 24/9

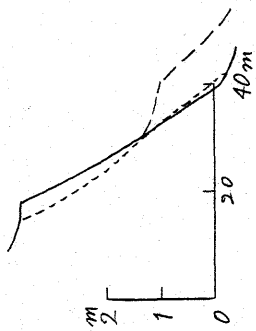
∇_{II}



— 24/9
- - - 28/9
- · - 1/10

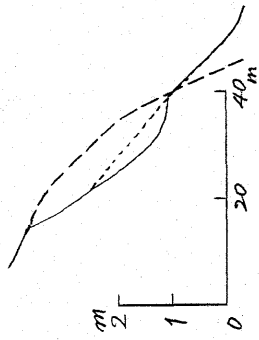
∇_{II}

N-120-11



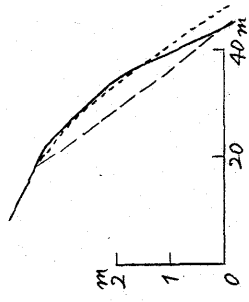
— 1/10/1981
- - - 6/10
- · - 12/10

∇_{II}



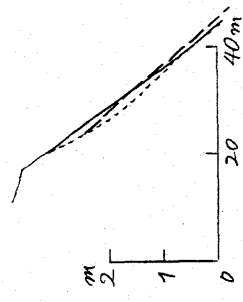
— 12/10
- - - 17/10
- · - 24/10

∇_{II}



— 24/10
- - - 28/10
- · - 2/11

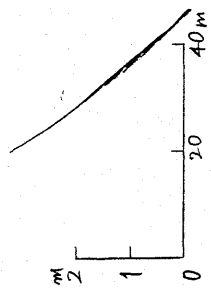
∇_{II}



— 2/11
- - - 8/11
- · - 15/11

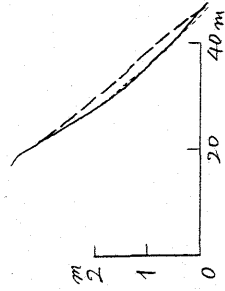
∇_{II}

N-120-12



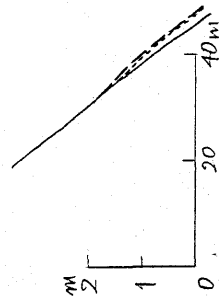
— 15/11/1981
- - - 19/11
- - - 23/11

\bar{V}



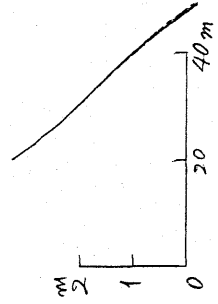
— 23/11
- - - 29/11
- - - 5/12

\bar{V}



— 5/12
- - - 12/12
- - - 15/12

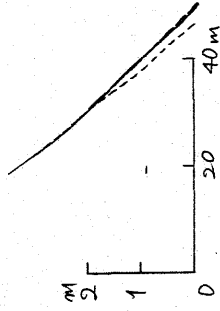
\bar{V}



— 15/12
- - - 22/12
- - - 29/12

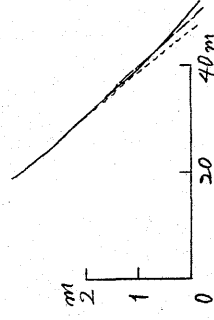
\bar{V}

N-120-13



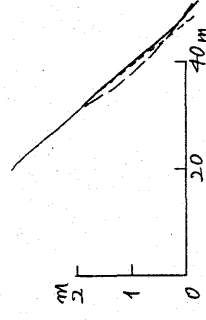
— 29/12/1981
- - - 5/1/1982
- - - 10/1

\bar{V}



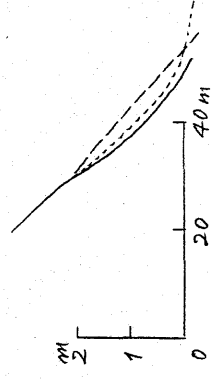
— 10/1
- - - 17/1
- - - 24/1

\bar{V}



— 24/1
- - - 31/1
- - - 7/2

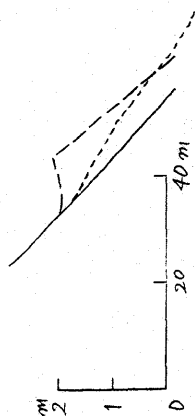
\bar{V}



— 7/2
- - - 14/2
- - - 21/2

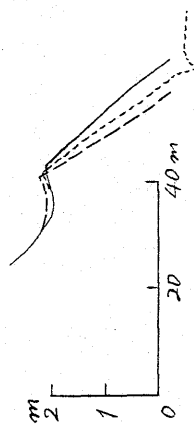
\bar{V}

N-120-14



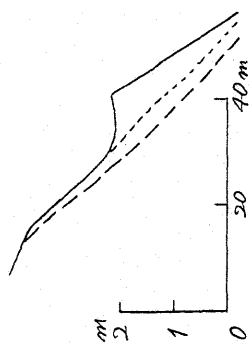
— 21/2/1982
- - - 28/2
- · - 6/3

\bar{v}



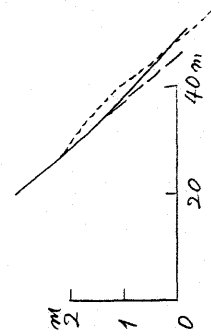
— 6/3
- - - 13/3
- · - 18/3

\bar{v}



— 18/3
- - - 24/3
- · - 5/4

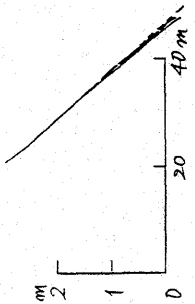
\bar{v}



— 5/4
- - - 11/4
- · - 18/4

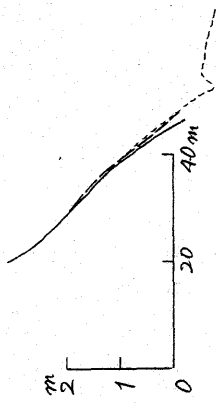
\bar{v}

N-120-15



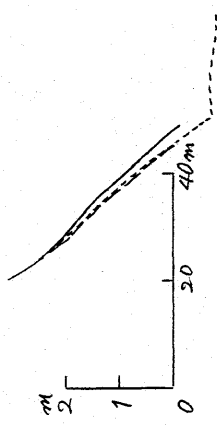
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{v}



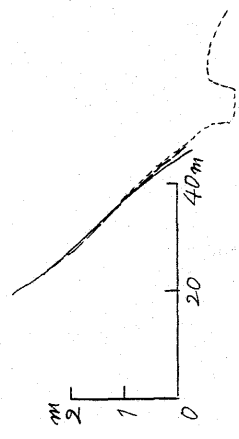
— 1/5
- - - 10/5
- · - 17/5

\bar{v}



— 17/5
- - - 24/5
- · - 31/5

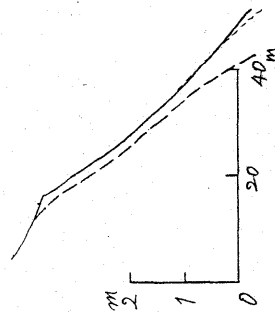
\bar{v}



— 31/5
- - - 6/6
- · - 15/6

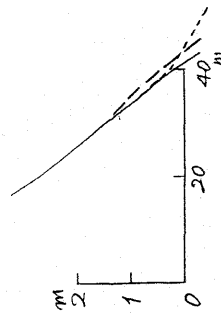
\bar{v}

N-120-16



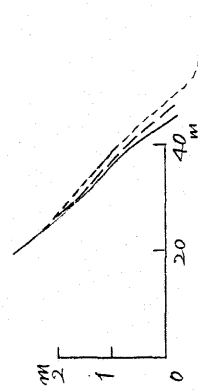
— 15/6/1982
 --- 21/6
 - - - 29/6

$\frac{m}{2}$



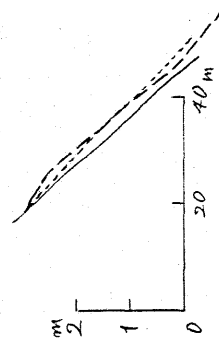
— 29/6
 --- 5/7
 - - - 12/7

$\frac{m}{2}$



— 12/7
 --- 20/7
 - - - 27/7

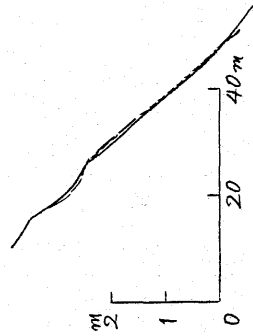
$\frac{m}{2}$



— 27/7
 --- 2/8
 - - - 9/8

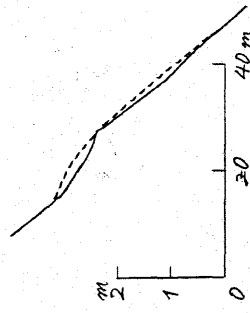
$\frac{m}{2}$

N-120-17



— 9/8/1982
 --- 15/8
 - - - 23/8

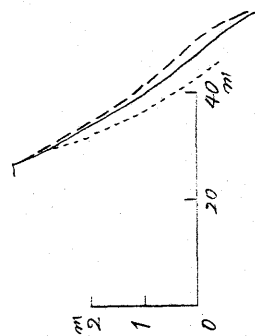
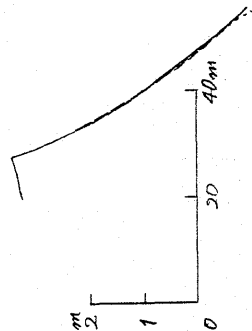
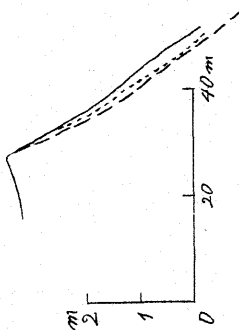
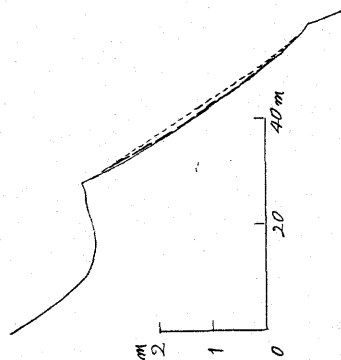
$\frac{m}{2}$



— 23/8
 --- 30/8

$\frac{m}{2}$

N-140-1



— 28/8/1980
--- 30/8
--- 2/9

\bar{V}

— 2/9
--- 6/9
--- 9/9

\bar{V}

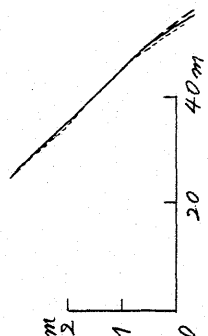
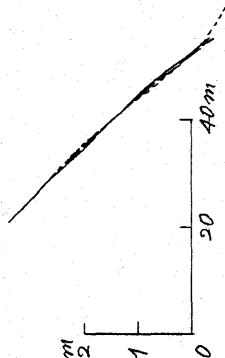
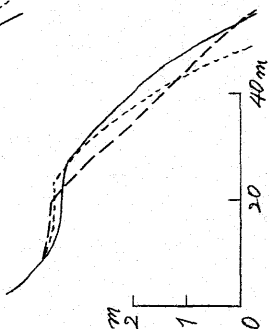
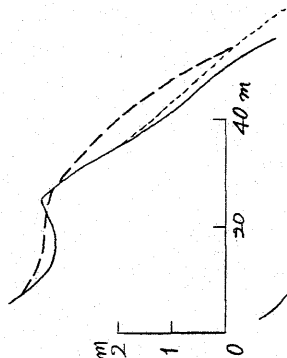
— 9/9
--- 12/9
--- 15/9

\bar{V}

— 15/9
--- 19/9
--- 22/9

\bar{V}

N-140-2



— 22/9/1980
--- 25/9
--- 29/9

\bar{V}

— 29/9
--- 3/10
--- 7/10

\bar{V}

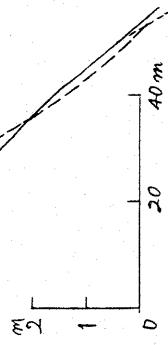
— 7/10
--- 10/10
--- 14/10

\bar{V}

— 14/10
--- 15/10
--- 18/10

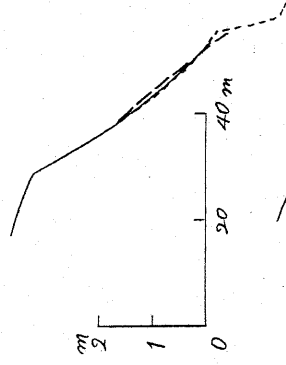
\bar{V}

N-140-3



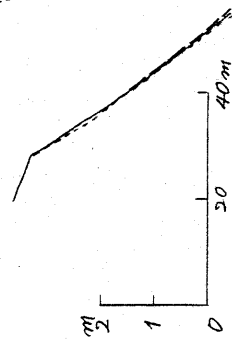
— 18/10/1980
- - - 22/10
- · - 27/10

∇



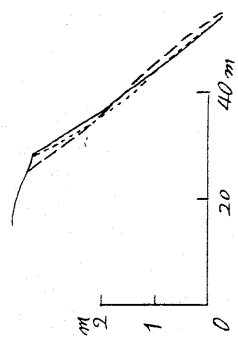
— 27/10
- - - 1/11
- · - 6/11

∇



— 6/11
- - - 11/11
- · - 16/11

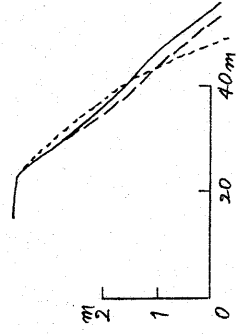
∇



— 16/11
- - - 21/11
- · - 26/11

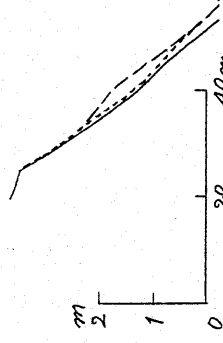
∇

N-140-4



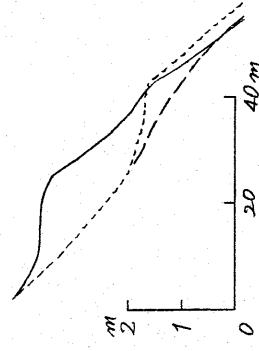
— 26/11/1980
- - - 1/12
- · - 8/12

∇



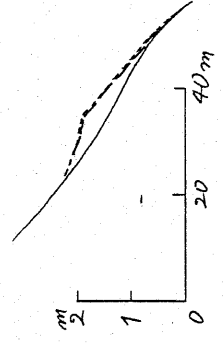
— 8/12
- - - 15/12
- · - 22/12

∇



— 22/12
- - - 29/12
- · - 6/1/1981

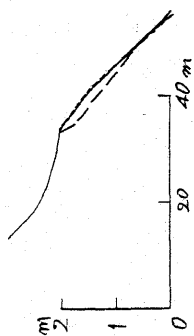
∇



— 6/1
- - - 12/1
- · - 21/1

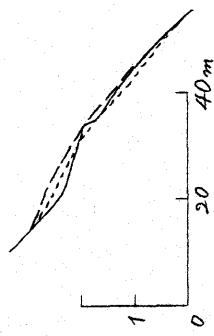
∇

N-140-5



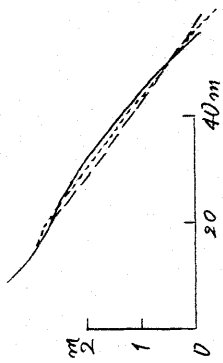
— 21 / 1 / 1981
 --- 25 / 1
 - - - 1 / 2

∇



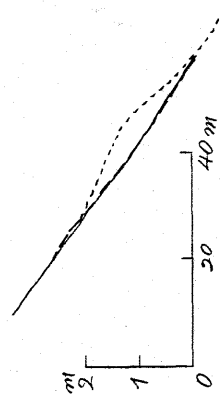
— 1 / 2
 --- 8 / 2
 - - - 15 / 2

∇



— 15 / 2
 --- 22 / 2
 - - - 28 / 2

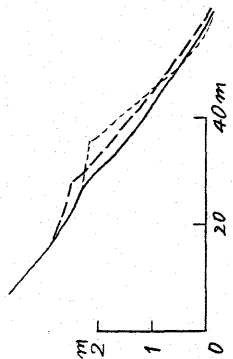
∇



— 28 / 2
 --- 8 / 3
 - - - 15 / 3

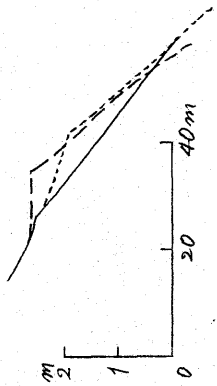
∇

N-140-6



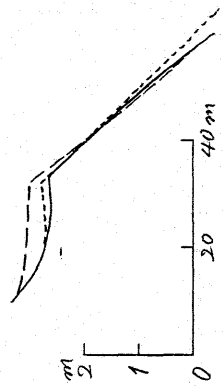
— 15 / 3 / 1981
 --- 22 / 3
 - - - 29 / 3

∇



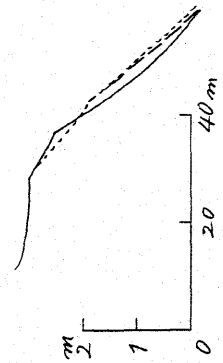
— 29 / 3
 --- 5 / 4
 - - - 11 / 4

∇



— 11 / 4
 --- 19 / 4
 - - - 26 / 4

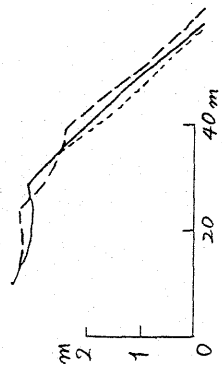
∇



— 26 / 4
 --- 3 / 5
 - - - 11 / 5

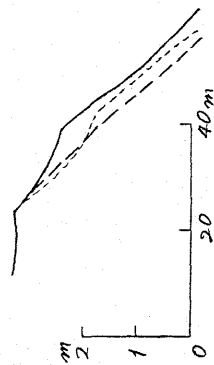
∇

N-140-7



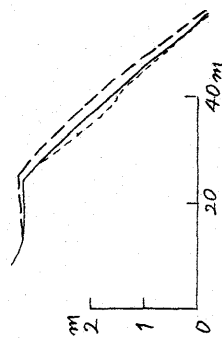
— 11 / 5 / 1981
 --- 17 / 5
 - - - 24 / 5

—



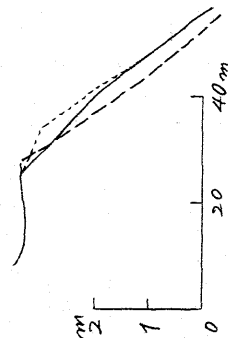
— 24 / 5
 --- 1 / 6
 - - - 7 / 6

—



— 7 / 6
 --- 15 / 6
 - - - 21 / 6

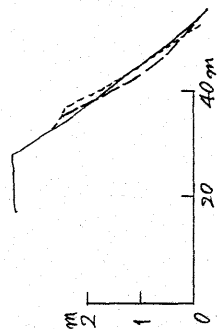
—



— 21 / 6
 --- 28 / 6
 - - - 6 / 7

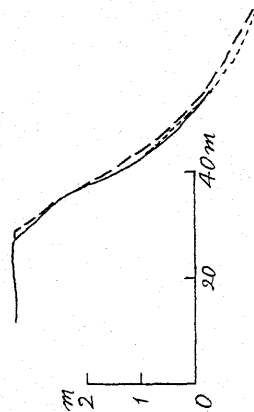
—

N-140-8



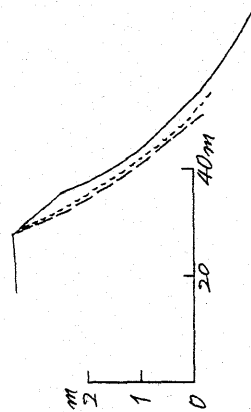
— 6 / 7 / 1981
 --- 9 / 7
 - - - 13 / 7

—



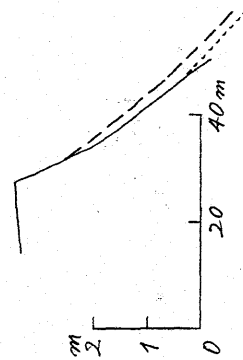
— 13 / 7
 --- 16 / 7
 - - - 20 / 7

—



— 20 / 7
 --- 23 / 7
 - - - 27 / 7

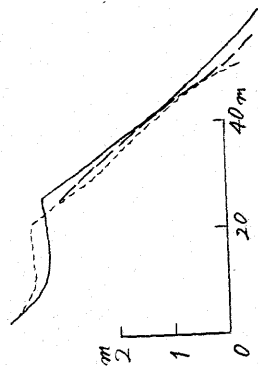
—



— 27 / 7
 --- 30 / 7
 - - - 3 / 8

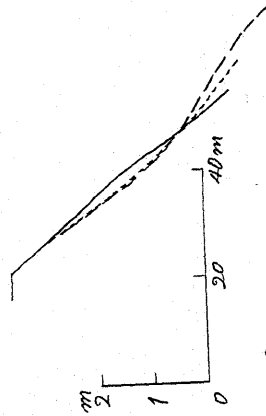
—

N-140-9



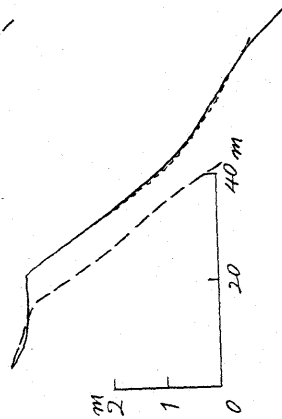
— 3/8/1981
- - - 6/8
- · - 11/8

∇



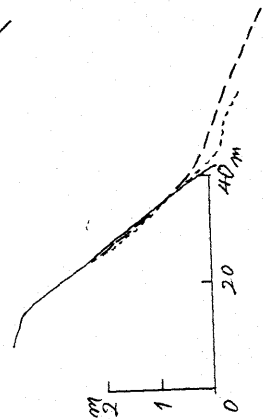
— 11/8
- - - 14/8
- · - 17/8

∇



— 17/8
- - - 19/8
- · - 23/8

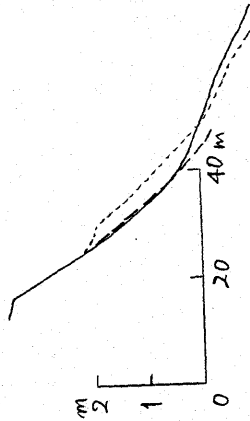
∇



— 23/8
- - - 26/8
- · - 31/8

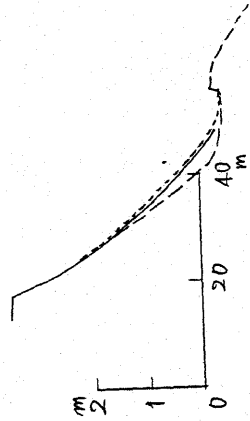
∇

N-140-10



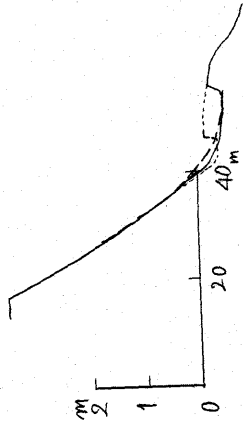
— 31/8/1981
- - - 3/9
- · - 7/9

∇



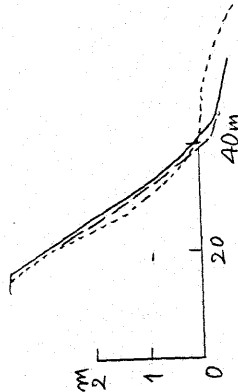
— 7/9
- - - 10/9
- · - 15/9

∇



— 15/9
- - - 19/9
- · - 24/9

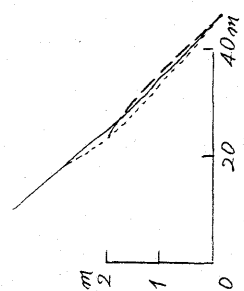
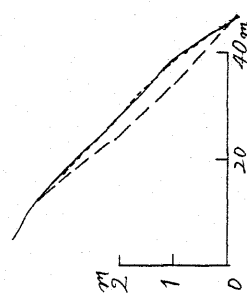
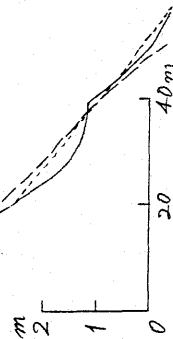
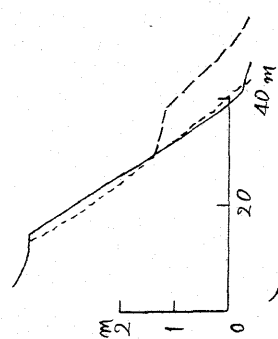
∇



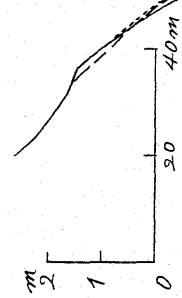
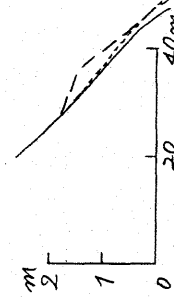
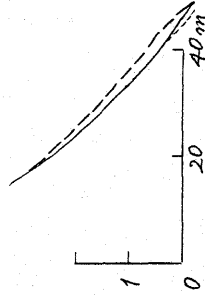
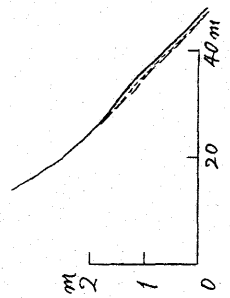
— 24/9
- - - 28/9
- · - 1/10

∇

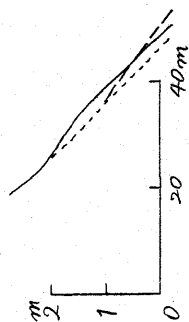
N- 140 - 11



N- 140 - 12

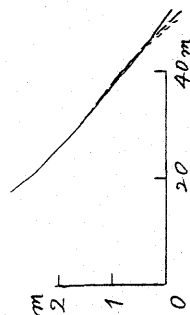


N-140-13



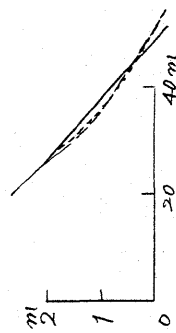
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

$\bar{\nabla}$



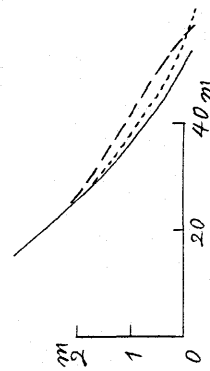
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

$\bar{\nabla}$



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

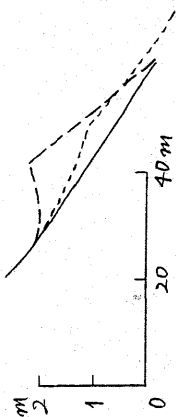
$\bar{\nabla}$



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

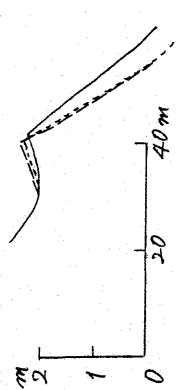
$\bar{\nabla}$

N-140-14



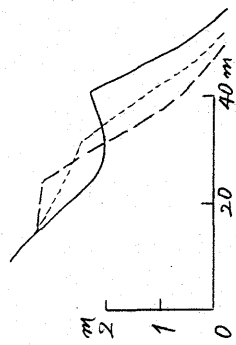
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

$\bar{\nabla}$



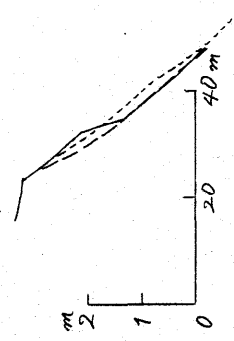
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

$\bar{\nabla}$



— 18 / 3
 --- 24 / 3
 - - - 5 / 4

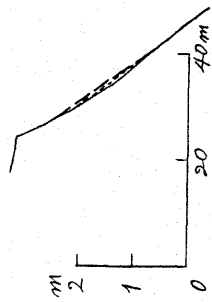
$\bar{\nabla}$



— 5 / 4
 --- 11 / 4
 - - - 18 / 4

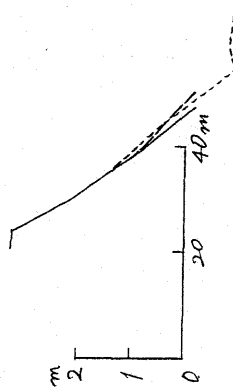
$\bar{\nabla}$

N-140-15



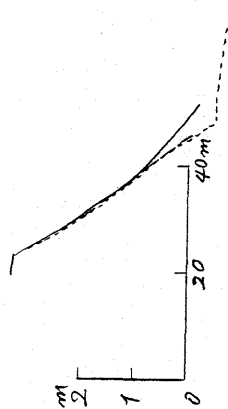
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{V}



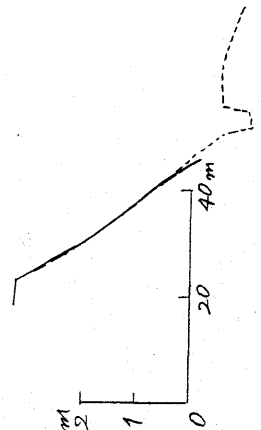
— 1/5
- - - 10/5
- · - 17/5

\bar{V}



— 17/5
- - - 24/5
- · - 31/5

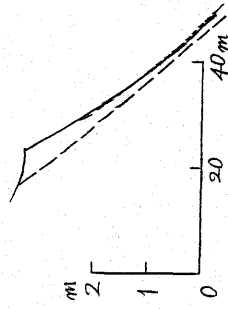
\bar{V}



— 31/5
- - - 6/6
- · - 15/6

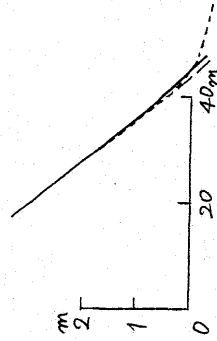
\bar{V}

N-140-16



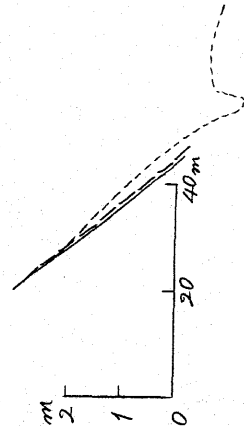
— 15/6/1982
- - - 21/6
- · - 29/6

\bar{V}



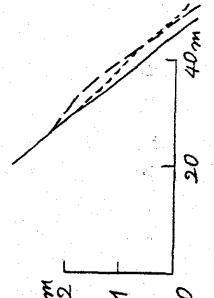
— 29/6
- - - 5/7
- · - 12/7

\bar{V}



— 12/7
- - - 20/7
- · - 27/7

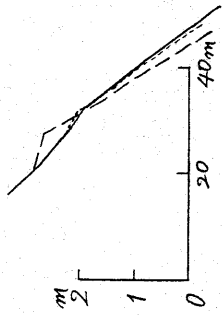
\bar{V}



— 27/7
- - - 2/8
- · - 9/8

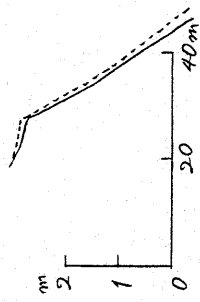
\bar{V}

N-140-17



— 9/8/1982
 --- 15/8
 - - - 23/8

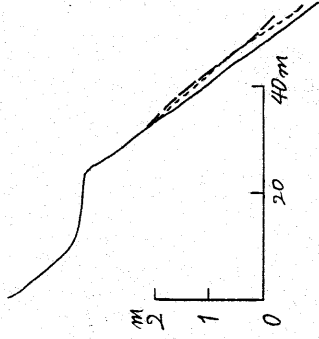
∇



— 23/8
 --- 30/8

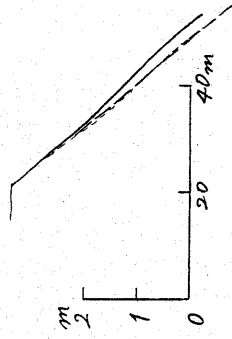
∇

N-160-1



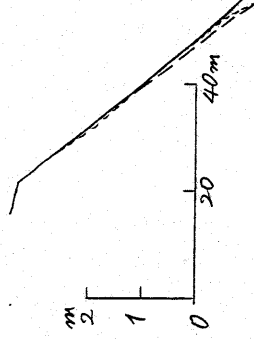
— 28/8/1980
 --- 30/8
 - - - 2/9

∇



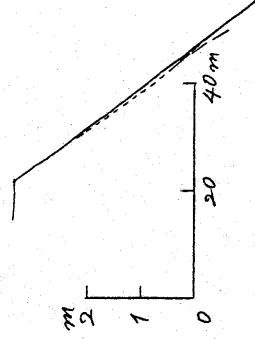
— 2/9
 --- 6/9
 - - - 9/9

∇



— 9/9
 --- 12/9
 - - - 15/9

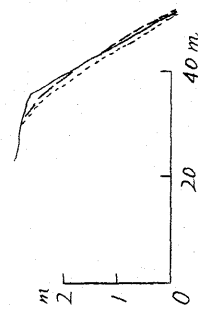
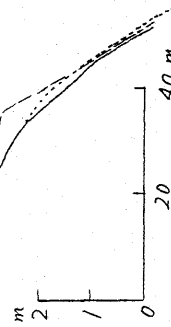
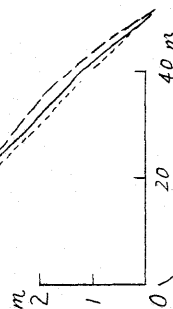
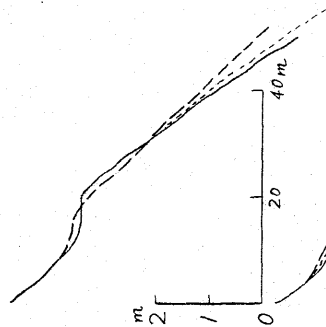
∇



— 15/9
 --- 19/9
 - - - 22/9

∇

N-160-2



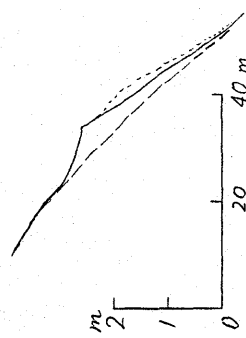
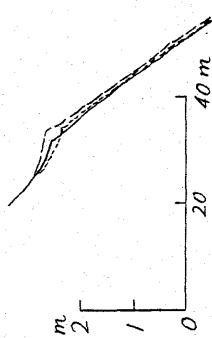
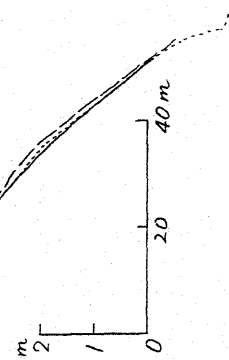
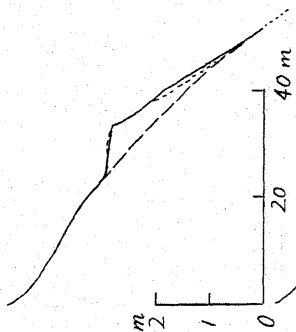
\bar{V}

\bar{V}

\bar{V}

\bar{V}

N-160-3



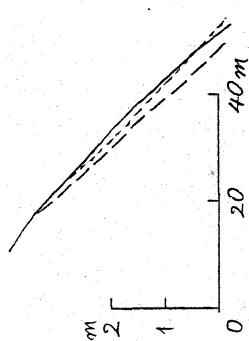
\bar{V}

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\bar{V}

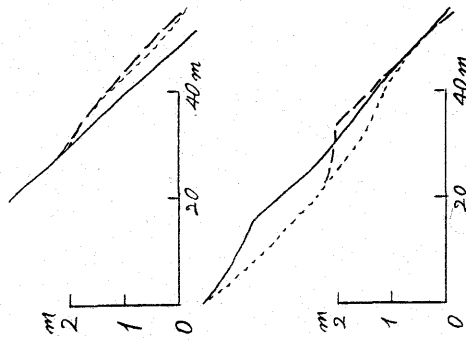
\bar{V}

N-160-4



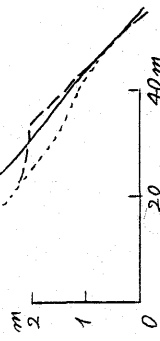
— 26 / 11 / 1980
 - - - 1 / 12
 - · - 8 / 12

\bar{V}_i



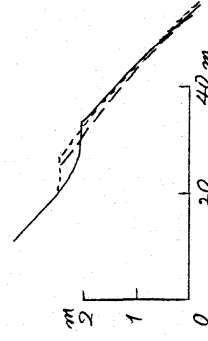
— 8 / 12
 - - - 15 / 12
 - · - 22 / 12

\bar{V}_i



— 22 / 12
 - - - 29 / 12
 - · - 6 / 1 / 1981

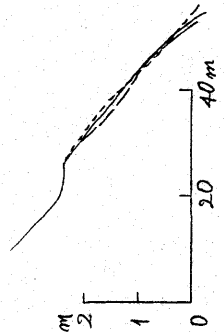
\bar{V}_i



— 6 / 1
 - - - 12 / 1
 - · - 21 / 1

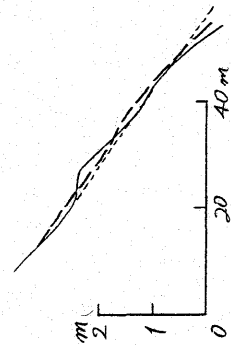
\bar{V}_i

N-160-5



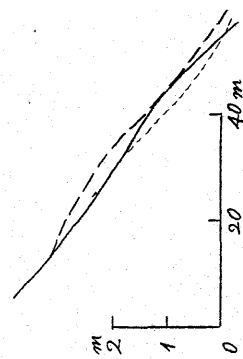
— 29 / 1 / 1981
 - - - 25 / 1
 - · - 1 / 2

\bar{V}_i



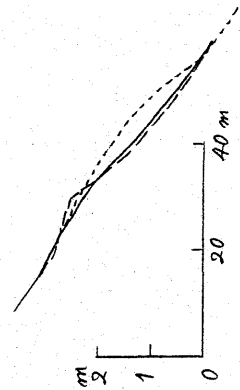
— 1 / 2
 - - - 8 / 2
 - · - 15 / 2

\bar{V}_i



— 15 / 2
 - - - 22 / 2
 - · - 28 / 2

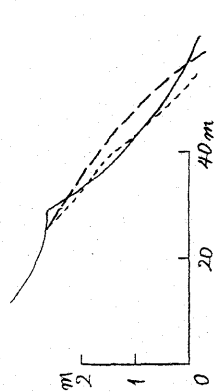
\bar{V}_i



— 28 / 2
 - - - 8 / 3
 - · - 15 / 3

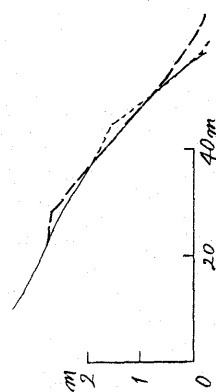
\bar{V}_i

N-160-6



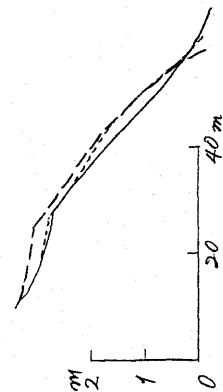
— 15/3/1981
 --- 22/3
 - - - 29/3

\bar{V}



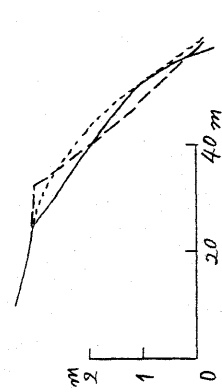
— 29/3
 --- 5/4
 - - - 11/4

\bar{V}



— 11/4
 --- 19/4
 - - - 26/4

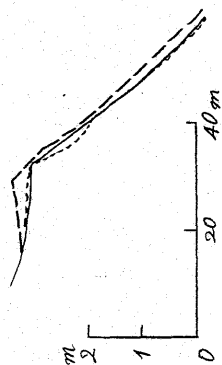
\bar{V}



— 26/4
 --- 3/5
 - - - 11/5

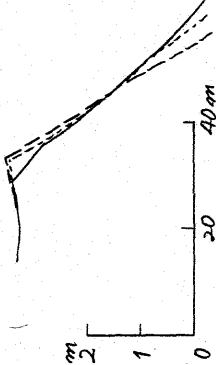
\bar{V}

N-160-7



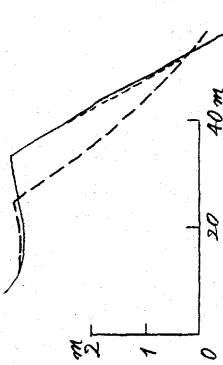
— 11/5/1981
 --- 17/5
 - - - 24/5

\bar{V}



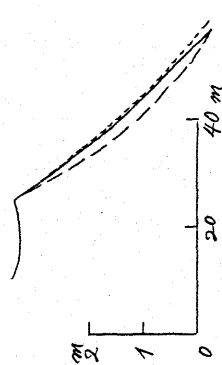
— 24/5
 --- 1/6
 - - - 7/6

\bar{V}



— 7/6
 --- 15/6
 - - - 21/6

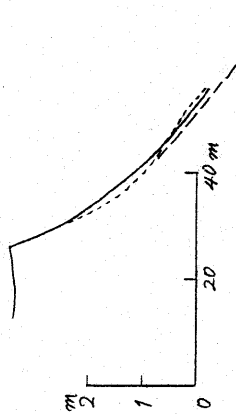
\bar{V}



— 21/6
 --- 28/6
 - - - 6/7

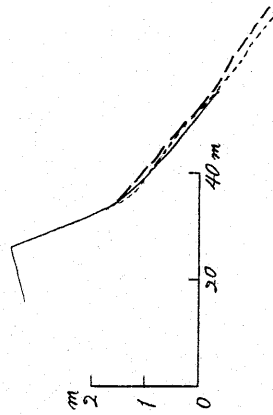
\bar{V}

N-160-8



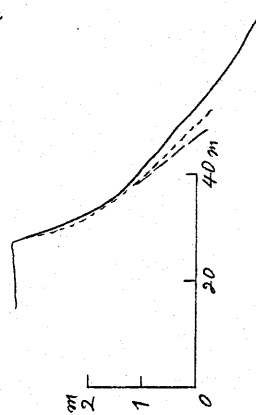
— 6 / 7 / 1981
- - - 9 / 7
- · - 13 / 7

\bar{y}



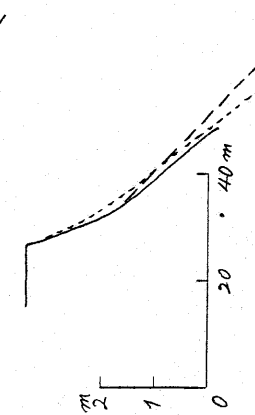
— 13 / 7
- - - 16 / 7
- · - 20 / 7

\bar{y}



— 20 / 7
- - - 23 / 7
- · - 27 / 7

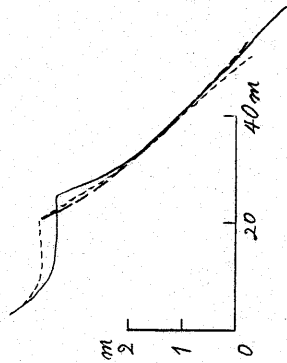
\bar{y}



— 27 / 7
- - - 30 / 7
- · - 3 / 8

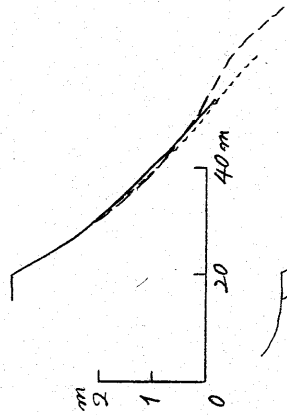
\bar{y}

N-160-9



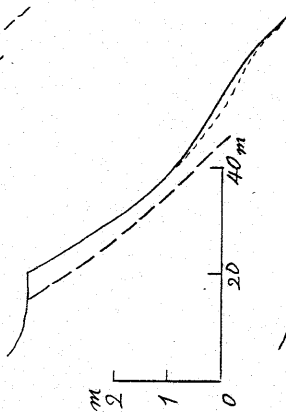
— 3 / 8 / 1981
- - - 6 / 8
- · - 11 / 8

\bar{y}



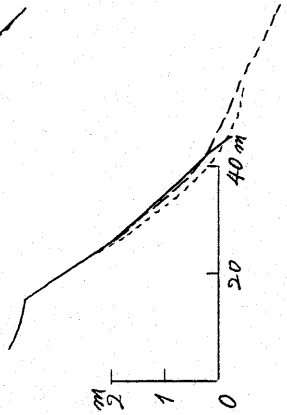
— 11 / 8
- - - 14 / 8
- · - 17 / 8

\bar{y}



— 17 / 8
- - - 19 / 8
- · - 23 / 8

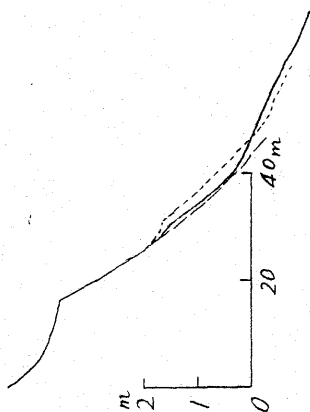
\bar{y}



— 23 / 8
- - - 26 / 8
- · - 31 / 8

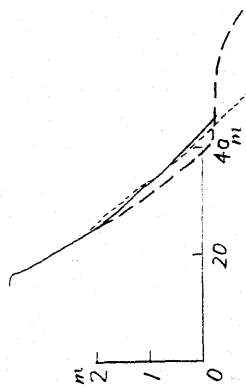
\bar{y}

N-160-10



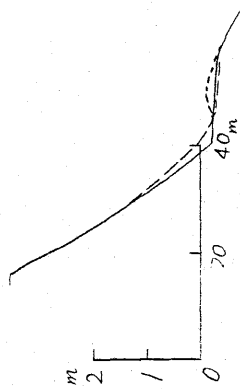
— 31/8/1981
- - - 3/9
- · - 7/9

\bar{y}



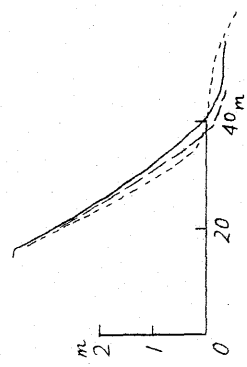
— 7/9
- - - 10/9
- · - 15/9

\bar{y}



— 15/9
- - - 19/9
- · - 24/9

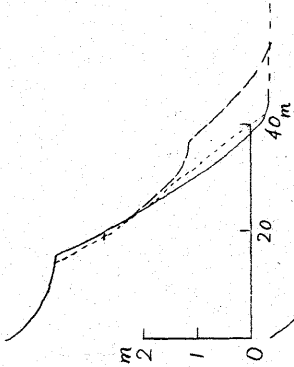
\bar{y}



— 24/9
- - - 28/9
- · - 1/10

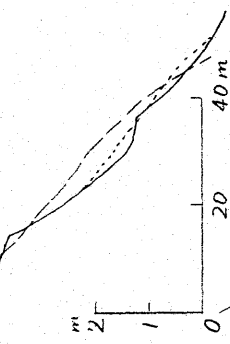
\bar{y}

N-160-11



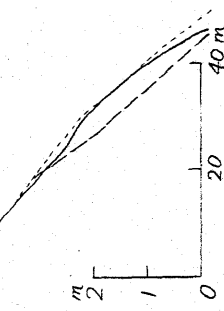
— 1/10/1981
- - - 6/10
- · - 12/10

\bar{y}



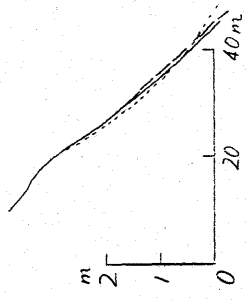
— 12/10
- - - 17/10
- · - 24/10

\bar{y}



— 24/10
- - - 28/10
- · - 2/11

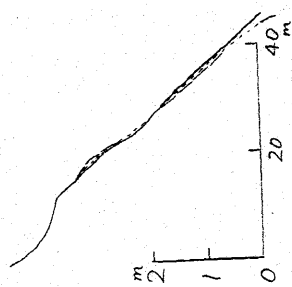
\bar{y}



— 2/11
- - - 8/11
- · - 15/11

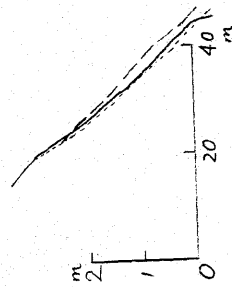
\bar{y}

N-160-12



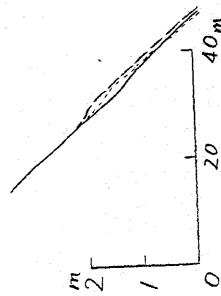
— 15/11/1981
 19/11
 --- 23/11

$\frac{\bar{v}}{v}$



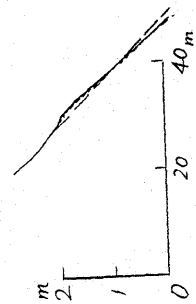
— 23/11
 29/11
 --- 5/12

$\frac{\bar{v}}{v}$



— 5/12
 12/12
 --- 15/12

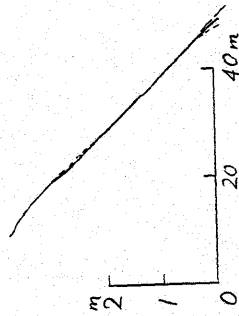
$\frac{\bar{v}}{v}$



— 15/12
 22/12
 --- 29/12

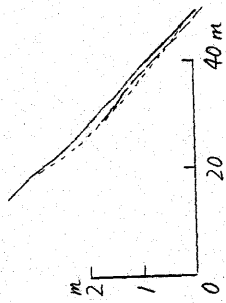
$\frac{\bar{v}}{v}$

N-160-13



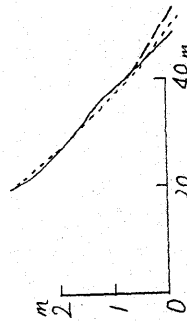
— 29/12/1981
 5/1/1982
 --- 10/1

$\frac{\bar{v}}{v}$



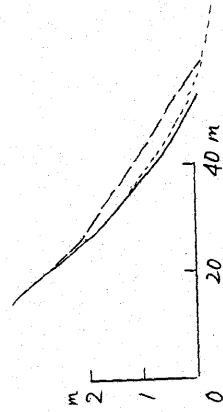
— 10/1
 17/1
 --- 24/1

$\frac{\bar{v}}{v}$



— 24/1
 31/1
 --- 7/2

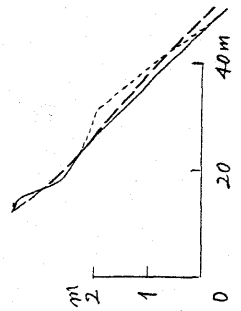
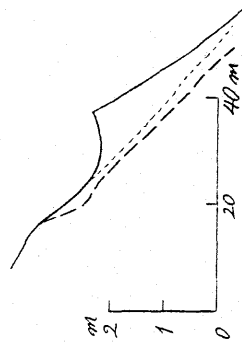
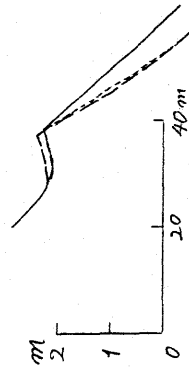
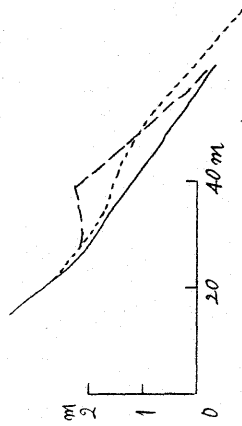
$\frac{\bar{v}}{v}$



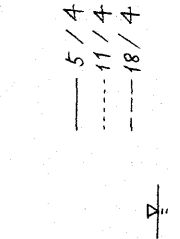
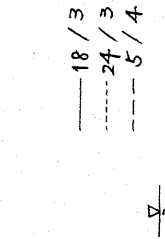
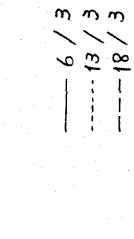
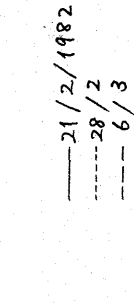
— 7/2
 14/2
 --- 21/2

$\frac{\bar{v}}{v}$

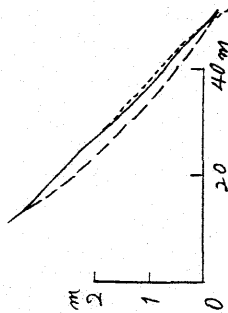
N-160-14



N-160-15

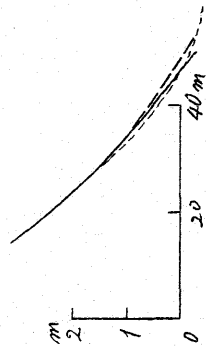


N-160-16



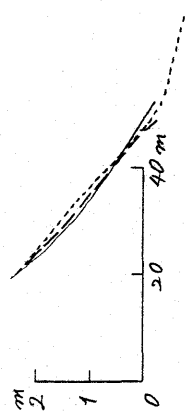
— 15/6/1982
 --- 21/6
 - - - 29/6

∇



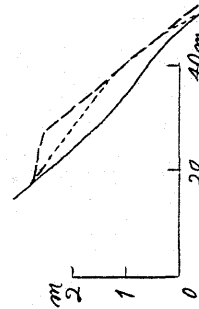
— 29/6
 --- 5/7
 - - - 12/7

∇



— 12/7
 --- 20/7
 - - - 27/7

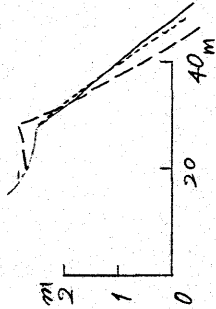
∇



— 27/7
 --- 2/8
 - - - 9/8

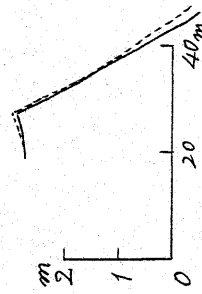
∇

N-160-17



— 9/8/1982
 --- 15/8
 - - - 23/8

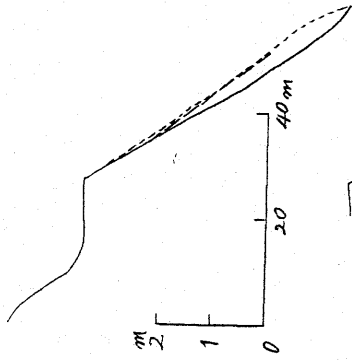
∇



— 23/8
 --- 30/8

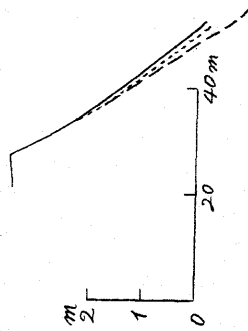
∇

N-180-1



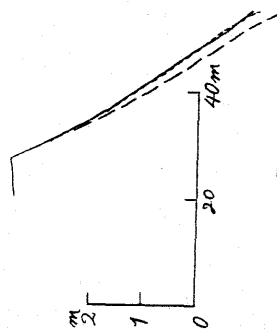
— 28 / 8 / 198Q
- - - 30 / 8
- · - 2 / 9

∇



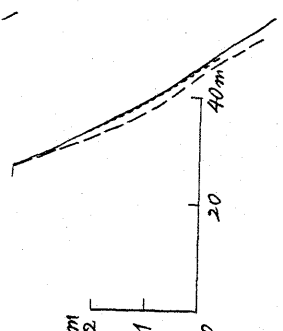
— 2 / 9
- - - 6 / 9
- · - 9 / 9

∇



— 9 / 9
- - - 12 / 9
- · - 15 / 9

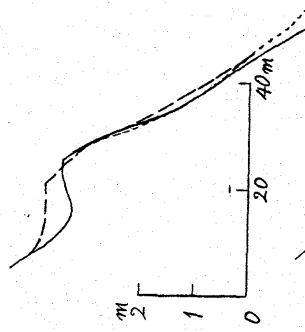
∇



— 15 / 9
- - - 19 / 9
- · - 22 / 9

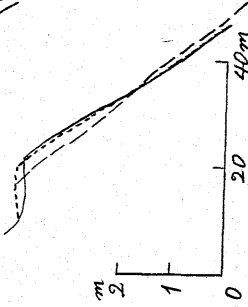
∇

N-180-2



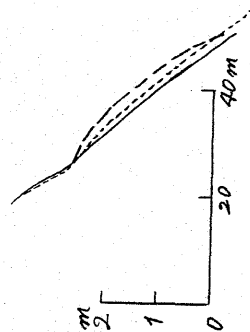
— 22 / 9 / 198Q
- - - 25 / 9
- · - 29 / 9

∇



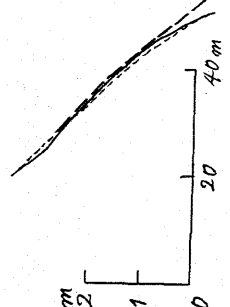
— 29 / 9
- - - 3 / 10
- · - 7 / 10

∇



— 7 / 10
- - - 10 / 10
- · - 14 / 10

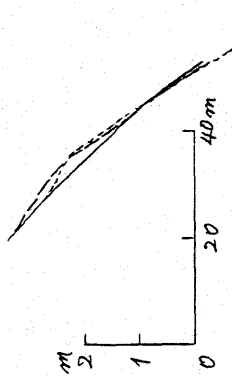
∇



— 14 / 10
- - - 15 / 10
- · - 18 / 10

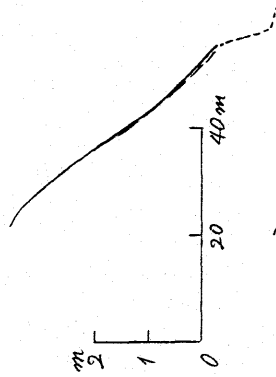
∇

N-180-3



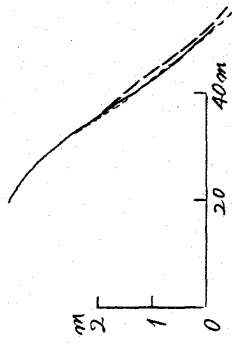
— 18/10/1980
 --- 22/10
 --- 27/10

∇



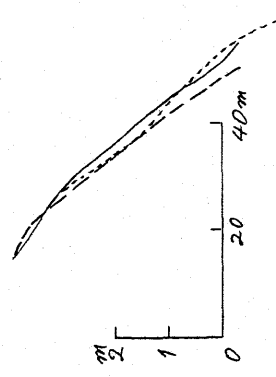
— 27/10
 --- 1/11
 --- 6/11

∇



— 6/11
 --- 11/11
 --- 16/11

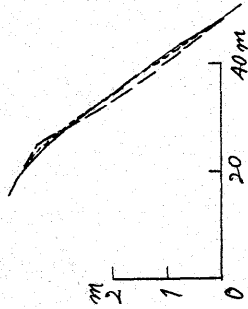
∇



— 16/11
 --- 21/11
 --- 26/11

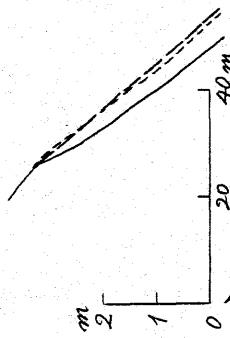
∇

N-180-4



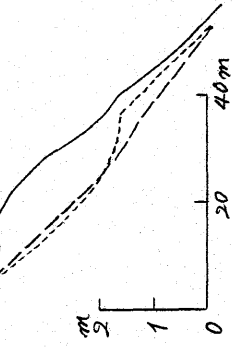
— 26/11/1980
 --- 1/12
 --- 8/12

∇



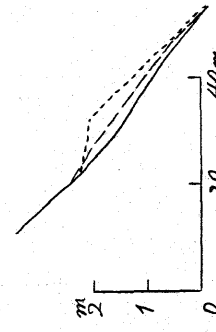
— 8/12
 --- 15/12
 --- 22/12

∇



— 22/12
 --- 29/12
 --- 6/1/1981

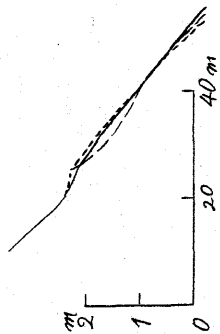
∇



— 6/1
 --- 12/1
 --- 21/1

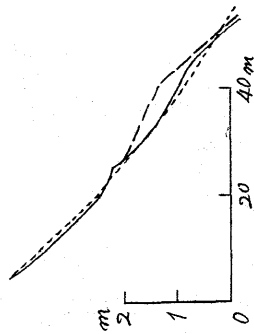
∇

N-180-5



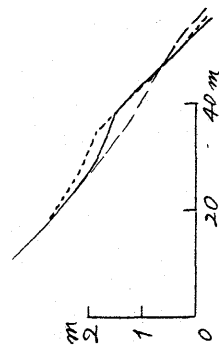
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{V}



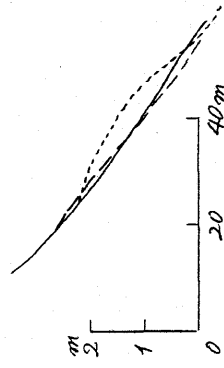
— 1/2
- - - 8/2
- · - 15/2

\bar{V}



— 15/2
- - - 22/2
- · - 28/2

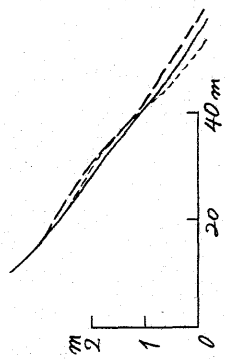
\bar{V}



— 28/2
- - - 8/2
- · - 15/2

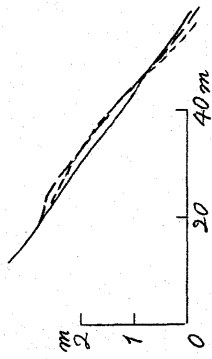
\bar{V}

N-180-6



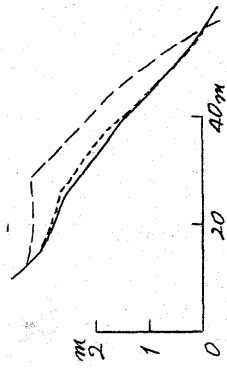
— 15/3/1981
- - - 22/3
- · - 29/3

\bar{V}



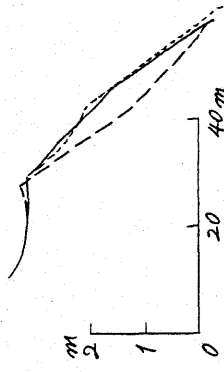
— 29/3
- - - 5/4
- · - 11/4

\bar{V}



— 11/4
- - - 19/4
- · - 26/4

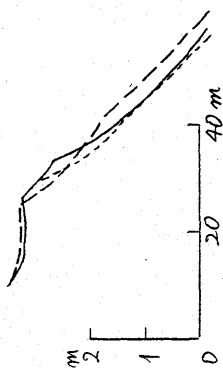
\bar{V}



— 26/4
- - - 3/5
- · - 11/5

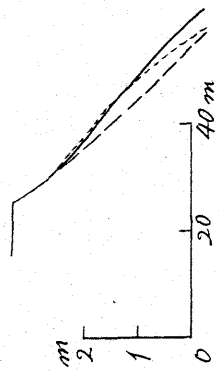
\bar{V}

N-180-7



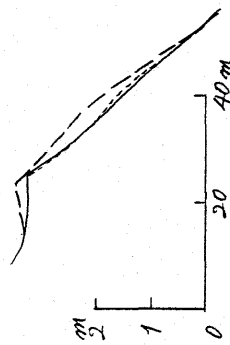
— 11 / 5 / 1981
 --- 17 / 5
 - - - 24 / 5

∇



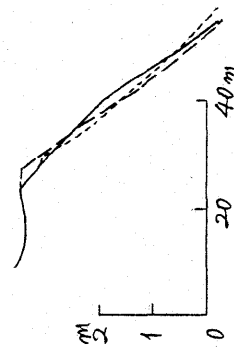
— 24 / 5
 --- 1 / 6
 - - - 7 / 6

∇



— 7 / 6
 --- 15 / 6
 - - - 21 / 6

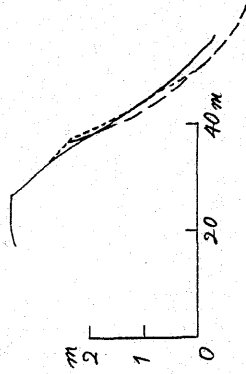
∇



— 21 / 6
 --- 28 / 6
 - - - 6 / 7

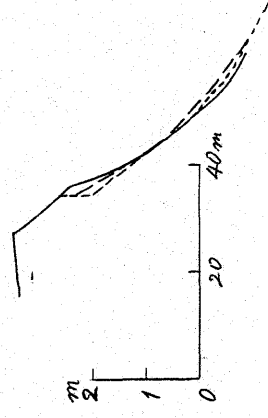
∇

N-180-8



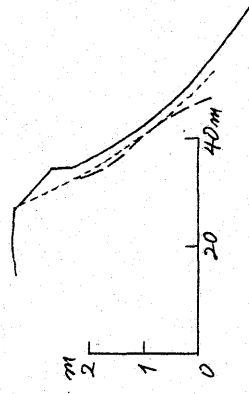
— 6 / 7 / 1981
 --- 9 / 7
 - - - 13 / 7

∇



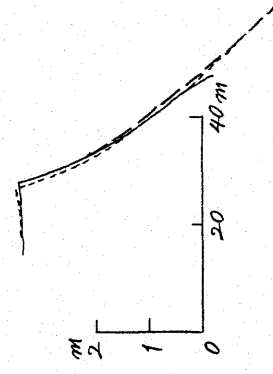
— 13 / 7
 --- 16 / 7
 - - - 20 / 7

∇



— 20 / 7
 --- 23 / 7
 - - - 27 / 7

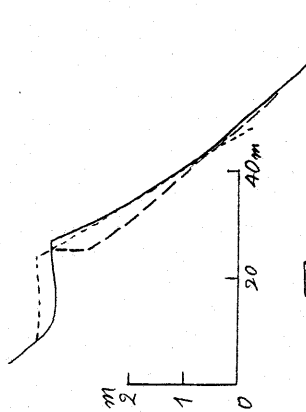
∇



— 27 / 7
 --- 30 / 7
 - - - 3 / 8

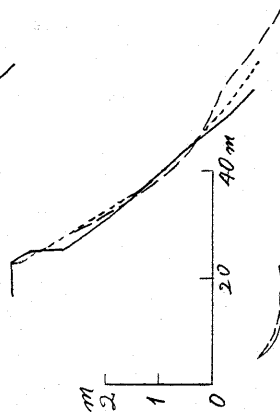
∇

N-180-9



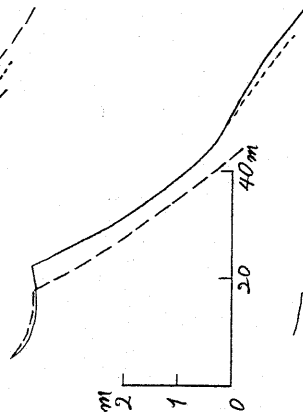
— 3 / 8 / 1981
- - - 6 / 8
- · - 11 / 8

\bar{V}



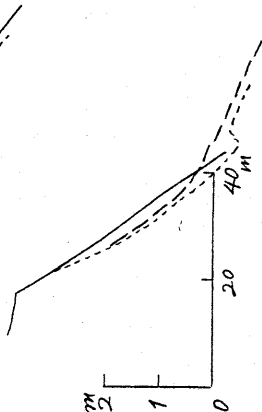
— 11 / 8
- - - 14 / 8
- · - 17 / 8

\bar{V}



— 17 / 8
- - - 19 / 8
- · - 23 / 8

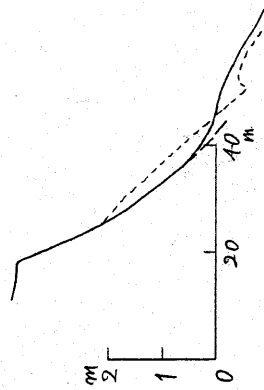
\bar{V}



— 23 / 8
- - - 24 / 8
- · - 31 / 8

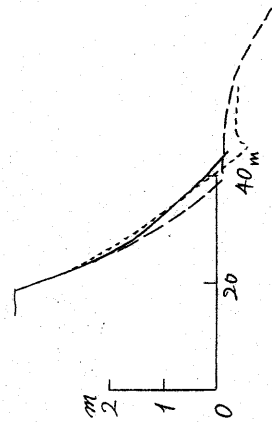
\bar{V}

N-180-10



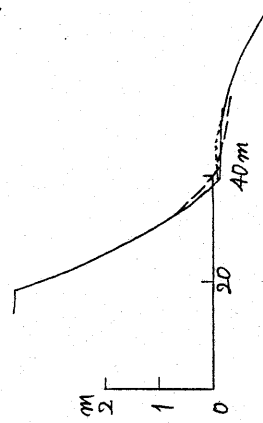
— 31 / 8 / 1981
- - - 3 / 9
- · - 7 / 9

\bar{V}



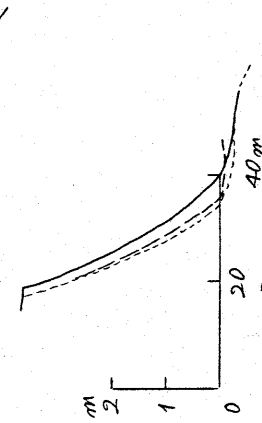
— 7 / 9
- - - 10 / 9
- · - 15 / 9

\bar{V}



— 15 / 9
- - - 19 / 9
- · - 24 / 9

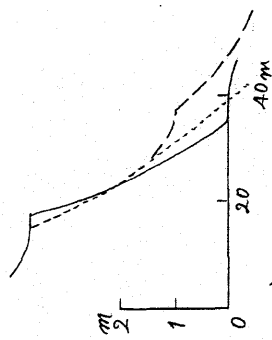
\bar{V}



— 24 / 9
- - - 28 / 9
- · - 1 / 10

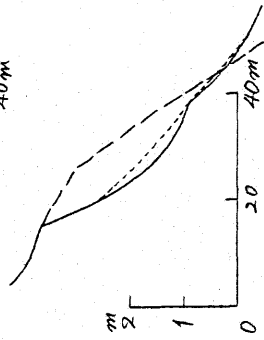
\bar{V}

N-180-11



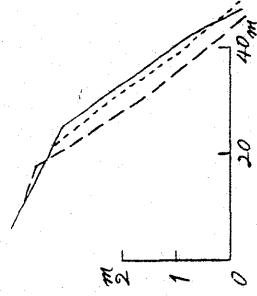
— 1 / 10 / 1981
- - - 6 / 10
- · - 12 / 10

∇



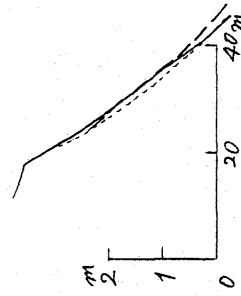
— 12 / 10
- - - 17 / 10
- · - 24 / 10

∇



— 24 / 10
- - - 28 / 10
- · - 2 / 11

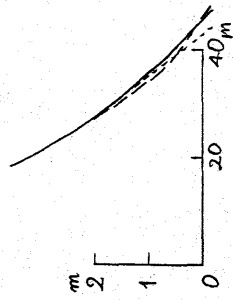
∇



— 2 / 11
- - - 8 / 11
- · - 15 / 11

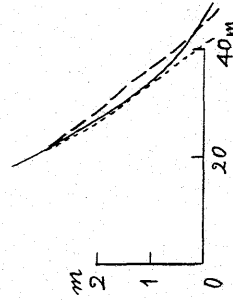
∇

N-180-12



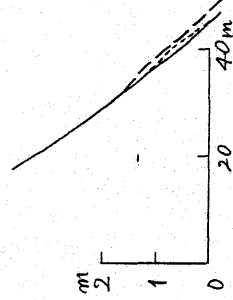
— 15 / 11 / 1981
- - - 19 / 11
- · - 23 / 11

∇



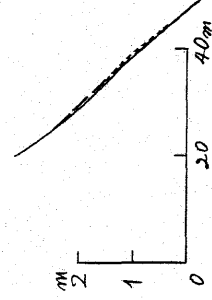
— 23 / 11
- - - 29 / 11
- · - 5 / 12

∇



— 5 / 12
- - - 12 / 12
- · - 15 / 12

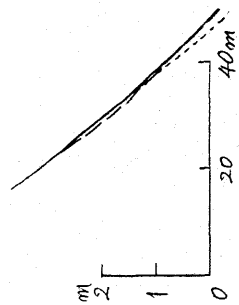
∇



— 15 / 12
- - - 22 / 12
- · - 29 / 12

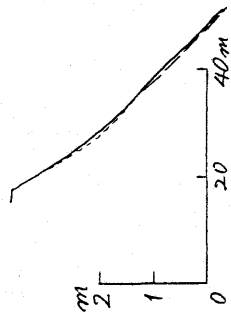
∇

N-180-13



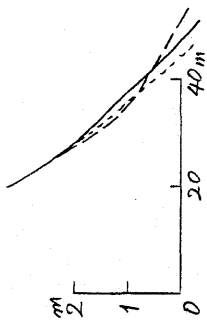
\bar{V}

— 29 / 12 / 1981
--- 5 / 1 / 1982
- - - 10 / 1



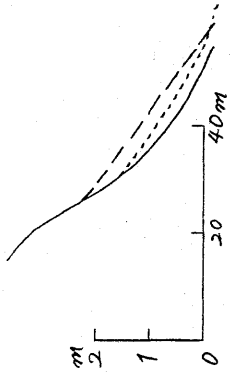
\bar{V}

— 10 / 1
--- 17 / 1
- - - 24 / 1



\bar{V}

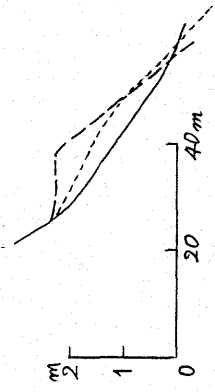
— 24 / 1
--- 31 / 1
- - - 7 / 2



\bar{V}

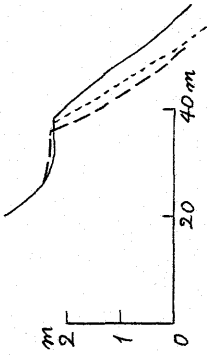
— 7 / 2
--- 14 / 2
- - - 21 / 2

N-180-14



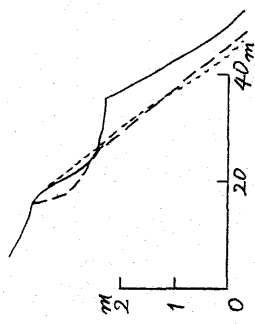
\bar{V}

— 21 / 2 / 1982
--- 28 / 2
- - - 6 / 3



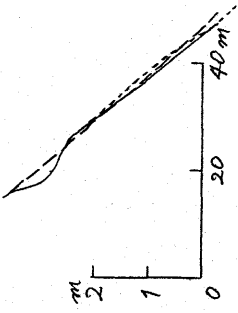
\bar{V}

— 6 / 3
--- 13 / 3
- - - 18 / 3



\bar{V}

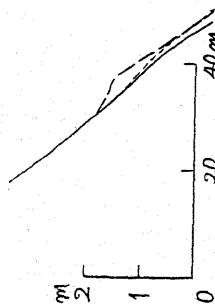
— 18 / 3
--- 24 / 3
- - - 5 / 4



\bar{V}

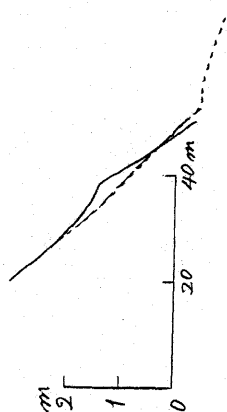
— 5 / 4
--- 11 / 4
- - - 18 / 4

N - 180 - 15



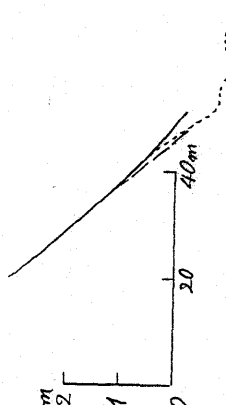
— 18/4/1982
- - - 25/4
- . - 1/5

\bar{y}



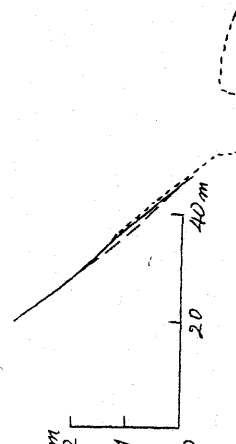
— 1/5
- - - 10/5
- . - 17/5

\bar{y}



— 17/5
- - - 24/5
- . - 31/5

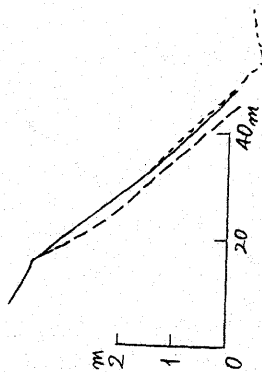
\bar{y}



— 31/5
- - - 6/6
- . - 15/6

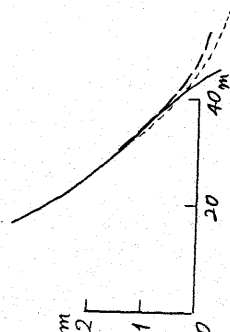
\bar{y}

N - 180 - 16



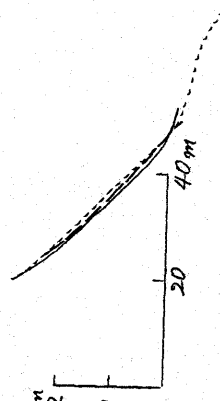
— 15/6/1982
- - - 21/6
- . - 29/6

\bar{y}



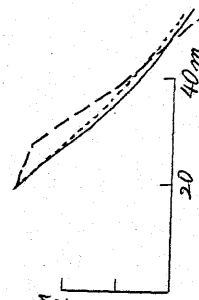
— 29/6
- - - 5/7
- . - 12/7

\bar{y}



— 12/7
- - - 20/7
- . - 27/7

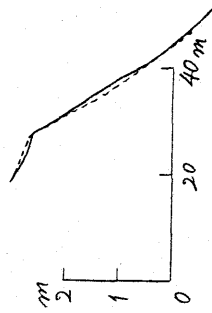
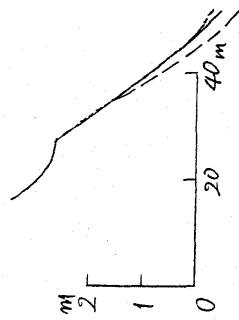
\bar{y}



— 27/7
- - - 2/8
- . - 9/8

\bar{y}

N-180-17



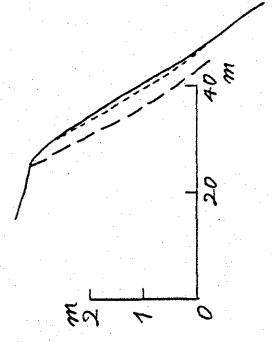
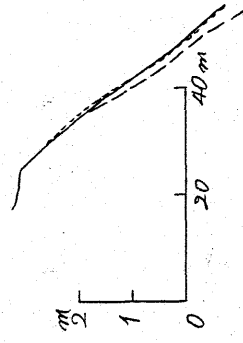
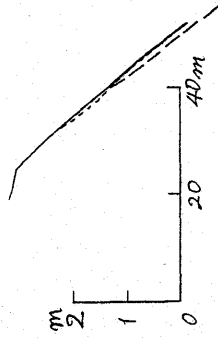
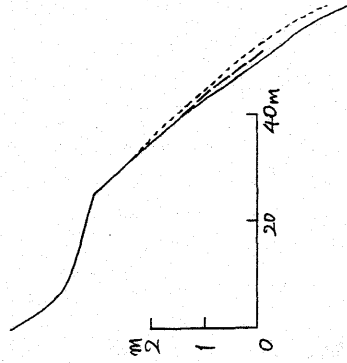
— 9 / 8 / 1982
 --- 15 / 8
 - - - 23 / 8

∇

— 23 / 8
 --- 30 / 8

∇

N-200-1



— 28 / 8 / 1980
 --- 30 / 8
 - - - 2 / 9

∇

— 2 / 9
 --- 6 / 9
 - - - 9 / 9

∇

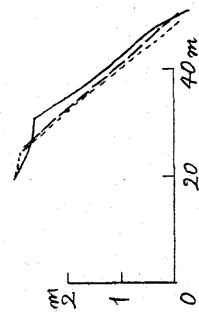
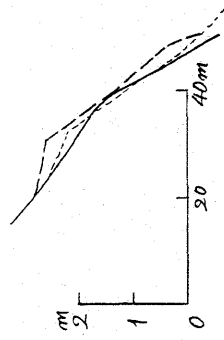
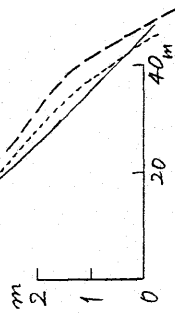
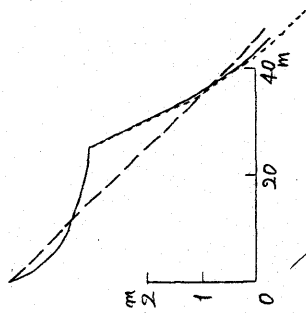
— 9 / 9
 --- 12 / 9
 - - - 15 / 9

∇

— 15 / 9
 --- 19 / 9
 - - - 22 / 9

∇

N-200-2



∇

— 22/9/1980
- - - 25/9
· · · 29/9

∇

— 29/9
- - - 3/10
· · · 7/10

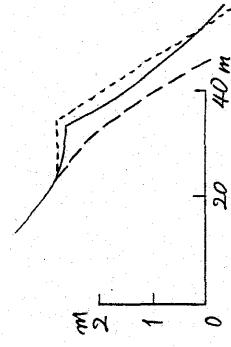
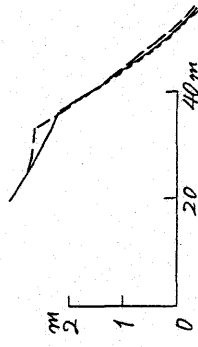
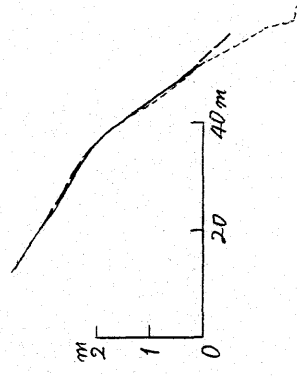
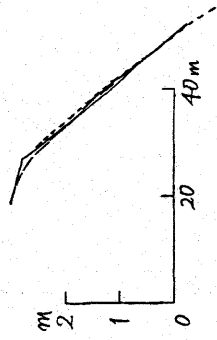
∇

— 7/10
- - - 10/10
· · · 14/10

∇

— 14/10
- - - 15/10
· · · 18/10

N-200-3



∇

— 18/10/1980
- - - 22/10
· · · 27/10

∇

— 27/10
- - - 1/11
· · · 6/11

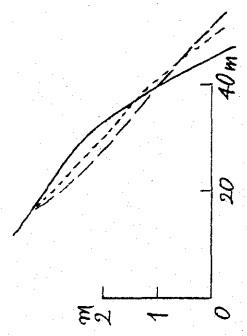
∇

— 6/11
- - - 11/11
· · · 16/11

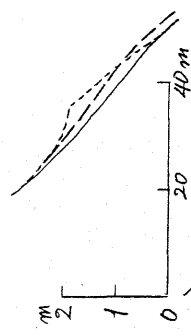
∇

— 16/11
- - - 21/11
· · · 26/11

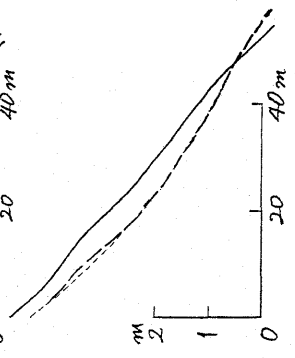
N-200-4



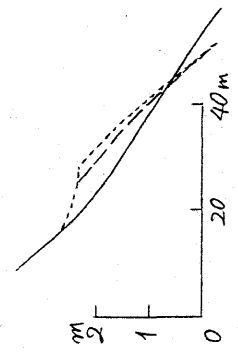
\bar{V}_z



\bar{V}_z

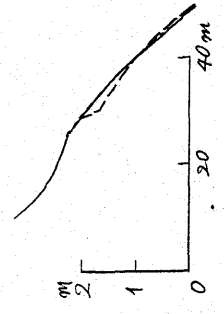


\bar{V}_z

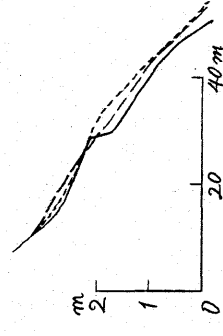


\bar{V}_z

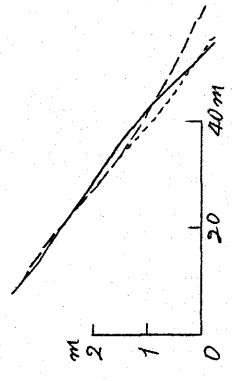
N-200-5



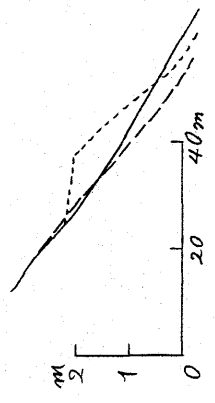
\bar{V}_z



\bar{V}_z

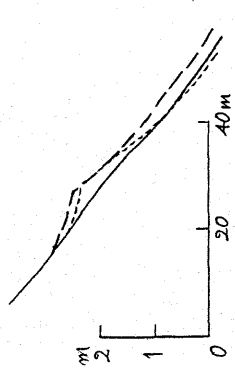


\bar{V}_z



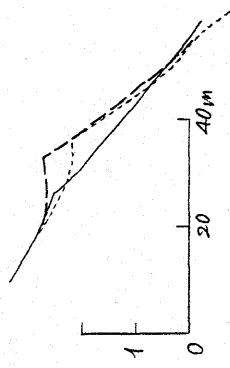
\bar{V}_z

N-200-6



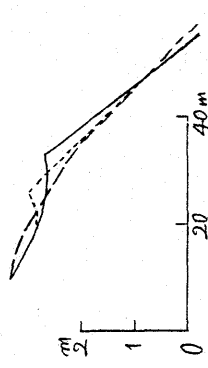
— 15/3/1981
- - - 22/3
- · - 29/3

\bar{V}



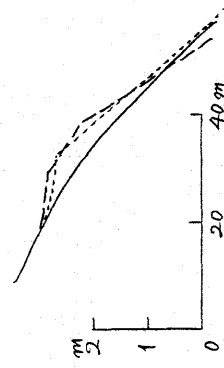
— 29/3
- - - 5/4
- · - 11/4

\bar{V}



— 11/4
- - - 19/4
- · - 26/4

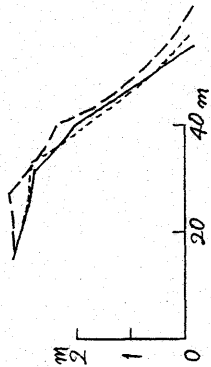
\bar{V}



— 26/4
- - - 3/5
- · - 11/5

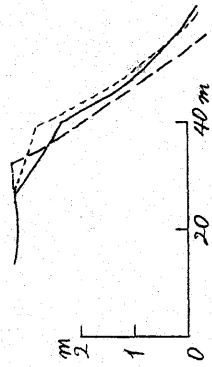
\bar{V}

N-200-7



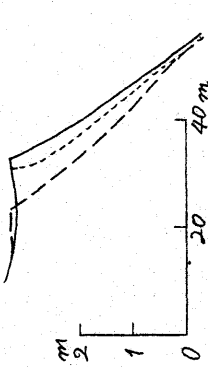
— 11/5/1981
- - - 17/5
- · - 24/5

\bar{V}



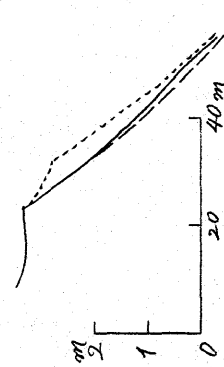
— 24/5
- - - 1/6
- · - 7/6

\bar{V}



— 7/6
- - - 15/6
- · - 21/6

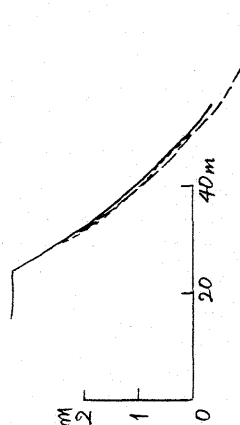
\bar{V}



— 21/6
- - - 28/6
- · - 6/7

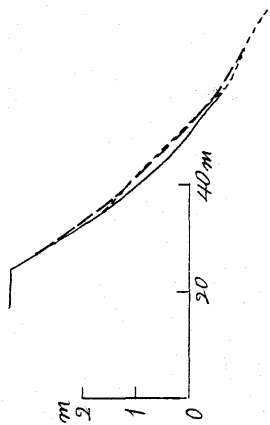
\bar{V}

N-200-8



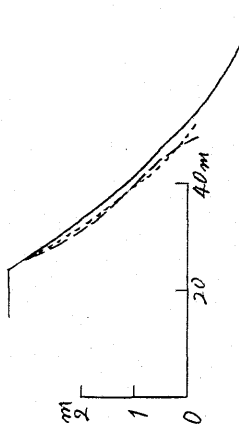
— 6 / 7 / 1981
- - - 9 / 7
- · - 13 / 7

∇



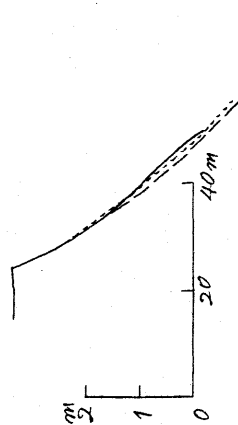
— 13 / 7
- - - 16 / 7
- · - 20 / 7

∇



— 20 / 7
- - - 23 / 7
- · - 27 / 7

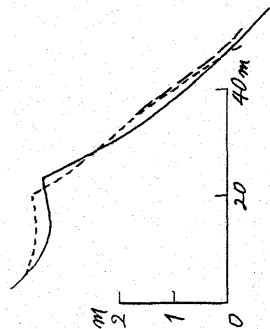
∇



— 27 / 7
- - - 30 / 7
- · - 3 / 8

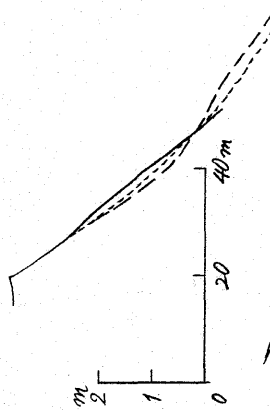
∇

N-200-9



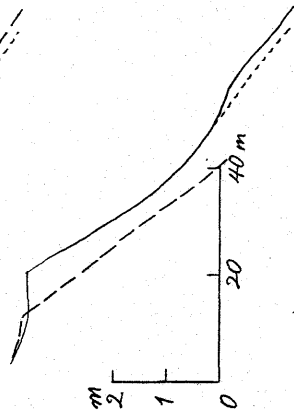
— 3 / 8 / 1981
- - - 6 / 8
- · - 11 / 8

∇



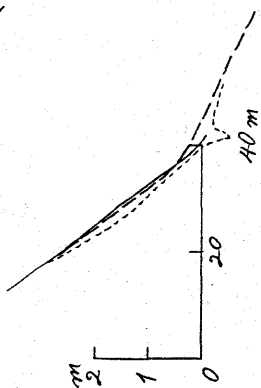
— 11 / 8
- - - 14 / 8
- · - 17 / 8

∇



— 17 / 8
- - - 19 / 8
- · - 23 / 8

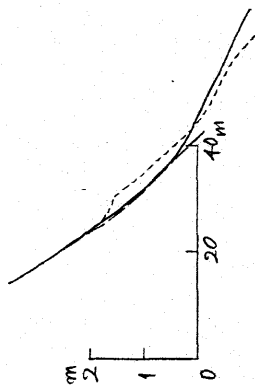
∇



— 23 / 8
- - - 26 / 8
- · - 31 / 8

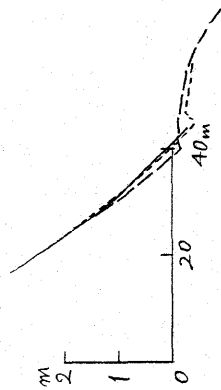
∇

N - 200 - 10



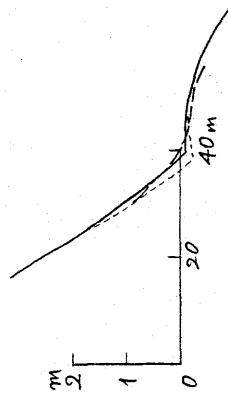
— 31/8/1981
- - - 3/9
- · - 7/9

\bar{V}



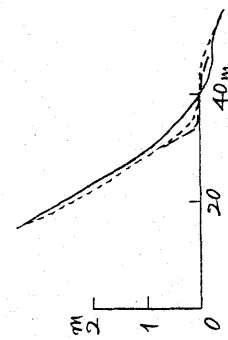
— 7/9
- - - 10/9
- · - 15/9

\bar{V}



— 15/9
- - - 19/9
- · - 24/9

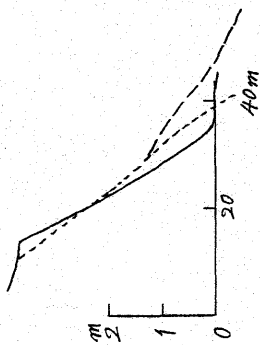
\bar{V}



— 24/9
- - - 28/9
- · - 1/10

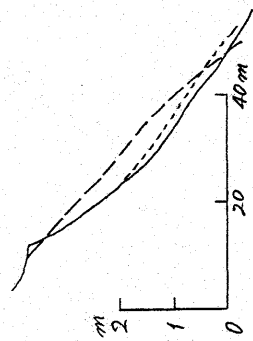
\bar{V}

N - 200 - 11



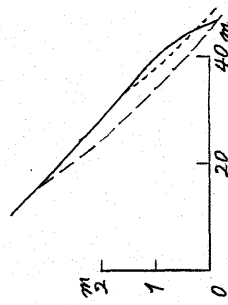
— 1/10/1981
- - - 6/10
- · - 12/10

\bar{V}



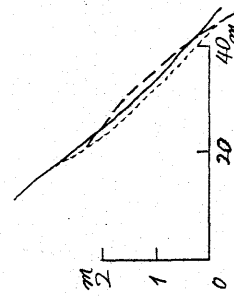
— 12/10
- - - 17/10
- · - 24/10

\bar{V}



— 24/10
- - - 28/10
- · - 2/11

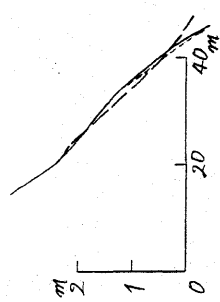
\bar{V}



— 2/11
- - - 8/11
- · - 15/11

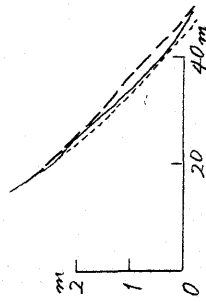
\bar{V}

N-200-12



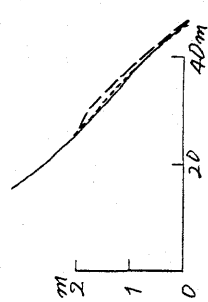
— 15 / 11 / 1981
- - - 19 / 11
- · - 23 / 11

\bar{V}



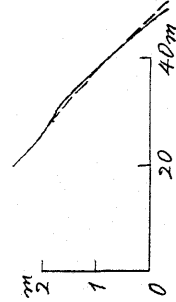
— 23 / 11
- - - 29 / 11
- · - 5 / 12

\bar{V}



— 5 / 12
- - - 12 / 12
- · - 15 / 12

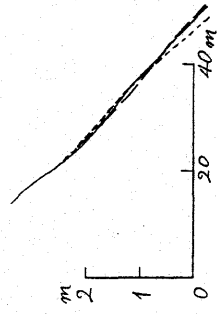
\bar{V}



— 15 / 12
- - - 22 / 12
- · - 29 / 12

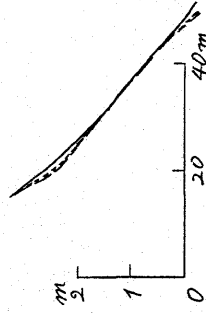
\bar{V}

N-200-13



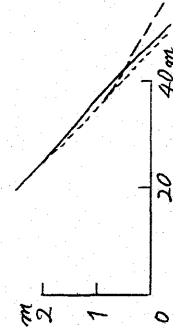
— 29 / 12 / 1981
- - - 5 / 1 / 1982
- · - 10 / 1

\bar{V}



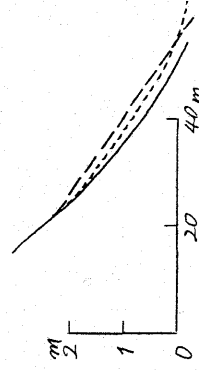
— 10 / 1
- - - 17 / 1
- · - 24 / 1

\bar{V}



— 24 / 1
- - - 31 / 1
- · - 7 / 2

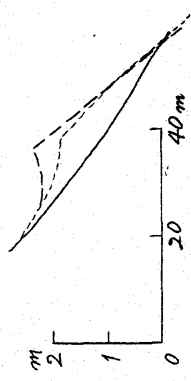
\bar{V}



— 7 / 2
- - - 14 / 2
- · - 21 / 2

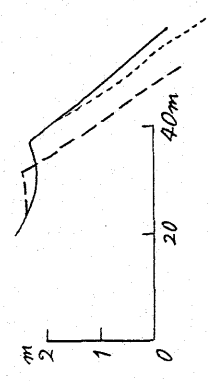
\bar{V}

N - 200 - 14



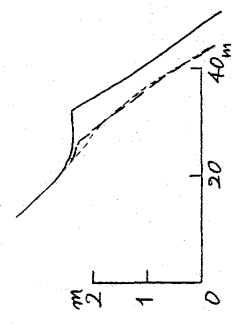
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

$\bar{V} =$



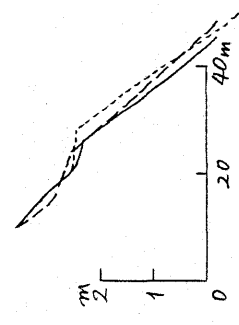
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

$\bar{V} =$



— 18 / 3
 --- 24 / 3
 - - - 5 / 4

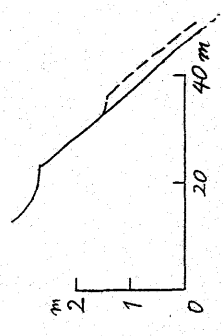
$\bar{V} =$



— 5 / 4
 --- 11 / 4
 - - - 18 / 4

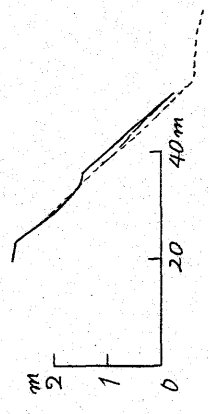
$\bar{V} =$

N - 200 - 15



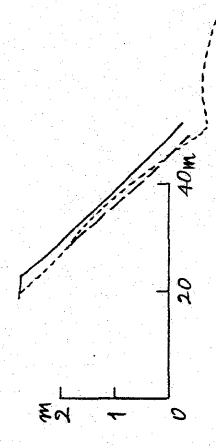
— 18 / 4 / 1982
 --- 25 / 4
 - - - 1 / 5

$\bar{V} =$



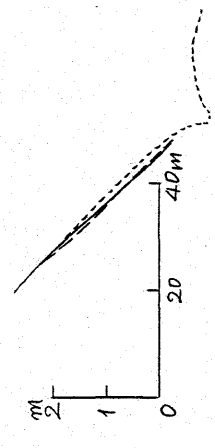
— 1 / 5
 --- 10 / 5
 - - - 17 / 5

$\bar{V} =$



— 17 / 5
 --- 24 / 5
 - - - 31 / 5

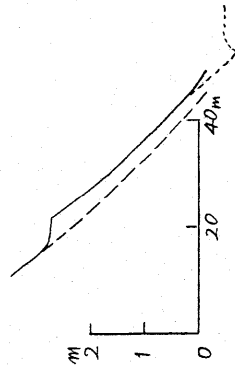
$\bar{V} =$



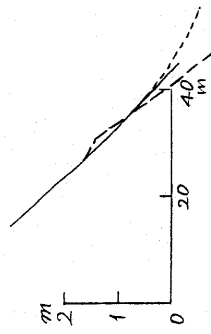
— 31 / 5
 --- 6 / 6
 - - - 15 / 6

$\bar{V} =$

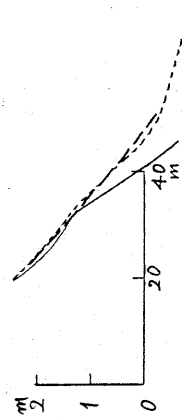
N - 200 - 16



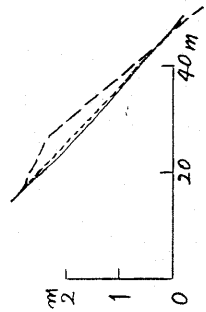
\bar{y}



\bar{y}

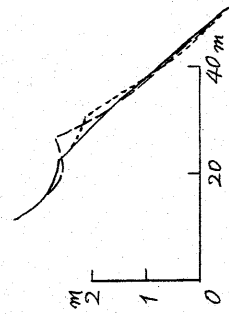


\bar{y}

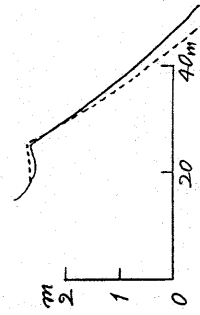


\bar{y}

N - 200 - 17

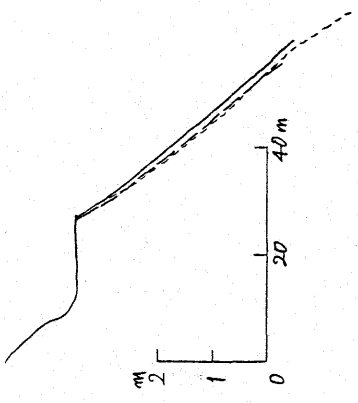


\bar{y}



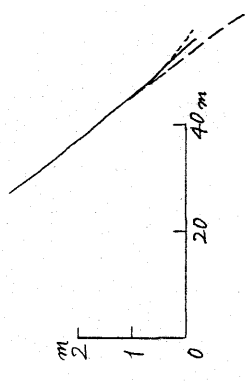
\bar{y}

N-220-1



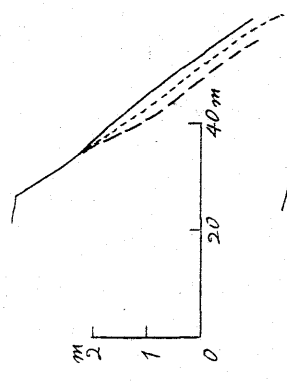
— 28/8/1980
 --- 30/8
 - - - 2/9

$\bar{V} =$



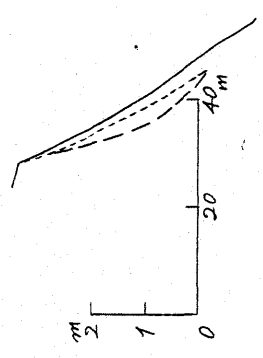
— 2/9
 --- 6/9
 - - - 9/9

$\bar{V} =$



— 9/9
 --- 12/9
 - - - 15/9

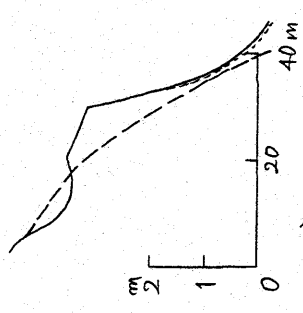
$\bar{V} =$



— 15/9
 --- 19/9
 - - - 22/9

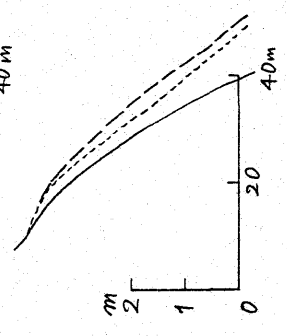
$\bar{V} =$

N-220-2



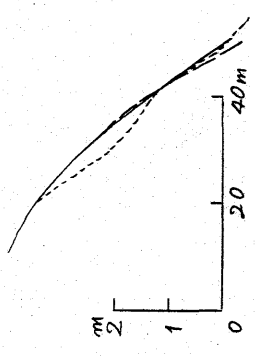
— 22/9/1980
 --- 25/9
 - - - 29/9

$\bar{V} =$



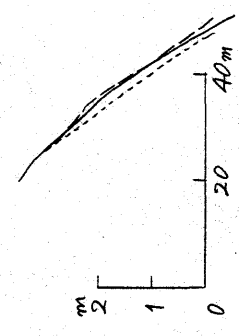
— 29/9
 --- 3/10
 - - - 7/10

$\bar{V} =$



— 7/10
 --- 10/10
 - - - 14/10

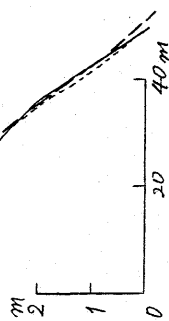
$\bar{V} =$



— 14/10
 --- 15/10
 - - - 18/10

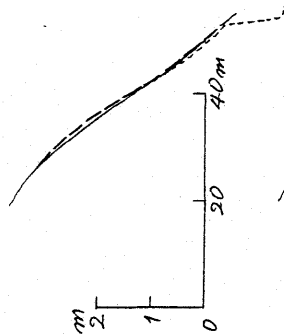
$\bar{V} =$

N-220-3



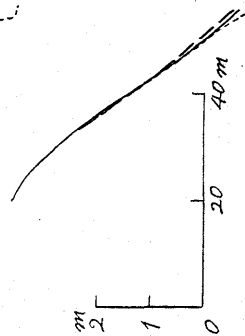
— 18 / 10 / 1980
- - - 22 / 10
- · - 27 / 10

\bar{V}



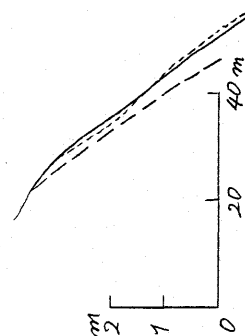
— 27 / 10
- - - 1 / 11
- · - 6 / 11

\bar{V}



— 6 / 11
- - - 11 / 11
- · - 16 / 11

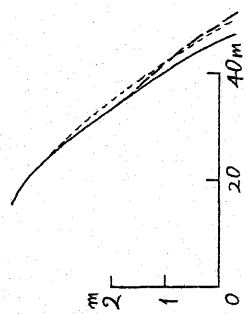
\bar{V}



— 16 / 11
- - - 21 / 11
- · - 26 / 11

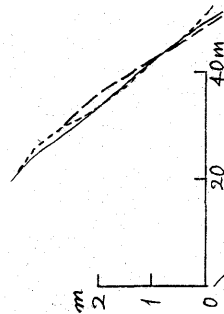
\bar{V}

N-220-4



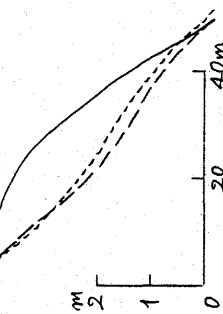
— 26 / 11 / 1980
- - - 1 / 12
- · - 8 / 12

\bar{V}



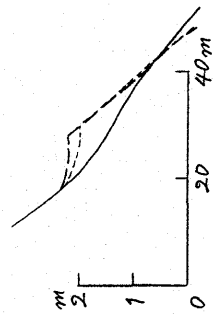
— 8 / 12
- - - 15 / 12
- · - 22 / 12

\bar{V}



— 22 / 12
- - - 29 / 12
- · - 6 / 1 / 1981

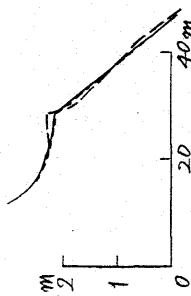
\bar{V}



— 6 / 1
- - - 12 / 1
- · - 21 / 1

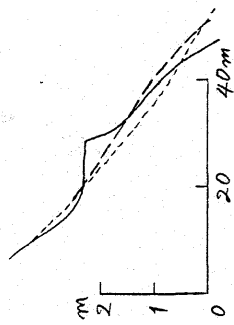
\bar{V}

N-220-5



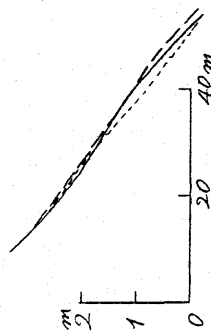
— 21 / 1 / 1981
- - - 25 / 1
- · - 1 / 2

$\bar{V} =$



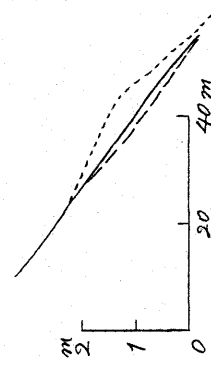
— 1 / 2
- - - 8 / 2
- · - 15 / 2

$\bar{V} =$



— 15 / 2
- - - 22 / 2
- · - 28 / 2

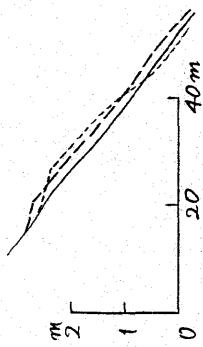
$\bar{V} =$



— 28 / 2
- - - 8 / 3
- · - 15 / 3

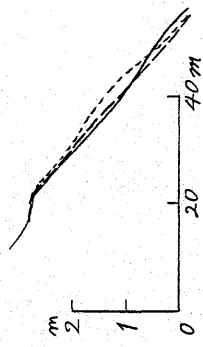
$\bar{V} =$

N-220-6



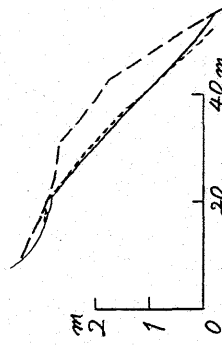
— 15 / 3 / 1981
- - - 22 / 3
- · - 29 / 3

$\bar{V} =$



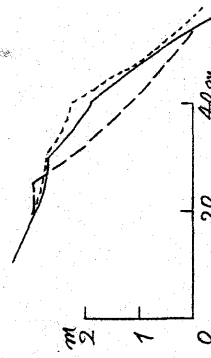
— 29 / 3
- - - 5 / 4
- · - 11 / 4

$\bar{V} =$



— 11 / 4
- - - 19 / 4
- · - 26 / 4

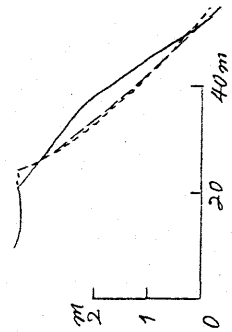
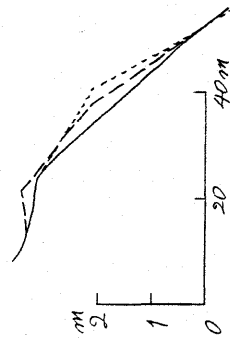
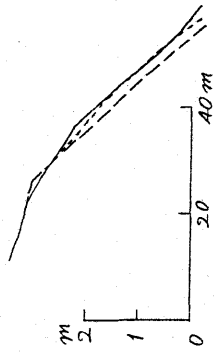
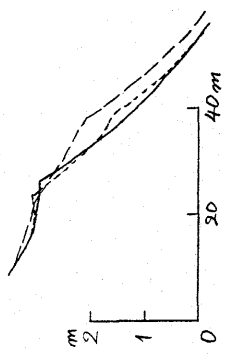
$\bar{V} =$



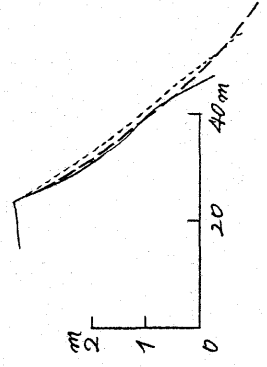
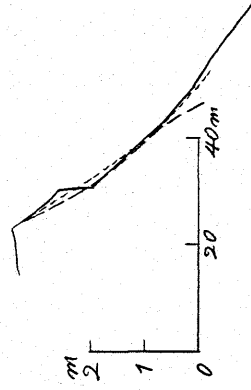
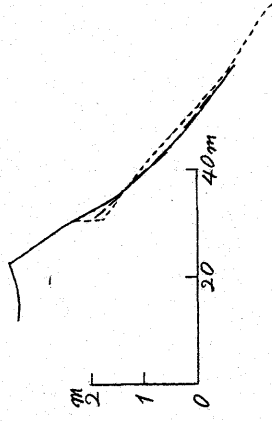
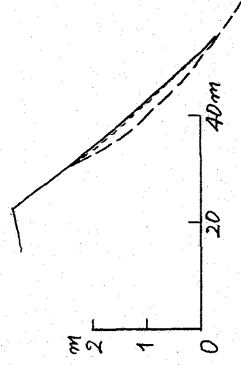
— 26 / 4
- - - 3 / 5
- · - 11 / 5

$\bar{V} =$

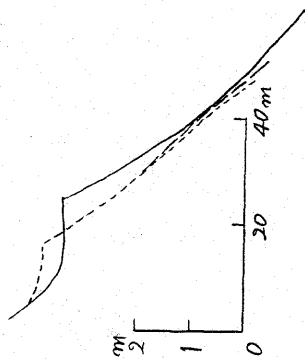
N - 220 - 7



N - 220 - 8

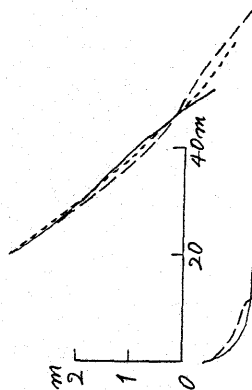


N - 220 - 9



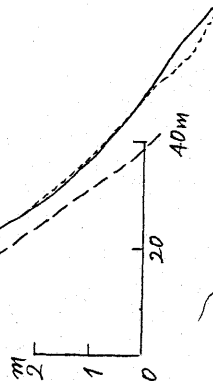
— 3 / 8 / 1981
 --- 6 / 8
 - - - 11 / 8

\bar{V}



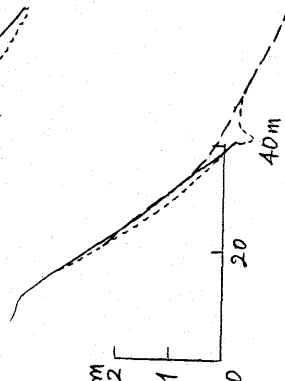
— 11 / 8
 --- 14 / 8
 - - - 17 / 8

\bar{V}



— 17 / 8
 --- 19 / 8
 - - - 23 / 8

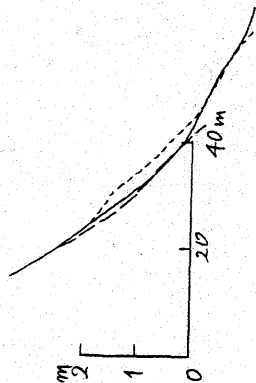
\bar{V}



— 23 / 8
 --- 24 / 8
 - - - 31 / 8

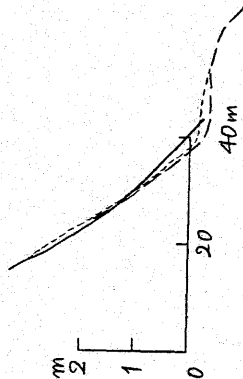
\bar{V}

N - 220 - 10



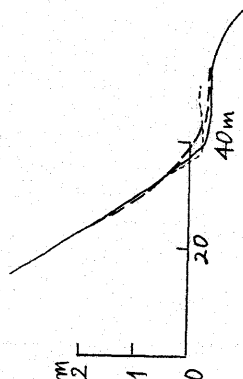
— 31 / 8 / 1981
 --- 3 / 9
 - - - 7 / 9

\bar{V}



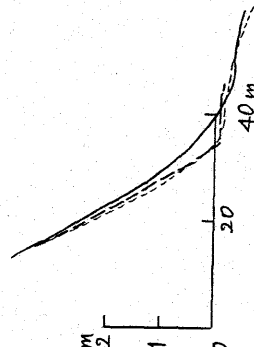
— 7 / 9
 --- 10 / 9
 - - - 15 / 9

\bar{V}



— 15 / 9
 --- 19 / 9
 - - - 24 / 9

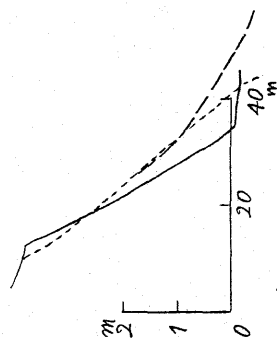
\bar{V}



— 24 / 9
 --- 28 / 9
 - - - 1 / 10

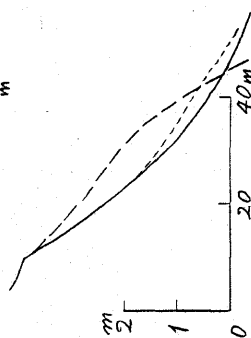
\bar{V}

N - 220 - 11



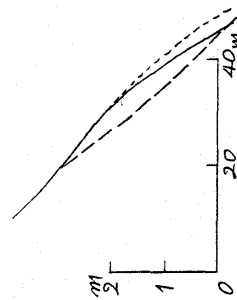
— 1 / 10 / 1981
 --- 6 / 10
 ... 12 / 10

$\frac{V}{\bar{V}}$



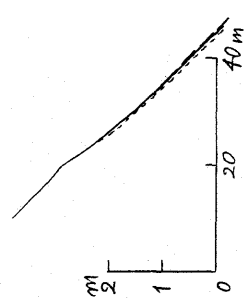
— 12 / 10
 --- 17 / 10
 ... 24 / 10

$\frac{V}{\bar{V}}$



— 24 / 10
 --- 28 / 10
 ... 2 / 11

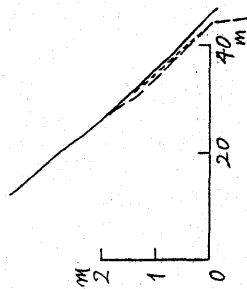
$\frac{V}{\bar{V}}$



— 2 / 11
 --- 8 / 11
 ... 15 / 11

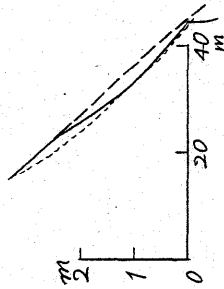
$\frac{V}{\bar{V}}$

N - 220 - 12



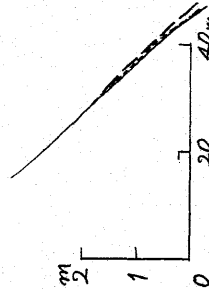
— 15 / 11 / 1981
 --- 19 / 11
 ... 23 / 11

$\frac{V}{\bar{V}}$



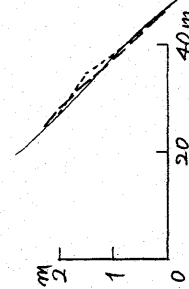
— 23 / 11
 --- 29 / 11
 ... 5 / 12

$\frac{V}{\bar{V}}$



— 5 / 12
 --- 12 / 12
 ... 15 / 12

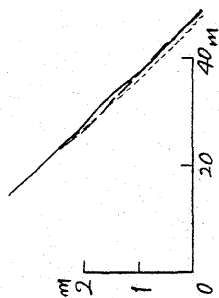
$\frac{V}{\bar{V}}$



— 15 / 12
 --- 22 / 12
 ... 29 / 12

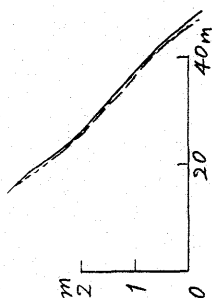
$\frac{V}{\bar{V}}$

N-220-13



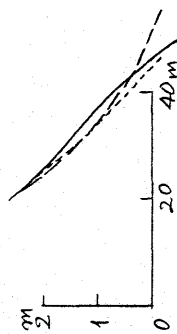
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

\bar{V}



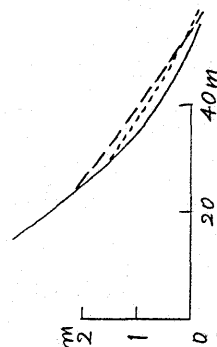
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

\bar{V}



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

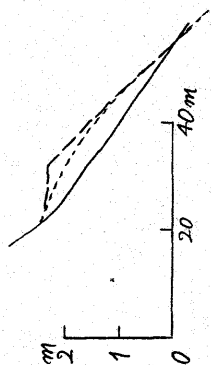
\bar{V}



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

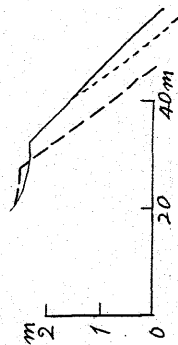
\bar{V}

N-220-14



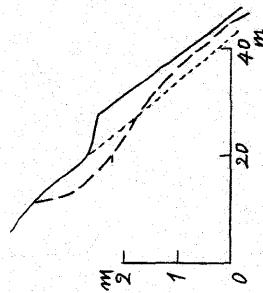
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

\bar{V}



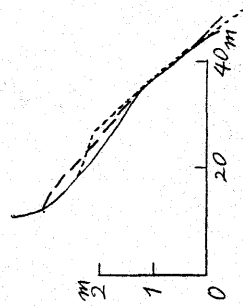
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

\bar{V}



— 18 / 3
 --- 24 / 3
 - - - 5 / 4

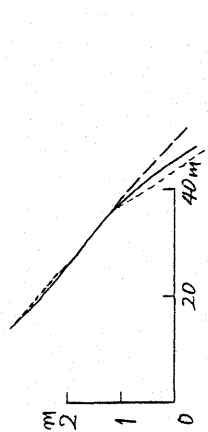
\bar{V}



— 5 / 4
 --- 11 / 4
 - - - 18 / 4

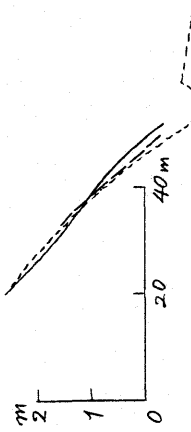
\bar{V}

N-220-15



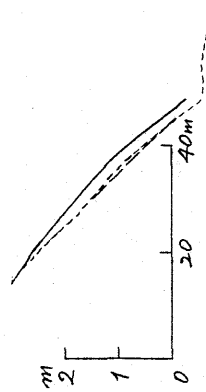
— 18/4/1982
 --- 25/4
 - - - 1/5

\overline{V}



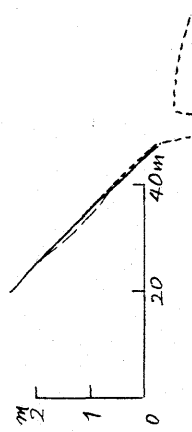
— 1/5
 --- 10/5
 - - - 17/5

\overline{V}



— 17/5
 --- 24/5
 - - - 31/5

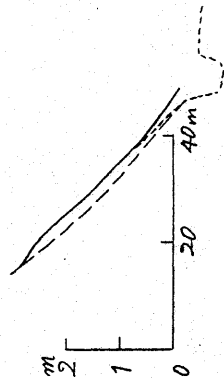
\overline{V}



— 31/5
 --- 6/6
 - - - 6/6

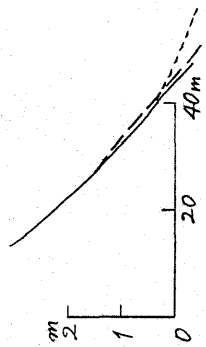
\overline{V}

N-220-16



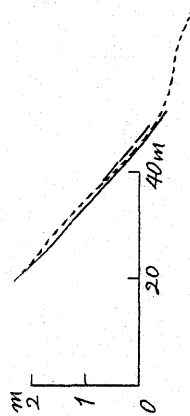
— 15/6/1982
 --- 21/6
 - - - 29/6

\overline{V}



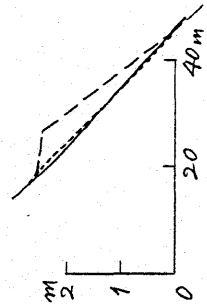
— 29/6
 --- 5/7
 - - - 12/7

\overline{V}



— 12/7
 --- 20/7
 - - - 27/7

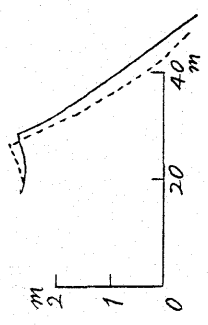
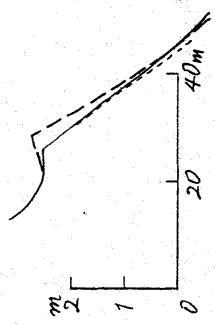
\overline{V}



— 27/7
 --- 2/8
 - - - 9/8

\overline{V}

N - 220 - 17



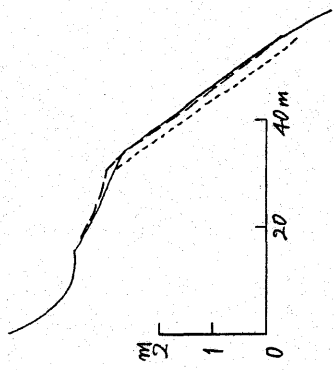
— 9 / 8 / 1982
 --- 15 / 8
 - - - 24 / 8

\bar{V}

— 24 / 8
 --- 30 / 8

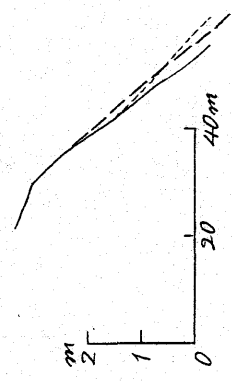
\bar{V}

N - 240 - 1



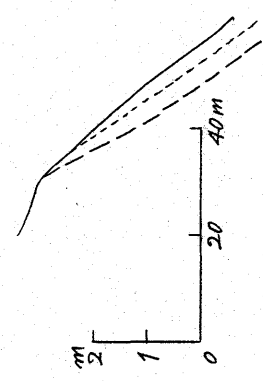
— 28 / 8 / 1980
 --- 30 / 8
 - - - 2 / 9

\bar{V}



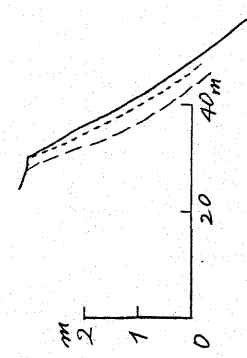
— 2 / 9
 --- 6 / 9
 - - - 9 / 9

\bar{V}



— 9 / 9
 --- 12 / 9
 - - - 15 / 9

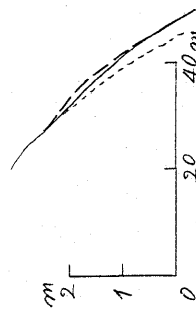
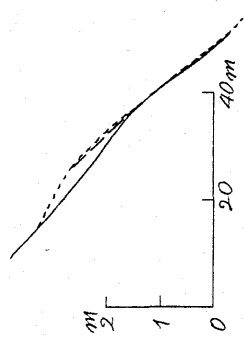
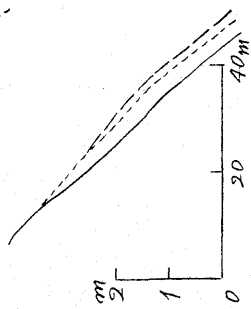
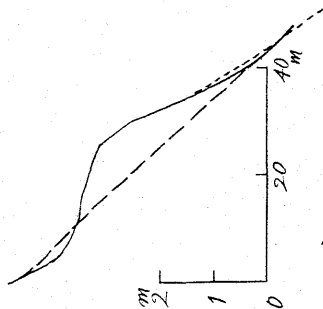
\bar{V}



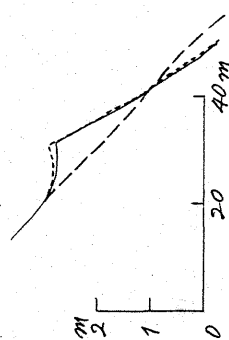
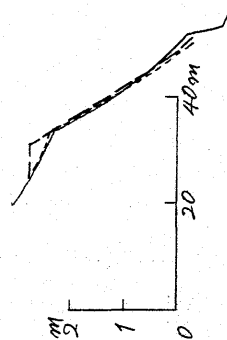
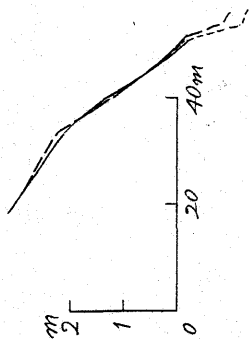
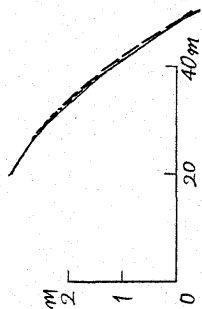
— 15 / 9
 --- 19 / 9
 - - - 22 / 9

\bar{V}

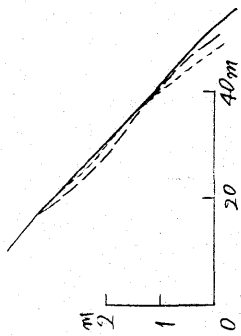
N-240-2



N-240-3

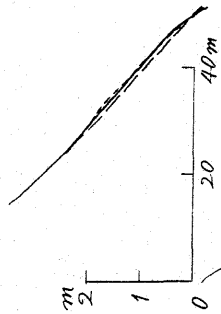


N-240-4



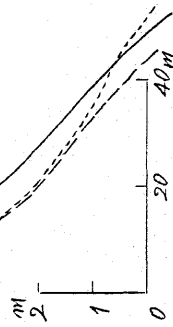
— 26/11/1980
- - - 1/12
- · - 8/12

▽



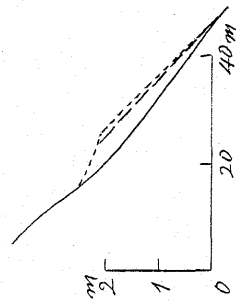
— 8/12
- - - 15/12
- · - 22/12

▽



— 22/12
- - - 29/12
- · - 6/1/1981

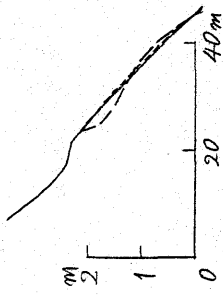
▽



— 6/1
- - - 12/1
- · - 21/1

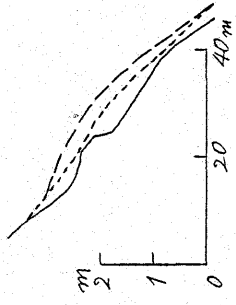
▽

N-240-5



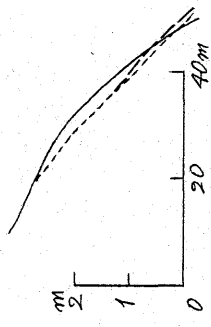
— 21/1/1981
- - - 25/1
- · - 1/2

▽



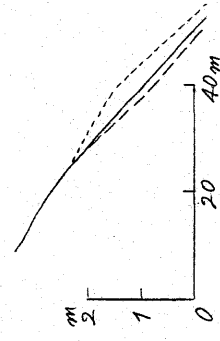
— 1/2
- - - 8/2
- · - 15/2

▽



— 15/2
- - - 22/2
- · - 28/2

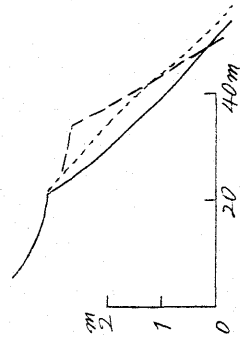
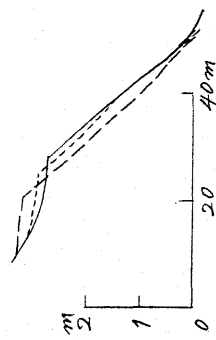
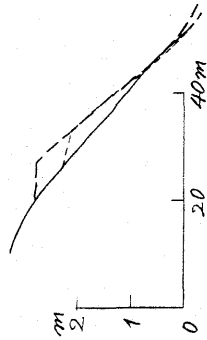
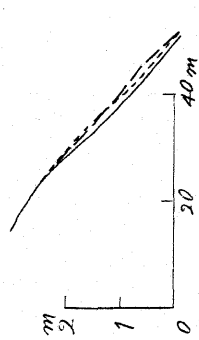
▽



— 28/2
- - - 8/3
- · - 15/3

▽

N-240-6



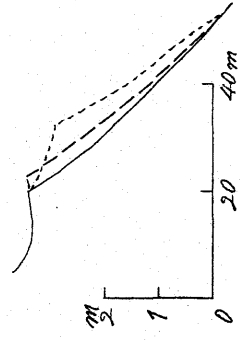
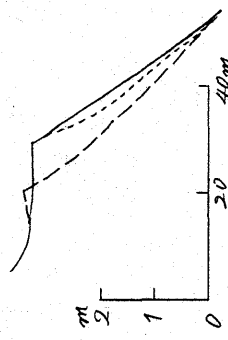
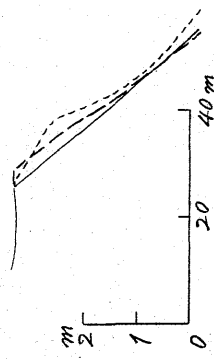
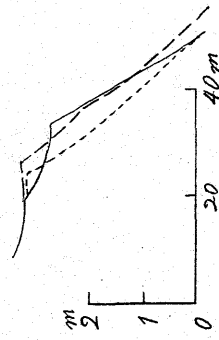
\bar{V}

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N-240-7



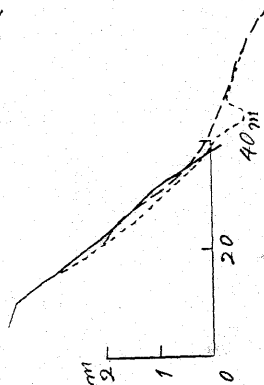
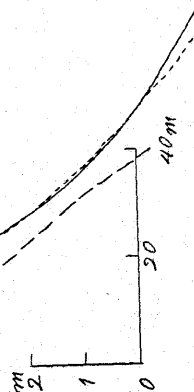
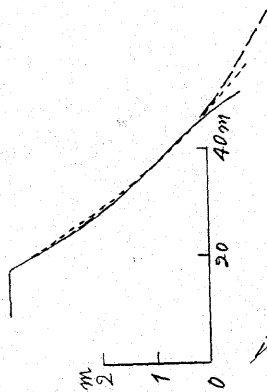
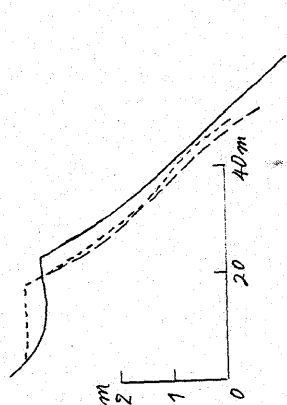
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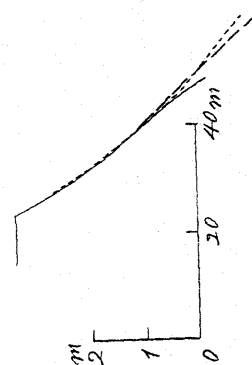
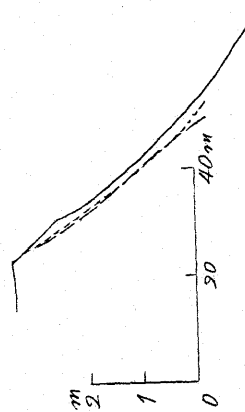
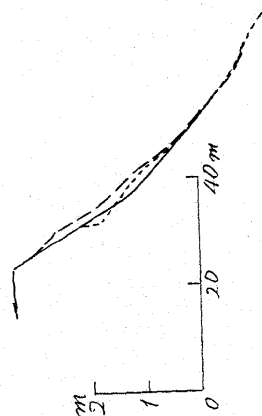
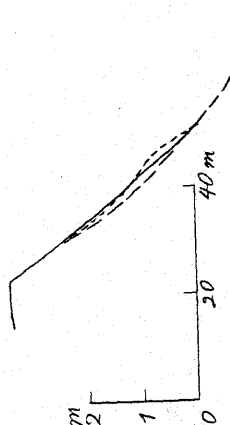
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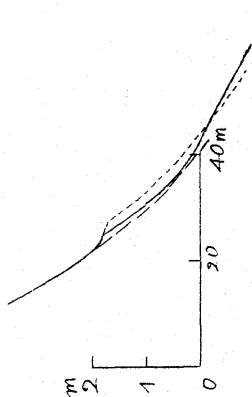
N-240-9



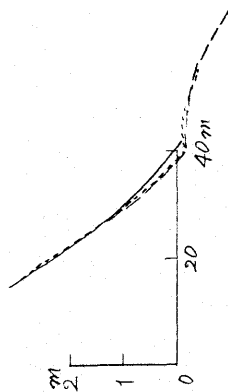
N-240-8



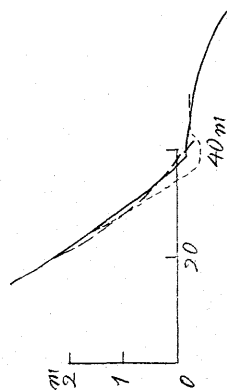
N-240-10



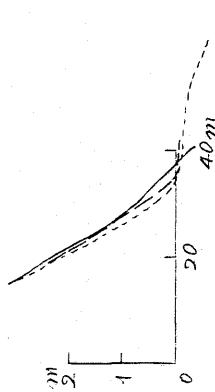
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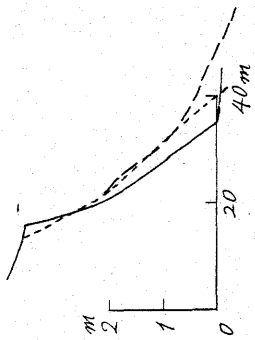


∇

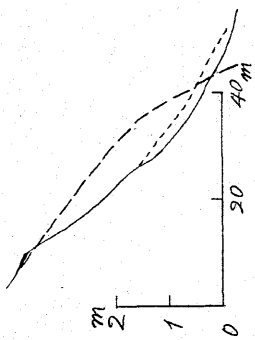


∇

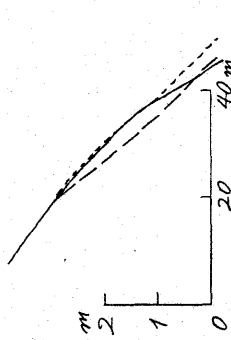
N-240-11



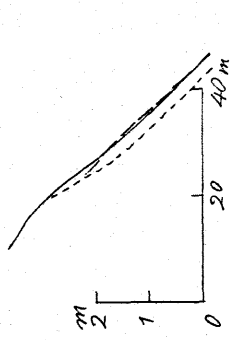
∇



∇

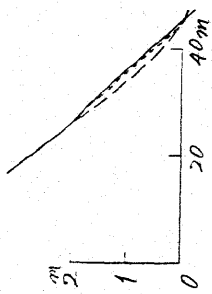


∇



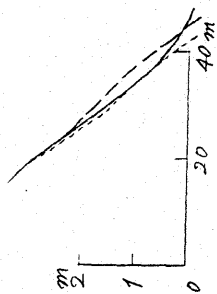
∇

N-240-12



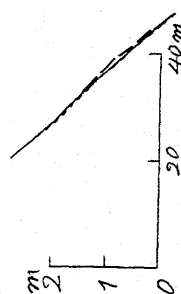
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

$\frac{\bar{y}}{2}$



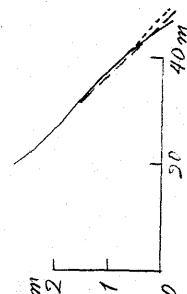
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

$\frac{\bar{y}}{2}$



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

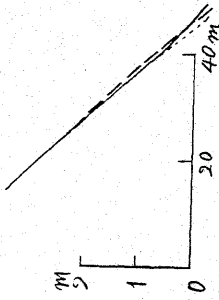
$\frac{\bar{y}}{2}$



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

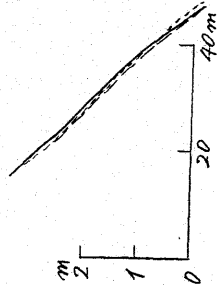
$\frac{\bar{y}}{2}$

N-240-13



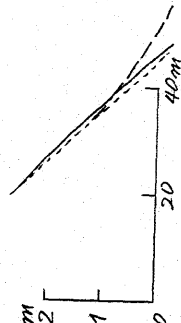
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

$\frac{\bar{y}}{2}$



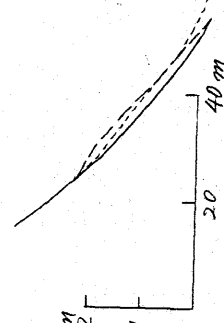
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

$\frac{\bar{y}}{2}$



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

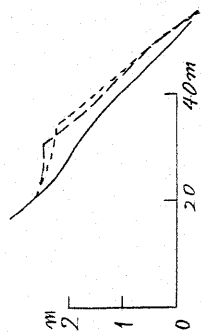
$\frac{\bar{y}}{2}$



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

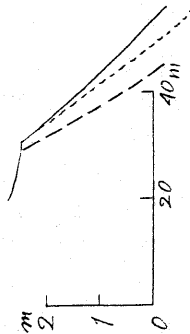
$\frac{\bar{y}}{2}$

N-240-14



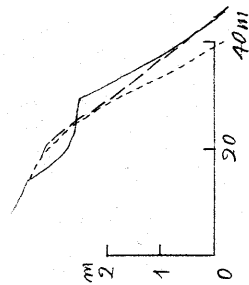
— 21/2/1982
- - - 28/2
- · - 6/3

\bar{y}



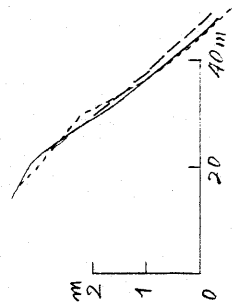
— 6/3
- - - 13/3
- · - 18/3

\bar{y}



— 18/3
- - - 24/3
- · - 5/4

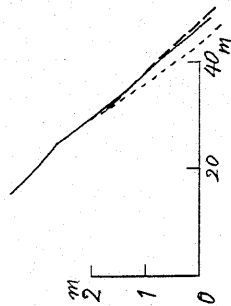
\bar{y}



— 5/4
- - - 11/4
- · - 18/4

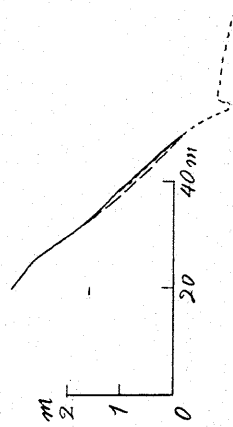
\bar{y}

N-240-15



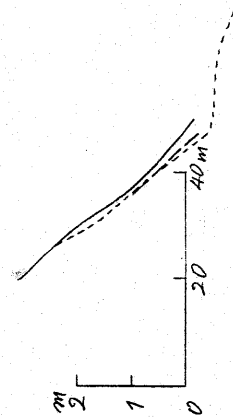
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{y}



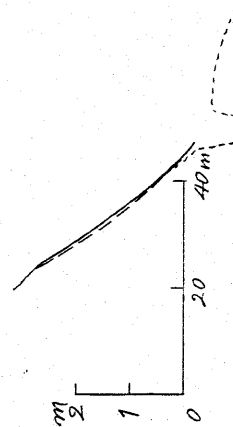
— 1/5
- - - 10/5
- · - 17/5

\bar{y}



— 17/5
- - - 24/5
- · - 31/5

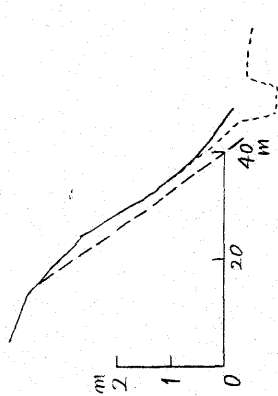
\bar{y}



— 31/5
- - - 6/6
- · - 15/6

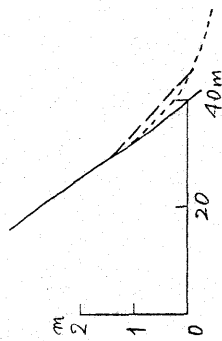
\bar{y}

N-240-16



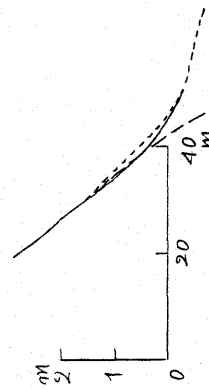
— 15/6/1982
- - - 21/6
- · - 29/6

\bar{V}



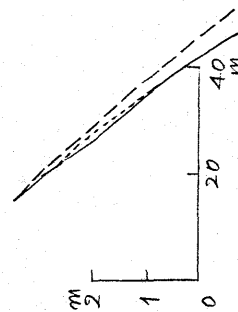
— 29/6
- - - 5/7
- · - 12/7

\bar{V}



— 12/7
- - - 20/7
- · - 27/7

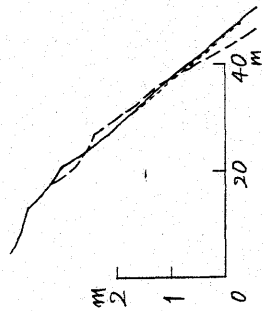
\bar{V}



— 27/7
- - - 2/8
- · - 9/8

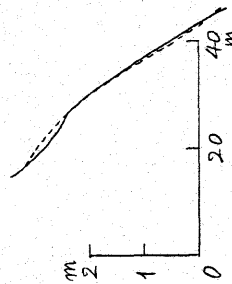
\bar{V}

N-240-17



— 9/8/1982
- - - 15/8
- · - 23/8

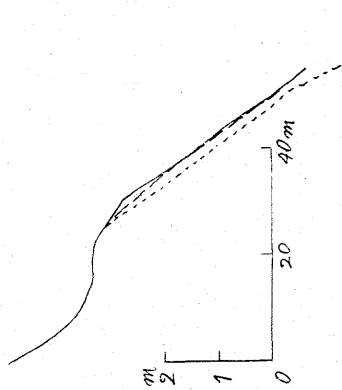
\bar{V}



— 23/8
- - - 30/8

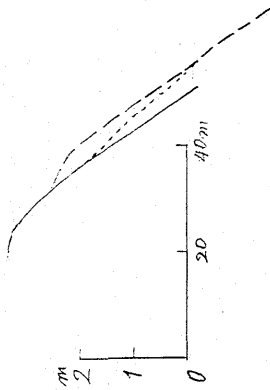
\bar{V}

N-260-1



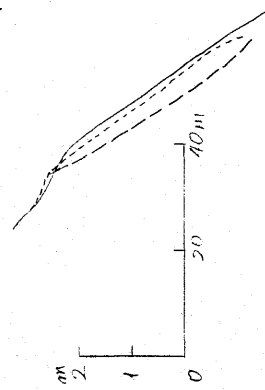
— 28/8/1980
--- 30/8
--- 2/9

\bar{V}



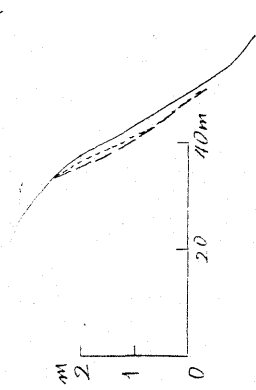
— 2/9
--- 6/9
--- 9/9

\bar{V}



— 9/9
--- 12/9
--- 15/9

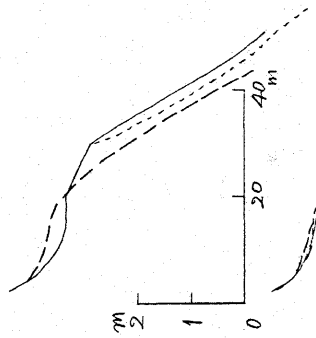
\bar{V}



— 15/9
--- 19/9
--- 22/9

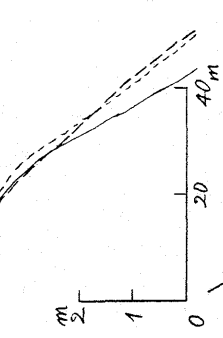
\bar{V}

N-260-2



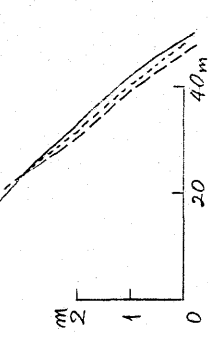
— 22/9/1980
--- 25/9
--- 29/9

\bar{V}



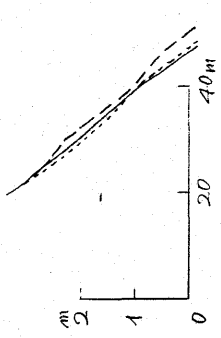
— 29/9
--- 3/10
--- 7/10

\bar{V}



— 7/10
--- 10/10
--- 14/10

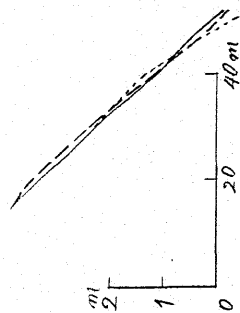
\bar{V}



— 11/10
--- 15/10
--- 18/10

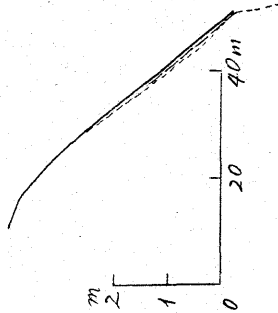
\bar{V}

N-260-3



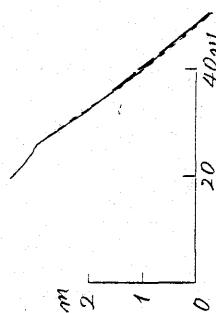
— 18 / 10 / 1980
- - - 22 / 10
- · - 27 / 10

$\bar{\nabla}$



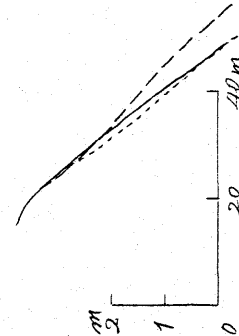
— 27 / 10
- - - 1 / 11
- · - 6 / 11

$\bar{\nabla}$



— 6 / 11
- - - 11 / 11
- · - 16 / 11

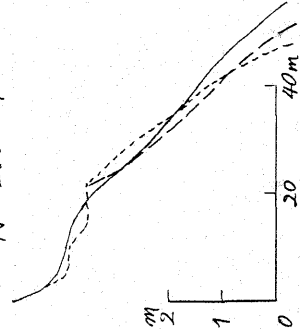
$\bar{\nabla}$



— 16 / 11
- - - 21 / 11
- · - 26 / 11

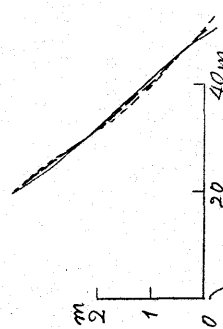
$\bar{\nabla}$

N-260-4



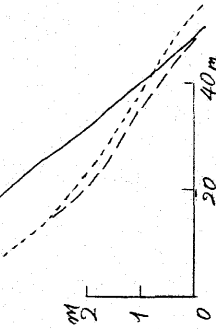
— 26 / 11 / 1980
- - - 1 / 12
- · - 8 / 12

$\bar{\nabla}$



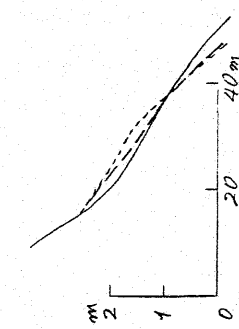
— 8 / 12
- - - 15 / 12
- · - 22 / 12

$\bar{\nabla}$



— 22 / 12
- - - 29 / 12
- · - 6 / 1 / 1981

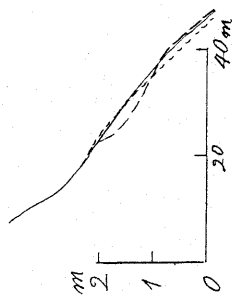
$\bar{\nabla}$



— 6 / 1
- - - 12 / 1
- · - 21 / 1

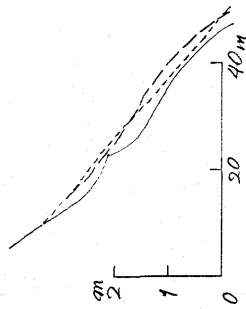
$\bar{\nabla}$

N-260-5



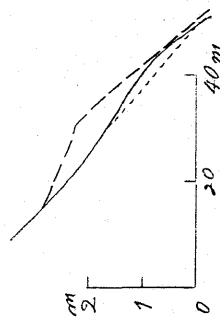
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{V}



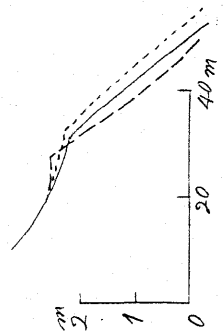
— 1/2
- - - 8/2
- · - 15/2

\bar{V}



— 15/2
- - - 22/2
- · - 28/2

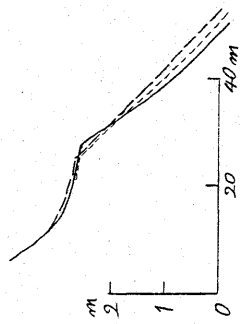
\bar{V}



— 28/2
- - - 8/3
- · - 15/3

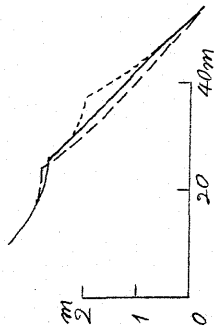
\bar{V}

N-260-6



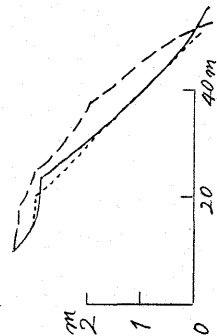
— 15/3/1981
- - - 22/3
- · - 29/3

\bar{V}



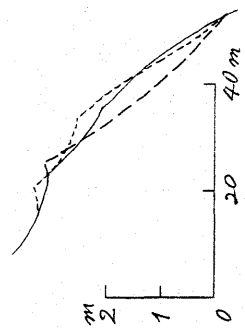
— 29/3
- - - 5/4
- · - 11/4

\bar{V}



— 11/4
- - - 19/4
- · - 26/4

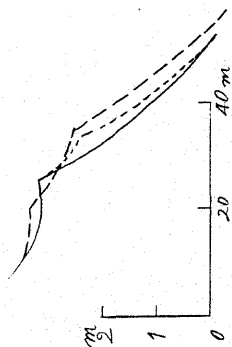
\bar{V}



— 26/4
- - - 3/5
- · - 11/5

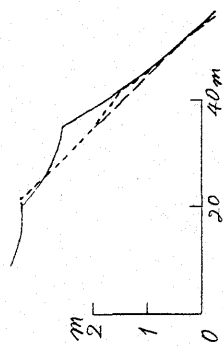
\bar{V}

N-260-7



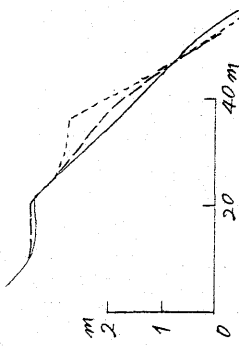
— 11/5/1981
- - - 17/5
- · - 24/5

\bar{V}



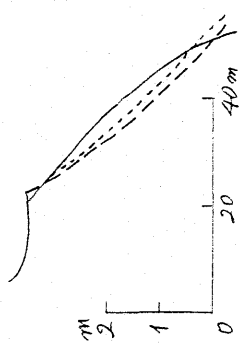
— 24/5
- - - 1/6
- · - 7/6

\bar{V}



— 7/6
- - - 15/6
- · - 21/6

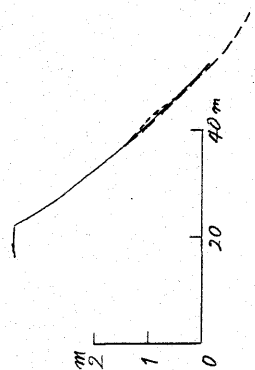
\bar{V}



— 21/6
- - - 28/6
- · - 6/7

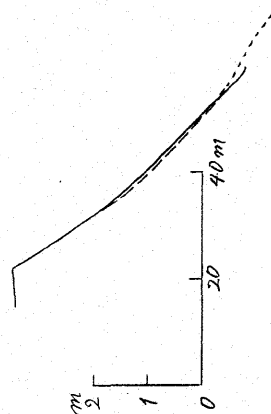
\bar{V}

N-260-8



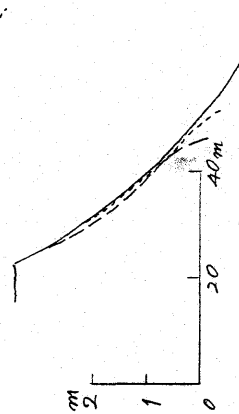
— 6/7/1981
- - - 9/7
- · - 13/7

\bar{V}



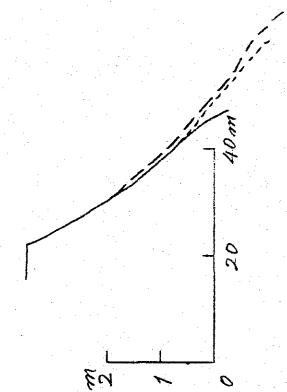
— 13/7
- - - 16/7
- · - 20/7

\bar{V}



— 20/7
- - - 23/7
- · - 27/7

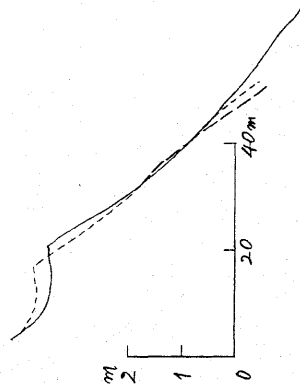
\bar{V}



— 27/7
- - - 30/7
- · - 3/8

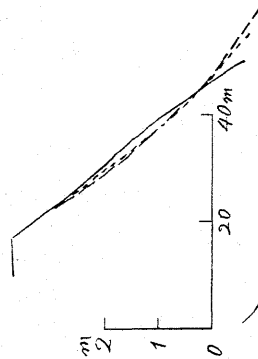
\bar{V}

N-260-9



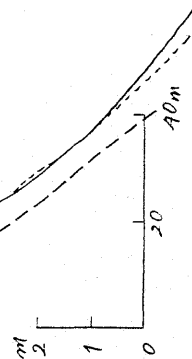
— 3 / 8 / 1981
- - - 6 / 8
- . - 11 / 8

\bar{V}



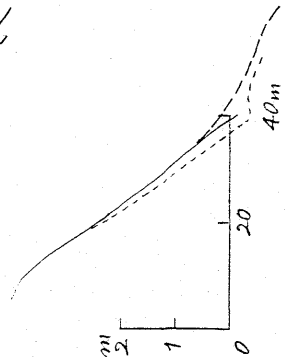
— 11 / 8
- - - 14 / 8
- . - 17 / 8

\bar{V}



— 17 / 8
- - - 19 / 8
- . - 23 / 8

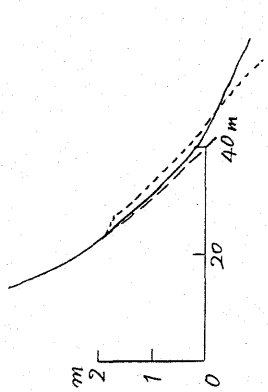
\bar{V}



— 23 / 8
- - - 26 / 8
- . - 31 / 8

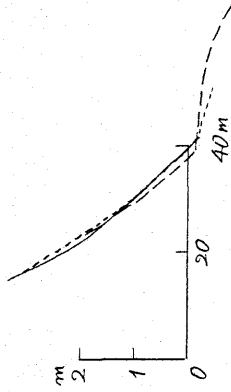
\bar{V}

N-260-10



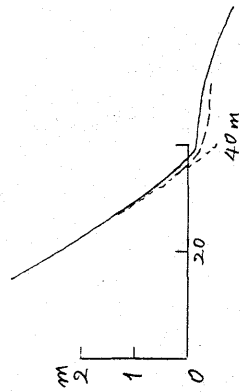
— 31 / 8 / 1981
- - - 3 / 9
- . - 7 / 9

\bar{V}



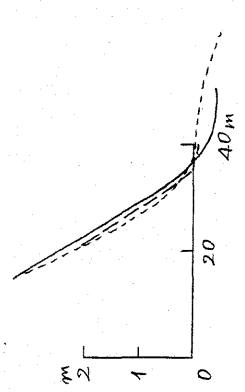
— 7 / 9
- - - 10 / 9
- . - 15 / 9

\bar{V}



— 15 / 9
- - - 19 / 9
- . - 24 / 9

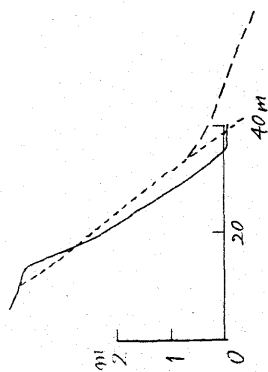
\bar{V}



— 24 / 9
- - - 28 / 9
- . - 1 / 10

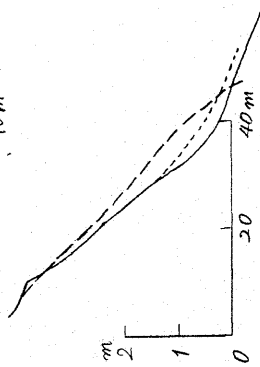
\bar{V}

N-260-11



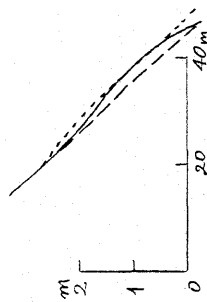
— 1 / 10 / 1981
- - - 6 / 10
- . - 12 / 10

\bar{V}



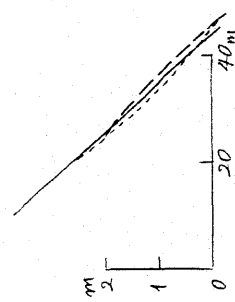
— 12 / 10
- - - 17 / 10
- . - 24 / 10

\bar{V}



— 24 / 10
- - - 28 / 10
- . - 2 / 11

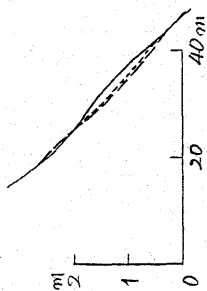
\bar{V}



— 2 / 11
- - - 8 / 11
- . - 15 / 11

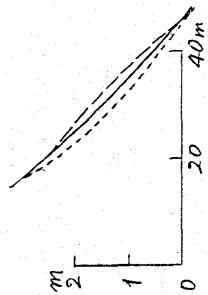
\bar{V}

N-260-12



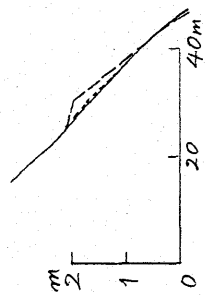
— 15 / 11 / 1981
- - - 19 / 11
- . - 23 / 11

\bar{V}



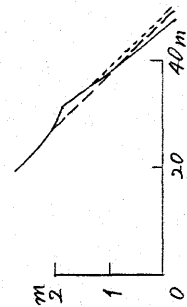
— 23 / 11
- - - 29 / 11
- . - 5 / 12

\bar{V}



— 5 / 12
- - - 12 / 12
- . - 15 / 12

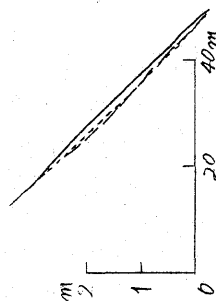
\bar{V}



— 15 / 12
- - - 22 / 12
- . - 29 / 12

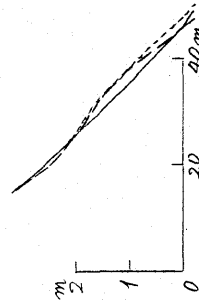
\bar{V}

N-260-13



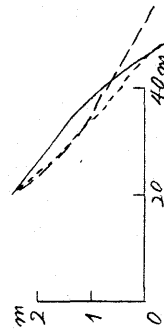
— 29 / 12 / 1981
- - - 5 / 1 / 1982
- · - 10 / 1

\bar{V}



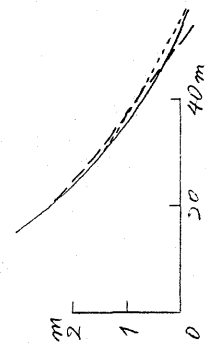
— 10 / 1
- - - 17 / 1
- · - 24 / 1

\bar{V}



— 24 / 1
- - - 31 / 1
- · - 7 / 2

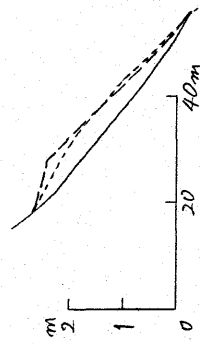
\bar{V}



— 7 / 2
- - - 14 / 2
- · - 21 / 2

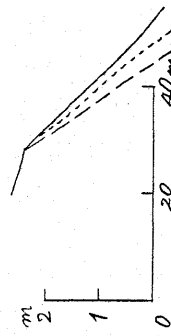
\bar{V}

N-260-14



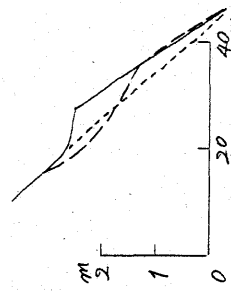
— 21 / 2 / 1982
- - - 28 / 2
- · - 6 / 3

\bar{V}



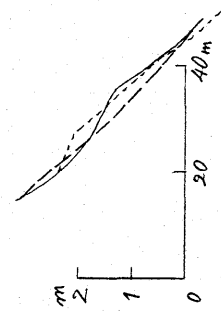
— 6 / 3
- - - 13 / 3
- · - 18 / 3

\bar{V}



— 18 / 3
- - - 24 / 3
- · - 5 / 4

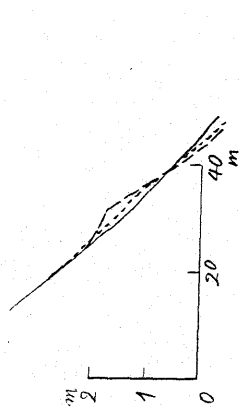
\bar{V}



— 5 / 4
- - - 11 / 4
- · - 18 / 4

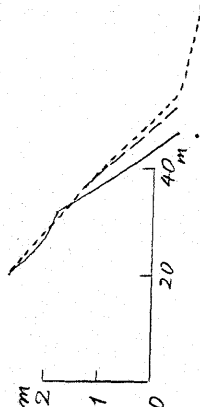
\bar{V}

N-260-15



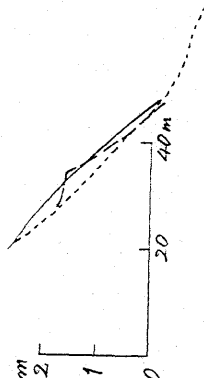
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{V}



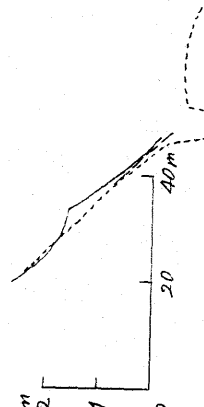
— 1/5
- - - 10/5
- · - 17/5

\bar{V}



— 17/5
- - - 24/5
- · - 31/5

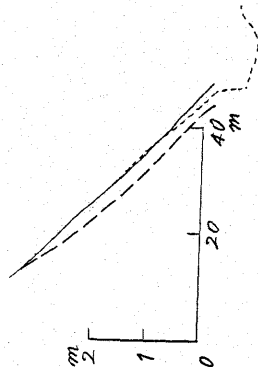
\bar{V}



— 31/5
- - - 6/6
- · - 15/6

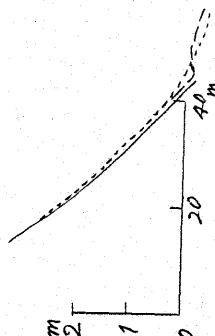
\bar{V}

N-260-16



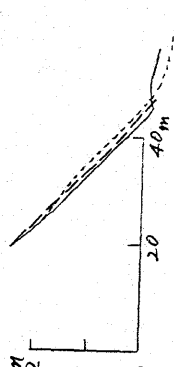
— 15/6/1982
- - - 21/6
- · - 29/6

\bar{V}



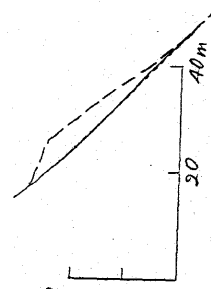
— 29/6
- - - 5/7
- · - 12/7

\bar{V}



— 12/7
- - - 20/7
- · - 27/7

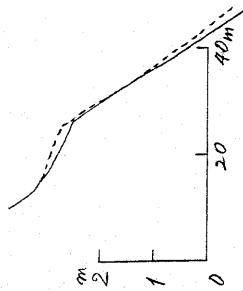
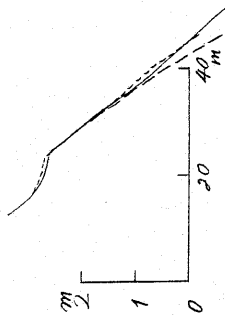
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— 27/7
- - - 2/8
- · - 9/8

\bar{V}

N-260-17



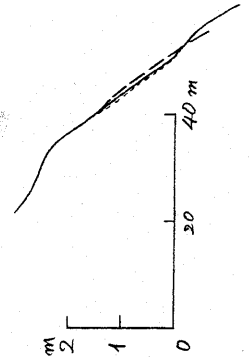
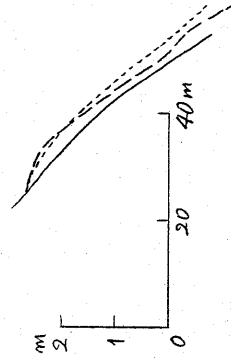
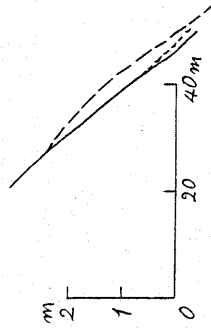
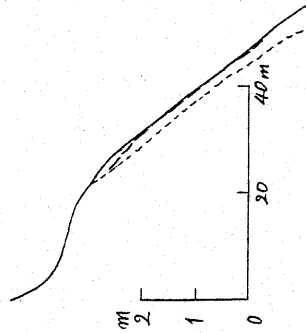
— 9 / 8 / 1982
 --- 15 / 8
 --- 23 / 8

∇

— 23 / 8
 --- 30 / 8

∇

N-280-1



— 28 / 8 / 1980
 --- 30 / 8
 --- 2 / 9

∇

— 2 / 9
 --- 6 / 9
 --- 9 / 9

∇

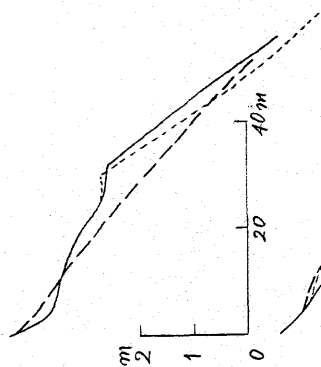
— 9 / 9
 --- 12 / 9
 --- 15 / 9

∇

— 15 / 9
 --- 19 / 9
 --- 22 / 9

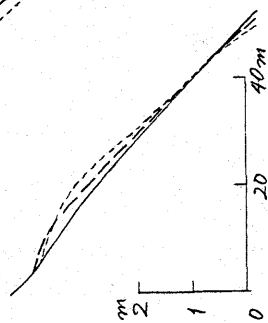
∇

N-280-2



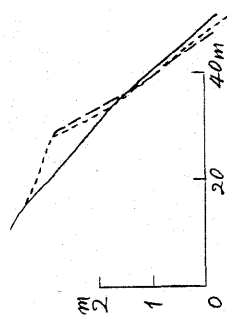
— 22/9/1980
- - - 25/9
- · - 29/9

∇_{II}



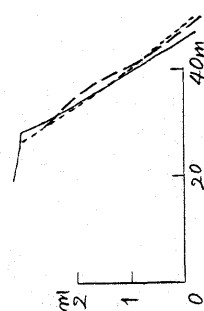
— 29/9
- - - 3/10
- · - 7/10

∇_{II}



— 7/10
- - - 10/10
- · - 14/10

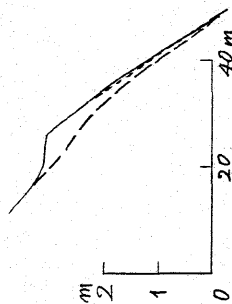
∇_{II}



— 14/10
- - - 15/10
- · - 18/10

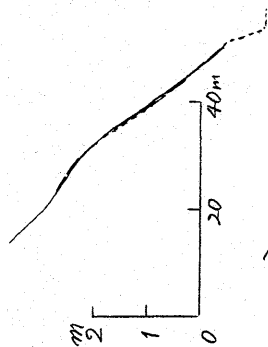
∇_{II}

N-280-3



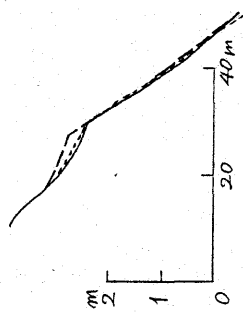
— 18/10/1980
- - - 22/10
- · - 27/10

∇_{II}



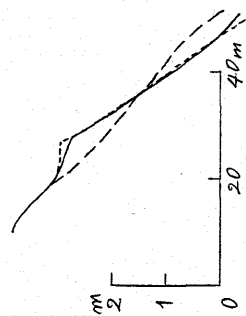
— 27/10
- - - 1/11
- · - 6/11

∇_{II}



— 6/11
- - - 11/11
- · - 16/11

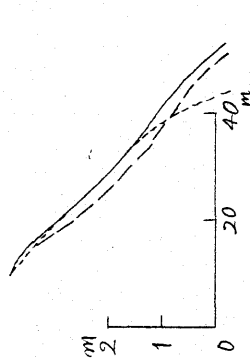
∇_{II}



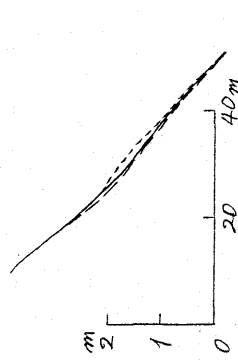
— 16/11
- - - 21/11
- · - 26/11

∇_{II}

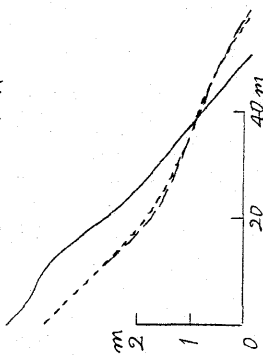
N-280-4



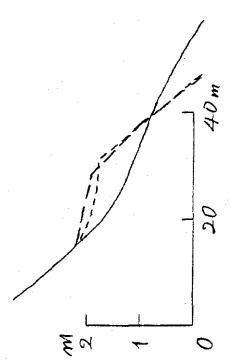
\bar{V}



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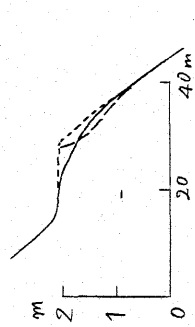


\bar{V}

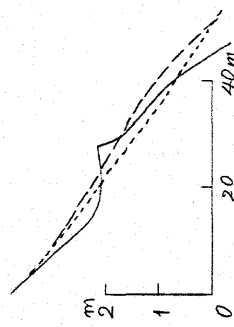


\bar{V}

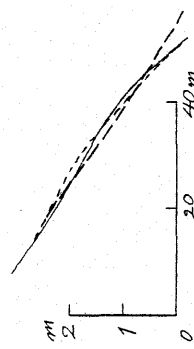
N-280-5



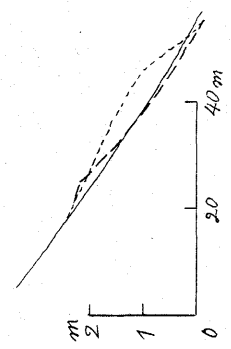
\bar{V}



\bar{V}

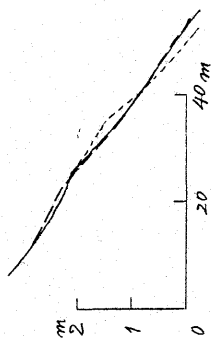


\bar{V}



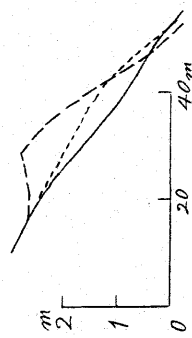
\bar{V}

N-280-6



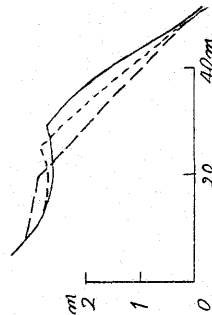
— 15 / 3 / 1981
 --- 22 / 3
 - - - 29 / 3

\bar{V}



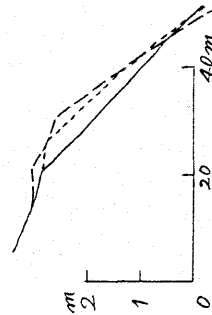
— 29 / 3
 --- 5 / 4
 - - - 11 / 4

\bar{V}



— 11 / 4
 --- 19 / 4
 - - - 26 / 4

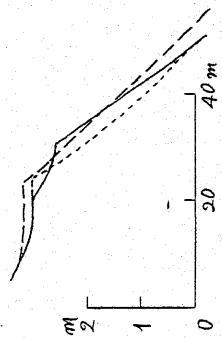
\bar{V}



— 26 / 4
 --- 3 / 5
 - - - 11 / 5

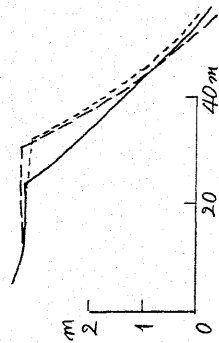
\bar{V}

N-280-7



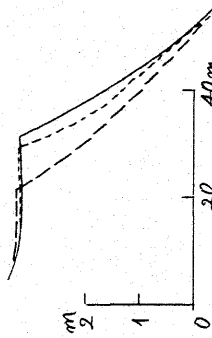
— 11 / 5 / 1981
 --- 17 / 5
 - - - 24 / 5

\bar{V}



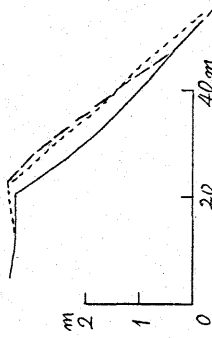
— 24 / 5
 --- 1 / 6
 - - - 7 / 6

\bar{V}



— 7 / 6
 --- 15 / 6
 - - - 21 / 6

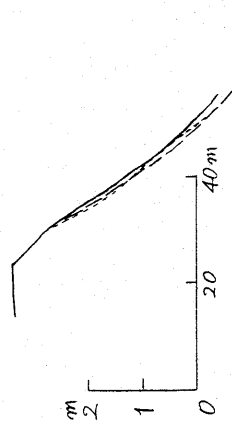
\bar{V}



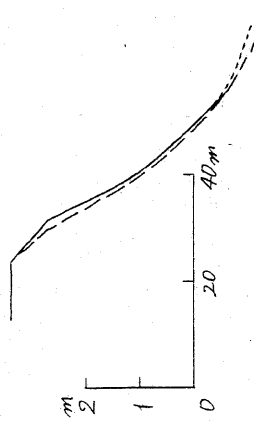
— 21 / 6
 --- 28 / 6
 - - - 6 / 7

\bar{V}

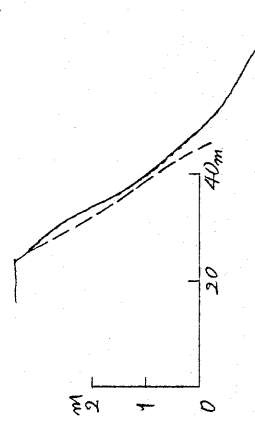
N-280-8



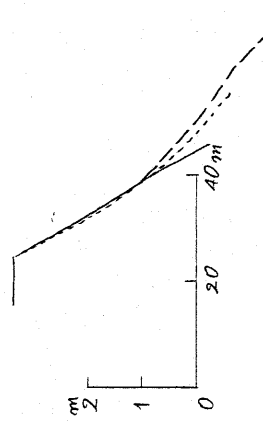
\bar{y}



\bar{y}

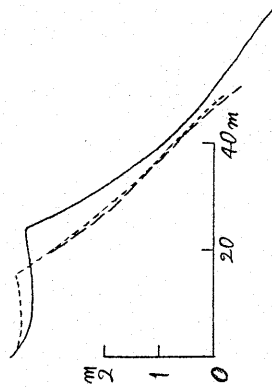


\bar{y}

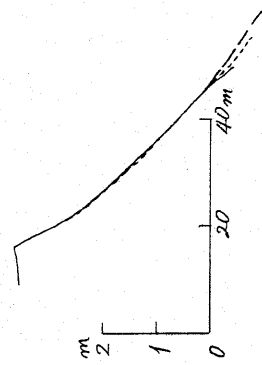


\bar{y}

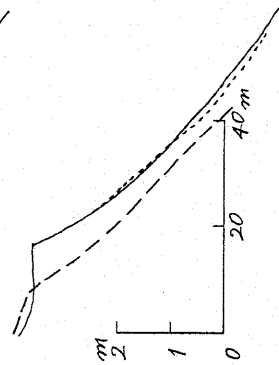
N-280-9



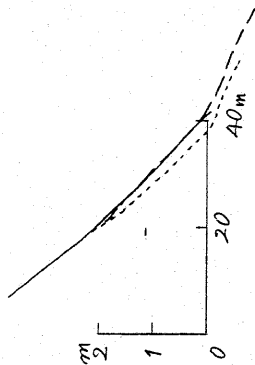
\bar{y}



\bar{y}

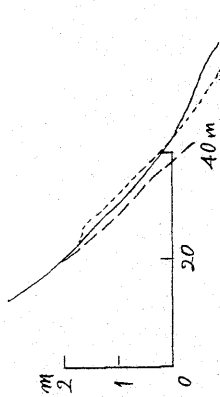


\bar{y}



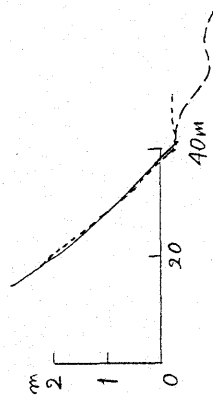
\bar{y}

N - 280 - 10



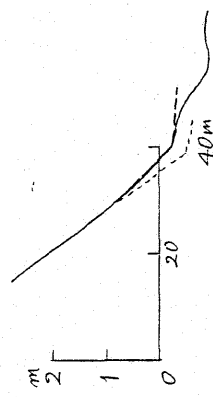
— 31 / 8 / 1981
 --- 3 / 9
 - - - 7 / 9

\bar{V}



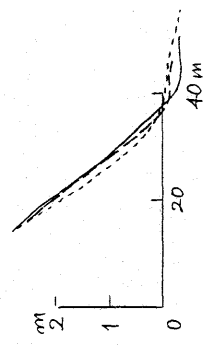
— 7 / 9
 --- 10 / 9
 - - - 15 / 9

\bar{V}



— 15 / 9
 --- 19 / 9
 - - - 24 / 9

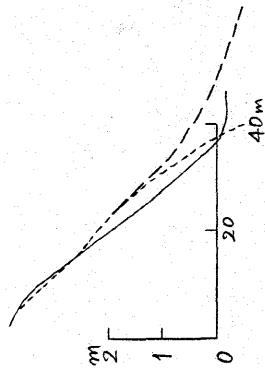
\bar{V}



— 24 / 9
 --- 28 / 9
 - - - 1 / 10

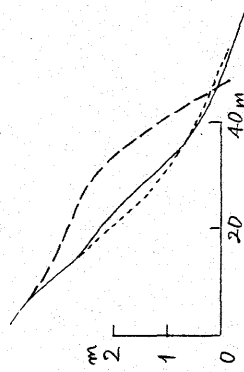
\bar{V}

N - 280 - 11



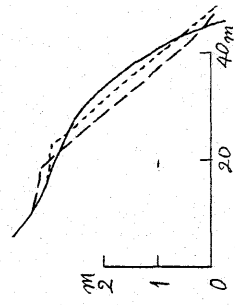
— 1 / 10 / 1981
 --- 6 / 10
 - - - 12 / 10

\bar{V}



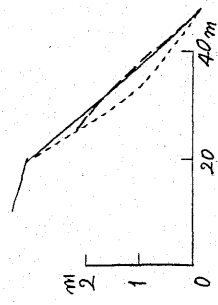
— 12 / 10
 --- 17 / 10
 - - - 24 / 10

\bar{V}



— 24 / 10
 --- 28 / 10
 - - - 2 / 11

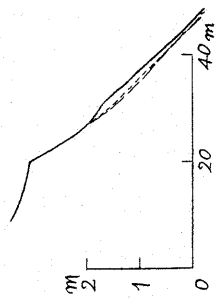
\bar{V}



— 2 / 11
 --- 8 / 11
 - - - 15 / 11

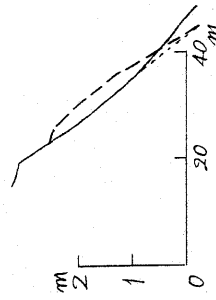
\bar{V}

N - 280 - 12



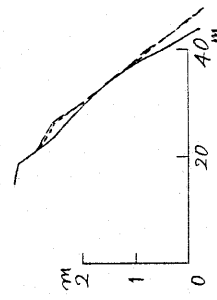
— 15 / 11 / 1981
- - - 19 / 11
- . - 23 / 11

\bar{V}



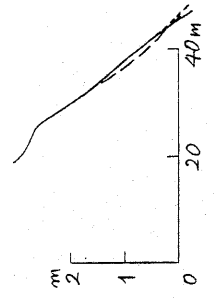
— 23 / 11
- - - 29 / 11
- . - 5 / 12

\bar{V}



— 5 / 12
- - - 12 / 12
- . - 15 / 12

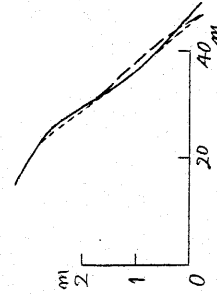
\bar{V}



— 15 / 12
- - - 22 / 12
- . - 29 / 12

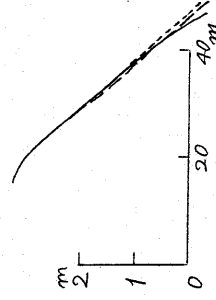
\bar{V}

N - 280 - 13



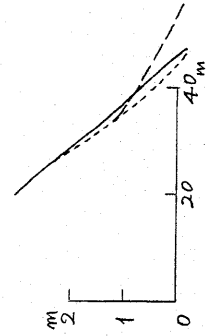
— 29 / 12 / 1981
- - - 5 / 1 / 1982
- . - 10 / 1

\bar{V}



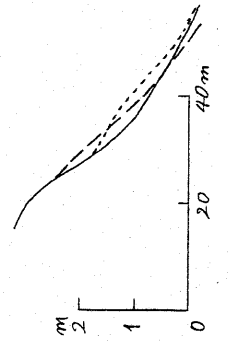
— 10 / 1
- - - 17 / 1
- . - 24 / 1

\bar{V}



— 24 / 1
- - - 31 / 1
- . - 7 / 2

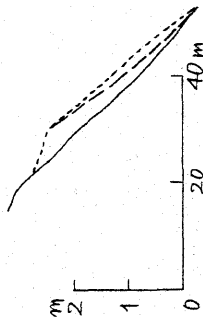
\bar{V}



— 7 / 2
- - - 14 / 2
- . - 21 / 2

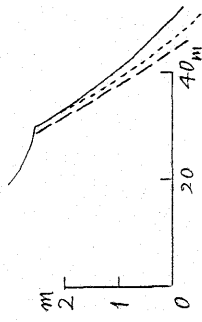
\bar{V}

N - 280 - 14



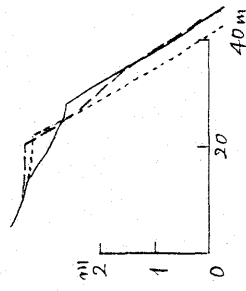
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

\bar{V}



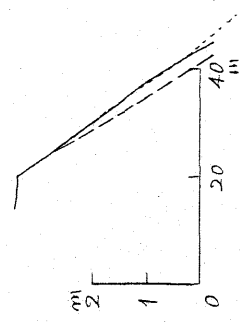
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

\bar{V}



— 18 / 3
 --- 24 / 3
 - - - 5 / 4

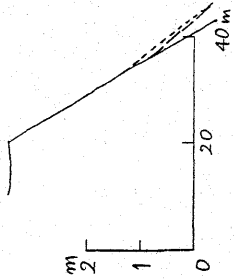
\bar{V}



— 5 / 4
 --- 11 / 4
 - - - 18 / 4

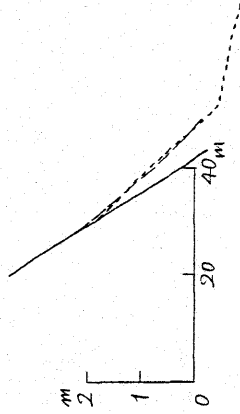
\bar{V}

N - 280 - 15



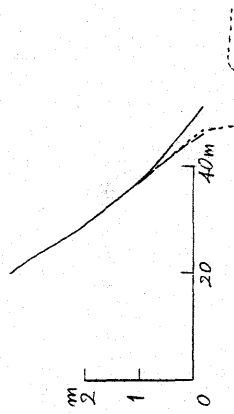
— 18 / 4 / 1982
 --- 25 / 4
 - - - 1 / 5

\bar{V}



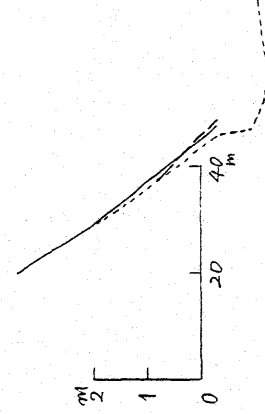
— 1 / 5
 --- 10 / 5
 - - - 17 / 5

\bar{V}



— 17 / 5
 --- 24 / 5
 - - - 31 / 5

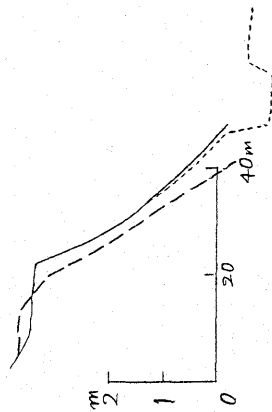
\bar{V}



— 31 / 5
 --- 6 / 6
 - - - 15 / 6

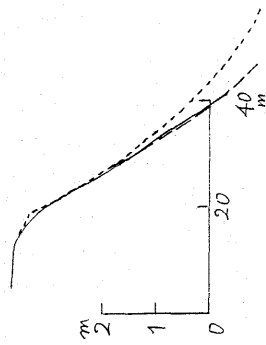
\bar{V}

N - 280 - 16



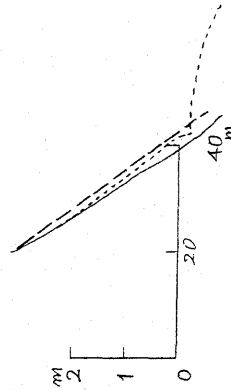
— 15/6/1982
 --- 21/6
 - - - 29/6

\bar{y}



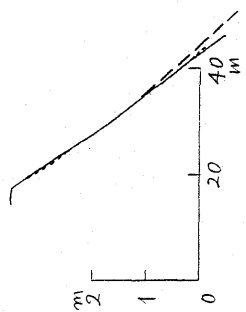
— 29/6
 --- 5/7
 - - - 12/7

\bar{y}



— 12/7
 --- 20/7
 - - - 27/7

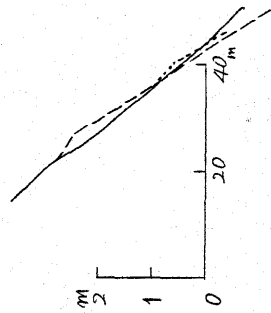
\bar{y}



— 27/7
 --- 2/8
 - - - 9/8

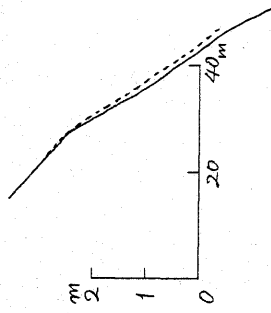
\bar{y}

N - 280 - 17



— 9/8/1982
 --- 15/8
 - - - 23/8

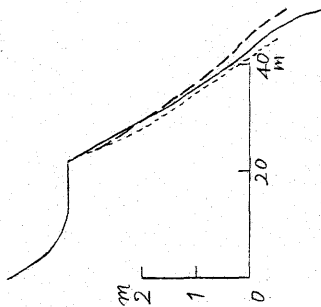
\bar{y}



— 23/8
 --- 30/8

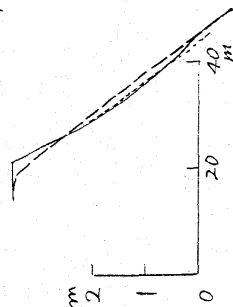
\bar{y}

N-300-1



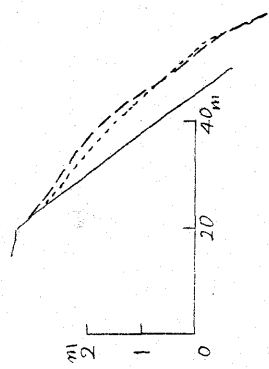
— 28 / 8 / 1980
- - - 30 / 8
- . - 2 / 9

$\bar{V} =$



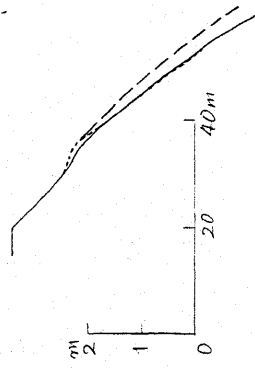
— 2 / 9
- - - 6 / 9
- . - 9 / 9

$\bar{V} =$



— 9 / 9
- - - 12 / 9
- . - 15 / 9

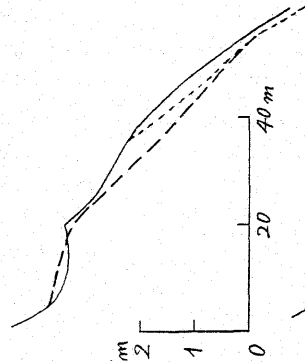
$\bar{V} =$



— 15 / 9
- - - 19 / 9
- . - 22 / 9

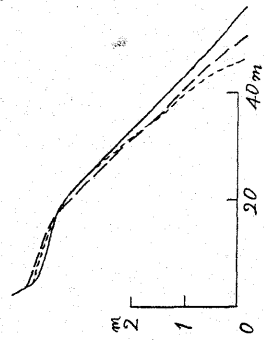
$\bar{V} =$

N-300-2



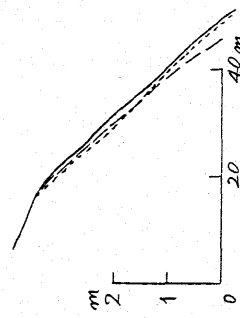
— 22 / 9 / 1980
- - - 25 / 9
- . - 29 / 9

$\bar{V} =$



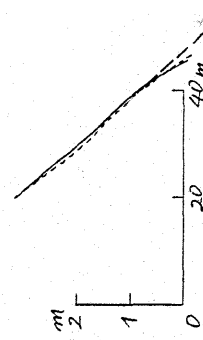
— 29 / 9
- - - 3 / 10
- . - 7 / 10

$\bar{V} =$



— 7 / 10
- - - 10 / 10
- . - 14 / 10

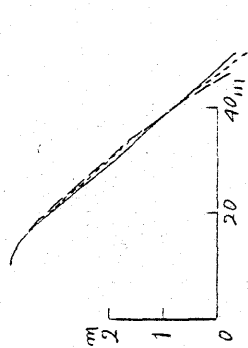
$\bar{V} =$



— 14 / 10
- - - 15 / 10
- . - 18 / 10

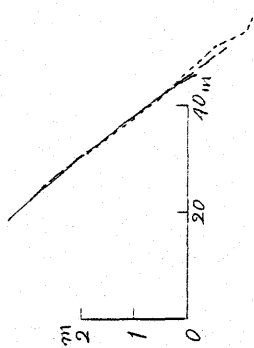
$\bar{V} =$

N-300-3



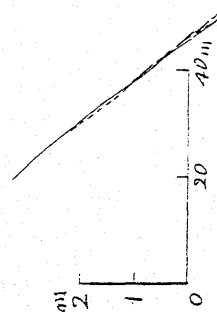
— 18/10/1980
- - - 22/10
- · - 27/10

\bar{y}



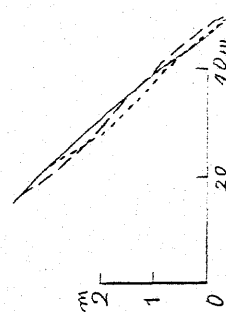
— 27/10
- - - 1/11
- · - 6/11

\bar{y}



— 6/11
- - - 11/11
- · - 16/11

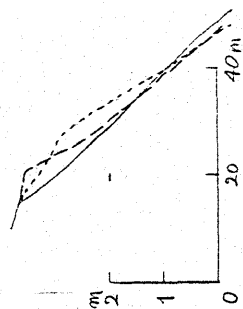
\bar{y}



— 16/11
- - - 21/11
- · - 26/11

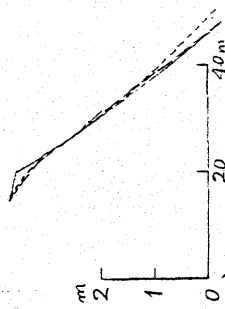
\bar{y}

N-300-4



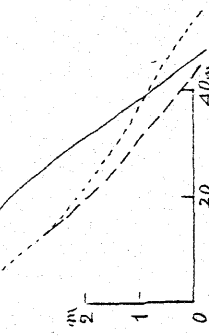
— 26/11/1980
- - - 1/12
- · - 8/12

\bar{y}



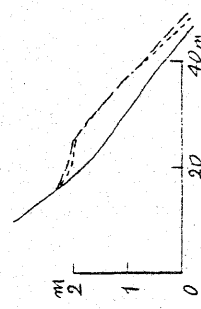
— 8/12
- - - 15/12
- · - 22/12

\bar{y}



— 22/12
- - - 29/12
- · - 6/1/1981

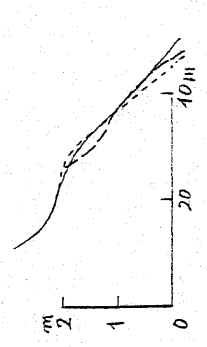
\bar{y}



— 6/1
- - - 12/1
- · - 21/1

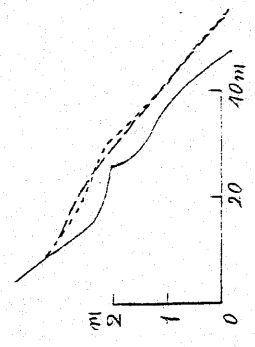
\bar{y}

N-300-5



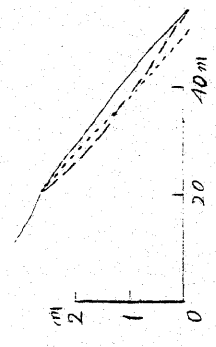
— 21 / 1 / 1981
 - - - 25 / 1
 - · - · 1 / 2

\bar{V}



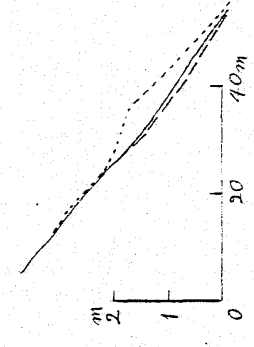
— 1 / 2
 - - - 8 / 2
 - · - · 15 / 2

\bar{V}



— 15 / 2
 - - - 22 / 2
 - · - · 28 / 2

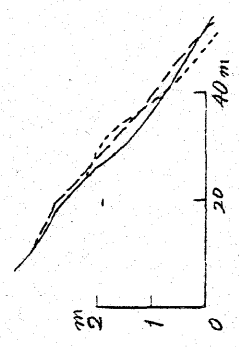
\bar{V}



— 28 / 2
 - - - 8 / 3
 - · - · 15 / 3

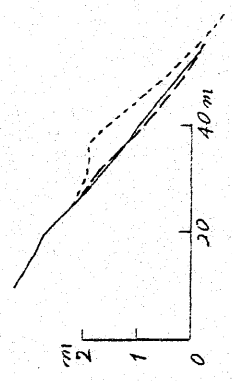
\bar{V}

N-300-6



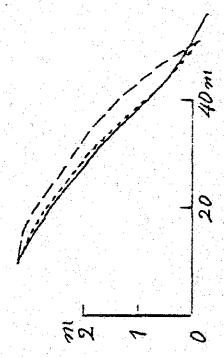
— 15 / 3 / 1981
 - - - 22 / 3
 - · - · 29 / 3

\bar{V}



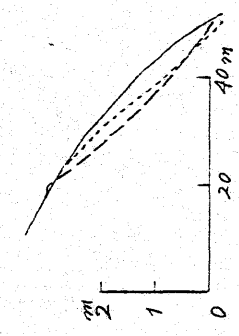
— 29 / 3
 - - - 5 / 4
 - · - · 11 / 4

\bar{V}



— 11 / 4
 - - - 19 / 4
 - · - · 26 / 4

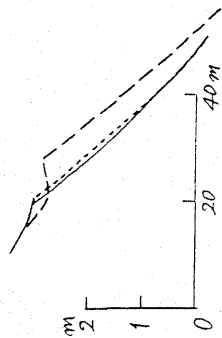
\bar{V}



— 26 / 4
 - - - 3 / 5
 - · - · 11 / 5

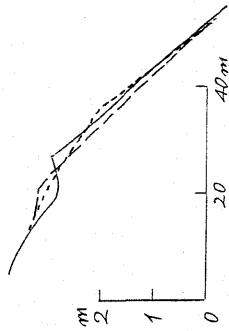
\bar{V}

N-300-7



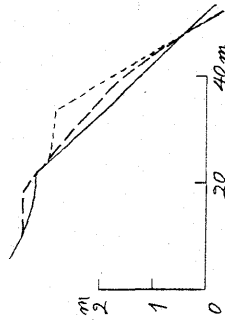
— 11/5/1981
- - - 17/5
- · - 24/5

∇



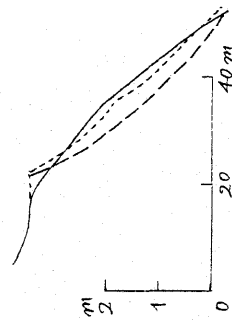
— 24/5
- - - 1/6
- · - 7/6

∇



— 7/6
- - - 15/6
- · - 21/6

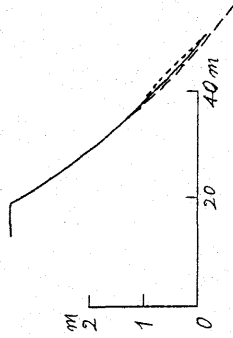
∇



— 21/6
- - - 28/6
- · - 6/7

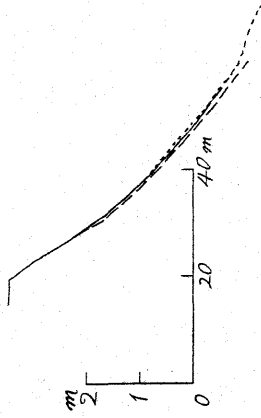
∇

N-300-8



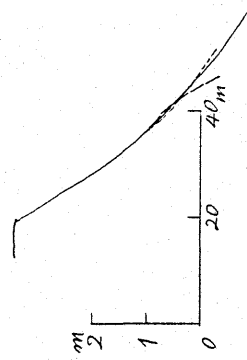
— 6/7/1981
- - - 9/7
- · - 13/7

∇



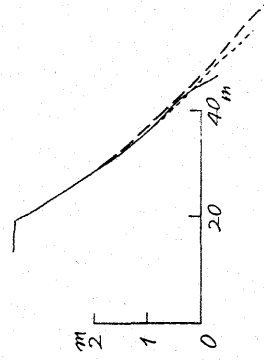
— 13/7
- - - 16/7
- · - 20/7

∇



— 20/7
- - - 23/7
- · - 27/7

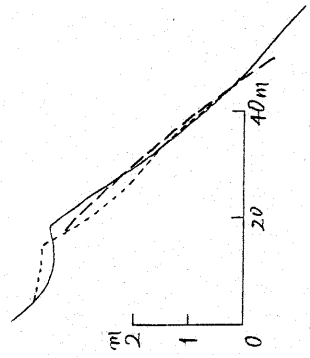
∇



— 27/7
- - - 30/7
- · - 3/8

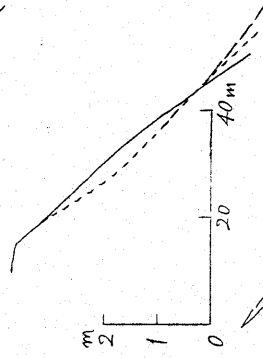
∇

N-300-9



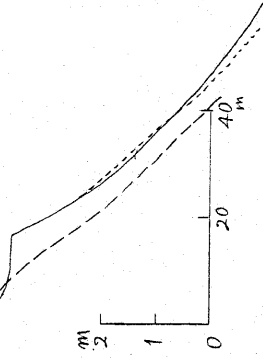
— 3 / 8 / 1981
- - - 6 / 8
- · - 11 / 8

$\bar{\nabla}$



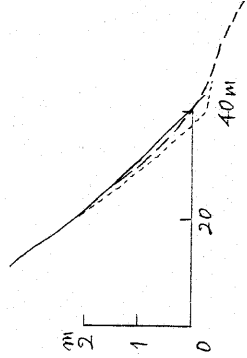
— 11 / 8
- - - 14 / 8
- · - 17 / 8

$\bar{\nabla}$



— 17 / 8
- - - 19 / 8
- · - 23 / 8

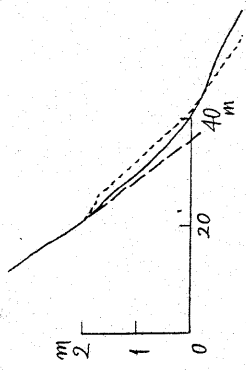
$\bar{\nabla}$



— 23 / 8
- - - 26 / 8
- · - 31 / 8

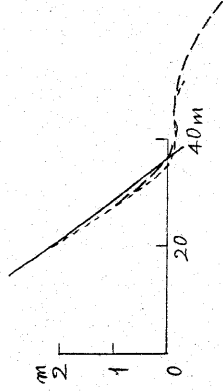
$\bar{\nabla}$

N-300-10



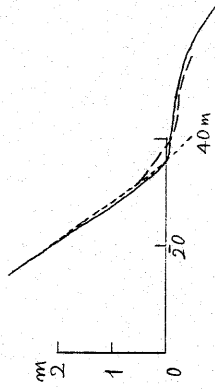
— 31 / 8 / 1981
- - - 3 / 9
- · - 7 / 9

$\bar{\nabla}$



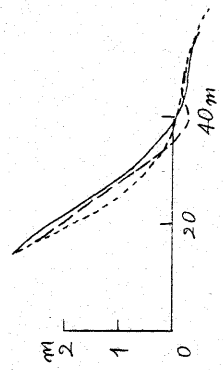
— 7 / 9
- - - 10 / 9
- · - 15 / 9

$\bar{\nabla}$



— 15 / 9
- - - 19 / 9
- · - 24 / 9

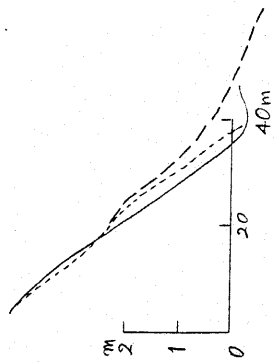
$\bar{\nabla}$



— 24 / 9
- - - 28 / 9
- · - 1 / 10

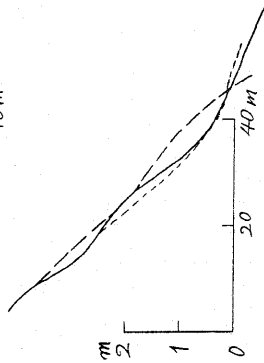
$\bar{\nabla}$

N-300-11



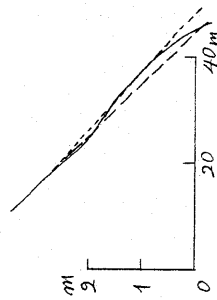
— 1 / 10 / 1981
 --- 6 / 10
 - - - 12 / 10

\bar{V}_1



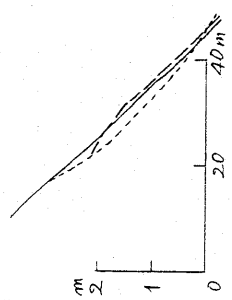
— 12 / 10
 --- 17 / 10
 - - - 24 / 10

\bar{V}_1



— 24 / 10
 --- 28 / 10
 - - - 2 / 11

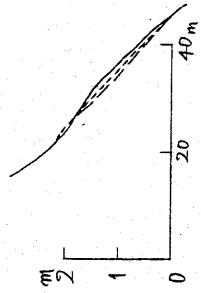
\bar{V}_1



— 2 / 11
 --- 8 / 11
 - - - 15 / 11

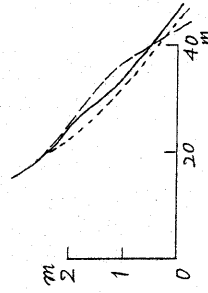
\bar{V}_1

N-300-12



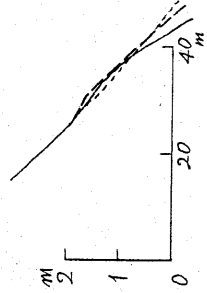
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

\bar{V}_1



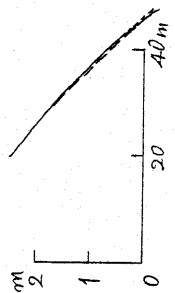
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

\bar{V}_1



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

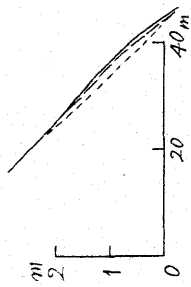
\bar{V}_1



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

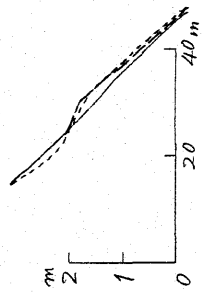
\bar{V}_1

N - 300 - 13



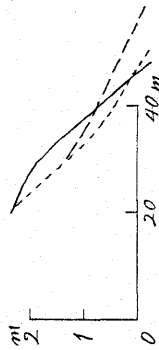
— 29 / 12 / 1981
 --- 5 / 7 / 1982
 - - - 10 / 1

∇



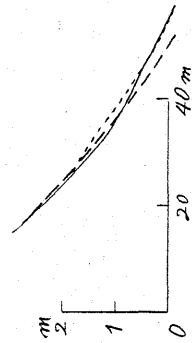
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

∇



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

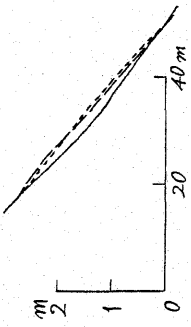
∇



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

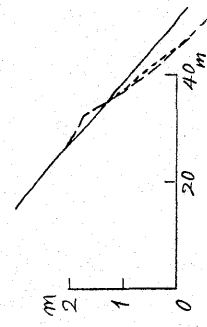
∇

N - 300 - 14



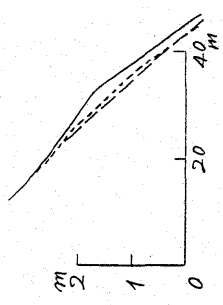
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

∇



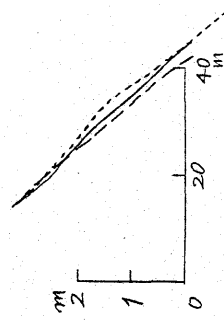
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

∇



— 18 / 3
 --- 24 / 3
 - - - 5 / 4

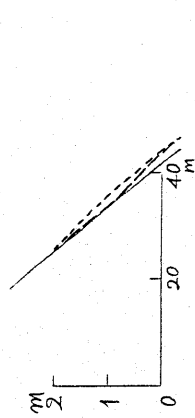
∇



— 5 / 4
 --- 11 / 4
 - - - 18 / 4

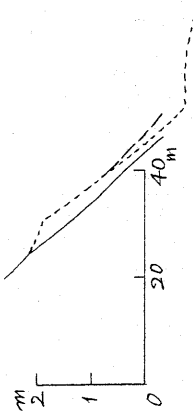
∇

N-300-15



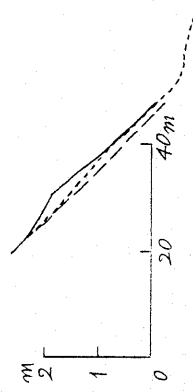
— 18/4/1982
--- 25/4
- - - 1/5

\bar{V}



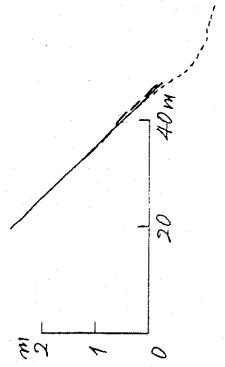
— 1/5
--- 10/5
- - - 17/5

\bar{V}



— 17/5
--- 24/5
- - - 31/5

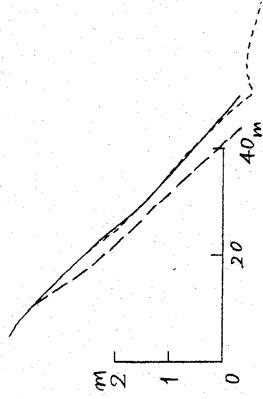
\bar{V}



— 31/5
--- 6/6
- - - 15/6

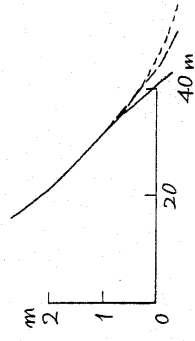
\bar{V}

N-300-16



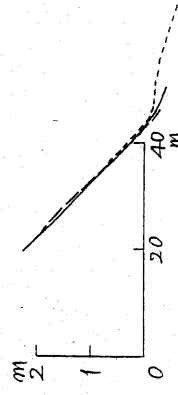
— 15/6/1982
--- 21/6
- - - 29/6

\bar{V}



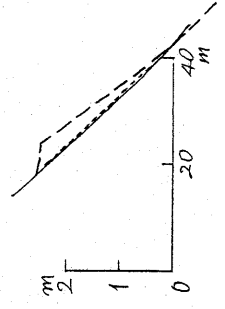
— 29/6
--- 5/7
- - - 12/7

\bar{V}



— 12/7
--- 20/7
- - - 27/7

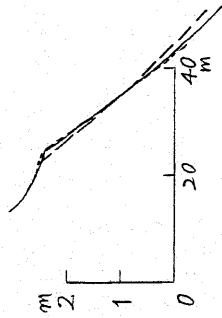
\bar{V}



— 27/7
--- 2/8
- - - 9/8

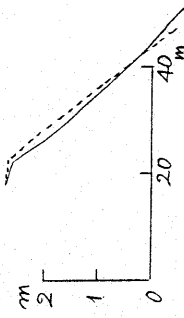
\bar{V}

N-300-17



— 9 / 8 / 1982
 --- 15 / 8
 - - - 23 / 8

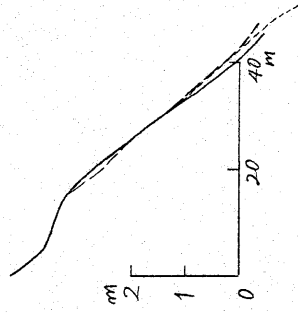
∇



— 23 / 8
 --- 30 / 8

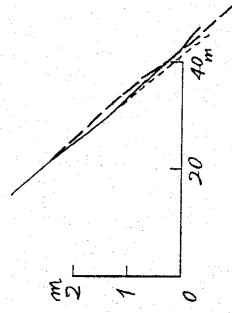
∇

N-320-1



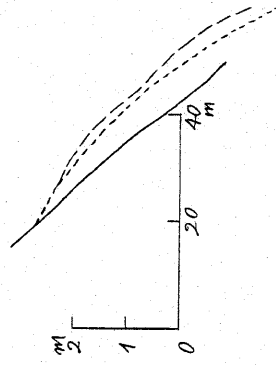
— 28 / 8 / 1980
 --- 30 / 8
 - - - 2 / 9

∇



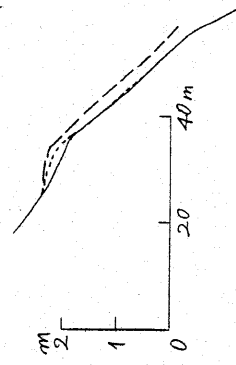
— 2 / 9
 --- 6 / 9
 - - - 9 / 9

∇



— 9 / 9
 --- 12 / 9
 - - - 15 / 9

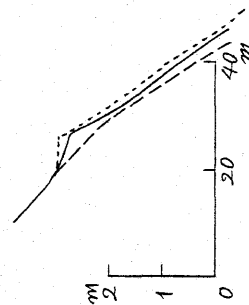
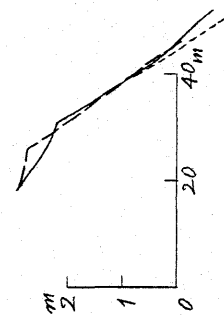
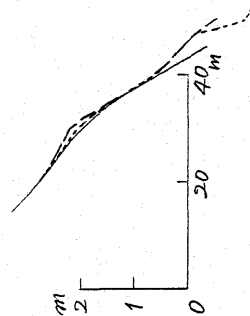
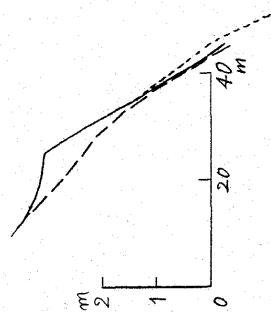
∇



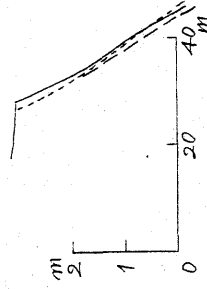
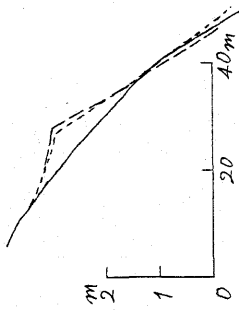
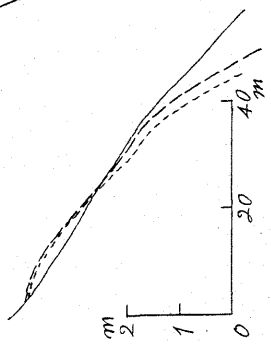
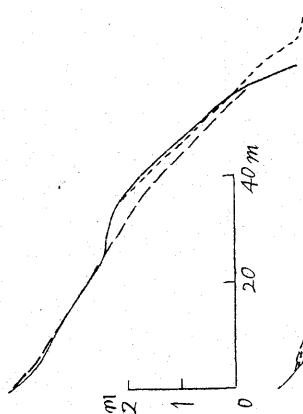
— 15 / 9
 --- 19 / 9
 - - - 22 / 9

∇

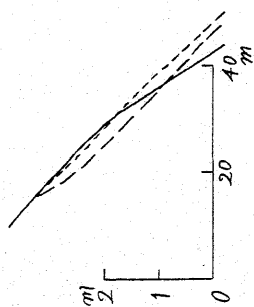
N-320-3



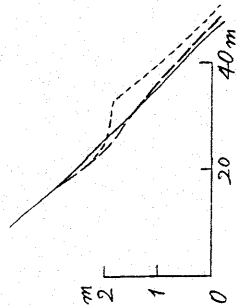
N-320-2



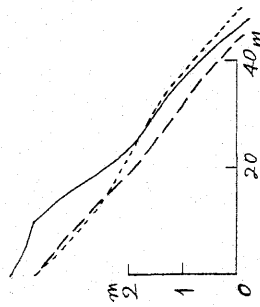
N-320-4



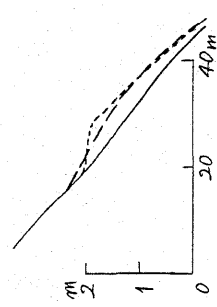
∇



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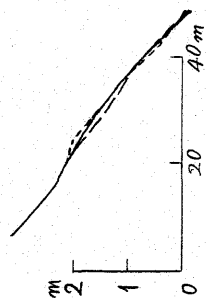


∇

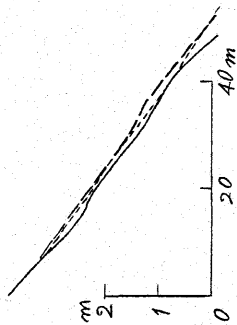


∇

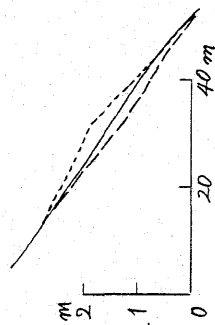
N-320-5



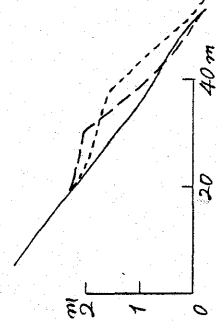
∇



∇

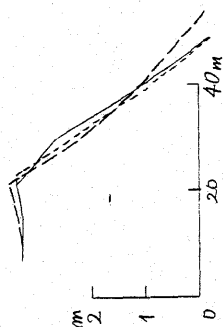


∇



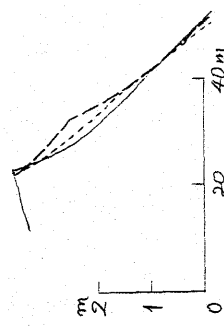
∇

N-320-7



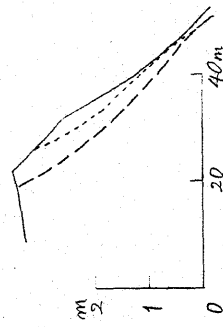
— 11/5/1981
 --- 17/5
 - - - 24/5

\bar{V}



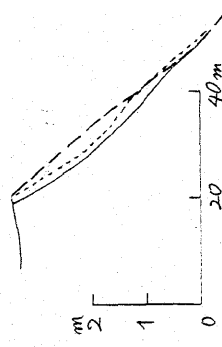
— 24/5
 --- 1/6
 - - - 7/6

\bar{V}



— 7/6
 --- 15/6
 - - - 21/6

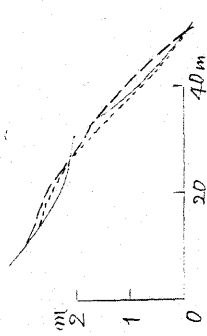
\bar{V}



— 21/6
 --- 28/6
 - - - 6/7

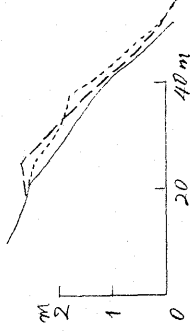
\bar{V}

N-320-6



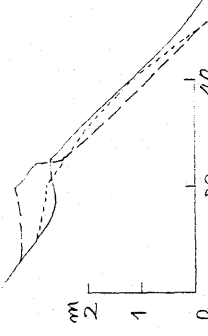
— 15/3/1981
 --- 22/3
 - - - 29/3

\bar{V}



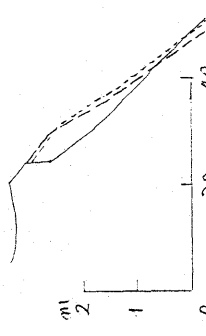
— 29/3
 --- 5/4
 - - - 11/4

\bar{V}



— 11/4
 --- 19/4
 - - - 26/4

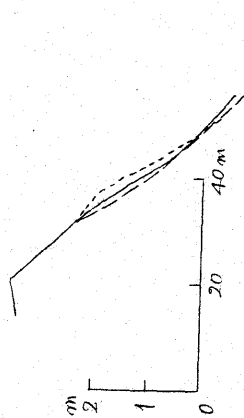
\bar{V}



— 26/4
 --- 3/5
 - - - 11/5

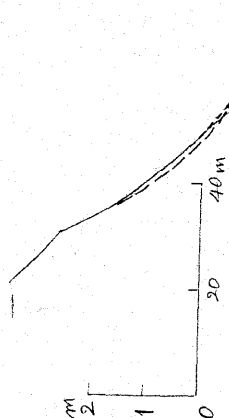
\bar{V}

N-320-8



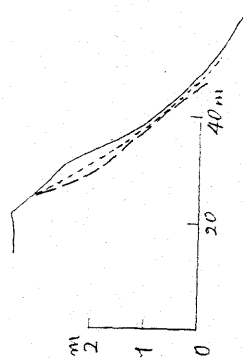
— 6/7/1981
- - - 9/7
- · - 13/7

\bar{V}



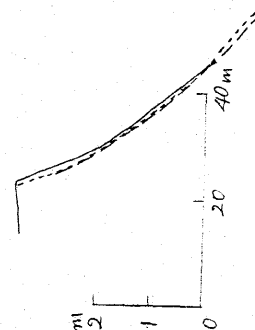
— 13/7
- - - 16/7
- · - 20/7

\bar{V}



— 20/7
- - - 23/7
- · - 27/7

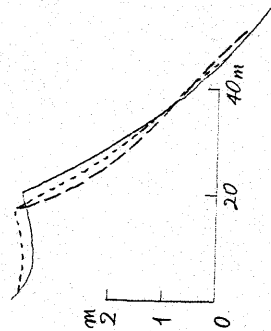
\bar{V}



— 27/7
- - - 30/7
- · - 3/8

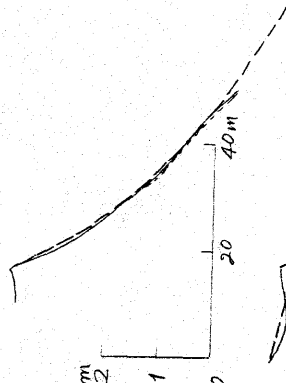
\bar{V}

N-320-9



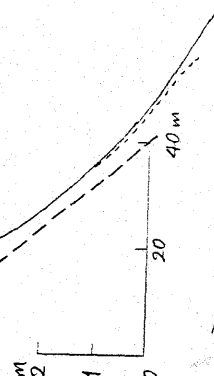
— 3/8/1981
- - - 6/8
- · - 11/8

\bar{V}



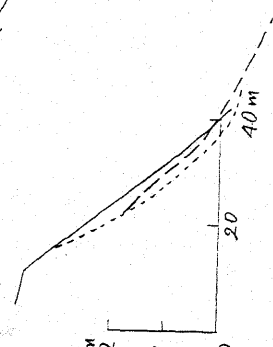
— 11/8
- - - 14/8
- · - 17/8

\bar{V}



— 17/8
- - - 19/8
- · - 23/8

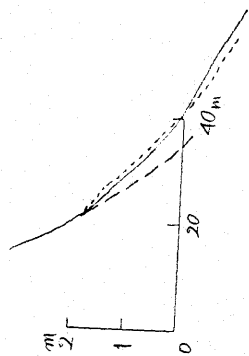
\bar{V}



— 23/8
- - - 26/8
- · - 31/8

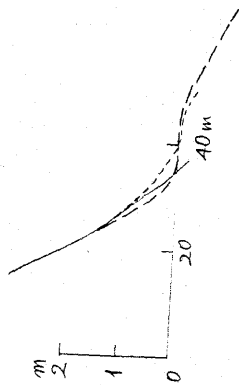
\bar{V}

N-320-10



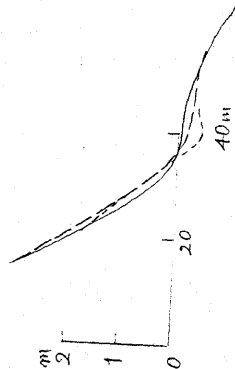
— 31/8/1981
- - - 3/9
- · - 7/9

\bar{V}



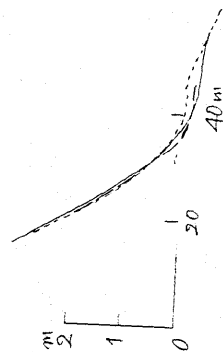
— 7/9
- - - 10/9
- · - 15/9

\bar{V}



— 15/9
- - - 19/9
- · - 24/9

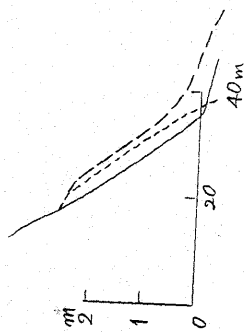
\bar{V}



— 24/9
- - - 28/9
- · - 1/10

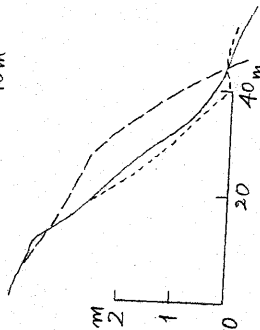
\bar{V}

N-320-11



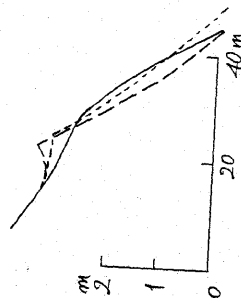
— 1/10/1981
- - - 6/10
- · - 12/10

\bar{V}



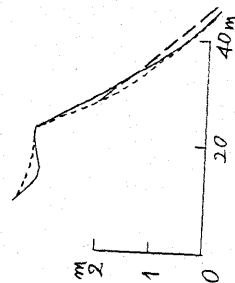
— 12/10
- - - 17/10
- · - 24/10

\bar{V}



— 24/10
- - - 28/10
- · - 2/11

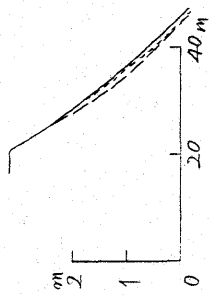
\bar{V}



— 2/11
- - - 8/11
- · - 15/11

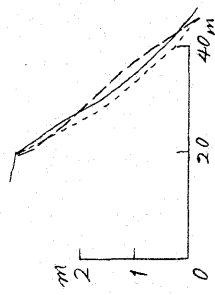
\bar{V}

N - 320 - 12



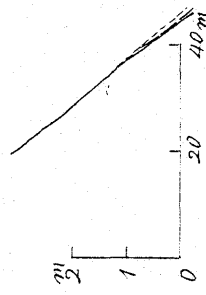
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

Σ



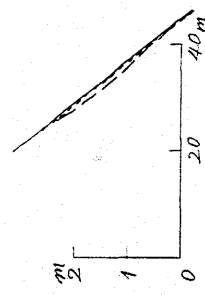
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

Σ



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

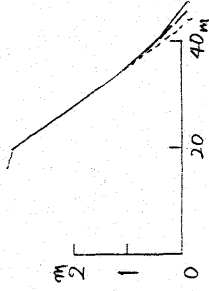
Σ



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

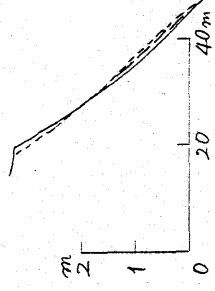
Σ

N - 320 - 13



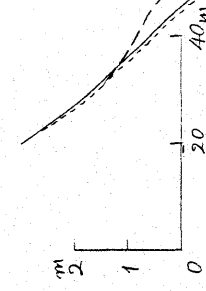
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

Σ



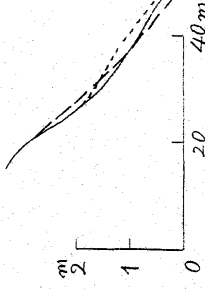
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

Σ



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

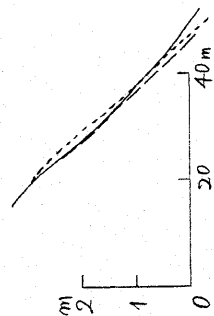
Σ



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

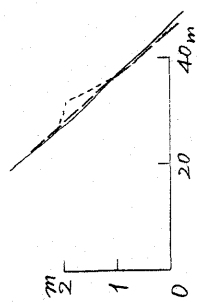
Σ

N-320-14



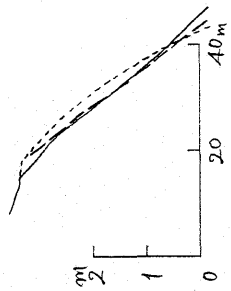
— 21/2/1982
- - - 28/2
- · - 6/3

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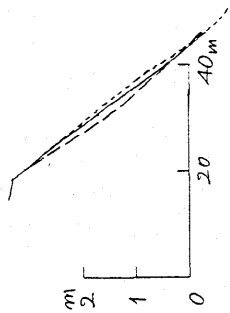
— 6/3
- - - 13/3
- · - 18/3

\bar{V}



— 18/3
- - - 24/3
- · - 5/4

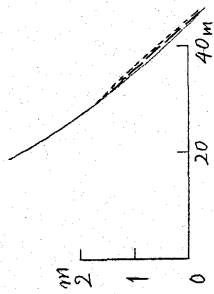
\bar{V}



— 5/4
- - - 11/4
- · - 18/4

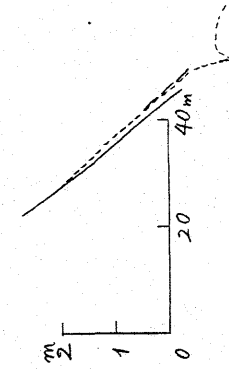
\bar{V}

N-320-15



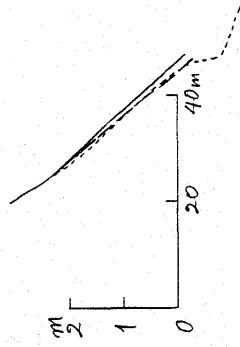
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{V}



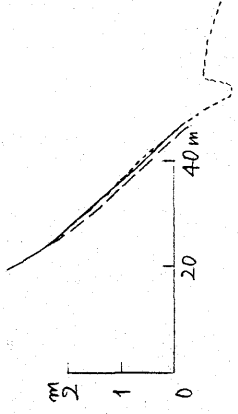
— 1/5
- - - 10/5
- · - 17/5

\bar{V}



— 17/5
- - - 24/5
- · - 31/5

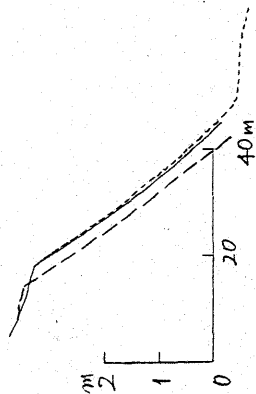
\bar{V}



— 31/5
- - - 6/6
- · - 15/6

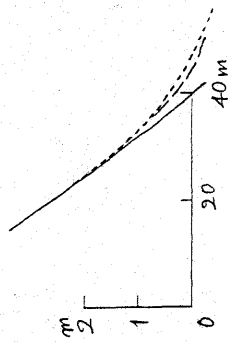
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N-320-16



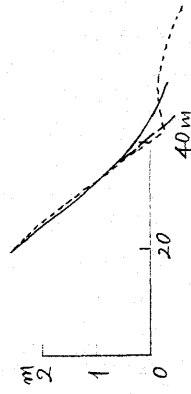
— 15/6/1982
 - - - 21/6
 . . . 29/6

∇



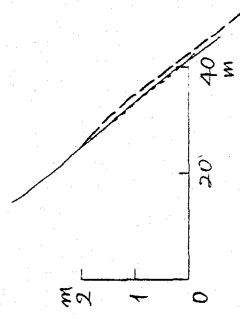
— 29/6
 - - - 5/7
 . . . 12/7

∇



— 12/7
 - - - 20/7
 . . . 27/7

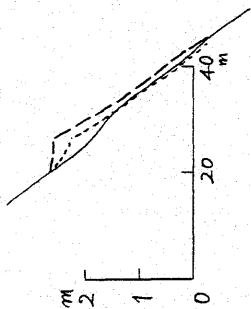
∇



— 27/7
 - - - 2/8
 . . . 9/8

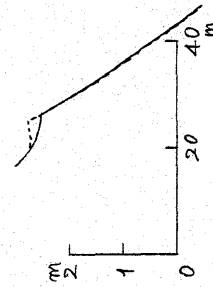
∇

N-320-17



— 9/8/1982
 - - - 15/8
 . . . 23/8

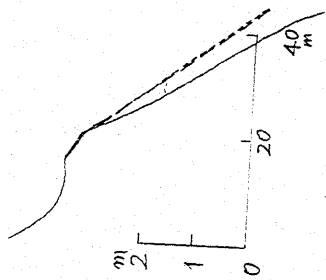
∇



— 23/8
 - - - 30/8

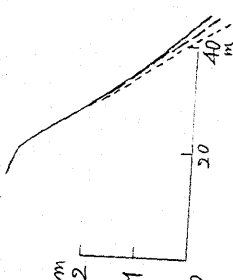
∇

N-340-1



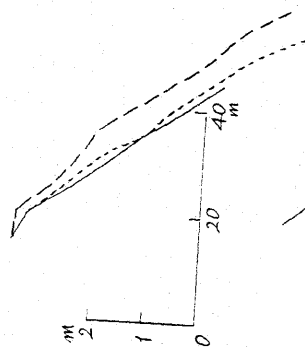
— 28 / 8 / 1980
- - - 30 / 8
- · - 2 / 9

\bar{V}



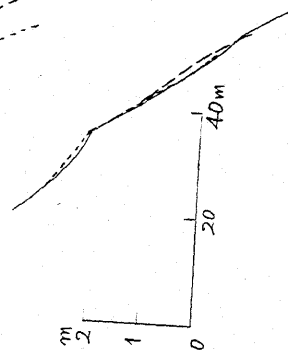
— 2 / 9
- - - 6 / 9
- · - 9 / 9

\bar{V}



— 9 / 9
- - - 12 / 9
- · - 15 / 9

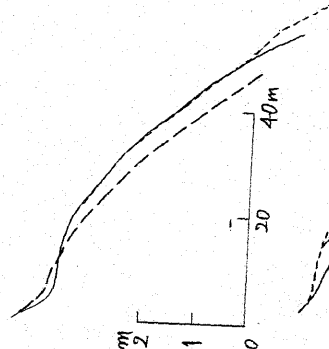
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— 15 / 9
- - - 19 / 9
- · - 22 / 9

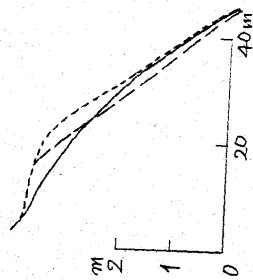
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N-340-2



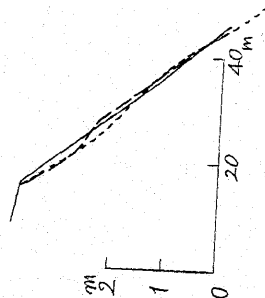
— 22 / 9 / 1980
- - - 25 / 9
- · - 29 / 9

\bar{V}



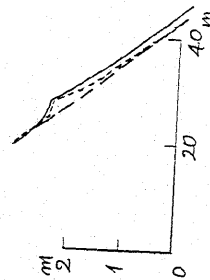
— 29 / 9
- - - 3 / 10
- · - 7 / 10

\bar{V}



— 7 / 10
- - - 10 / 10
- · - 14 / 10

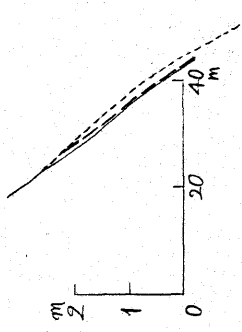
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— 14 / 10
- - - 15 / 10
- · - 18 / 10

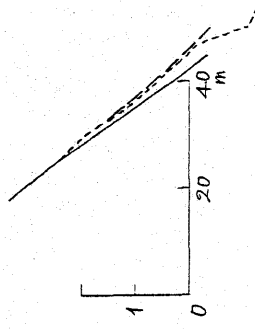
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N - 340 - 3



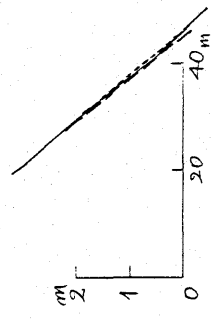
— 18 / 10 / 1980
 --- 22 / 10
 - - - 27 / 10

∇



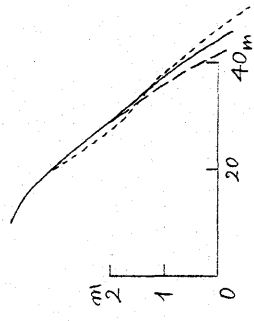
— 27 / 10
 --- 1 / 11
 - - - 6 / 11

∇



— 6 / 11
 --- 11 / 11
 - - - 16 / 11

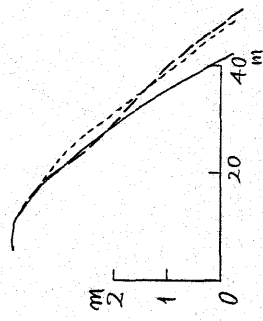
∇



— 16 / 11
 --- 21 / 11
 - - - 26 / 11

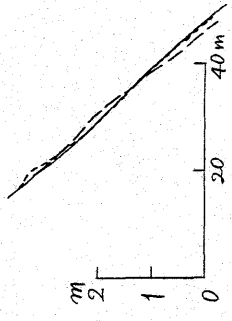
∇

N - 340 - 4



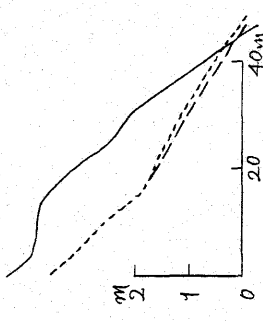
— 26 / 11 / 1980
 --- 1 / 12
 - - - 8 / 12

∇



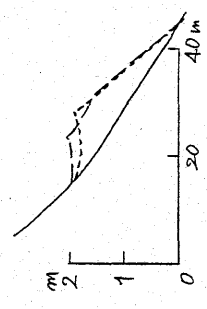
— 8 / 12
 --- 15 / 12
 - - - 22 / 12

∇



— 22 / 12
 --- 29 / 12
 - - - 6 / 1 / 1981

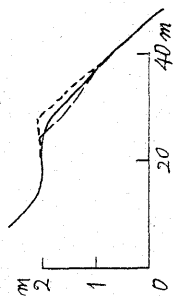
∇



— 6 / 1
 --- 12 / 1
 - - - 21 / 1

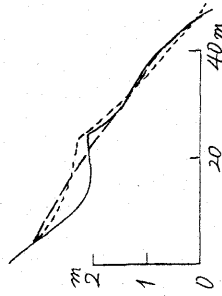
∇

N-340-5



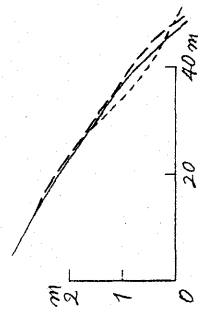
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{V}



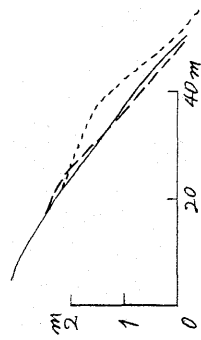
— 29/3
- - - 5/4
- · - 11/4

\bar{V}



— 11/4
- - - 19/4
- · - 26/4

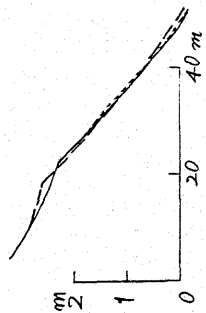
\bar{V}



— 26/4
- - - 3/5
- · - 11/5

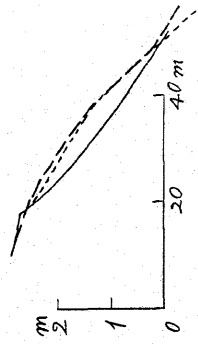
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N-340-6



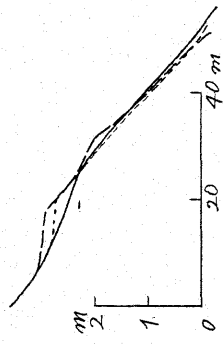
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{V}



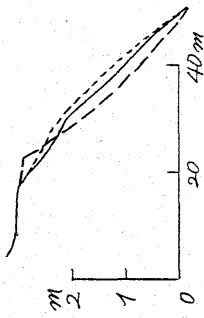
— 1/2
- - - 8/2
- · - 15/2

\bar{V}



— 15/2
- - - 22/2
- · - 28/2

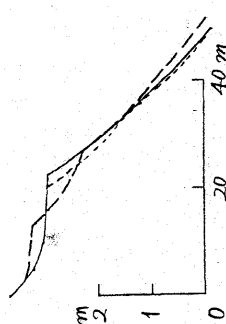
\bar{V}



— 28/2
- - - 8/3
- · - 15/3

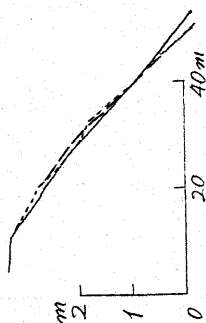
\bar{V}

N-340-7



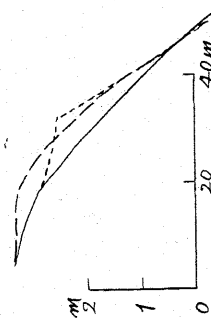
— 11/5/1981
- - - 17/5
- · - 24/5

▽



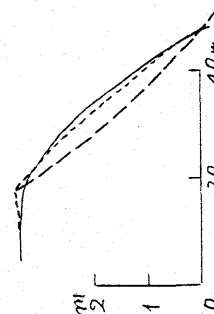
— 24/5
- - - 1/6
- · - 7/6

▽



— 7/6
- - - 15/6
- · - 21/6

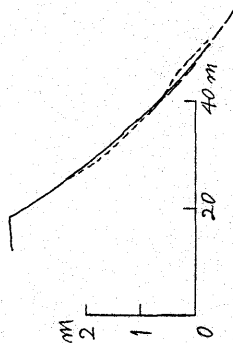
▽



— 21/6
- - - 28/6
- · - 6/7

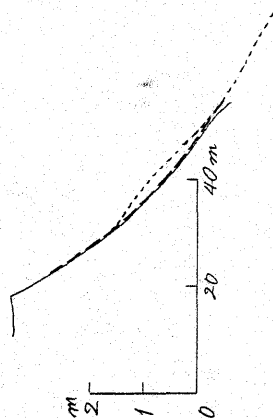
▽

N-340-8



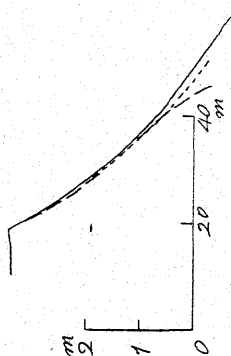
— 6/7/1981
- - - 9/7
- · - 13/7

▽



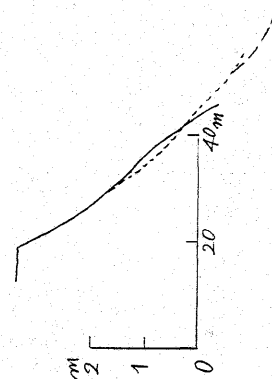
— 13/7
- - - 16/7
- · - 20/7

▽



— 20/7
- - - 23/7
- · - 27/7

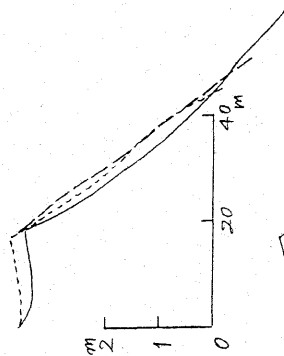
▽



— 27/7
- - - 30/7
- · - 3/8

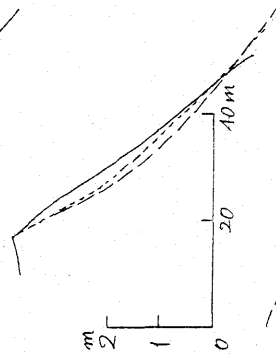
▽

N-340-9



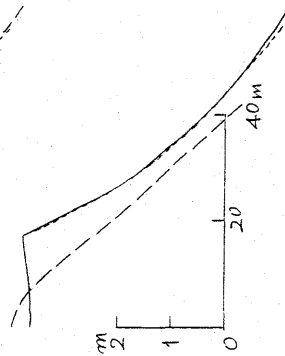
— 3 / 8 / 1981
- - - 6 / 8
- · - 11 / 8

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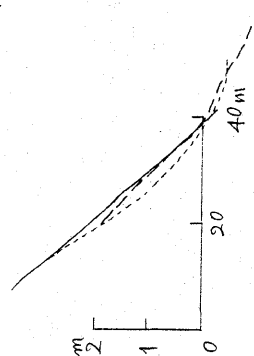
— 11 / 8
- - - 14 / 8
- · - 17 / 8

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— 17 / 8
- - - 19 / 8
- · - 23 / 8

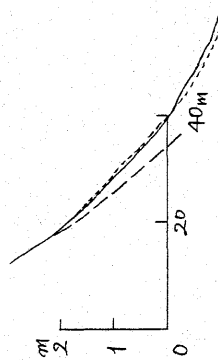
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— 23 / 8
- - - 26 / 8
- · - 31 / 8

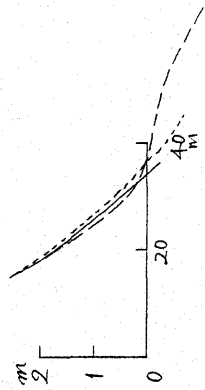
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N-340-10



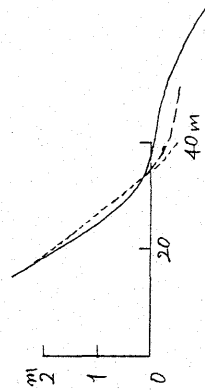
— 31 / 8 / 1981
- - - 3 / 9
- · - 7 / 9

\bar{V}



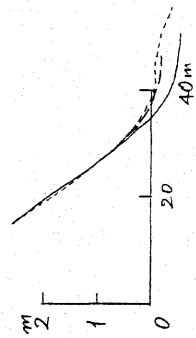
— 7 / 9
- - - 10 / 9
- · - 15 / 9

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— 15 / 9
- - - 19 / 9
- · - 24 / 9

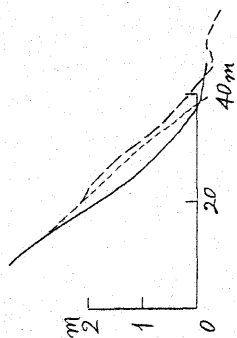
\bar{V}



— 24 / 9
- - - 28 / 9
- · - 1 / 10

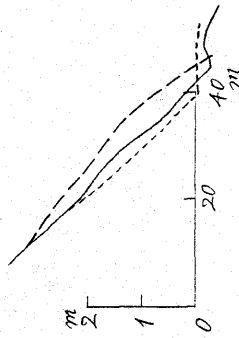
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N - 340 - 11



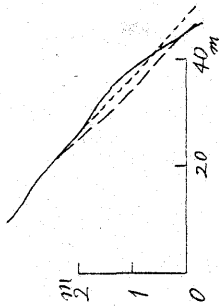
— 1 / 10 / 1981
 --- 6 / 10
 - - - 12 / 10

∇



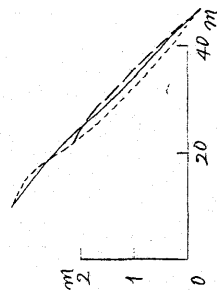
— 12 / 10
 --- 17 / 10
 - - - 24 / 10

∇



— 24 / 10
 --- 28 / 10
 - - - 2 / 11

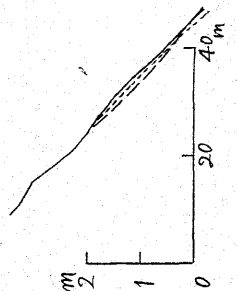
∇



— 2 / 11
 --- 8 / 11
 - - - 15 / 11

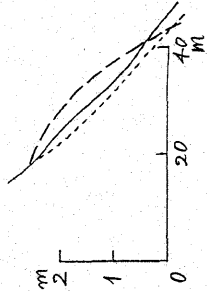
∇

N - 340 - 12



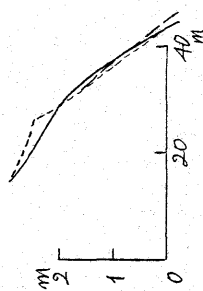
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

∇



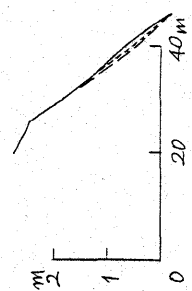
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

∇



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

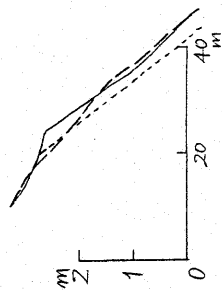
∇



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

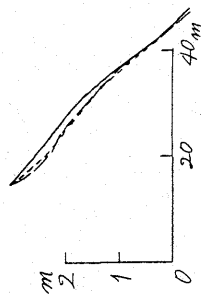
∇

N - 340 - 13



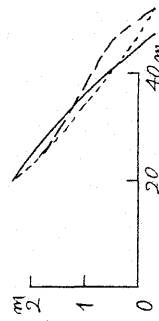
— 29 / 12 / 1981
- - - 5 / 1 / 1982
- · - 10 / 1

\bar{V}



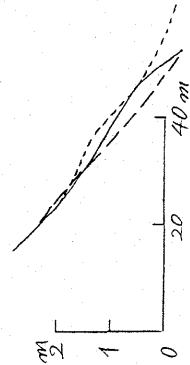
— 10 / 1
- - - 17 / 1
- · - 24 / 1

\bar{V}



— 24 / 1
- - - 31 / 1
- · - 7 / 2

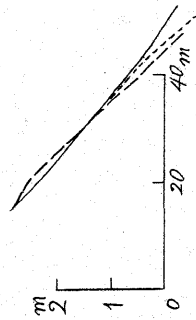
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— 7 / 2
- - - 14 / 2
- · - 21 / 2

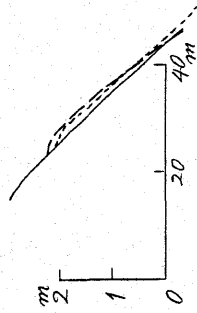
\bar{V}

N - 340 - 14



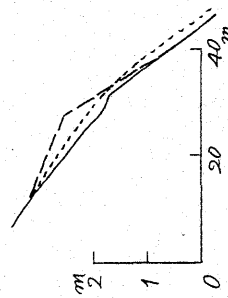
— 21 / 2 / 1982
- - - 28 / 2
- · - 6 / 3

\bar{V}



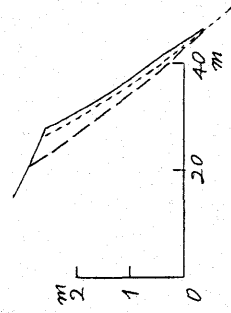
— 6 / 3
- - - 13 / 3
- · - 18 / 3

\bar{V}



— 18 / 3
- - - 24 / 3
- · - 5 / 4

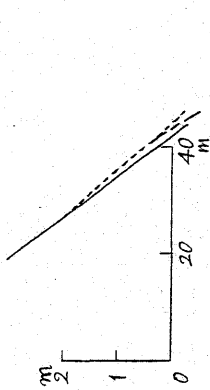
\bar{V}



— 5 / 4
- - - 11 / 4
- · - 18 / 4

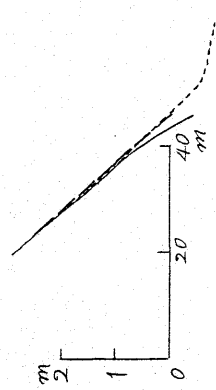
\bar{V}

N - 340 - 15



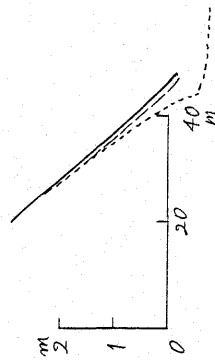
— 18 / 4 / 1982
 --- 25 / 4
 - - - 1 / 5

$\bar{\nabla}$



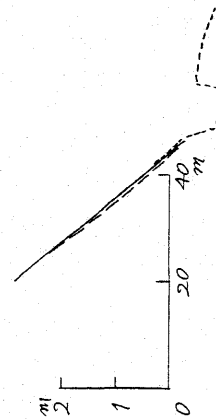
— 1 / 5
 --- 10 / 5
 - - - 17 / 5

$\bar{\nabla}$



— 17 / 5
 --- 24 / 5
 - - - 31 / 5

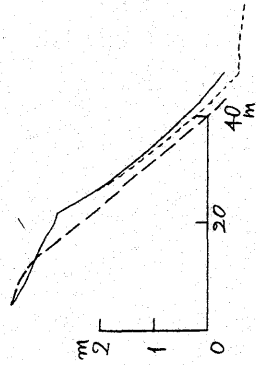
$\bar{\nabla}$



— 31 / 5
 --- 6 / 6
 - - - 15 / 6

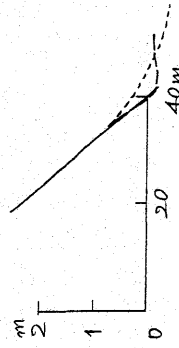
$\bar{\nabla}$

N - 340 - 16



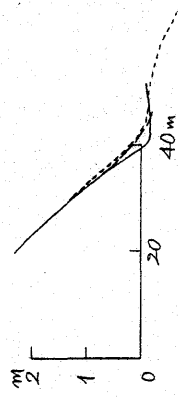
— 15 / 6 / 1982
 --- 21 / 6
 - - - 29 / 6

$\bar{\nabla}$



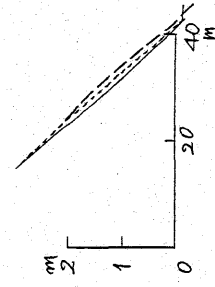
— 29 / 6
 --- 5 / 7
 - - - 12 / 7

$\bar{\nabla}$



— 12 / 7
 --- 20 / 7
 - - - 27 / 7

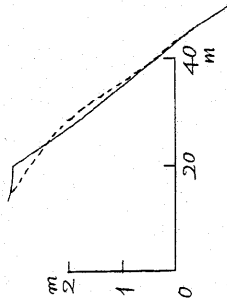
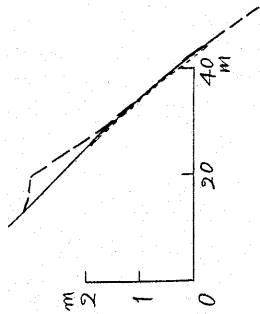
$\bar{\nabla}$



— 27 / 7
 --- 2 / 8
 - - - 9 / 8

$\bar{\nabla}$

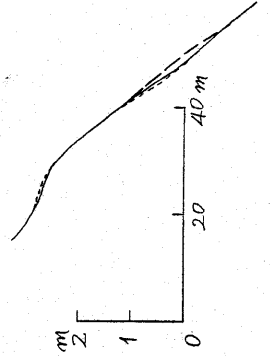
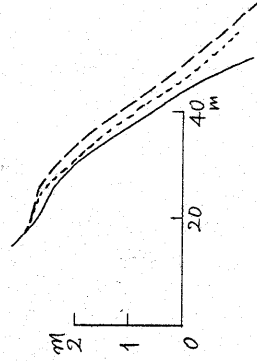
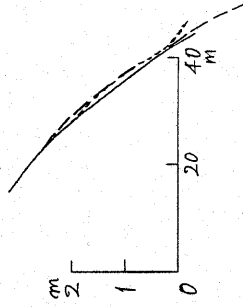
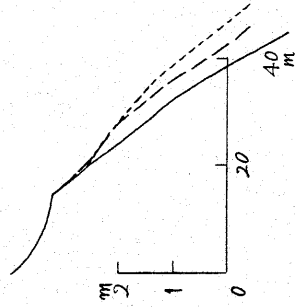
N - 340 - 17



\bar{V}

\bar{V}

N - 360 - 1



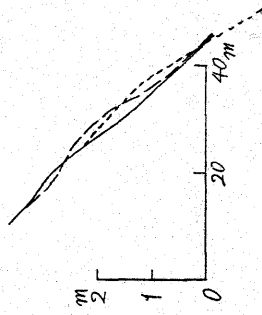
\bar{V}

\bar{V}

\bar{V}

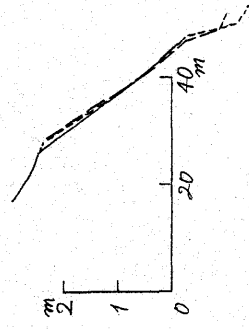
\bar{V}

N-360-3



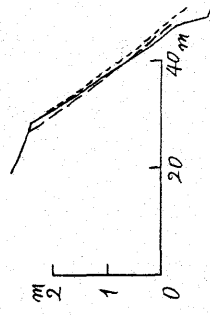
— 18 / 10 / 1980
 --- 22 / 10
 ... 27 / 10

∇



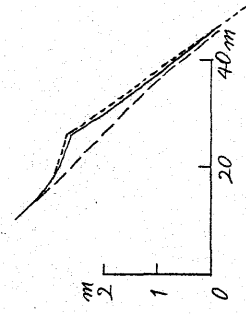
— 27 / 10
 --- 1 / 11
 ... 6 / 11

∇



— 6 / 11
 --- 11 / 11
 ... 16 / 11

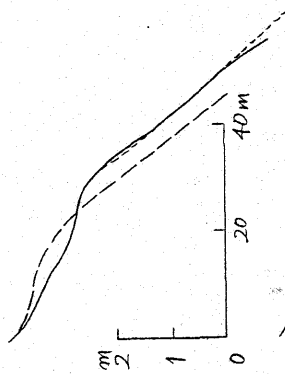
∇



— 16 / 11
 --- 21 / 11
 ... 26 / 11

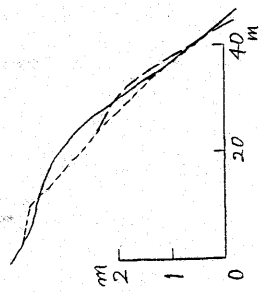
∇

N-360-2



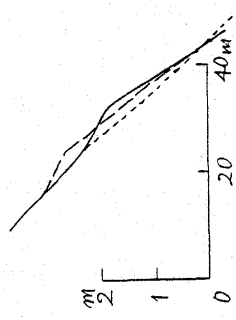
— 22 / 9 / 1980
 --- 25 / 9
 ... 29 / 9

∇



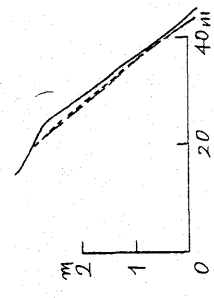
— 29 / 9
 --- 3 / 10
 ... 7 / 10

∇



— 7 / 10
 --- 10 / 10
 ... 14 / 10

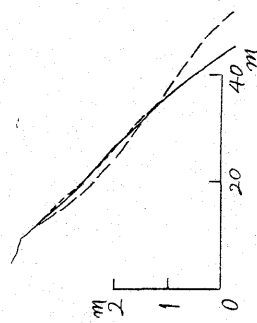
∇



— 14 / 10
 --- 15 / 10
 ... 18 / 10

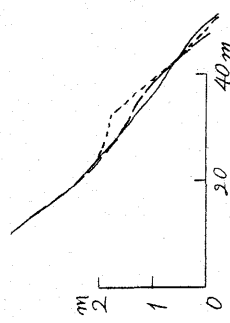
∇

N-360-4



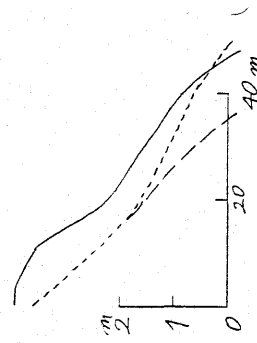
— 26 / 11 / 1980
 --- 1 / 12
 - - - 8 / 12

\bar{y}



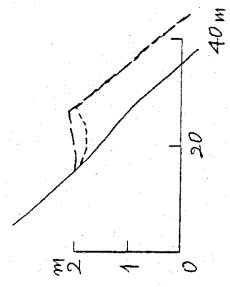
— 8 / 12
 --- 15 / 12
 - - - 22 / 12

\bar{y}



— 22 / 12
 --- 29 / 12
 - - - 6 / 1 / 1981

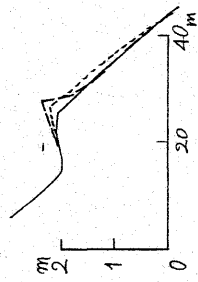
\bar{y}



— 6 / 1
 --- 12 / 1
 - - - 21 / 1

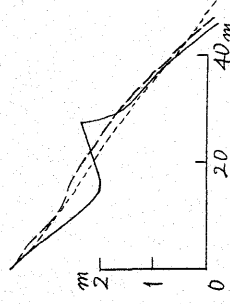
\bar{y}

N-360-5



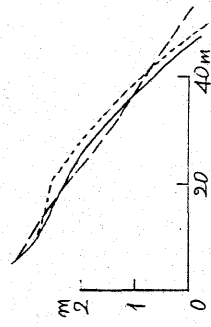
— 21 / 1 / 1981
 --- 25 / 1
 - - - 1 / 2

\bar{y}



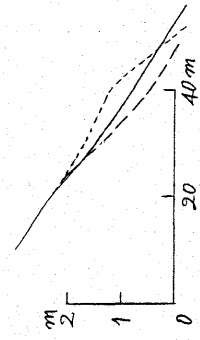
— 1 / 2
 --- 8 / 2
 - - - 15 / 2

\bar{y}



— 15 / 2
 --- 22 / 2
 - - - 28 / 2

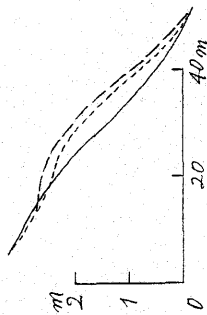
\bar{y}



— 28 / 2
 --- 8 / 3
 - - - 15 / 3

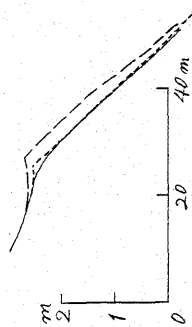
\bar{y}

N-360-6



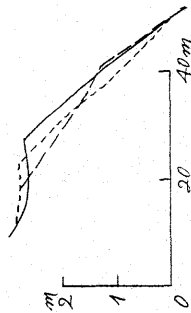
— 15/3/1981
- - - 22/3
- · - 29/3

\bar{V}



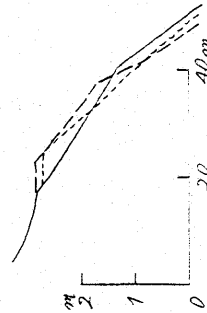
— 29/3
- - - 5/4
- · - 11/4

\bar{V}



— 11/4
- - - 19/4
- · - 26/4

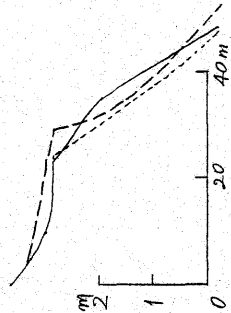
\bar{V}



— 26/4
- - - 3/5
- · - 11/5

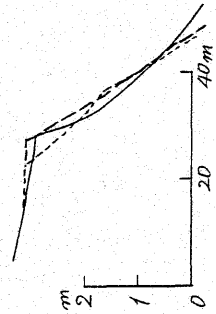
\bar{V}

N-360-7



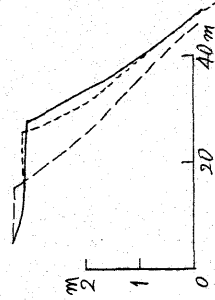
— 11/5/1981
- - - 17/5
- · - 24/5

\bar{V}



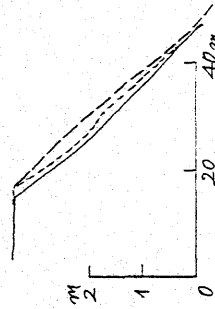
— 24/5
- - - 1/6
- · - 7/6

\bar{V}



— 7/6
- - - 15/6
- · - 21/6

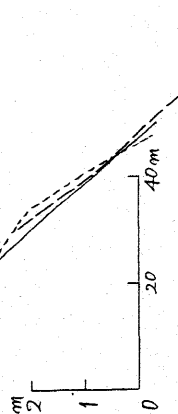
\bar{V}



— 21/6
- - - 28/6
- · - 6/7

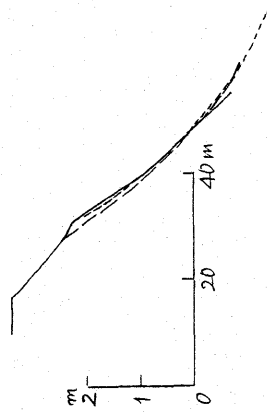
\bar{V}

N-360-8



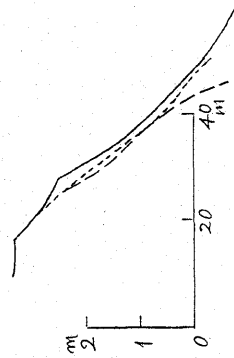
— 6 / 7 / 1981
 --- 9 / 7
 - - - 13 / 7

\bar{V}



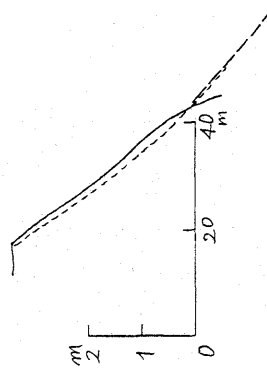
— 13 / 7
 --- 16 / 7
 - - - 20 / 7

\bar{V}



— 20 / 7
 --- 23 / 7
 - - - 27 / 7

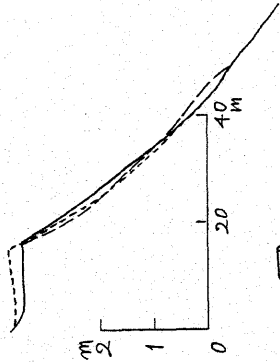
\bar{V}



— 27 / 7
 --- 30 / 7
 - - - 3 / 8

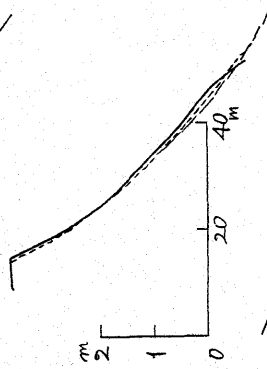
\bar{V}

N-360-9



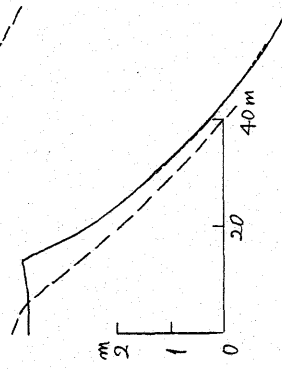
— 3 / 8 / 1981
 --- 6 / 8
 - - - 11 / 8

\bar{V}



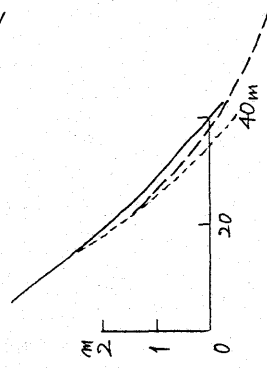
— 11 / 8
 --- 14 / 8
 - - - 17 / 8

\bar{V}



— 17 / 8
 --- 19 / 8
 - - - 23 / 8

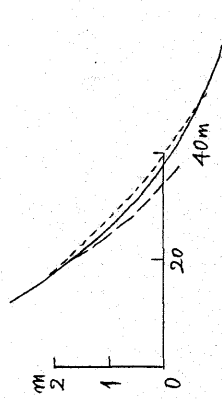
\bar{V}



— 23 / 8
 --- 26 / 8
 - - - 31 / 8

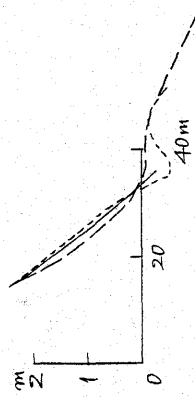
\bar{V}

N - 360 - 10



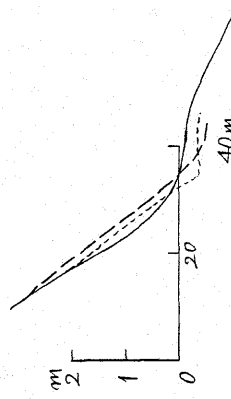
— 31 / 8 / 1981
 --- 3 / 9
 - - - 7 / 9

∇



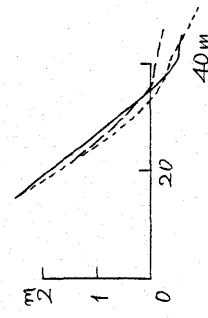
— 7 / 9
 --- 10 / 9
 - - - 15 / 9

∇



— 15 / 9
 --- 19 / 9
 - - - 24 / 9

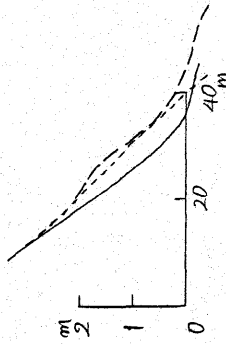
∇



— 24 / 9
 --- 28 / 9
 - - - 1 / 10

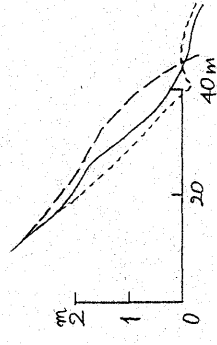
∇

N - 360 - 11



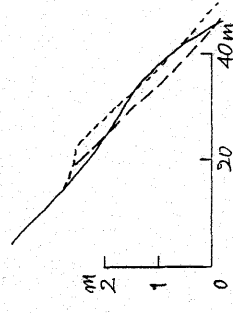
— 1 / 10 / 1981
 --- 6 / 10
 - - - 12 / 10

∇



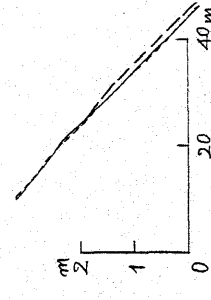
— 12 / 10
 --- 17 / 10
 - - - 24 / 10

∇



— 24 / 10
 --- 28 / 10
 - - - 2 / 11

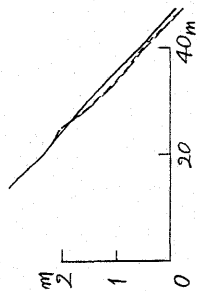
∇



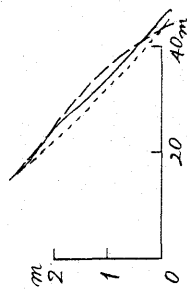
— 2 / 11
 --- 8 / 11
 - - - 15 / 11

∇

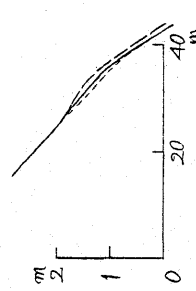
N-360-12



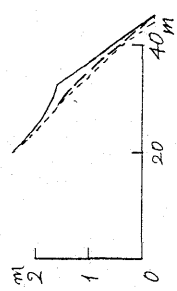
\bar{V}



\bar{V}

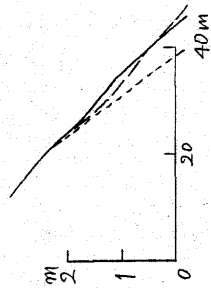


\bar{V}

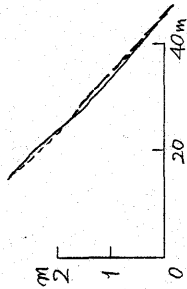


\bar{V}

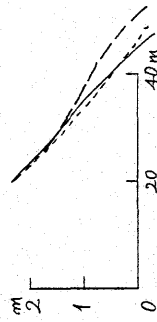
N-360-13



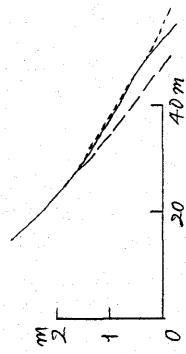
\bar{V}



\bar{V}

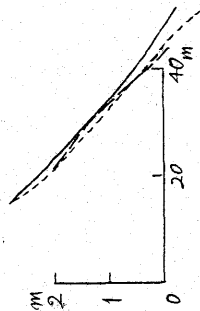


\bar{V}



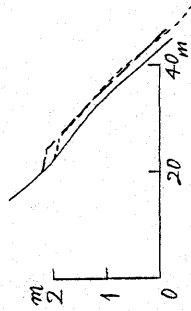
\bar{V}

N - 360 - 14



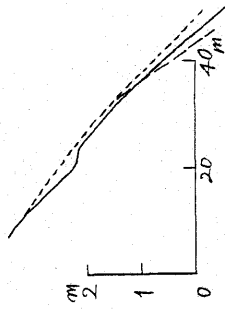
— 21 / 2 / 1982
 - - - 28 / 2
 - · - · 6 / 3

∇



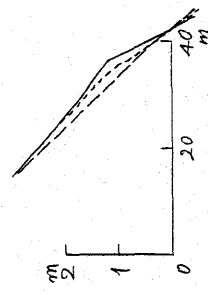
— 6 / 3
 - - - 13 / 3
 - · - · 18 / 3

∇



— 18 / 3
 - - - 24 / 3
 - · - · 5 / 4

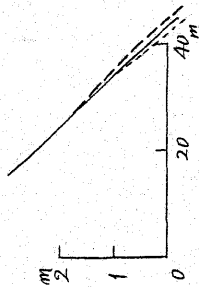
∇



— 5 / 4
 - - - 11 / 4
 - · - · 18 / 4

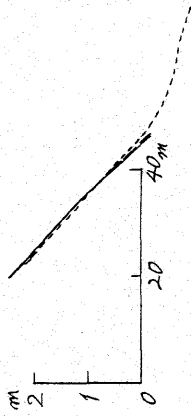
∇

N - 360 - 15



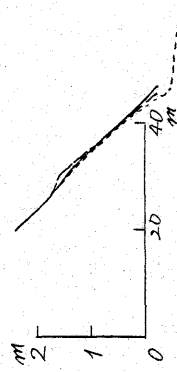
— 18 / 4 / 1982
 - - - 25 / 4
 - · - · 1 / 5

∇



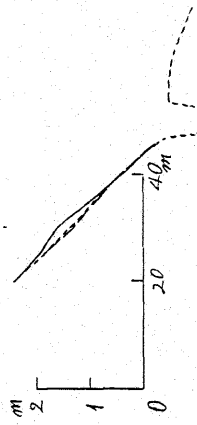
— 1 / 5
 - - - 10 / 5
 - · - · 17 / 5

∇



— 17 / 5
 - - - 24 / 5
 - · - · 31 / 5

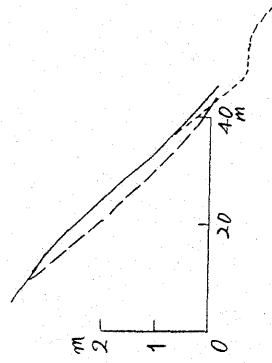
∇



— 31 / 5
 - - - 6 / 6
 - · - · 15 / 6

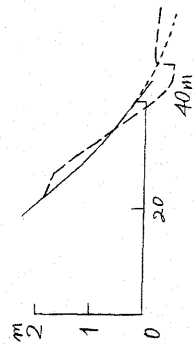
∇

N-360-16



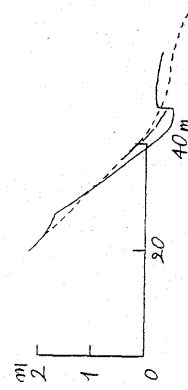
— 15/6/1982
 - - - 21/6
 - · - 29/6

▽



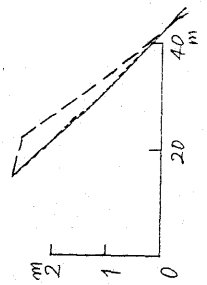
— 29/6
 - - - 5/7
 - · - 12/7

▽



— 12/7
 - - - 20/7
 - · - 27/7

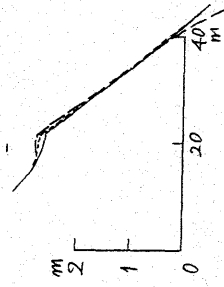
▽



— 27/7
 - - - 2/8
 - · - 9/8

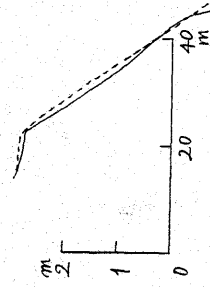
▽

N-360-17



— 9/8/1982
 - - - 15/8
 - · - 23/8

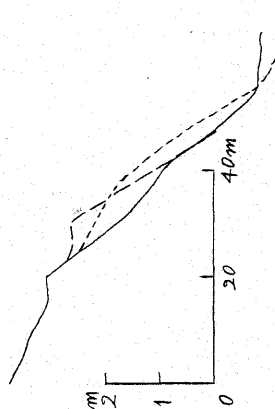
▽



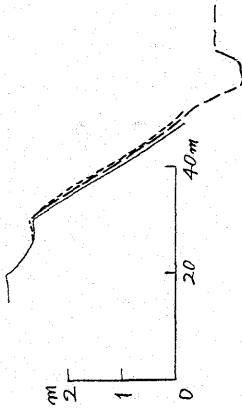
— 23/8
 - - - 30/8

▽

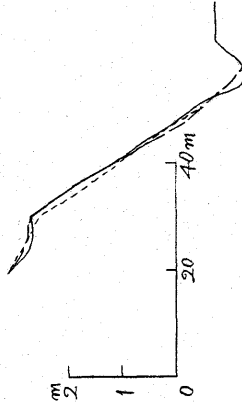
N-380-1



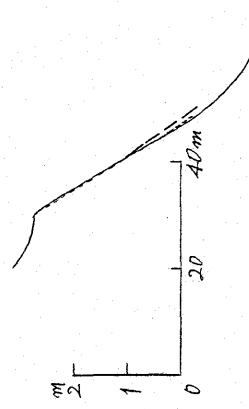
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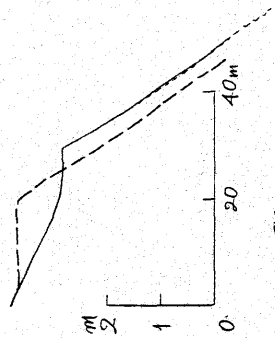


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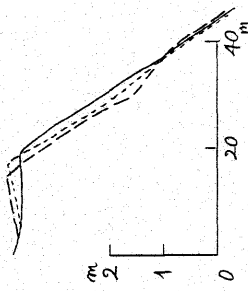


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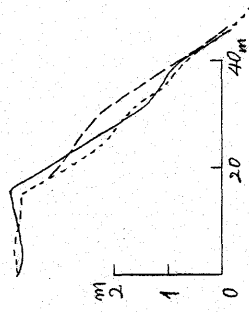
N-380-2



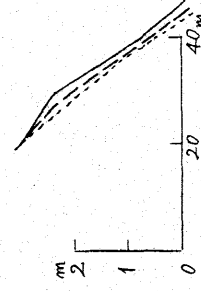
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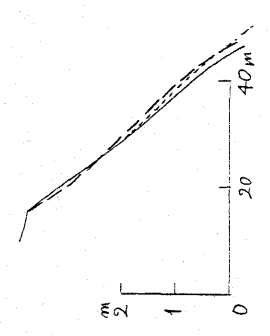
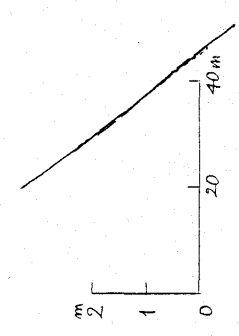
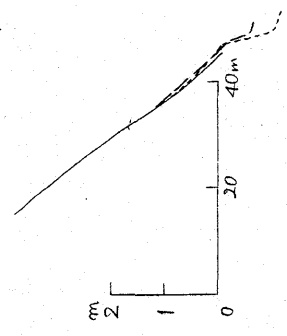
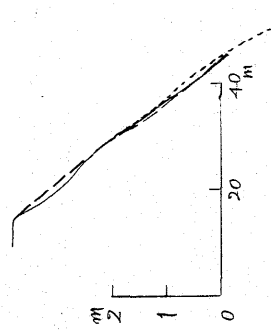


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N-380-3



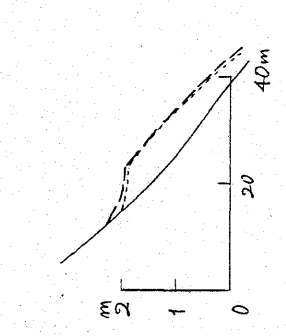
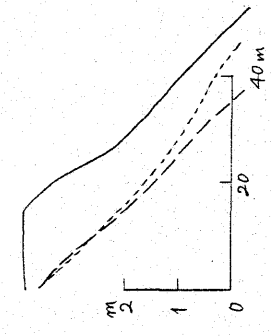
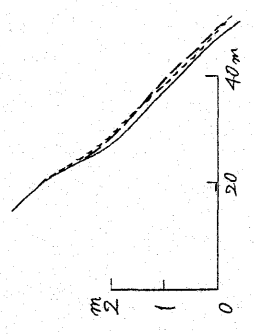
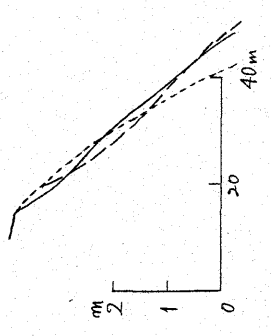
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N-380-4



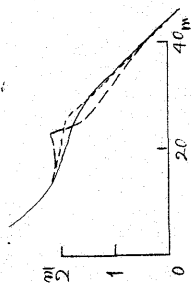
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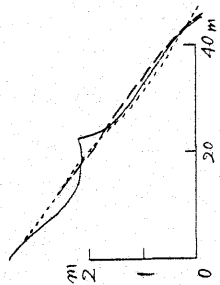
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N-380-5



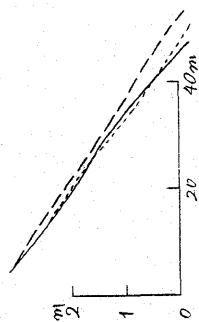
— 21 / 1 / 1981
 --- 25 / 1
 - - - 1 / 2

\bar{V}



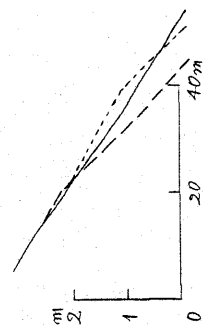
— 1 / 2
 --- 8 / 2
 - - - 15 / 2

\bar{V}



— 15 / 2
 --- 22 / 2
 - - - 28 / 2

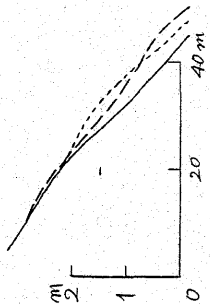
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— 28 / 2
 --- 8 / 3
 - - - 15 / 3

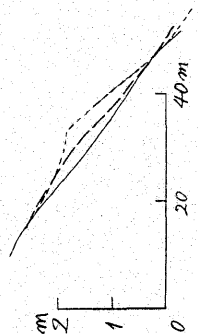
\bar{V}

N-380-6



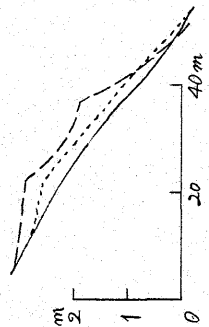
— 15 / 3 / 1981
 --- 22 / 3
 - - - 29 / 3

\bar{V}



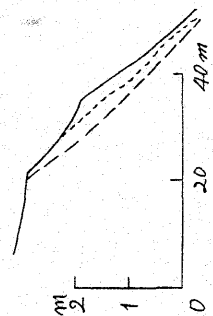
— 29 / 3
 --- 5 / 4
 - - - 11 / 4

\bar{V}



— 11 / 4
 --- 19 / 4
 - - - 26 / 4

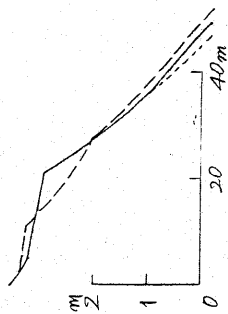
\bar{V}



— 26 / 4
 --- 3 / 5
 - - - 11 / 5

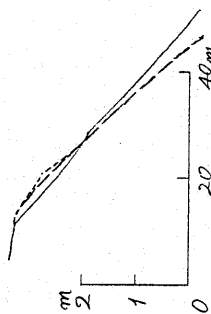
\bar{V}

N-380-7



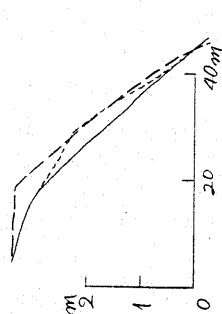
— 11 / 5 / 1981
- - - 17 / 5 /
- · - 24 / 5

\bar{y}



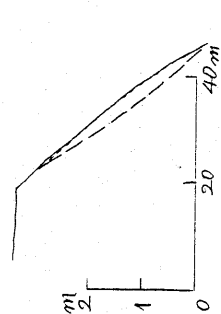
— 24 / 5
- - - 1 / 6
- · - 7 / 6

\bar{y}



— 7 / 6
- - - 15 / 6
- · - 21 / 6

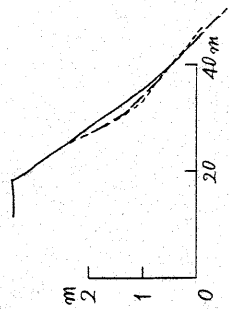
\bar{y}



— 21 / 6
- - - 28 / 6
- · - 6 / 7

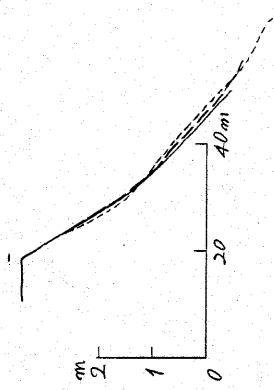
\bar{y}

N-380-8



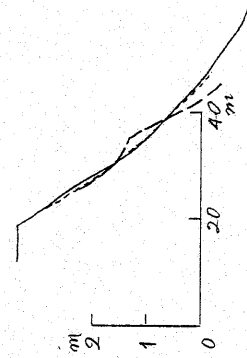
— 6 / 7 / 1981
- - - 9 / 7
- · - 13 / 7

\bar{y}



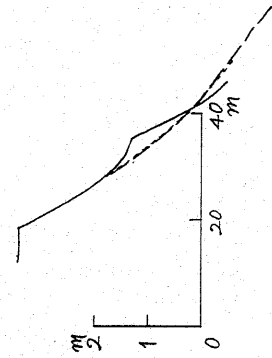
— 13 / 7
- - - 16 / 7
- · - 20 / 7

\bar{y}



— 20 / 7
- - - 23 / 7
- · - 27 / 7

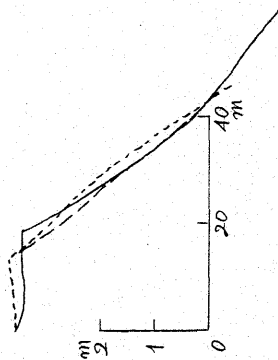
\bar{y}



— 27 / 7
- - - 30 / 7
- · - 3 / 8

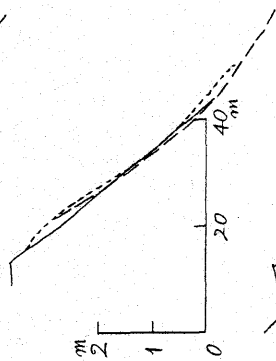
\bar{y}

N-380-9



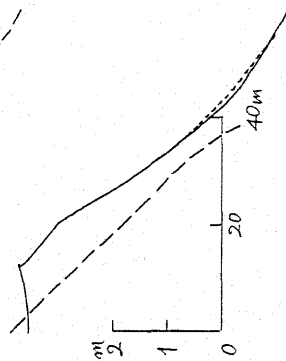
— 3 / 8 / 1981
- - - 6 / 8
- · - 11 / 8

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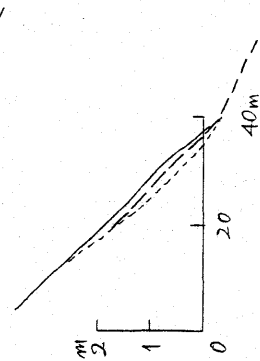
— 11 / 8
- - - 14 / 8
- · - 17 / 8

\bar{V}



— 17 / 8
- - - 19 / 8
- · - 23 / 8

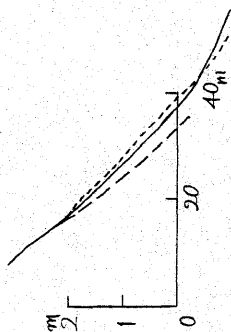
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— 23 / 8
- - - 26 / 8
- · - 31 / 8

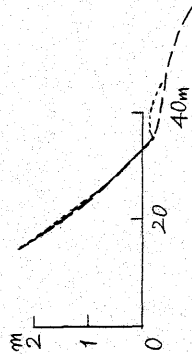
\bar{V}

N-380-10



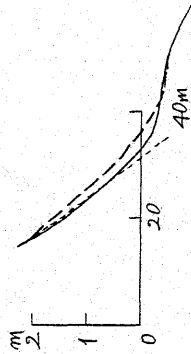
— 31 / 8 / 1981
- - - 3 / 9
- · - 7 / 9

\bar{V}



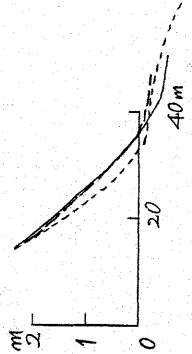
— 7 / 9
- - - 10 / 9
- · - 15 / 9

\bar{V}



— 15 / 9
- - - 19 / 9
- · - 24 / 9

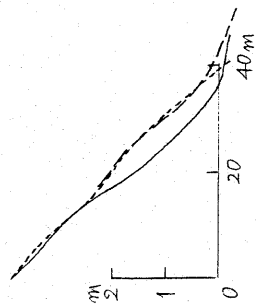
\bar{V}



— 24 / 9
- - - 28 / 9
- · - 1 / 10

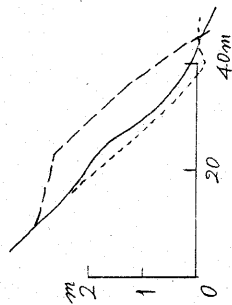
\bar{V}

N - 380 - 11



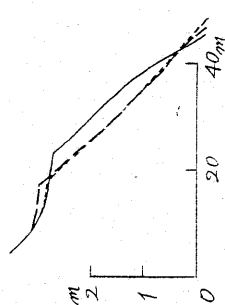
— 1 / 10 / 1981
 --- 6 / 10
 - - - 12 / 10

\bar{V}



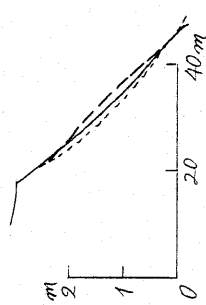
— 12 / 10
 --- 17 / 10
 - - - 24 / 10

\bar{V}



— 24 / 10
 --- 28 / 10
 - - - 2 / 11

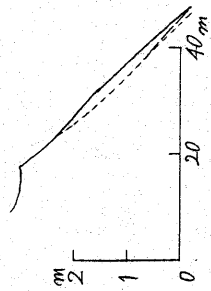
\bar{V}



— 2 / 11
 --- 8 / 11
 - - - 15 / 11

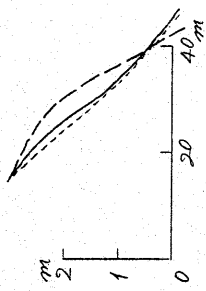
\bar{V}

N - 380 - 12



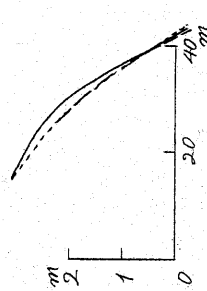
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

\bar{V}



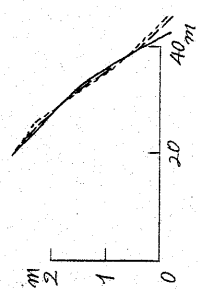
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

\bar{V}



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

\bar{V}

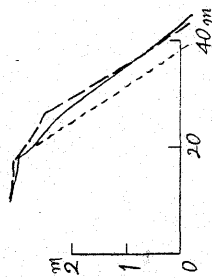


— 15 / 12
 --- 22 / 12
 - - - 29 / 12

\bar{V}

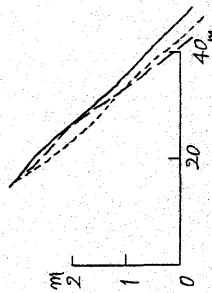
N-380-13

N-380-14



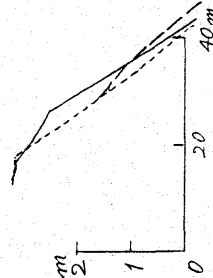
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

∇



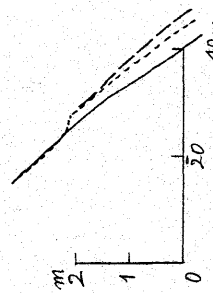
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

∇



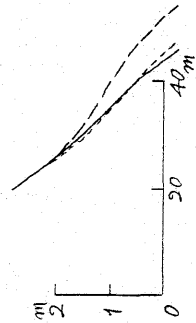
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

∇



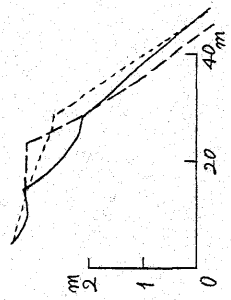
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

∇



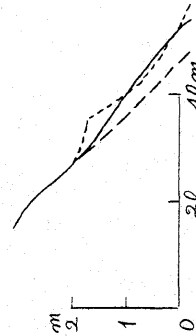
— 24 / 1
 --- 21 / 1
 - - - 7 / 2

∇



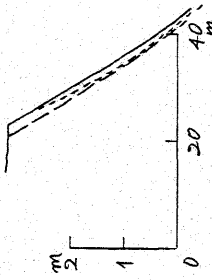
— 18 / 3
 --- 24 / 3
 - - - 5 / 4

∇



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

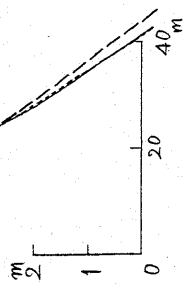
∇



— 5 / 4
 --- 11 / 4
 - - - 18 / 4

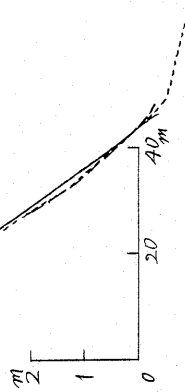
∇

N-380-15



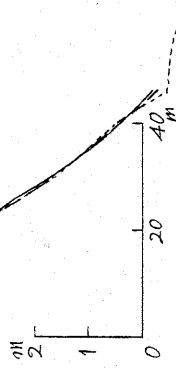
— 18 / 4 / 1982
 --- 25 / 4
 - - - 1 / 5

\bar{y}



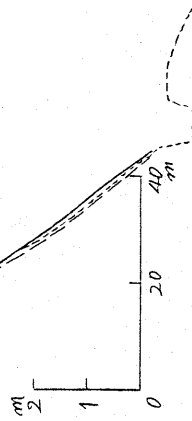
— 1 / 5
 --- 10 / 5
 - - - 17 / 5

\bar{y}



— 17 / 5
 --- 24 / 5
 - - - 31 / 5

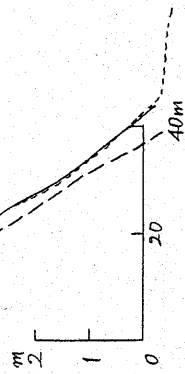
\bar{y}



— 31 / 5
 --- 6 / 6
 - - - 15 / 6

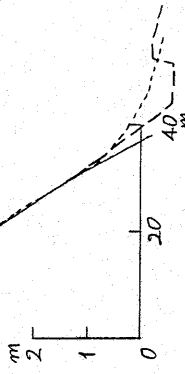
\bar{y}

N-380-16



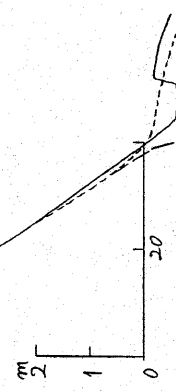
— 15 / 6 / 1982
 --- 21 / 6
 - - - 24 / 6

\bar{y}



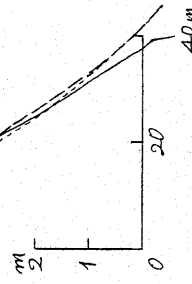
— 29 / 6
 --- 5 / 7
 - - - 12 / 7

\bar{y}



— 12 / 7
 --- 20 / 7
 - - - 27 / 7

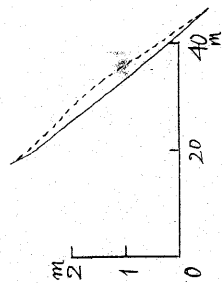
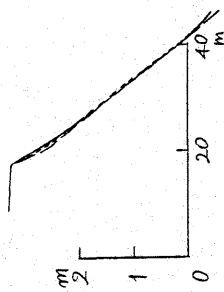
\bar{y}



— 27 / 7
 --- 2 / 8
 - - - 9 / 8

\bar{y}

N-380-17



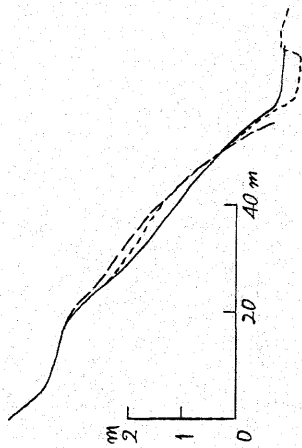
— 9 / 8 / 1982
 - - - 15 / 8
 - - - 23 / 8

\bar{V}

— 23 / 8
 - - - 30 / 8

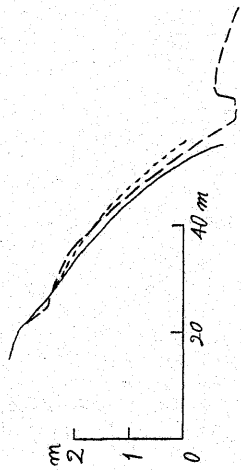
\bar{V}

N-400-1



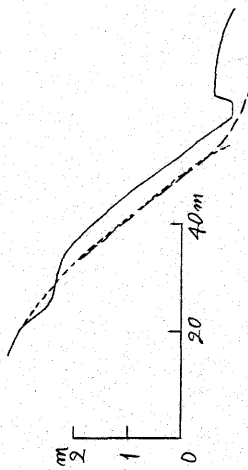
— 28 / 8 / 1980
 - - - 30 / 8
 - - - 2 / 9

\bar{V}



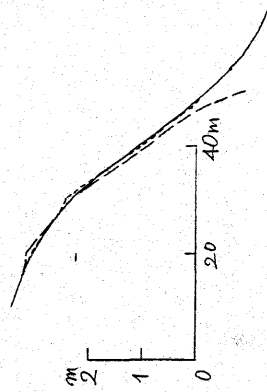
— 2 / 9
 - - - 6 / 9
 - - - 9 / 9

\bar{V}



— 9 / 9
 - - - 12 / 9
 - - - 15 / 9

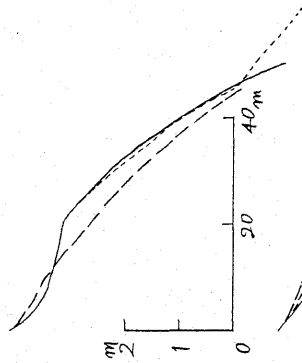
\bar{V}



— 15 / 9
 - - - 19 / 9
 - - - 22 / 9

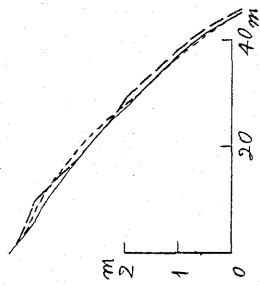
\bar{V}

N-400-2



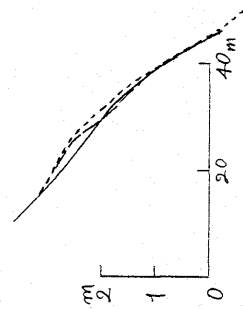
— 22 / 9 / 1980
 --- 25 / 9
 - - - 29 / 9

\bar{V}



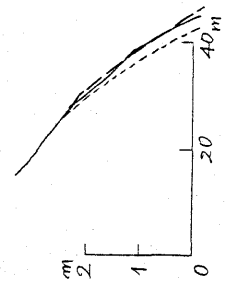
— 29 / 9
 --- 3 / 10
 - - - 7 / 10

\bar{V}



— 7 / 10
 --- 10 / 10
 - - - 14 / 10

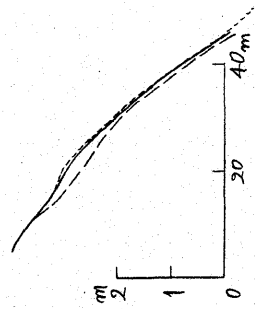
\bar{V}



— 14 / 10
 --- 15 / 10
 - - - 18 / 10

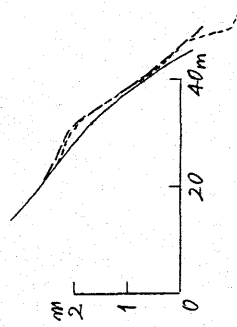
\bar{V}

N-400-3



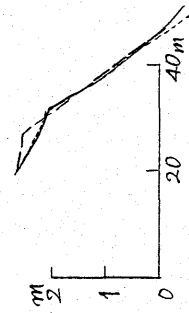
— 18 / 10 / 1980
 --- 22 / 10
 - - - 27 / 10

\bar{V}



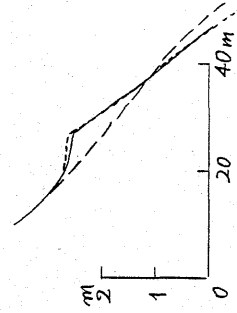
— 27 / 10
 --- 7 / 11
 - - - 6 / 11

\bar{V}



— 6 / 11
 --- 11 / 11
 - - - 16 / 11

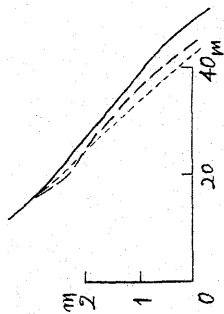
\bar{V}



— 16 / 11
 --- 21 / 11
 - - - 26 / 11

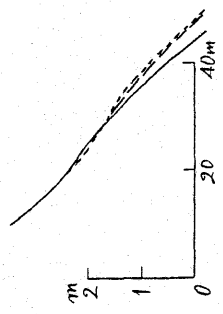
\bar{V}

N-400-4



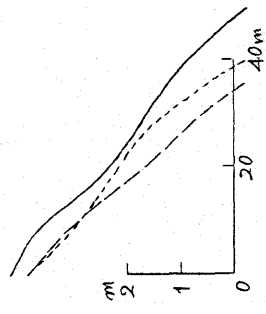
— 26 / 11 / 1980
 --- 1 / 12
 - - - 8 / 12

\bar{y}



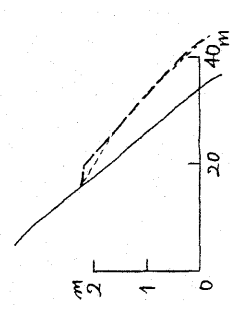
— 8 / 12
 --- 15 / 12
 - - - 22 / 12

\bar{y}



— 22 / 12
 --- 29 / 12
 - - - 6 / 1 / 1981

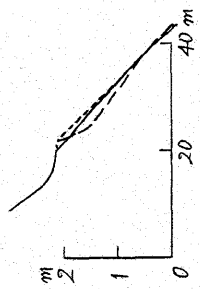
\bar{y}



— 6 / 1
 --- 12 / 1
 - - - 21 / 1

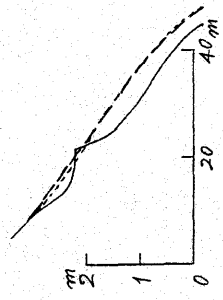
\bar{y}

N-400-5



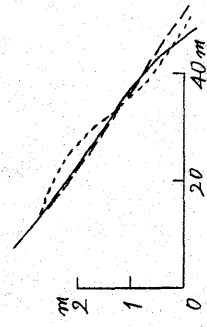
— 21 / 1 / 1981
 --- 25 / 1
 - - - 1 / 2

\bar{y}



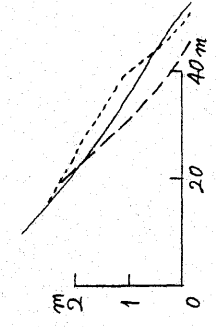
— 1 / 2
 --- 8 / 2
 - - - 15 / 2

\bar{y}



— 15 / 2
 --- 22 / 2
 - - - 28 / 2

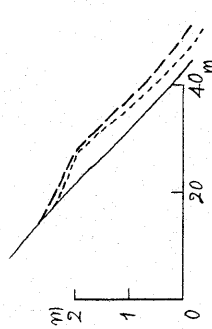
\bar{y}



— 28 / 2
 --- 8 / 3
 - - - 15 / 3

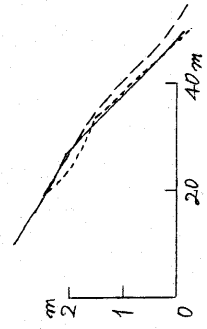
\bar{y}

N-400-6



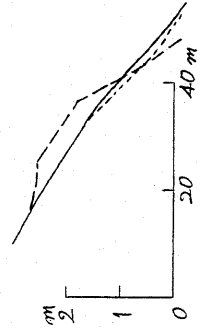
— 15 / 3 / 1981
- - - 22 / 3
- · - 29 / 3

\bar{y}



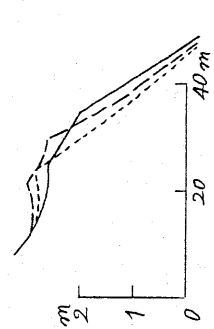
— 29 / 3
- - - 5 / 4
- · - 11 / 4

\bar{y}



— 11 / 4
- - - 19 / 4
- · - 26 / 4

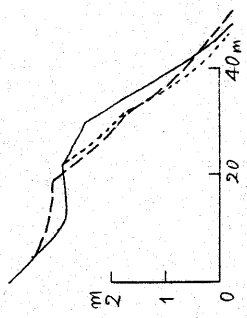
\bar{y}



— 26 / 4
- - - 3 / 5
- · - 11 / 5

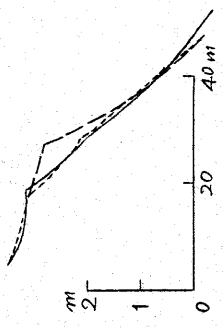
\bar{y}

N-400-7



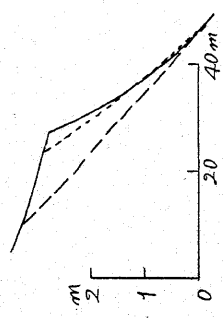
— 11 / 5 / 1981
- - - 17 / 5
- · - 24 / 5

\bar{y}



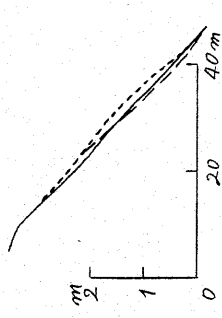
— 24 / 5
- - - 1 / 6
- · - 7 / 6

\bar{y}



— 7 / 6
- - - 15 / 6
- · - 21 / 6

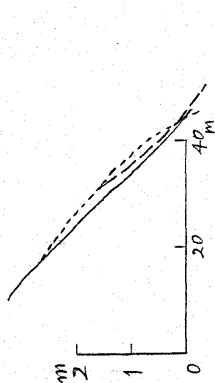
\bar{y}



— 21 / 6
- - - 28 / 6
- · - 6 / 7

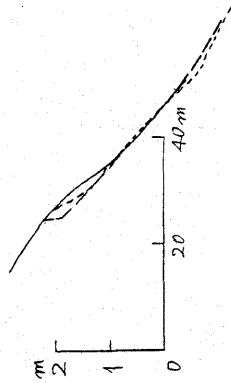
\bar{y}

N-400-8



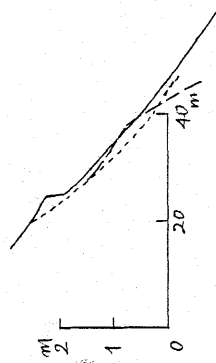
— 6/7/1981
- - - 9/7
- · - 13/7

∇



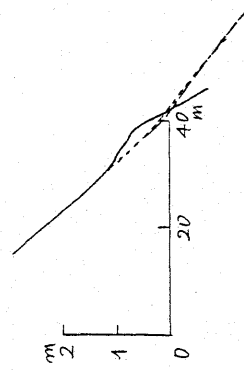
— 13/7
- - - 16/7
- · - 20/7

∇



— 20/7
- - - 23/7
- · - 27/7

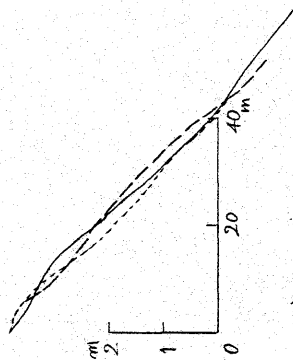
∇



— 27/7
- - - 30/7
- · - 3/8

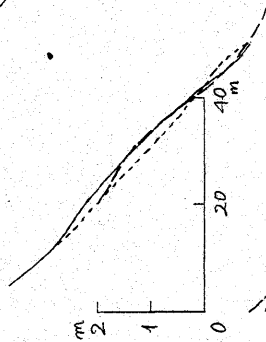
∇

N-400-9



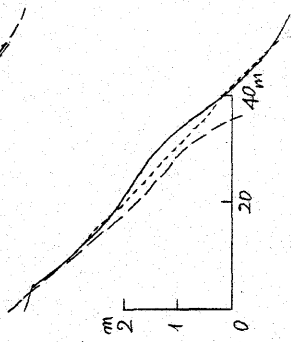
— 3/8/1981
- - - 6/8
- · - 11/8

∇



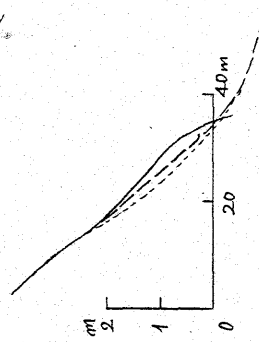
— 11/8
- - - 14/8
- · - 17/8

∇



— 17/8
- - - 19/8
- · - 23/8

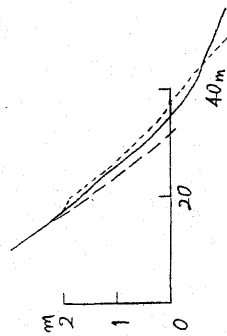
∇



— 23/8
- - - 26/8
- · - 31/8

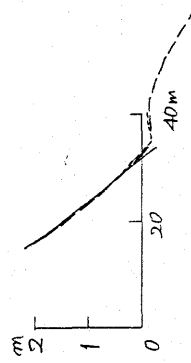
∇

N - 400 - 10



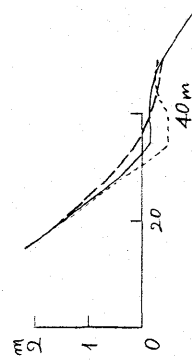
— 31 / 8 / 1981
- - - 3 / 9
- · - 7 / 9

\bar{V}



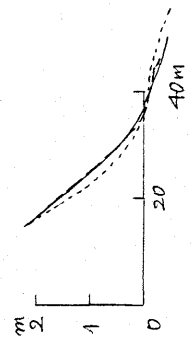
— 7 / 9
- - - 10 / 9
- · - 15 / 9

\bar{V}



— 15 / 9
- - - 19 / 9
- · - 24 / 9

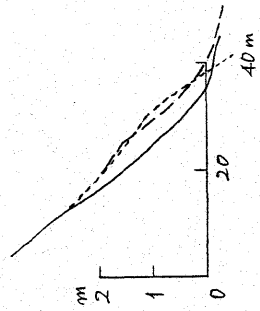
\bar{V}



— 24 / 9
- - - 28 / 9
- · - 1 / 10

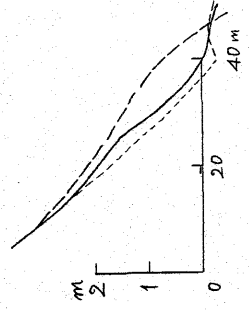
\bar{V}

N - 400 - 11



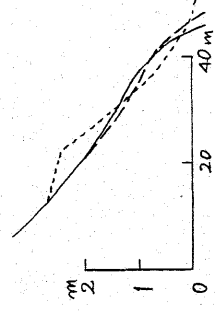
— 1 / 10 / 1981
- - - 6 / 10
- · - 12 / 10

\bar{V}



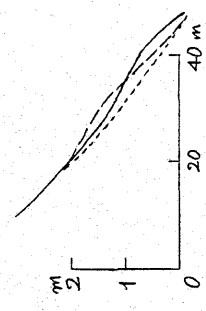
— 12 / 10
- - - 17 / 10
- · - 24 / 10

\bar{V}



— 24 / 10
- - - 28 / 10
- · - 2 / 11

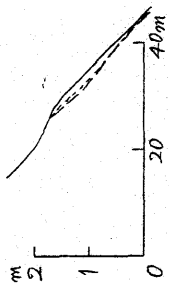
\bar{V}



— 2 / 11
- - - 8 / 11
- · - 15 / 11

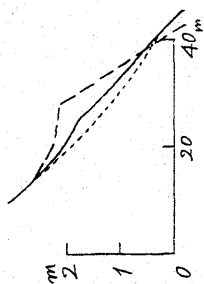
\bar{V}

N - 400 - 12



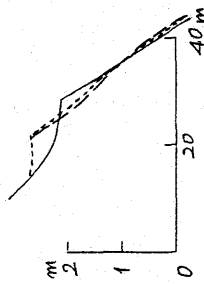
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

∇



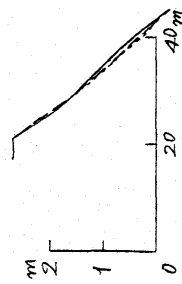
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

∇



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

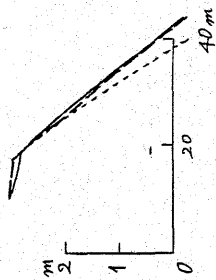
∇



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

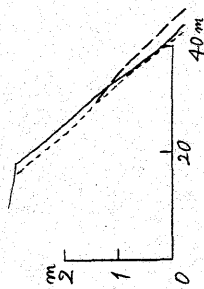
∇

N - 400 - 13



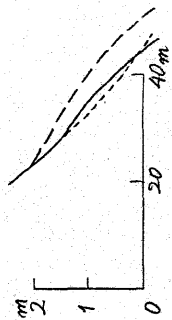
— 29 / 12 / 1981
 --- 5 / 1 1982
 - - - 10 / 1

∇



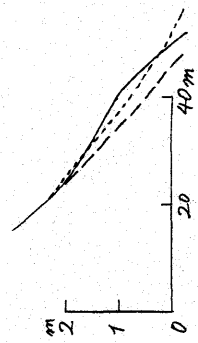
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

∇



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

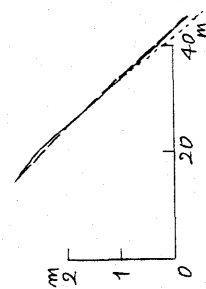
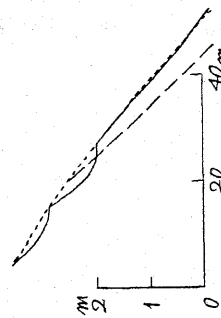
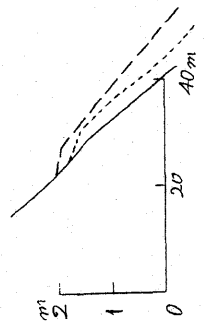
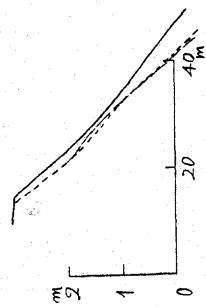
∇



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

∇

N-400-14



— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

\bar{V}

— 6 / 3
 --- 13 / 3
 - - - 18 / 3

\bar{V}

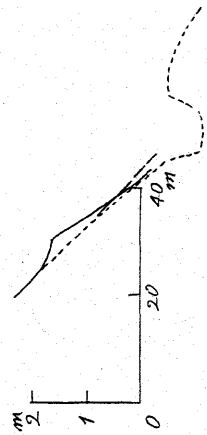
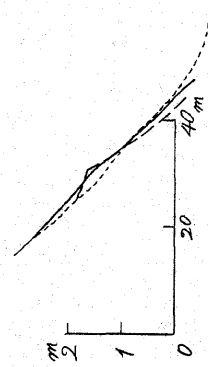
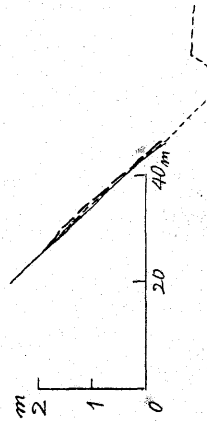
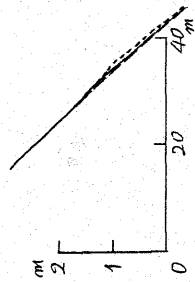
— 18 / 3
 --- 24 / 3
 - - - 5 / 4

\bar{V}

— 5 / 4
 --- 11 / 4
 - - - 18 / 4

\bar{V}

N-400-15



— 18 / 4 / 1982
 --- 25 / 4
 - - - 1 / 5

\bar{V}

— 1 / 5
 --- 10 / 5
 - - - 17 / 5

\bar{V}

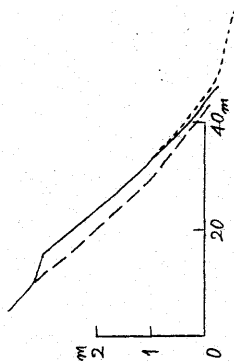
— 17 / 5
 --- 24 / 5
 - - - 31 / 5

\bar{V}

— 31 / 5
 --- 6 / 6
 - - - 15 / 6

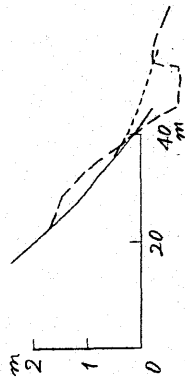
\bar{V}

N-400-16



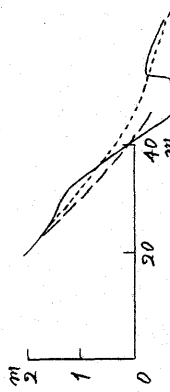
— 15/6/1982
 - - - 21/6
 - · - 29/6

∇



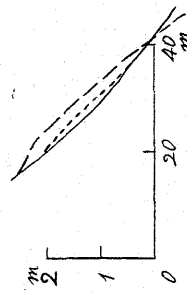
— 29/6
 - - - 5/7
 - · - 12/7

∇



— 12/7
 - - - 20/7
 - · - 27/7

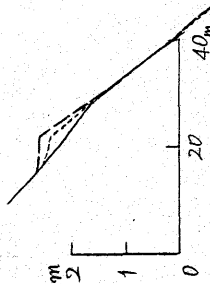
∇



— 27/7
 - - - 2/8
 - · - 9/8

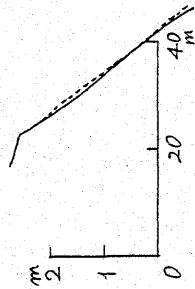
∇

N-400-17



— 9/8/1982
 - - - 15/8
 - · - 23/8

∇

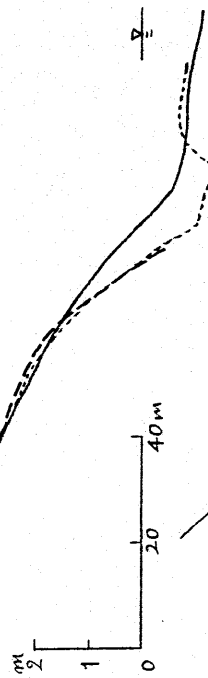


— 23/8
 - - - 30/8
 - · - 30/8

∇

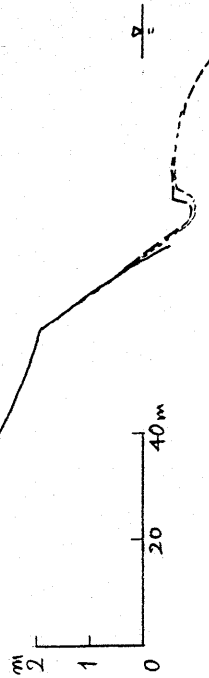
Central Site

C-000-1



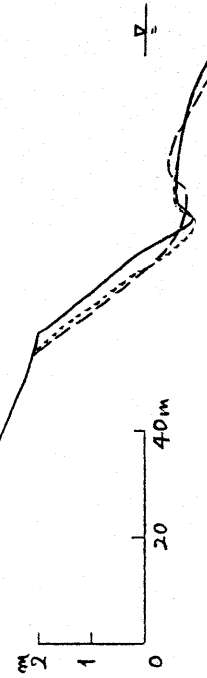
— 28/8/1980
- - - 30/8
- - - 2/9

\bar{y}



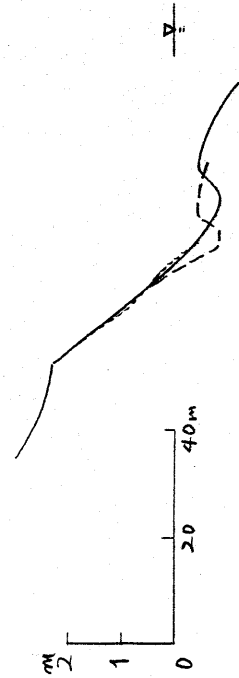
— 2/9
- - - 6/9
- - - 9/9

\bar{y}



— 9/9
- - - 12/9
- - - 15/9

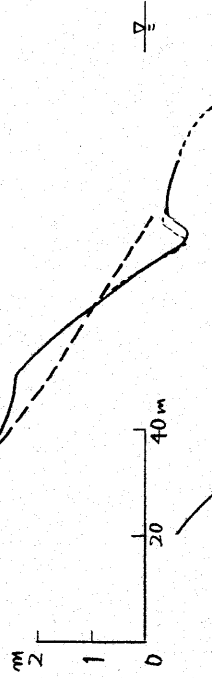
\bar{y}



— 15/9
- - - 19/9
- - - 22/9

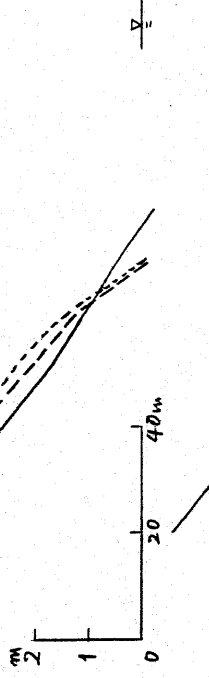
\bar{y}

C-000-2



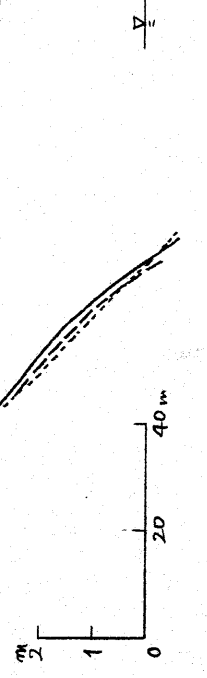
— 22/9/1980
- - - 25/9
- - - 29/9

\bar{y}



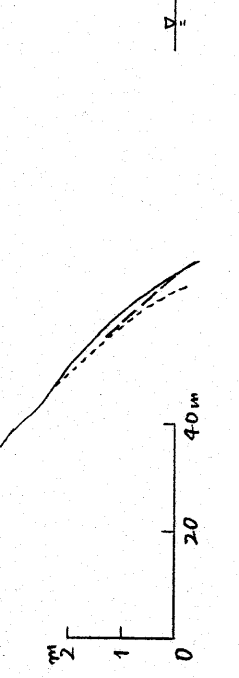
— 29/9
- - - 3/10
- - - 7/10

\bar{y}



— 7/10
- - - 10/10
- - - 14/10

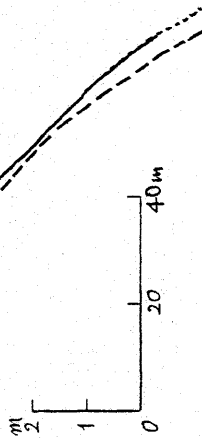
\bar{y}



— 14/10
- - - 15/10
- - - 18/10

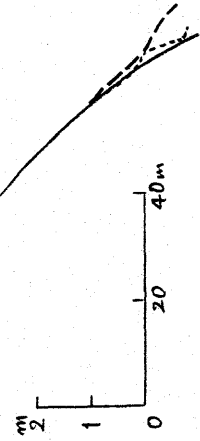
\bar{y}

C-000-3



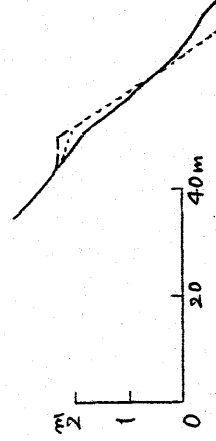
— 18/10/1980
 ---- 22/10
 -.- 27/10

\bar{V}_i



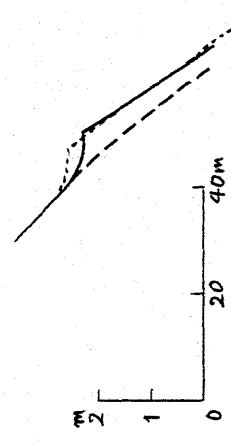
— 27/10
 ---- 1/11
 -.- 6/11

\bar{V}_i



— 6/11
 ---- 11/11
 -.- 16/11

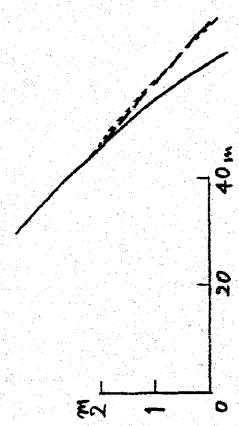
\bar{V}_i



— 16/11
 ---- 21/11
 -.- 26/11

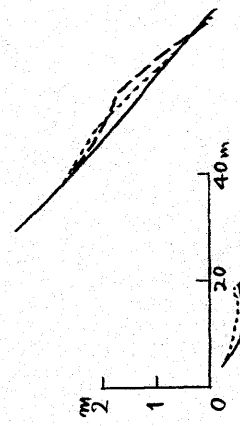
\bar{V}_i

C-000-4



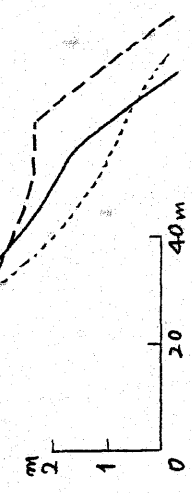
— 26/11/1980
 ---- 1/12
 -.- 8/12

\bar{V}_i



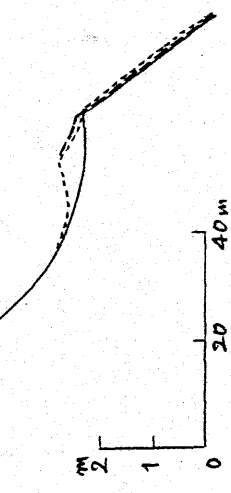
— 8/12
 ---- 15/12
 -.- 22/12

\bar{V}_i



— 22/12
 ---- 29/12
 -.- 6/1/1981

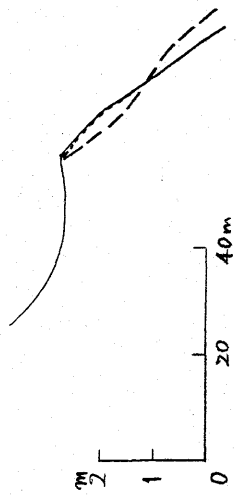
\bar{V}_i



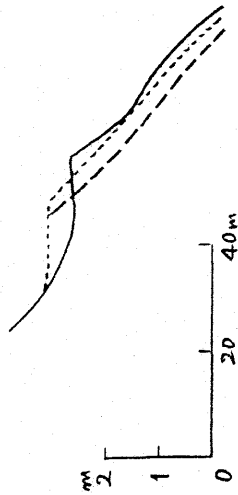
— 6/1
 ---- 12/1
 -.- 21/1

\bar{V}_i

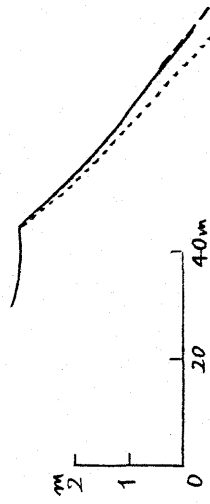
C-000-5



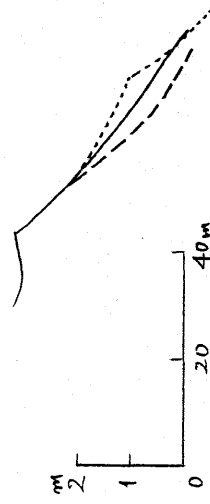
\bar{y}



\bar{y}

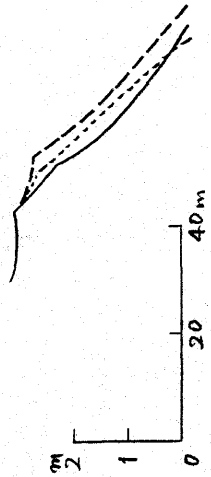


\bar{y}

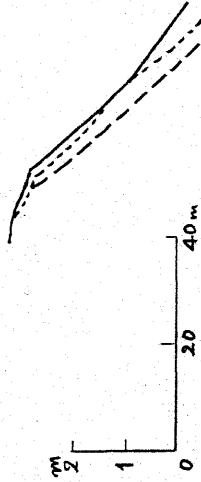


\bar{y}

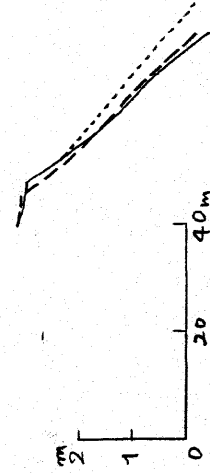
C-000-6



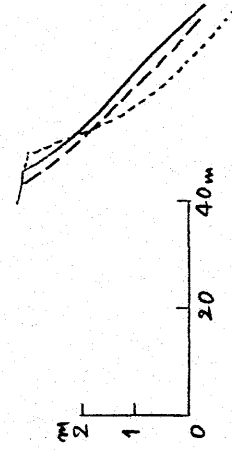
\bar{y}



\bar{y}

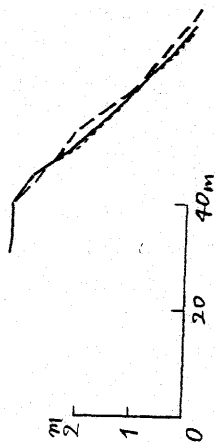


\bar{y}



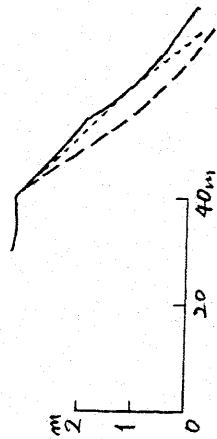
\bar{y}

C-000-7



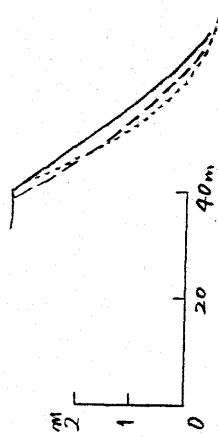
— 11/5/1981
- - - 17/5
- . - 24/5

$\frac{V}{\bar{V}}$



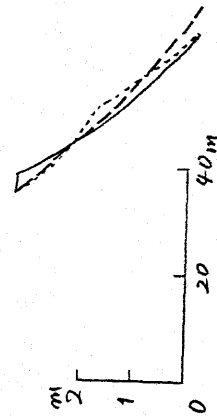
— 24/5
- . - 1/6
- - - 7/6

$\frac{V}{\bar{V}}$



— 7/6
- . - 15/6
- - - 21/6

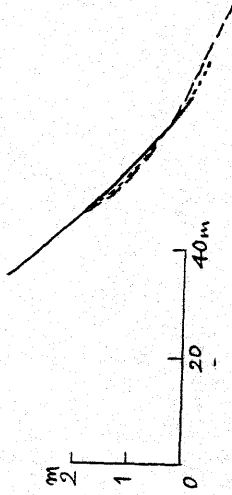
$\frac{V}{\bar{V}}$



— 21/6
- . - 28/6
- - - 6/7

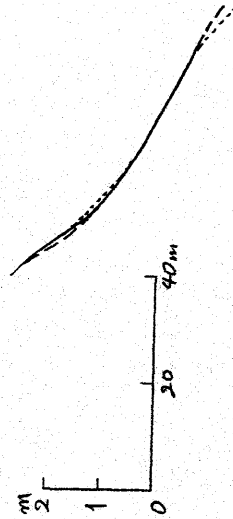
$\frac{V}{\bar{V}}$

C-000-8



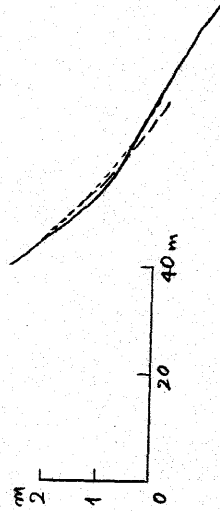
— 6/7/1981
- . - 9/7
- - - 13/7

$\frac{V}{\bar{V}}$



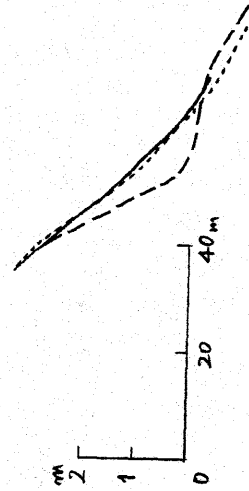
— 13/7
- . - 16/7
- - - 20/7

$\frac{V}{\bar{V}}$



— 20/7
- . - 23/7
- - - 27/7

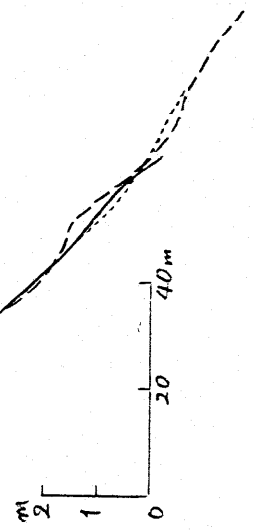
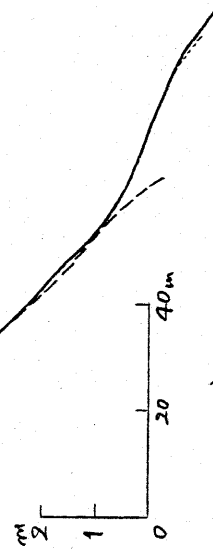
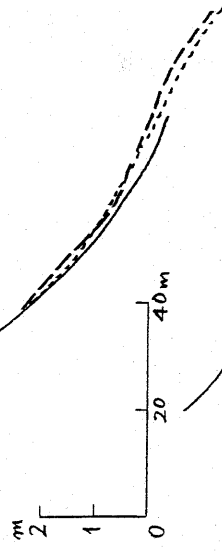
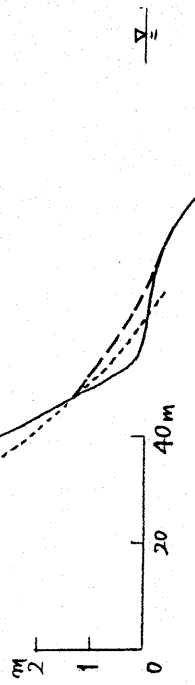
$\frac{V}{\bar{V}}$



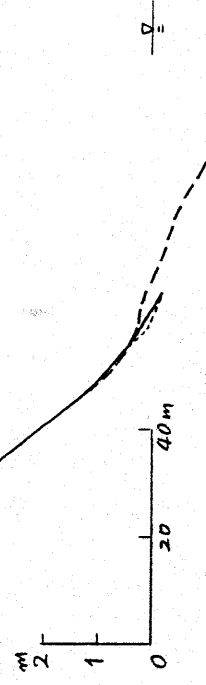
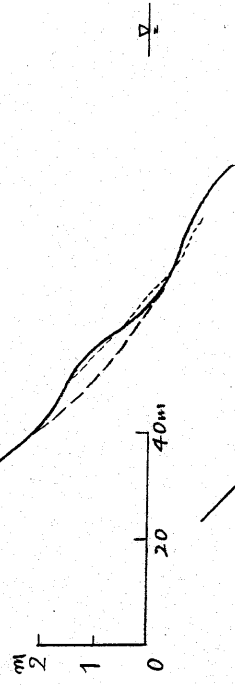
— 27/7
- . - 30/7
- - - 3/8

$\frac{V}{\bar{V}}$

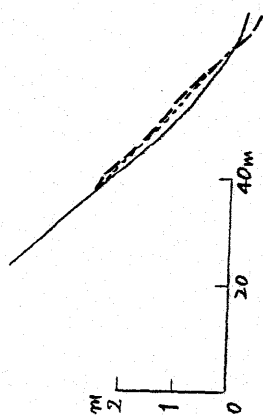
C-000-9



C-000-10

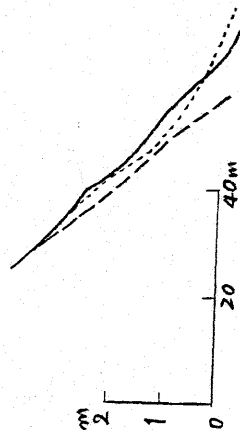


C-000-11



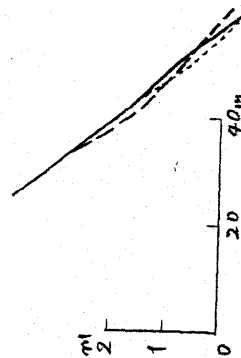
— 1/10/1981
- - - 6/10
- · - 12/10

\bar{V}



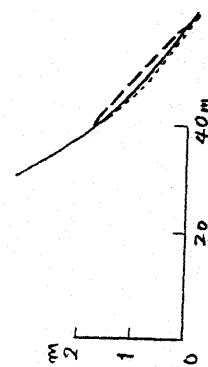
— 12/10
- - - 17/10
- · - 24/10

\bar{V}



— 24/10
- - - 28/10
- · - 2/11

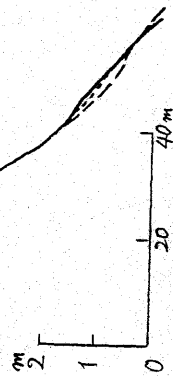
\bar{V}



— 2/11
- - - 8/11
- · - 15/11

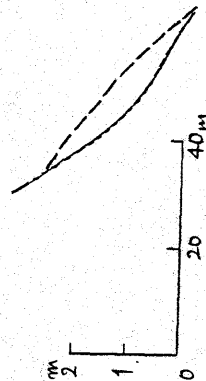
\bar{V}

C-000-12



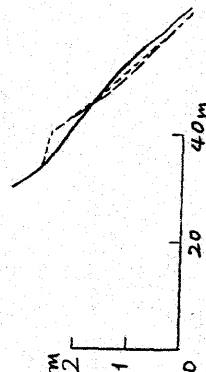
— 15/11/1981
- - - 19/11
- · - 23/11

\bar{V}



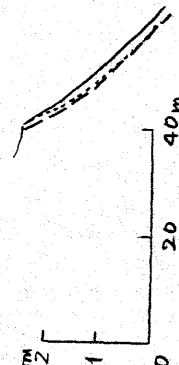
— 23/11
- - - 29/11
- · - 5/12

\bar{V}



— 5/12
- - - 12/12
- · - 15/12

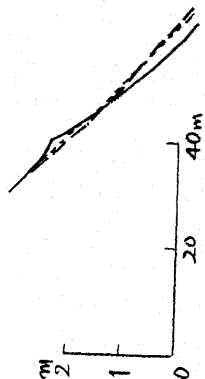
\bar{V}



— 15/12
- - - 22/12
- · - 29/12

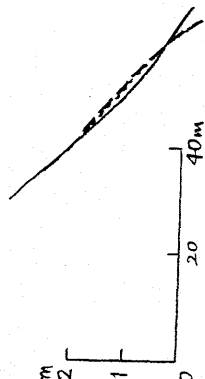
\bar{V}

C-000-13



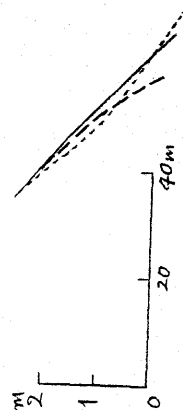
— 29/12/1981
 --- 5/1/1982
 - - - 10/1

$\frac{V}{V_0}$



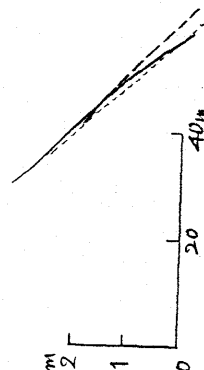
— 10/1
 --- 17/1
 - - - 24/1

$\frac{V}{V_0}$



— 24/1
 --- 31/1
 - - - 7/2

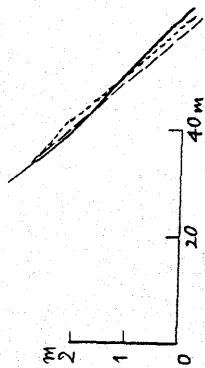
$\frac{V}{V_0}$



— 7/2
 --- 14/2
 - - - 21/2

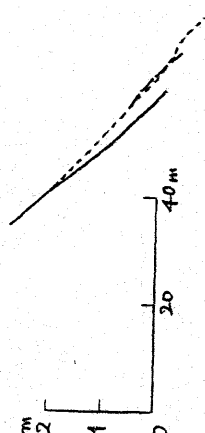
$\frac{V}{V_0}$

C-000-14



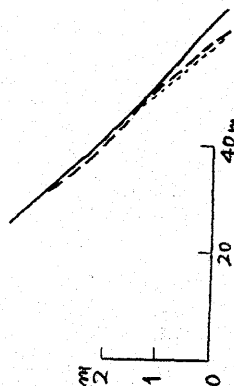
— 21/2/1982
 --- 28/2
 - - - 6/3

$\frac{V}{V_0}$



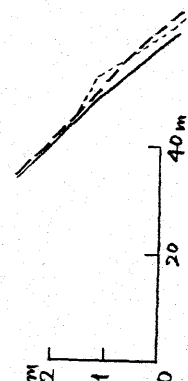
— 6/3
 --- 13/3
 - - - 18/3

$\frac{V}{V_0}$



— 18/3
 --- 24/3
 - - - 5/4

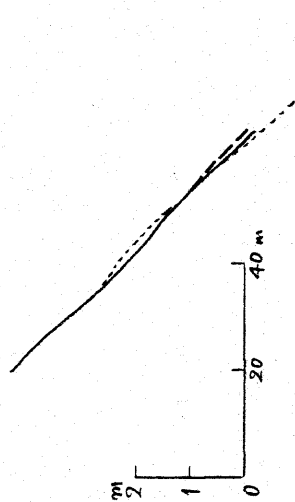
$\frac{V}{V_0}$



— 5/4
 --- 11/4
 - - - 18/4

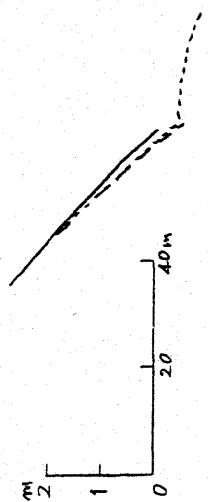
$\frac{V}{V_0}$

C-000-15



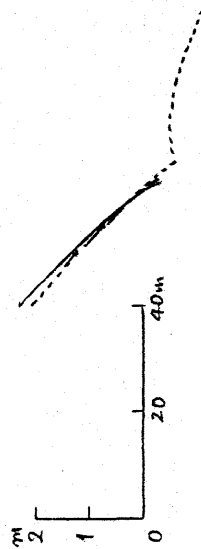
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{V}_a



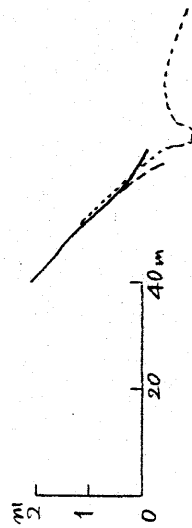
— 1/5
- - - 10/5
- · - 17/5

\bar{V}_a



— 17/5
- - - 24/5
- · - 31/5

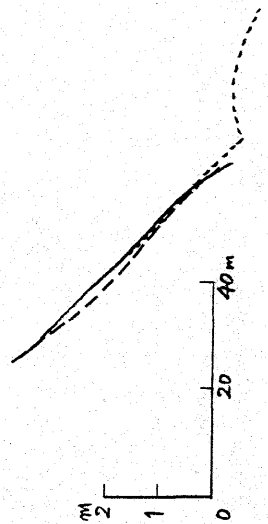
\bar{V}_a



— 31/5
- - - 6/6
- · - 15/6

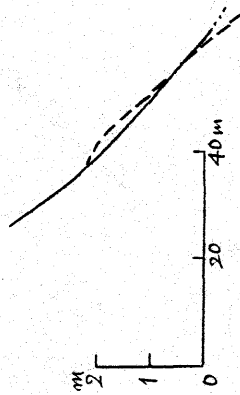
\bar{V}_a

C-000-16



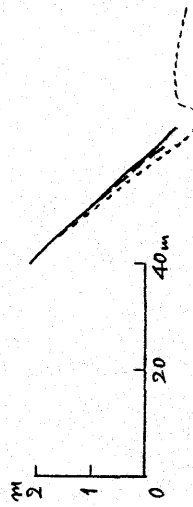
— 15/6/1982
- - - 21/6
- · - 29/6

\bar{V}_a



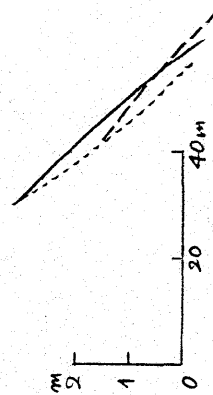
— 29/6
- - - 5/7
- · - 12/7

\bar{V}_a



— 12/7
- - - 20/7
- · - 27/7

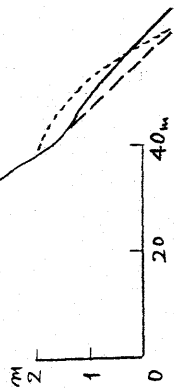
\bar{V}_a



— 27/7
- - - 2/8
- · - 9/8

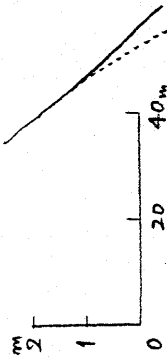
\bar{V}_a

C-000-17



— 9/8/1982
 --- 15/8
 - - - 23/8

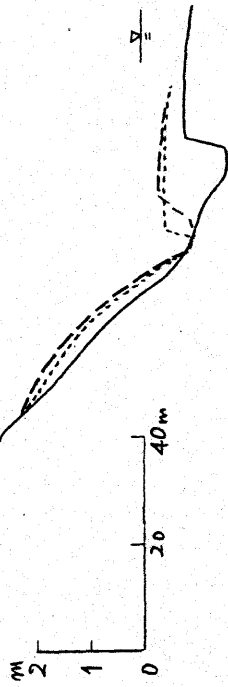
V



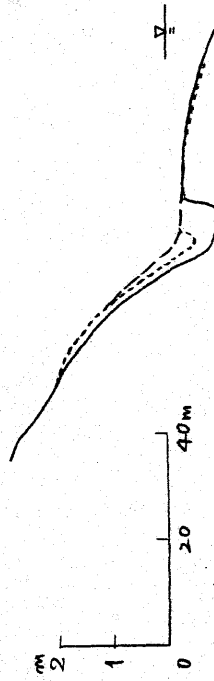
— 23/8
 --- 30/8

V

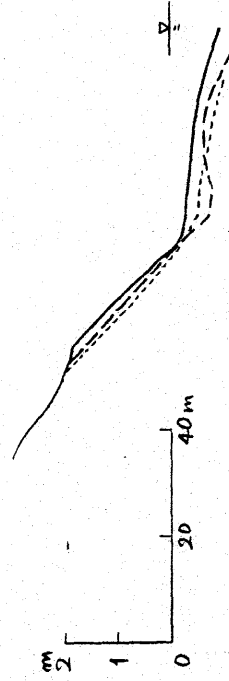
C-050-1



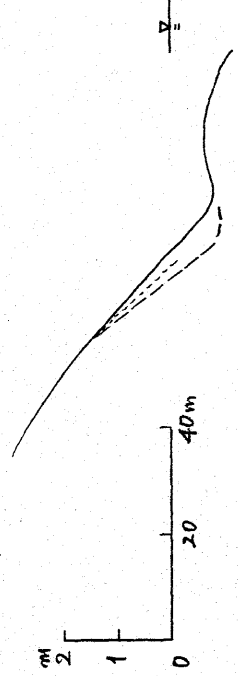
— 28/8/1980
 --- 30/8
 - - - 2/9



— 2/9
 --- 6/9
 - - - 9/9

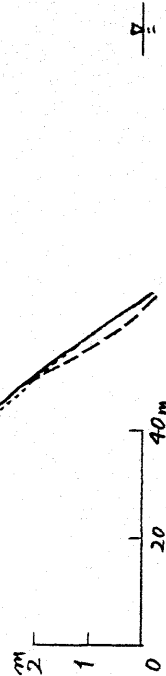
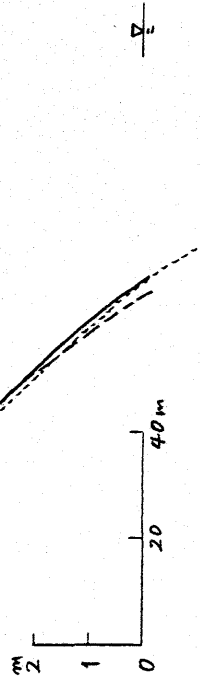
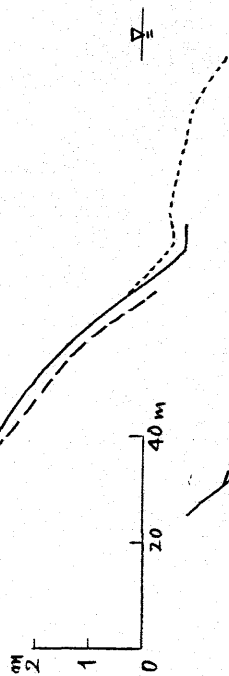


— 9/9
 --- 12/9
 - - - 15/9

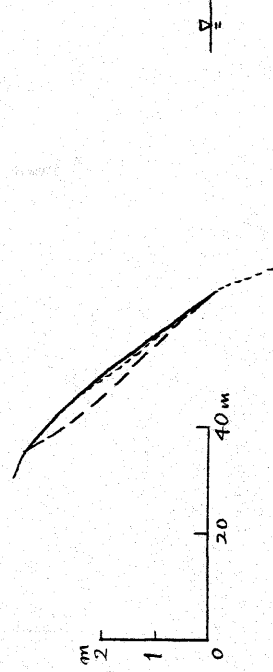
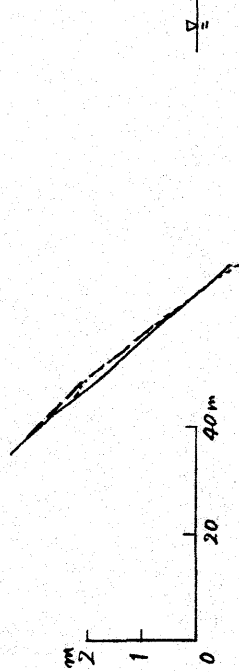
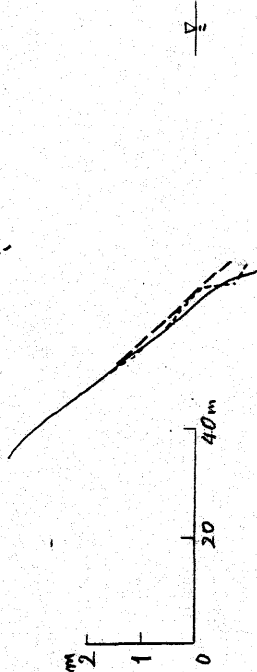
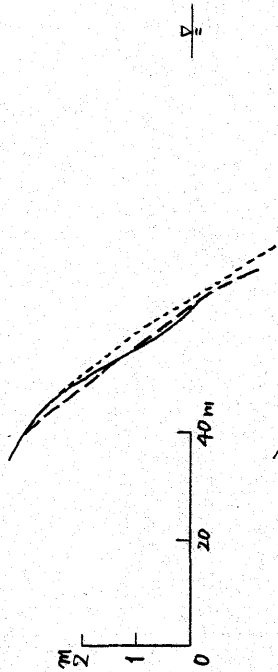


— 15/9
 --- 19/9
 - - - 22/9

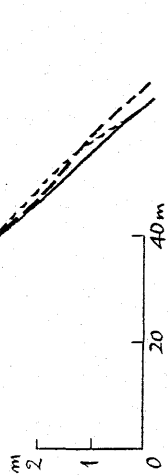
C-050-2



C-050-3

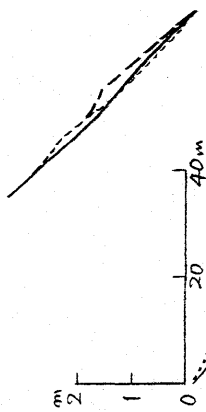


C-050-4



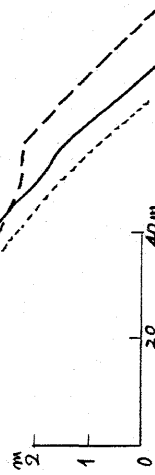
— 26/11/1980
--- 1/12
--- 8/12

\bar{V}



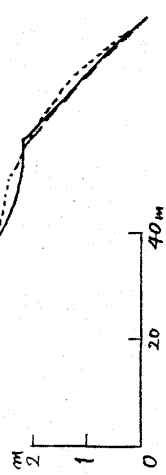
— 8/12
--- 15/12
--- 22/12

\bar{V}



— 22/12
--- 29/12
--- 6/1/1981

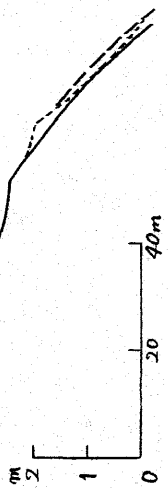
\bar{V}



— 6/1
--- 12/1
--- 21/1

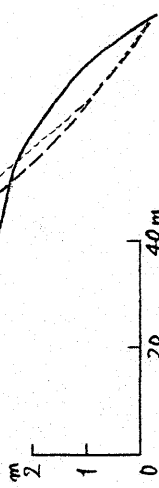
\bar{V}

C-050-5



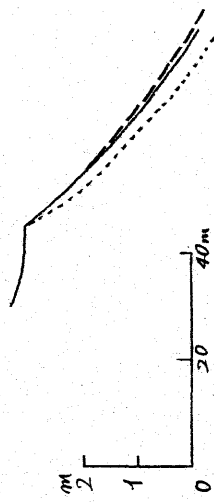
— 21/1/1981
--- 25/1
--- 1/2

\bar{V}



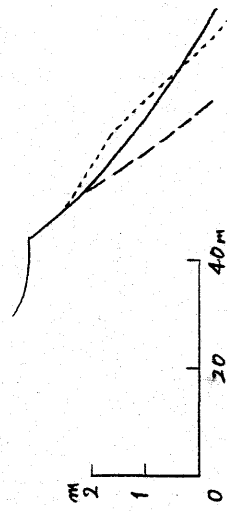
— 1/2
--- 8/2
--- 15/2

\bar{V}



— 15/2
--- 22/2
--- 28/2

\bar{V}

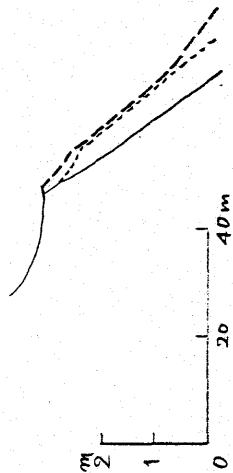


— 28/2
--- 8/3
--- 15/3

\bar{V}

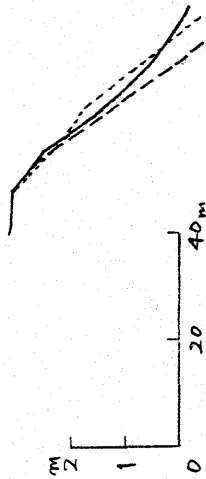
C-050-6

C-050-7



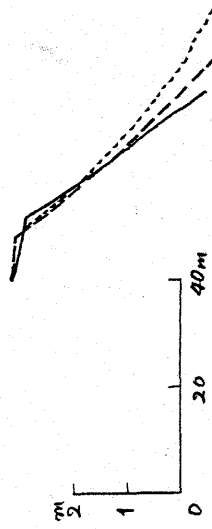
— 15/3/1981
- - - 22/3
- . - 29/3

∇



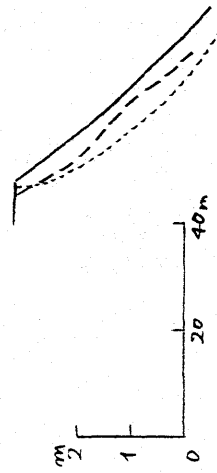
— 29/3
- - - 5/4
- . - 11/4

∇



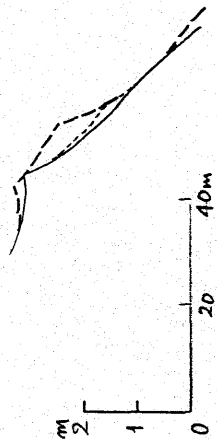
— 11/4
- - - 19/4
- . - 26/4

∇



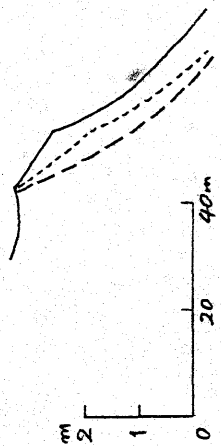
— 26/4
- - - 3/5
- . - 11/5

∇



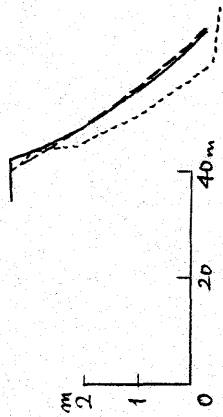
— 11/5/1981
- - - 17/5
- . - 24/5

∇



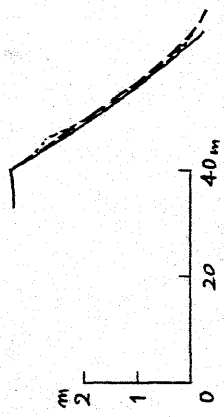
— 24/5
- - - 1/6
- . - 7/6

∇



— 7/6
- - - 15/6
- . - 21/6

∇



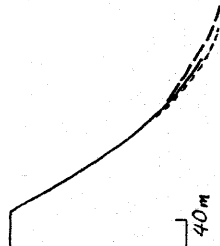
— 21/6
- - - 28/6
- . - 6/7

∇

C-050-8

m
2
1
0

20 40m

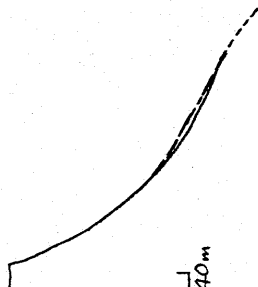


— 6/7/1981
--- 9/7
--- 13/7

\bar{v}

m
2
1
0

20 40m

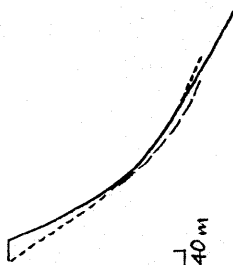


— 13/7
--- 16/7
--- 20/7

\bar{v}

m
2
1
0

20 40m

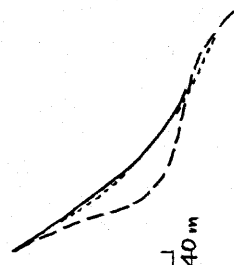


— 20/7
--- 23/7
--- 27/7

\bar{v}

m
2
1
0

20 40m



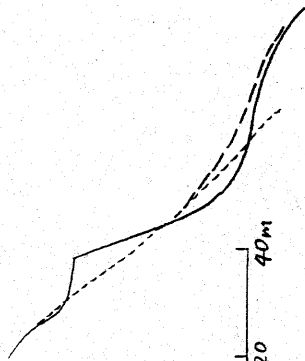
— 27/7
--- 30/7
--- 3/8

\bar{v}

C-050-9

m
2
1
0

20 40m

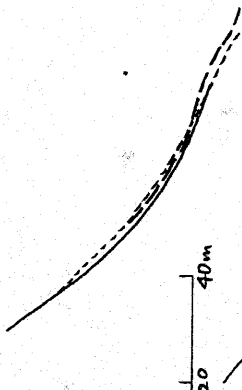


— 3/8/1981
--- 6/8
--- 11/8

\bar{v}

m
2
1
0

20 40m

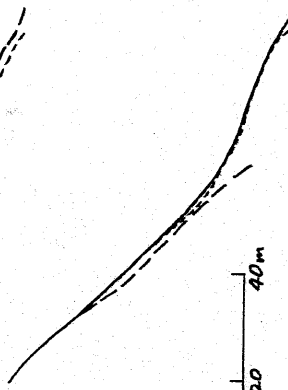


— 11/8
--- 14/8
--- 17/8

\bar{v}

m
2
1
0

20 40m

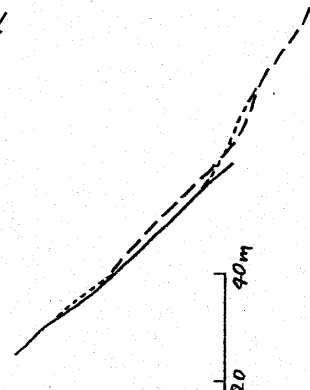


— 17/8
--- 19/8
--- 23/8

\bar{v}

m
2
1
0

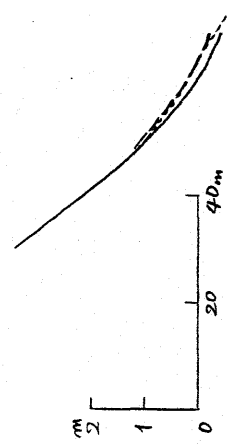
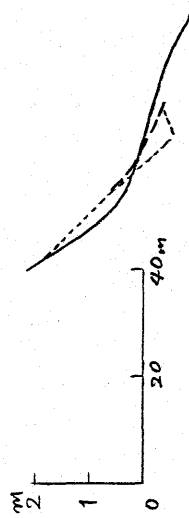
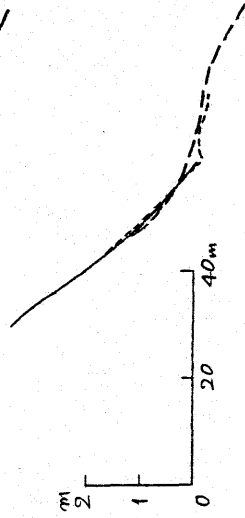
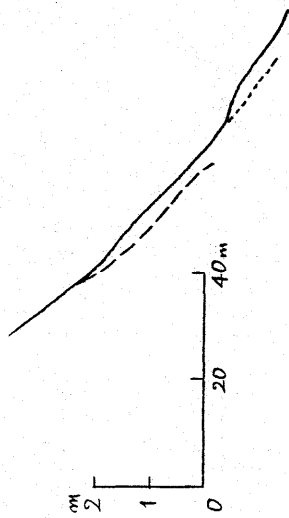
20 40m



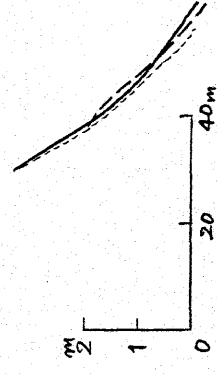
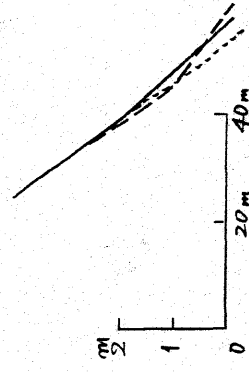
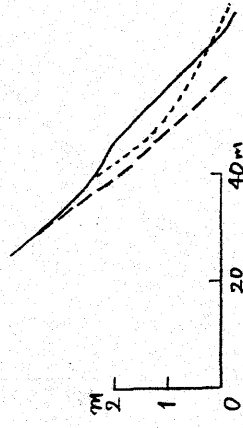
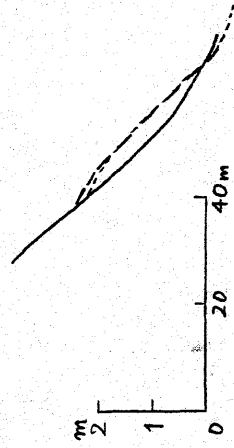
— 23/8
--- 26/8
--- 31/8

\bar{v}

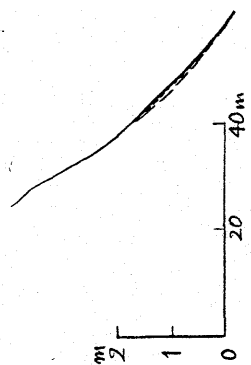
C-050-10



C-050-11

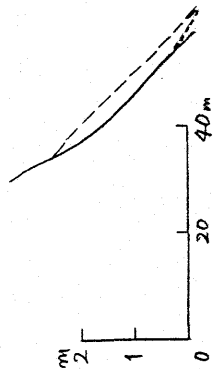


C-050-12



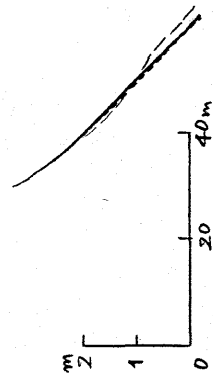
— 15/11/1981
 --- 19/11
 - - - 23/11

$\frac{V}{E}$



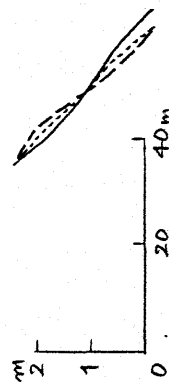
— 23/11
 --- 29/11
 - - - 5/12

$\frac{V}{E}$



— 5/12
 --- 12/12
 - - - 15/12

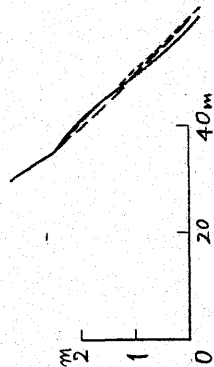
$\frac{V}{E}$



— 15/12
 --- 22/12
 - - - 29/12

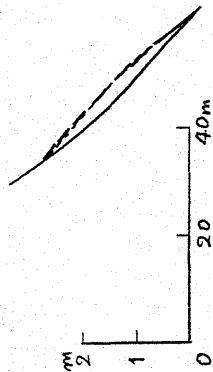
$\frac{V}{E}$

C-050-13



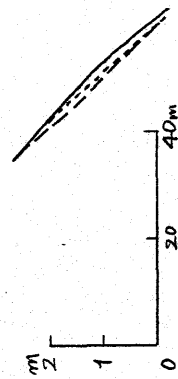
— 29/12/1981
 --- 5/1/1982
 - - - 10/1

$\frac{V}{E}$



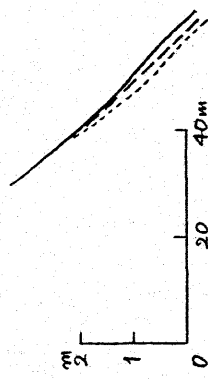
— 10/1
 --- 17/1
 - - - 24/1

$\frac{V}{E}$



— 24/1
 --- 31/1
 - - - 7/2

$\frac{V}{E}$

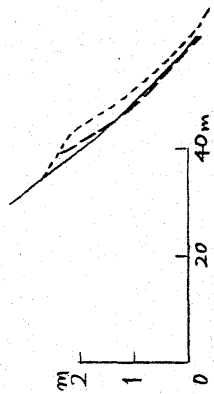


— 7/2
 --- 14/2
 - - - 21/2

$\frac{V}{E}$

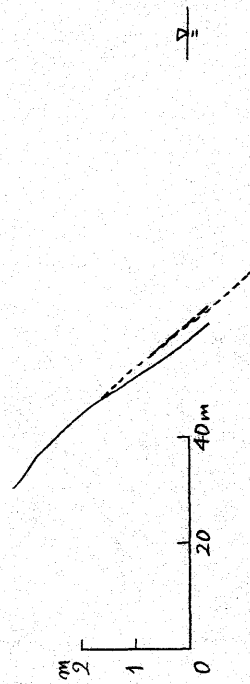
C-050-14

C-050-15



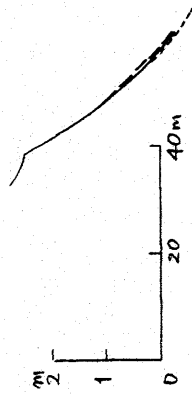
— 21/2/1982
- - - 28/2
- . - 6/3

$\frac{V}{m}$



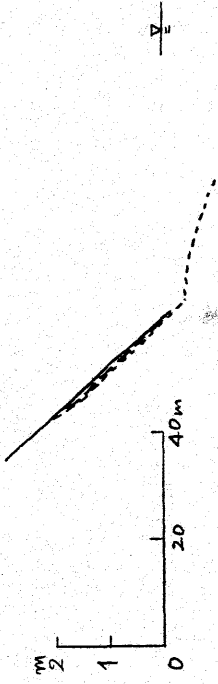
— 18/4/1982
- - - 25/4
- . - 1/5

$\frac{V}{m}$



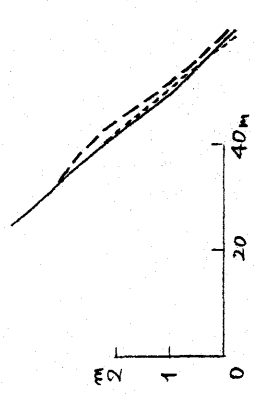
— 6/3
- - - 13/3
- . - 18/3

$\frac{V}{m}$



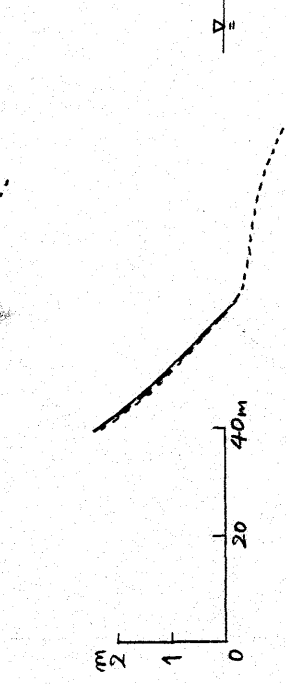
— 1/5
- - - 10/5
- . - 17/5

$\frac{V}{m}$



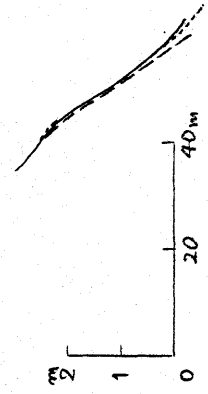
— 18/3
- - - 24/3
- . - 5/4

$\frac{V}{m}$



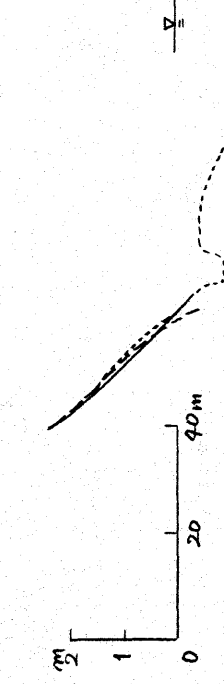
— 17/5
- - - 24/5
- . - 31/5

$\frac{V}{m}$



— 5/4
- - - 11/4
- . - 18/4

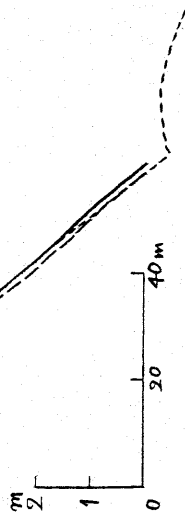
$\frac{V}{m}$



— 31/5
- - - 6/6
- . - 15/6

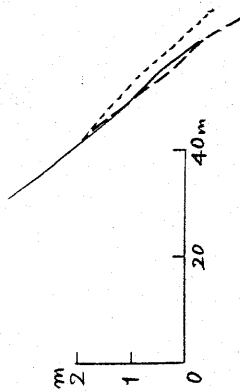
$\frac{V}{m}$

C-050-16



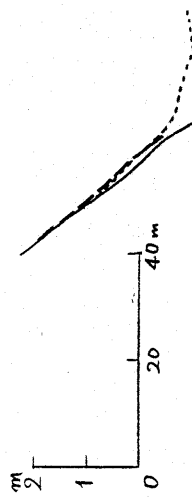
— 15/6/1982
 --- 21/6
 - - - 29/6

\bar{V}



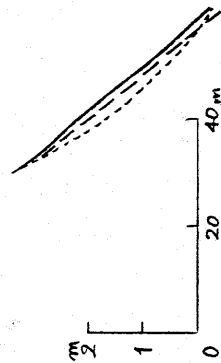
— 29/6
 --- 5/7
 - - - 12/7

\bar{V}



— 12/7
 --- 20/7
 - - - 27/7

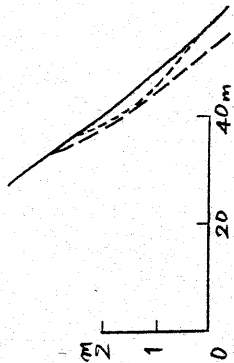
\bar{V}



— 27/7
 --- 2/8
 - - - 9/8

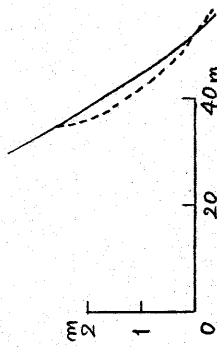
\bar{V}

C-050-17



— 9/8/1982
 --- 15/8
 - - - 23/8

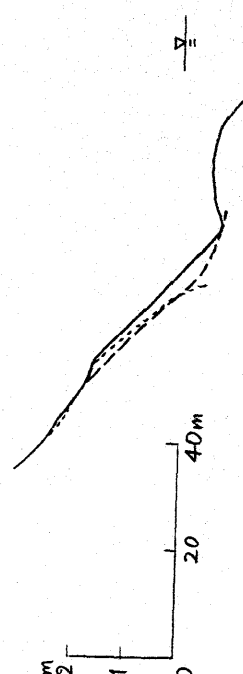
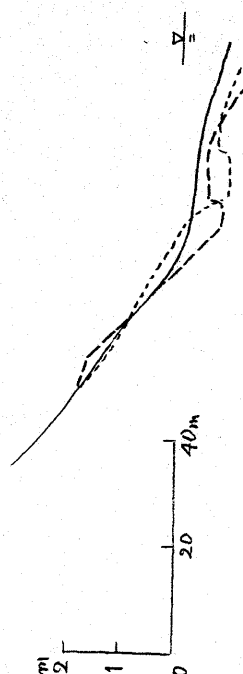
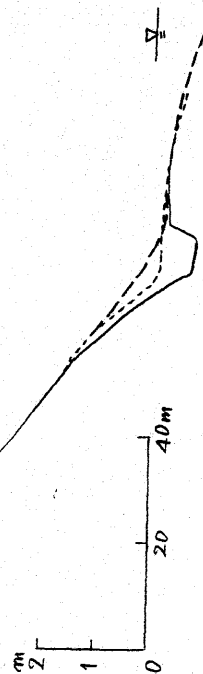
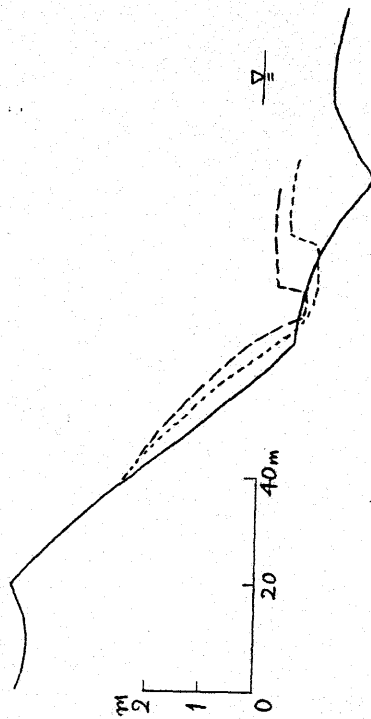
\bar{V}



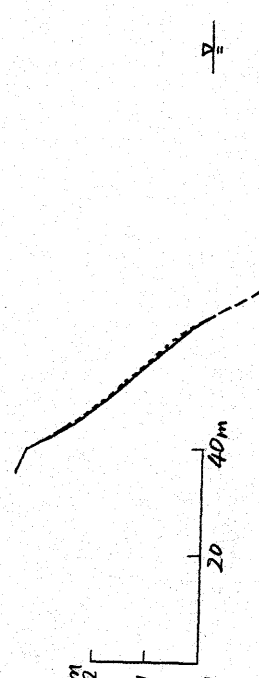
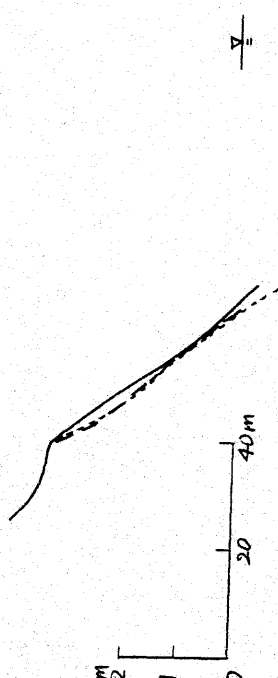
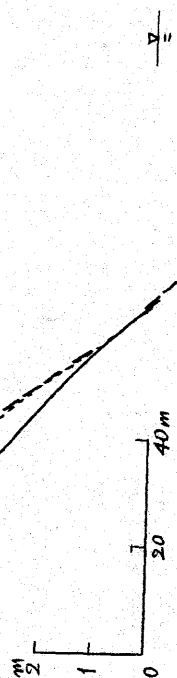
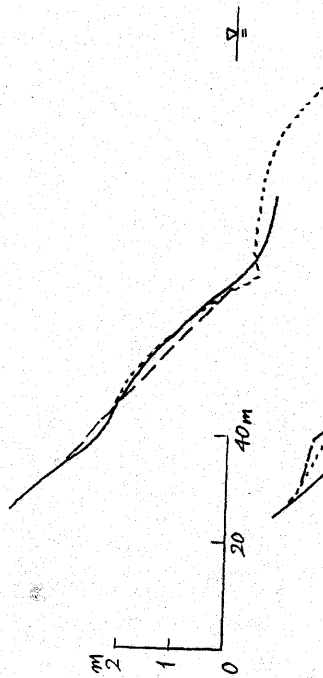
— 23/8
 --- 30/8

\bar{V}

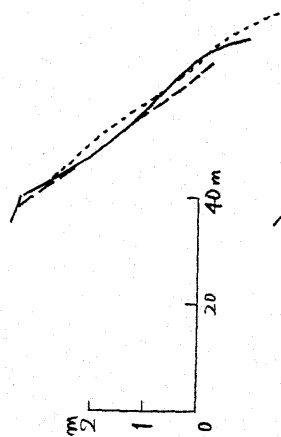
C-100-1



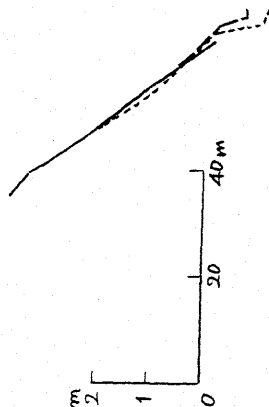
C-100-2



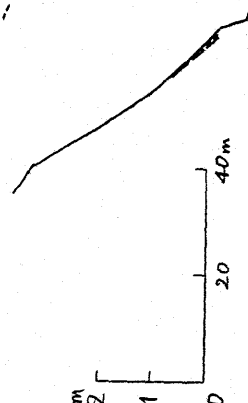
C-100-3



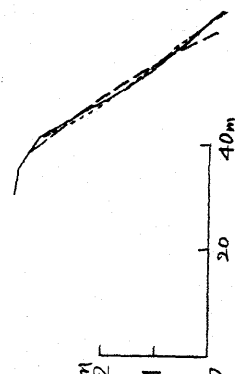
$\frac{V}{H}$



$\frac{V}{H}$

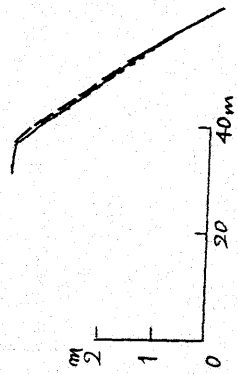


$\frac{V}{H}$

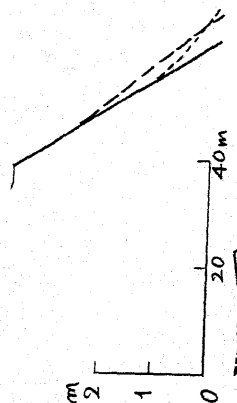


$\frac{V}{H}$

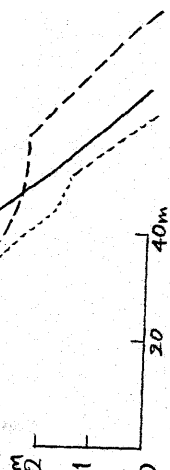
C-100-4



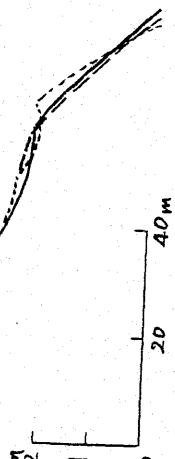
$\frac{V}{H}$



$\frac{V}{H}$



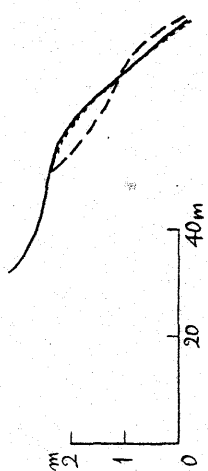
$\frac{V}{H}$



$\frac{V}{H}$

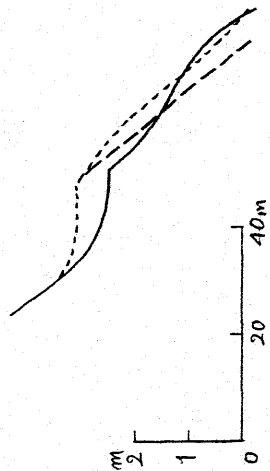
C-100-5

C-100-6



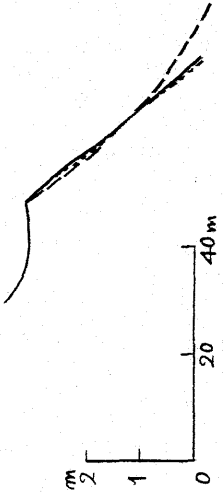
— 21/1/1981
 --- 25/1
 - - - 1/2

\bar{V}



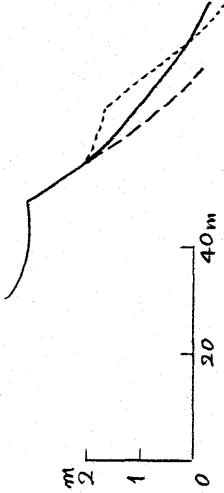
— 1/2
 --- 8/2
 - - - 15/2

\bar{V}



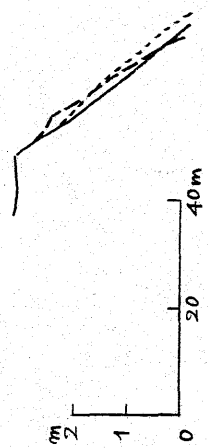
— 15/2
 --- 22/2
 - - - 28/2

\bar{V}



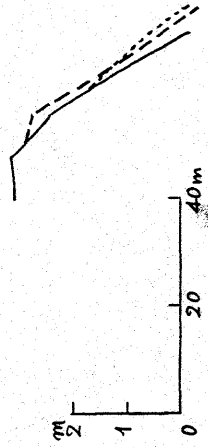
— 28/2
 --- 8/3
 - - - 15/3

\bar{V}



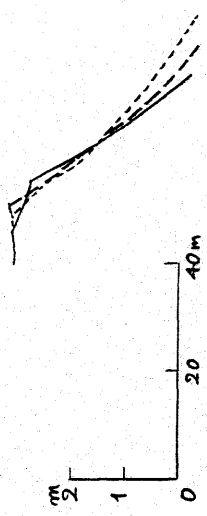
— 15/3/1981
 --- 22/3
 - - - 29/3

\bar{V}



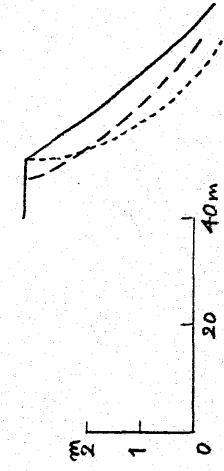
— 29/3
 --- 5/4
 - - - 11/4

\bar{V}



— 11/4
 --- 19/4
 - - - 26/4

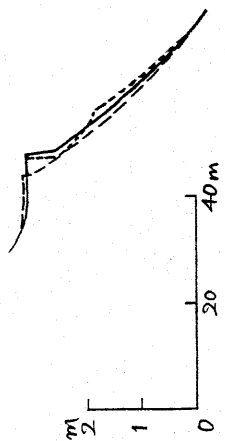
\bar{V}



— 26/4
 --- 3/5
 - - - 11/5

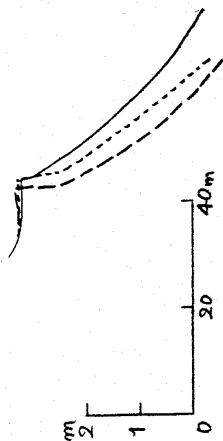
\bar{V}

C-100-7



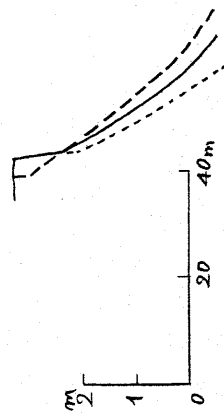
— 11/5/1981
- - - 17/5
- · - 24/5

\bar{V}



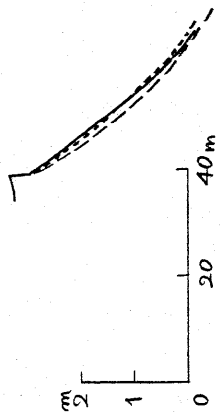
— 24/5
- - - 1/6
- · - 7/6

\bar{V}



— 7/6
- - - 15/6
- · - 21/6

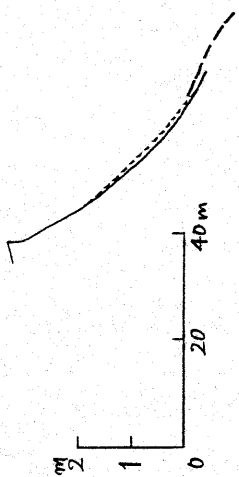
\bar{V}



— 21/6
- - - 28/6
- · - 6/7

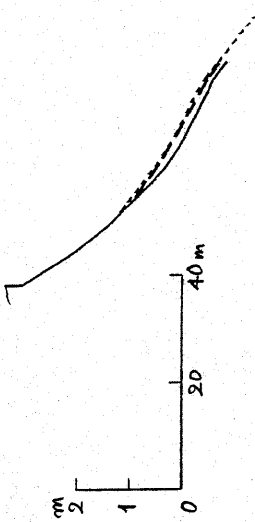
\bar{V}

C-100-8



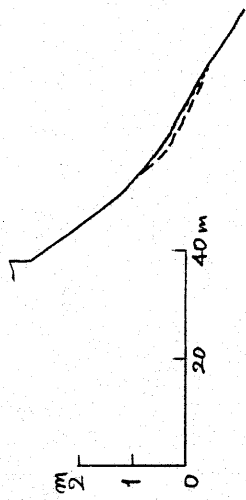
— 6/7/1981
- - - 9/7
- · - 13/7

\bar{V}



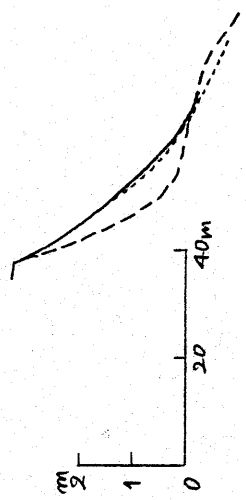
— 13/7
- - - 16/7
- · - 20/7

\bar{V}



— 20/7
- - - 23/7
- · - 27/7

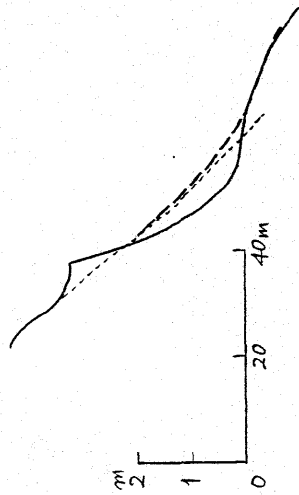
\bar{V}



— 27/7
- - - 30/7
- · - 3/8

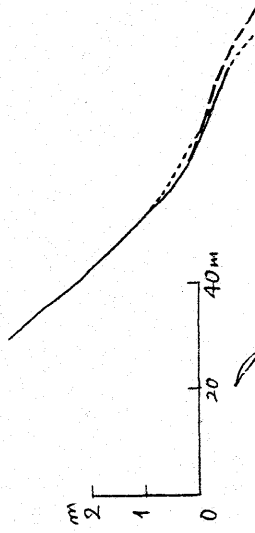
\bar{V}

C-100-9



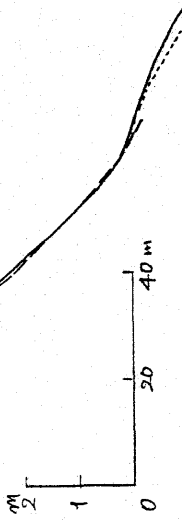
— 3/8/1981
- - - 6/8
- . - 11/8

\bar{V}



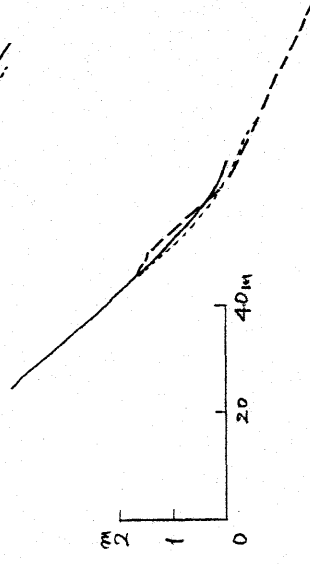
— 11/8
- - - 14/8
- . - 17/8

\bar{V}



— 17/8
- - - 19/8
- . - 23/8

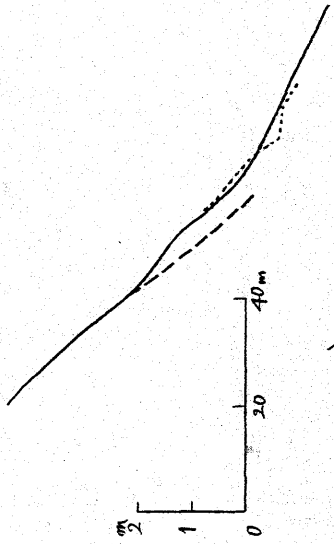
\bar{V}



— 23/8
- - - 26/8
- . - 31/8

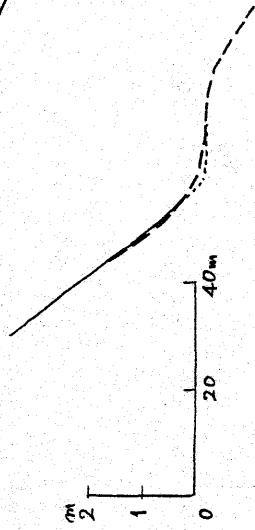
\bar{V}

C-100-10



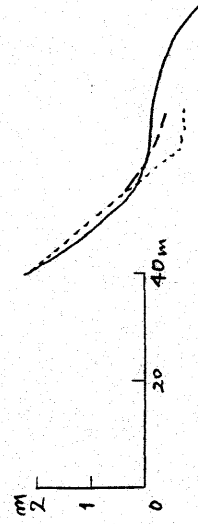
— 31/8/1981
- - - 3/9
- . - 7/9

\bar{V}



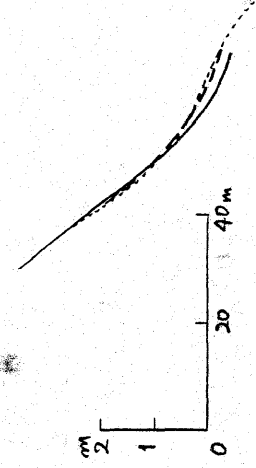
— 7/9
- - - 10/9
- . - 15/9

\bar{V}



— 15/9
- - - 19/9
- . - 24/9

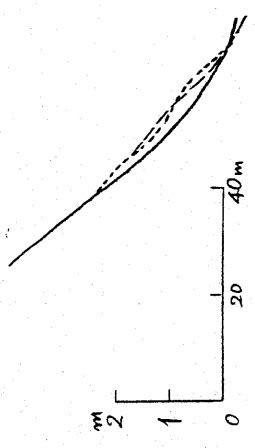
\bar{V}



— 24/9
- - - 28/9
- . - 1/10

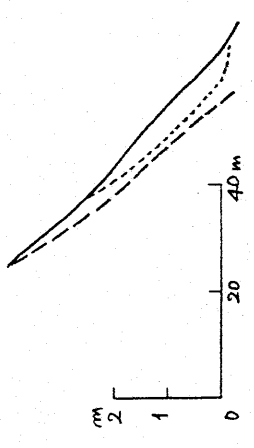
\bar{V}

C-100-11



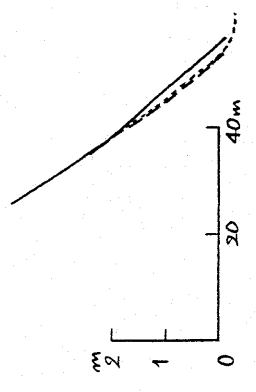
— 1 / 10 / 1981
 - - - 6 / 10
 - · - 12 / 10

\bar{V}



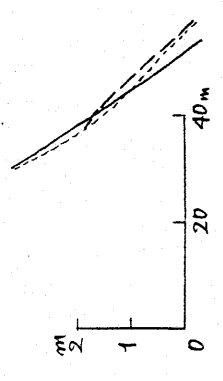
— 12 / 10
 - - - 17 / 10
 - · - 24 / 10

\bar{V}



— 24 / 10
 - - - 28 / 10
 - · - 2 / 11

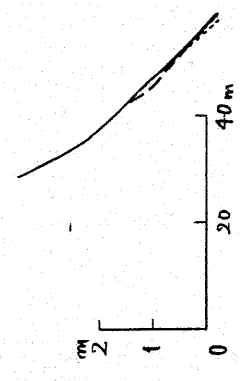
\bar{V}



— 2 / 11
 - - - 8 / 11
 - · - 15 / 11

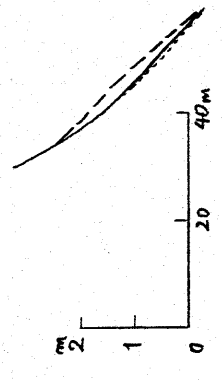
\bar{V}

C-100-12



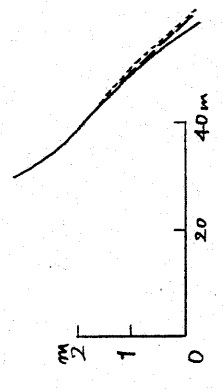
— 15 / 11 / 1981
 - - - 19 / 11
 - · - 23 / 11

\bar{V}



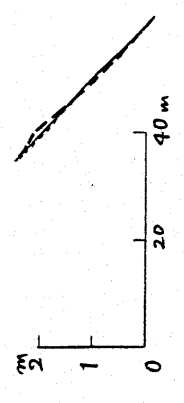
— 23 / 11
 - - - 29 / 11
 - · - 5 / 12

\bar{V}



— 5 / 12
 - - - 12 / 12
 - · - 15 / 12

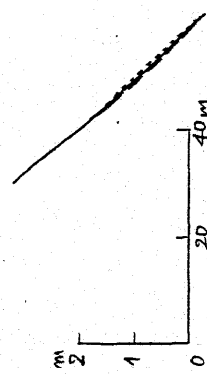
\bar{V}



— 15 / 12
 - - - 22 / 12
 - · - 29 / 12

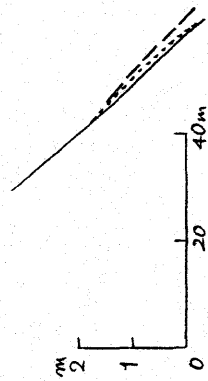
\bar{V}

C-100-13



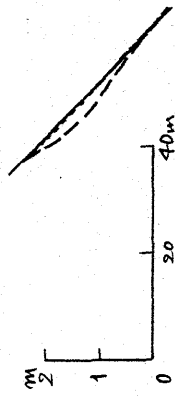
— 29/12/1981
- - - 5/1/1982
- - - 10/1

\bar{v}



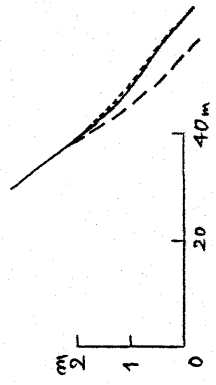
— 10/1
- - - 17/1
- - - 24/1

\bar{v}



— 24/1
- - - 31/1
- - - 7/2

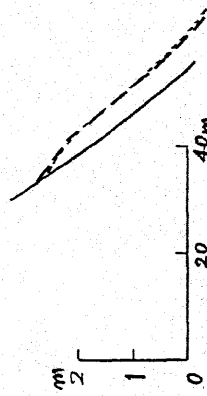
\bar{v}



— 7/2
- - - 14/2
- - - 21/2

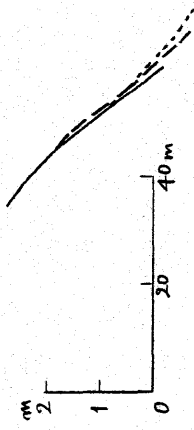
\bar{v}

C-100-14



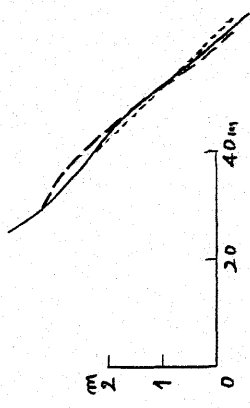
— 21/2/1982
- - - 28/2
- - - 6/3

\bar{v}



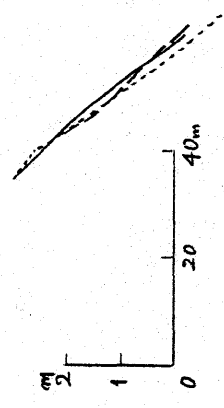
— 6/3
- - - 13/3
- - - 18/3

\bar{v}



— 18/3
- - - 24/3
- - - 5/4

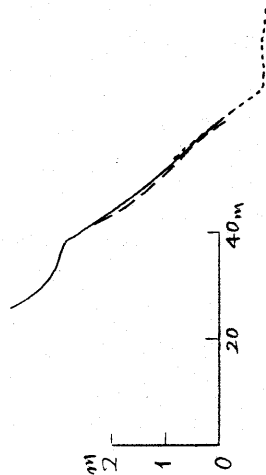
\bar{v}



— 5/4
- - - 11/4
- - - 18/4

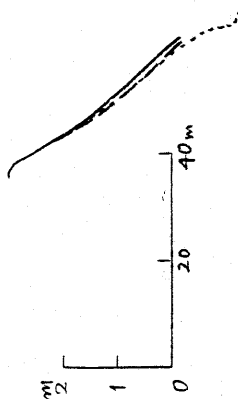
\bar{v}

C-100-15



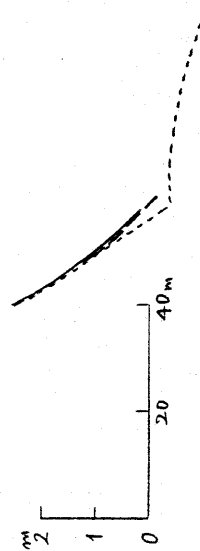
— 18/4/1982
--- 25/4
- - - 1/5

\bar{V}



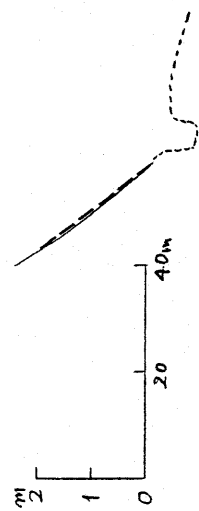
— 1/5
--- 10/5
- - - 17/5

\bar{V}



— 17/5
--- 24/5
- - - 31/5

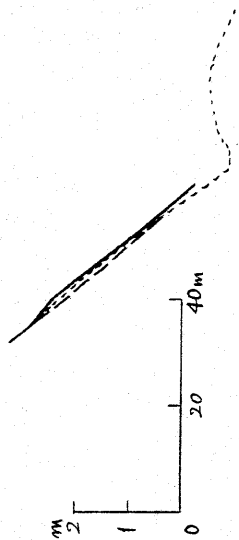
\bar{V}



— 31/5
--- 6/6
- - - 15/6

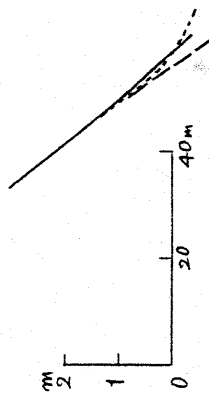
\bar{V}

C-100-16



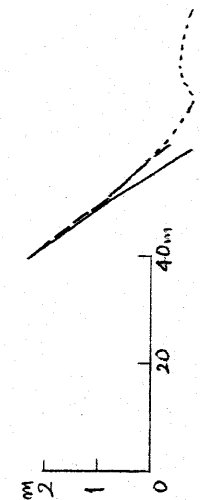
— 15/6/1982
--- 21/6
- - - 29/6

\bar{V}



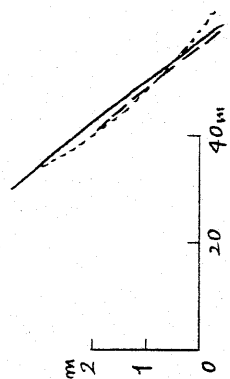
— 29/6
--- 5/7
- - - 12/7

\bar{V}



— 12/7
--- 20/7
- - - 27/7

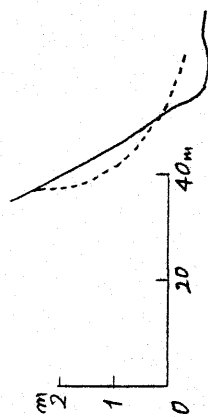
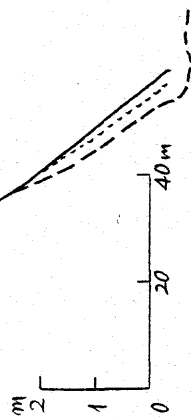
\bar{V}



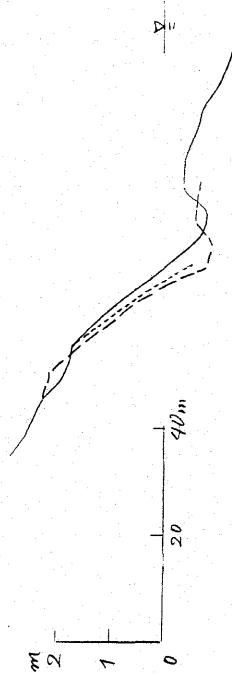
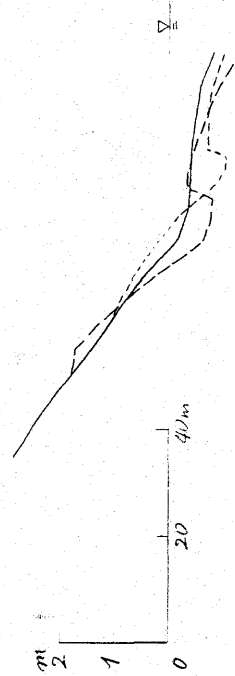
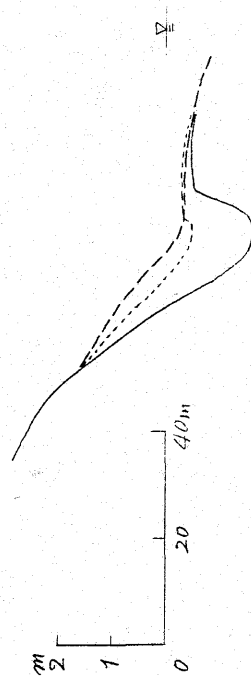
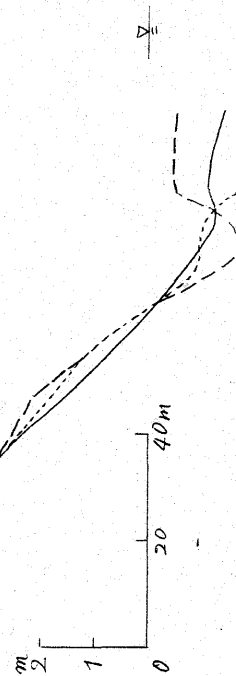
— 27/7
--- 2/8
- - - 9/8

\bar{V}

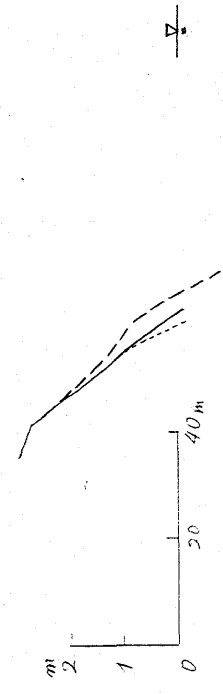
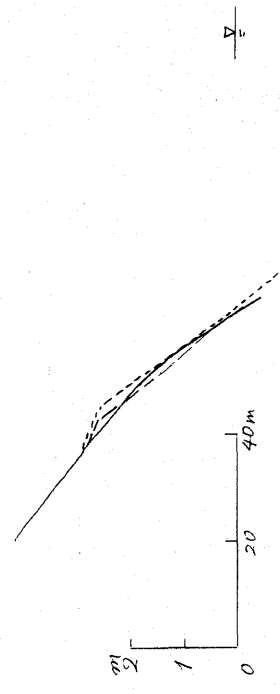
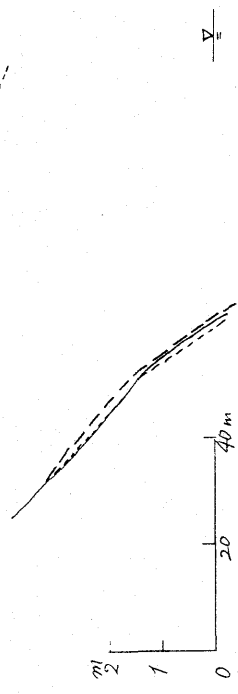
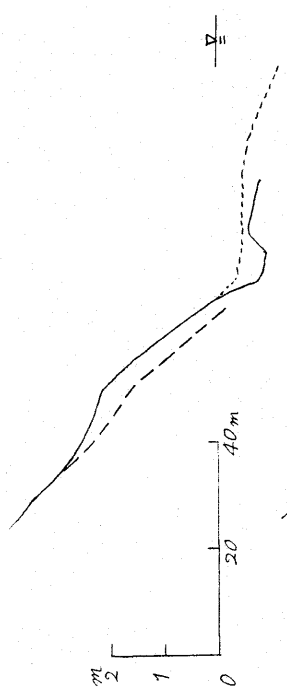
C-100-17



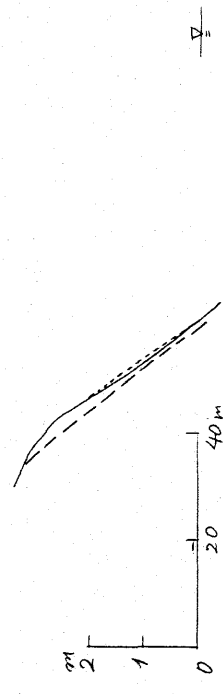
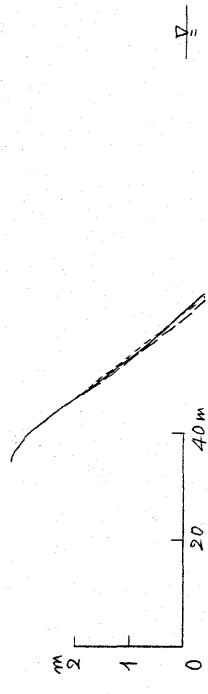
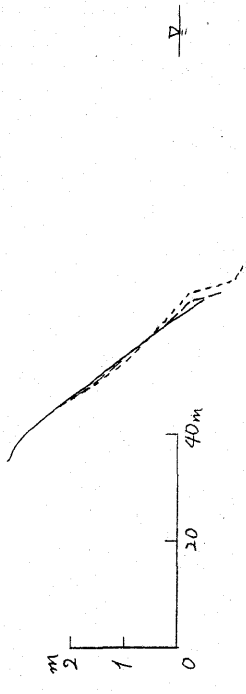
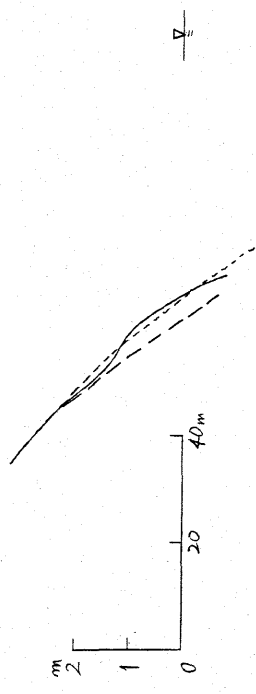
C-150-1



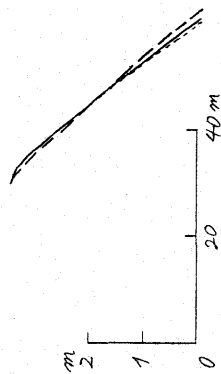
C-150-2



C-150-3

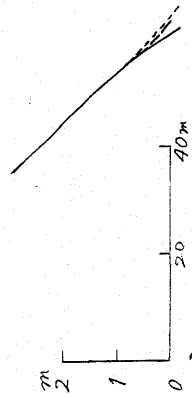


C-150-4



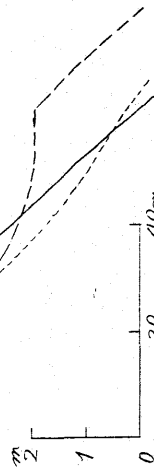
— 26/11/1980
- - - 1/12
- - - 8/12

\bar{V}



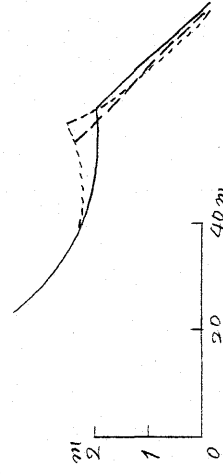
— 8/12
- - - 15/12
- - - 22/12

\bar{V}



— 22/12
- - - 29/12
- - - 6/1/1981

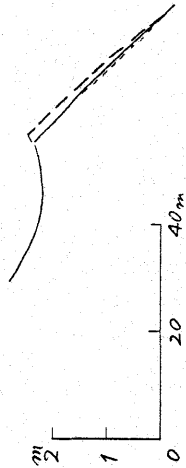
\bar{V}



— 6/1
- - - 12/1
- - - 21/1

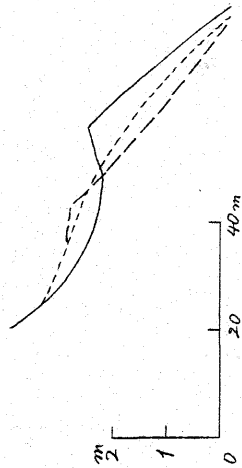
\bar{V}

C-150-5



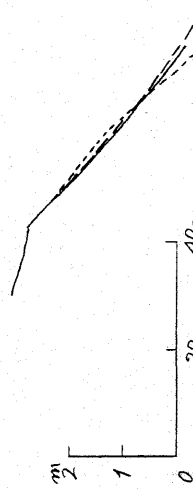
— 21/1/1981
- - - 25/1
- - - 1/2

\bar{V}



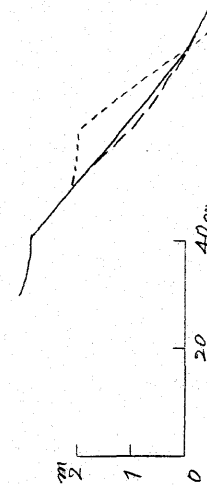
— 1/2
- - - 8/2
- - - 15/2

\bar{V}



— 15/2
- - - 22/2
- - - 28/2

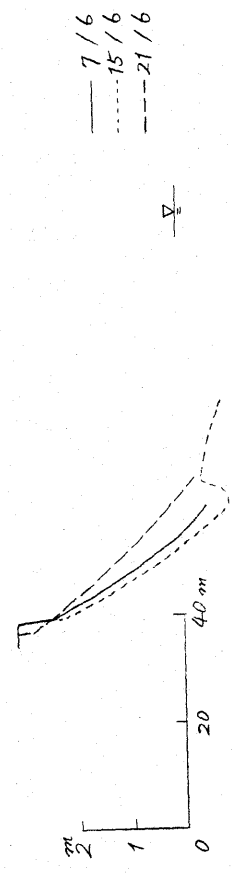
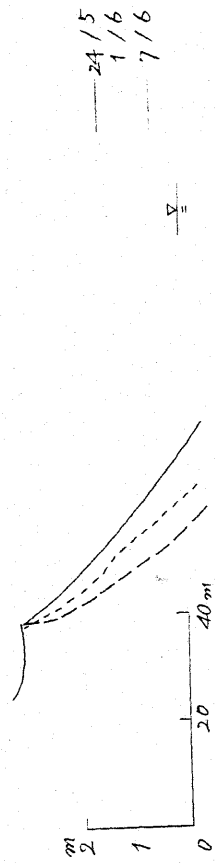
\bar{V}



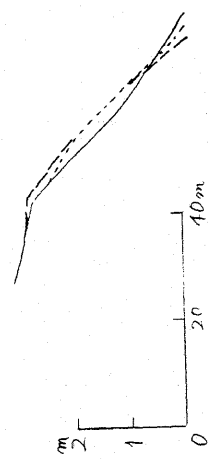
— 28/2
- - - 8/3
- - - 15/3

\bar{V}

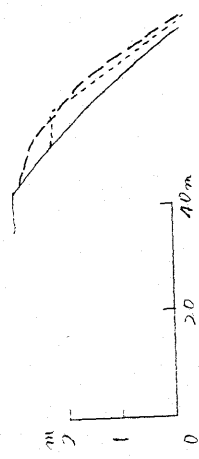
C-150-7



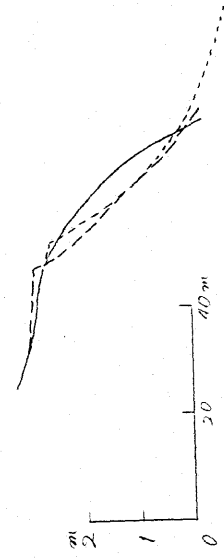
15/3/1981
 ---- 22/3
 -.- 29/3



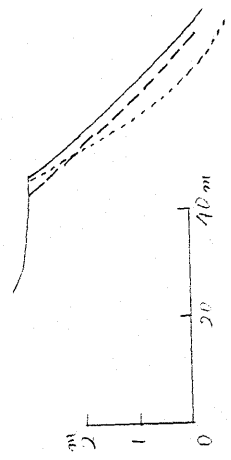
29/3
 ---- 5/4
 -.- 11/4



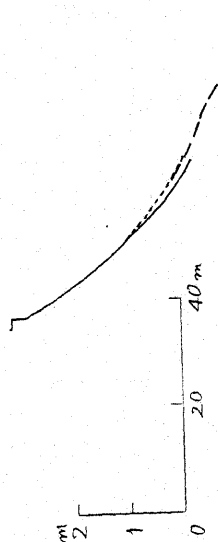
11/4
 ---- 19/4
 -.- 26/4



26/4
 ---- 3/5
 -.- 11/5

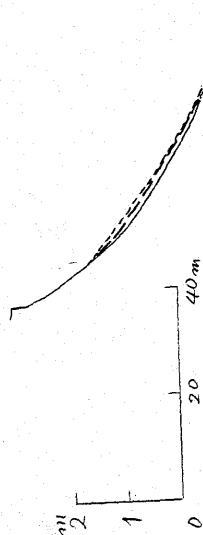


C-150-8



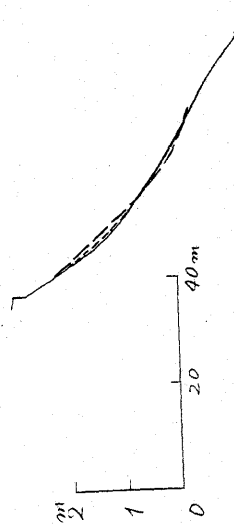
— 6/7/1981
- - - 9/7
- · - 13/7

\bar{V}_m



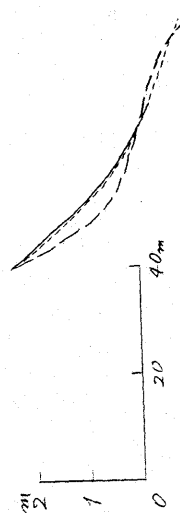
— 13/7
- - - 16/7
- · - 20/7

\bar{V}_m



— 20/7
- - - 23/7
- · - 27/7

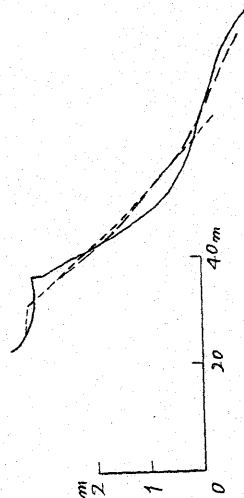
\bar{V}_m



— 27/7
- - - 30/7
- · - 3/8

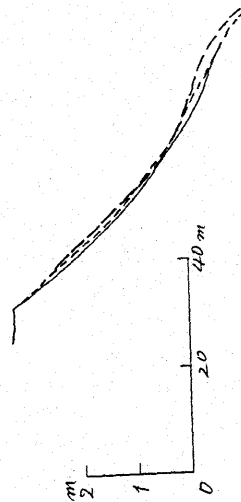
\bar{V}_m

C-150-9



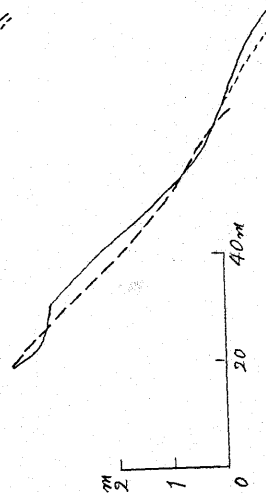
— 3/8/1981
- - - 6/8
- · - 11/8

\bar{V}_m



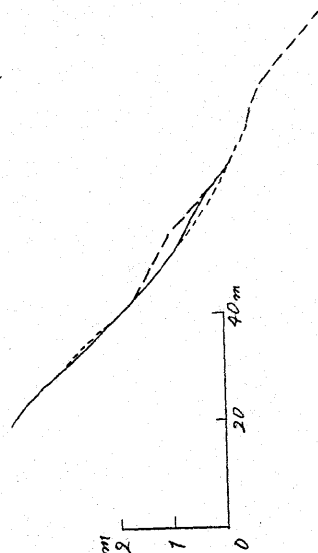
— 11/8
- - - 14/8
- · - 17/8

\bar{V}_m



— 17/8
- - - 19/8
- · - 23/8

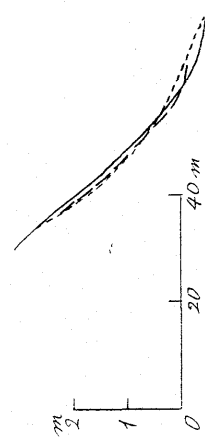
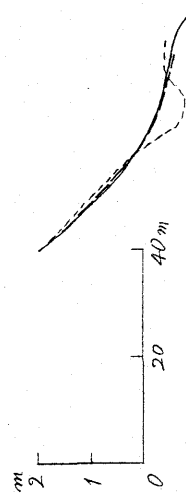
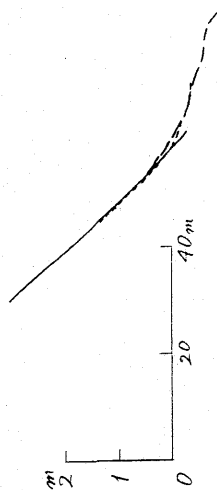
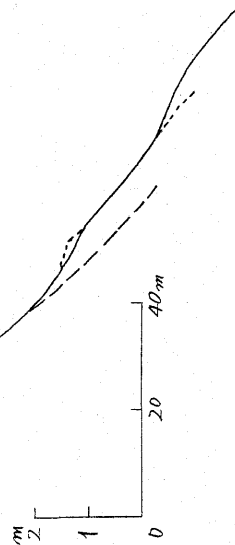
\bar{V}_m



— 23/8
- - - 26/8
- · - 31/8

\bar{V}_m

C-150-10



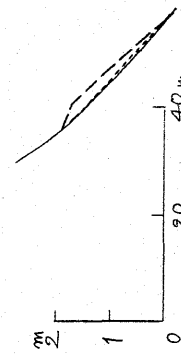
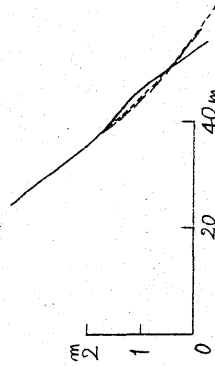
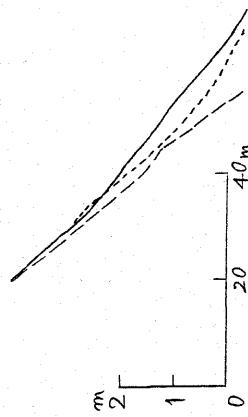
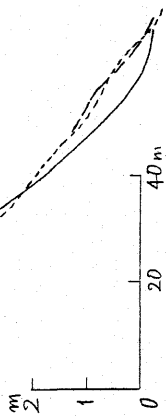
\bar{V}

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C-150-11



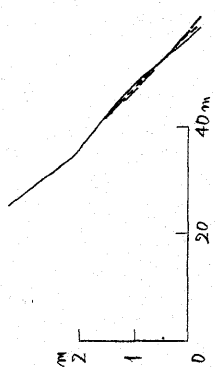
\bar{V}

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\bar{V}

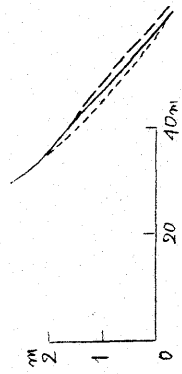
\bar{V}

C-150-12



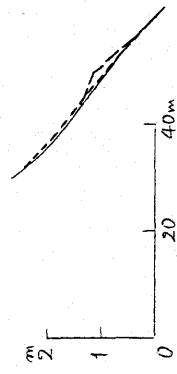
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

V



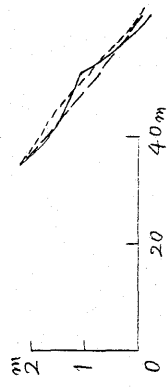
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

V



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

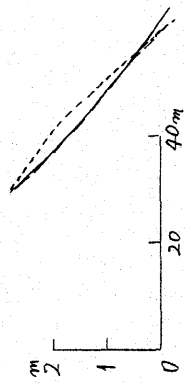
V



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

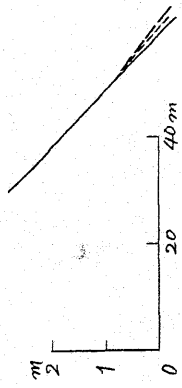
V

C-150-13



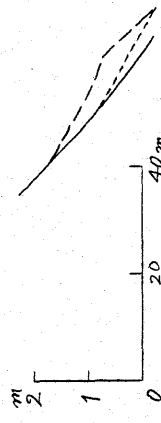
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

V



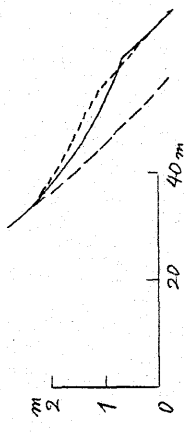
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

V



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

V



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

V

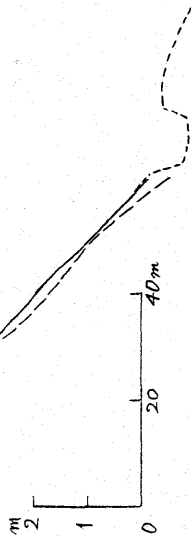
C-150-15



C-150-14

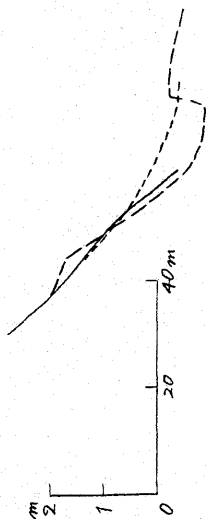


C-150-16



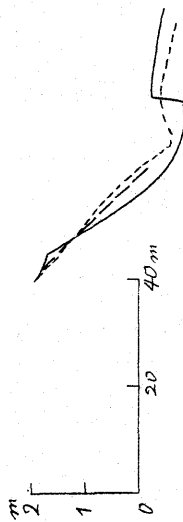
— 15/6/1982
 ---- 21/6
 - - - 29/6

∇



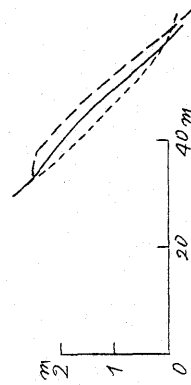
— 29/6
 ---- 5/7
 - - - 12/7

∇



— 12/7
 ---- 20/7
 - - - 27/7

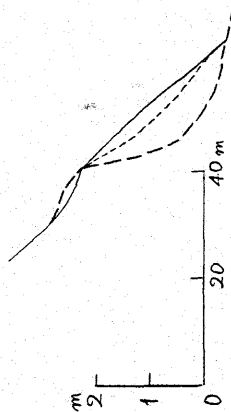
∇



— 27/7
 ---- 2/8
 - - - 9/8

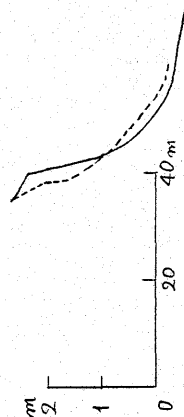
∇

C-150-17



— 9/8/1982
 ---- 15/8
 - - - 23/8

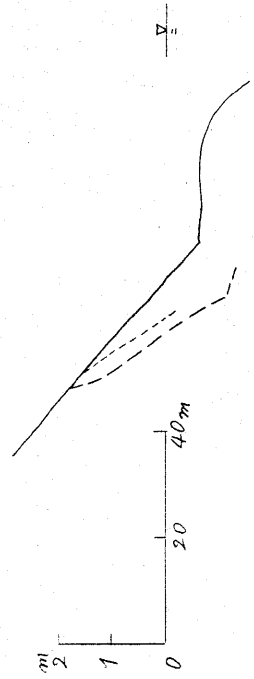
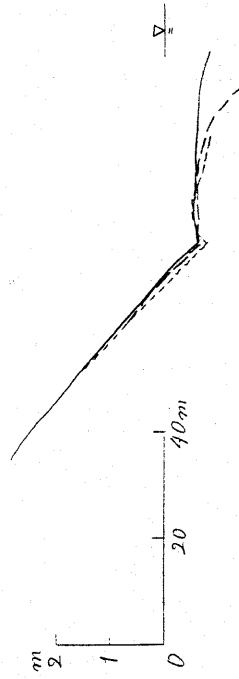
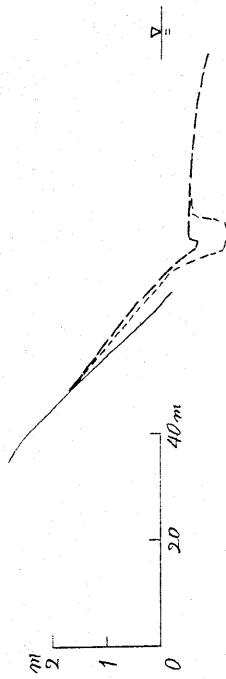
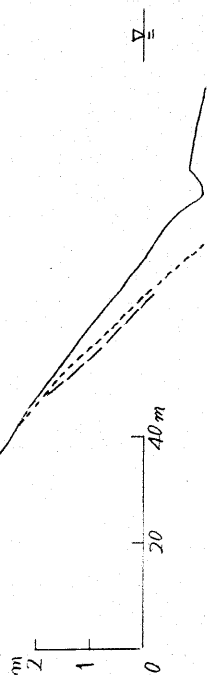
∇



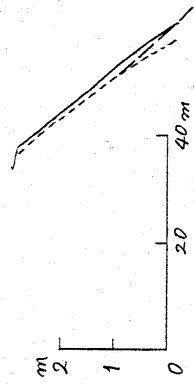
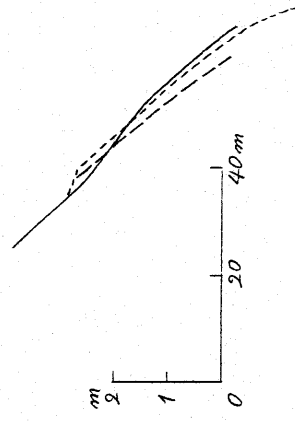
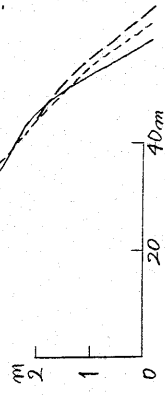
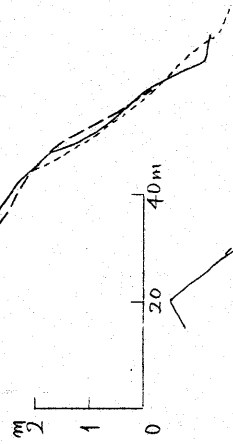
— 23/8
 ---- 30/8

∇

C-200-1

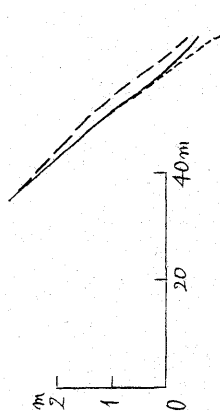


C-200-2



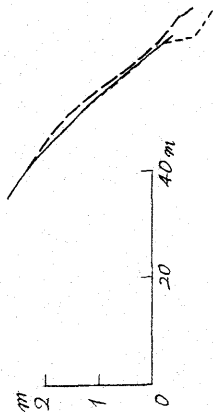
C-200-3

C-200-4



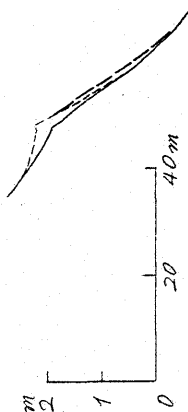
— 18/10/1980
- - - 22/10
- · - 27/10

∇



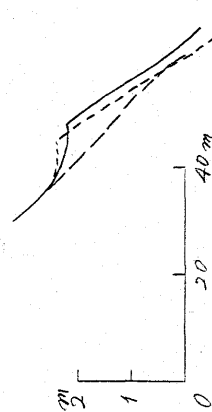
— 27/10
- - - 1/11
- · - 6/11

∇



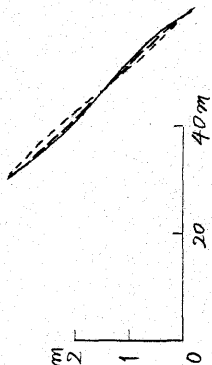
— 6/11
- - - 11/11
- · - 16/11

∇



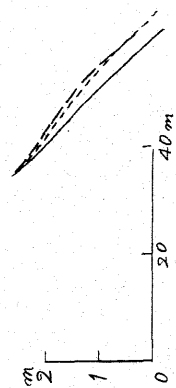
— 16/11
- - - 21/11
- · - 26/11

∇



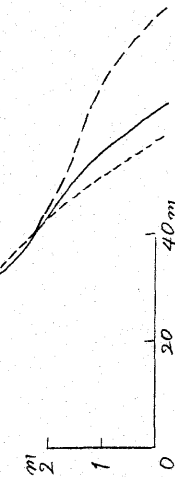
— 26/11/1980
- - - 1/12
- · - 8/12

∇



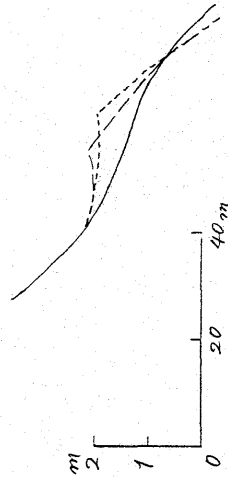
— 8/12
- - - 15/12
- · - 22/12

∇



— 22/12
- - - 29/12
- · - 6/1/1981

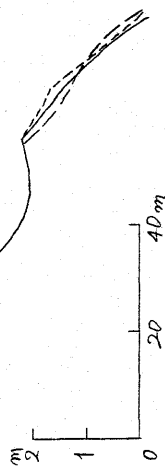
∇



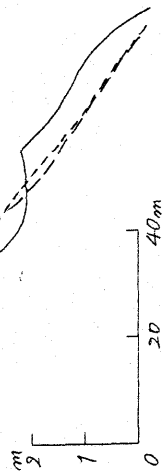
— 6/1
- - - 12/1
- · - 21/1

∇

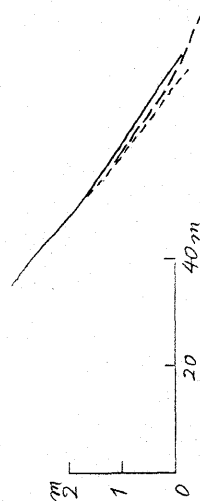
C-200-5



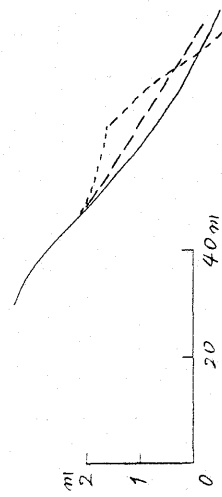
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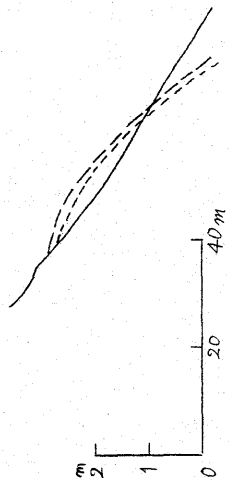


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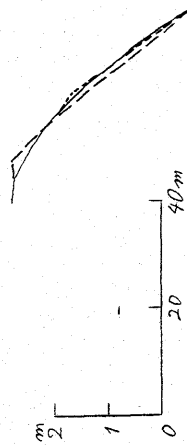


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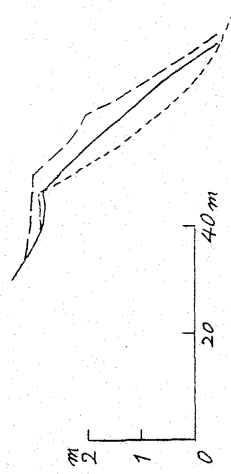
C-200-6



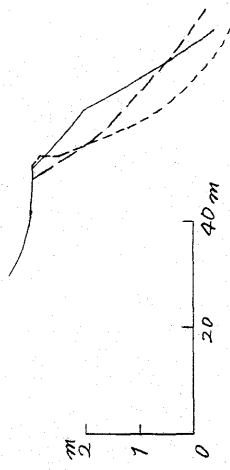
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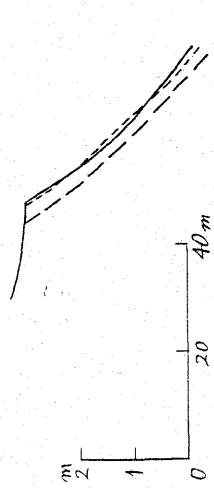


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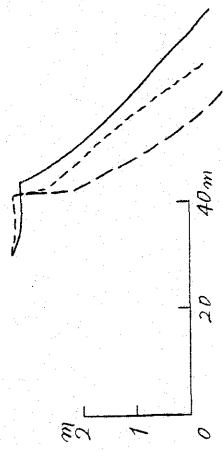
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C-200-7



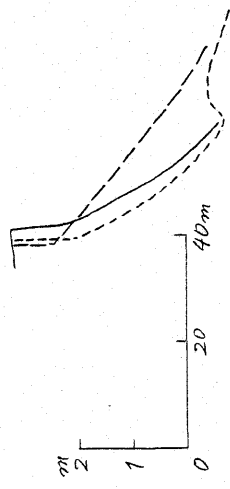
— 11/5/1981
- - - 17/5
- · - 24/5

∇



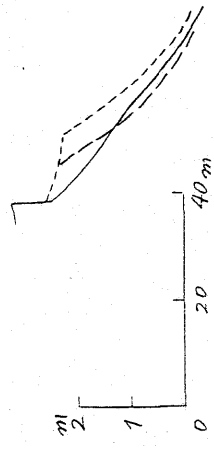
— 24/5
- - - 1/6
- · - 7/6

∇



— 7/6
- - - 15/6
- · - 21/6

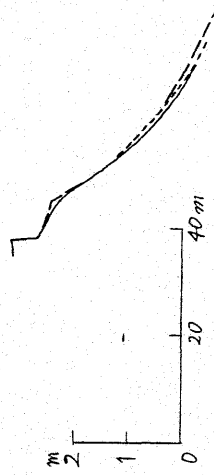
∇



— 21/6
- - - 28/6
- · - 6/7

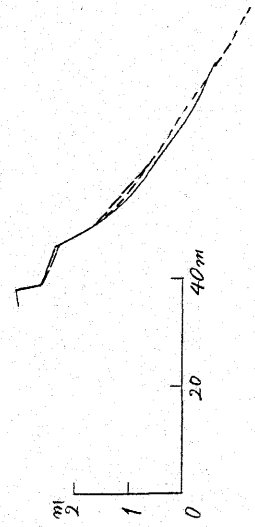
∇

C-200-8



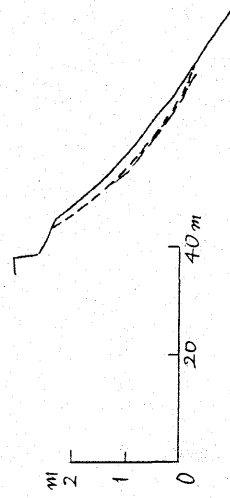
— 6/7/1981
- - - 9/7
- · - 13/7

∇



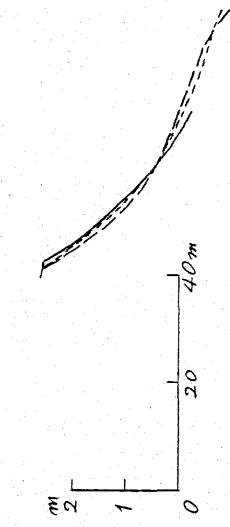
— 13/7
- - - 16/7
- · - 20/7

∇



— 20/7
- - - 23/7
- · - 27/7

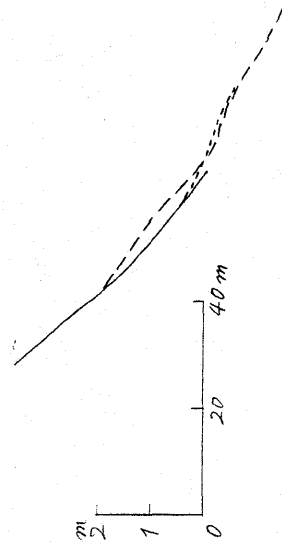
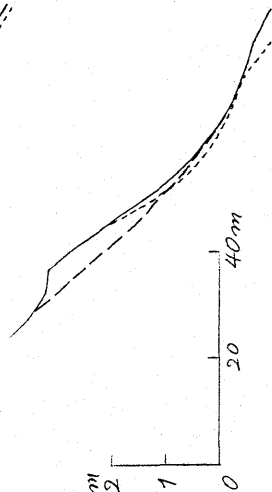
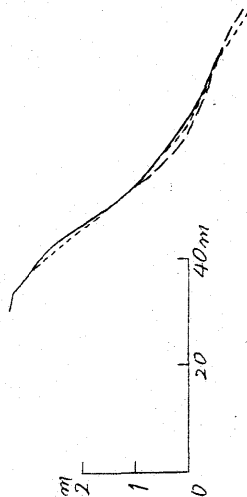
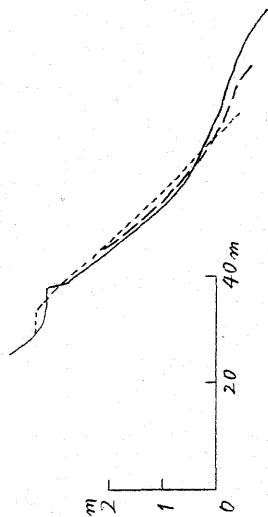
∇



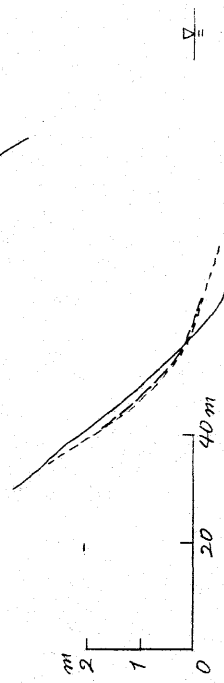
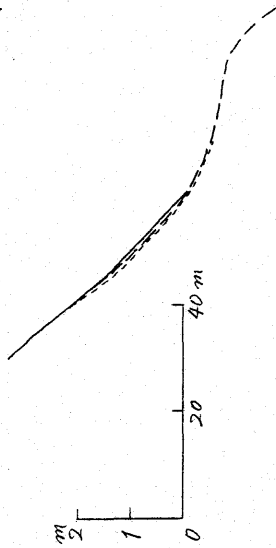
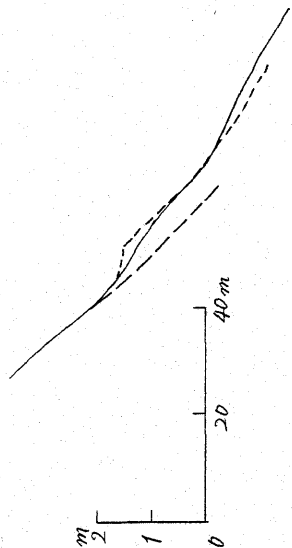
— 27/7
- - - 30/7
- · - 3/8

∇

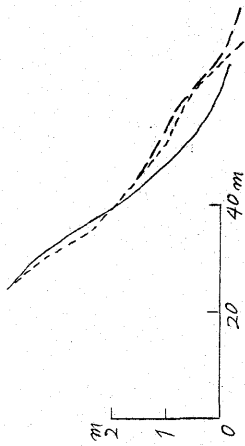
C-200-9



C-200-10

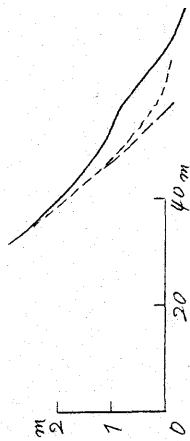


C-200-11



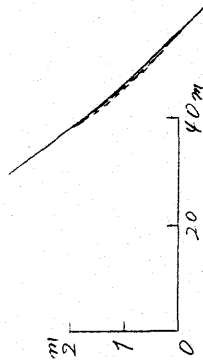
— 1/10/1981
--- 6/10
- - - 12/10

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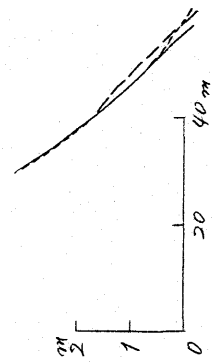
— 12/10
--- 17/10
- - - 24/10

\bar{y}



— 24/10
--- 28/10
- - - 2/11

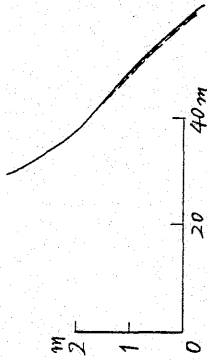
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— 2/11
--- 8/11
- - - 15/11

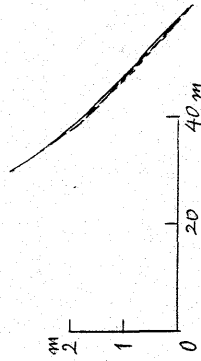
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C-200-12



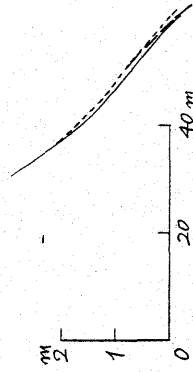
— 15/11/1981
--- 19/11
- - - 23/11

\bar{y}



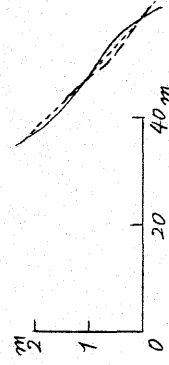
— 23/11
--- 29/11
- - - 5/12

\bar{y}



— 5/12
--- 12/12
- - - 15/12

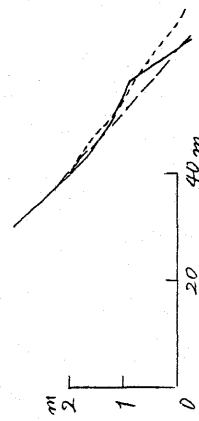
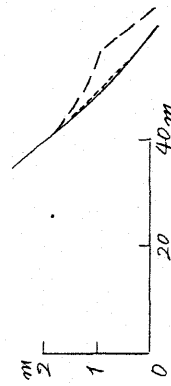
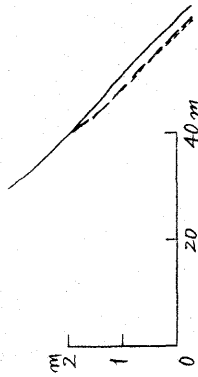
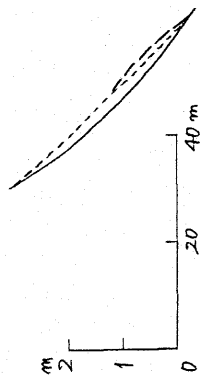
\bar{y}



— 15/12
--- 22/12
- - - 29/12

\bar{y}

C-200-13



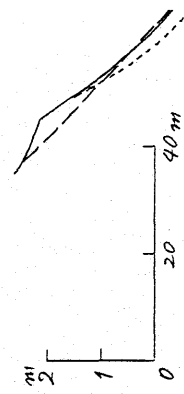
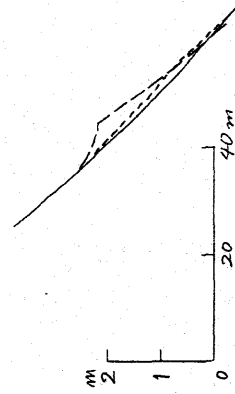
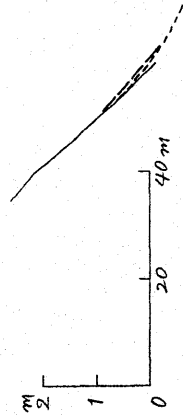
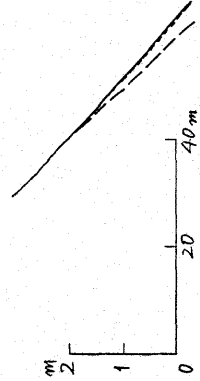
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C-200-14



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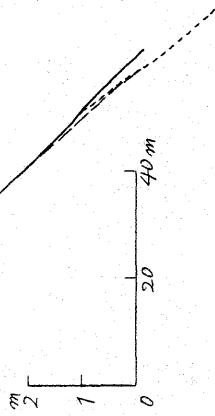
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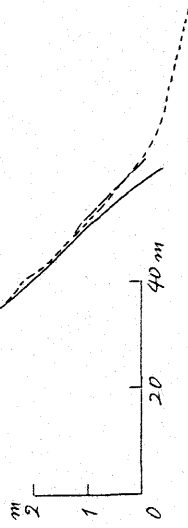
C-200-15

C-200-16



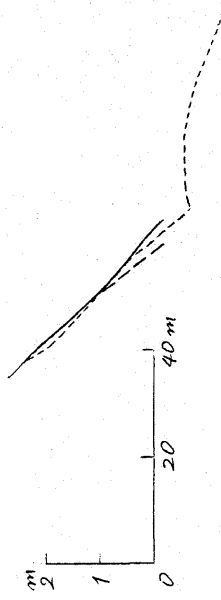
— 18/4/1982
- - - 24/4
- · - 1/5

▽



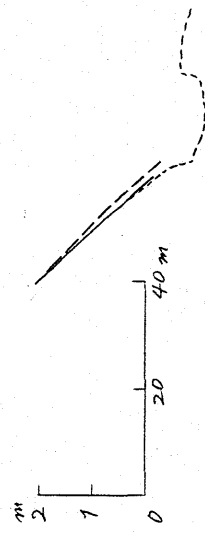
— 1/5
- - - 10/5
- · - 17/5

▽



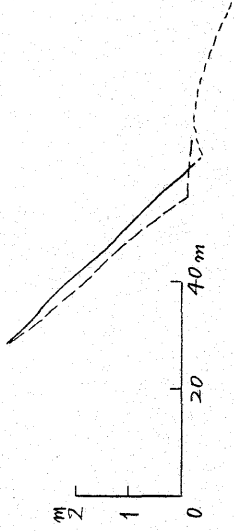
— 17/5
- - - 24/5
- · - 31/5

▽



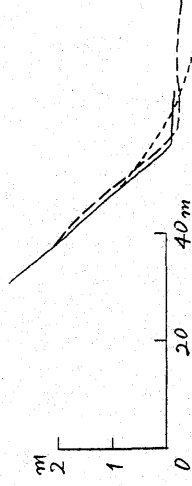
— 31/5
- - - 6/6
- · - 15/6

▽



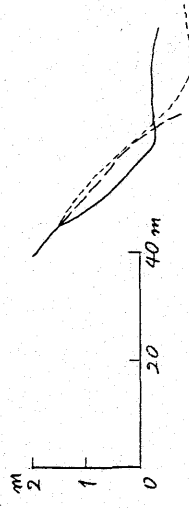
— 15/6/1982
- - - 21/6
- · - 29/6

▽



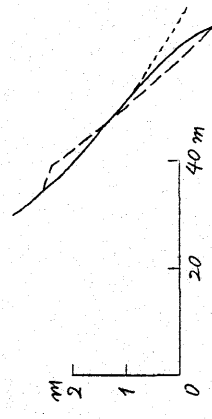
— 29/6
- - - 5/7
- · - 12/7

▽



— 12/7
- - - 20/7
- · - 27/7

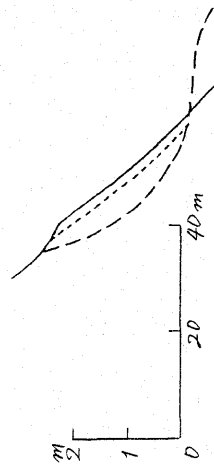
▽



— 27/7
- - - 2/8
- · - 9/8

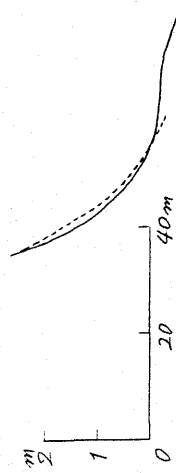
▽

C-200-17



— 9/8/1982
 --- 15/8
 - - - 23/8

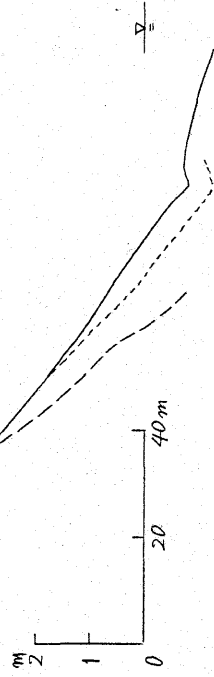
\bar{V}



— 23/8
 --- 30/8

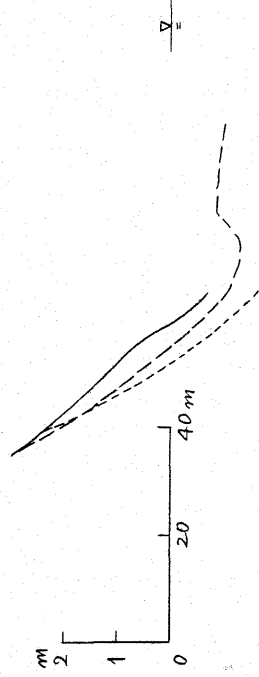
\bar{V}

C-250-1



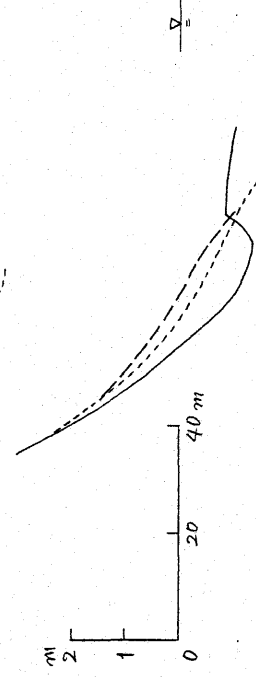
— 28/8/1980
 --- 30/8
 - - - 2/9

\bar{V}



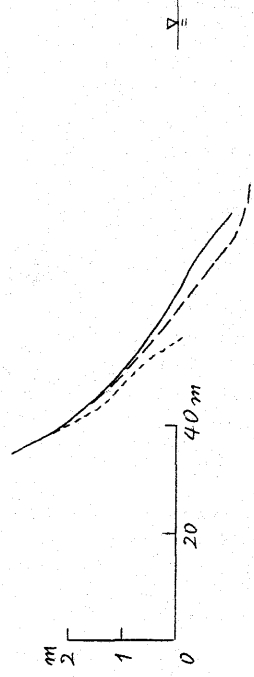
— 2/9
 --- 6/9
 - - - 9/9

\bar{V}



— 9/9
 --- 12/9
 - - - 15/9

\bar{V}

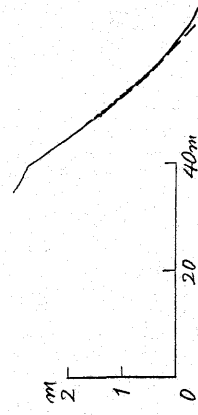
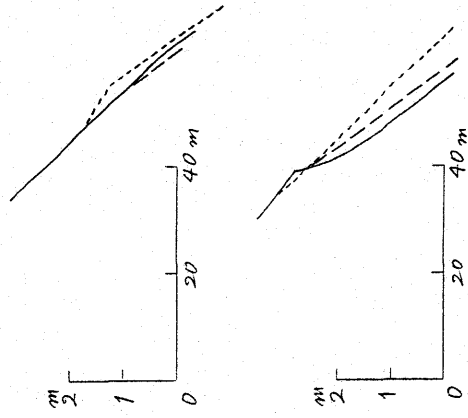
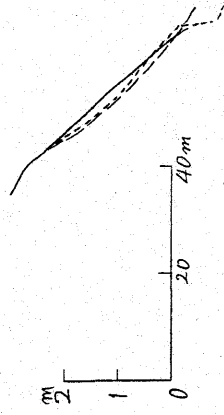
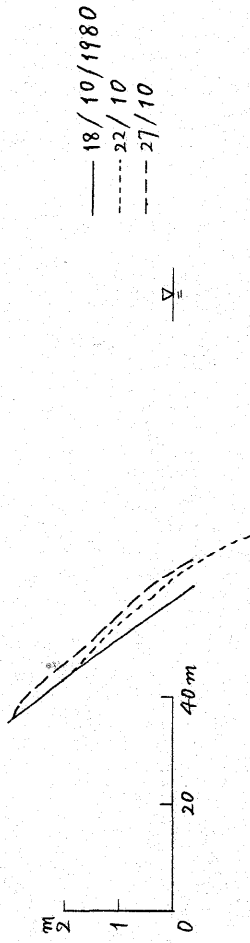
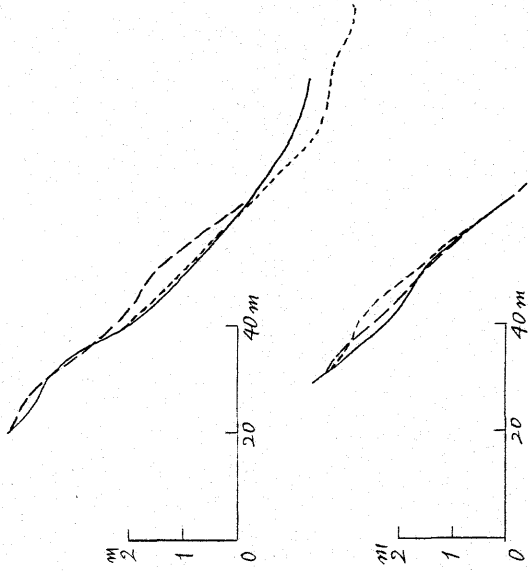


— 15/9
 --- 19/9
 - - - 22/9

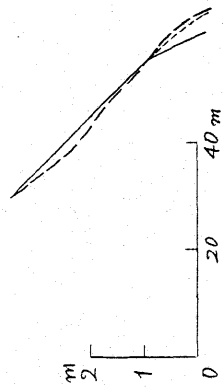
\bar{V}

C - 250 - 2

C - 250 - 3

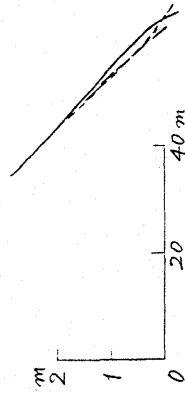


C-250-4



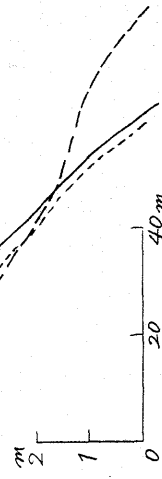
— 26/11/1980
- - - 1/12
- · - 8/12

\bar{V}



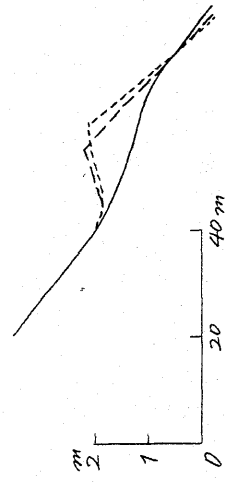
— 8/12
- - - 15/12
- · - 22/12

\bar{V}



— 22/12
- - - 29/12
- · - 6/1/1981

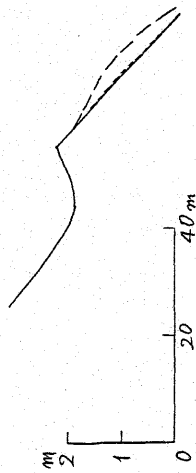
\bar{V}



— 6/1
- - - 12/1
- · - 21/1

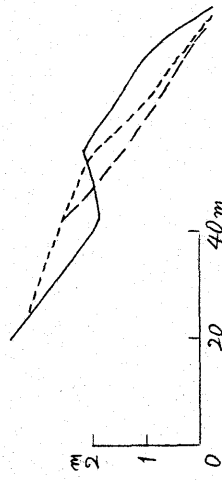
\bar{V}

C-250-5



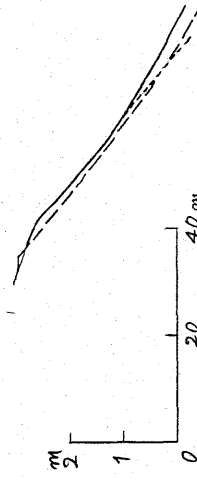
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{V}



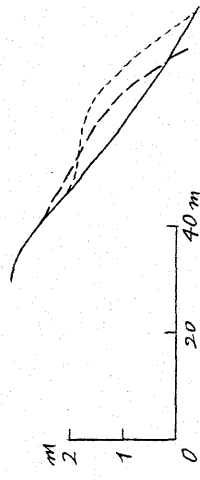
— 1/2
- - - 8/2
- · - 15/2

\bar{V}



— 15/2
- - - 22/2
- · - 28/2

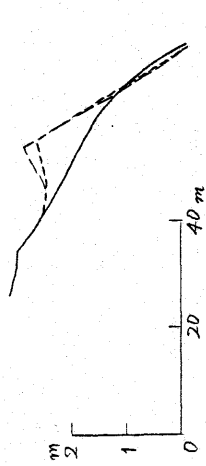
\bar{V}



— 28/2
- - - 8/3
- · - 15/3

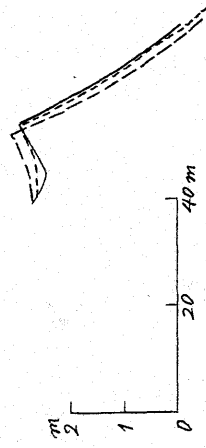
\bar{V}

C-250-6



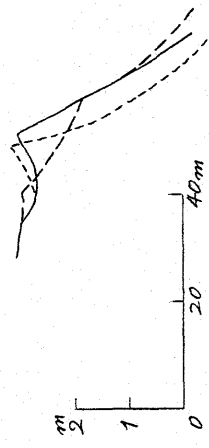
— 15/3/1981
- - - 22/3
- · - 29/3

∇



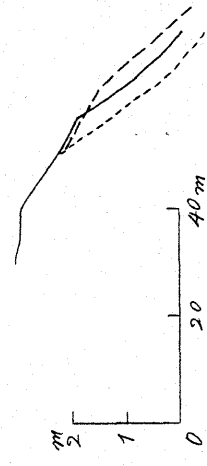
— 29/3
- - - 5/4
- · - 11/4

∇



— 11/4
- - - 19/4
- · - 26/4

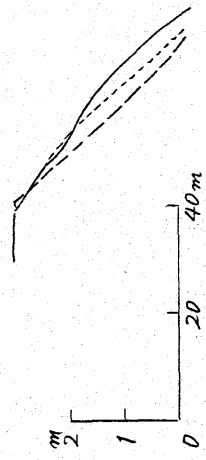
∇



— 26/4
- - - 3/5
- · - 11/5

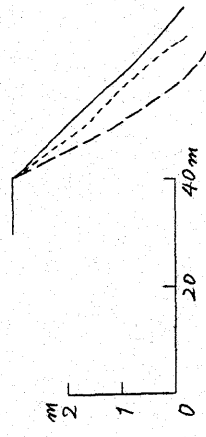
∇

C-250-7



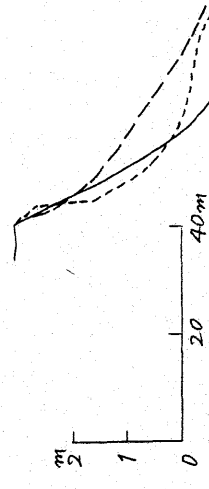
— 11/5/1981
- - - 17/5
- · - 24/5

∇



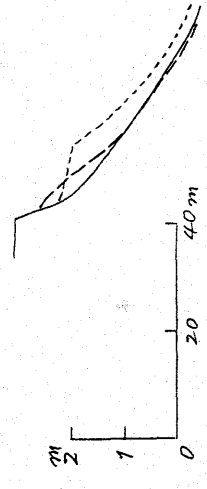
— 24/5
- - - 1/6
- · - 7/6

∇



— 7/6
- - - 15/6
- · - 21/6

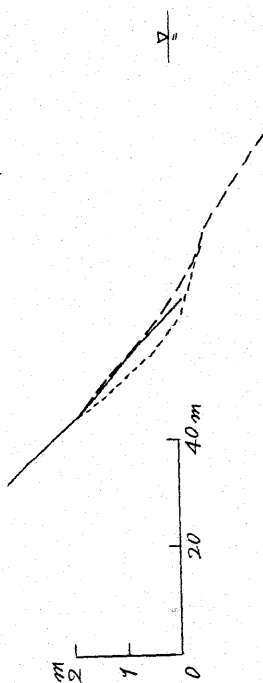
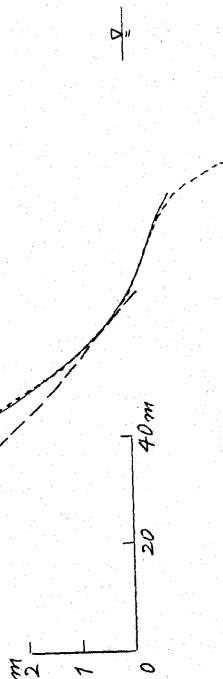
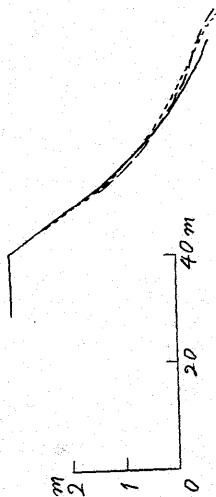
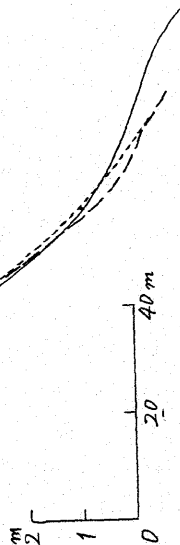
∇



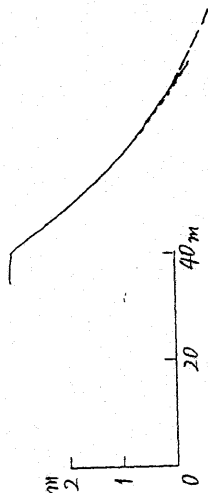
— 21/6
- - - 28/6
- · - 6/7

∇

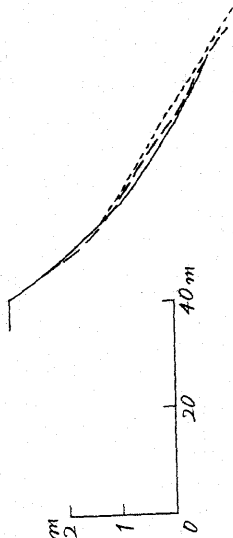
C-250-9



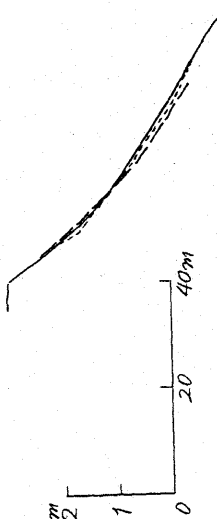
— 6/7/1981
--- 9/7
- - - 13/7



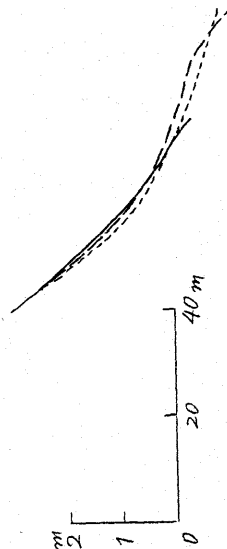
— 13/7
--- 16/7
- - - 20/7



— 20/7
--- 23/7
- - - 27/7

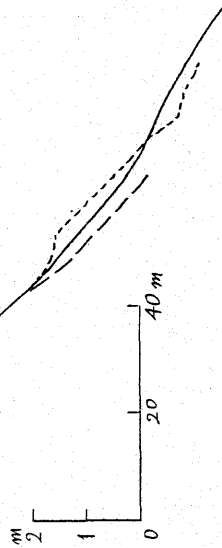


— 27/7
--- 30/7
- - - 3/8



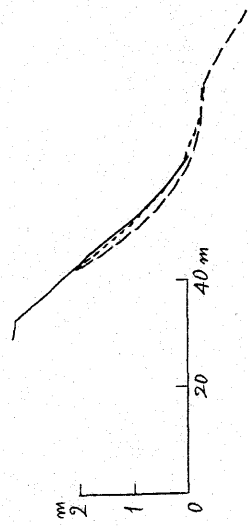
C-250-10

C-250-11



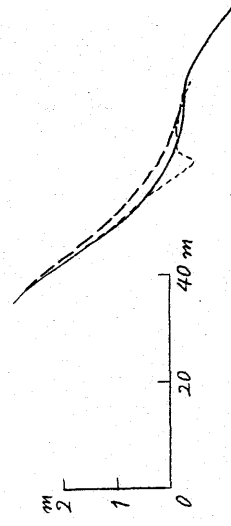
— 31/8/1981
- - - 3/9
- . - 7/9

$\bar{y} =$



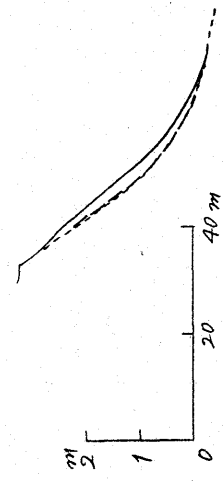
— 7/9
- - - 10/9
- . - 15/9

$\bar{y} =$



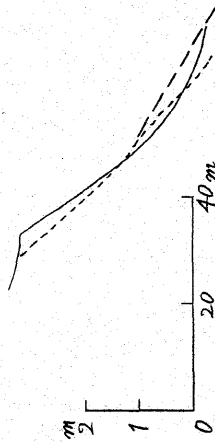
— 15/9
- - - 19/9
- . - 24/9

$\bar{y} =$



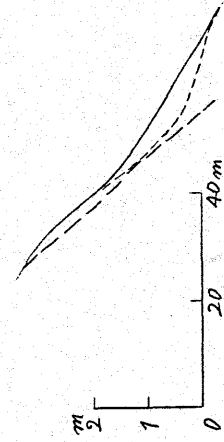
— 24/9
- - - 28/9
- . - 1/10

$\bar{y} =$



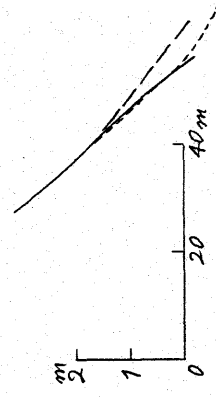
— 1/10/1981
- - - 6/10
- . - 12/10

$\bar{y} =$



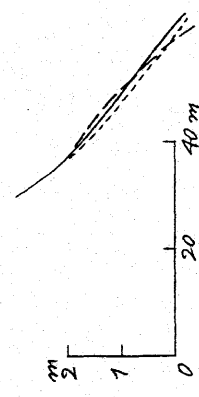
— 12/10
- - - 17/10
- . - 24/10

$\bar{y} =$



— 24/10
- - - 28/10
- . - 2/11

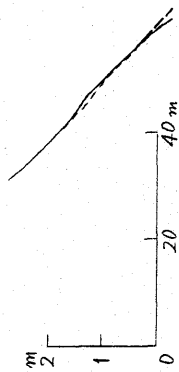
$\bar{y} =$



— 2/11
- - - 18/11
- . - 15/11

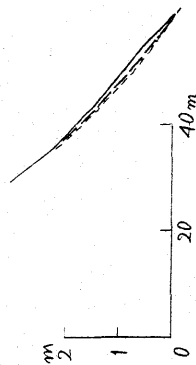
$\bar{y} =$

C-250-12



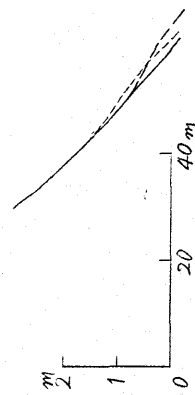
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

\bar{V}



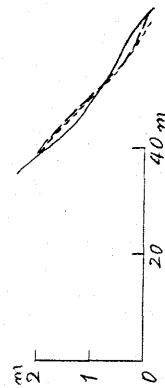
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

\bar{V}



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

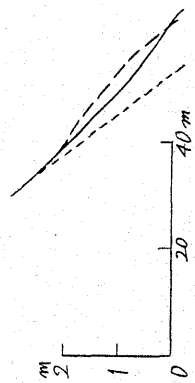
\bar{V}



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

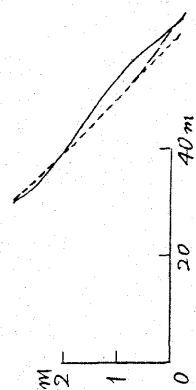
\bar{V}

C-250-13



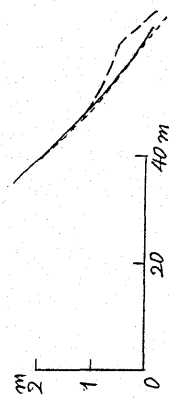
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

\bar{V}



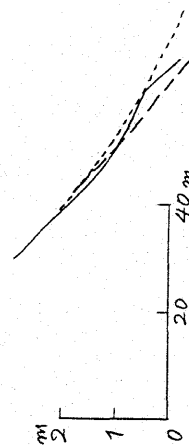
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

\bar{V}



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

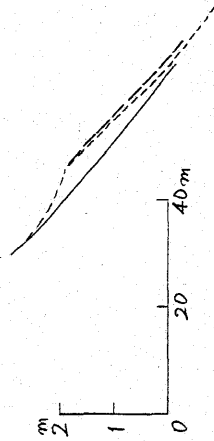
\bar{V}



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

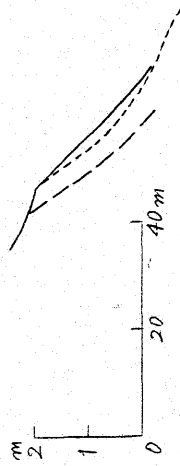
\bar{V}

C-250-14



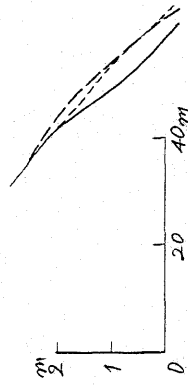
— 21/2/1982
 --- 28/2
 - - - 6/3

∇



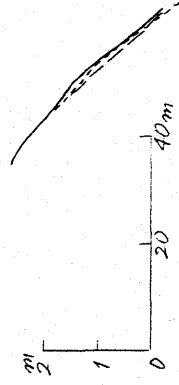
— 6/3
 --- 13/3
 - - - 18/3

∇



— 18/3
 --- 24/3
 - - - 5/4

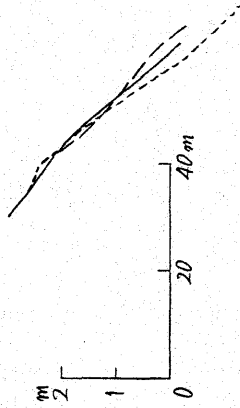
∇



— 5/4
 --- 11/4
 - - - 18/4

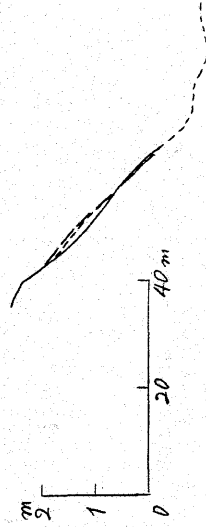
∇

C-250-15



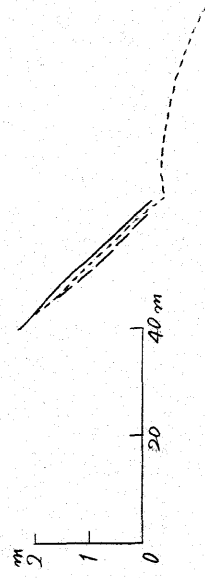
— 18/4/1982
 --- 25/4
 - - - 1/5

∇



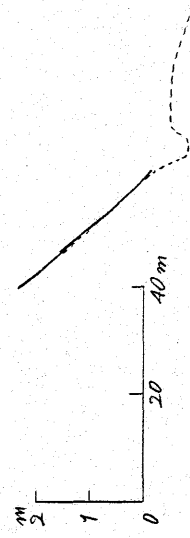
— 1/5
 --- 10/5
 - - - 17/5

∇



— 17/5
 --- 24/5
 - - - 31/5

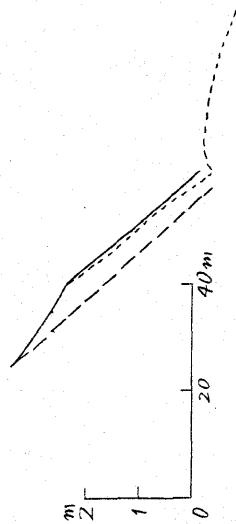
∇



— 31/5
 --- 6/6
 - - - 15/6

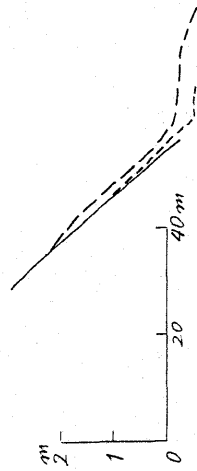
∇

C-250-16



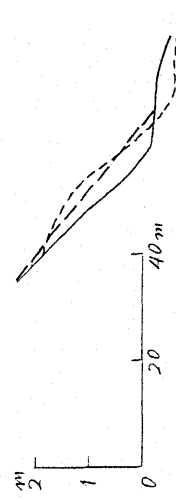
— 15/6/1982
- - - 21/6
- · - 29/6

∇



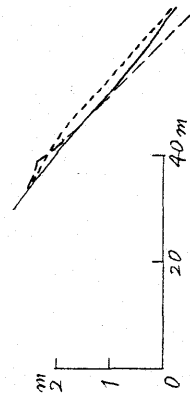
— 29/6
- - - 5/7
- · - 12/7

∇



— 12/7
- - - 20/7
- · - 27/7

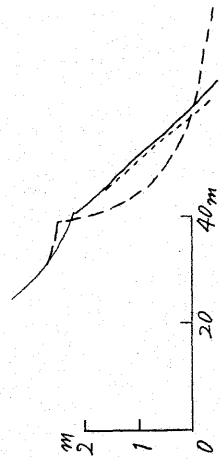
∇



— 27/7
- - - 2/8
- · - 9/8

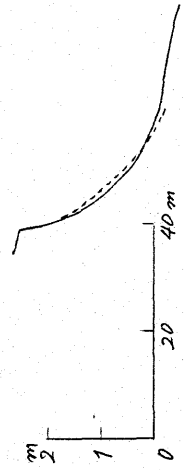
∇

C-250-17



— 9/8/1982
- - - 15/8
- · - 23/8

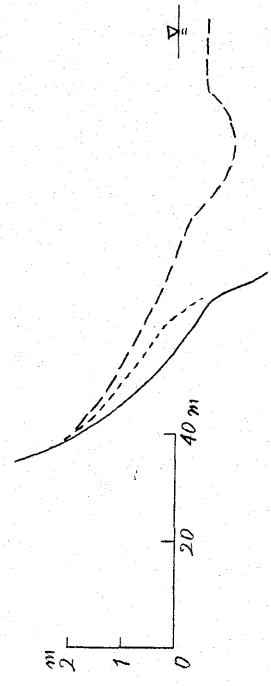
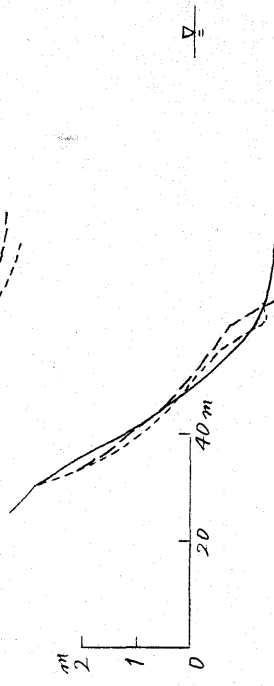
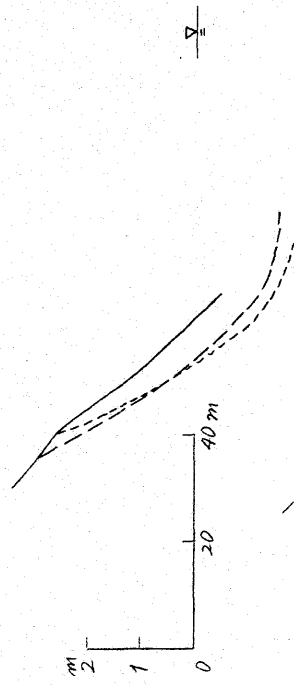
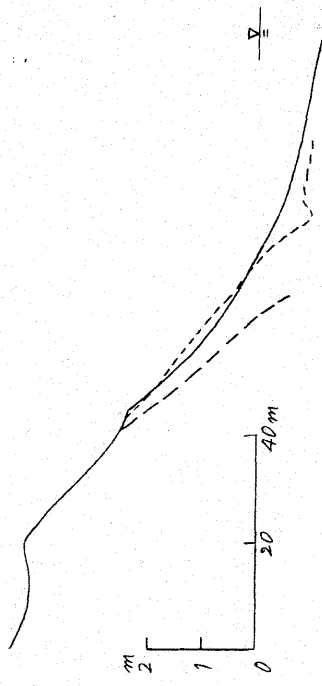
∇



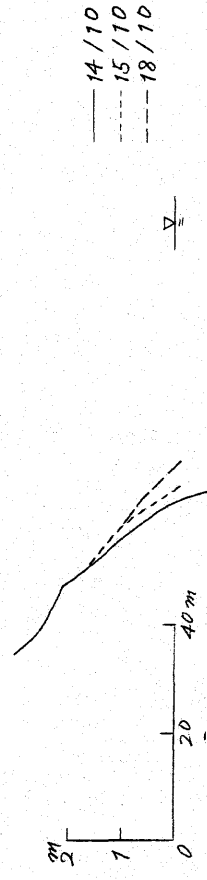
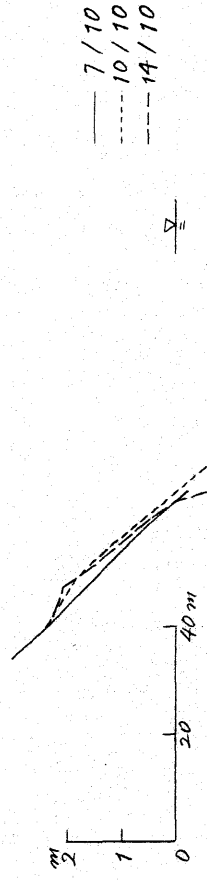
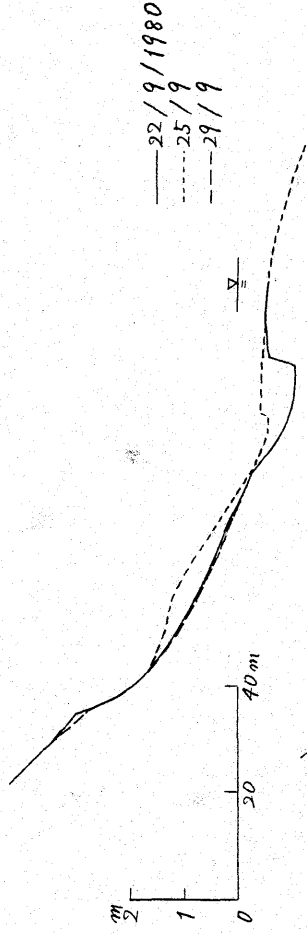
— 23/8
- - - 30/8

∇

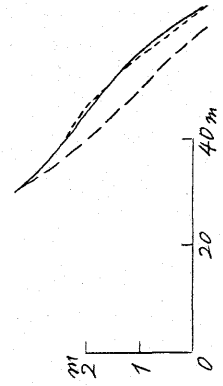
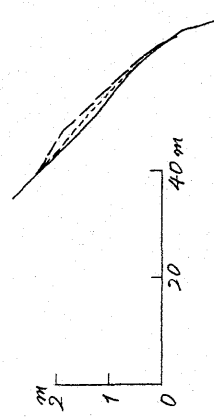
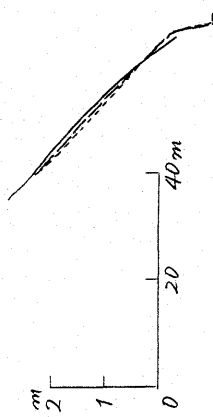
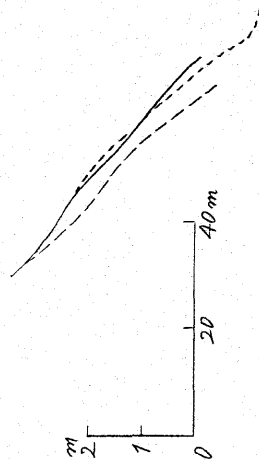
C-300-1



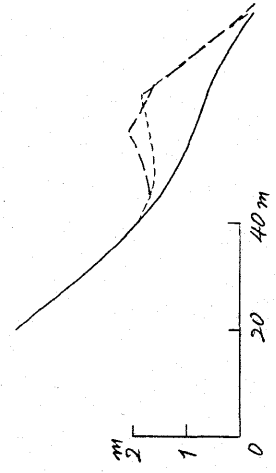
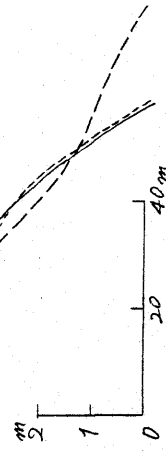
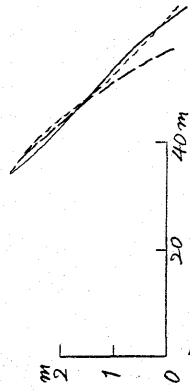
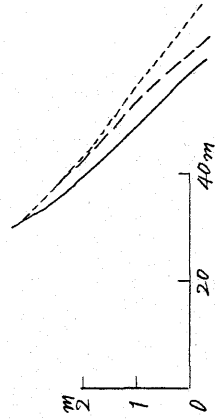
C-300-2



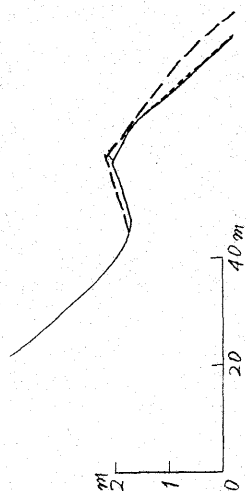
C-300-3



C-300-4

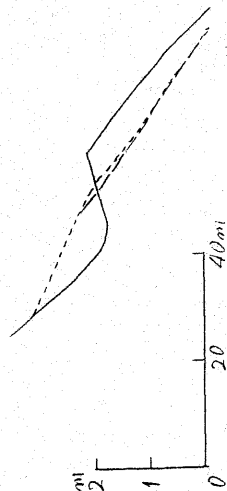


C-300-5



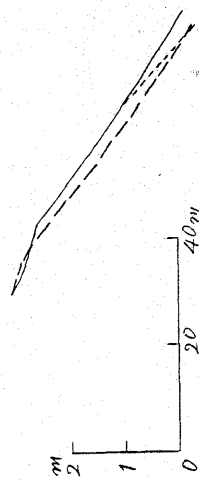
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{y}



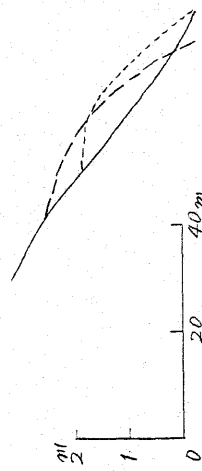
— 1/2
- - - 8/2
- · - 15/2

\bar{y}



— 15/2
- - - 22/2
- · - 28/2

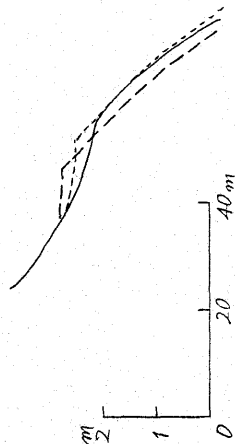
\bar{y}



— 28/2
- - - 8/3
- · - 15/3

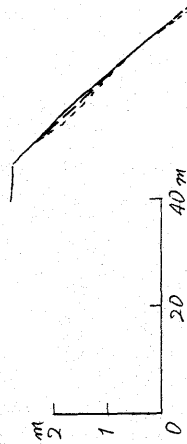
\bar{y}

C-300-6



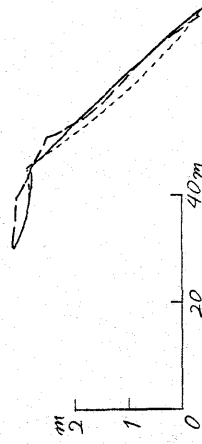
— 15/3/1981
- - - 22/3
- · - 29/3

\bar{y}



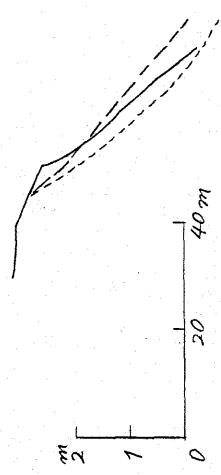
— 29/3
- - - 5/4
- · - 11/4

\bar{y}



— 11/4
- - - 19/4
- · - 26/4

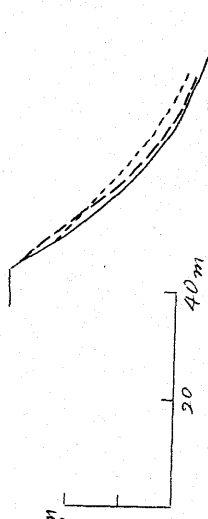
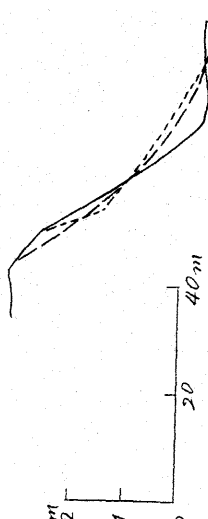
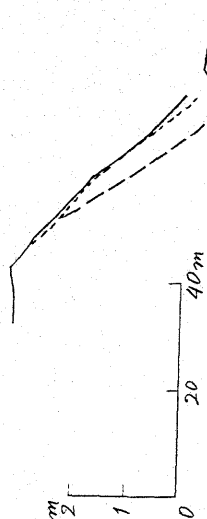
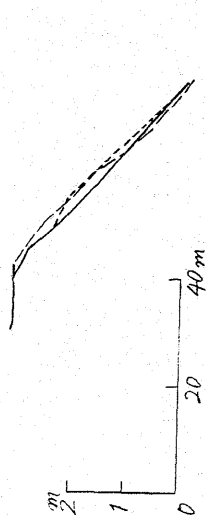
\bar{y}



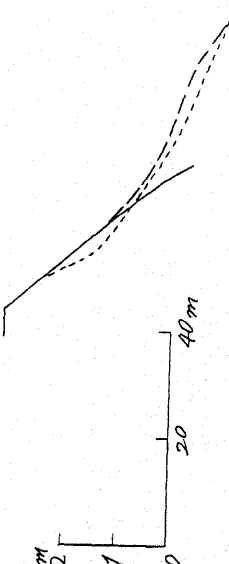
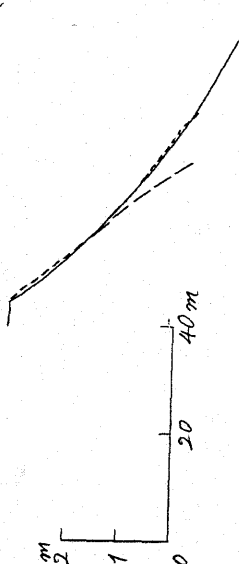
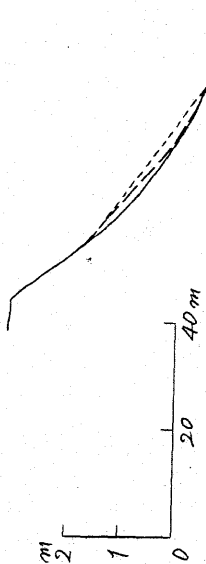
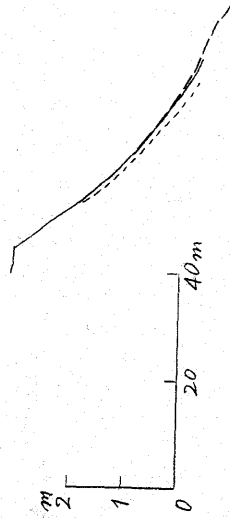
— 26/4
- - - 3/5
- · - 11/5

\bar{y}

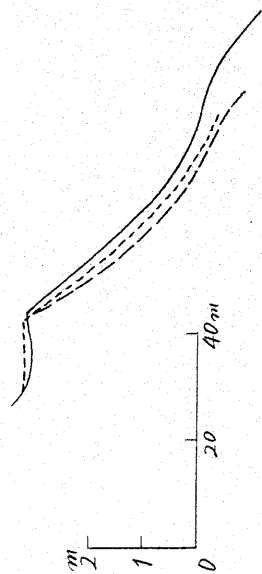
C-300-7



C-300-8

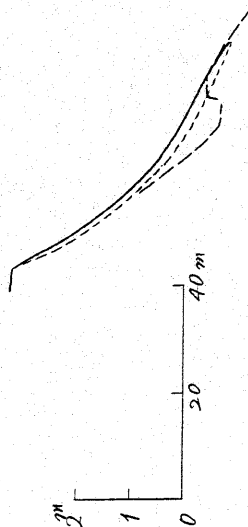


C-300-9



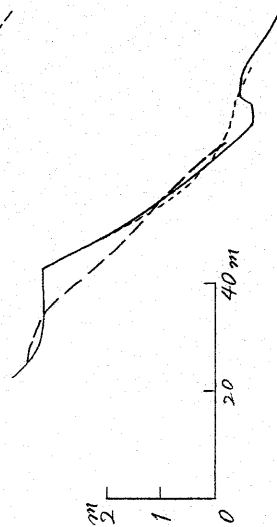
— 3/8/1981
- - - 6/8
- · - 11/8

▽



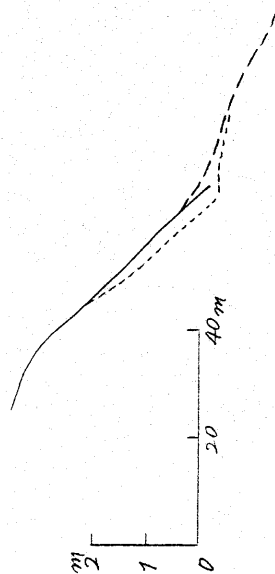
— 11/8
- - - 14/8
- · - 17/8

▽



— 17/8
- - - 19/8
- · - 23/8

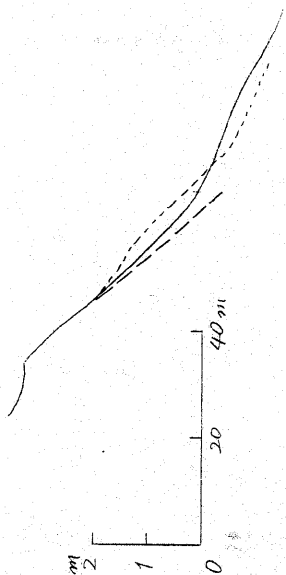
▽



— 23/8
- - - 26/8
- · - 31/8

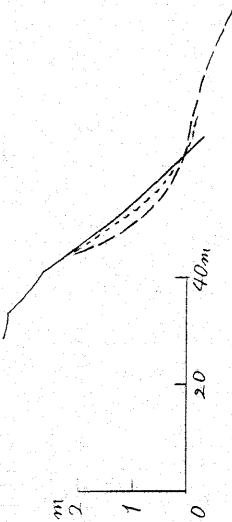
▽

C-300-10



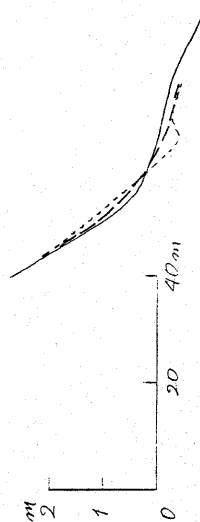
— 31/8/1981
- - - 3/9
- · - 7/9

▽



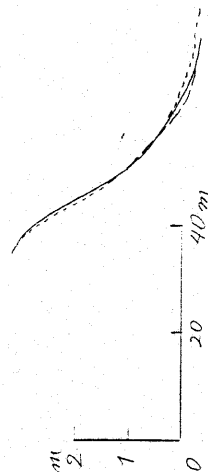
— 7/9
- - - 10/9
- · - 15/9

▽



— 15/9
- - - 19/9
- · - 24/9

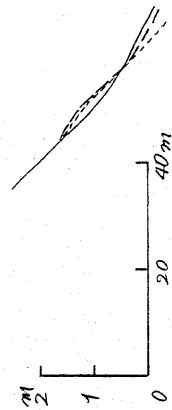
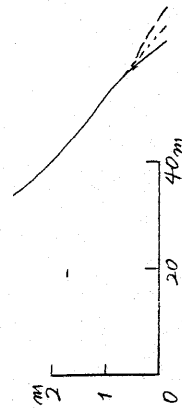
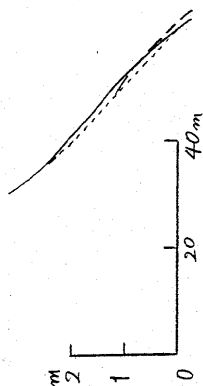
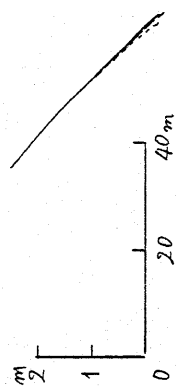
▽



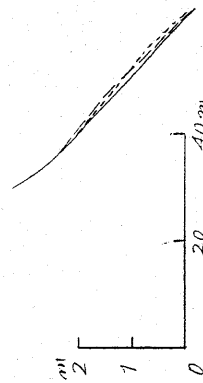
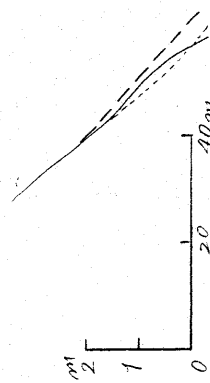
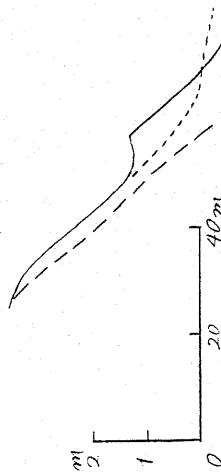
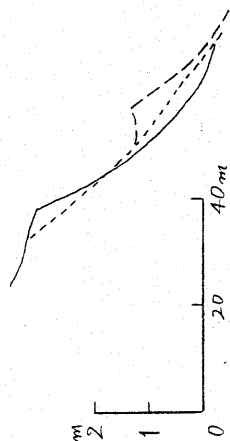
— 24/9
- - - 28/9
- · - 1/10

▽

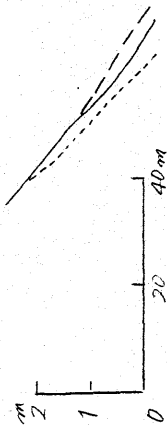
C-300-12



C-300-11

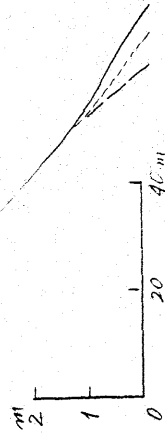


C-300-13



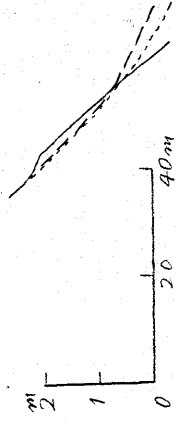
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

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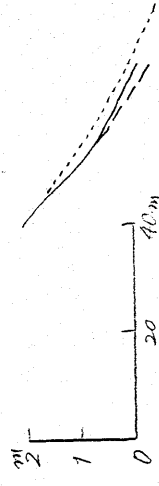
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

\bar{V}



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

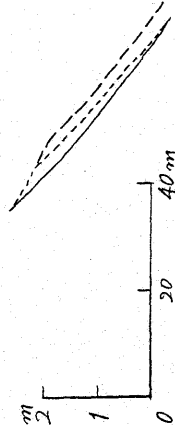
\bar{V}



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

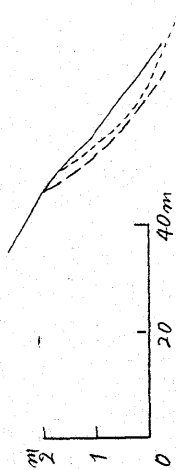
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C-300-14



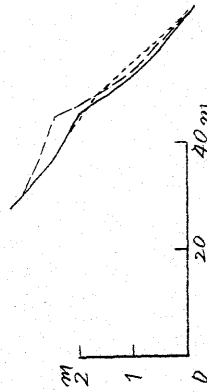
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

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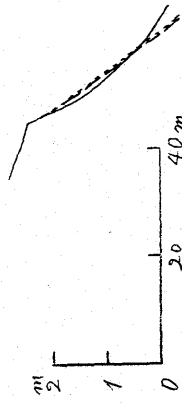
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

\bar{V}



— 18 / 3
 --- 24 / 3
 - - - 5 / 4

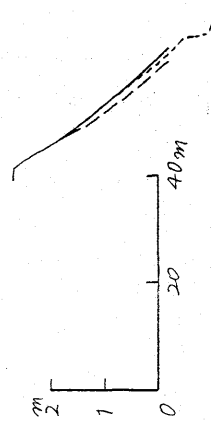
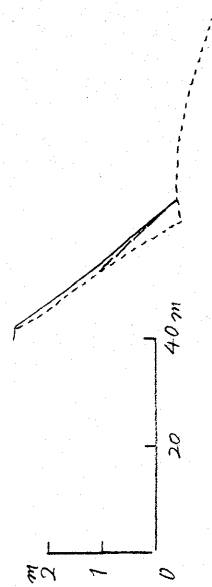
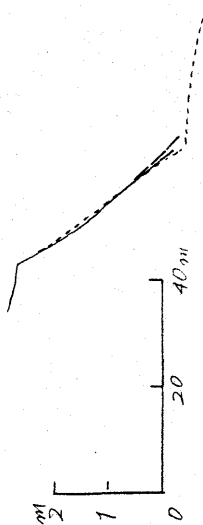
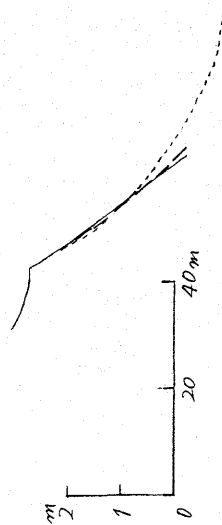
\bar{V}



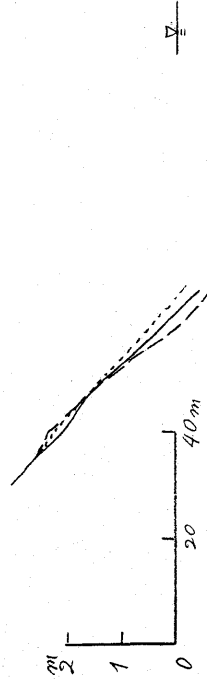
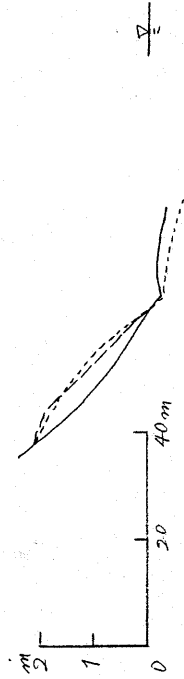
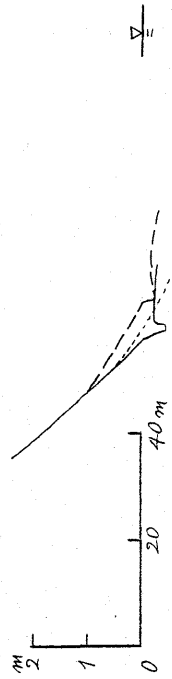
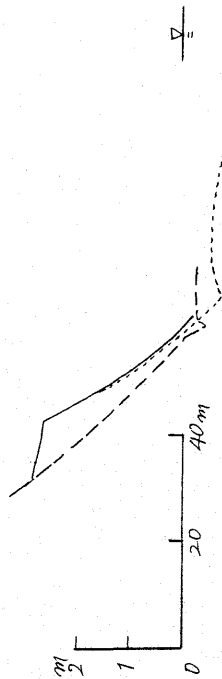
— 5 / 4
 --- 11 / 4
 - - - 18 / 4

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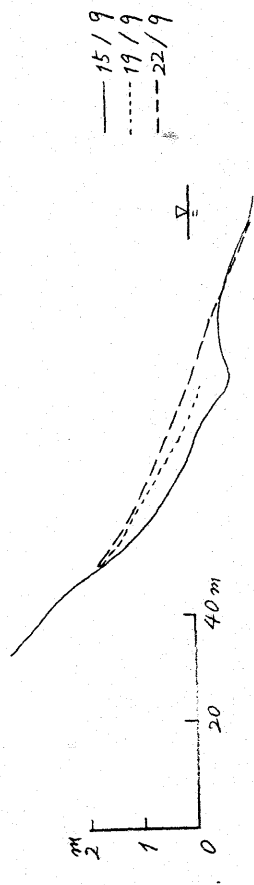
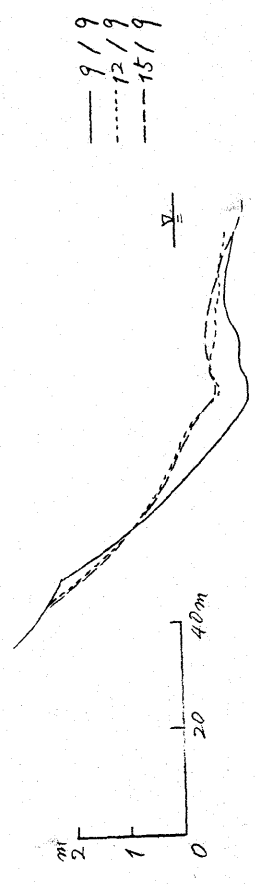
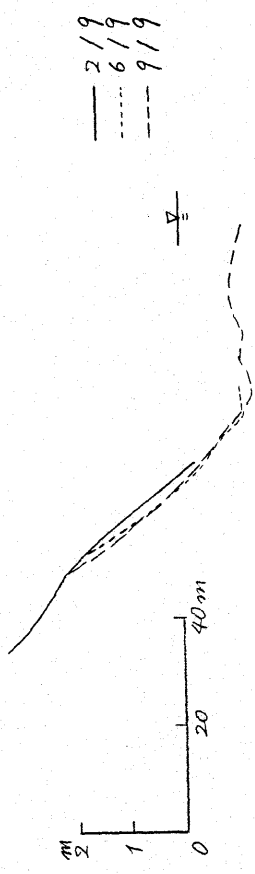
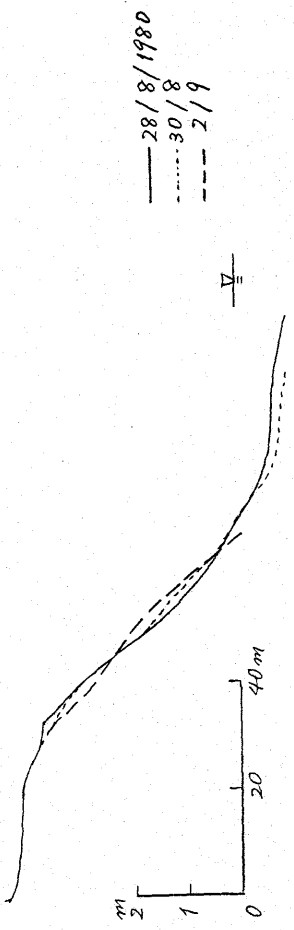
C-300-15



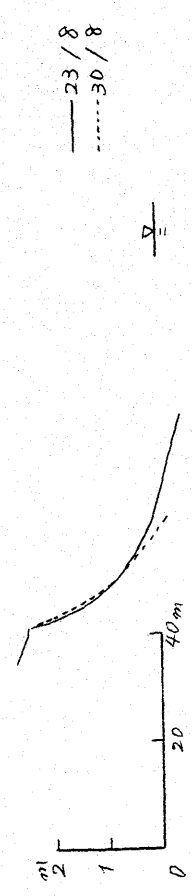
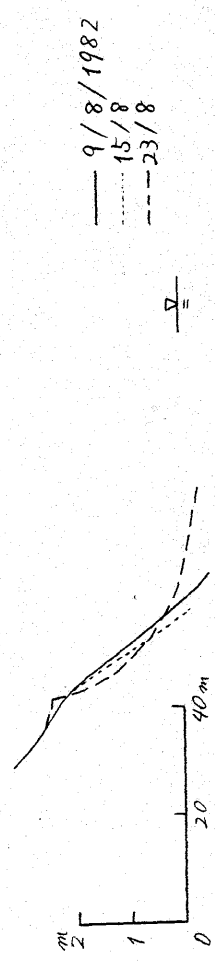
C-300-16



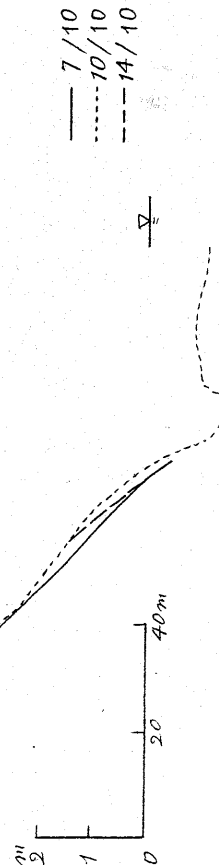
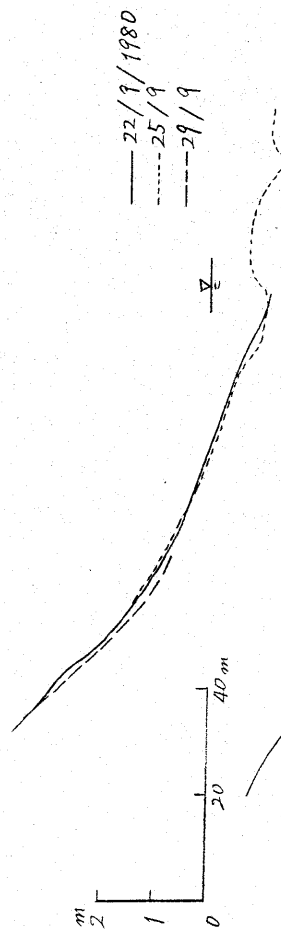
C-350-1



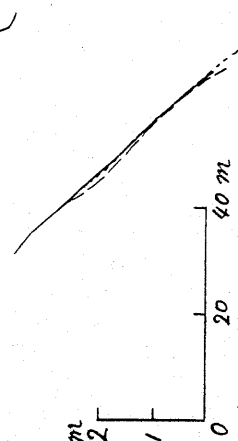
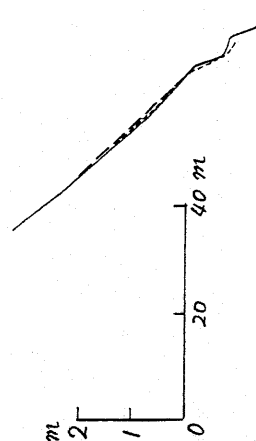
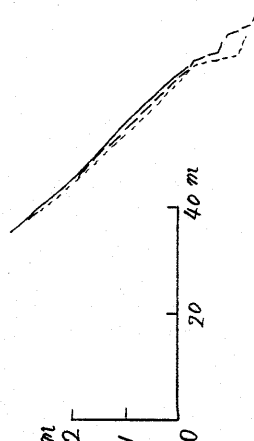
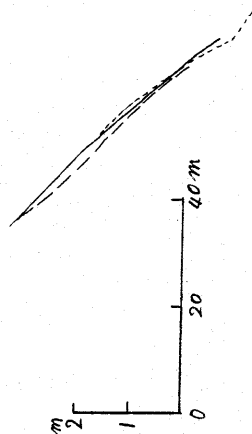
C-300-17



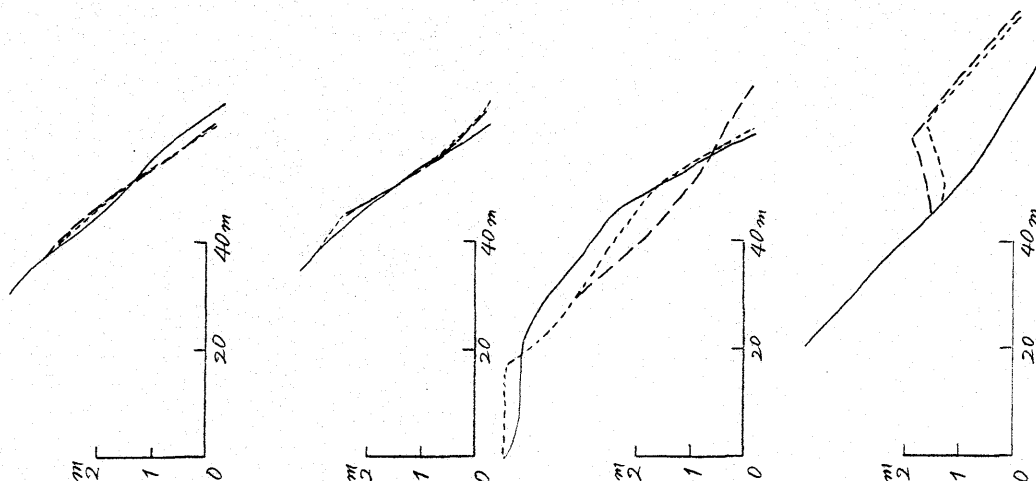
C-350-2



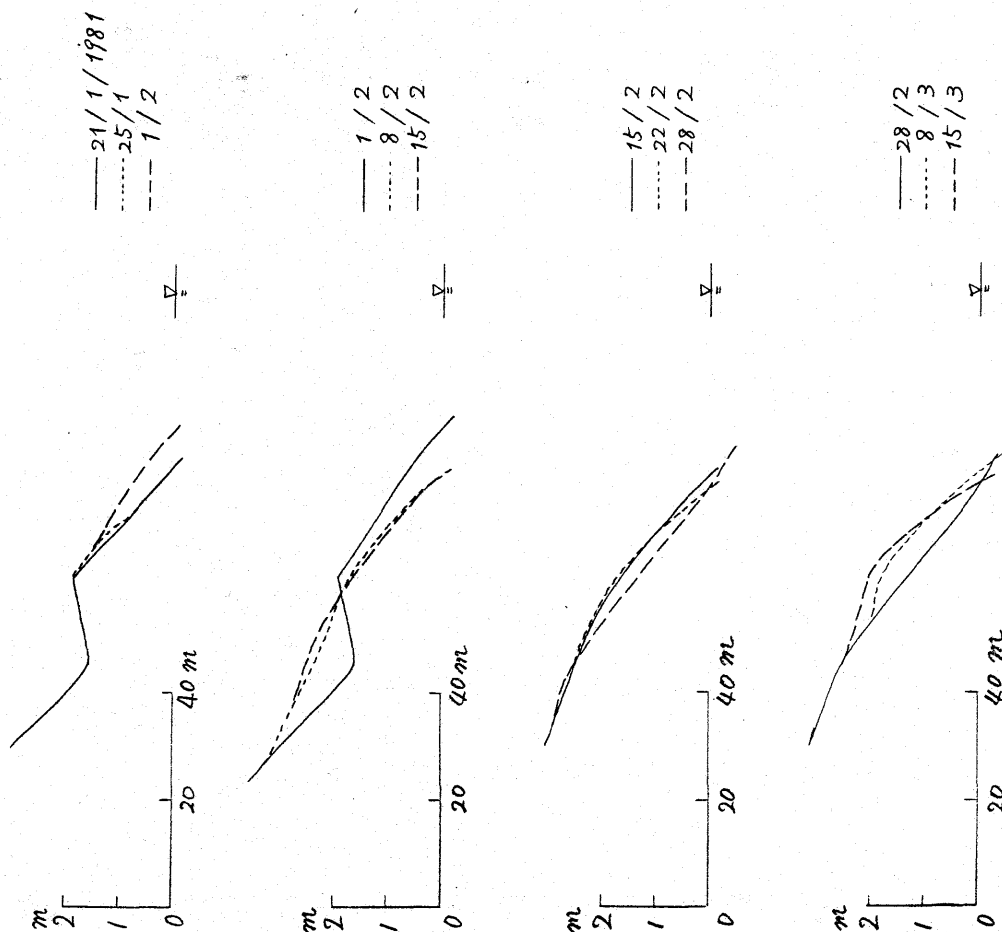
C-350-3



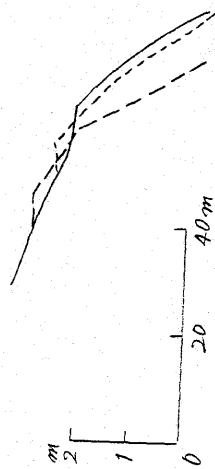
C-350-4



C-350-5

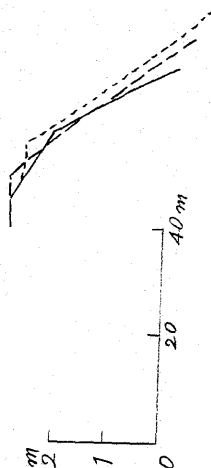


C-350-6



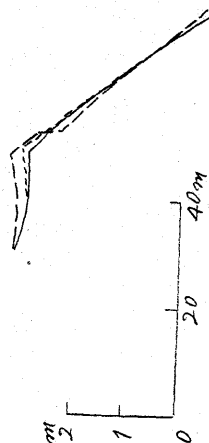
— 15/3/1981
 --- 22/3
 - - - 29/3

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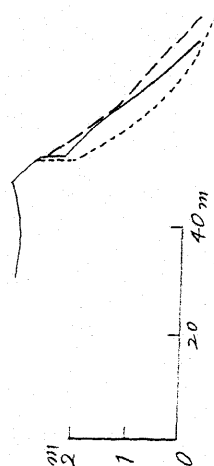
— 29/3
 --- 5/4
 - - - 11/4

\bar{V}



— 11/4
 --- 19/4
 - - - 26/4

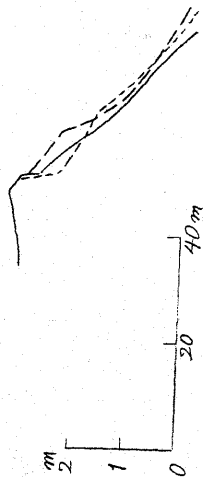
\bar{V}



— 26/4
 --- 3/5
 - - - 11/5

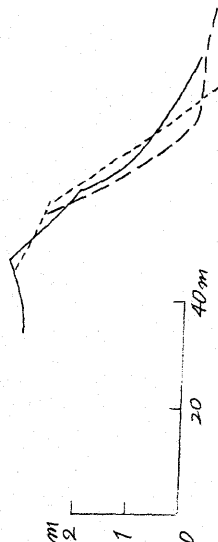
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C-350-7



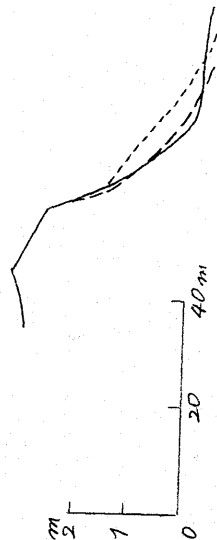
— 11/5/1981
 --- 17/5
 - - - 24/5

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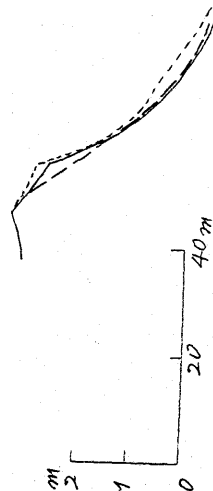
— 24/5
 --- 1/6
 - - - 7/6

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— 7/6
 --- 15/6
 - - - 21/6

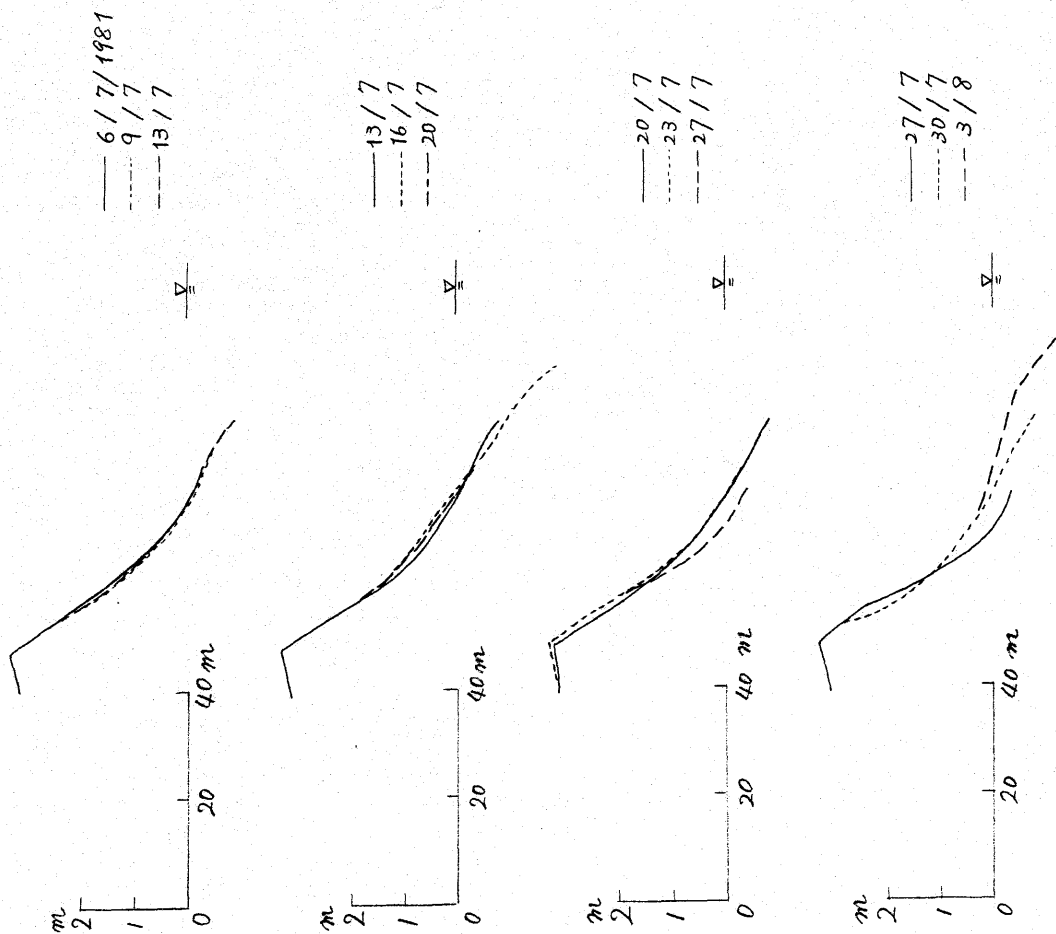
\bar{V}



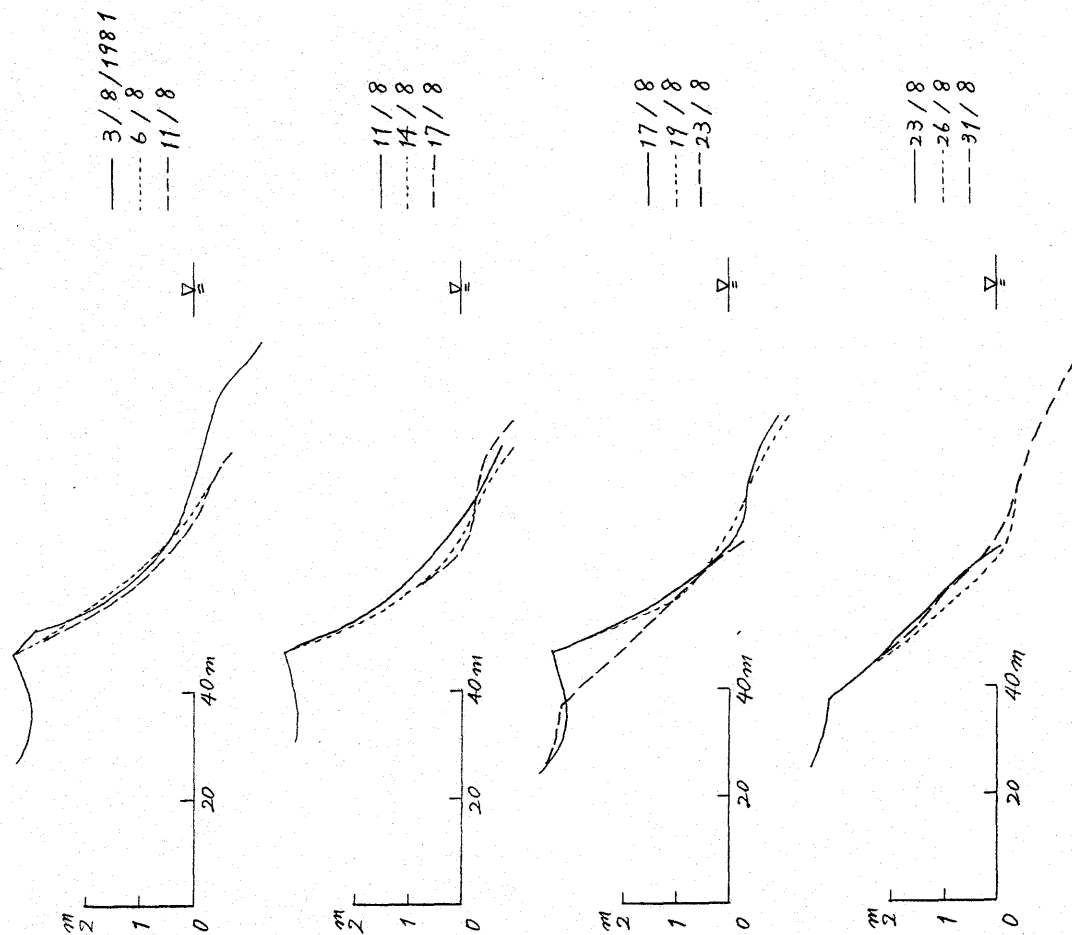
— 21/6
 --- 28/6
 - - - 6/7

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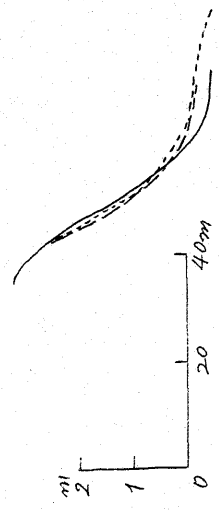
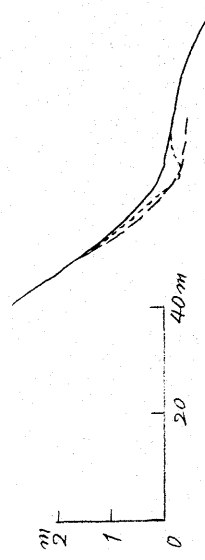
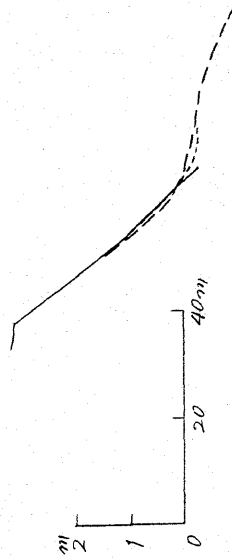
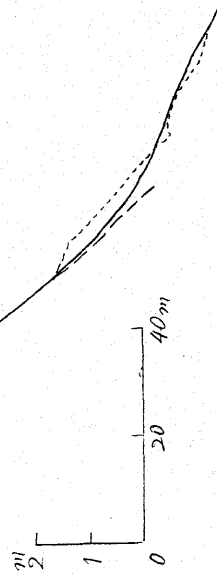
C-350-8



C-350-9



C-350-10



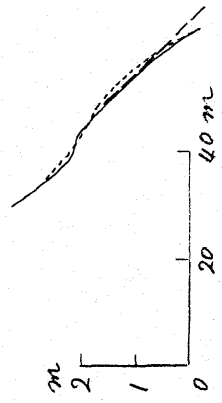
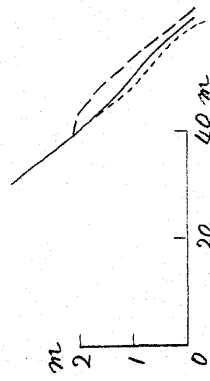
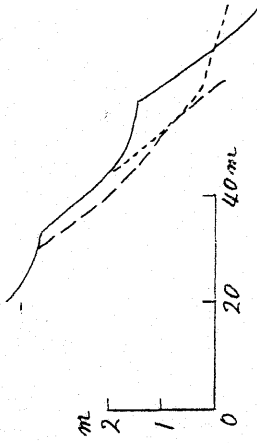
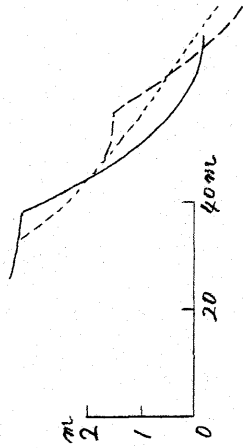
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C-350-11



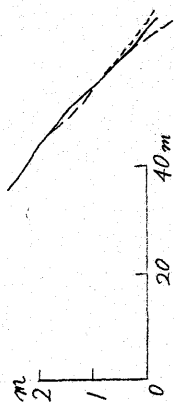
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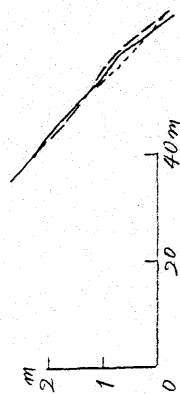
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C-350-12



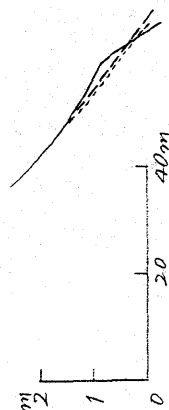
— 15/11/1981
 - - - 19/11
 - · - 23/11

—



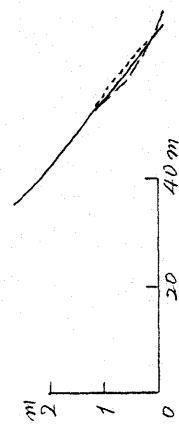
— 23/11
 - - - 27/11
 - · - 5/12

—



— 5/12
 - - - 12/12
 - · - 15/12

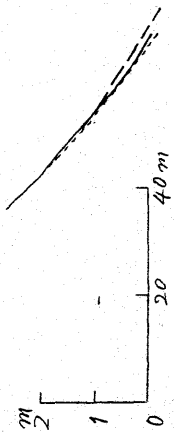
—



— 15/12
 - - - 22/12
 - · - 29/12

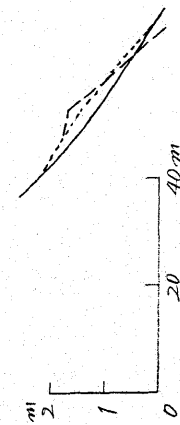
—

C-350-13



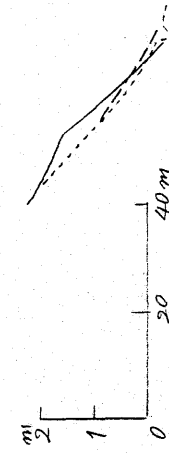
— 29/12/1981
 - - - 5/1/1982
 - · - 10/1

—



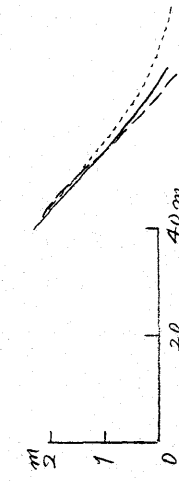
— 10/1
 - - - 17/1
 - · - 24/1

—



— 24/1
 - - - 31/1
 - · - 7/2

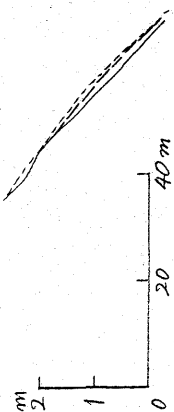
—



— 7/2
 - - - 14/2
 - · - 21/2

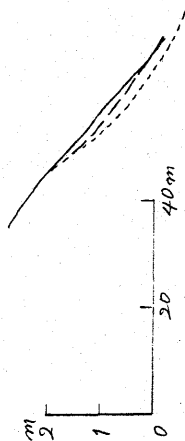
—

C-350-14



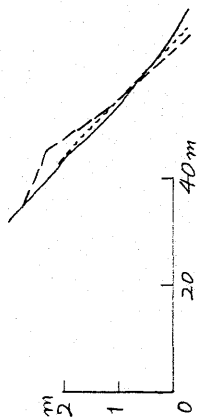
— 21/2/1982
 --- 28/2
 - - - 6/3

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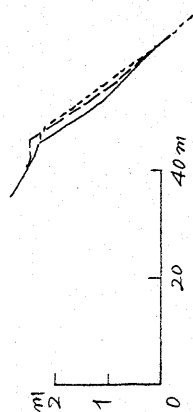
— 6/3
 --- 13/3
 - - - 18/3

\bar{V}



— 18/3
 --- 24/3
 - - - 5/4

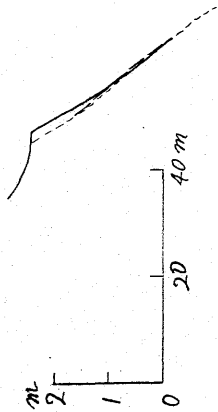
\bar{V}



— 5/4
 --- 11/4
 - - - 18/4

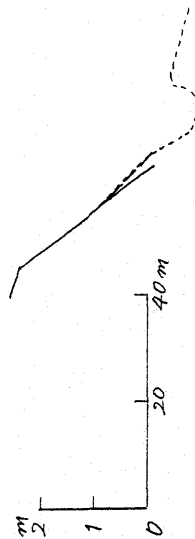
\bar{V}

C-350-15



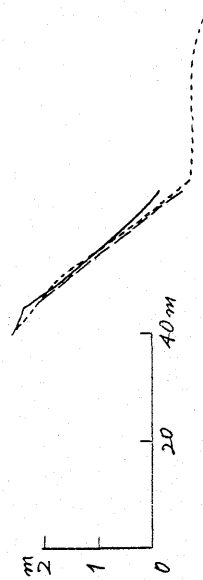
— 18/4/1981
 --- 25/4
 - - - 1/5

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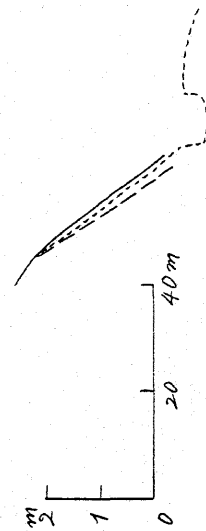
— 1/5
 --- 10/5
 - - - 17/5

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— 17/5
 --- 24/5
 - - - 31/5

\bar{V}



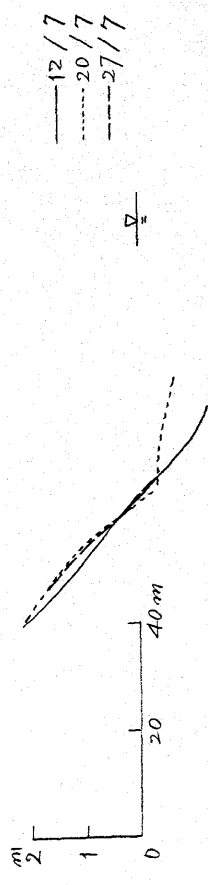
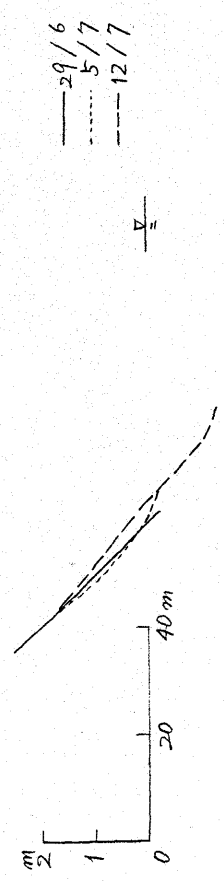
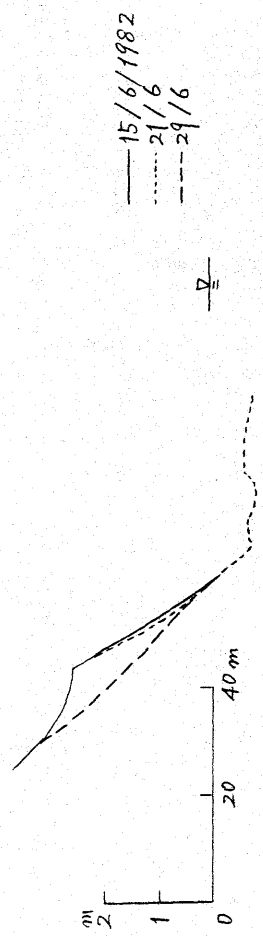
— 31/5
 --- 6/6
 - - - 15/6

\bar{V}

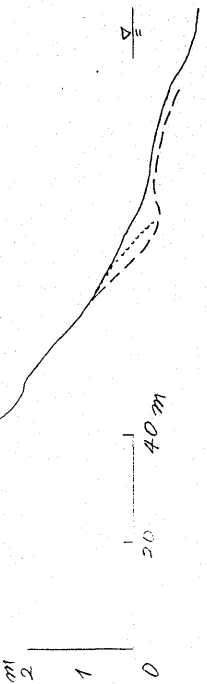
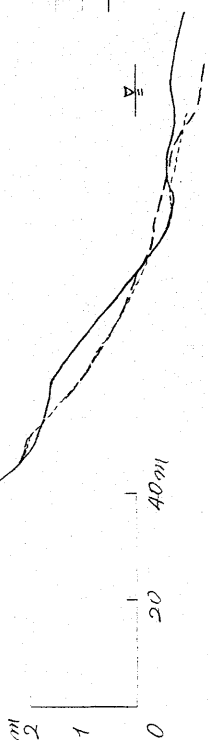
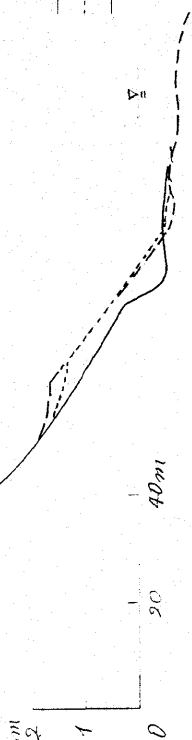
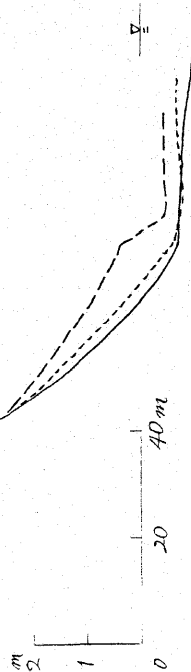
C-350-17



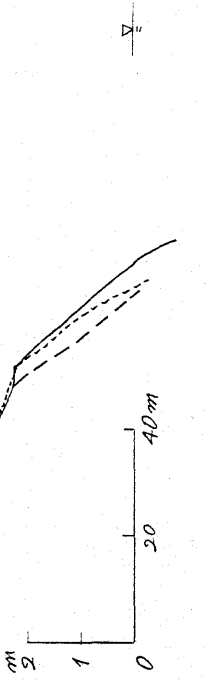
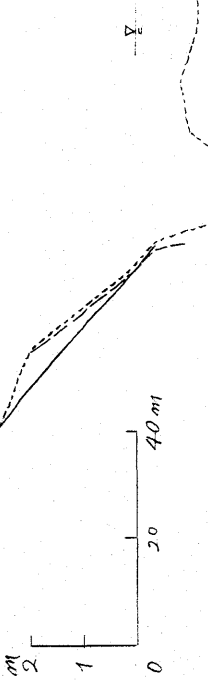
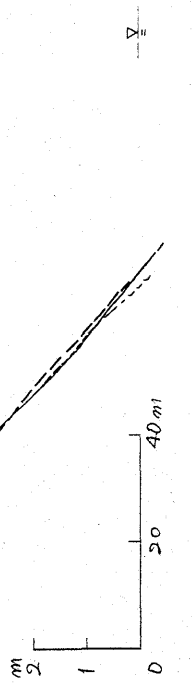
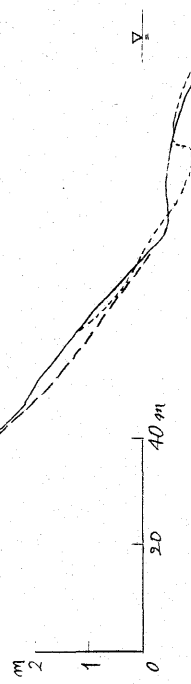
C-350-16



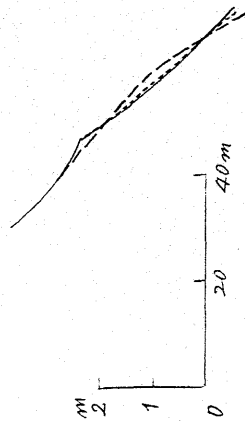
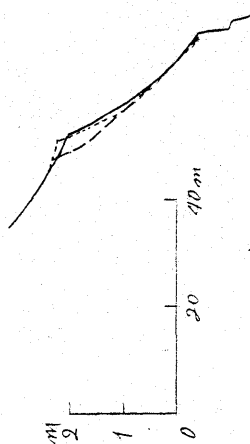
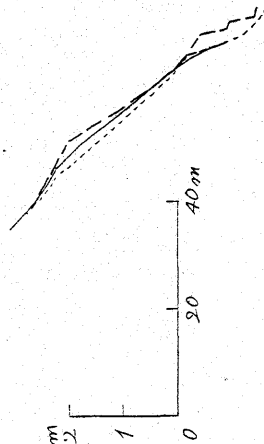
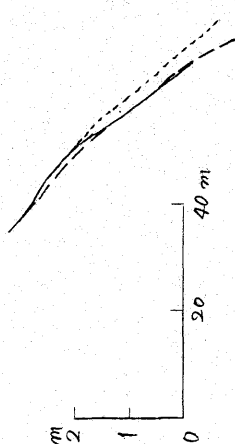
C-400-1



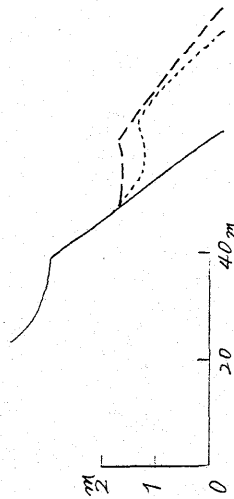
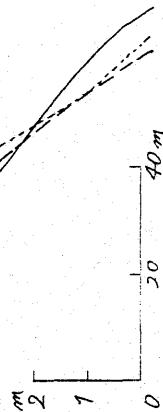
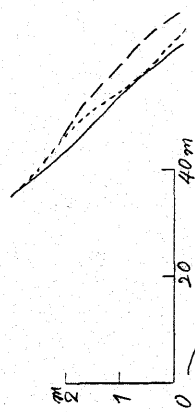
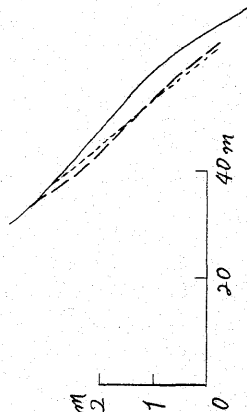
C-400-2



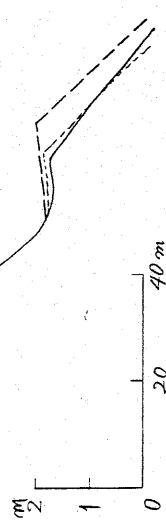
C-400-3



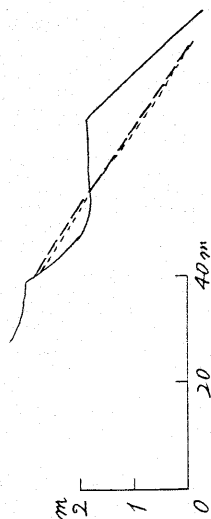
C-400-4



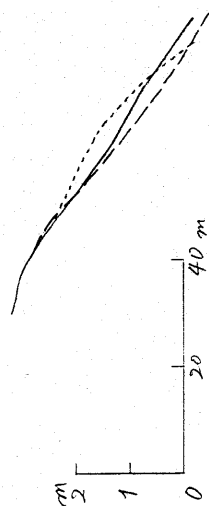
C-400-5



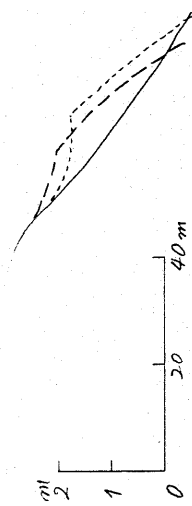
\bar{V}



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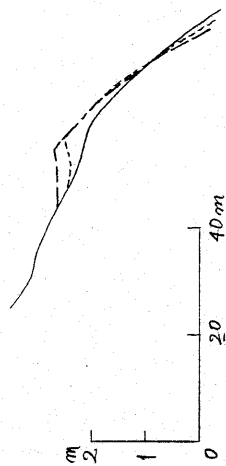


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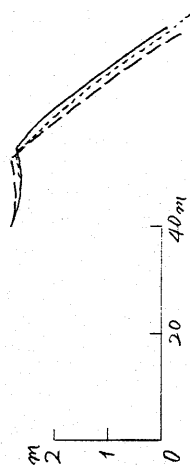


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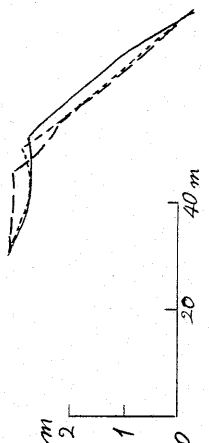
C-400-6



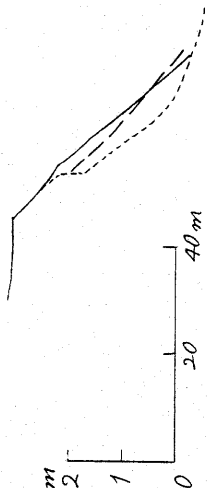
\bar{V}



\bar{V}

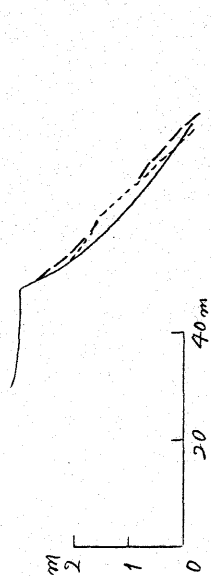


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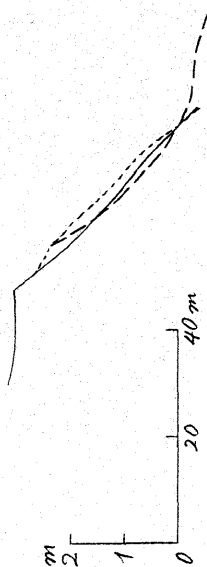
\bar{V}

C-400-7



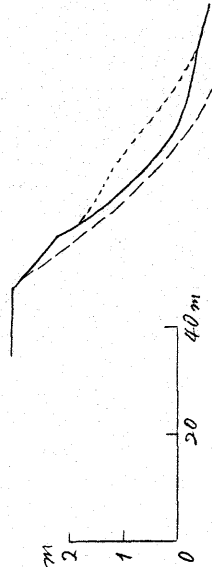
— 11 / 5 / 1981
 --- 17 / 5
 - - - 24 / 5

\bar{y}



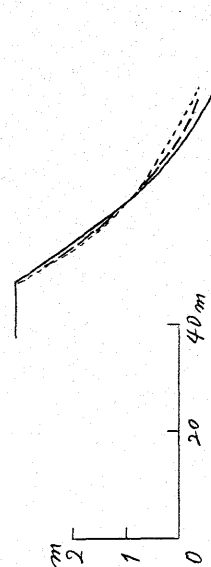
— 24 / 5
 --- 1 / 6
 - - - 7 / 6

\bar{y}



— 7 / 6
 --- 15 / 6
 - - - 21 / 6

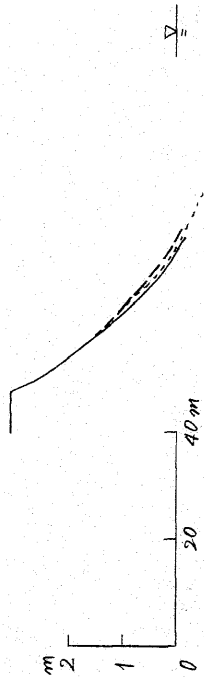
\bar{y}



— 21 / 6
 --- 28 / 6
 - - - 6 / 7

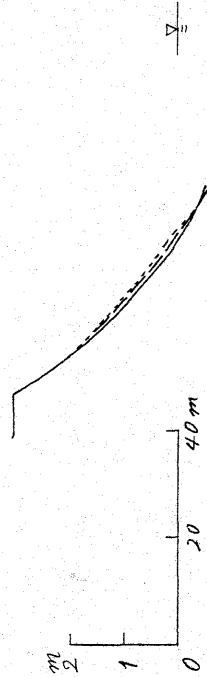
\bar{y}

C-400-8



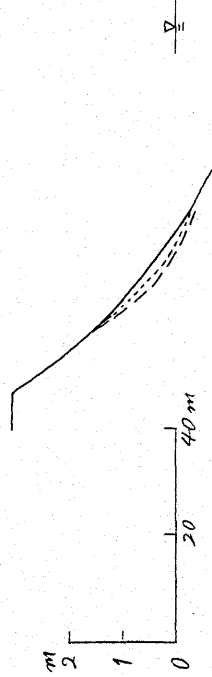
— 6 / 7 / 1981
 --- 9 / 7
 - - - 13 / 7

\bar{y}



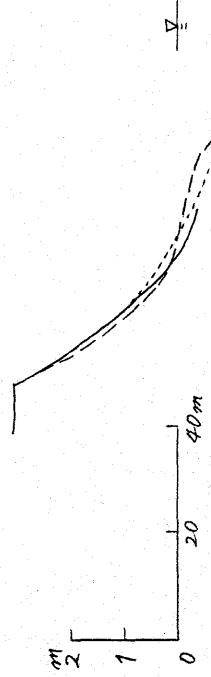
— 13 / 7
 --- 16 / 7
 - - - 20 / 7

\bar{y}



— 20 / 7
 --- 23 / 7
 - - - 27 / 7

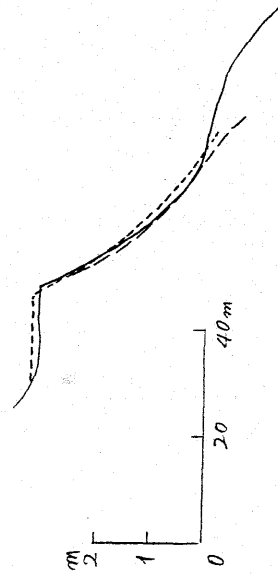
\bar{y}



— 27 / 7
 --- 30 / 7
 - - - 3 / 8

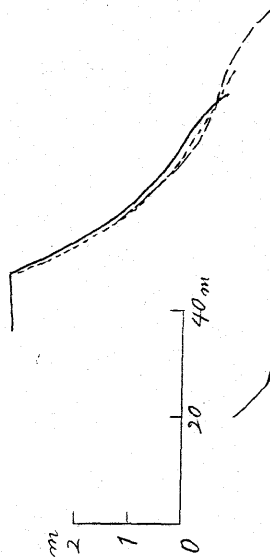
\bar{y}

C-400-9



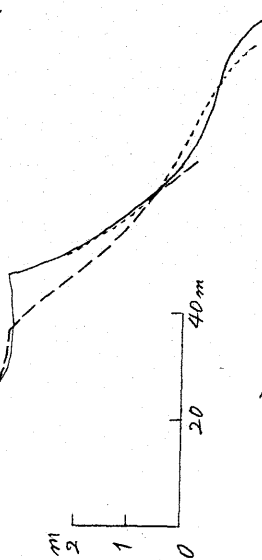
— 3/8/1981
- - - 6/8
- · - 11/8

▽



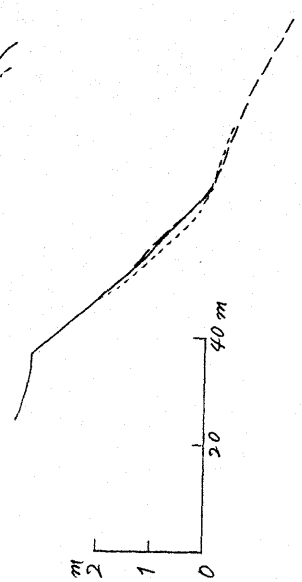
— 11/8
- - - 14/8
- · - 17/8

▽



— 17/8
- - - 19/8
- · - 23/8

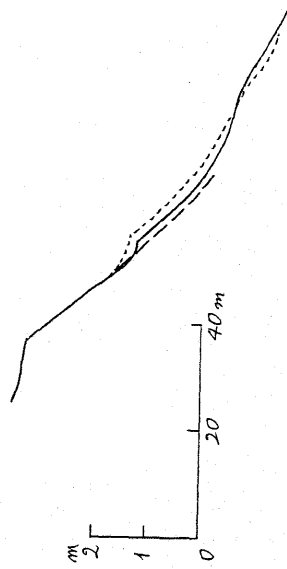
▽



— 23/8
- - - 26/8
- · - 31/8

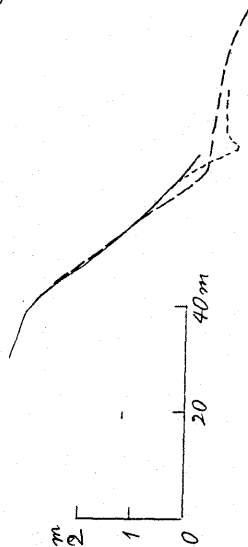
▽

C-400-10



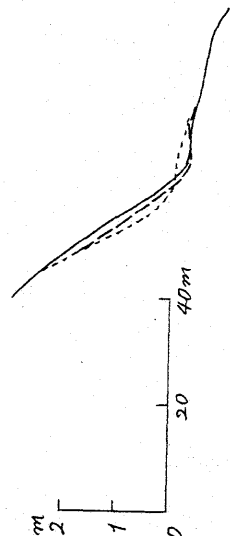
— 31/8/1981
- - - 3/9
- · - 7/9

▽



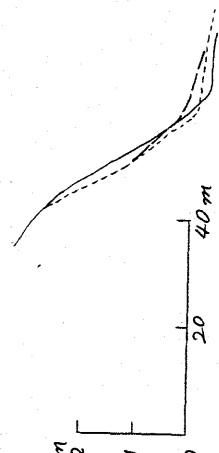
— 7/9
- - - 10/9
- · - 15/9

▽



— 15/9
- - - 19/9
- · - 24/9

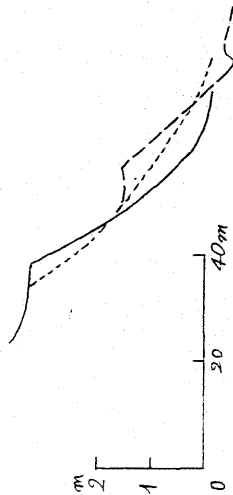
▽



— 24/9
- - - 28/9
- · - 1/10

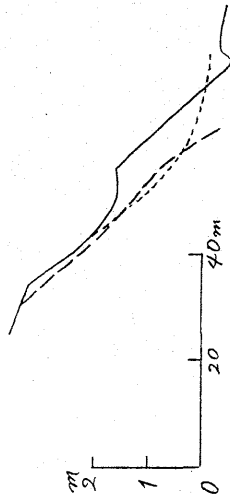
▽

C-400-11



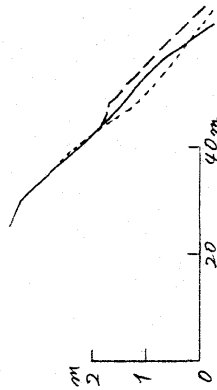
— 1/10/1981
- - - 6/10
- · - 12/10

\bar{V}



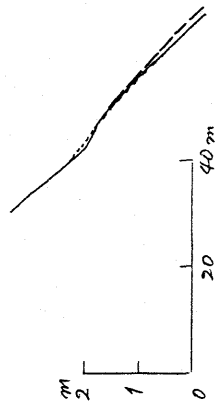
— 12/10
- - - 17/10
- · - 24/10

\bar{V}



— 24/10
- - - 28/10
- · - 2/11

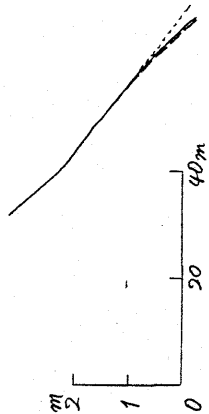
\bar{V}



— 2/11
- - - 8/11
- · - 15/11

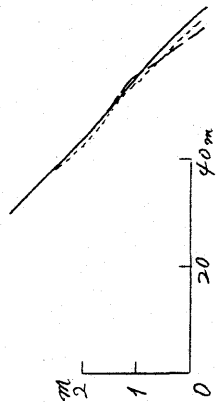
\bar{V}

C-400-12



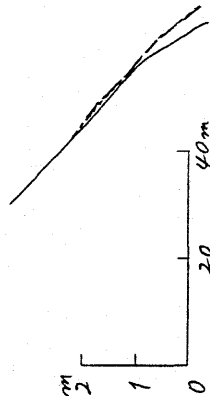
— 15/11/1981
- - - 19/11
- · - 23/11

\bar{V}



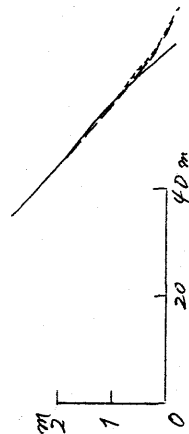
— 23/11
- - - 29/11
- · - 5/12

\bar{V}



— 5/12
- - - 12/12
- · - 15/12

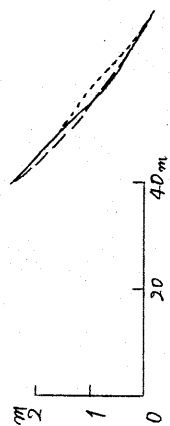
\bar{V}



— 15/12
- - - 22/12
- · - 29/12

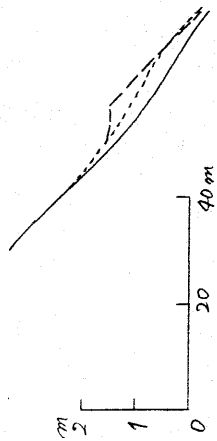
\bar{V}

C-400-13



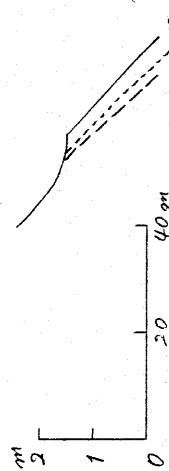
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

\bar{V}



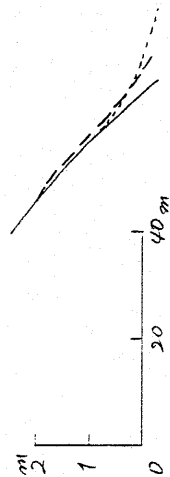
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

\bar{V}



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

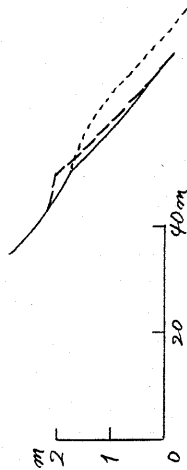
\bar{V}



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

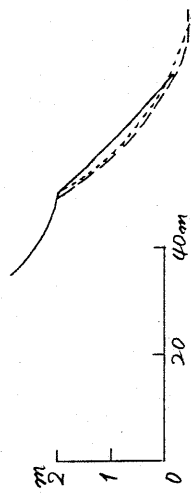
\bar{V}

C-400-14



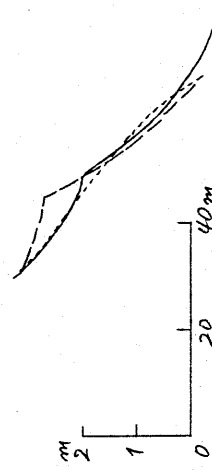
— 21 / 2 / 1982
 --- 28 / 2
 - - - 6 / 3

\bar{V}



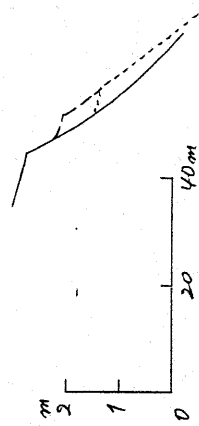
— 6 / 3
 --- 13 / 3
 - - - 18 / 3

\bar{V}



— 18 / 3
 --- 24 / 3
 - - - 5 / 4

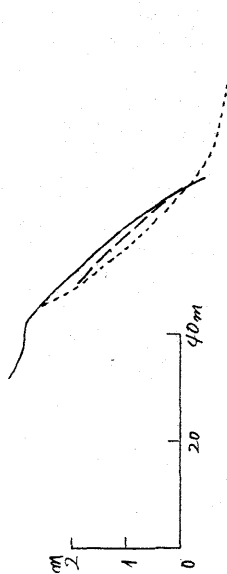
\bar{V}



— 5 / 4
 --- 11 / 4
 - - - 18 / 4

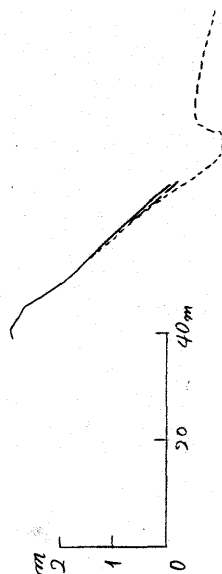
\bar{V}

C-400-15



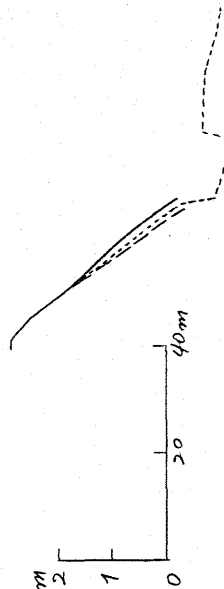
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{y}



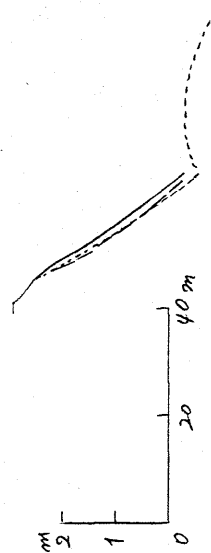
— 1/5
- - - 10/5
- · - 17/5

\bar{y}



— 17/5
- - - 24/5
- · - 31/5

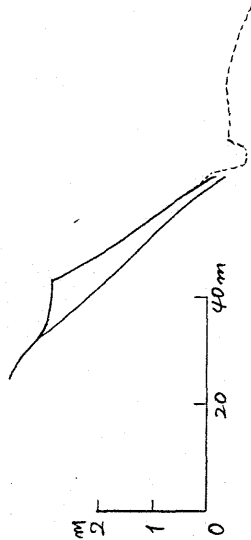
\bar{y}



— 31/5
- - - 6/6
- · - 15/6

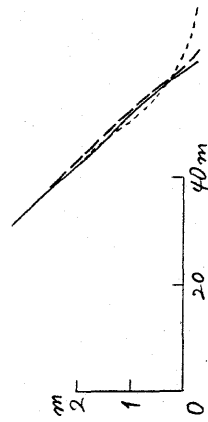
\bar{y}

C-400-16



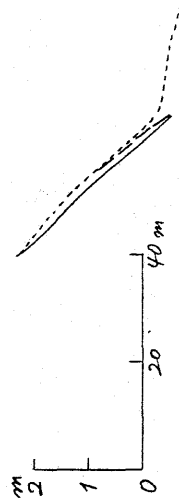
— 15/6/1982
- - - 21/6
- · - 29/6

\bar{y}



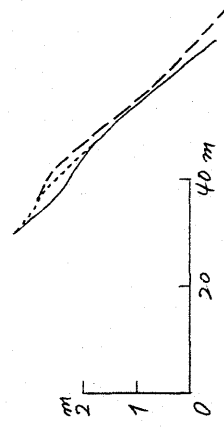
— 29/6
- - - 5/7
- · - 12/7

\bar{y}



— 12/7
- - - 20/7
- · - 27/7

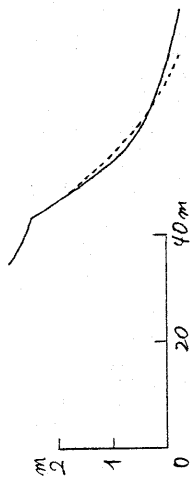
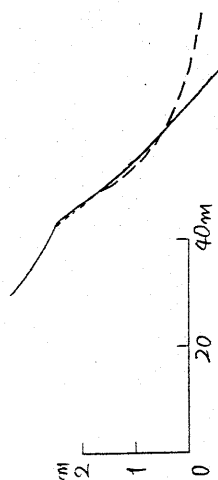
\bar{y}



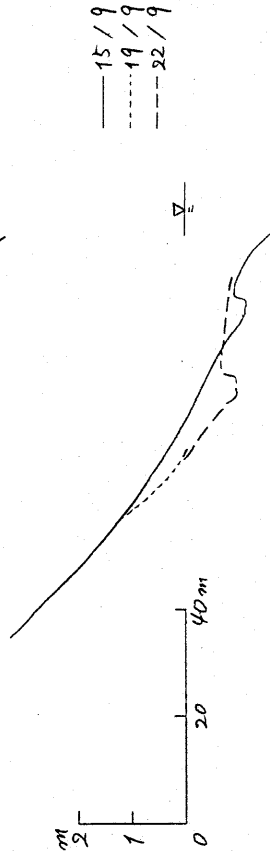
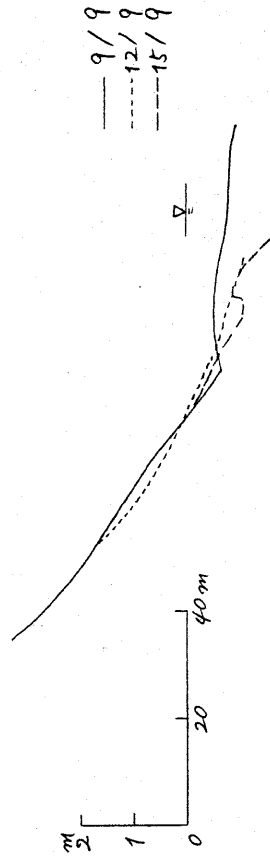
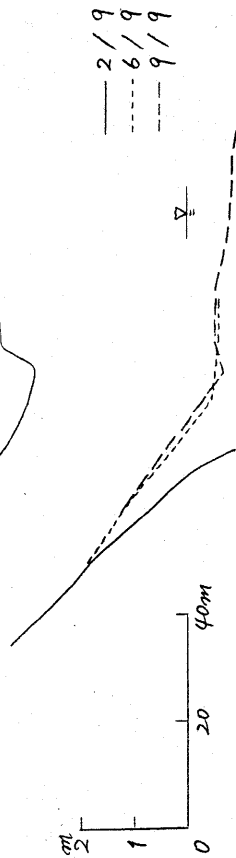
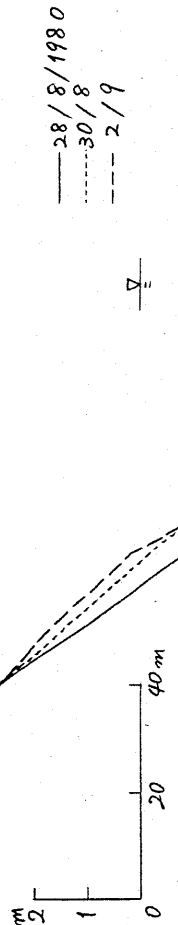
— 27/7
- - - 2/8
- · - 9/8

\bar{y}

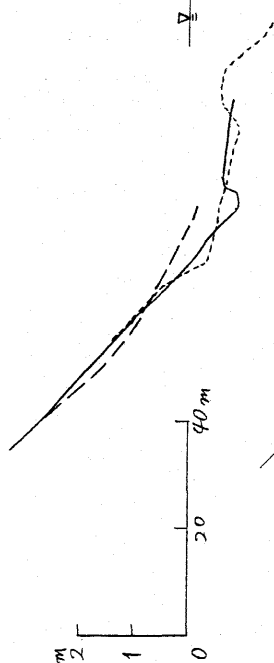
C-400-17



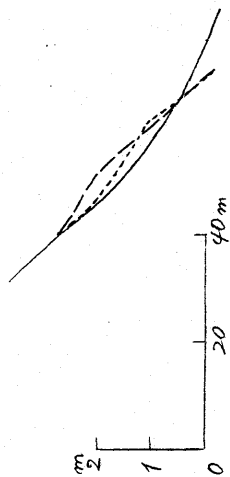
C-450-1



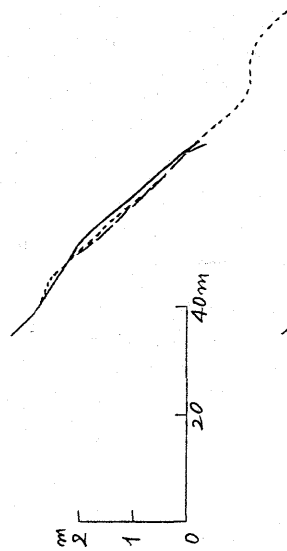
C-450-2



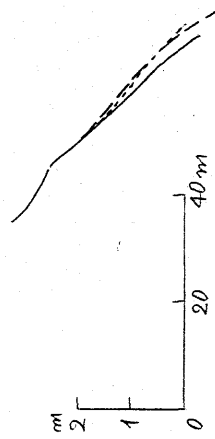
\bar{y}



\bar{y}

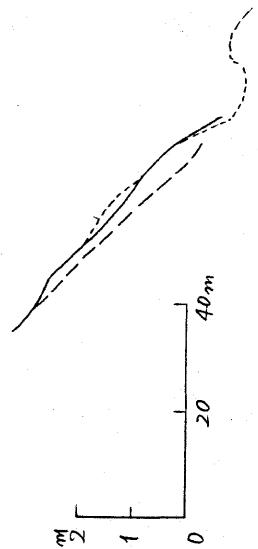


\bar{y}

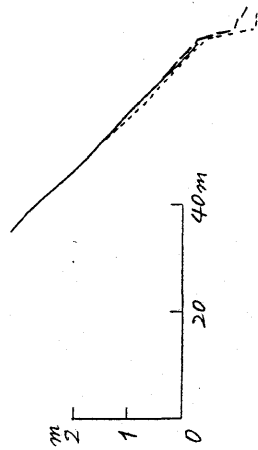


\bar{y}

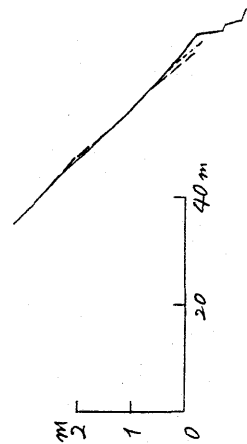
C-450-3



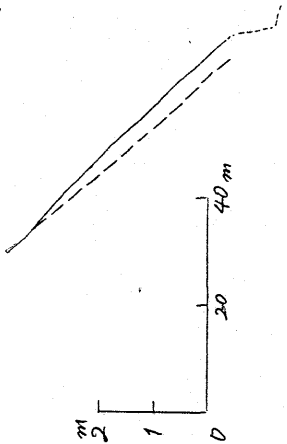
\bar{y}



\bar{y}

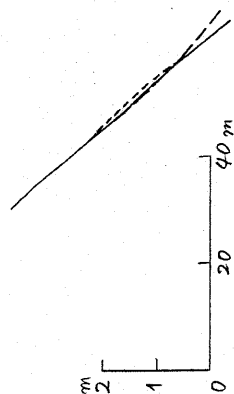


\bar{y}



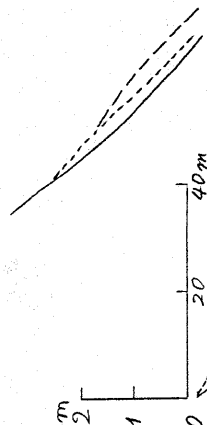
\bar{y}

C-450-4



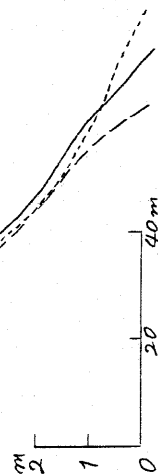
— 26/11/1980
- - - 1/12
- · - 8/12

∇



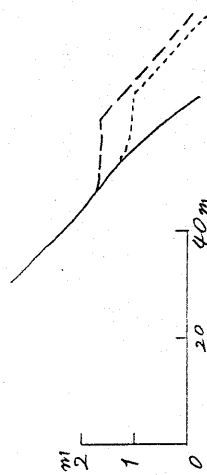
— 8/12
- - - 15/12
- · - 22/12

∇



— 22/12
- - - 29/12
- · - 6/1/1981

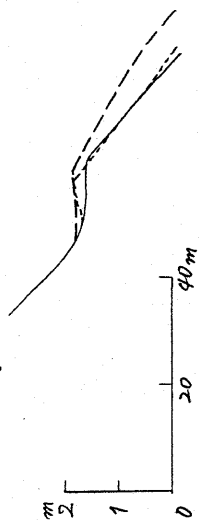
∇



— 6/1
- - - 12/1
- · - 21/1

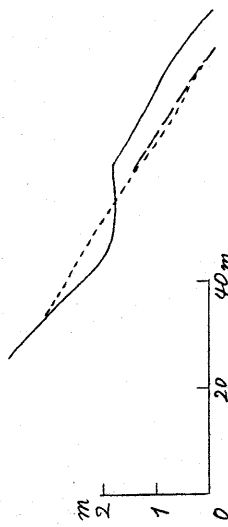
∇

C-450-5



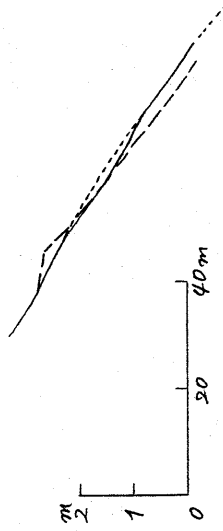
— 21/1/1981
- - - 25/1
- · - 1/2

∇



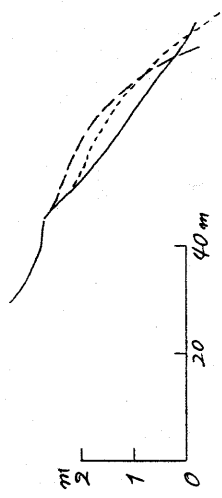
— 1/2
- - - 8/2
- · - 15/2

∇



— 15/2
- - - 22/2
- · - 28/2

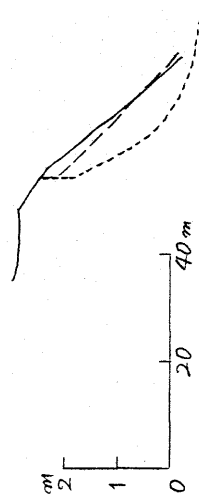
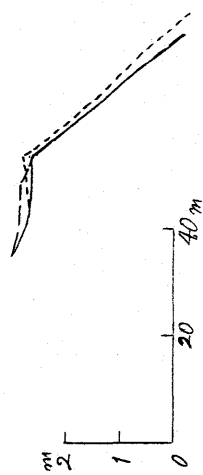
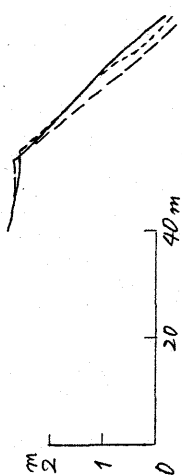
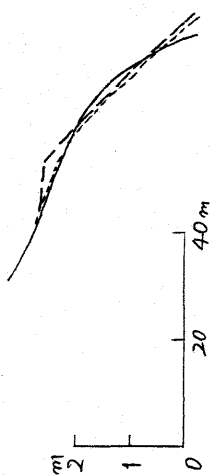
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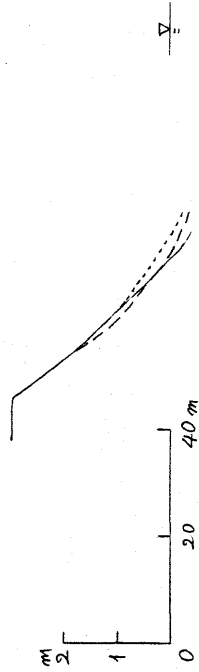
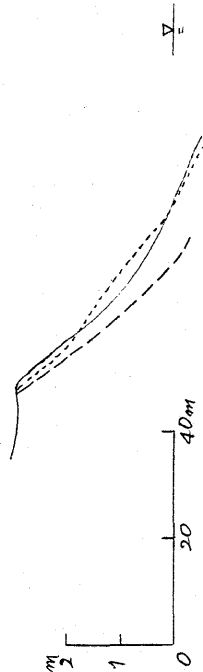
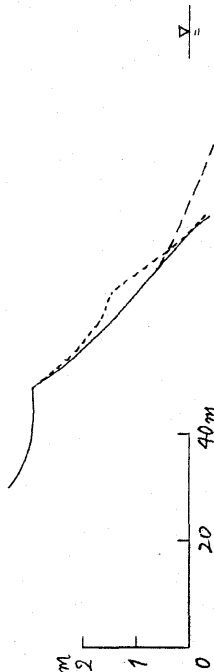
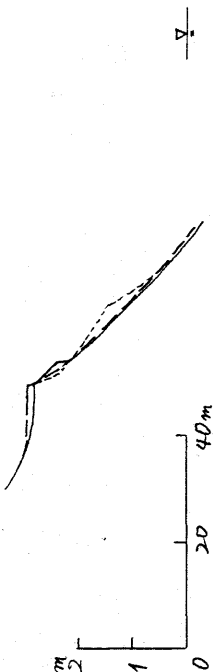
— 28/2
- - - 8/3
- · - 15/3

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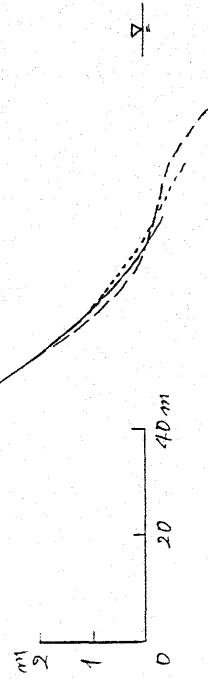
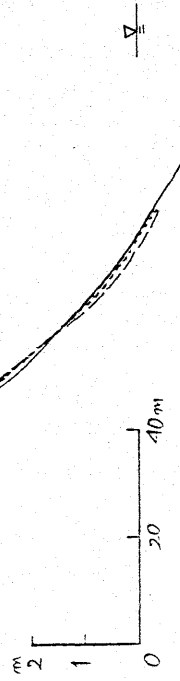
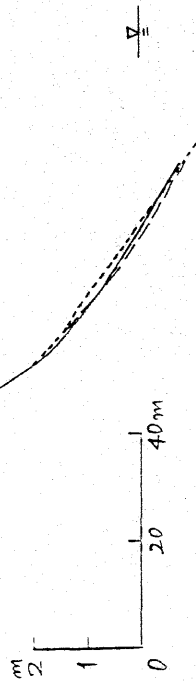
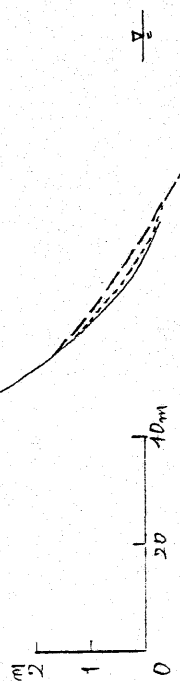
C-450-6



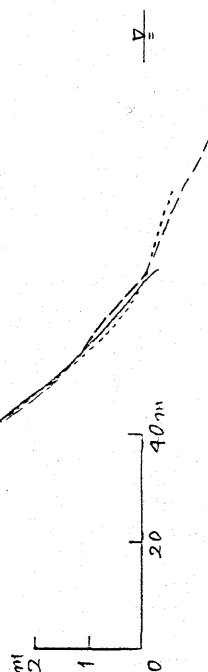
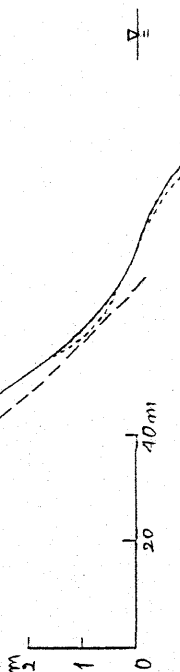
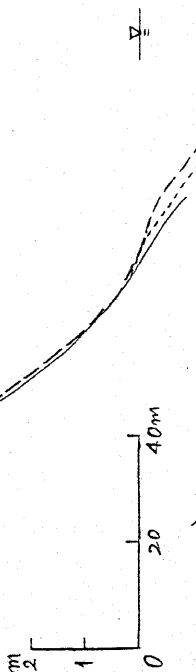
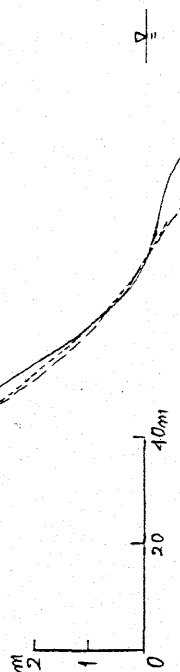
C-450-7



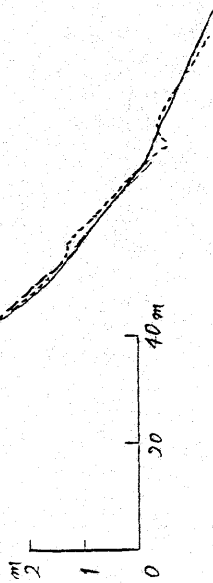
C-450-8



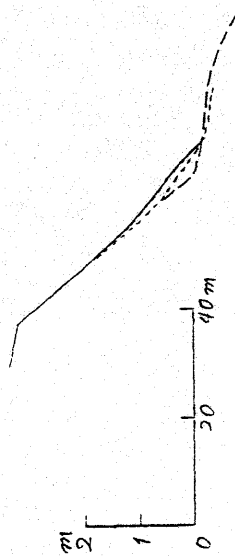
C-450-9



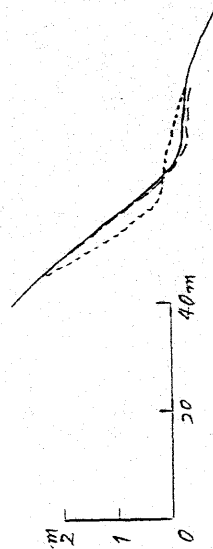
C-450-10



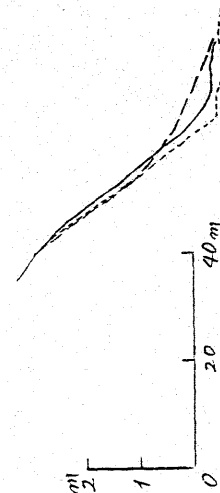
— 31/8/1981
--- 3/9
--- 7/9



— 7/9
--- 10/9
--- 15/9

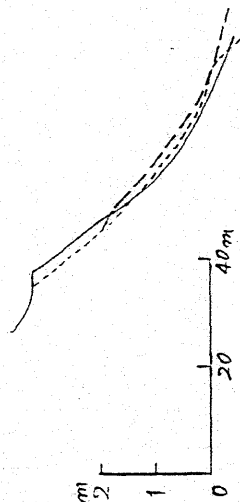


— 15/9
--- 19/9
--- 24/9

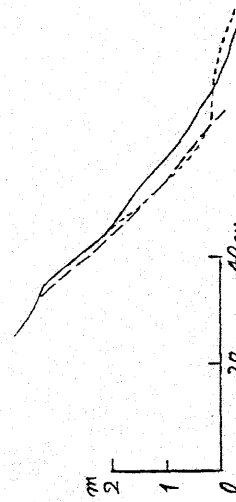


— 24/9
--- 28/9
--- 1/10

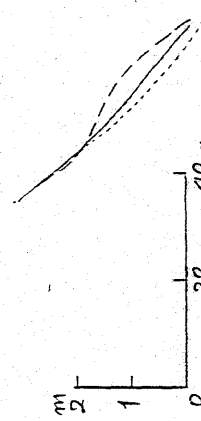
C-450-11



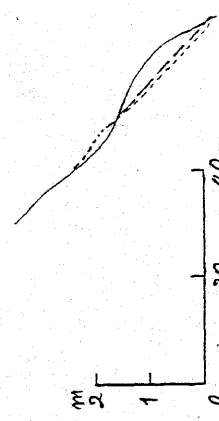
— 1/10/1981
--- 6/10
--- 12/10



— 12/10
--- 17/10
--- 24/10

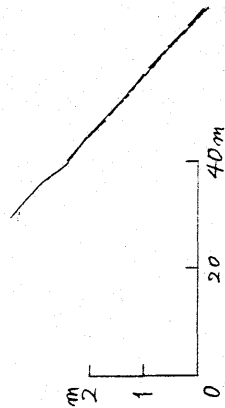


— 24/10
--- 28/10
--- 2/11



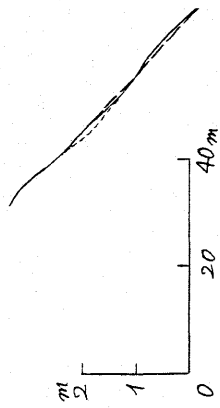
— 2/11
--- 8/11
--- 15/11

C-450-12



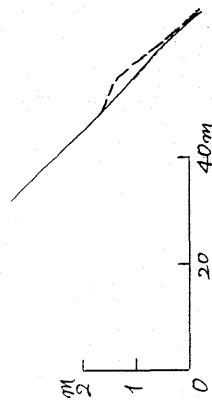
— 15 / 11 / 1981
 --- 19 / 11
 --- 23 / 11

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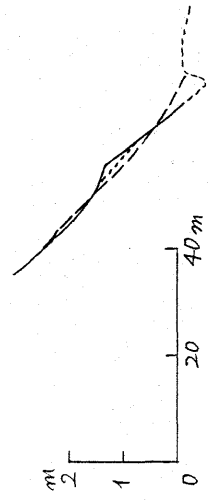
— 23 / 11
 --- 29 / 11
 --- 5 / 12

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— 5 / 12
 --- 12 / 12
 --- 15 / 12

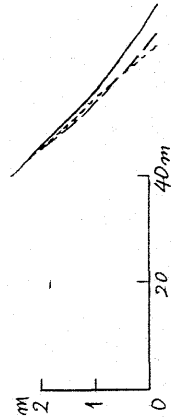
\bar{y}



— 15 / 12
 --- 22 / 12
 --- 29 / 12

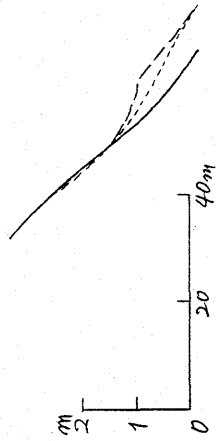
\bar{y}

C-450-13



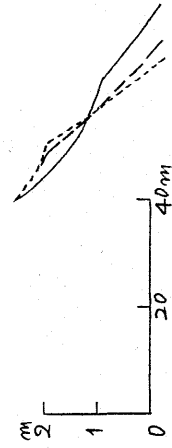
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 --- 10 / 1

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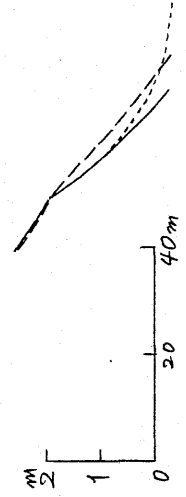
— 10 / 1
 --- 17 / 1
 --- 24 / 1

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— 24 / 1
 --- 31 / 1
 --- 7 / 2

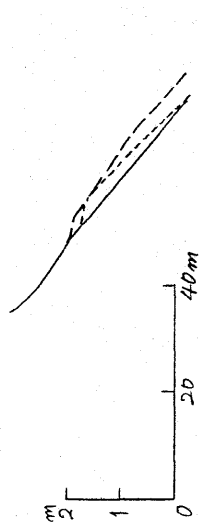
\bar{y}



— 7 / 2
 --- 14 / 2
 --- 21 / 2

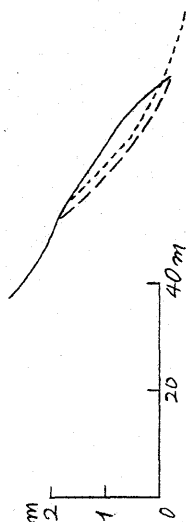
\bar{y}

C-450-14



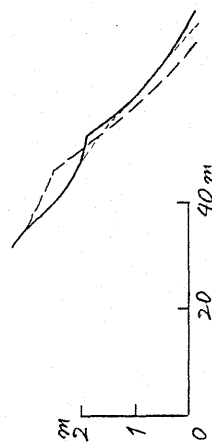
— 21/2/1982
- - - 28/2
- · - 6/3

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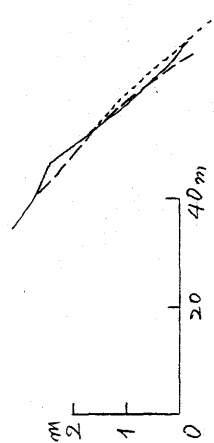
— 6/3
- - - 13/3
- · - 18/3

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— 18/3
- - - 24/3
- · - 5/4

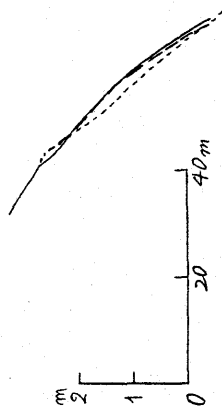
\bar{V}



— 5/4
- - - 11/4
- · - 18/4

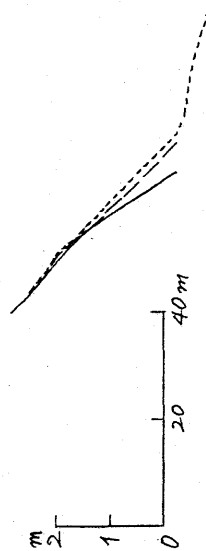
\bar{V}

C-450-15



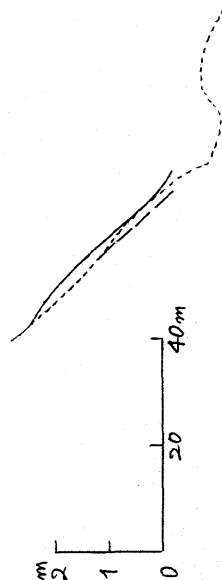
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{V}



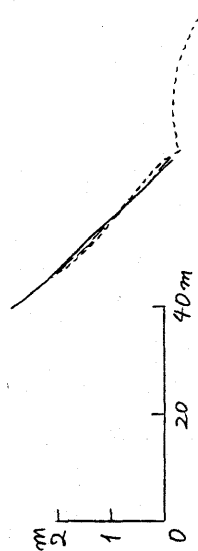
— 1/5
- - - 10/5
- · - 17/5

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— 17/5
- - - 24/5
- · - 31/5

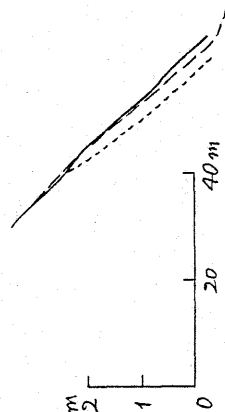
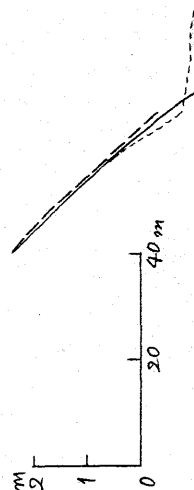
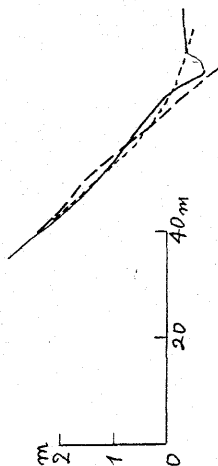
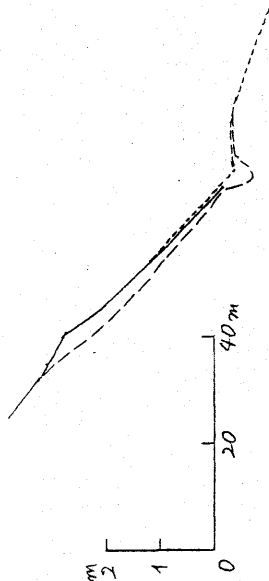
\bar{V}



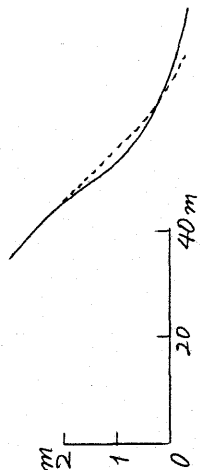
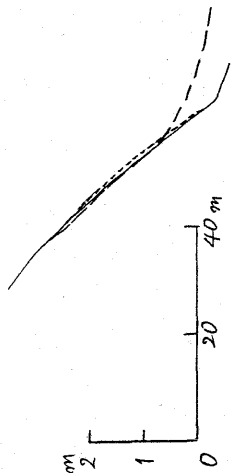
— 31/5
- - - 6/6
- · - 15/6

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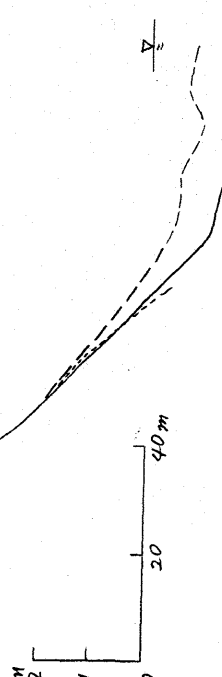
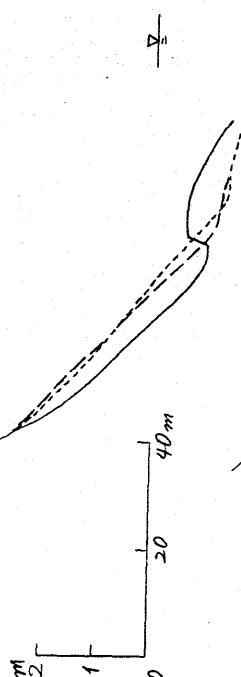
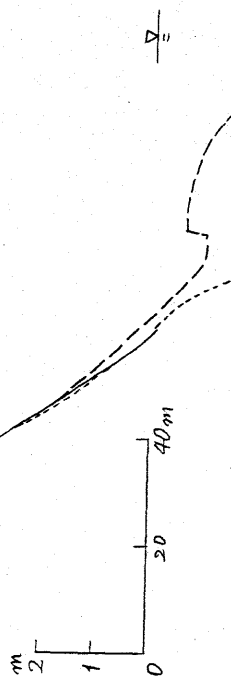
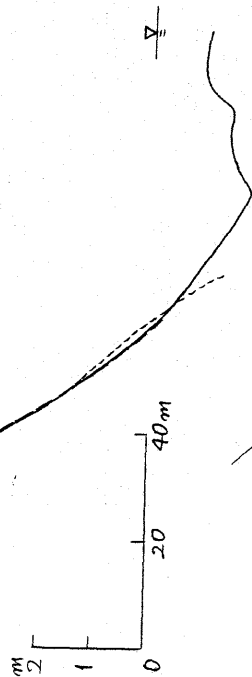
C-450-16



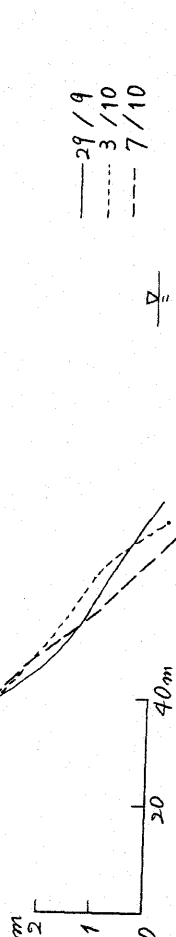
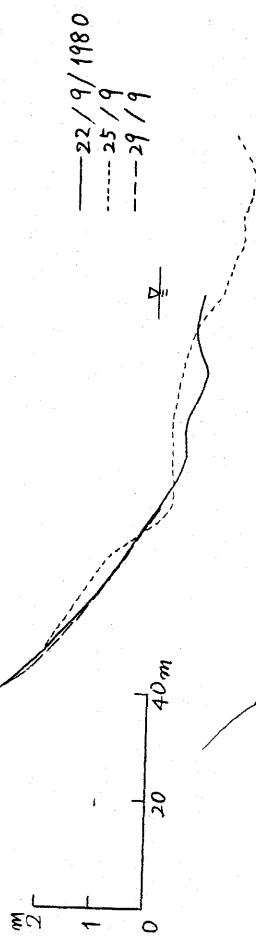
C-450-17



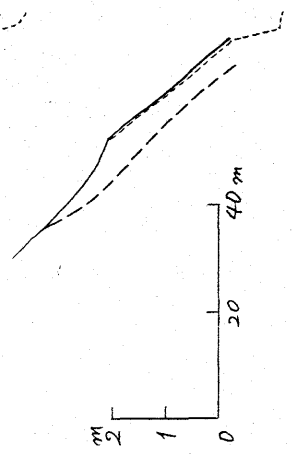
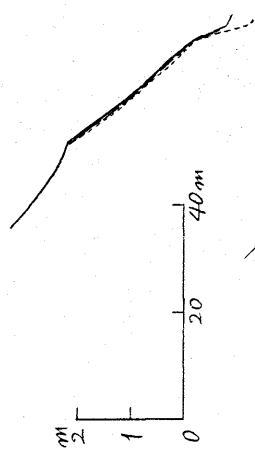
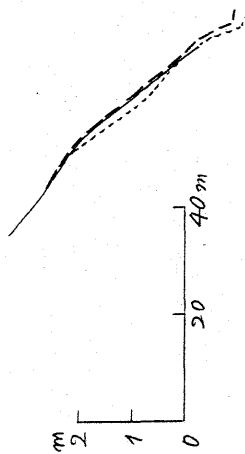
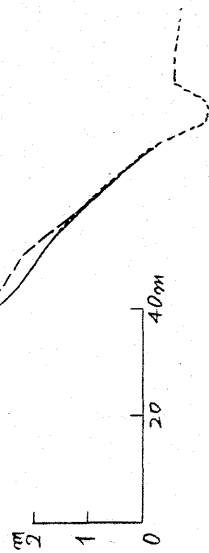
C-500-1



C-500-2



C-500-3



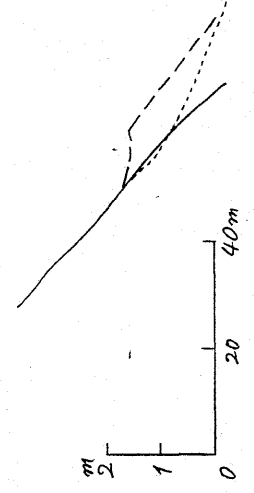
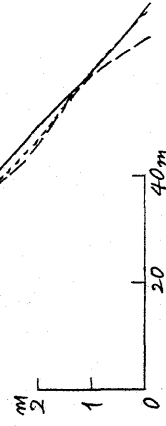
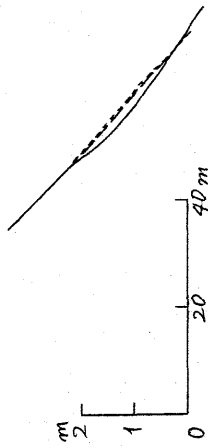
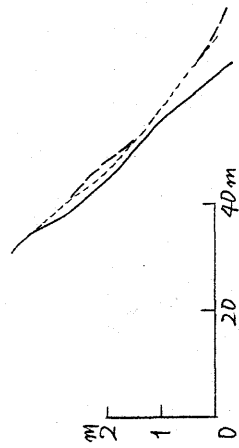
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C-500-4



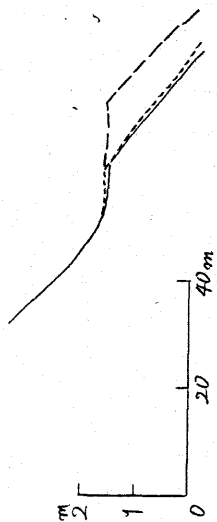
\bar{V}

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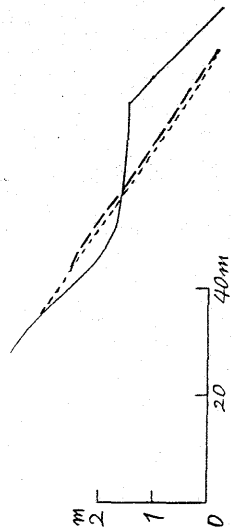
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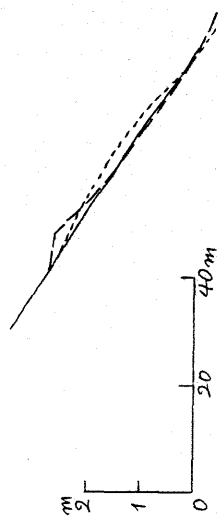
C-500-5



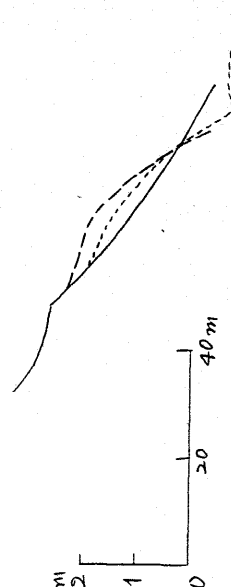
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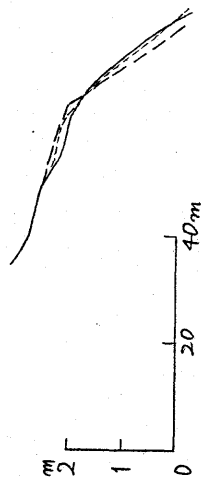


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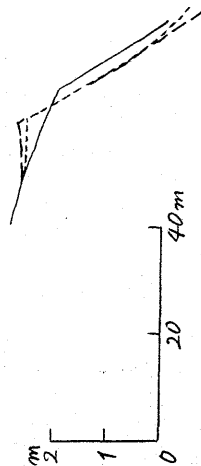


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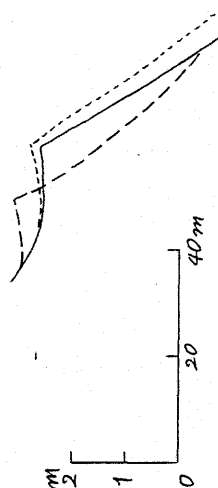
C-500-6



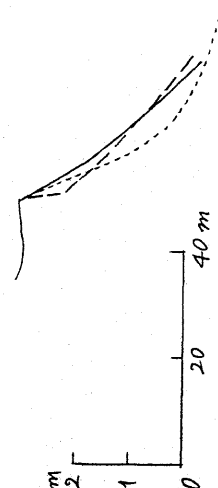
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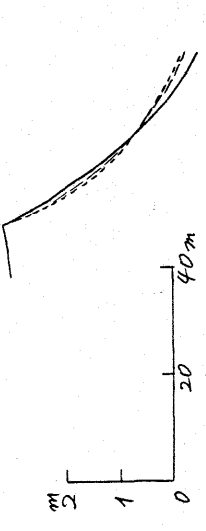
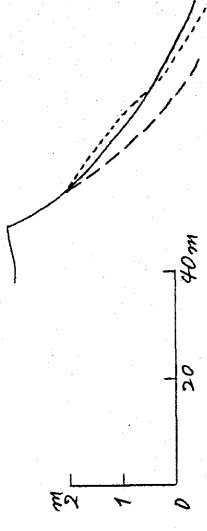
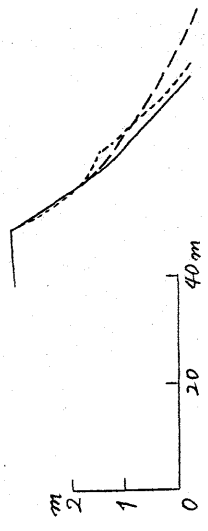
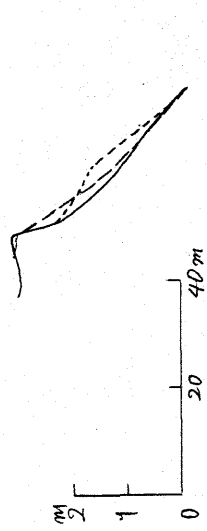


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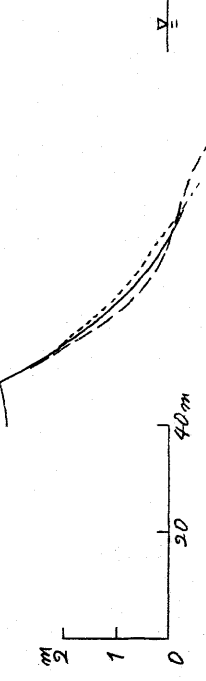
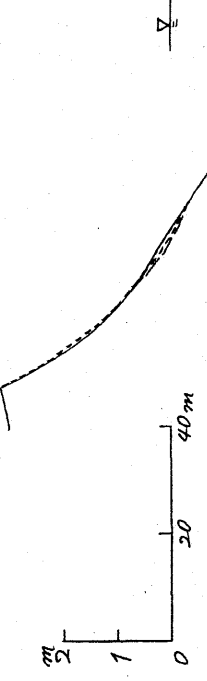
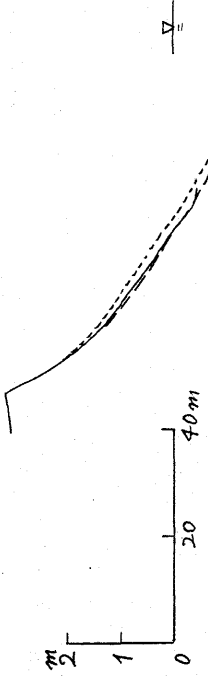
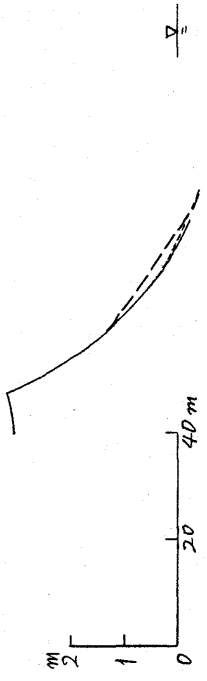


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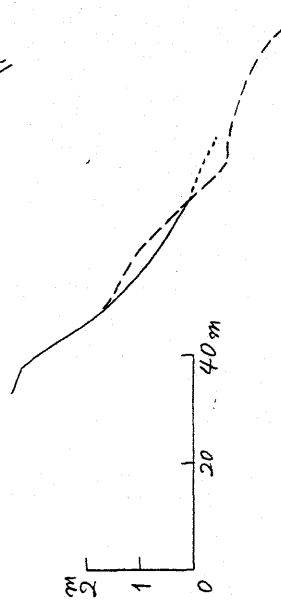
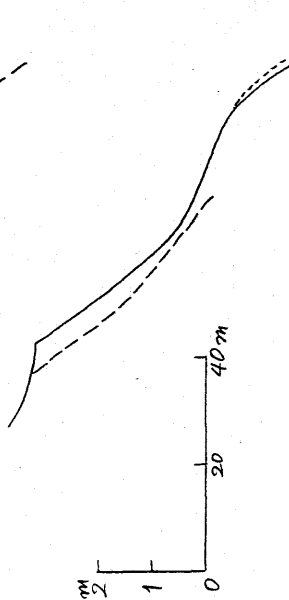
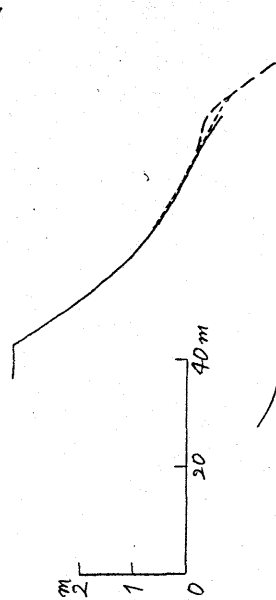
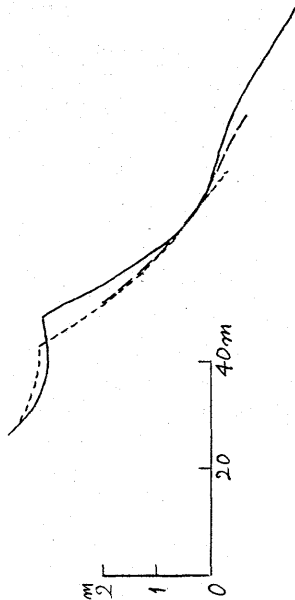
C-500-7



C-500-8



C-500-9



3/8/1981

6/8
11/8

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11/8
14/8
17/8

\bar{y}

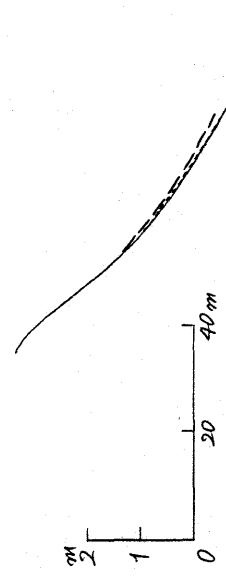
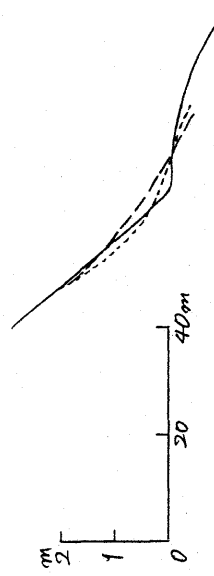
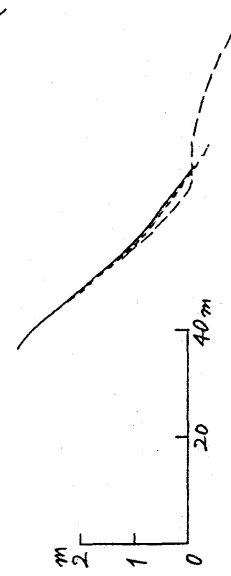
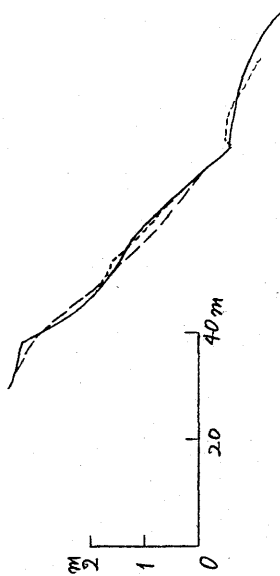
17/8
19/8
23/8

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23/8
26/8
31/8

\bar{y}

C-500-10



31/8/1981
3/9
7/9

\bar{y}

7/9
10/9
15/9

\bar{y}

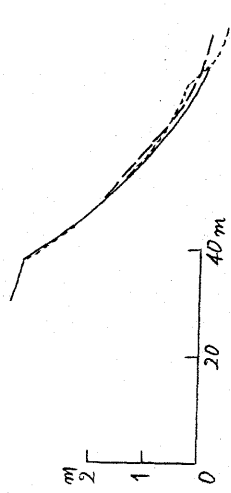
15/9
19/9
24/9

\bar{y}

24/9
28/9
1/10

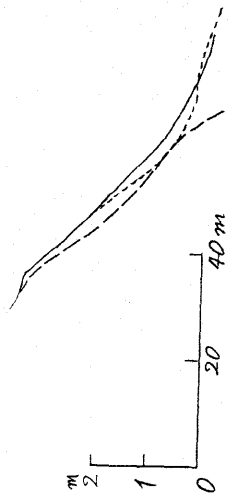
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C-500-11



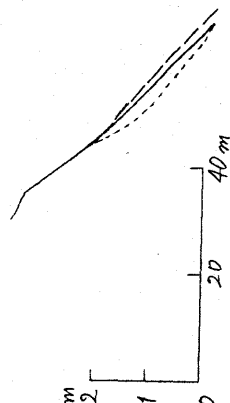
— 1/10/1981
- - - 6/10
- · - 12/10

\bar{V}



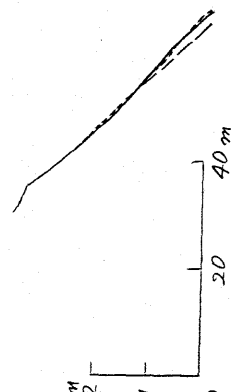
— 12/10
- - - 17/10
- · - 24/10

\bar{V}



— 24/10
- - - 28/10
- · - 2/11

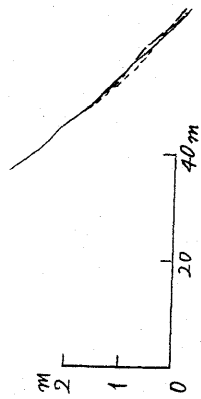
\bar{V}



— 2/11
- - - 8/11
- · - 15/11

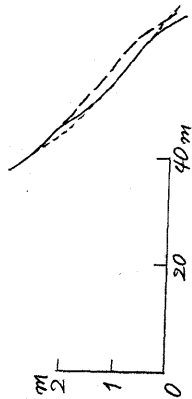
\bar{V}

C-500-12



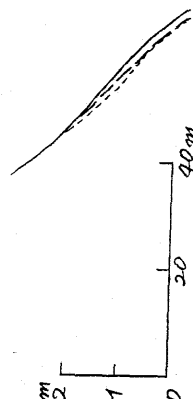
— 15/11/1981
- - - 19/11
- · - 23/11

\bar{V}



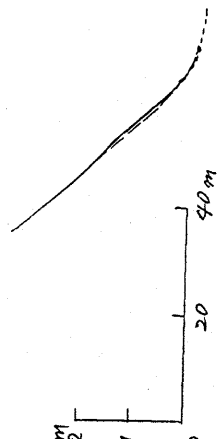
— 23/11
- - - 29/11
- · - 5/12

\bar{V}



— 5/12
- - - 12/12
- · - 15/12

\bar{V}

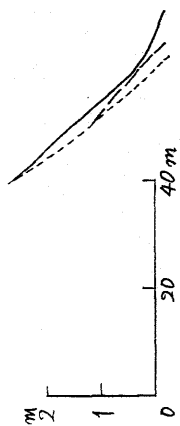


— 15/12
- - - 22/12
- · - 29/12

\bar{V}

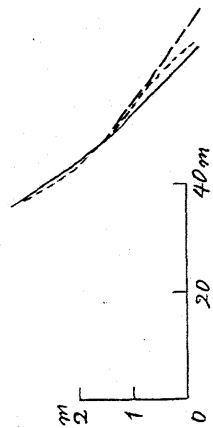
C-500-13

C-500-14



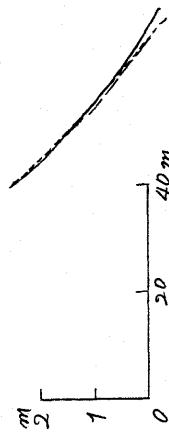
— 29/12/1981
- - - 5/1/1982
- · - 10/1

\bar{V}



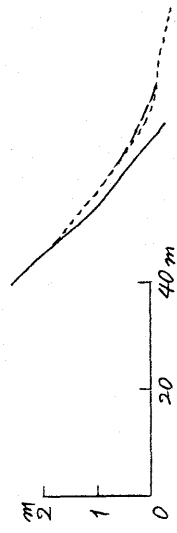
— 10/1
- - - 17/1
- · - 24/1

\bar{V}



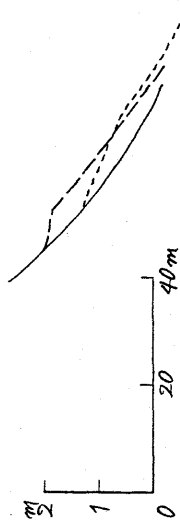
— 24/1
- - - 31/1
- · - 7/2

\bar{V}



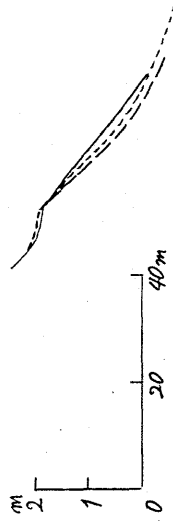
— 7/2
- - - 14/2
- · - 21/2

\bar{V}



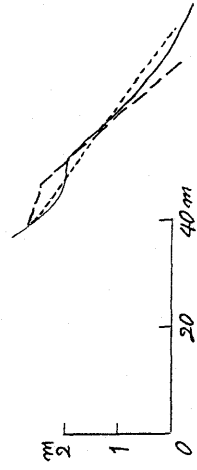
— 21/2/1982
- - - 28/2
- · - 6/3

\bar{V}



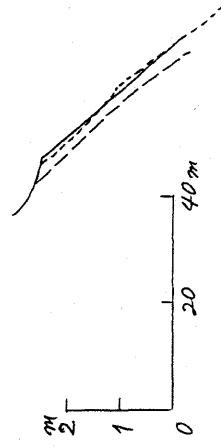
— 6/3
- - - 13/3
- · - 18/3

\bar{V}



— 18/3
- - - 24/3
- · - 5/4

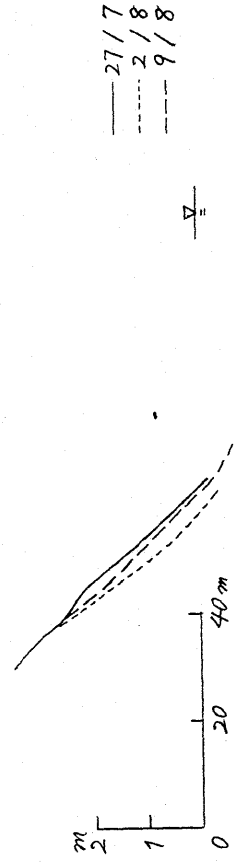
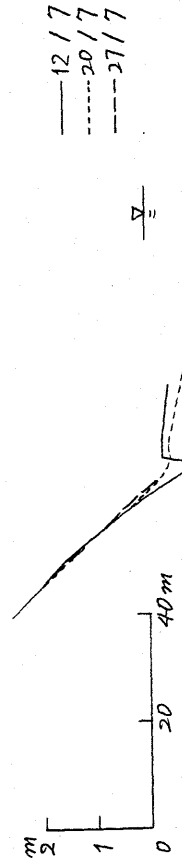
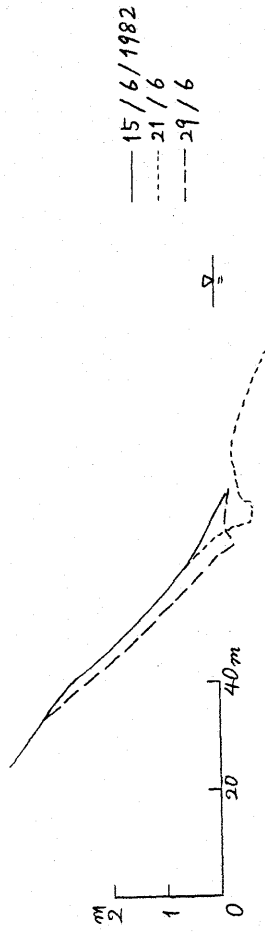
\bar{V}



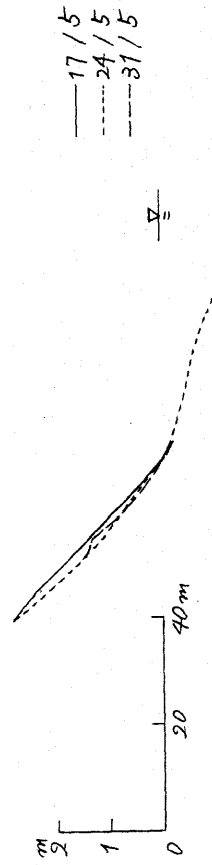
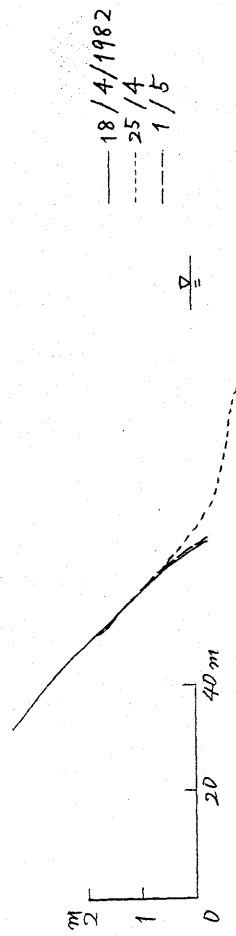
— 5/4
- - - 11/4
- · - 18/4

\bar{V}

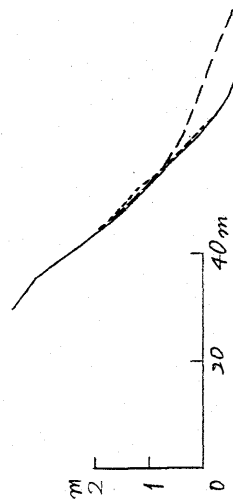
C-500-16



C-500-15

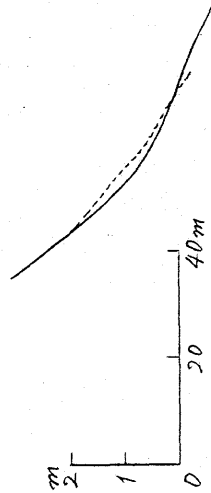


C-500-17



— 9 / 8 / 1982
 --- 15 / 8
 - · - 23 / 8

V

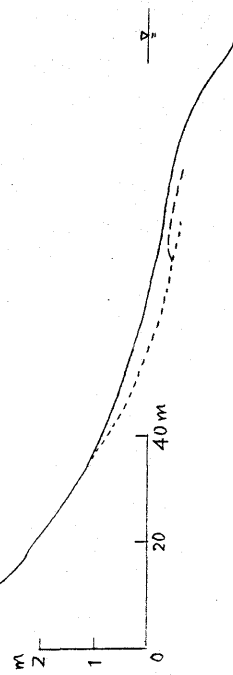


— 23 / 8
 --- 30 / 8

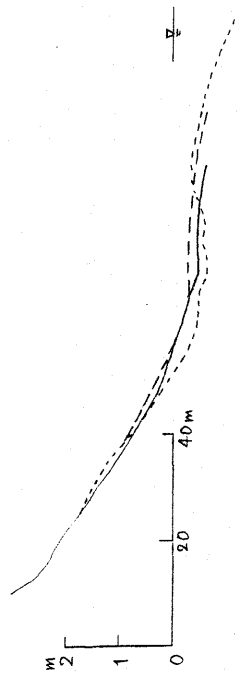
V

South Site

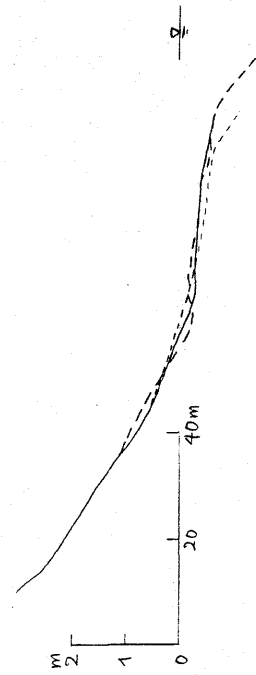
S-000-1



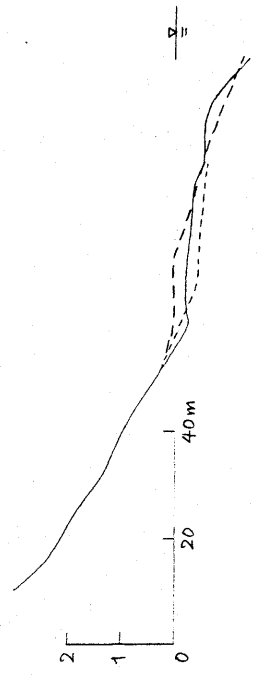
— 28/8/1980
- - - 31/8
- - - 3/9



— 3/9
- - - 7/9
- - - 10/9

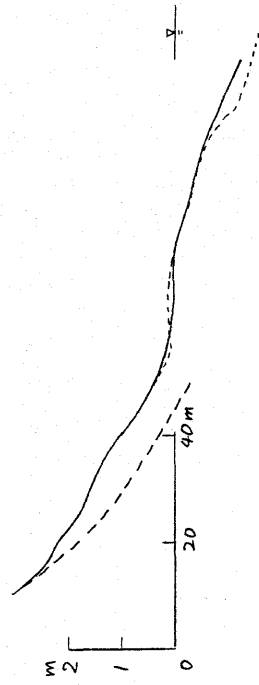


— 10/9
- - - 13/9
- - - 16/9

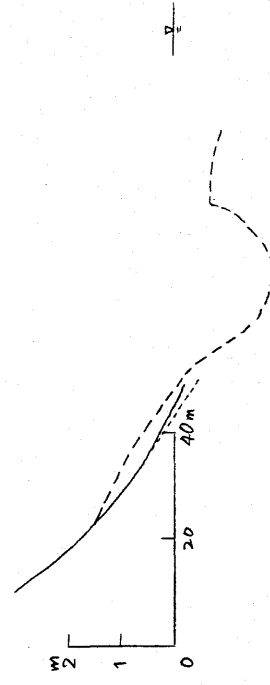


— 16/9
- - - 20/9
- - - 23/9

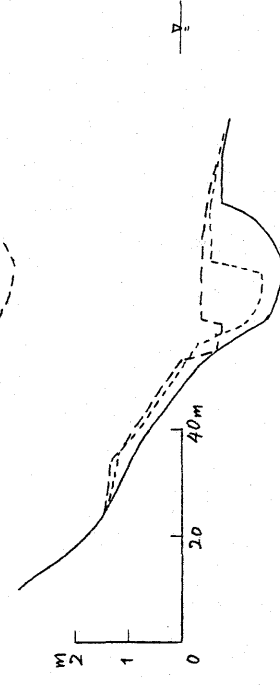
S-000-2



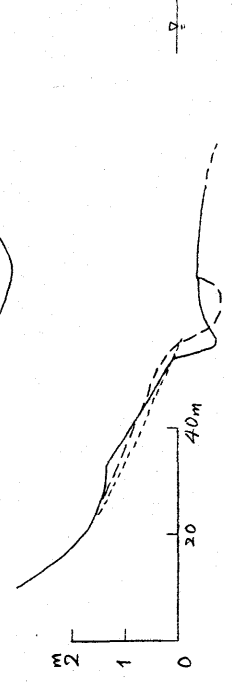
— 23/9/1980
- - - 26/9
- - - 30/9



— 30/9
- - - 4/10
- - - 8/10

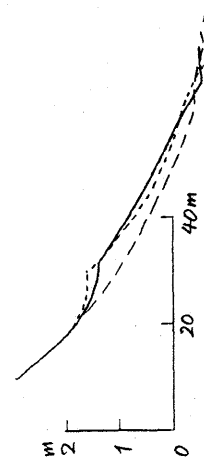
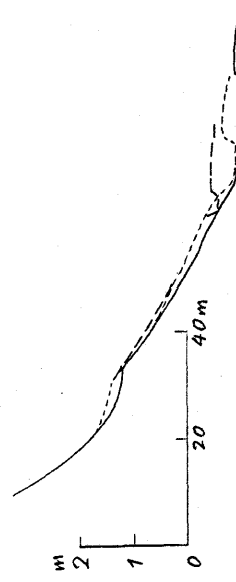
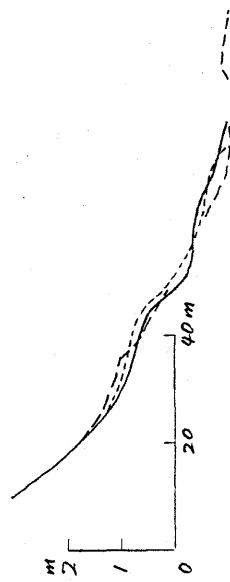
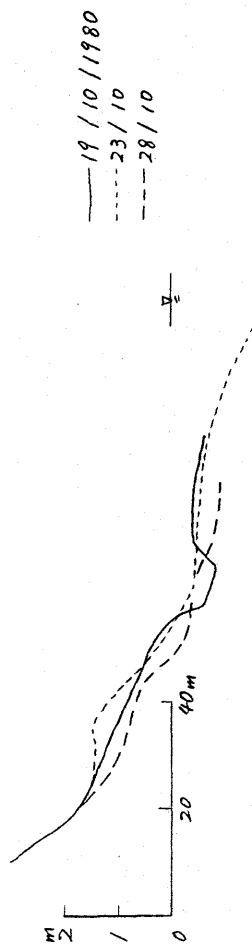


— 8/10
- - - 11/10
- - - 14/10

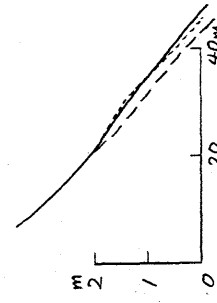
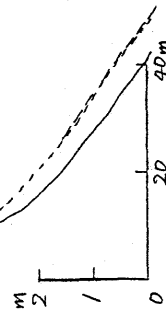
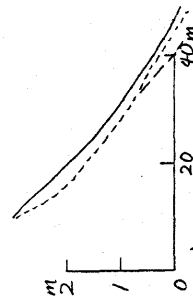
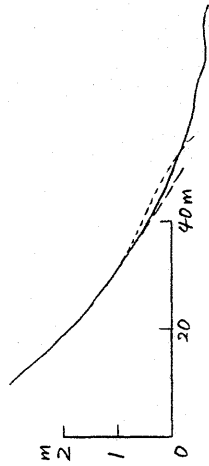


— 14/10
- - - 15/10
- - - 19/10

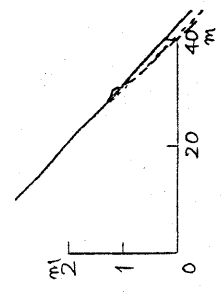
S-000-3



S-000-4

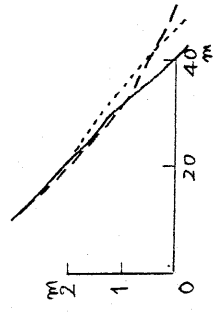


S-000-5



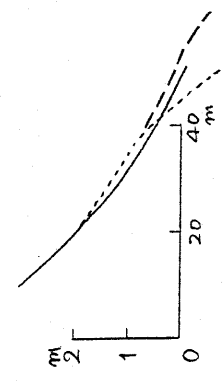
— 21/1/1981
 --- 25/1
 - - - 1/2

\bar{v}



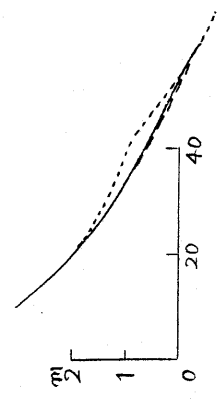
— 1/2
 --- 8/2
 - - - 15/2

\bar{v}



— 15/2
 --- 22/2
 - - - 28/2

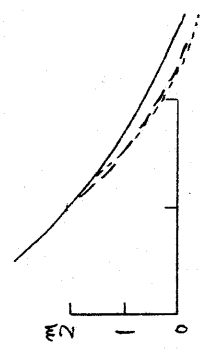
\bar{v}



— 28/2
 --- 8/3
 - - - 15/3

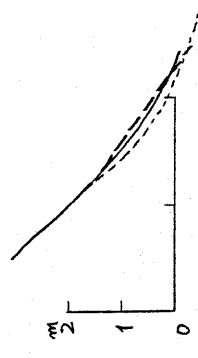
\bar{v}

S-000-6



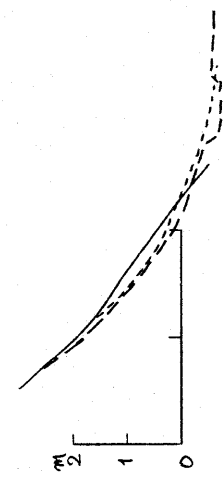
— 15/3/1981
 --- 22/3
 - - - 29/3

\bar{v}



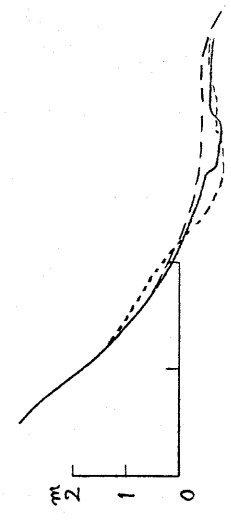
— 29/4
 --- 5/4
 - - - 11/4

\bar{v}



— 11/4
 --- 19/4
 - - - 26/4

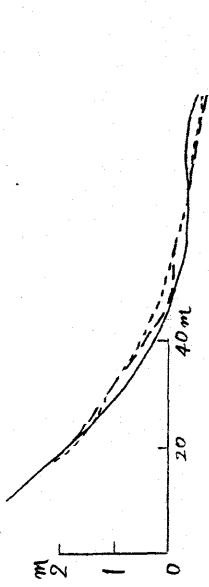
\bar{v}



— 26/4
 --- 3/5
 - - - 11/5

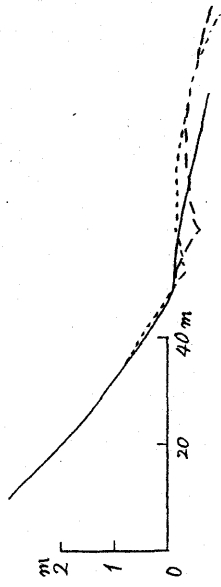
\bar{v}

S-000-7



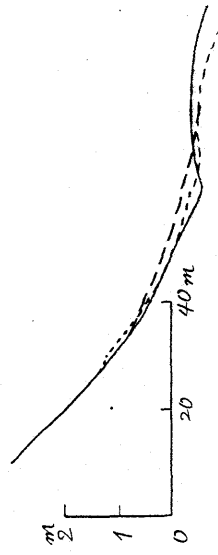
— 11/5/1981
- - - 17/5
- · - 24/5

$\frac{m}{2}$



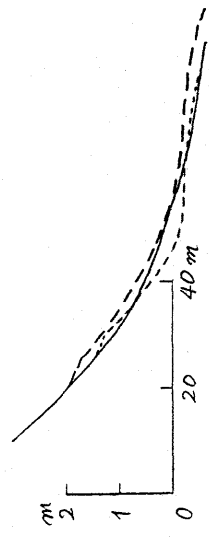
— 24/5
- - - 1/6
- · - 7/6

$\frac{m}{2}$



— 7/6
- - - 15/6
- · - 21/6

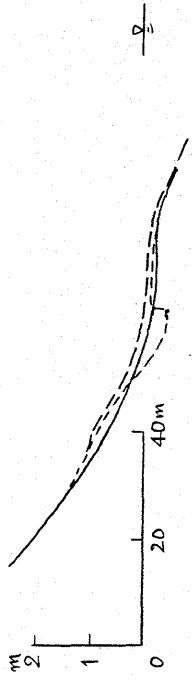
$\frac{m}{2}$



— 21/6
- - - 28/6
- · - 6/7

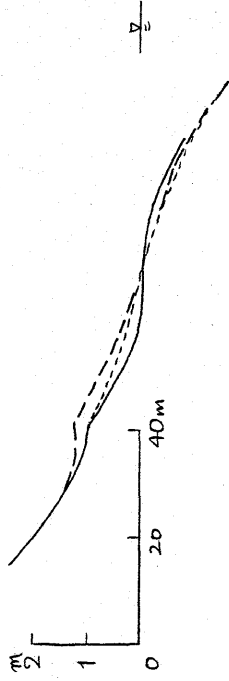
$\frac{m}{2}$

S-000-8



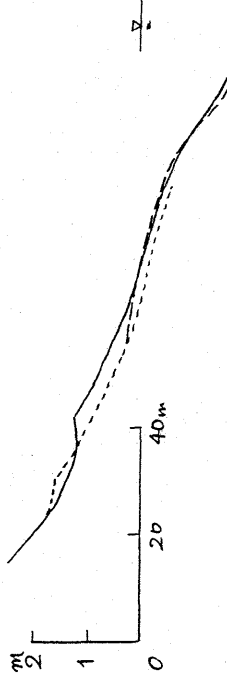
— 6/7/1981
- - - 9/7
- · - 14/7

$\frac{m}{2}$



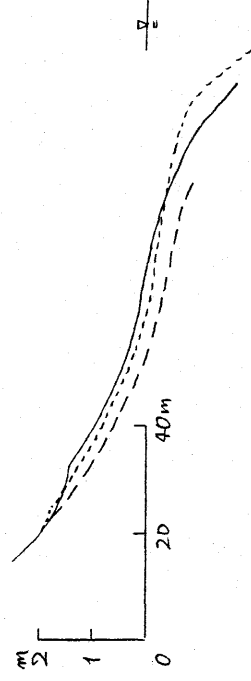
— 14/7
- - - 17/7
- · - 21/7

$\frac{m}{2}$



— 21/7
- - - 24/7
- · - 28/7

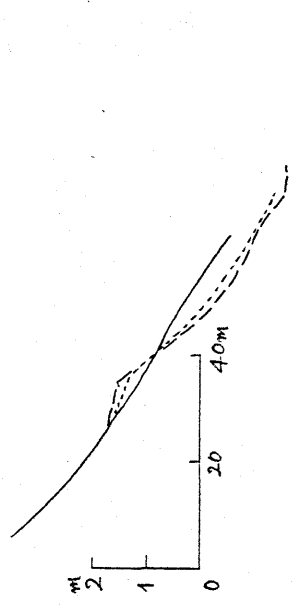
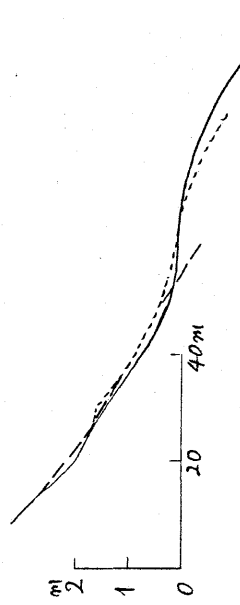
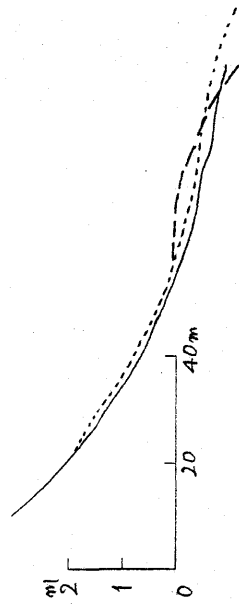
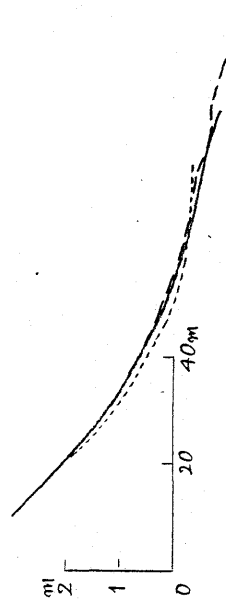
$\frac{m}{2}$



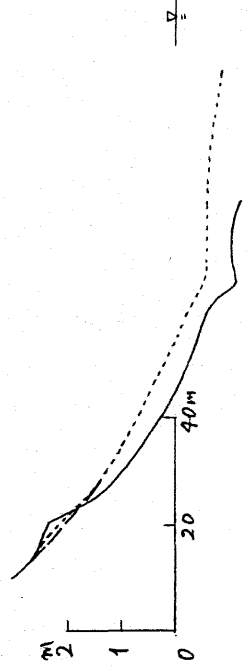
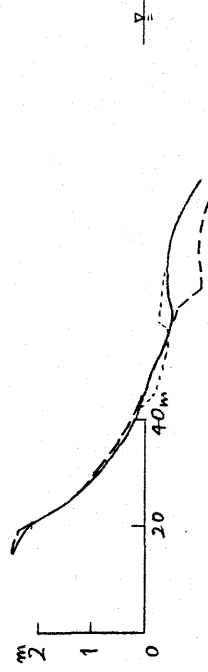
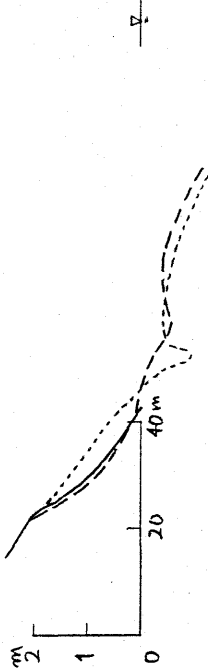
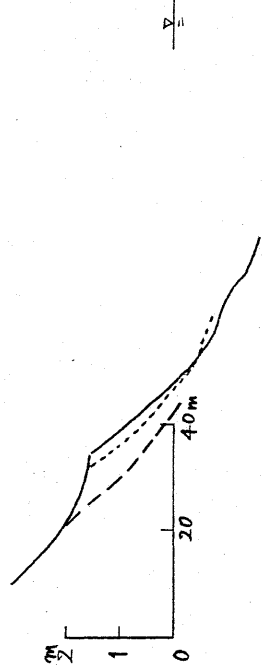
— 28/7
- - - 31/7
- · - 4/8

$\frac{m}{2}$

S-000-9

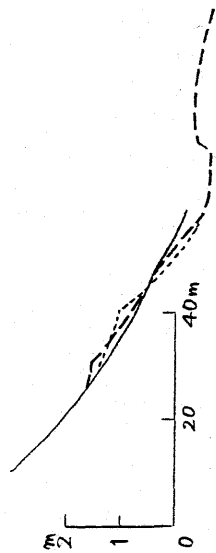


S-000-10



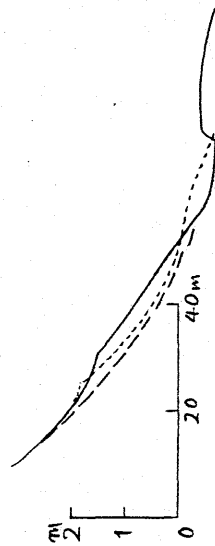
S-000-11

S-000-12



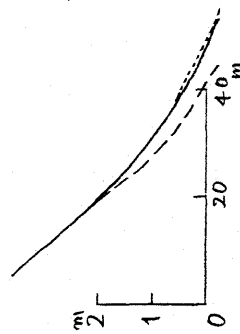
— 2 / 10 / 1981
- - - 7 / 10
- . - 13 / 10

\bar{v}



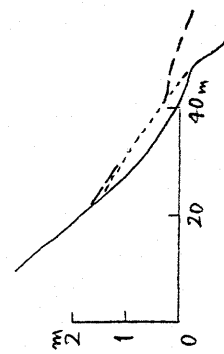
— 13 / 10
- - - 18 / 10
- . - 24 / 10

\bar{v}



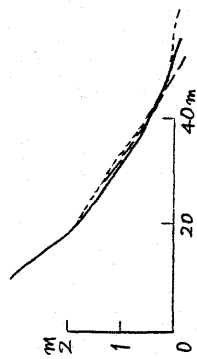
— 24 / 10
- - - 28 / 10
- . - 2 / 11

\bar{v}



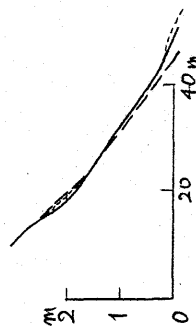
— 2 / 11
- - - 8 / 11
- . - 15 / 11

\bar{v}



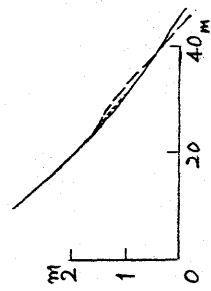
— 15 / 11 / 1981
- - - 19 / 11
- . - 23 / 11

\bar{v}



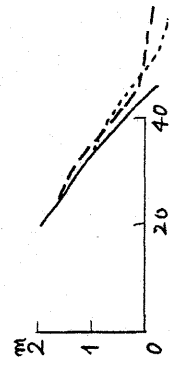
— 23 / 11
- - - 29 / 11
- . - 5 / 12

\bar{v}



— 5 / 12
- - - 12 / 12
- . - 15 / 12

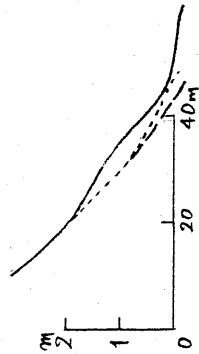
\bar{v}



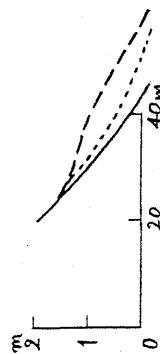
— 15 / 12
- - - 22 / 12
- . - 29 / 12

\bar{v}

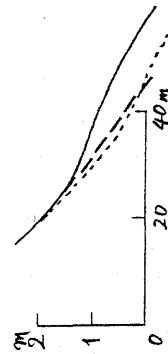
S-000-13



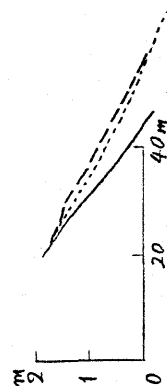
$\frac{V}{\bar{V}}$



$\frac{V}{\bar{V}}$

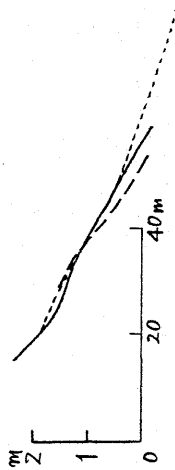


$\frac{V}{\bar{V}}$

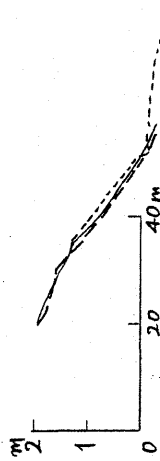


$\frac{V}{\bar{V}}$

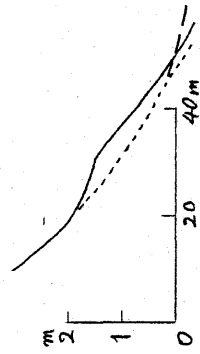
S-000-14



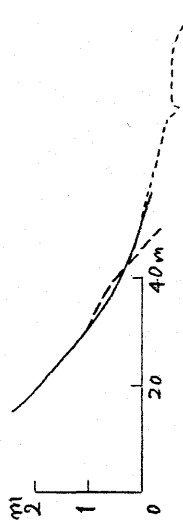
$\frac{V}{\bar{V}}$



$\frac{V}{\bar{V}}$

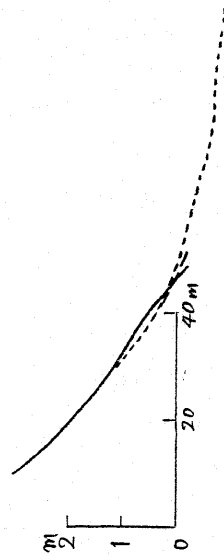


$\frac{V}{\bar{V}}$



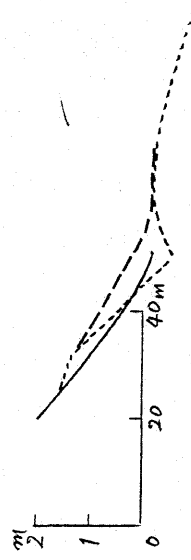
$\frac{V}{\bar{V}}$

S-000-15



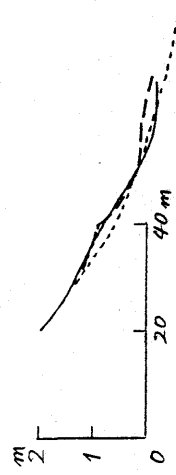
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{v}



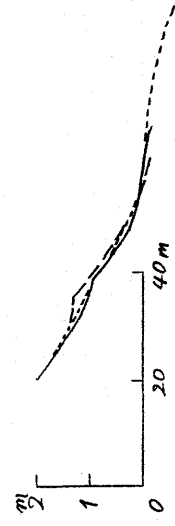
— 1/5
- - - 10/5
- · - 17/5

\bar{v}



— 17/5
- - - 24/5
- · - 31/5

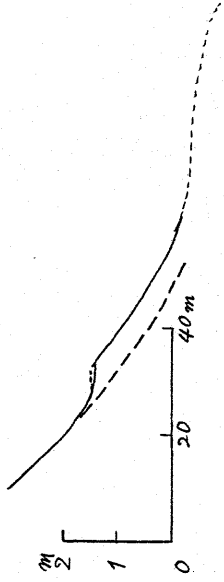
\bar{v}



— 31/5
- - - 6/6
- · - 15/6

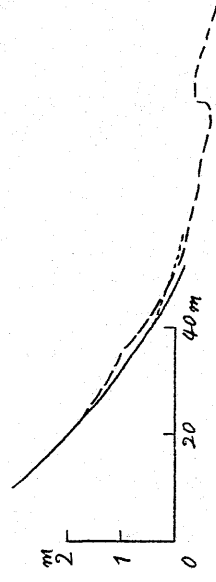
\bar{v}

S-000-16



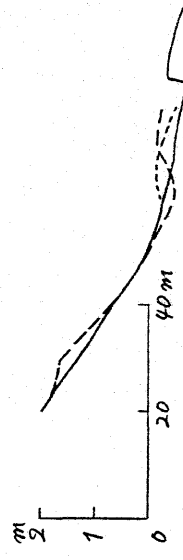
— 15/6/1982
- - - 21/6
- · - 29/6

\bar{v}



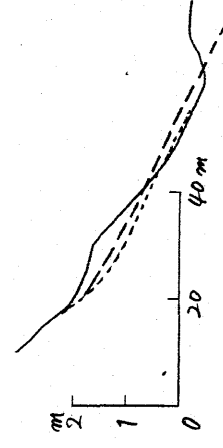
— 29/6
- - - 5/7
- · - 12/7

\bar{v}



— 12/7
- - - 20/7
- · - 27/7

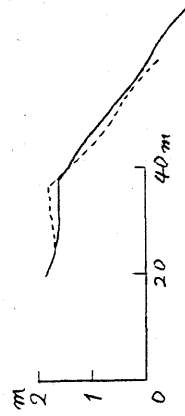
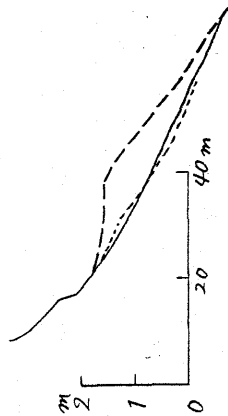
\bar{v}



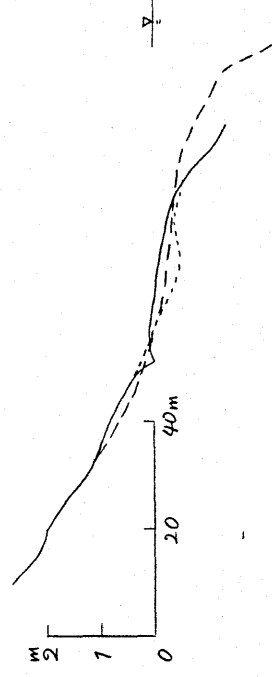
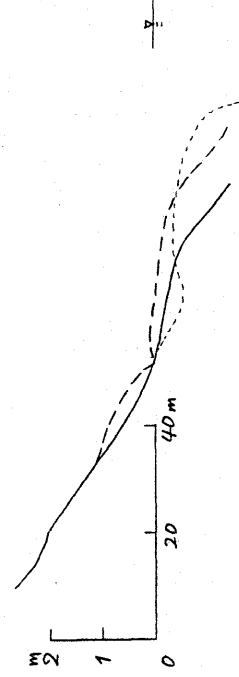
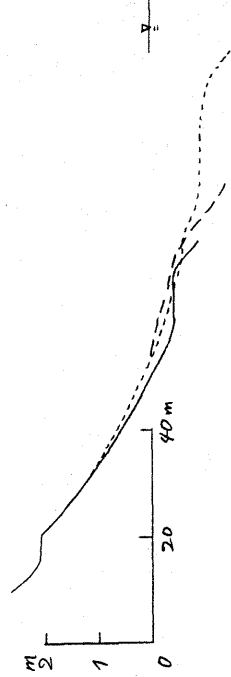
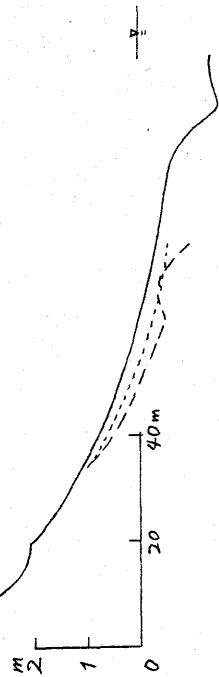
— 27/7
- - - 2/8
- · - 9/8

\bar{v}

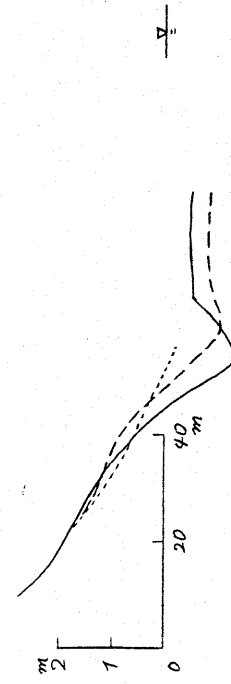
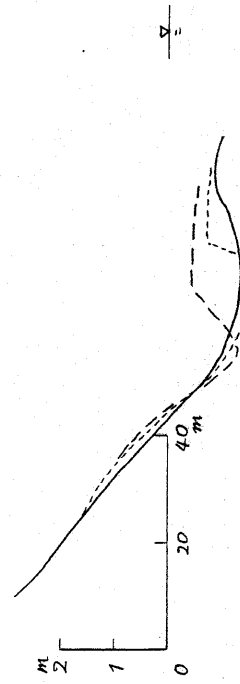
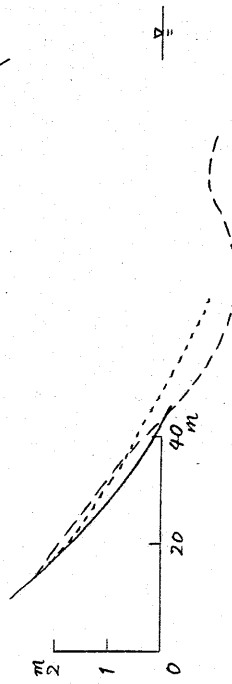
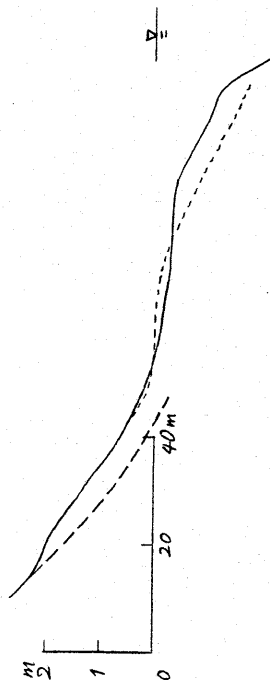
S-000-17



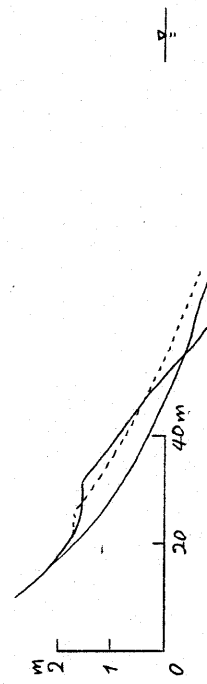
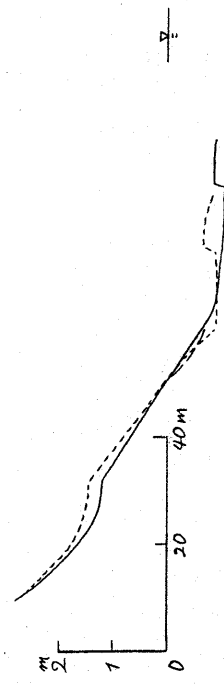
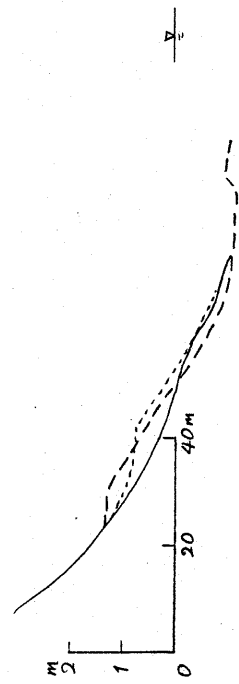
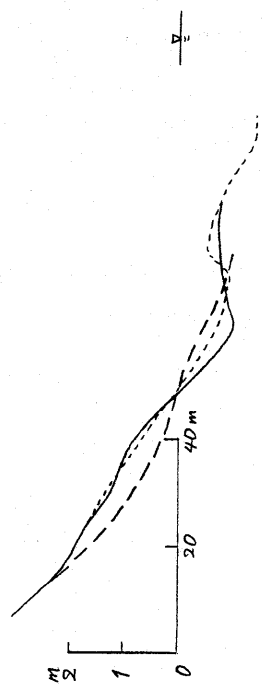
S-050-1



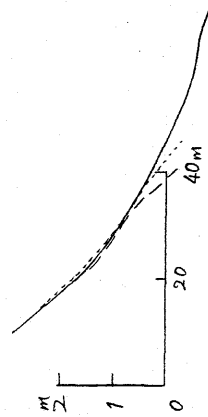
С-050-2



С-050-3

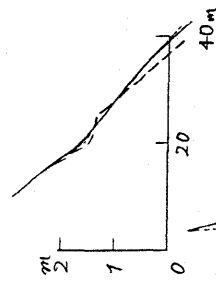


S-050-4



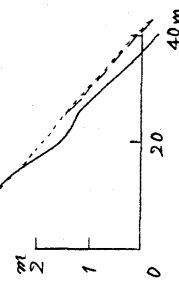
— 27/11/1980
 2/12
 --- 8/12

\bar{v}



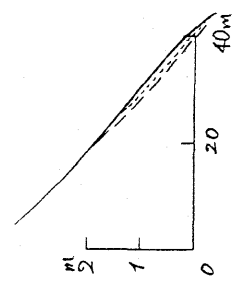
— 8/12
 15/12
 --- 22/12

\bar{v}



— 22/12
 29/12
 --- 6/1/1981

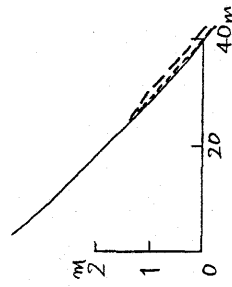
\bar{v}



— 6/1
 12/1
 --- 21/1

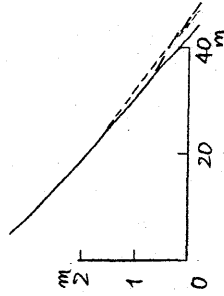
\bar{v}

S-050-5



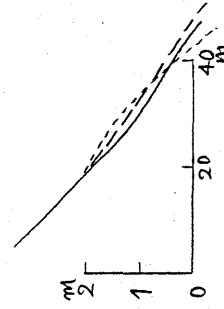
— 21/1/1981
 25/1
 --- 1/2

\bar{v}



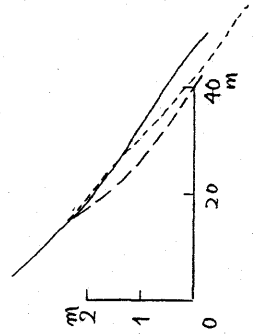
— 1/2
 8/2
 --- 15/2

\bar{v}



— 15/2
 22/2
 --- 28/2

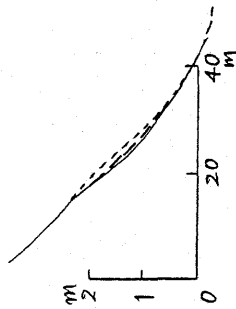
\bar{v}



— 28/2
 8/3
 --- 15/3

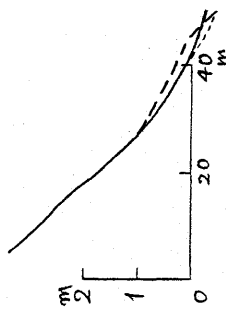
\bar{v}

S-050-6



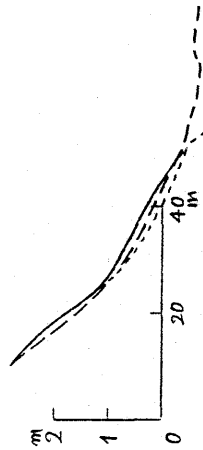
— 15/3/1981
 --- 22/3
 - - - 29/3

\bar{v}



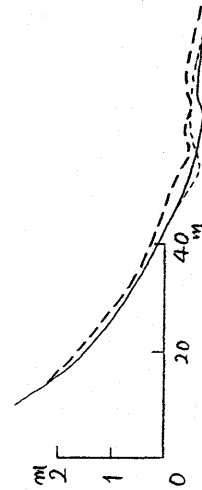
— 29/3
 --- 5/4
 - - - 11/4

\bar{v}



— 11/4
 --- 19/4
 - - - 26/4

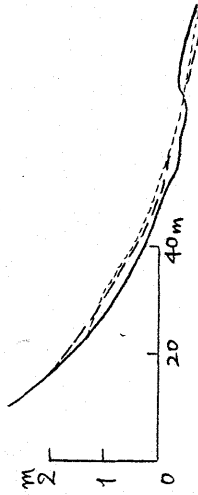
\bar{v}



— 26/4
 --- 3/5
 - - - 11/5

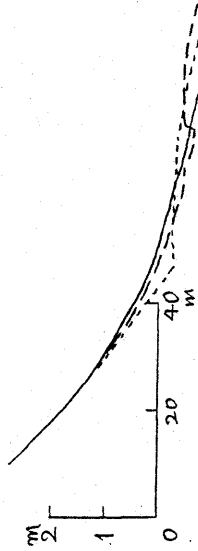
\bar{v}

S-050-7



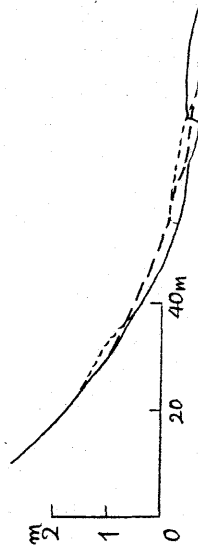
— 11/5/1981
 --- 17/5
 - - - 24/5

\bar{v}



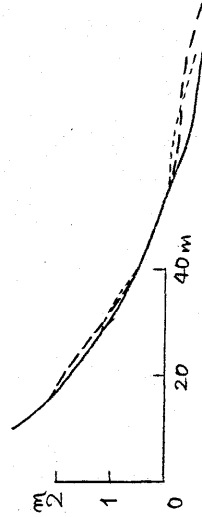
— 24/5
 --- 1/6
 - - - 7/6

\bar{v}



— 7/6
 --- 15/6
 - - - 21/6

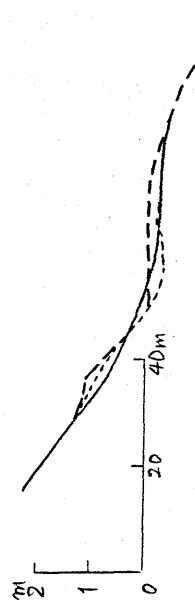
\bar{v}



— 21/6
 --- 28/6
 - - - 6/7

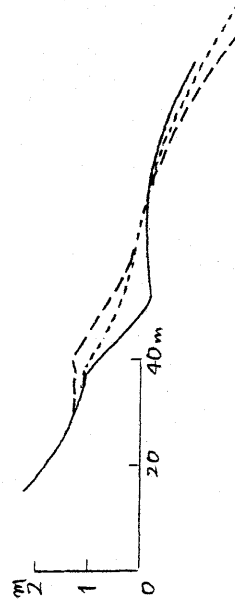
\bar{v}

S-050-8



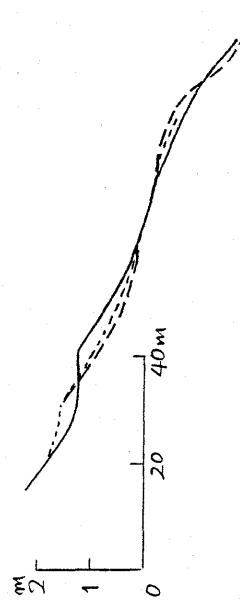
— 6/7/1981
- - - 9/7
- · - 14/7

\bar{v}



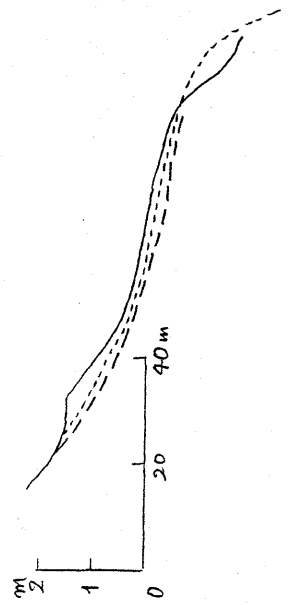
— 14/7
- - - 17/7
- · - 21/7

\bar{v}



— 21/7
- - - 24/7
- · - 28/7

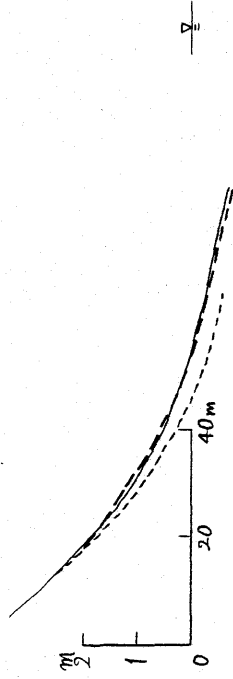
\bar{v}



— 28/7
- - - 31/7
- · - 4/8

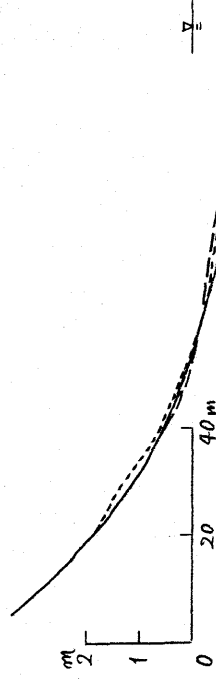
\bar{v}

S-050-9



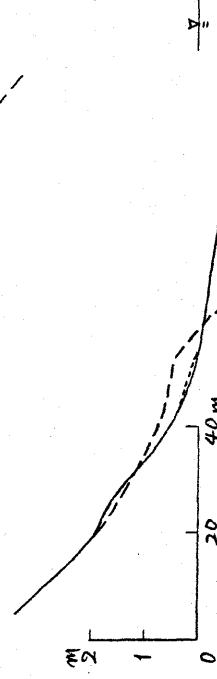
— 4/8/1981
- - - 7/8
- · - 12/8

\bar{v}



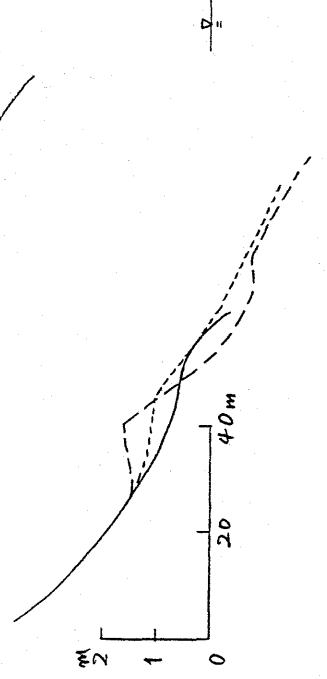
— 12/8
- - - 15/8
- · - 18/8

\bar{v}



— 18/8
- - - 20/8
- · - 24/8

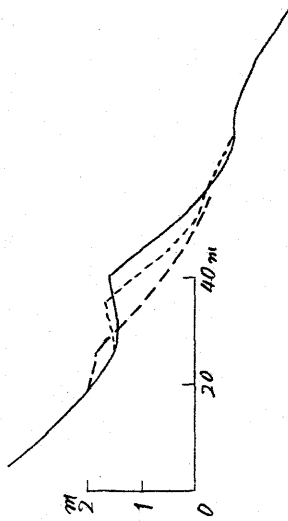
\bar{v}



— 24/8
- - - 27/8
- · - 1/9

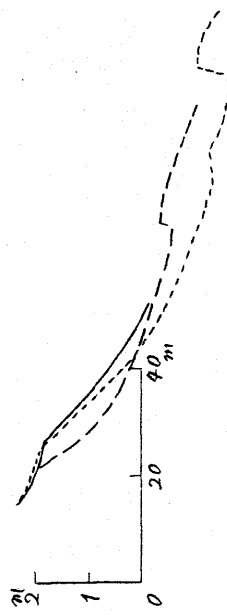
\bar{v}

S-050-10



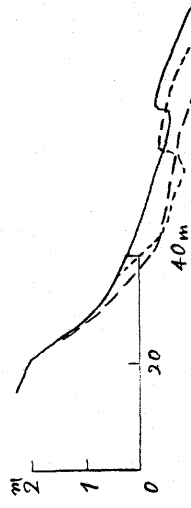
— 1/9/1981
- - - 4/9
- · - 7/9

\bar{v}



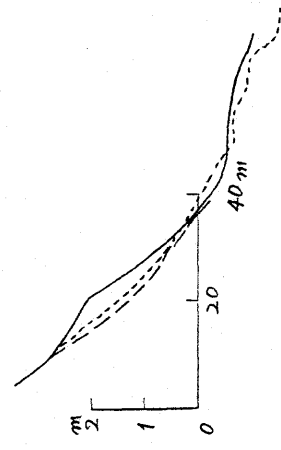
— 7/9
- - - 11/9
- · - 16/9

\bar{v}



— 16/9
- - - 20/9
- · - 25/9

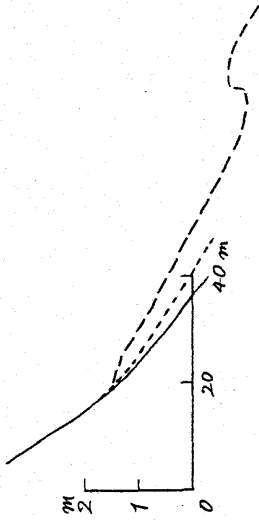
\bar{v}



— 25/9
- - - 29/9
- · - 2/10

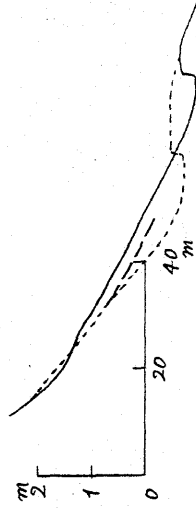
\bar{v}

S-050-11



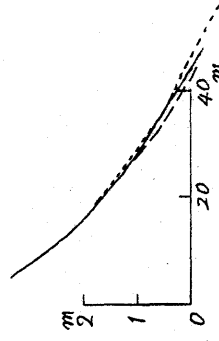
— 2/10/1981
- - - 7/10
- · - 13/10

\bar{v}



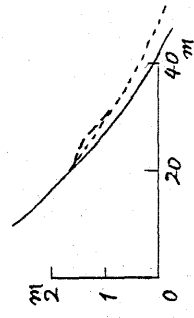
— 13/10
- - - 18/10
- · - 24/10

\bar{v}



— 24/10
- - - 28/10
- · - 2/11

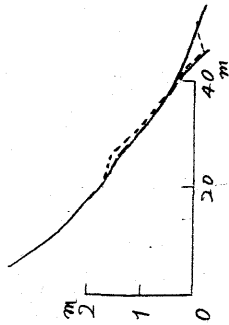
\bar{v}



— 2/11
- - - 8/11
- · - 15/11

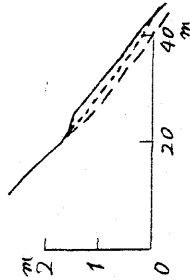
\bar{v}

S-050-12



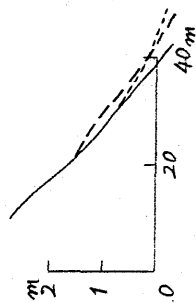
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

\bar{y}



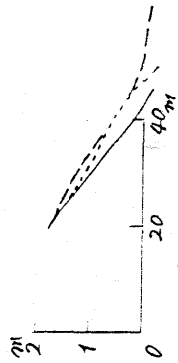
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

\bar{y}



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

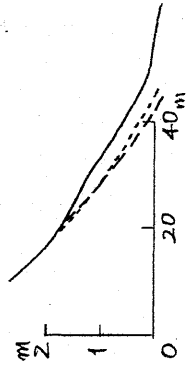
\bar{y}



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

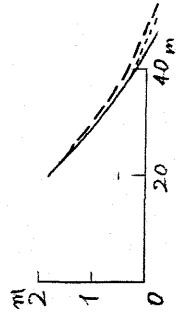
\bar{y}

S-050-13



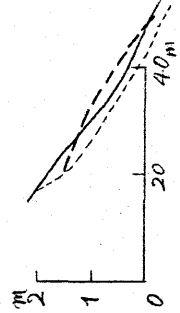
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

\bar{y}



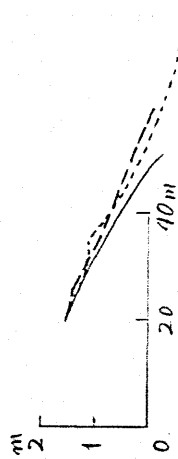
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

\bar{y}



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

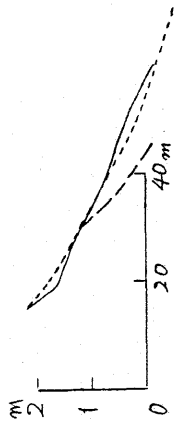
\bar{y}



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

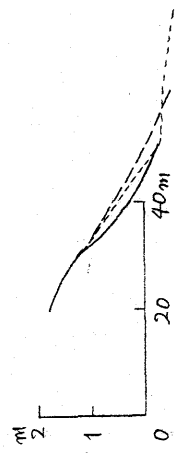
\bar{y}

S-050-14



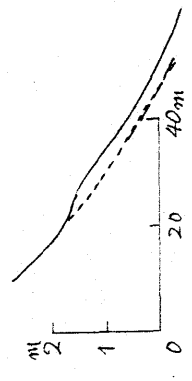
— 21/2/1982
- - - 28/2
- · - 6/3

\bar{V}_i



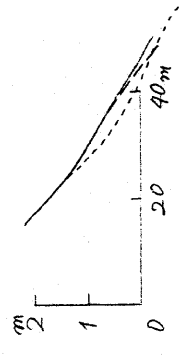
— 6/3
- - - 13/3
- · - 18/3

\bar{V}_i



— 18/3
- - - 24/3
- · - 5/4

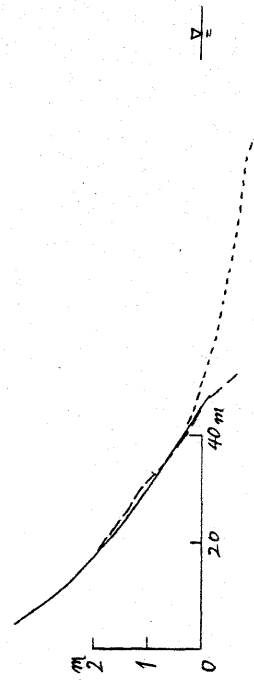
\bar{V}_i



— 5/4
- - - 11/4
- · - 18/4

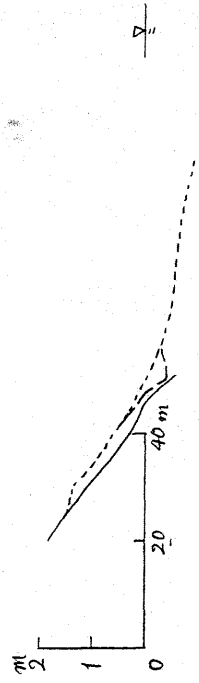
\bar{V}_i

S-050-15



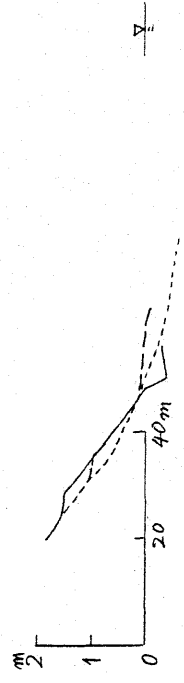
— 18/4/1982
- - - 25/4
- · - 1/5

\bar{V}_i



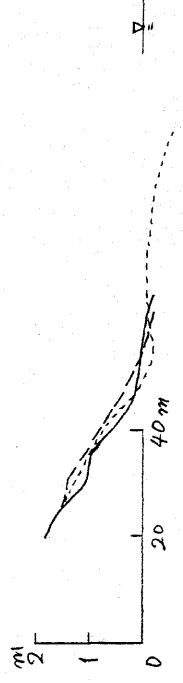
— 1/5
- - - 10/5
- · - 17/5

\bar{V}_i



— 17/5
- - - 24/5
- · - 31/5

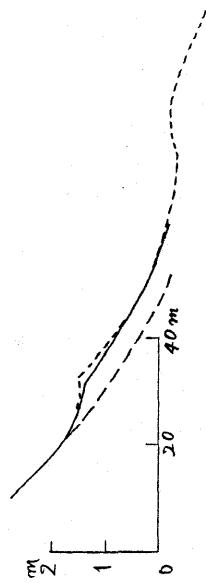
\bar{V}_i



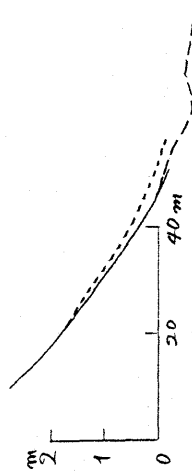
— 31/5
- - - 6/6
- · - 15/6

\bar{V}_i

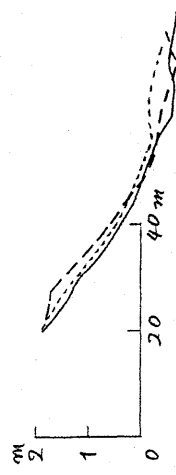
S-050-16



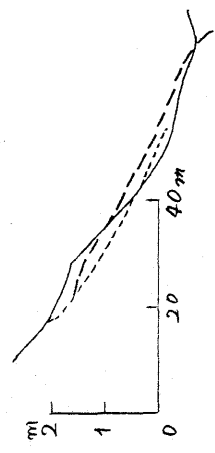
\bar{V}



\bar{V}

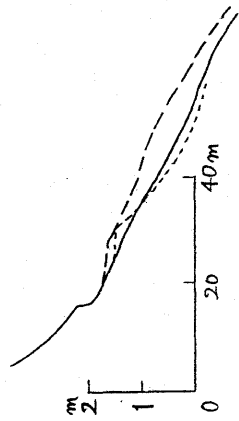


\bar{V}

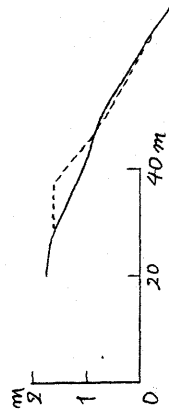


\bar{V}

S-050-17

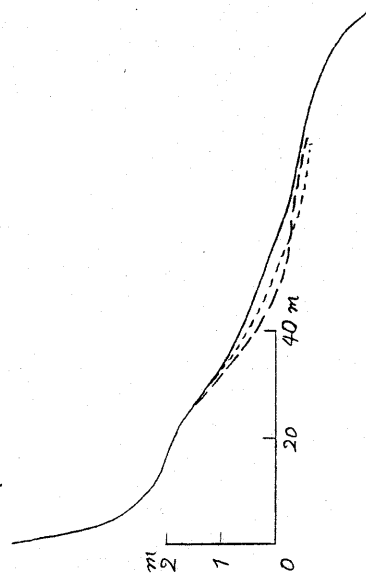


\bar{V}



\bar{V}

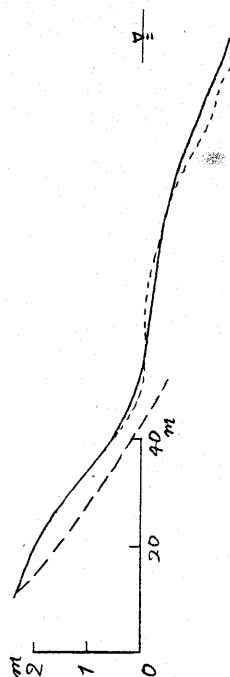
S-100-1



— 28 / 8 / 1980
 31 / 8
 --- 3 / 9

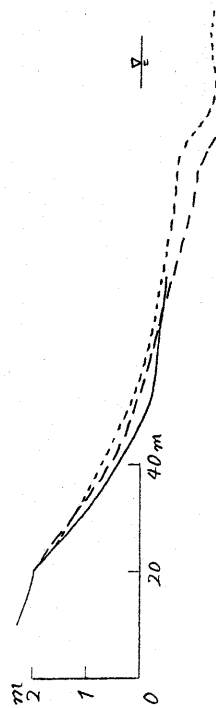
\bar{y}

S-100-2



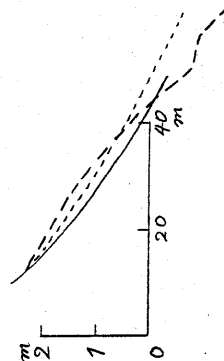
— 23 / 9 / 1980
 26 / 9
 --- 30 / 9

\bar{y}



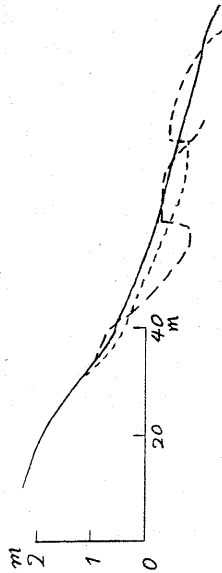
— 3 / 9
 7 / 9
 --- 10 / 9

\bar{y}



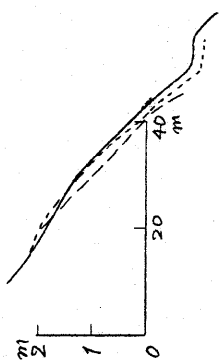
— 30 / 9
 4 / 10
 --- 8 / 10

\bar{y}



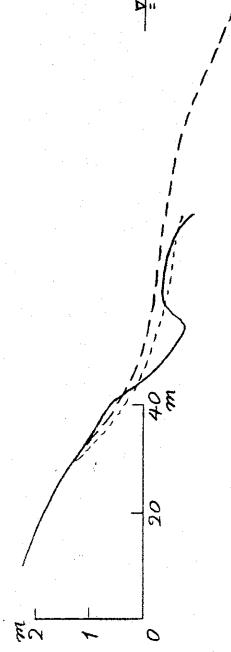
— 10 / 9
 13 / 9
 --- 16 / 9

\bar{y}



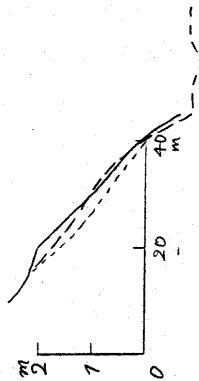
— 8 / 10
 11 / 10
 --- 14 / 10

\bar{y}



— 16 / 9
 20 / 9
 --- 23 / 9

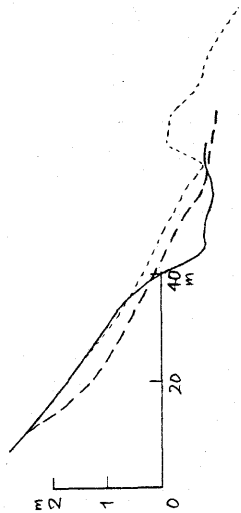
\bar{y}



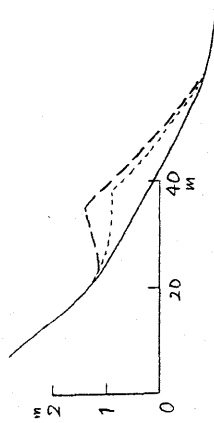
— 14 / 10
 15 / 10
 --- 19 / 10

\bar{y}

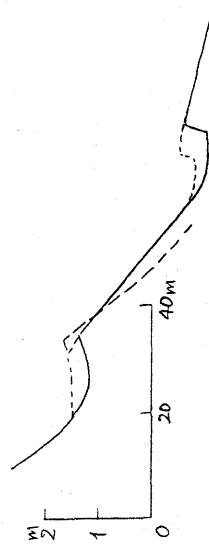
S-100-3



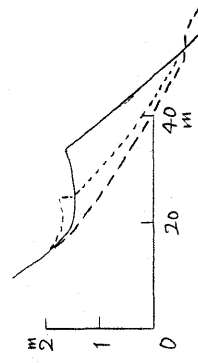
\bar{V}_H



\bar{V}_H

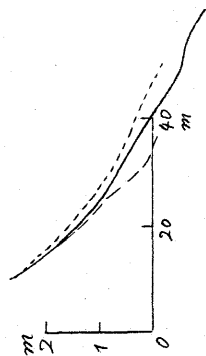


\bar{V}_H

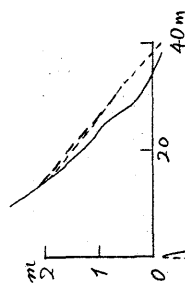


\bar{V}_H

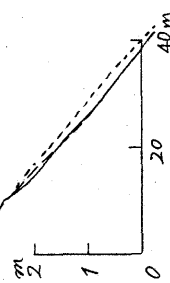
S-100-4



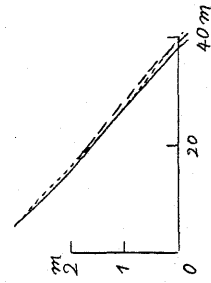
\bar{V}_H



\bar{V}_H

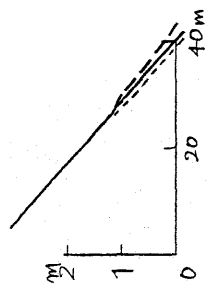


\bar{V}_H



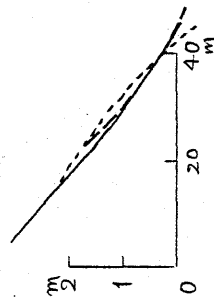
\bar{V}_H

S-100-5



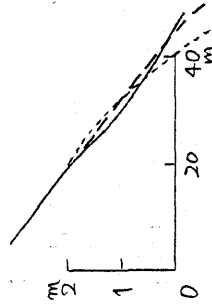
— 21/1/1981
- - - 25/1
- . - 1/2

$\frac{v}{v_0}$



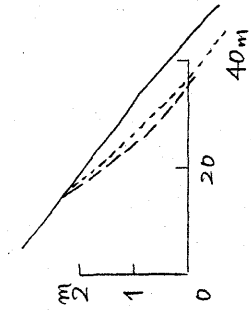
— 1/2
- - - 8/2
- . - 15/2

$\frac{v}{v_0}$



— 15/2
- - - 22/2
- . - 28/2

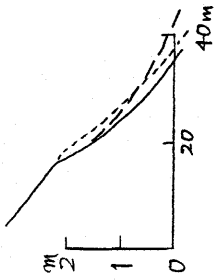
$\frac{v}{v_0}$



— 28/2
- - - 8/3
- . - 15/3

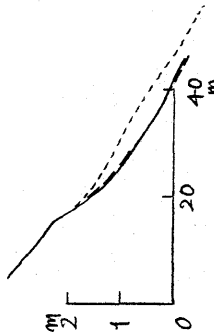
$\frac{v}{v_0}$

S-100-6



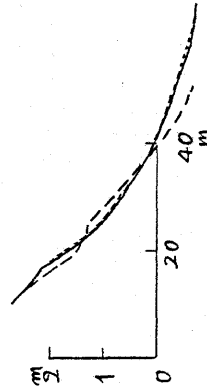
— 15/3/1981
- - - 22/3
- . - 29/3

$\frac{v}{v_0}$



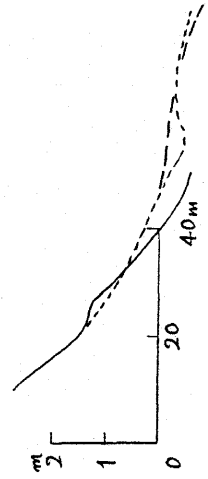
— 29/3
- - - 5/4
- . - 11/4

$\frac{v}{v_0}$



— 11/4
- - - 19/4
- . - 26/4

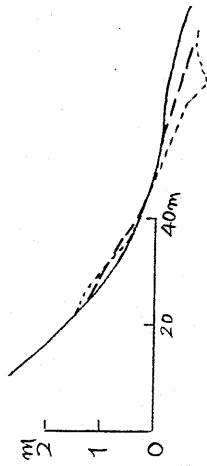
$\frac{v}{v_0}$



— 26/4
- - - 3/5
- . - 11/5

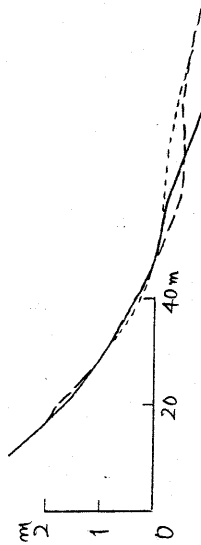
$\frac{v}{v_0}$

S-100-7



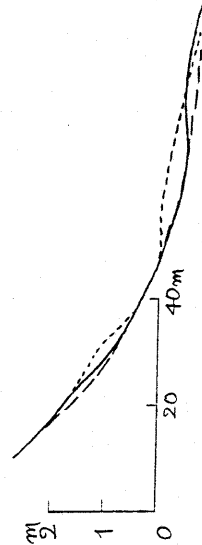
— 11/5/1981
- - - 17/5
- · - 24/5

\bar{V}_i



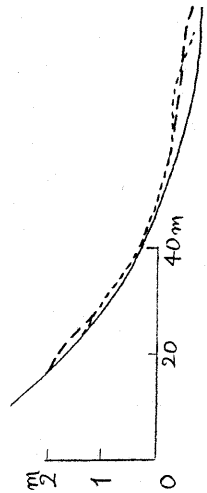
— 24/5
- - - 1/6
- · - 7/6

\bar{V}_i



— 7/6
- - - 15/6
- · - 21/6

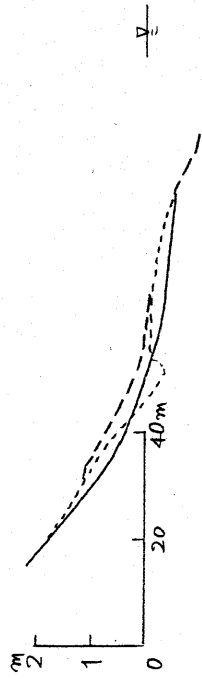
\bar{V}_i



— 21/6
- - - 28/6
- · - 6/7

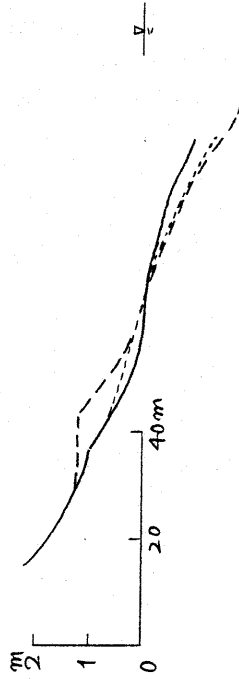
\bar{V}_i

S-100-8



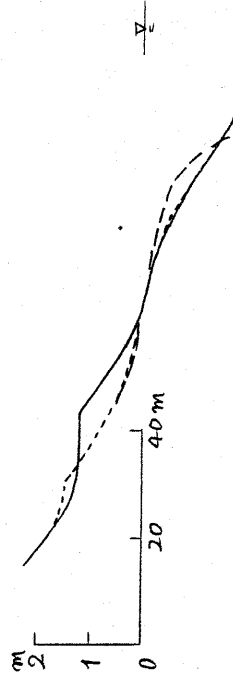
— 6/7/1981
- - - 9/7
- · - 14/7

\bar{V}_i



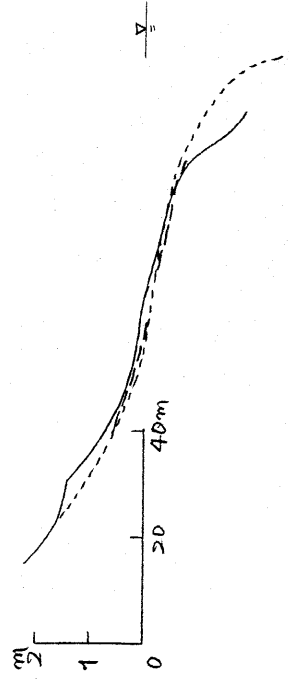
— 14/7
- - - 17/7
- · - 21/7

\bar{V}_i



— 21/7
- - - 24/7
- · - 28/7

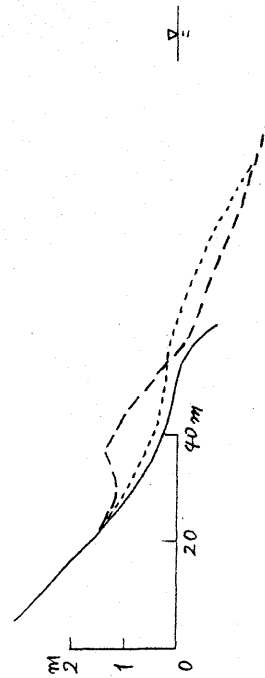
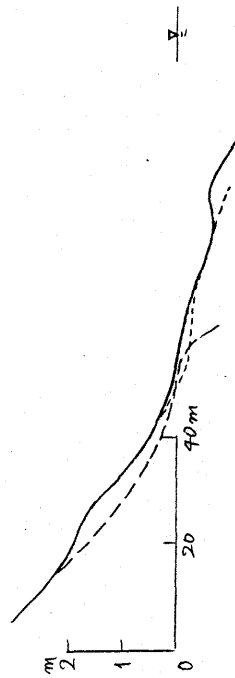
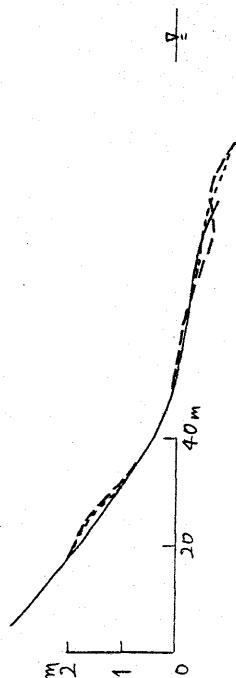
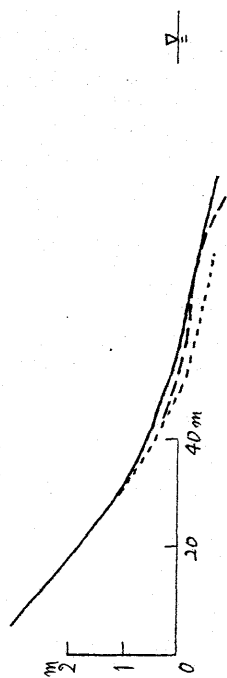
\bar{V}_i



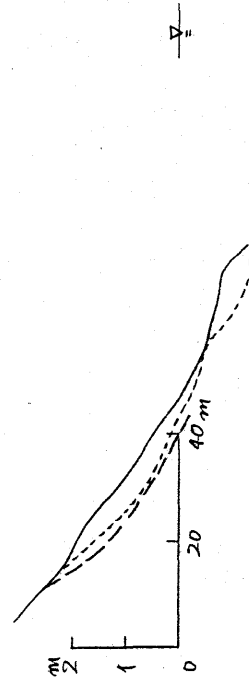
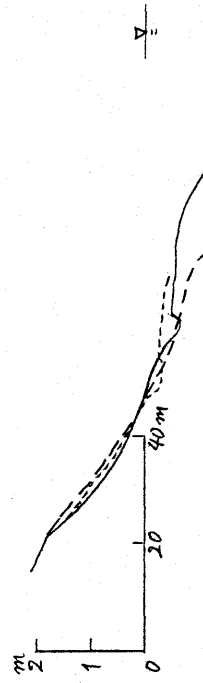
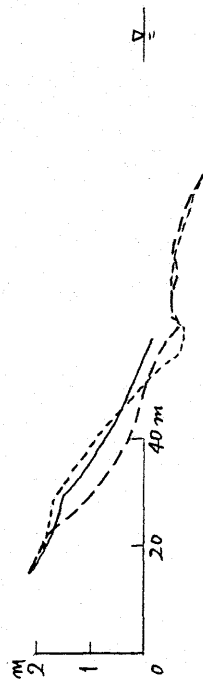
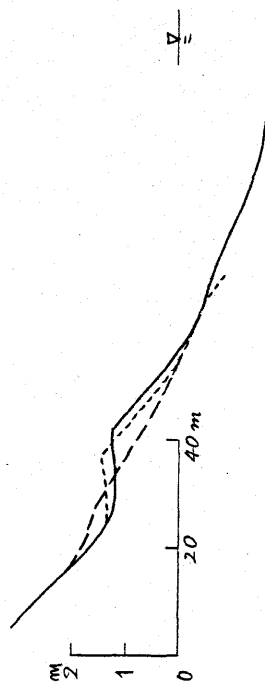
— 28/7
- - - 31/7
- · - 4/8

\bar{V}_i

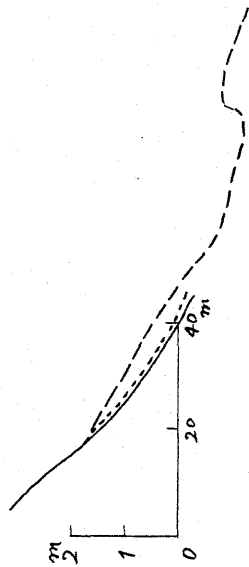
S-100-9



S-100-10

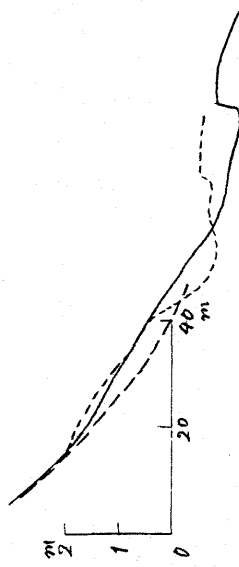


S-100-11



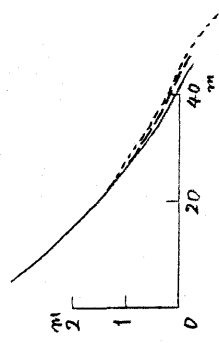
— 2/10/1981
- - - 7/10
- · - 13/10

$\frac{V}{V_0}$



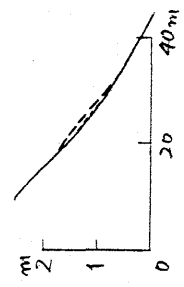
— 13/10
- - - 18/10
- · - 24/10

$\frac{V}{V_0}$



— 24/10
- - - 28/10
- · - 2/11

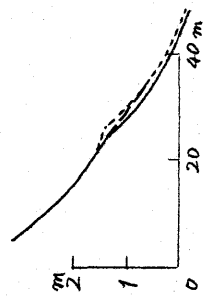
$\frac{V}{V_0}$



— 2/11
- - - 8/11
- · - 15/11

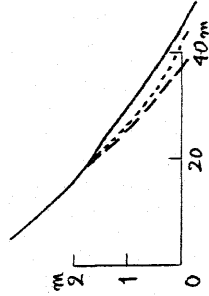
$\frac{V}{V_0}$

S-100-12



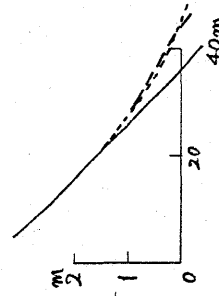
— 15/11/1981
- - - 19/11
- · - 23/11

$\frac{V}{V_0}$



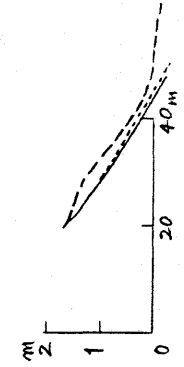
— 23/11
- - - 29/11
- · - 5/12

$\frac{V}{V_0}$



— 5/12
- - - 12/12
- · - 15/12

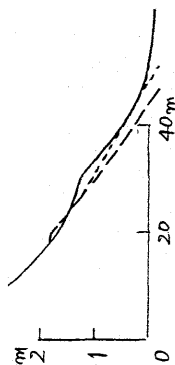
$\frac{V}{V_0}$



— 15/12
- - - 22/12
- · - 29/12

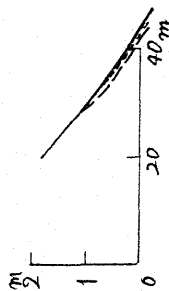
$\frac{V}{V_0}$

S-100-13



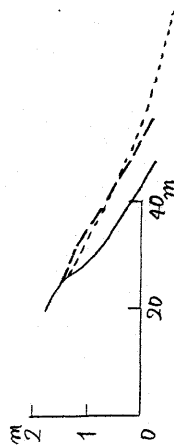
— 29/12/1981
- - - 5/1/1982
- · - 10/1

\bar{v}



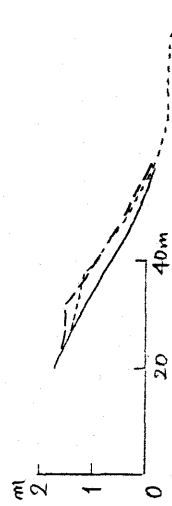
— 10/1
- - - 17/1
- · - 24/1

\bar{v}



— 24/1
- - - 31/1
- · - 7/2

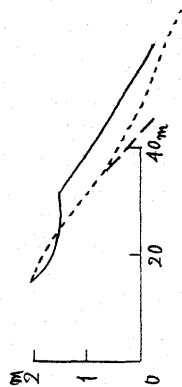
\bar{v}



— 7/2
- - - 14/2
- · - 21/2

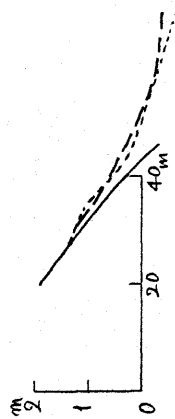
\bar{v}

S-100-14



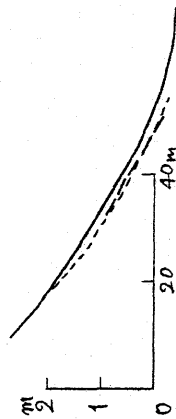
— 21/2/1982
- - - 28/2
- · - 6/3

\bar{v}



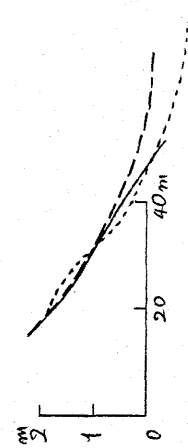
— 6/3
- - - 13/3
- · - 18/3

\bar{v}



— 18/3
- - - 24/3
- · - 5/4

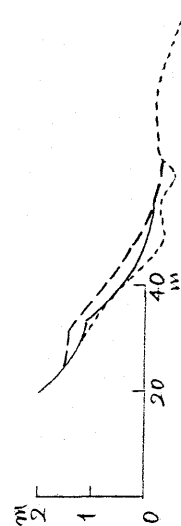
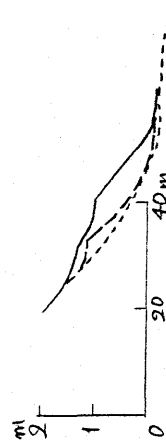
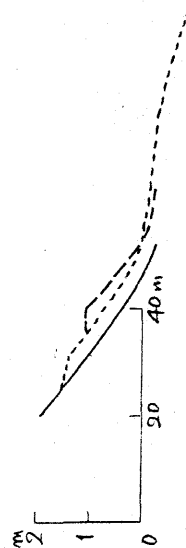
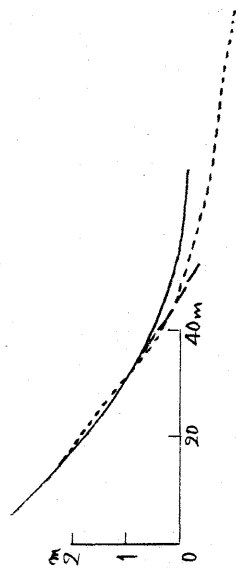
\bar{v}



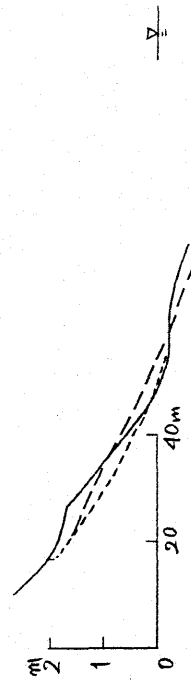
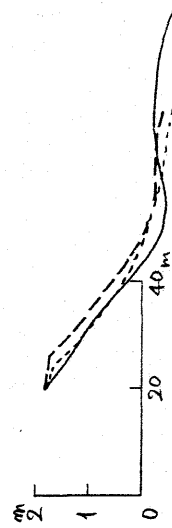
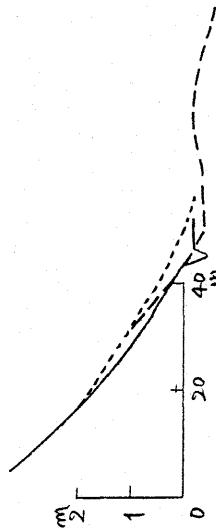
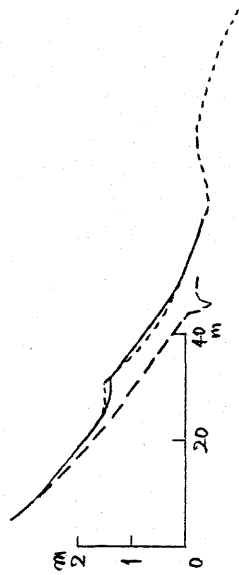
— 5/4
- - - 11/4
- · - 18/4

\bar{v}

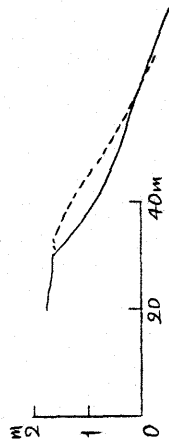
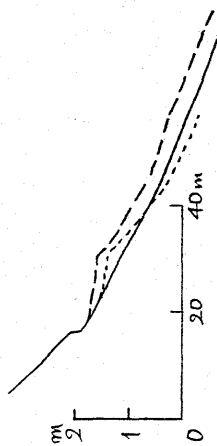
S-100-15



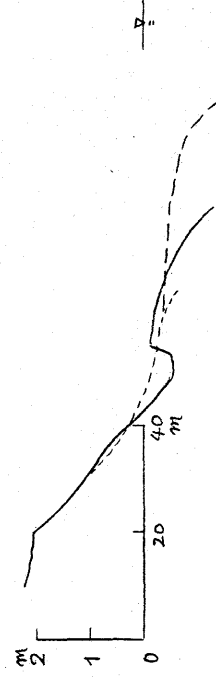
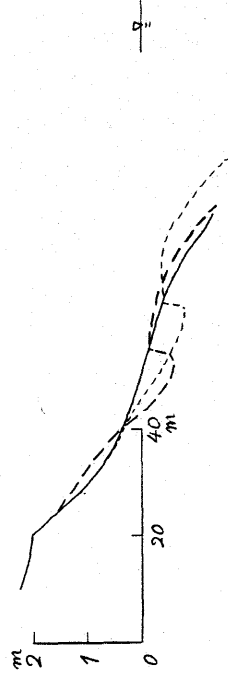
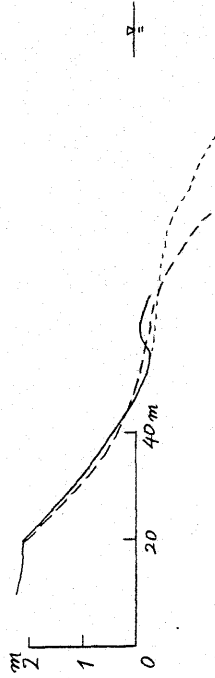
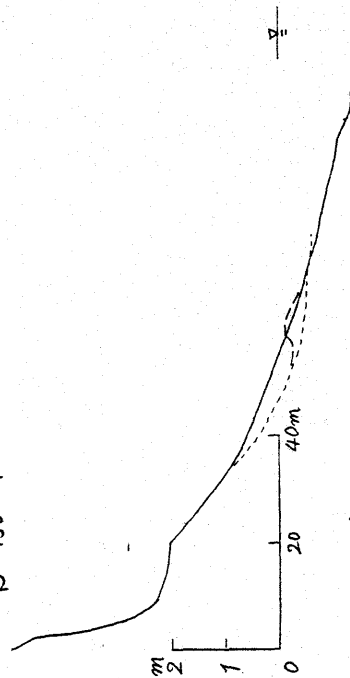
S-100-16



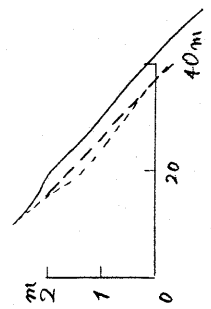
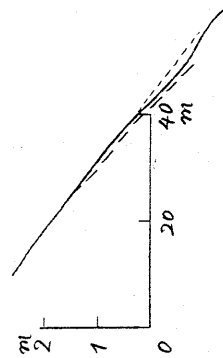
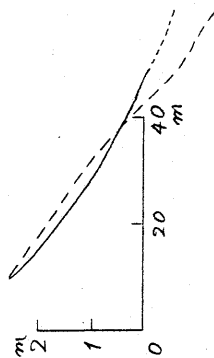
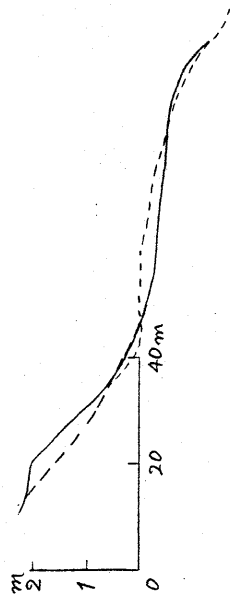
S-100-17



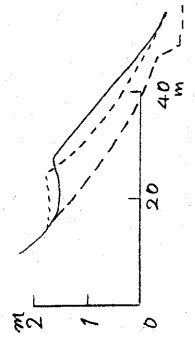
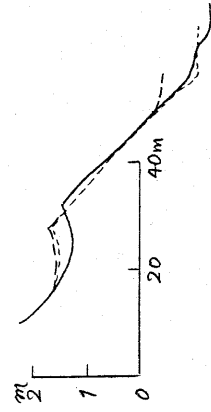
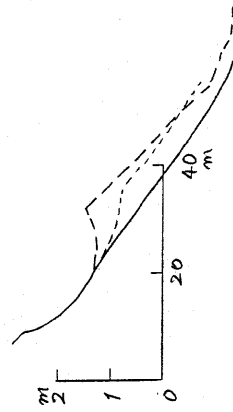
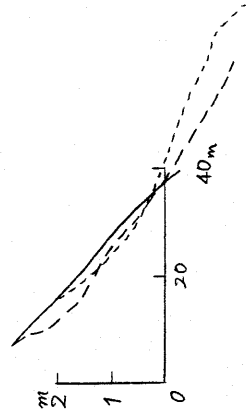
S-150-1



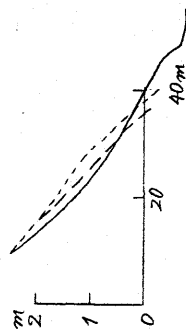
С-150-2



С-150-3

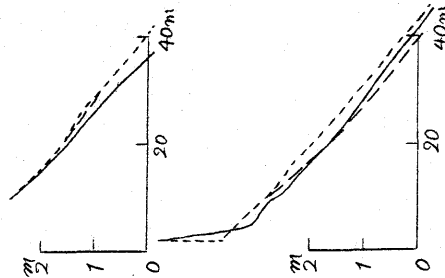


Σ-150-4



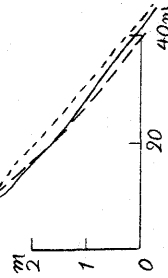
— 27 / 11 / 1980
 - - - 2 / 12
 - · - 8 / 12

$\frac{\bar{v}}{v}$



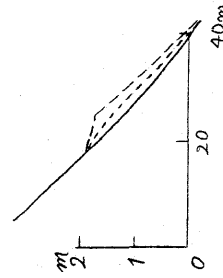
— 8 / 12
 - - - 15 / 12
 - · - 22 / 12

$\frac{\bar{v}}{v}$



— 22 / 12
 - - - 29 / 12
 - · - 6 / 1 / 1981

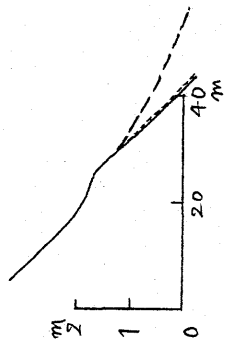
$\frac{\bar{v}}{v}$



— 6 / 1
 - - - 12 / 1
 - · - 21 / 1

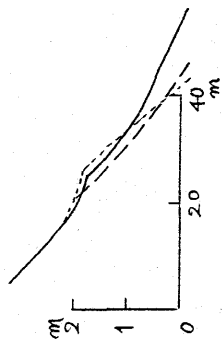
$\frac{\bar{v}}{v}$

Σ-150-5



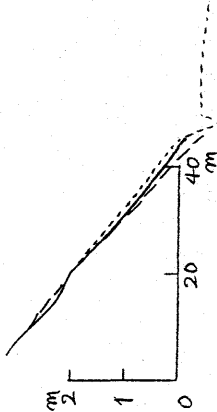
— 21 / 1 / 1981
 - - - 25 / 1
 - · - 1 / 2

$\frac{\bar{v}}{v}$



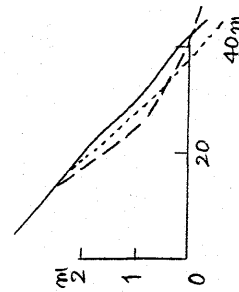
— 1 / 2
 - - - 8 / 2
 - · - 15 / 2

$\frac{\bar{v}}{v}$



— 15 / 2
 - - - 22 / 2
 - · - 28 / 2

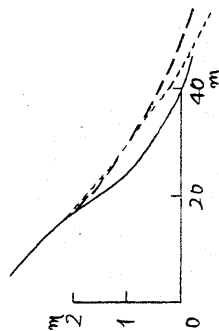
$\frac{\bar{v}}{v}$



— 28 / 2
 - - - 8 / 3
 - · - 15 / 3

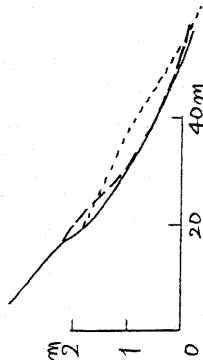
$\frac{\bar{v}}{v}$

S-150 · 6



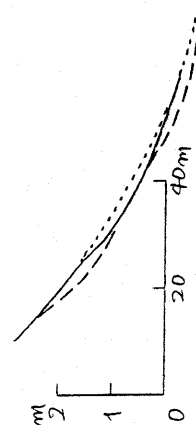
— 15/3/1981
- - - 22/3
- · - 29/3

$\frac{V}{\bar{V}}$



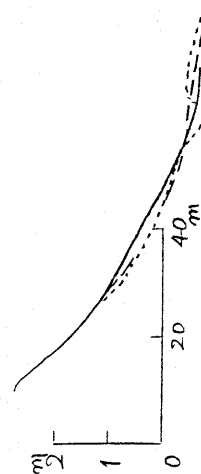
— 29/3
- - - 5/4
- · - 11/4

$\frac{V}{\bar{V}}$



— 11/4
- - - 19/4
- · - 26/4

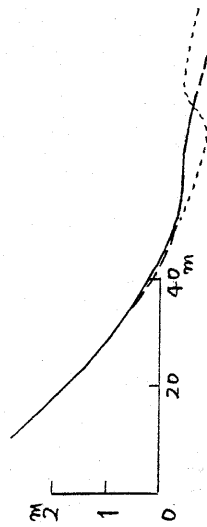
$\frac{V}{\bar{V}}$



— 26/4
- - - 3/5
- · - 11/5

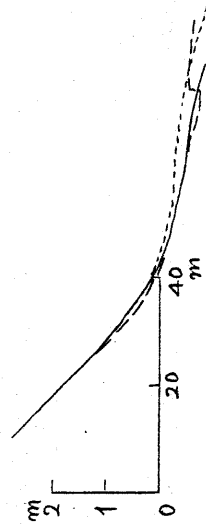
$\frac{V}{\bar{V}}$

S-150-7



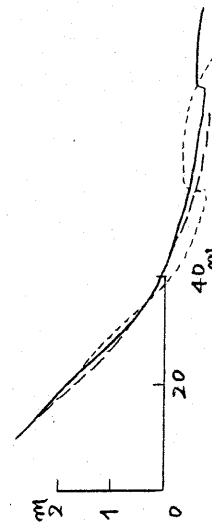
— 11/5/1981
- - - 17/5
- · - 24/5

$\frac{V}{\bar{V}}$



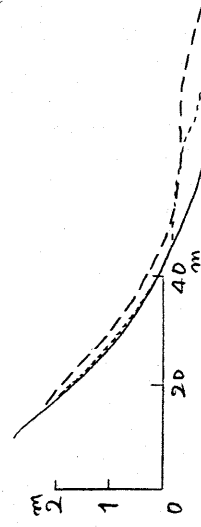
— 24/5
- - - 1/6
- · - 7/6

$\frac{V}{\bar{V}}$



— 7/6
- - - 15/6
- · - 21/6

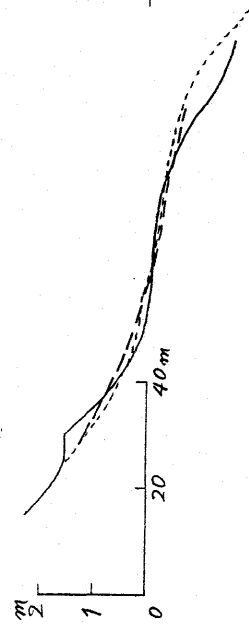
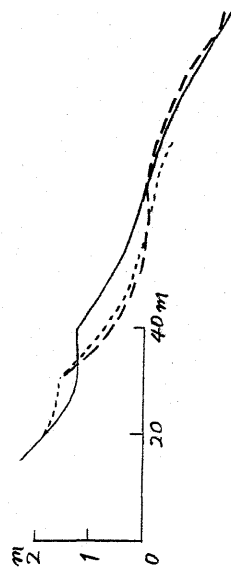
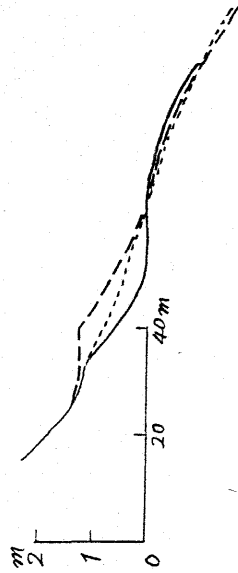
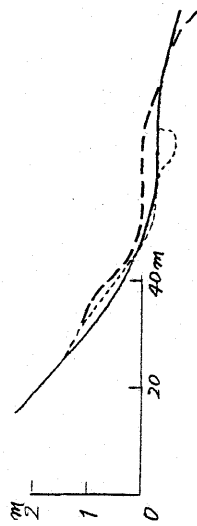
$\frac{V}{\bar{V}}$



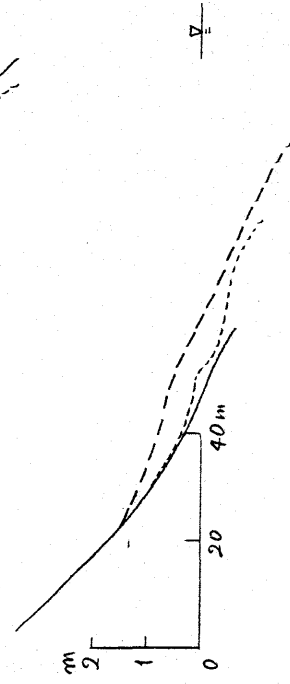
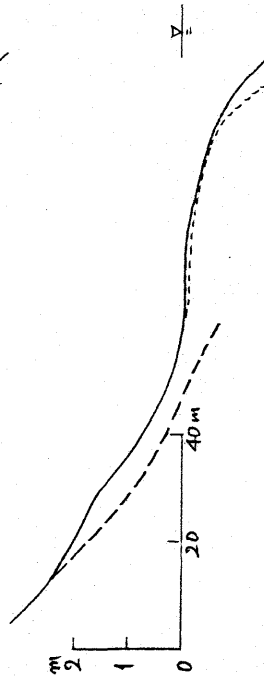
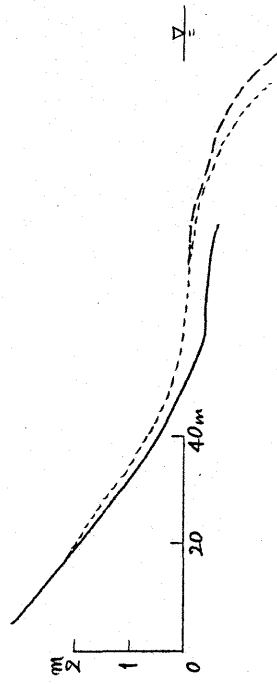
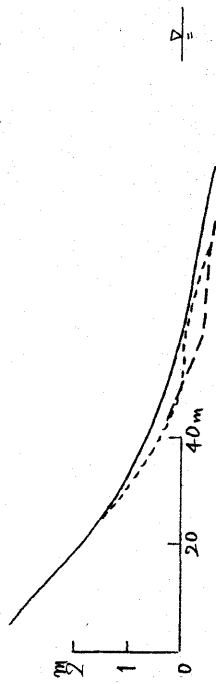
— 21/6
- - - 28/6
- · - 6/7

$\frac{V}{\bar{V}}$

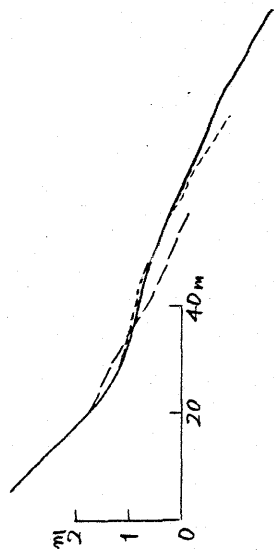
S-150-8



S-150-9

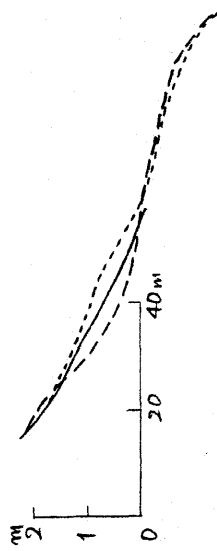


S-150-10



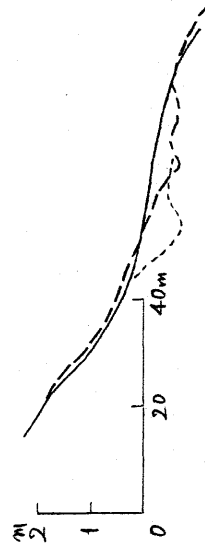
— 1/9/1981
- - - 4/9
- · - 7/9

\bar{V}



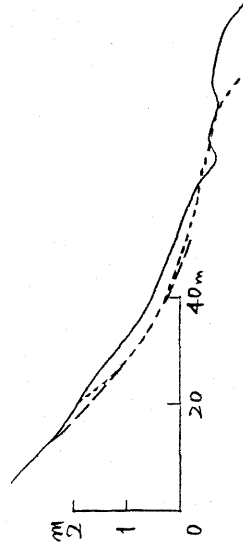
— 7/9
- - - 11/9
- · - 16/9

\bar{V}



— 16/9
- - - 20/9
- · - 25/9

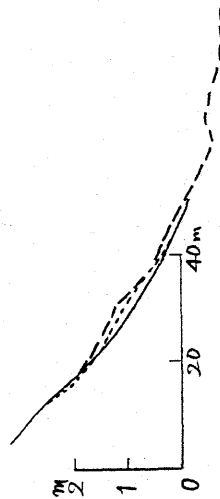
\bar{V}



— 25/9
- - - 29/9
- · - 2/10

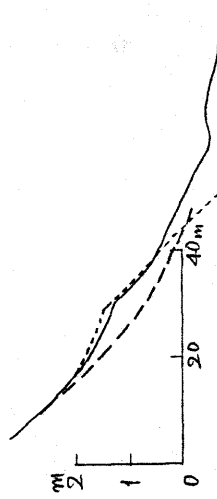
\bar{V}

S-150-11



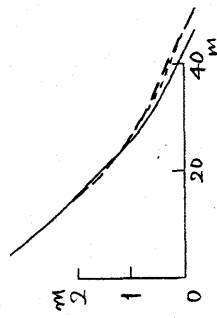
— 2/10/1981
- - - 7/10
- · - 13/10

\bar{V}



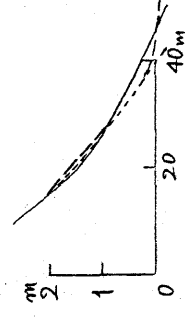
— 13/10
- - - 18/10
- · - 24/10

\bar{V}



— 24/10
- - - 28/10
- · - 2/11

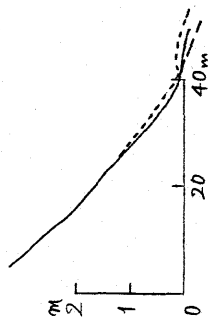
\bar{V}



— 2/11
- - - 8/11
- · - 15/11

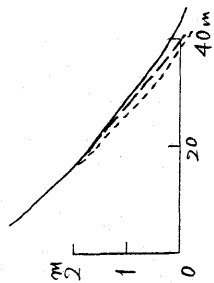
\bar{V}

S-150-12



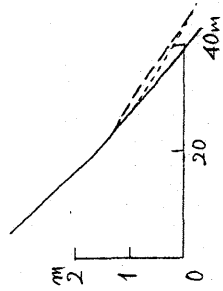
— 15 / 11 / 1981
 --- 19 / 11
 - - - 23 / 11

\overline{V}



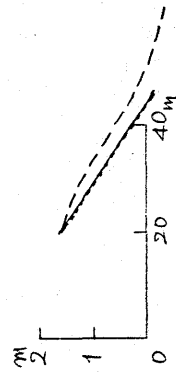
— 23 / 11
 --- 29 / 11
 - - - 5 / 12

\overline{V}



— 5 / 12
 --- 12 / 12
 - - - 15 / 12

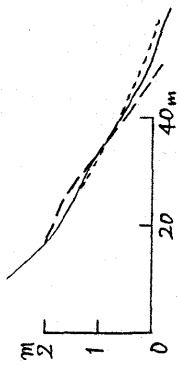
\overline{V}



— 15 / 12
 --- 22 / 12
 - - - 29 / 12

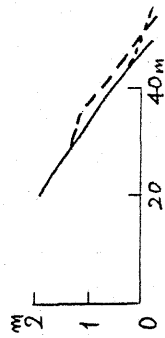
\overline{V}

S-150-13



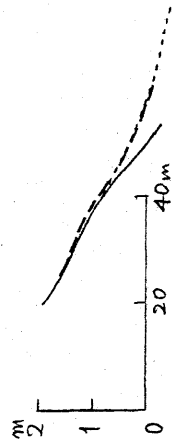
— 29 / 12 / 1981
 --- 5 / 1 / 1982
 - - - 10 / 1

\overline{V}



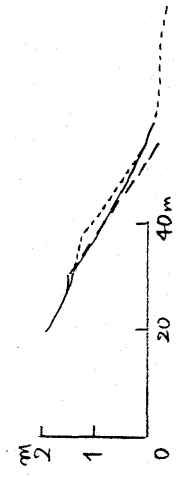
— 10 / 1
 --- 17 / 1
 - - - 24 / 1

\overline{V}



— 24 / 1
 --- 31 / 1
 - - - 7 / 2

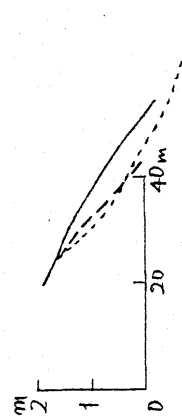
\overline{V}



— 7 / 2
 --- 14 / 2
 - - - 21 / 2

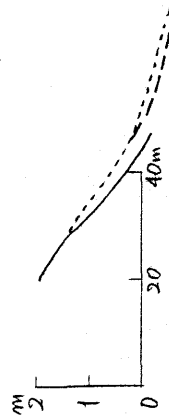
\overline{V}

S-150-14



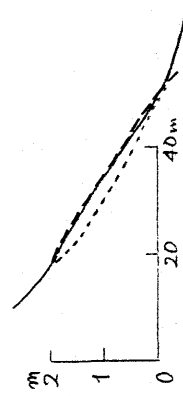
— 21/2/1982
--- 28/2
- - - 6/3

\bar{y}



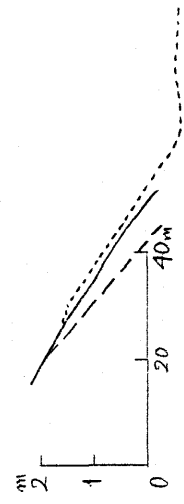
— 6/3
--- 13/3
- - - 18/3

\bar{y}



— 18/3
--- 24/3
- - - 5/4

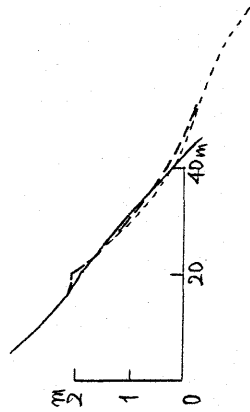
\bar{y}



— 5/4
--- 11/4
- - - 18/4

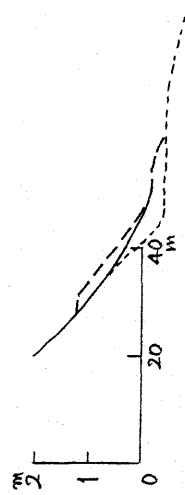
\bar{y}

S-150-15



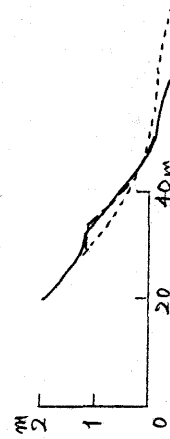
— 18/4/1982
--- 25/4
- - - 1/5

\bar{y}



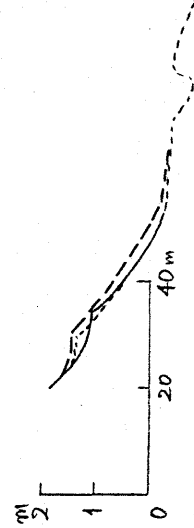
— 1/5
--- 10/5
- - - 17/5

\bar{y}



— 17/5
--- 24/5
- - - 31/5

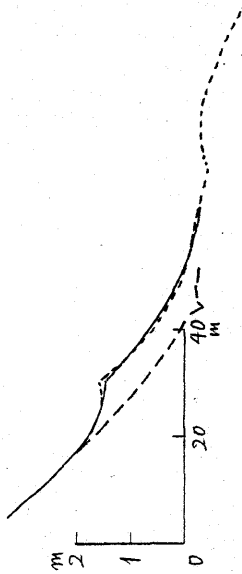
\bar{y}



— 31/5
--- 6/6
- - - 15/6

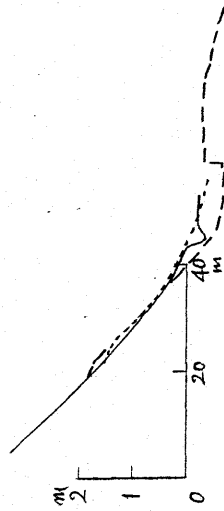
\bar{y}

S-150-16



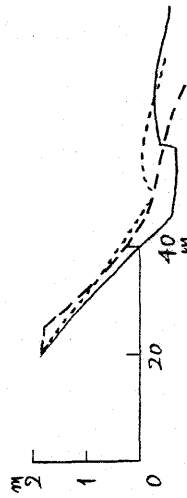
— 15/6/1982
- - - 21/6
- · - 29/6

$\frac{\nabla}{\bar{v}}$



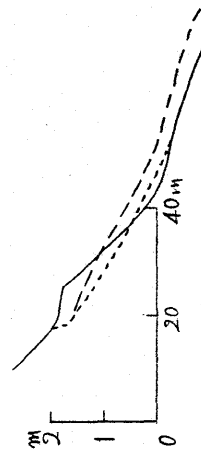
— 29/6
- - - 5/7
- · - 12/7

$\frac{\nabla}{\bar{v}}$



— 12/7
- - - 20/7
- · - 27/7

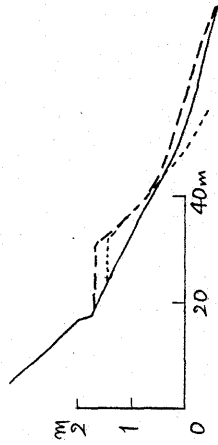
$\frac{\nabla}{\bar{v}}$



— 27/7
- - - 2/8
- · - 9/8

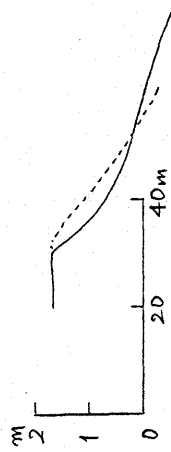
$\frac{\nabla}{\bar{v}}$

S-150-17



— 9/8/1982
- - - 15/8
- · - 23/8

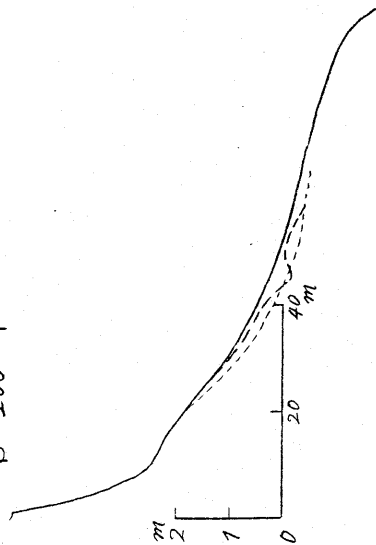
$\frac{\nabla}{\bar{v}}$



— 23/8
- - - 30/8

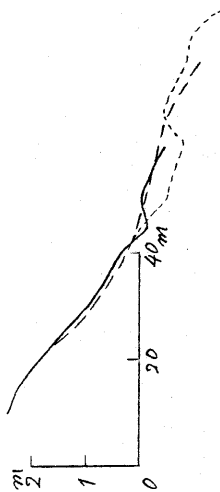
$\frac{\nabla}{\bar{v}}$

S-200-1



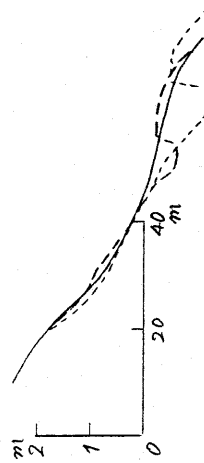
— 28 / 8 / 1980
 --- 31 / 8
 ... 3 / 9

\bar{y}



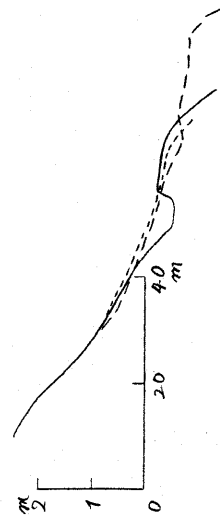
— 3 / 9
 --- 7 / 9
 ... 10 / 9

\bar{y}



— 10 / 9
 --- 13 / 9
 ... 16 / 9

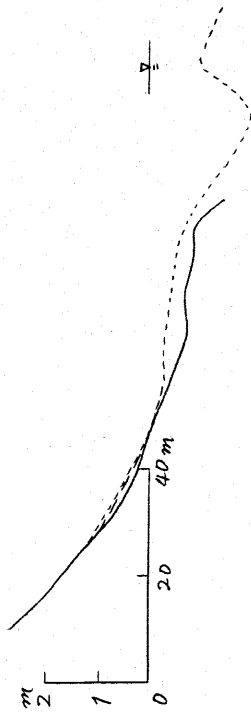
\bar{y}



— 16 / 9
 --- 20 / 9
 ... 23 / 9

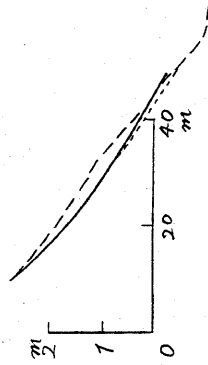
\bar{y}

S-200-2



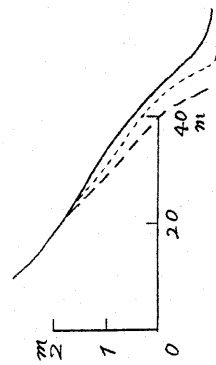
— 23 / 9 / 1980
 --- 26 / 9
 ... 30 / 9

\bar{y}



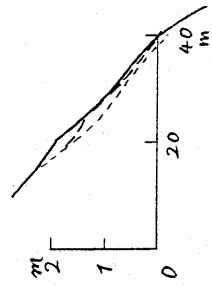
— 30 / 9
 --- 4 / 10
 ... 8 / 10

\bar{y}



— 8 / 10
 --- 11 / 10
 ... 14 / 10

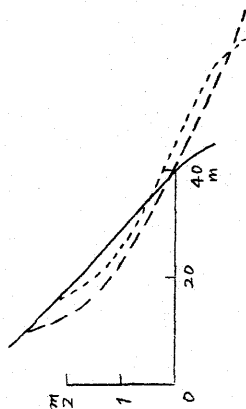
\bar{y}



— 14 / 10
 --- 15 / 10
 ... 19 / 10

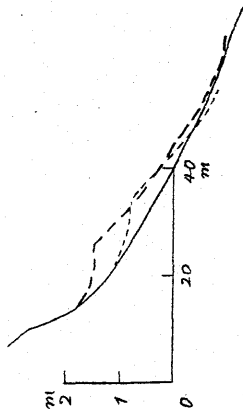
\bar{y}

S-200-3



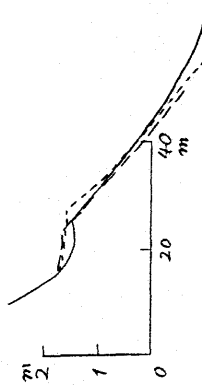
— 19 / 10 / 1980
- - - 23 / 10
- · - 28 / 10

\bar{v}



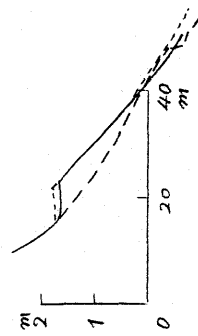
— 28 / 10
- - - 2 / 11
- · - 7 / 11

\bar{v}



— 7 / 11
- - - 12 / 11
- · - 17 / 11

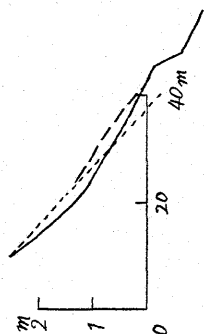
\bar{v}



— 17 / 11
- - - 22 / 11
- · - 27 / 11

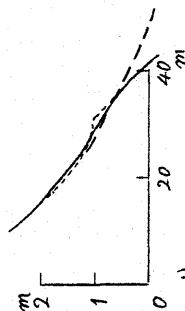
\bar{v}

S-200-4



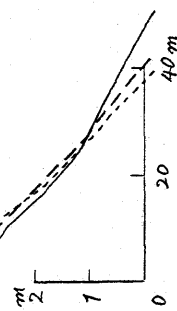
— 27 / 11 / 1980
- - - 2 / 12
- · - 8 / 12

\bar{v}



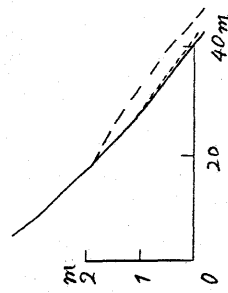
— 8 / 12
- - - 15 / 12
- · - 22 / 12

\bar{v}



— 22 / 12
- - - 29 / 12
- · - 6 / 1 / 1981

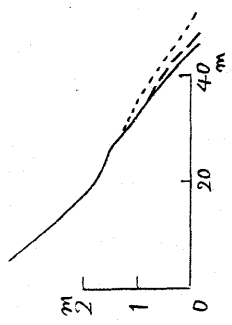
\bar{v}



— 6 / 1
- - - 12 / 1
- · - 21 / 1

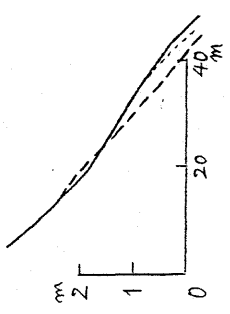
\bar{v}

S-200-5



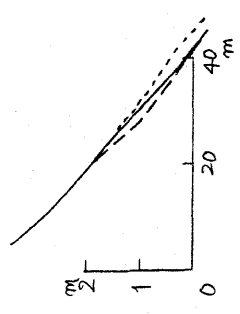
— 21/1/1981
 --- 25/1
 - - - 1/2

\bar{y}



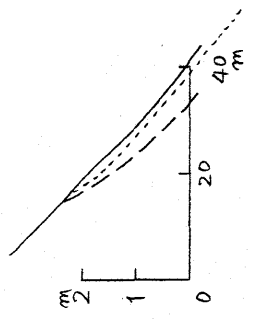
— 1/2
 --- 8/2
 - - - 15/2

\bar{y}



— 15/2
 --- 22/2
 - - - 28/2

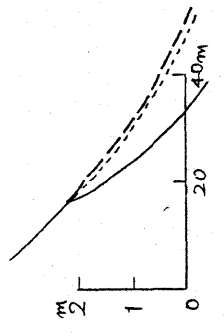
\bar{y}



— 28/2
 --- 8/3
 - - - 15/3

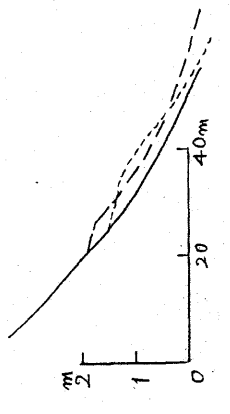
\bar{y}

S-200-6



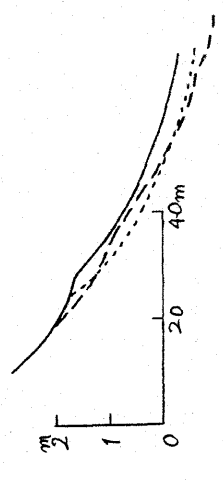
— 15/3/1981
 --- 22/3
 - - - 29/3

\bar{y}



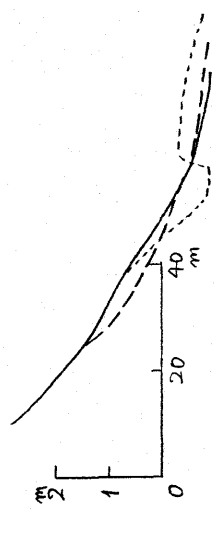
— 29/3
 --- 5/4
 - - - 11/4

\bar{y}



— 11/4
 --- 19/4
 - - - 26/4

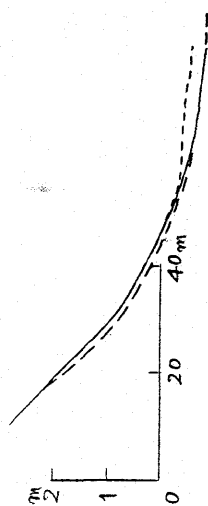
\bar{y}



— 26/4
 --- 3/5
 - - - 11/5

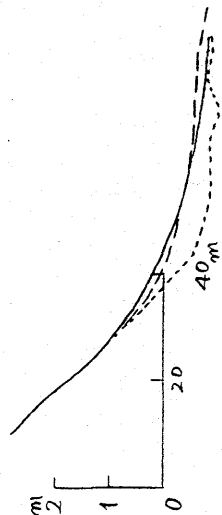
\bar{y}

S-200-7



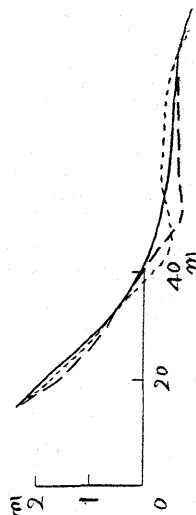
— 11/5/1981
- - - 17/5
- · - 24/5

\bar{y}



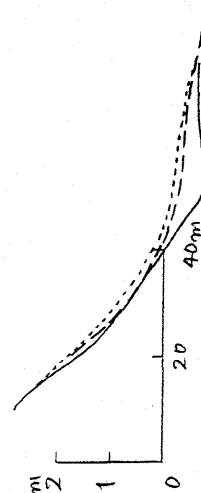
— 24/5
- · - 1/6
- - - 7/6

\bar{y}



— 7/6
- · - 15/6
- - - 21/6

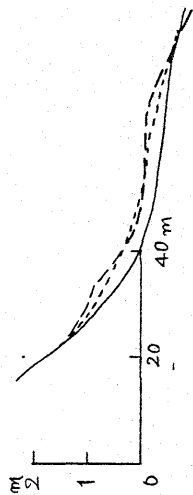
\bar{y}



— 21/6
- · - 28/6
- - - 6/7

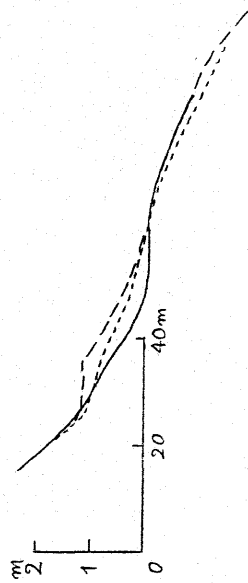
\bar{y}

S-200-8



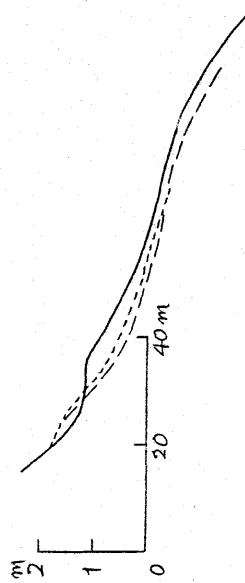
— 6/7/1981
- · - 9/7
- - - 14/7

\bar{y}



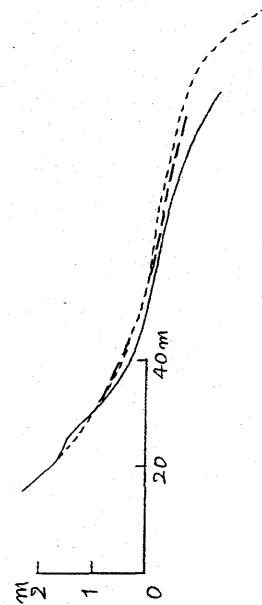
— 14/7
- · - 17/7
- - - 21/7

\bar{y}



— 21/7
- · - 24/7
- - - 28/7

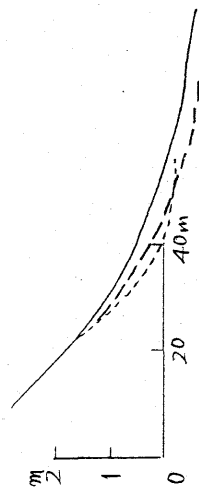
\bar{y}



— 28/7
- · - 31/7
- - - 4/8

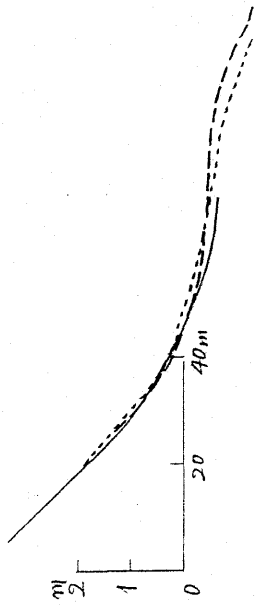
\bar{y}

S-200-9



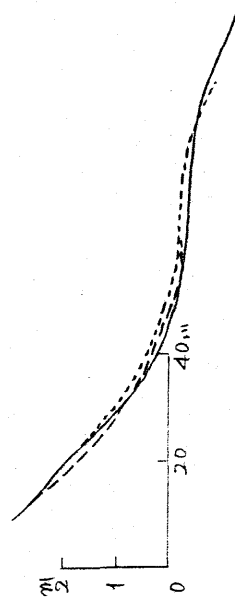
— 4/8/1981
- - - 7/8
- · - 12/8

\bar{v}



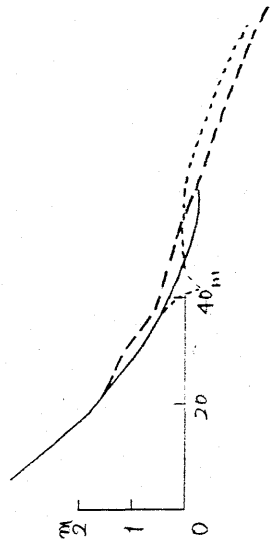
— 12/8
- - - 15/8
- · - 18/8

\bar{v}



— 18/8
- - - 20/8
- · - 24/8

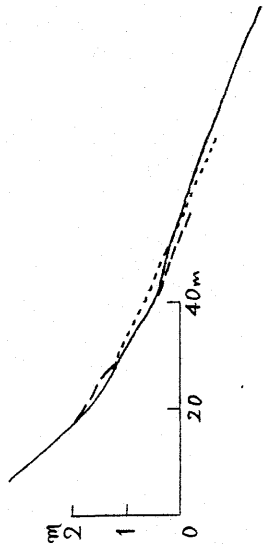
\bar{v}



— 24/8
- - - 27/8
- · - 1/8

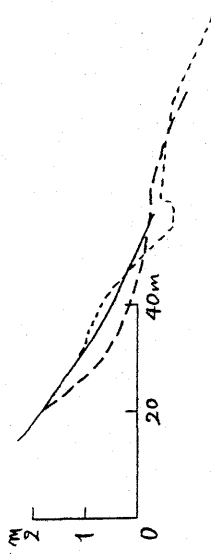
\bar{v}

S-200-10



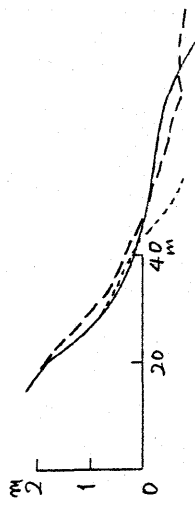
— 1/9/1981
- - - 4/9
- · - 7/9

\bar{v}



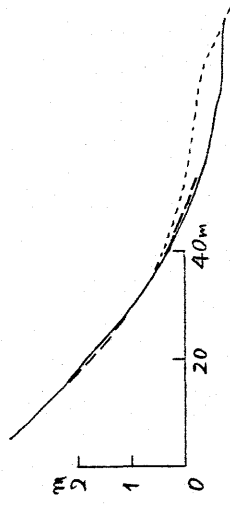
— 7/9
- - - 11/9
- · - 16/9

\bar{v}



— 16/9
- - - 20/9
- · - 25/9

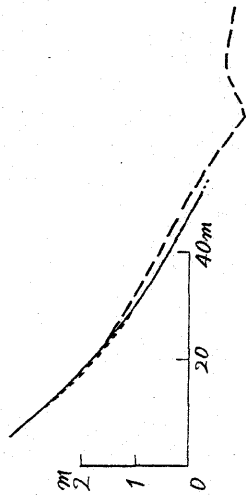
\bar{v}



— 25/9
- - - 29/9
- · - 2/10

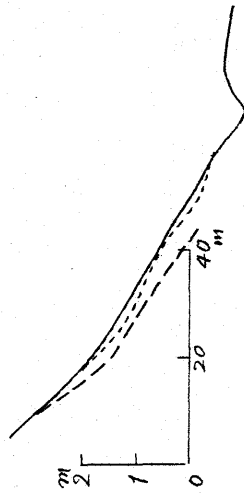
\bar{v}

S-200-11



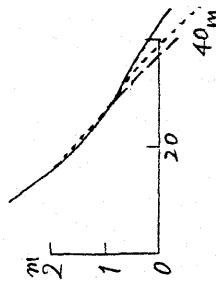
— 2/10/1981
- - - 7/10
- · - 13/10

$\frac{\nabla}{\bar{\nabla}}$



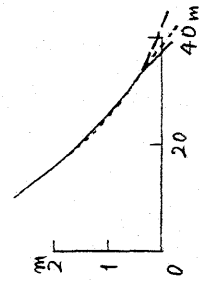
— 13/10
- - - 18/10
- · - 24/10

$\frac{\nabla}{\bar{\nabla}}$



— 24/10
- - - 28/10
- · - 2/11

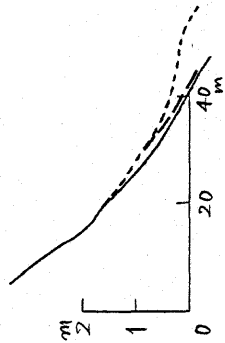
$\frac{\nabla}{\bar{\nabla}}$



— 2/11
- - - 8/11
- · - 15/11

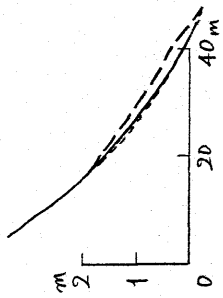
$\frac{\nabla}{\bar{\nabla}}$

S-200-12



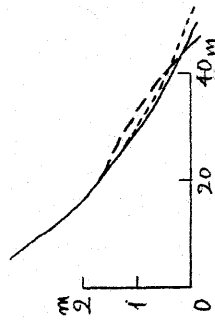
— 15/11/1981
- - - 19/11
- · - 23/11

$\frac{\nabla}{\bar{\nabla}}$



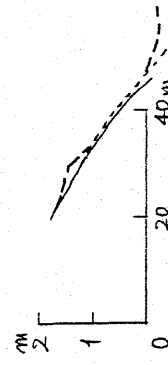
— 23/11
- - - 29/11
- · - 5/12

$\frac{\nabla}{\bar{\nabla}}$



— 5/12
- - - 12/12
- · - 15/12

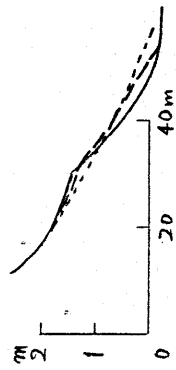
$\frac{\nabla}{\bar{\nabla}}$



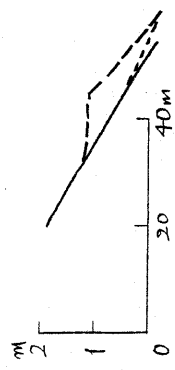
— 15/12
- - - 22/12
- · - 29/12

$\frac{\nabla}{\bar{\nabla}}$

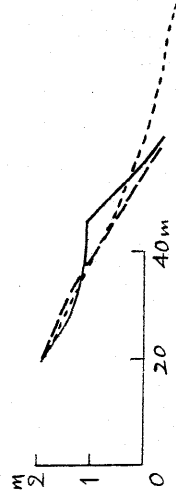
S-200-13



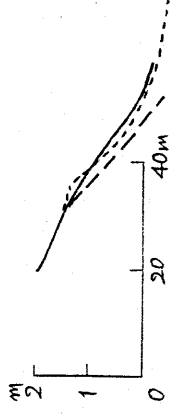
\bar{V}



\bar{V}

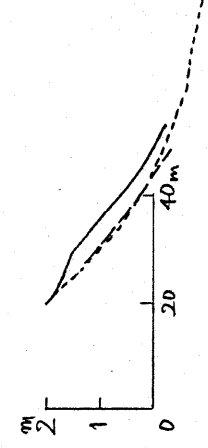


\bar{V}

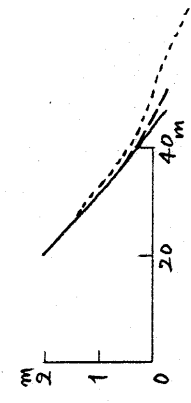


\bar{V}

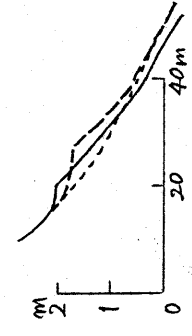
S-200-14



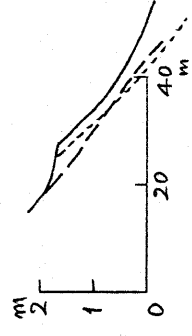
\bar{V}



\bar{V}

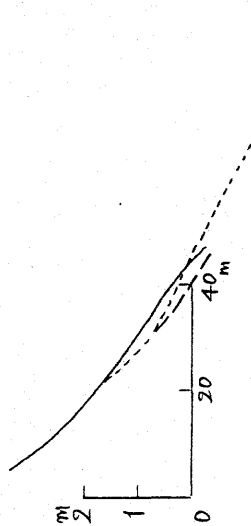


\bar{V}

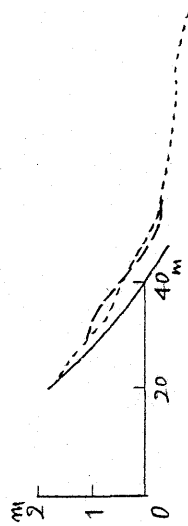


\bar{V}

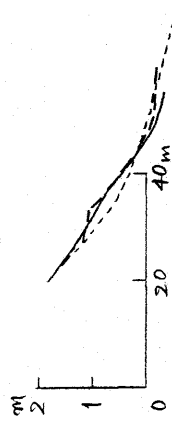
S-200-15



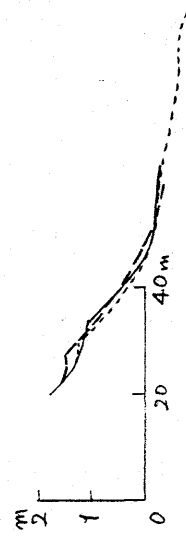
\bar{V}



\bar{V}

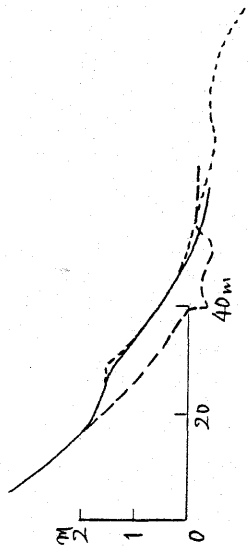


\bar{V}

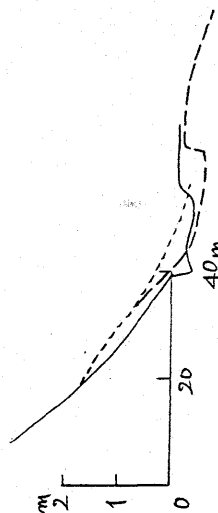


\bar{V}

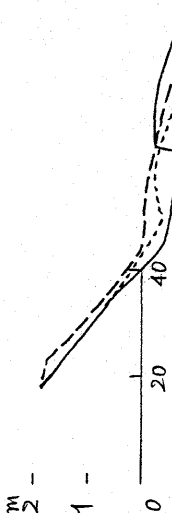
S-200-16



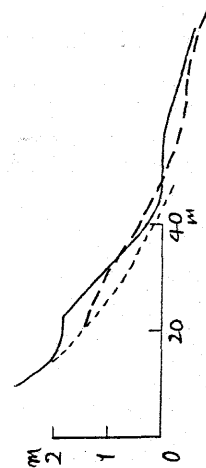
\bar{V}



\bar{V}

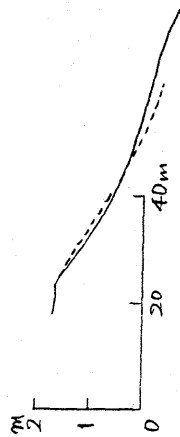
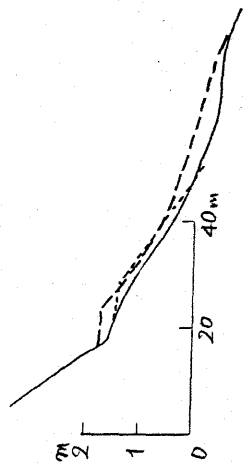


\bar{V}

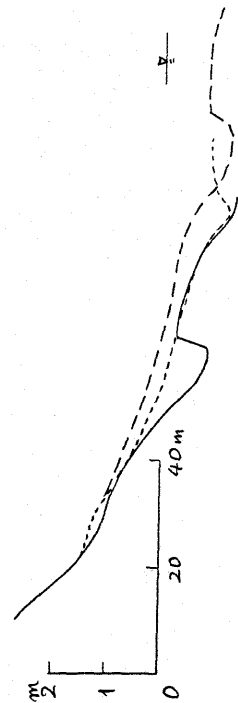
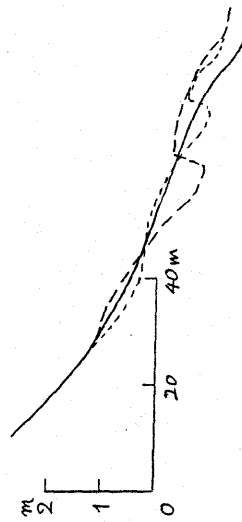
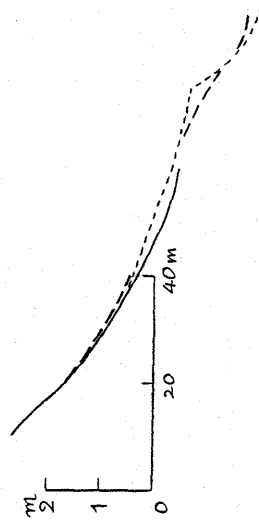
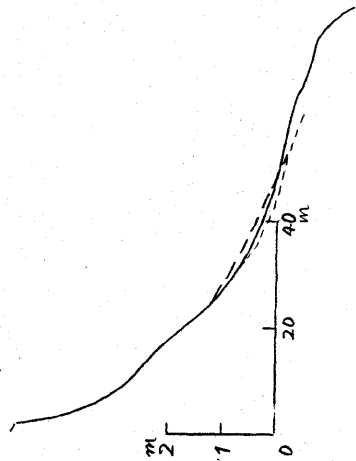


\bar{V}

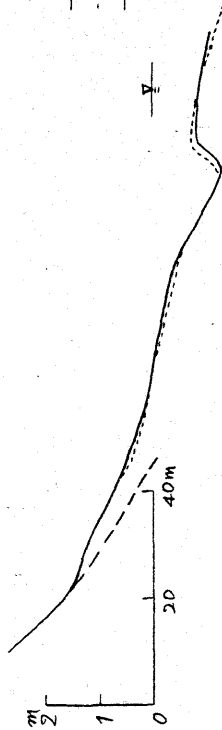
S-200-17



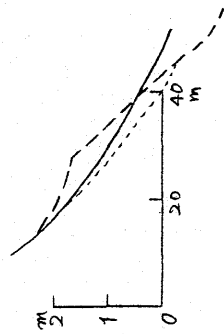
S-250-1



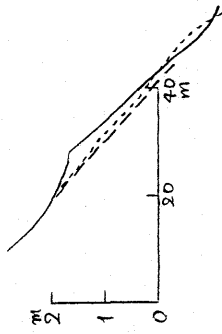
S-250-2



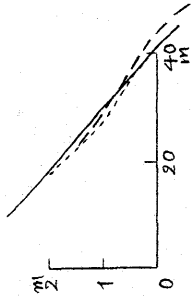
— 23 / 9 / 1980
 --- 26 / 9
 --- 30 / 9



— 30 / 9
 --- 4 / 10
 --- 8 / 10

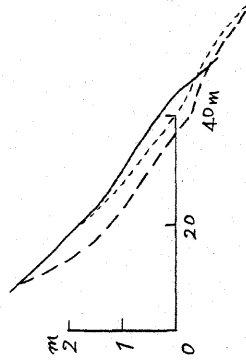


— 8 / 10
 --- 11 / 10
 --- 14 / 10

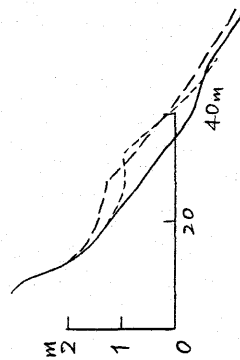


— 14 / 10
 --- 15 / 10
 --- 19 / 10

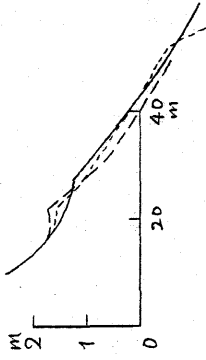
S-250-3



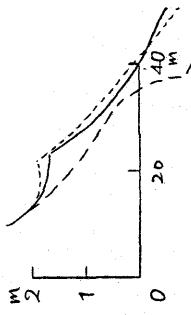
— 19 / 10 / 1980
 --- 23 / 10
 --- 28 / 10



— 28 / 10
 --- 2 / 11
 --- 7 / 11

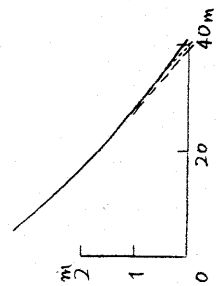
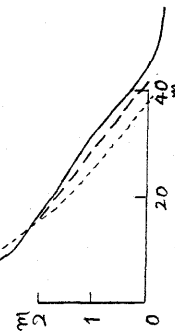
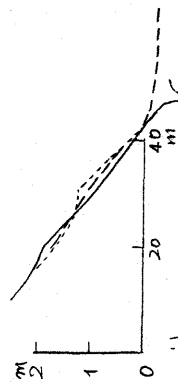
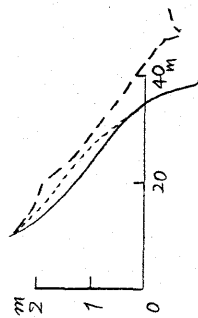


— 7 / 11
 --- 12 / 11
 --- 17 / 11



— 17 / 11
 --- 22 / 11
 --- 27 / 11

S-250-4



— 27 / 11 / 1980
- - - 2 / 12
- - - 8 / 12

\bar{y}

— 8 / 12
- - - 15 / 12
- - - 22 / 12

\bar{y}

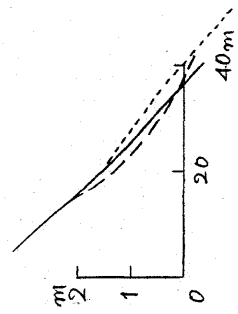
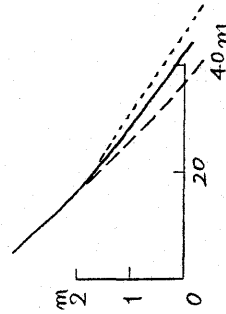
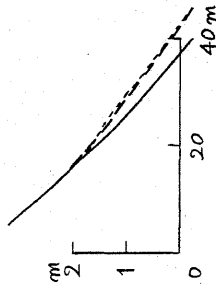
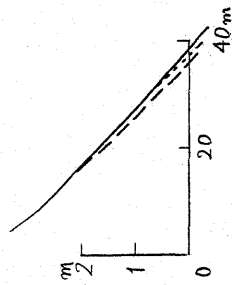
— 22 / 12
- - - 29 / 12
- - - 6 / 1 / 1981

\bar{y}

— 6 / 1
- - - 12 / 1
- - - 31 / 1

\bar{y}

S-250-5



— 21 / 1 / 1981
- - - 25 / 1
- - - 1 / 2

\bar{y}

— 1 / 2
- - - 8 / 2
- - - 15 / 2

\bar{y}

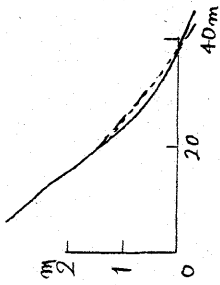
— 15 / 2
- - - 22 / 2
- - - 28 / 2

\bar{y}

— 28 / 2
- - - 8 / 3
- - - 15 / 3

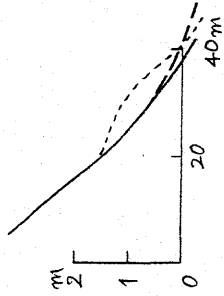
\bar{y}

S-250-6



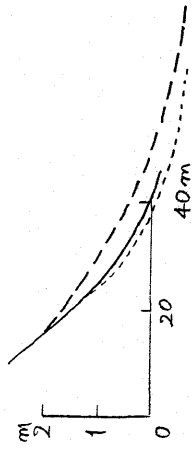
— 15/3/1981
 --- 22/3
 - - - 29/3

$\frac{V}{V_0}$



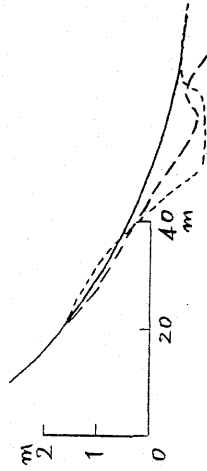
— 29/3
 --- 5/4
 - - - 11/4

$\frac{V}{V_0}$



— 11/4
 --- 19/4
 - - - 26/4

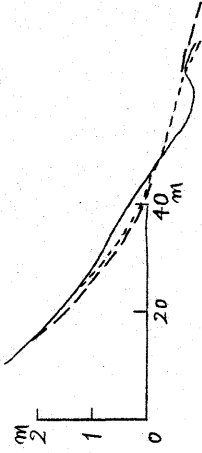
$\frac{V}{V_0}$



— 26/4
 --- 3/5
 - - - 11/5

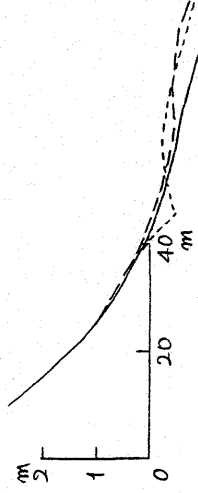
$\frac{V}{V_0}$

S-250-7



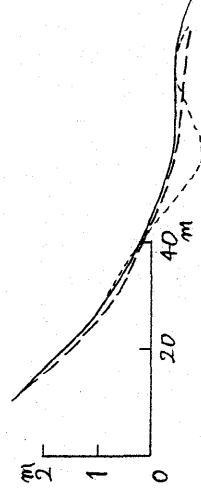
— 11/5/1981
 --- 17/5
 - - - 24/5

$\frac{V}{V_0}$



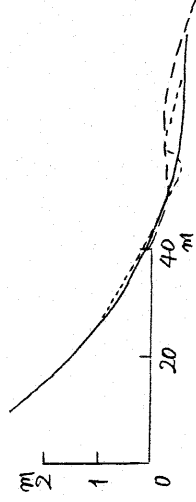
— 24/5
 --- 1/6
 - - - 7/6

$\frac{V}{V_0}$



— 7/6
 --- 15/6
 - - - 21/6

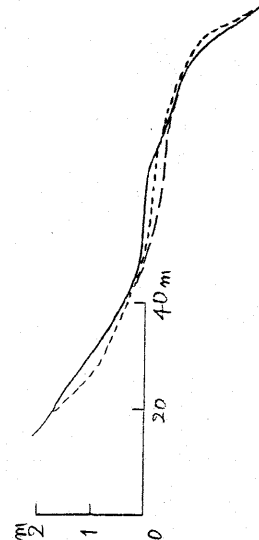
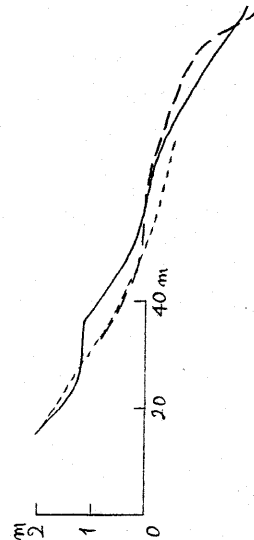
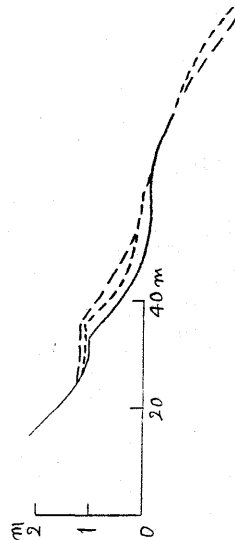
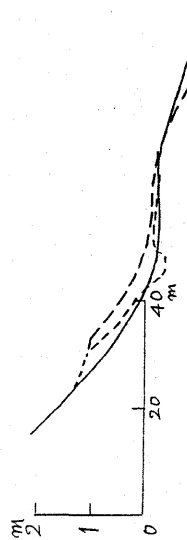
$\frac{V}{V_0}$



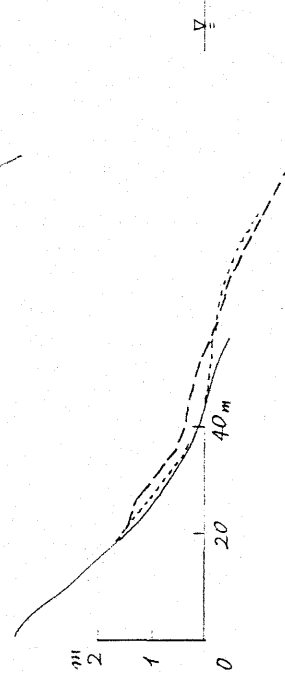
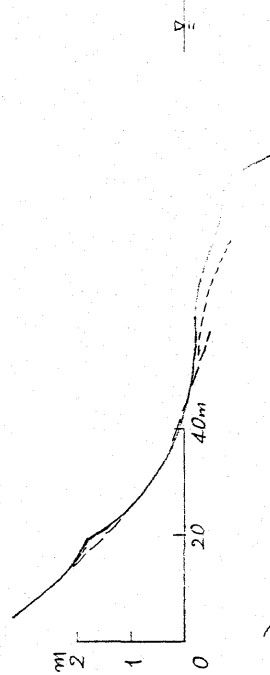
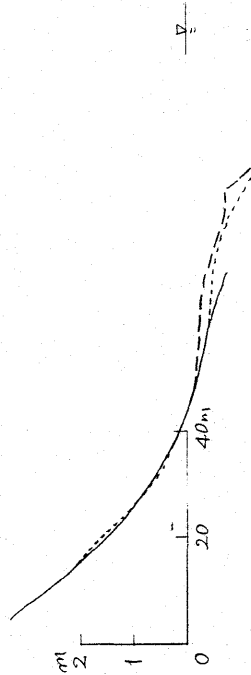
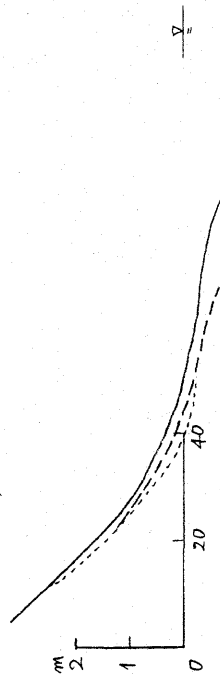
— 21/6
 --- 28/6
 - - - 6/7

$\frac{V}{V_0}$

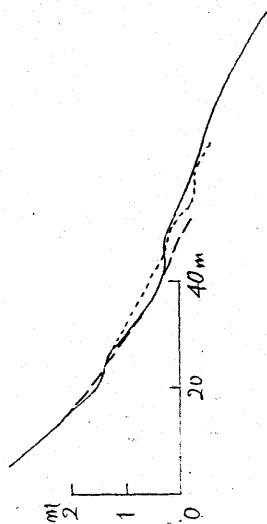
S-250-8



S-250-9

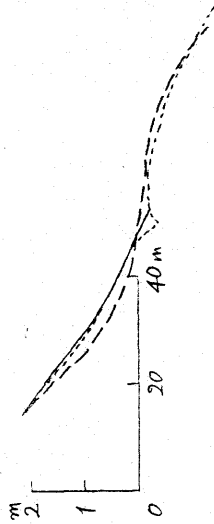


S-250-10



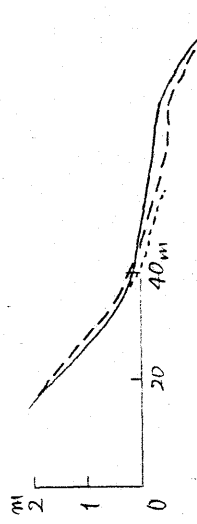
— 1/9/1981
- - - 4/9
- · - 7/9

\bar{V}_i



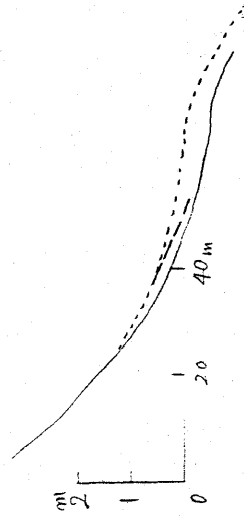
— 7/9
- - - 11/9
- · - 16/9

\bar{V}_i



— 16/9
- - - 20/9
- · - 25/9

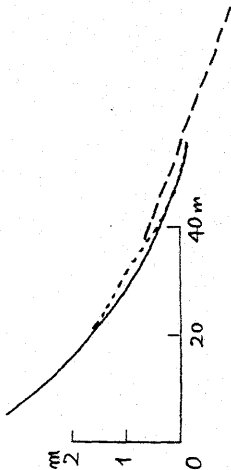
\bar{V}_i



— 25/9
- - - 29/9
- · - 2/10

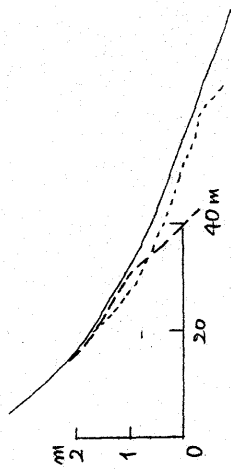
\bar{V}_i

S-250-11



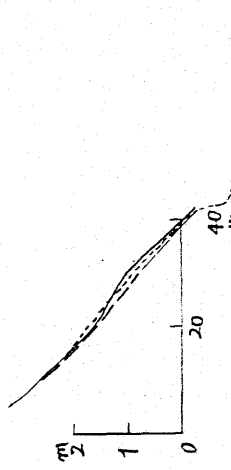
— 2/10/1981
- - - 7/10
- · - 13/10

\bar{V}_i



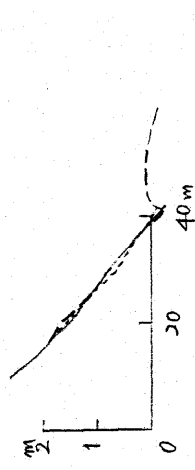
— 13/10
- - - 18/10
- · - 24/10

\bar{V}_i



— 24/10
- - - 28/10
- · - 2/11

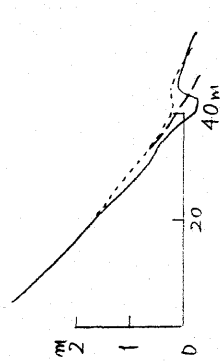
\bar{V}_i



— 2/11
- - - 8/11
- · - 15/11

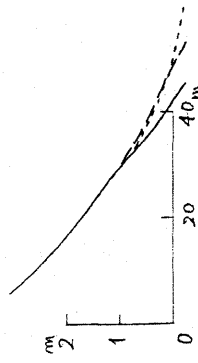
\bar{V}_i

S-250-12



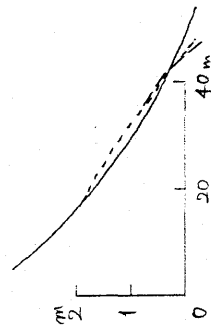
— 15/11/1981
- - - 19/11
- · - 23/11

\bar{V}



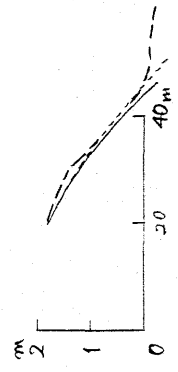
— 23/11
- - - 29/11
- · - 5/12

\bar{V}



— 5/12
- - - 12/12
- · - 15/12

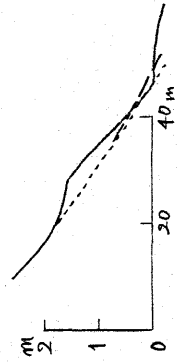
\bar{V}



— 15/12
- - - 22/12
- · - 29/12

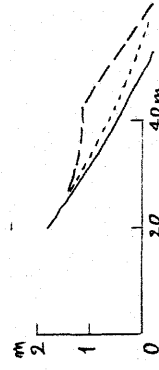
\bar{V}

S-250-13



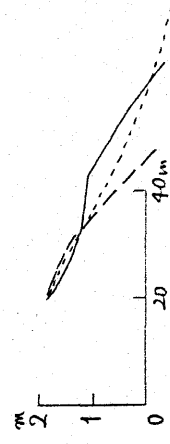
— 29/12/1981
- - - 5/1/1982
- · - 10/1

\bar{V}



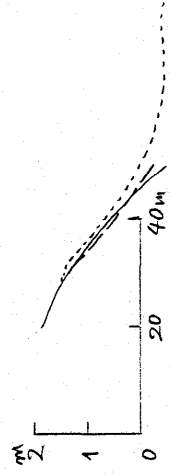
— 10/1
- - - 17/1
- · - 24/1

\bar{V}



— 24/1
- - - 31/1
- · - 7/2

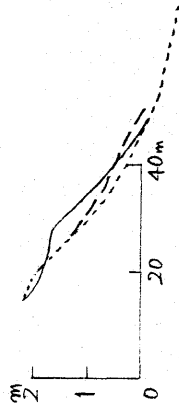
\bar{V}



— 7/2
- - - 14/2
- · - 21/2

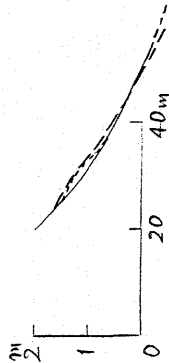
\bar{V}

S-250-14



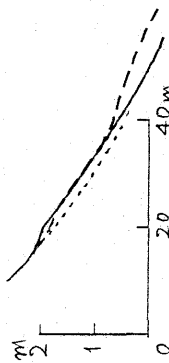
— 21/2/1982
 --- 28/2
 - - - 6/3

\bar{V}



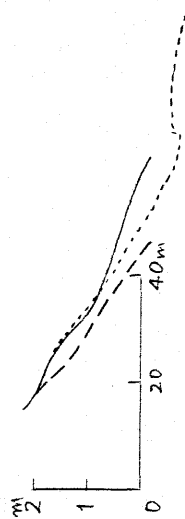
— 6/3
 --- 13/3
 - - - 18/3

\bar{V}



— 18/3
 --- 24/3
 - - - 5/4

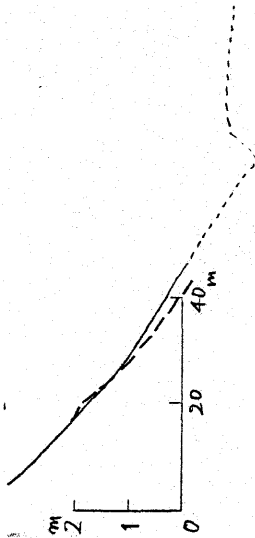
\bar{V}



— 5/4
 --- 11/4
 - - - 18/4

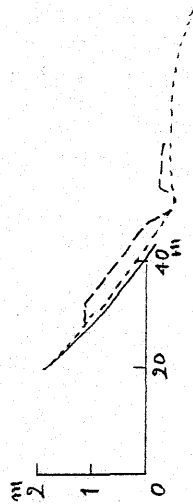
\bar{V}

S-250-15



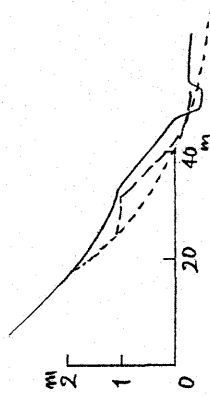
— 18/4/1982
 --- 25/4
 - - - 1/5

\bar{V}



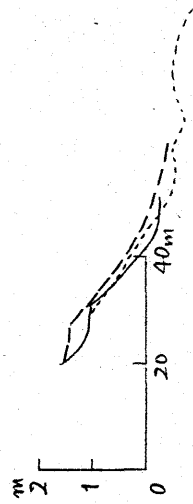
— 1/5
 --- 10/5
 - - - 17/5

\bar{V}



— 17/5
 --- 24/5
 - - - 31/5

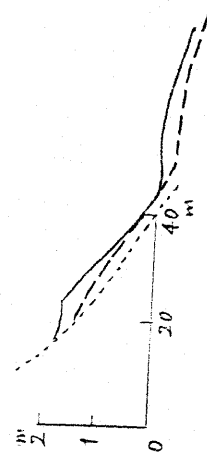
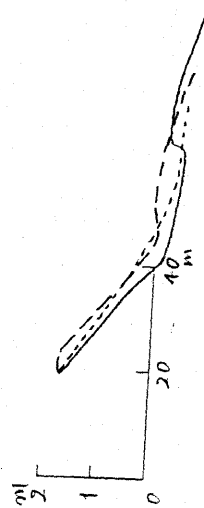
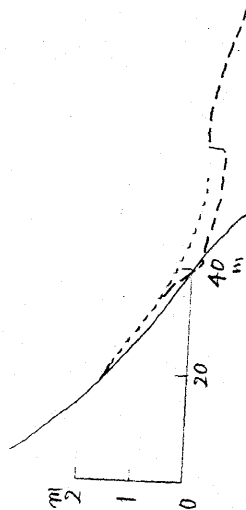
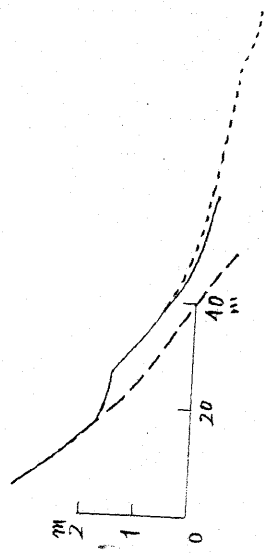
\bar{V}



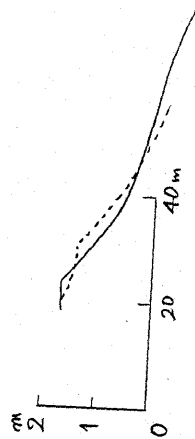
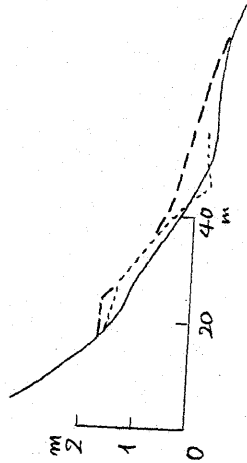
— 31/5
 --- 6/6
 - - - 15/6

\bar{V}

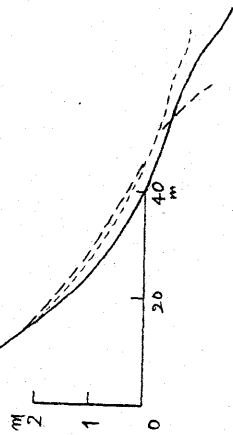
S-250-16



S-250-17

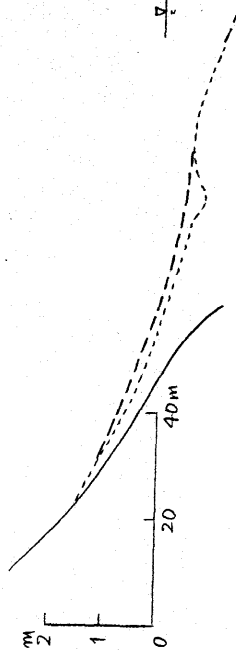


S-300-1



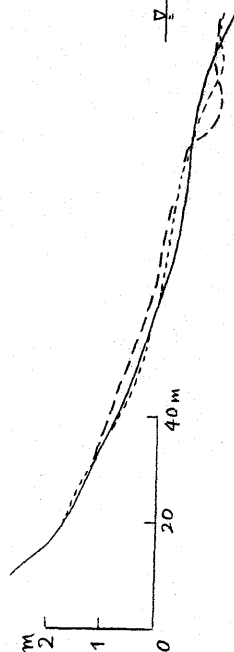
— 28/8/1980
 - - - 31/8
 - · - 3/9

V



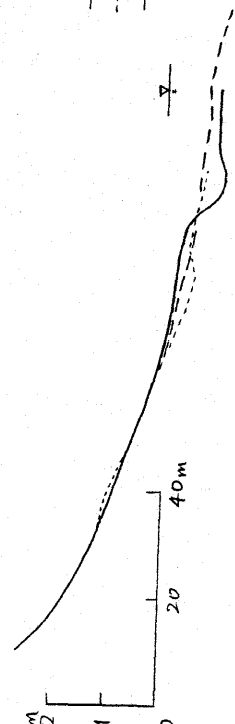
— 3/9
 - - - 7/9
 - · - 10/9

V



— 10/9
 - - - 13/9
 - · - 16/9

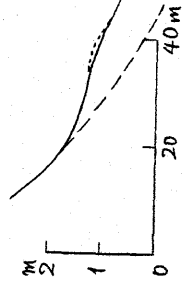
V



— 16/9
 - - - 20/9
 - · - 23/9

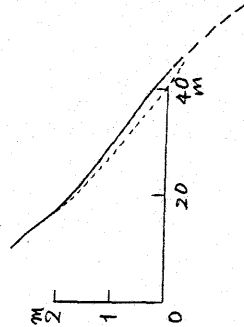
V

S-300-2



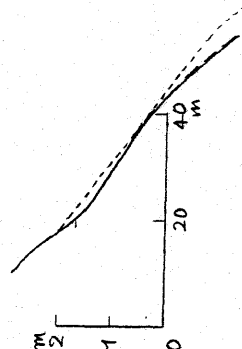
— 23/9/1980
 - - - 26/9
 - · - 30/9

V



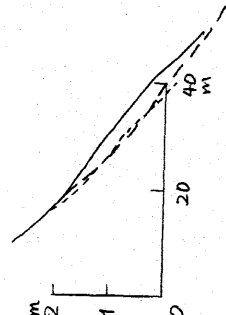
— 30/9
 - - - 4/10
 - · - 8/10

V



— 8/10
 - - - 11/10
 - · - 14/10

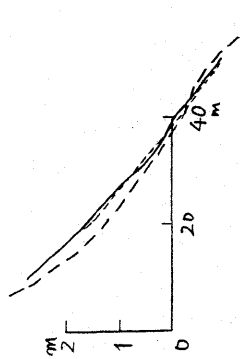
V



— 14/10
 - - - 15/10
 - · - 19/10

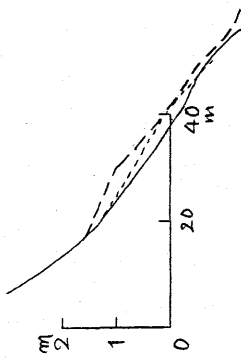
V

S-300-3



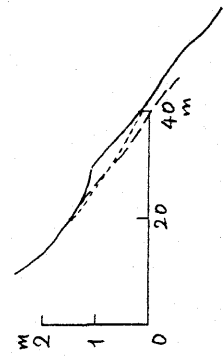
— 11 / 10 / 1980
 --- 23 / 10
 - - - 28 / 10

$\frac{V}{m}$



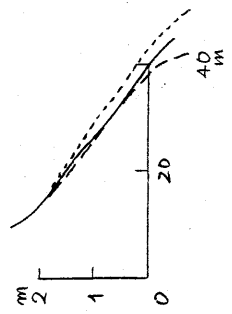
— 28 / 10
 --- 2 / 11
 - - - 7 / 11

$\frac{V}{m}$



— 7 / 11
 --- 12 / 11
 - - - 17 / 11

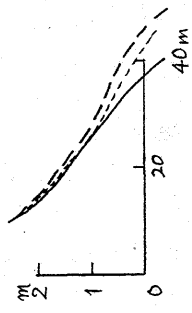
$\frac{V}{m}$



— 17 / 11
 --- 22 / 11
 - - - 27 / 11

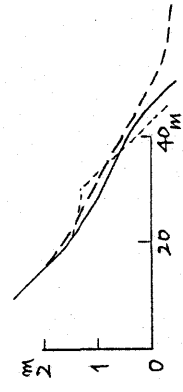
$\frac{V}{m}$

S-300-4



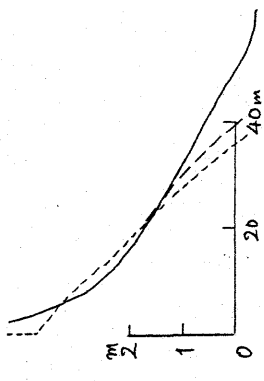
— 27 / 11 / 1980
 --- 2 / 12
 - - - 8 / 12

$\frac{V}{m}$



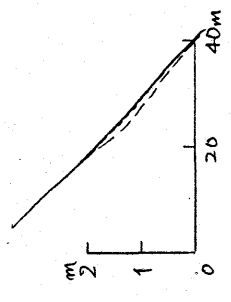
— 8 / 12
 --- 15 / 12
 - - - 22 / 12

$\frac{V}{m}$



— 22 / 12
 --- 29 / 12
 - - - 6 / 1 / 1981

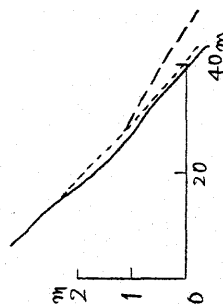
$\frac{V}{m}$



— 6 / 1
 --- 12 / 1
 - - - 21 / 1

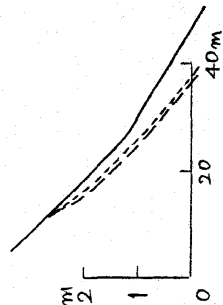
$\frac{V}{m}$

S-300-5



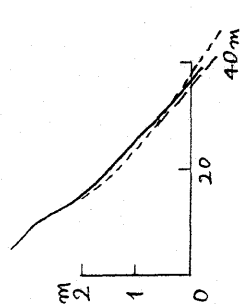
— 21/1/1981
--- 25/1
- - - 1/2

$\frac{V}{V_0}$



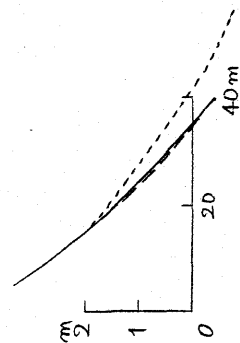
— 1/2
--- 8/2
- - - 15/2

$\frac{V}{V_0}$



— 15/2
--- 22/2
- - - 28/2

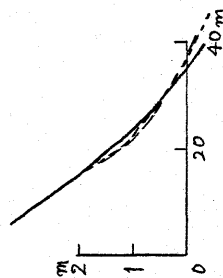
$\frac{V}{V_0}$



— 28/2
--- 8/3
- - - 15/3

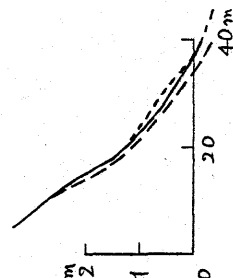
$\frac{V}{V_0}$

S-300-6



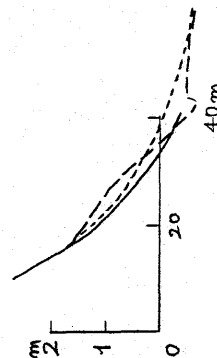
— 15/3/1981
--- 22/3
- - - 29/3

$\frac{V}{V_0}$



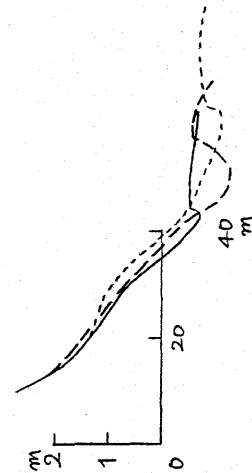
— 29/3
--- 5/4
- - - 11/4

$\frac{V}{V_0}$



— 11/4
--- 19/4
- - - 26/4

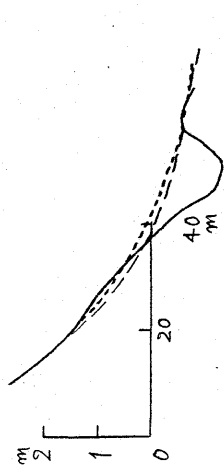
$\frac{V}{V_0}$



— 26/4
--- 3/5
- - - 11/5

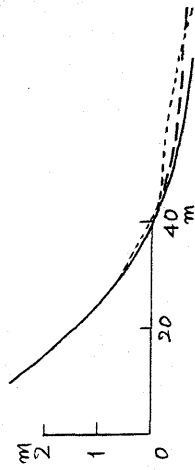
$\frac{V}{V_0}$

S-300-7



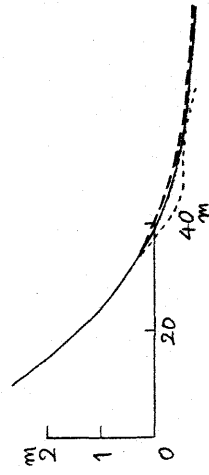
— 11/5/1981
- - - 17/5
- . - 24/5

\bar{V}



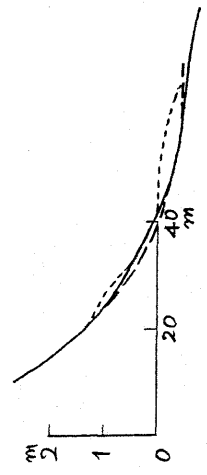
— 24/5
- - - 1/6
- . - 7/6

\bar{V}



— 7/6
- - - 15/6
- . - 21/6

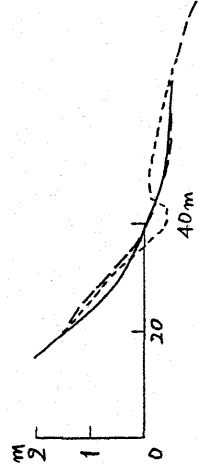
\bar{V}



— 21/6
- - - 28/6
- . - 6/7

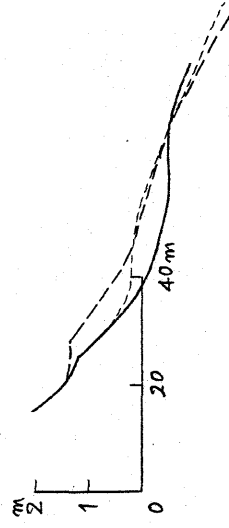
\bar{V}

S-300-8



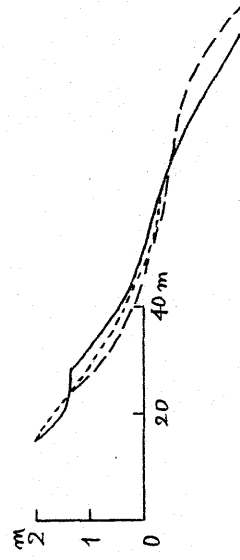
— 6/7/1981
- - - 9/7
- . - 14/7

\bar{V}



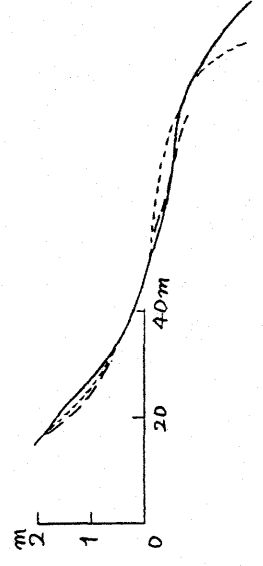
— 14/7
- - - 17/7
- . - 21/7

\bar{V}



— 21/7
- - - 24/7
- . - 28/7

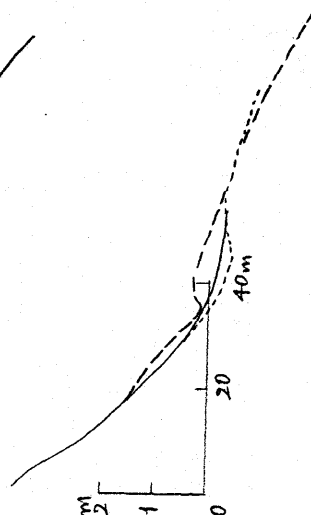
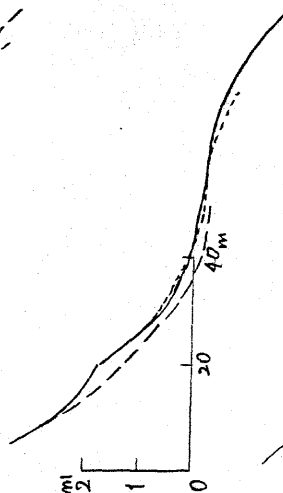
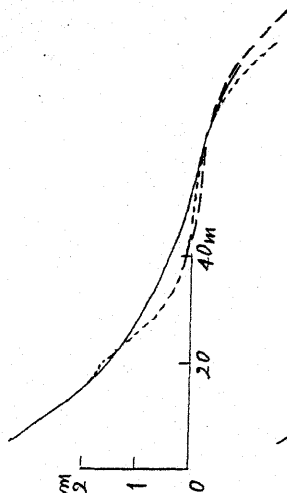
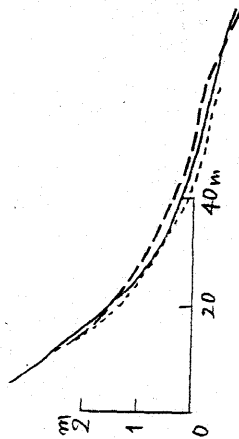
\bar{V}



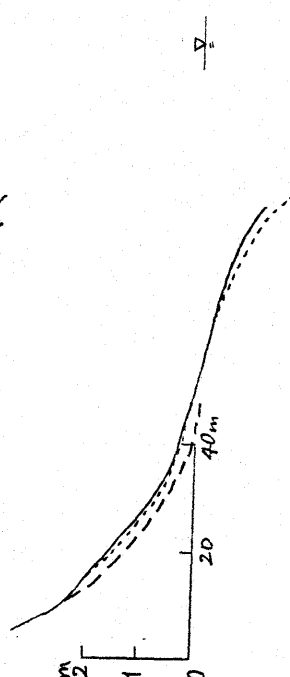
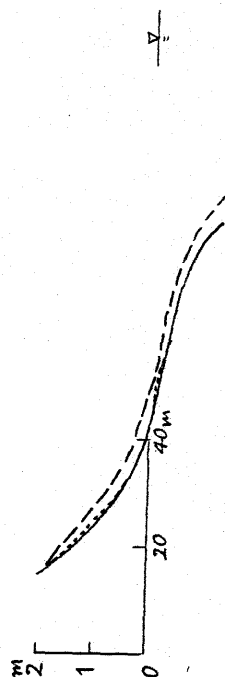
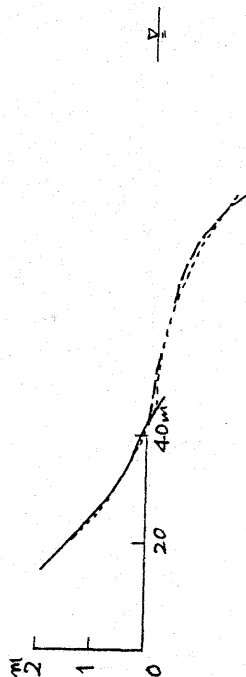
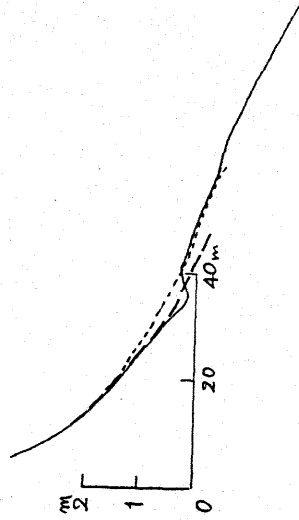
— 28/7
- - - 31/7
- . - 4/8

\bar{V}

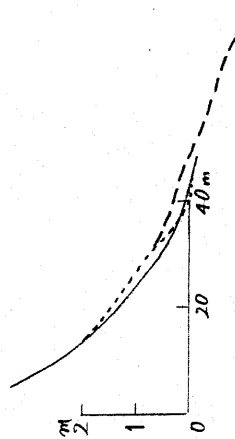
S-300-9



S-300-10

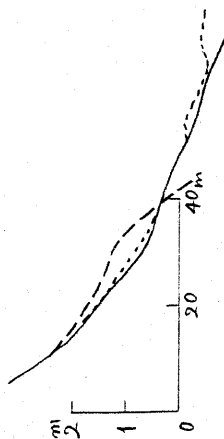


S-300-11



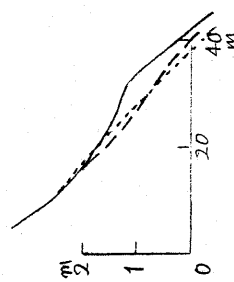
— 2 / 10 / 1981
- - - 7 / 10
- . - 13 / 10

\bar{V}



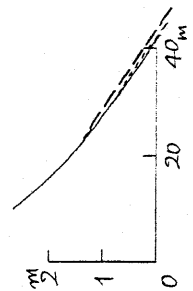
— 13 / 10
- - - 18 / 10
- . - 24 / 10

\bar{V}



— 24 / 10
- - - 28 / 10
- . - 2 / 11

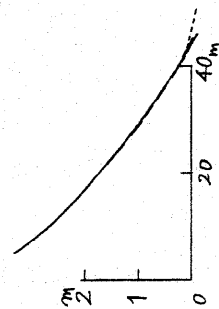
\bar{V}



— 2 / 11
- - - 8 / 11
- . - 15 / 11

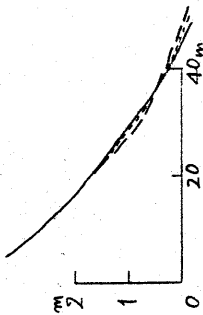
\bar{V}

S-300-12



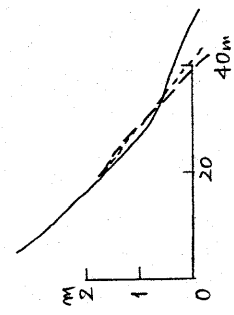
— 15 / 11 / 1981
- - - 19 / 11
- . - 23 / 11

\bar{V}



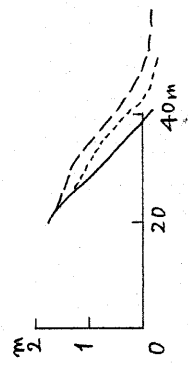
— 23 / 11
- - - 29 / 11
- . - 5 / 12

\bar{V}



— 5 / 12
- - - 12 / 12
- . - 15 / 12

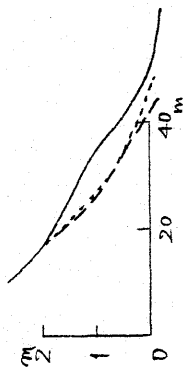
\bar{V}



— 15 / 12
- - - 22 / 12
- . - 29 / 12

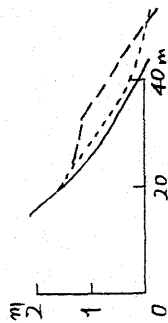
\bar{V}

S-300-13



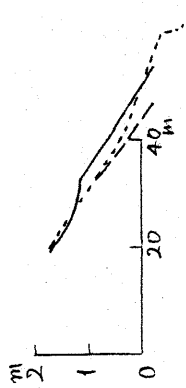
— 29/12/1981
- - - 5/1/1982
- · - 10/1

\bar{v}



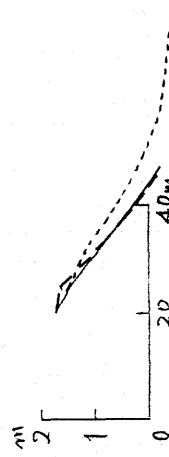
— 10/1
- - - 17/1
- · - 24/1

\bar{v}



— 24/1
- - - 31/1
- · - 7/2

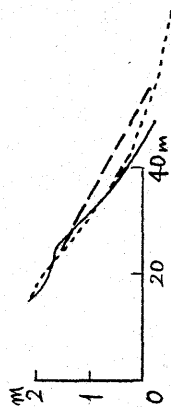
\bar{v}



— 7/2
- - - 14/2
- · - 21/2

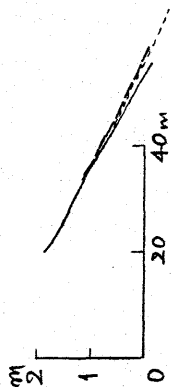
\bar{v}

S-300-14



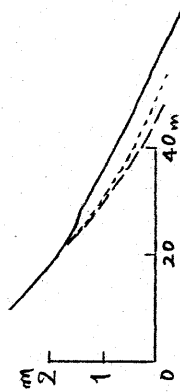
— 21/2/1982
- - - 28/2
- · - 6/3

\bar{v}



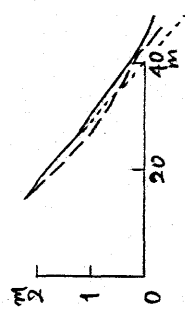
— 6/3
- - - 13/3
- · - 18/3

\bar{v}



— 18/3
- - - 24/3
- · - 5/4

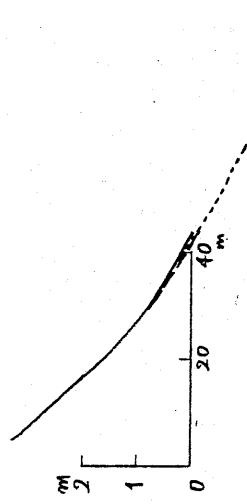
\bar{v}



— 5/4
- - - 11/4
- · - 8/4

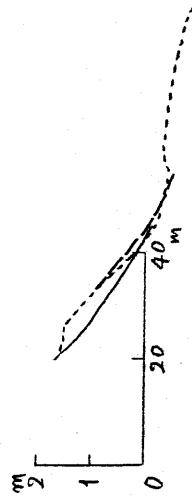
\bar{v}

S-300-15



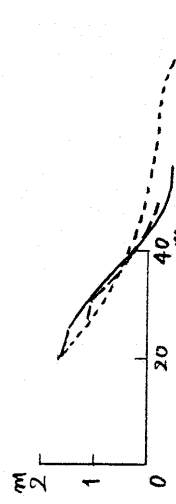
— 18/4/1982
 --- 25/4
 - - - 1/5

\bar{y}



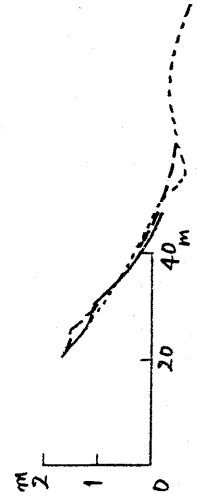
— 1/5
 --- 10/5
 - - - 17/5

\bar{y}



— 17/5
 --- 24/5
 - - - 31/5

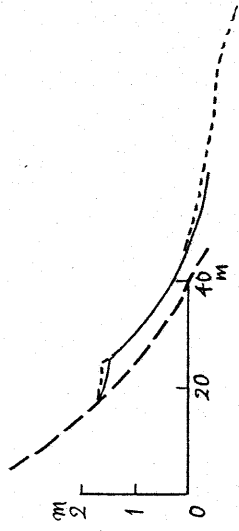
\bar{y}



— 31/5
 --- 6/6
 - - - 15/6

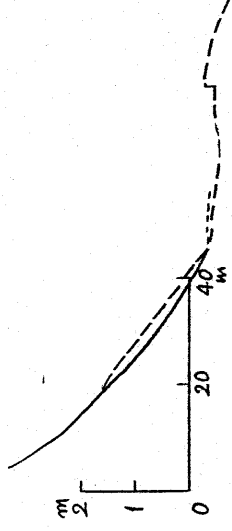
\bar{y}

S-300-16



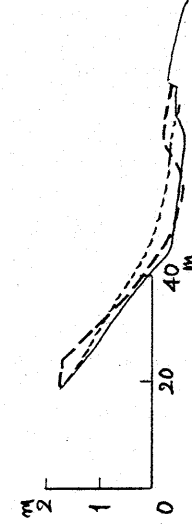
— 15/6/1982
 --- 21/6
 - - - 29/6

\bar{y}



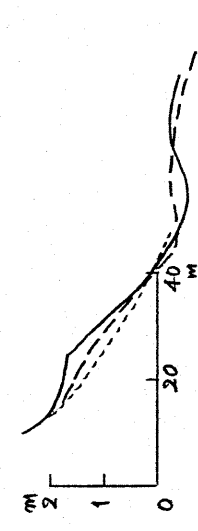
— 29/6
 --- 5/7
 - - - 12/7

\bar{y}



— 12/7
 --- 20/7
 - - - 27/7

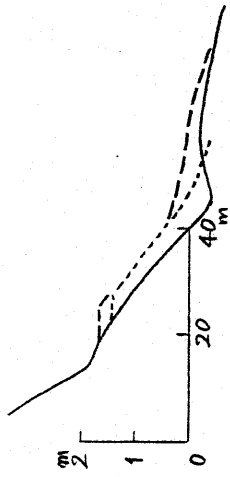
\bar{y}



— 27/7
 --- 2/8
 - - - 9/8

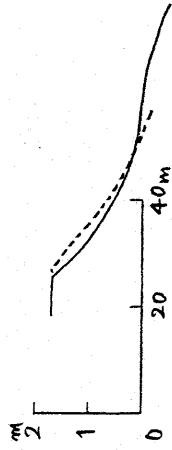
\bar{y}

S-300-17



— 9/8/1982
 - - - 15/8
 - · - 23/8

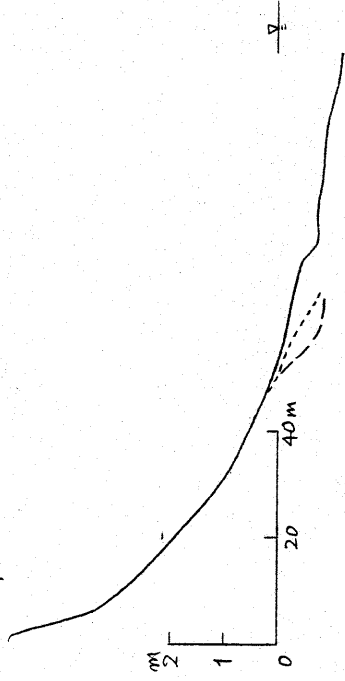
—



— 23/8
 - - - 30/8

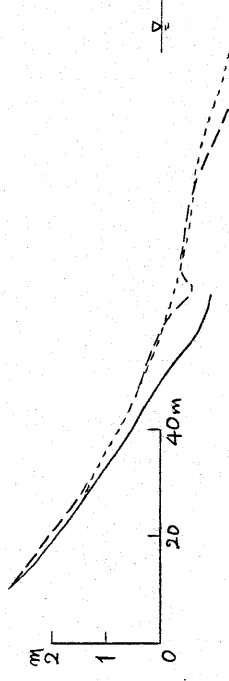
—

S-350-1



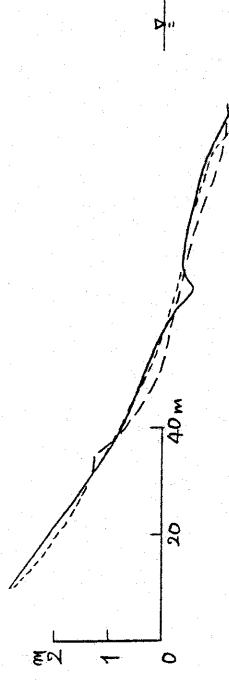
— 28/8/1980
 - - - 31/8
 - · - 3/9

—



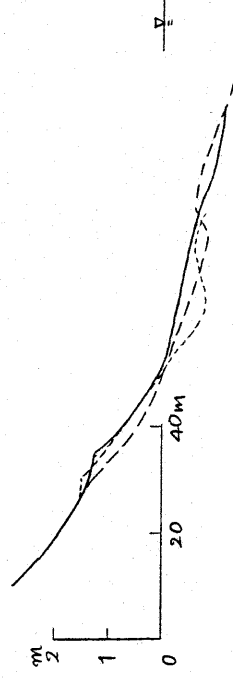
— 3/9
 - - - 7/9
 - · - 10/9

—



— 10/9
 - - - 13/9
 - · - 16/9

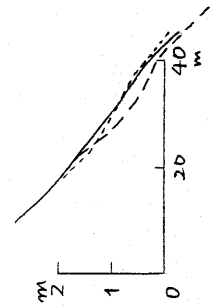
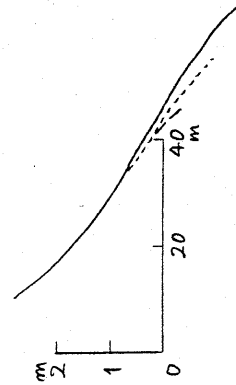
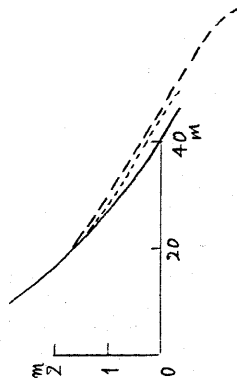
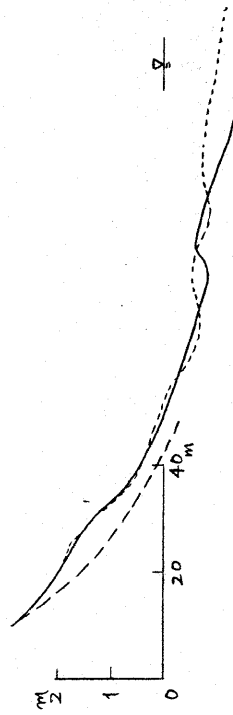
—



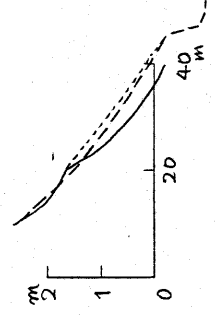
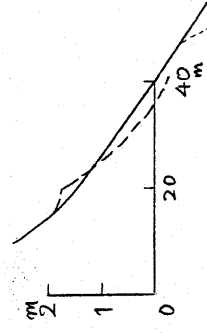
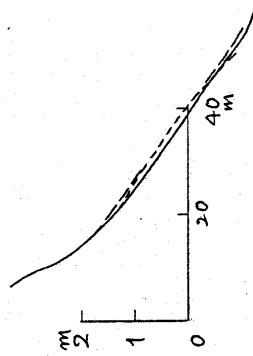
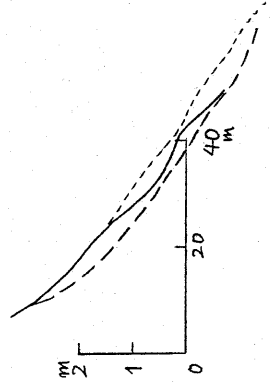
— 16/9
 - - - 20/9
 - · - 23/9

—

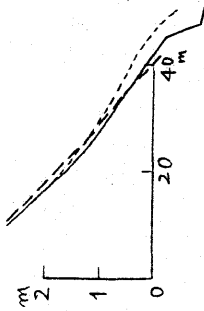
S-350-2



S-350-3

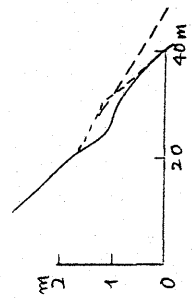


S-350-4



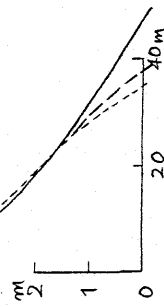
— 27/11/1980
 - - - 2/12
 - · - 8/12

$\frac{V}{m}$



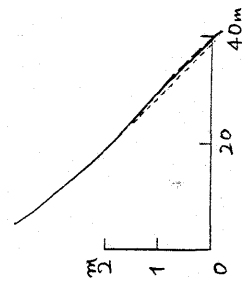
— 8/12
 - - - 15/12
 - · - 22/12

$\frac{V}{m}$



— 22/12
 - - - 29/12
 - · - 6/1/1981

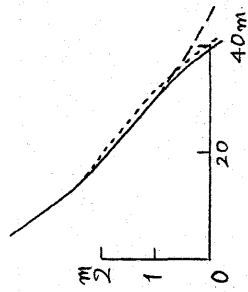
$\frac{V}{m}$



— 6/1
 - - - 12/1
 - · - 21/1

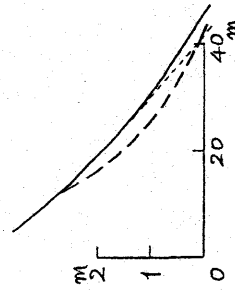
$\frac{V}{m}$

S-350-5



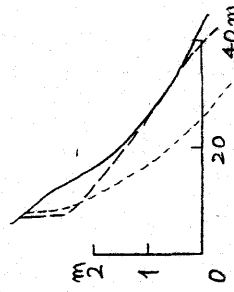
— 21/1/1981
 - - - 25/1
 - · - 1/2

$\frac{V}{m}$



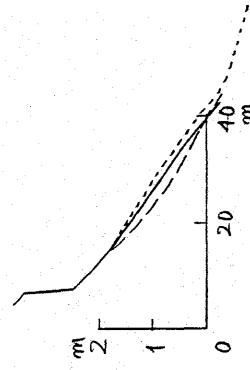
— 1/2
 - - - 8/2
 - · - 15/2

$\frac{V}{m}$



— 15/2
 - - - 22/2
 - · - 28/2

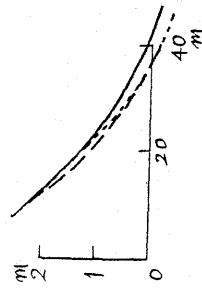
$\frac{V}{m}$



— 28/2
 - - - 8/3
 - · - 15/3

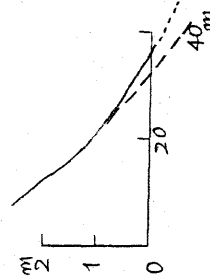
$\frac{V}{m}$

S-350-6



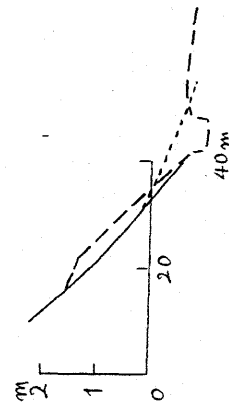
— 15/3/1981
 --- 22/3
 - - - 29/3

\bar{v}



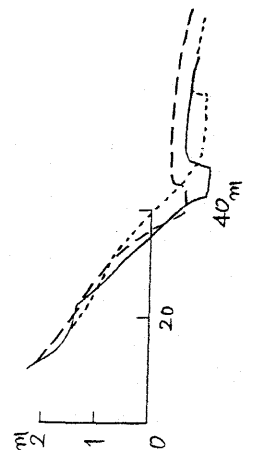
— 29/3
 --- 5/4
 - - - 11/4

\bar{v}



— 11/4
 --- 19/4
 - - - 26/4

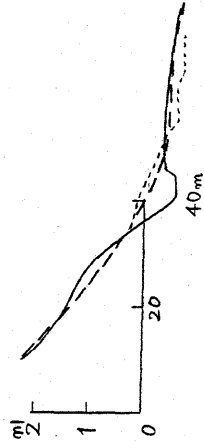
\bar{v}



— 26/4
 --- 3/5
 - - - 11/5

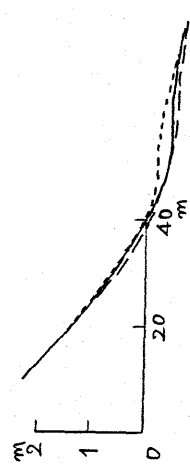
\bar{v}

S-350-7



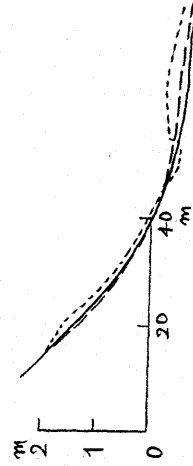
— 11/5/1981
 --- 17/5
 - - - 24/5

\bar{v}



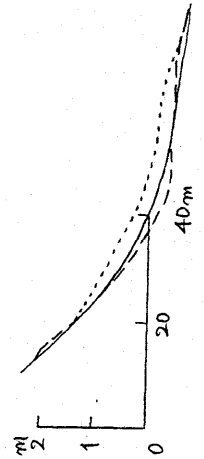
— 24/5
 --- 1/6
 - - - 7/6

\bar{v}



— 7/6
 --- 15/6
 - - - 21/6

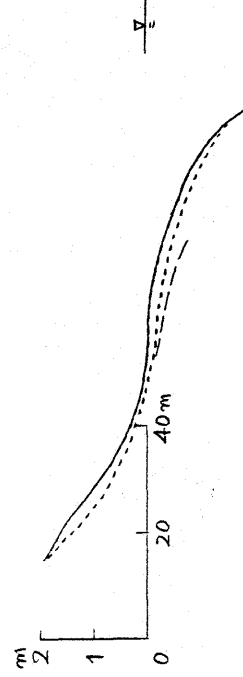
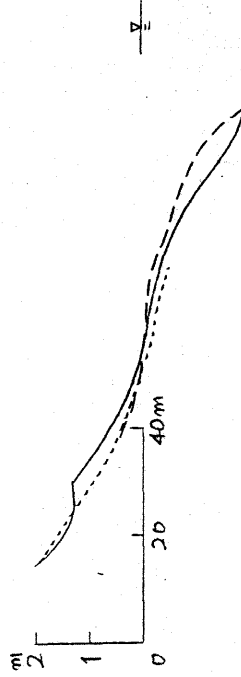
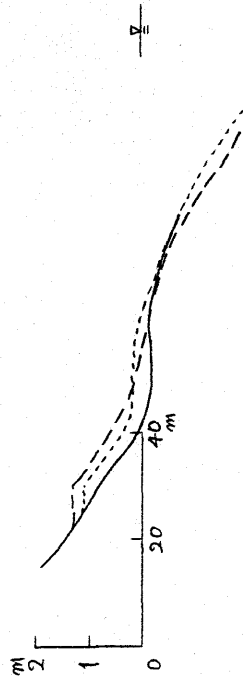
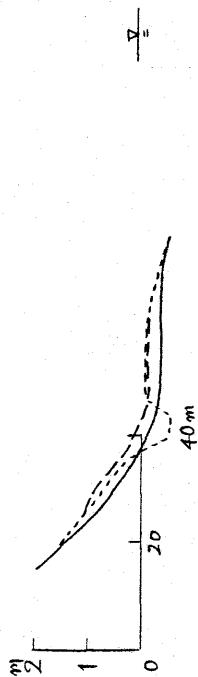
\bar{v}



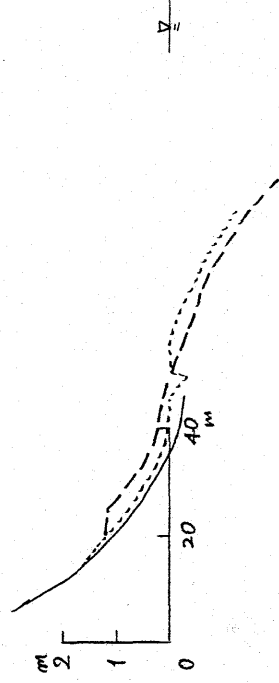
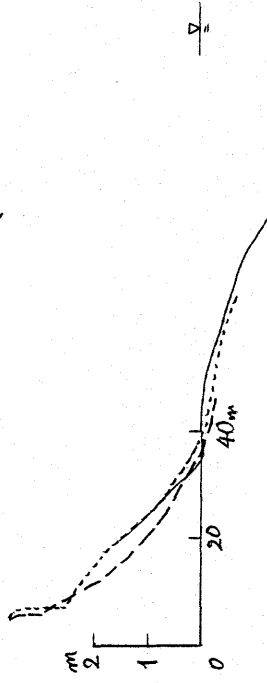
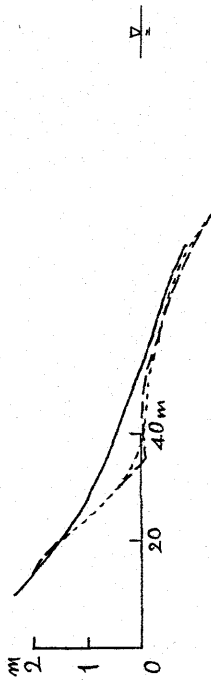
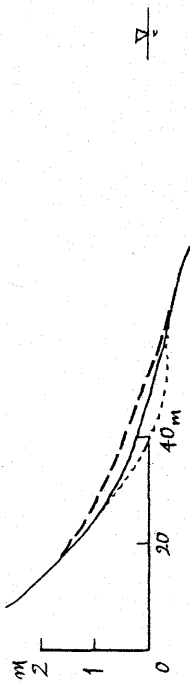
— 21/6
 --- 28/6
 - - - 6/7

\bar{v}

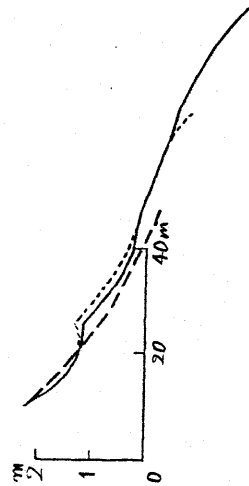
S-350-8



S-350-9

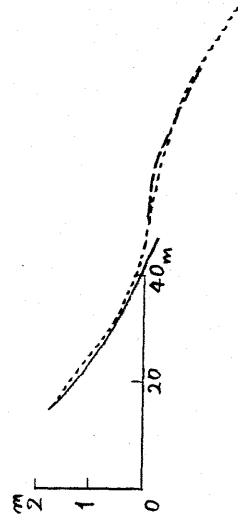


S-350-10



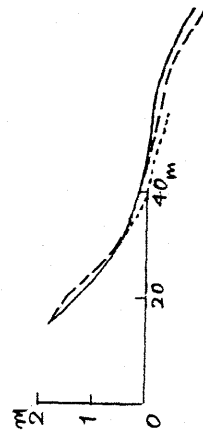
— 1/9/1981
- - - 4/9
- · - 7/9

$\frac{V}{c}$



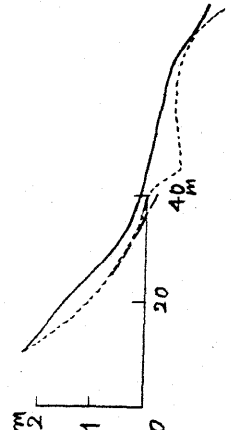
— 7/9
- - - 11/9
- · - 16/9

$\frac{V}{c}$



— 16/9
- - - 20/9
- · - 25/9

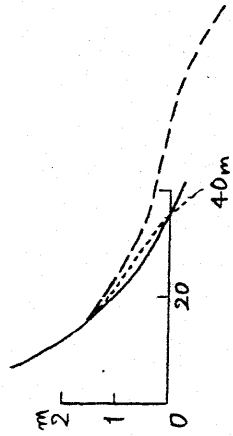
$\frac{V}{c}$



— 25/9
- - - 29/9
- · - 2/10

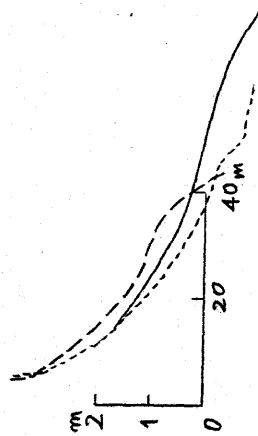
$\frac{V}{c}$

S-350-11



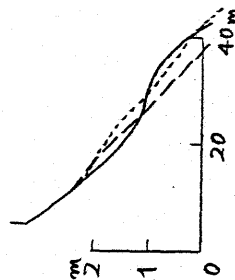
— 2/10/1981
- - - 7/10
- · - 13/10

$\frac{V}{c}$



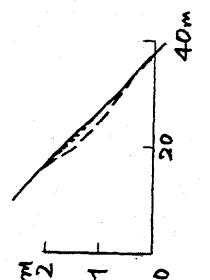
— 13/10
- - - 18/10
- · - 24/10

$\frac{V}{c}$



— 24/10
- - - 28/10
- · - 2/11

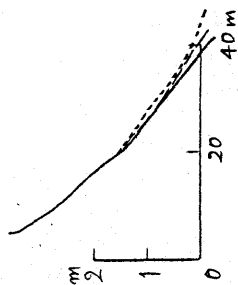
$\frac{V}{c}$



— 2/11
- - - 8/11
- · - 15/11

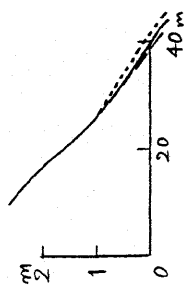
$\frac{V}{c}$

S-350-12



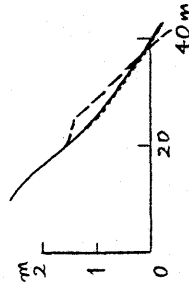
— 15/11/1981
- - - 19/11
- · - 23/11

$\frac{\nabla}{\nabla}$



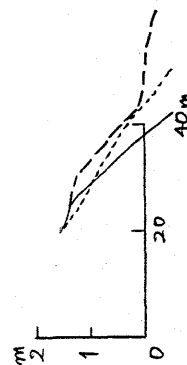
— 23/11
- - - 29/11
- · - 5/12

$\frac{\nabla}{\nabla}$



— 5/12
- - - 12/12
- · - 15/12

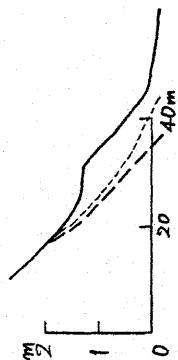
$\frac{\nabla}{\nabla}$



— 15/12
- - - 22/12
- · - 29/12

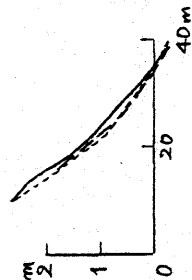
$\frac{\nabla}{\nabla}$

S-350-13



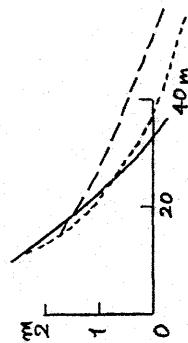
— 29/12/1981
- - - 5/1/1982
- · - 10/1

$\frac{\nabla}{\nabla}$



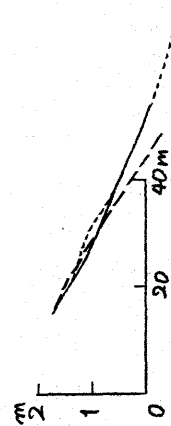
— 10/1
- - - 17/1
- · - 24/1

$\frac{\nabla}{\nabla}$



— 24/1
- - - 31/1
- · - 7/2

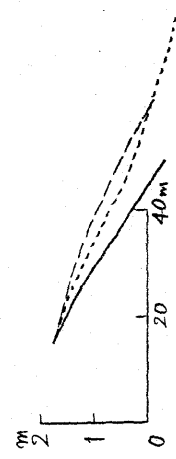
$\frac{\nabla}{\nabla}$



— 7/2
- - - 14/2
- · - 21/2

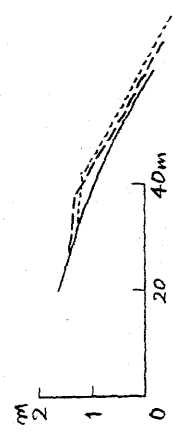
$\frac{\nabla}{\nabla}$

S-350-14



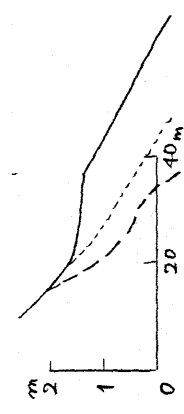
— 21/2/1982
 --- 28/2
 - - - 6/3

\bar{v}



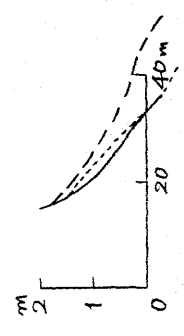
— 6/3
 --- 19/3
 - - - 18/3

\bar{v}



— 18/3
 --- 24/3
 - - - 5/4

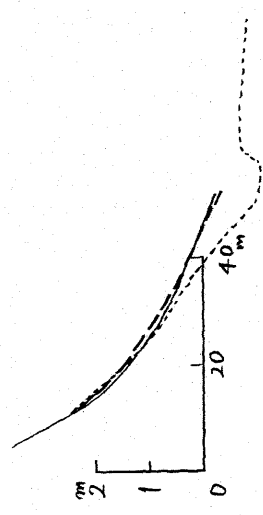
\bar{v}



— 5/4
 --- 11/4
 - - - 18/4

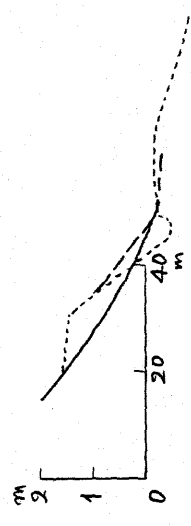
\bar{v}

S-350-15



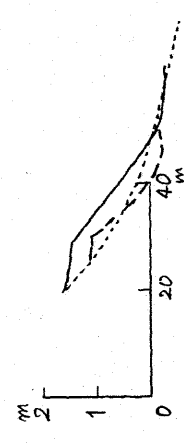
— 18/4/1982
 --- 25/4
 - - - 1/5

\bar{v}



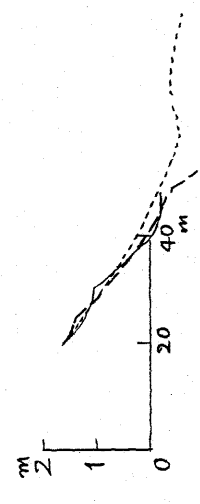
— 1/5
 --- 10/5
 - - - 17/5

\bar{v}



— 17/5
 --- 24/5
 - - - 31/5

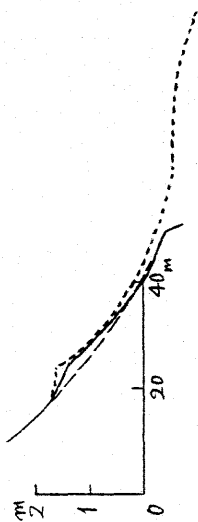
\bar{v}



— 31/5
 --- 6/6
 - - - 15/6

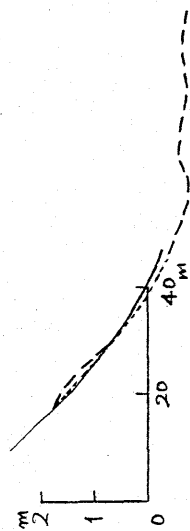
\bar{v}

S-350-16



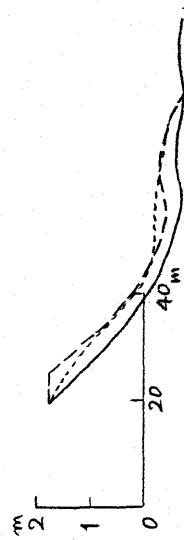
— 15/6/1982
- - - 21/6
- - - 29/6

\bar{V}



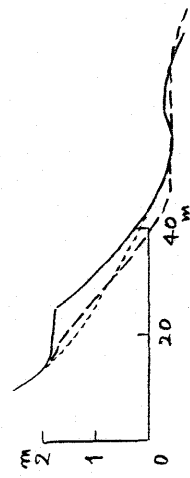
— 29/6
- - - 5/7
- - - 12/7

\bar{V}



— 12/7
- - - 20/7
- - - 27/7

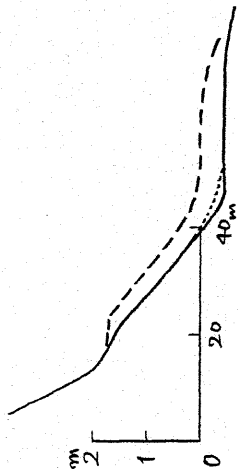
\bar{V}



— 27/7
- - - 2/8
- - - 9/8

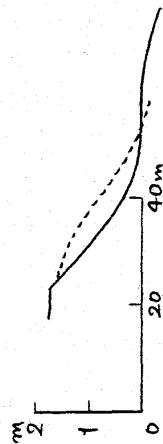
\bar{V}

S-350-17



— 9/8/1982
- - - 15/8
- - - 23/8

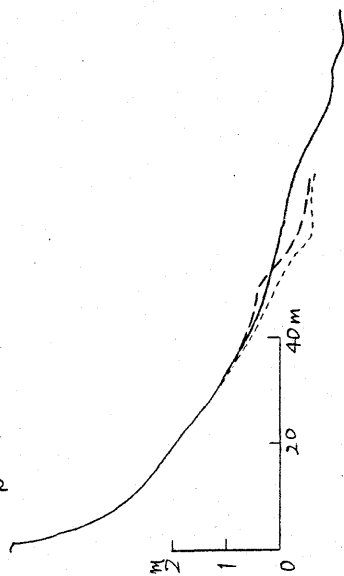
\bar{V}



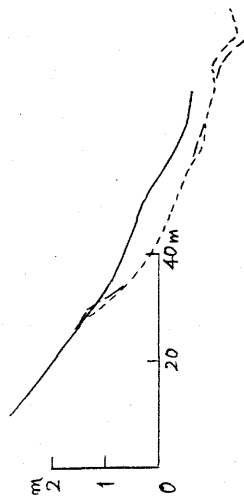
— 23/8
- - - 30/8

\bar{V}

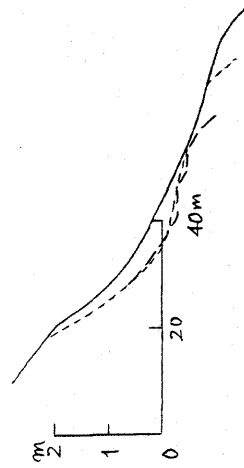
22-400-1



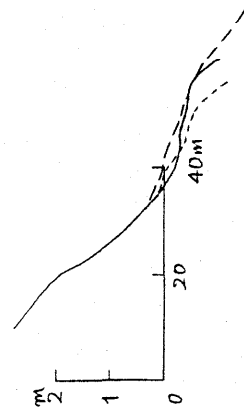
\bar{y}



\bar{y}

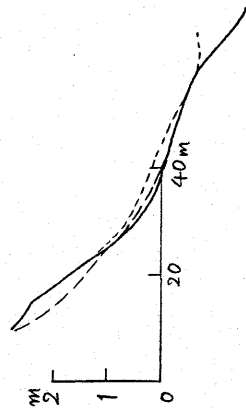


\bar{y}

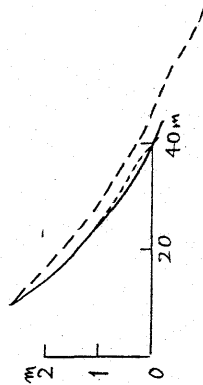


\bar{y}

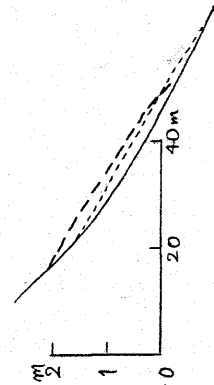
22-400-2



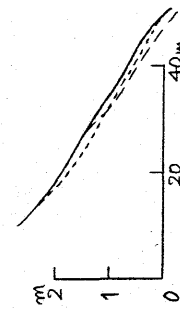
\bar{y}



\bar{y}



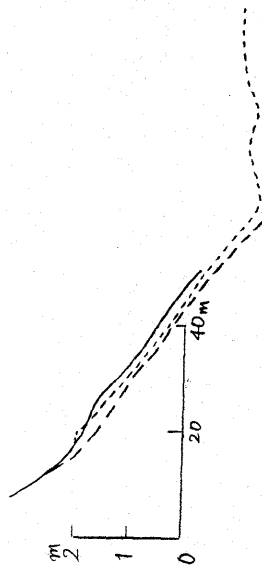
\bar{y}



\bar{y}

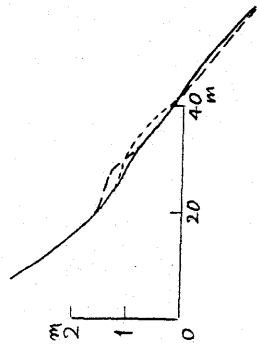
S-400-3

S-400-4



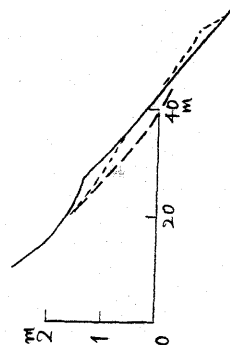
— 19/10/1980
 --- 23/10
 ... 28/10

\bar{y}



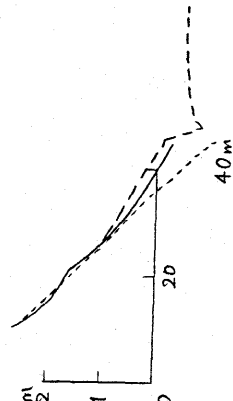
— 28/10
 --- 2/11
 ... 7/11

\bar{y}



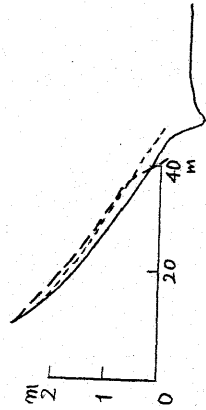
— 7/11
 --- 12/11
 ... 17/11

\bar{y}



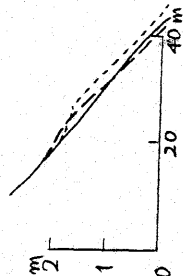
— 17/11
 --- 22/11
 ... 27/11

\bar{y}



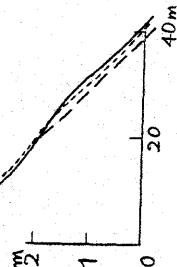
— 27/11/1980
 --- 2/12
 ... 8/12

\bar{y}



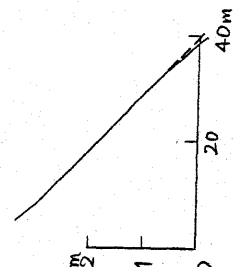
— 8/12
 --- 15/12
 ... 22/12

\bar{y}



— 22/12
 --- 29/12
 ... 6/1/1981

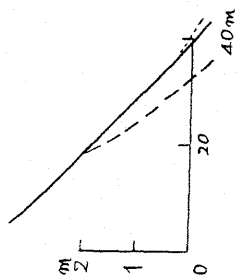
\bar{y}



— 6/1
 --- 12/1
 ... 21/1

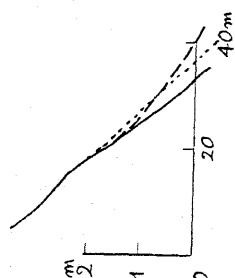
\bar{y}

S-400-5



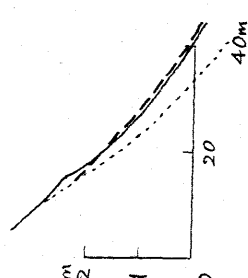
— 21/1/1981
- - - 25/1
- · - 1/2

\bar{V}



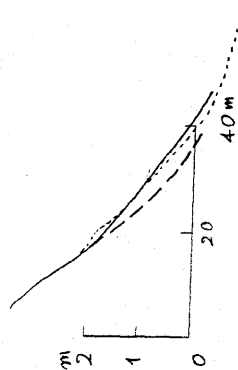
— 1/2
- - - 8/2
- · - 15/2

\bar{V}



— 15/2
- - - 22/2
- · - 28/2

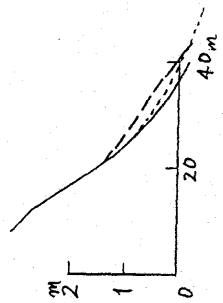
\bar{V}



— 28/2
- - - 8/3
- · - 15/3

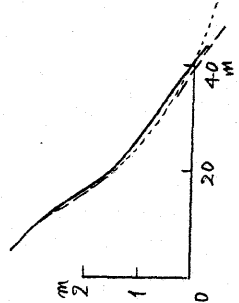
\bar{V}

S-400-6



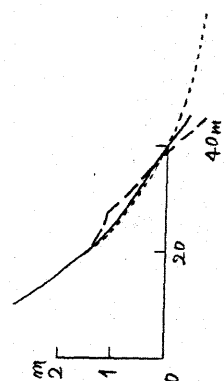
— 15/3/1981
- - - 22/3
- · - 29/3

\bar{V}



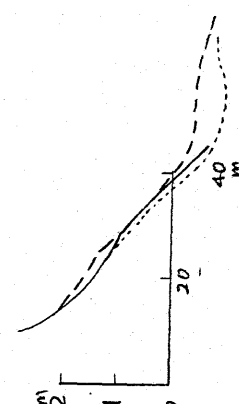
— 29/3
- - - 5/4
- · - 11/4

\bar{V}



— 11/4
- - - 19/4
- · - 26/4

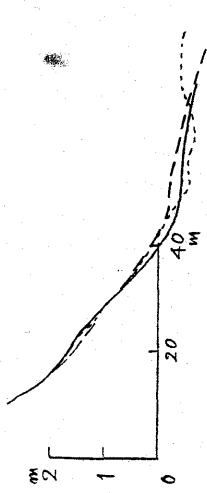
\bar{V}



— 26/4
- - - 3/5
- · - 11/5

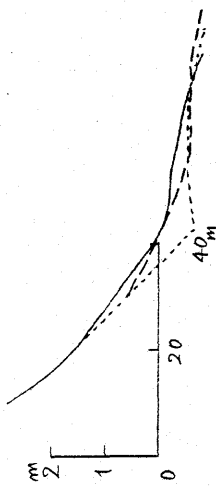
\bar{V}

S-100-7



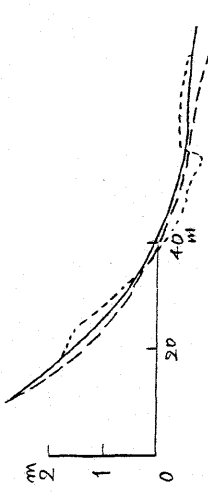
— 11/5/1981
 --- 17/5
 - - - 24/5

\bar{v}



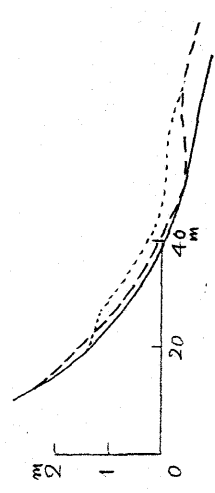
— 24/5
 --- 1/6
 - - - 7/6

\bar{v}



— 7/6
 --- 15/6
 - - - 21/6

\bar{v}



— 21/6
 --- 28/6
 - - - 6/7

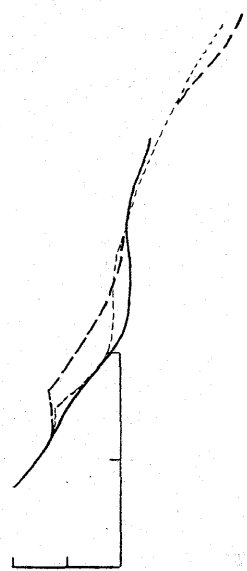
\bar{v}

S-100-8



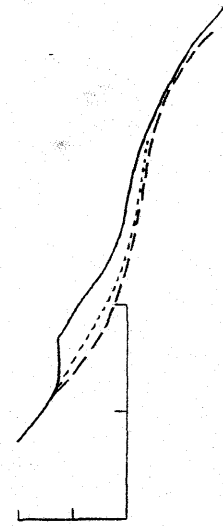
— 6/7/1981
 --- 9/7
 - - - 14/7

\bar{v}



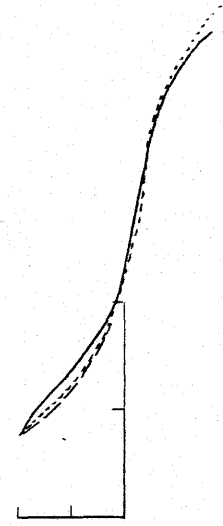
— 14/7
 --- 17/7
 - - - 21/7

\bar{v}



— 21/7
 --- 24/7
 - - - 28/7

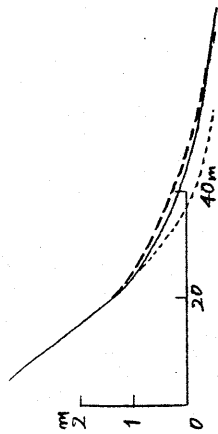
\bar{v}



— 28/7
 --- 31/7
 - - - 4/8

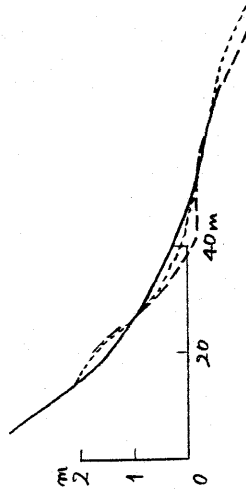
\bar{v}

S-400-9



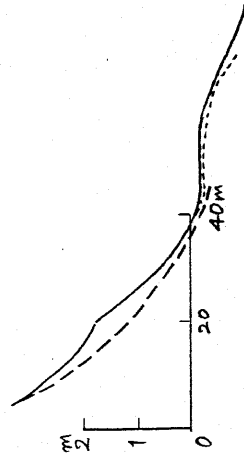
— 4/8/1981
--- 7/8
- - - 12/8

$\frac{V}{V_0}$



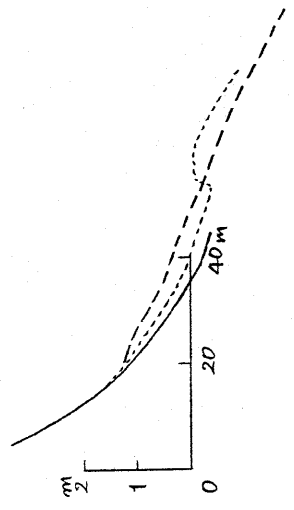
— 12/8
--- 15/8
- - - 18/8

$\frac{V}{V_0}$



— 18/8
--- 20/8
- - - 24/8

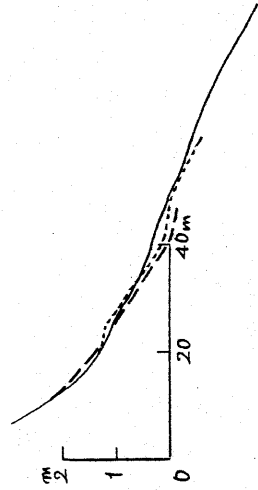
$\frac{V}{V_0}$



— 24/8
--- 27/8
- - - 1/9

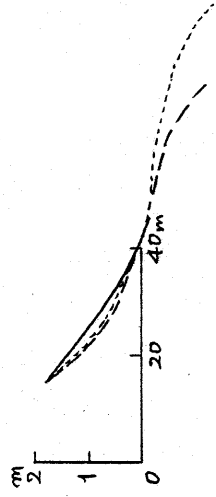
$\frac{V}{V_0}$

S-400-10



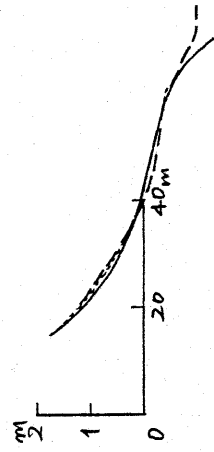
— 1/9/1981
--- 4/9
- - - 7/9

$\frac{V}{V_0}$



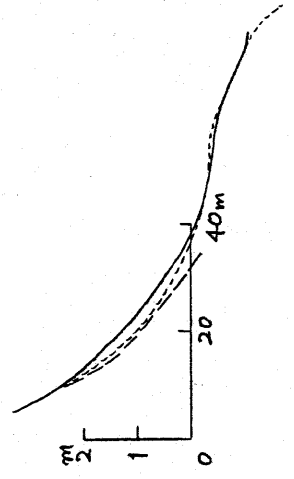
— 7/9
--- 11/9
- - - 16/9

$\frac{V}{V_0}$



— 16/9
--- 20/9
- - - 25/9

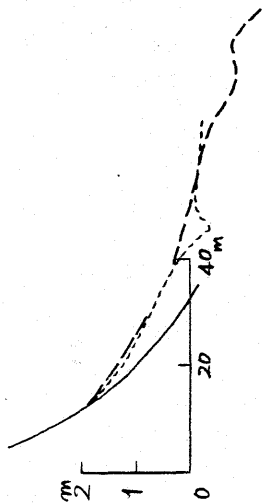
$\frac{V}{V_0}$



— 25/9
--- 29/9
- - - 2/10

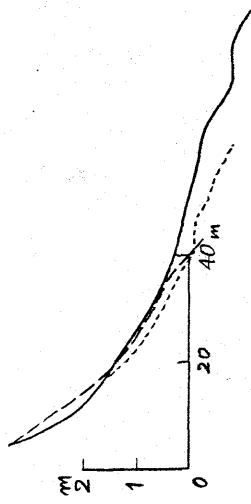
$\frac{V}{V_0}$

S-400-11



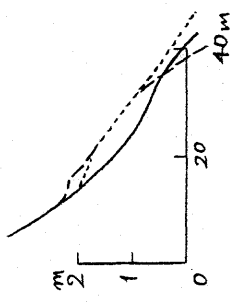
— 2/10/1981
--- 7/10
- - - 13/10

$\frac{V}{V_0}$



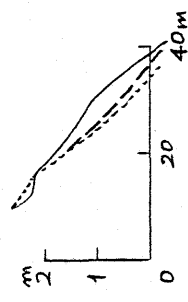
— 13/10
--- 18/10
- - - 24/10

$\frac{V}{V_0}$



— 24/10
--- 28/10
- - - 2/11

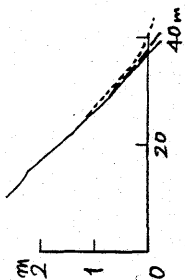
$\frac{V}{V_0}$



— 2/11
--- 8/11
- - - 15/11

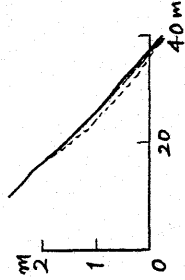
$\frac{V}{V_0}$

S-400-12



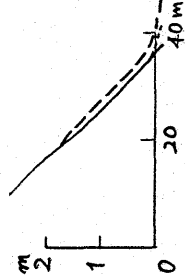
— 15/11/1981
--- 19/11
- - - 23/11

$\frac{V}{V_0}$



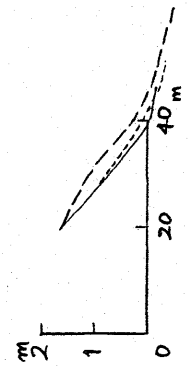
— 23/11
--- 29/11
- - - 5/12

$\frac{V}{V_0}$



— 5/12
--- 12/12
- - - 15/12

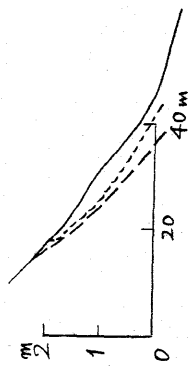
$\frac{V}{V_0}$



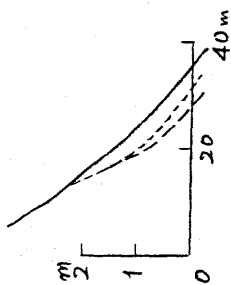
— 15/12
--- 22/12
- - - 29/12

$\frac{V}{V_0}$

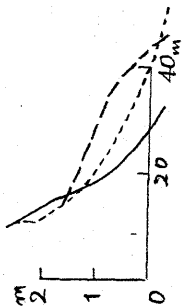
S-400-13



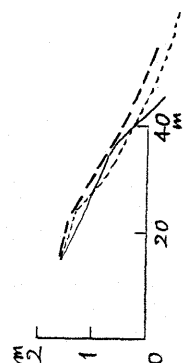
\bar{V}



\bar{V}

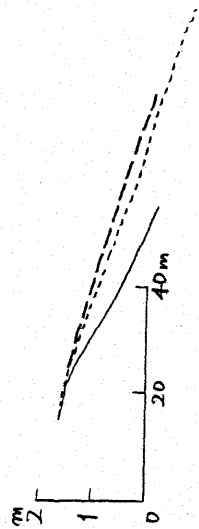


\bar{V}

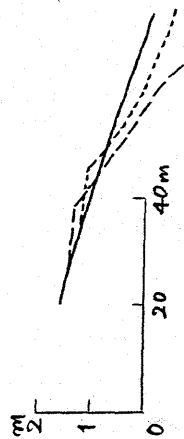


\bar{V}

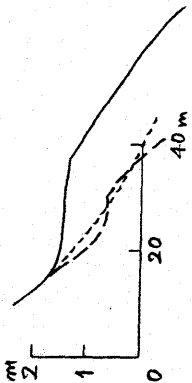
S-400-14



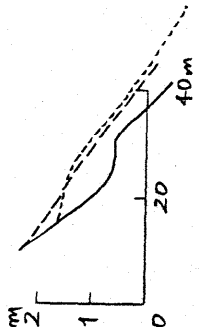
\bar{V}



\bar{V}

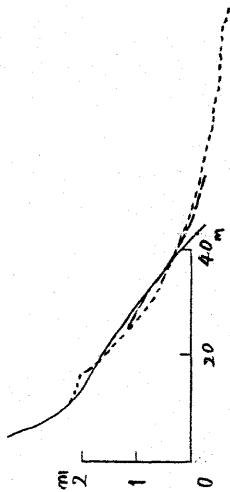


\bar{V}



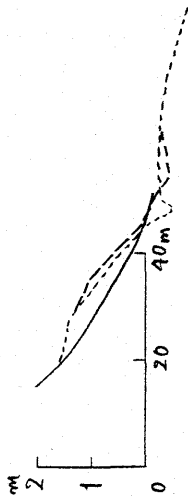
\bar{V}

S-400-15



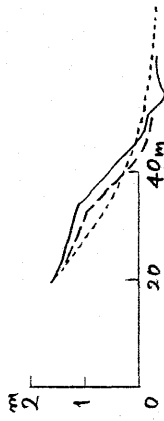
— 18/4/1982
- - - 25/4
- . - 1/5

\bar{y}



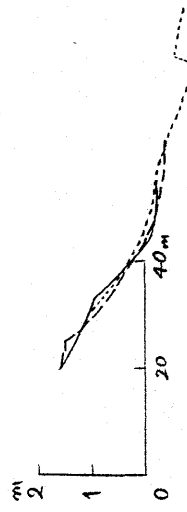
— 1/5
- - - 10/5
- . - 17/5

\bar{y}



— 17/5
- - - 24/5
- . - 31/5

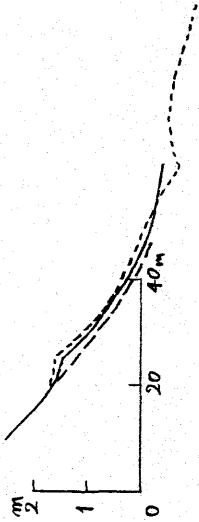
\bar{y}



— 31/5
- - - 6/6
- . - 15/6

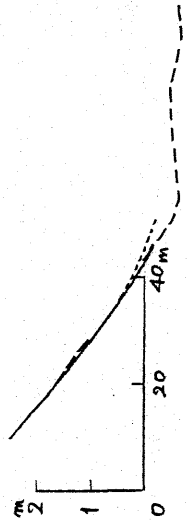
\bar{y}

S-400-16



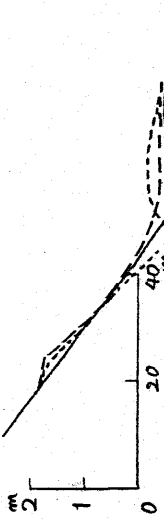
— 15/6/1982
- - - 21/6
- . - 29/6

\bar{y}



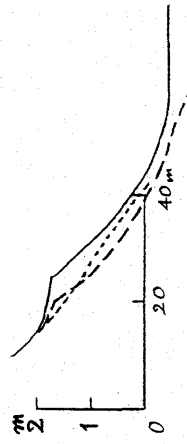
— 29/6
- - - 5/7
- . - 12/7

\bar{y}



— 12/7
- - - 20/7
- . - 27/7

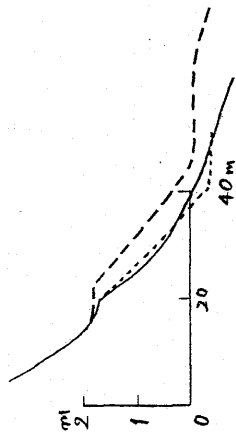
\bar{y}



— 27/7
- - - 2/8
- . - 9/8

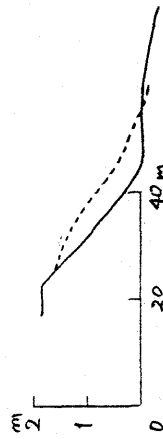
\bar{y}

S-400-17



— 9/8/1982
 --- 15/8
 - - - 23/8

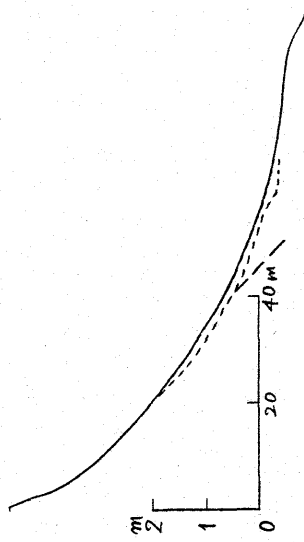
\bar{V}



— 23/8
 --- 30/8

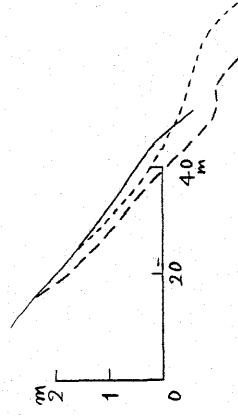
\bar{V}

S-450-1



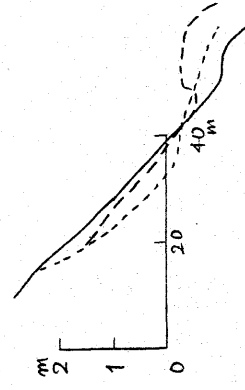
— 28/8/1980
 --- 31/8
 - - - 3/9

\bar{V}



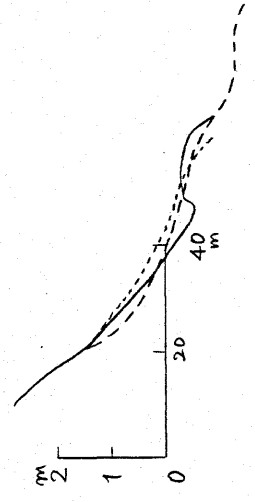
— 3/9
 --- 7/9
 - - - 10/9

\bar{V}



— 10/9
 --- 13/9
 - - - 16/9

\bar{V}

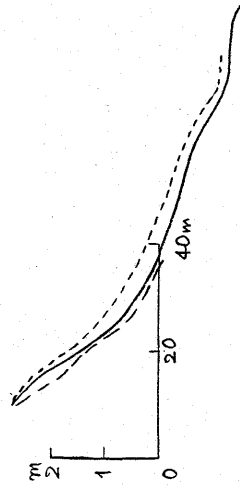


— 16/9
 --- 20/9
 - - - 23/9

\bar{V}

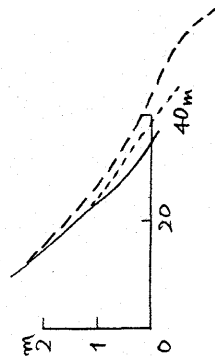
S-450-2

S-450-3



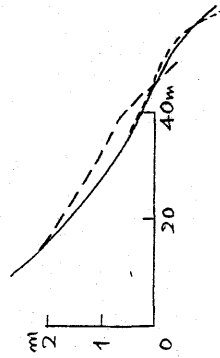
— 23/9/1980
- - - 26/9
- · - 30/9

\bar{v}_i



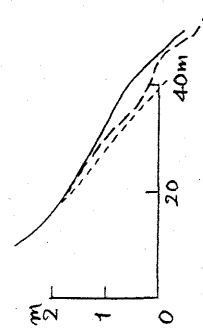
— 30/9
- - - 4/10
- · - 8/10

\bar{v}_i



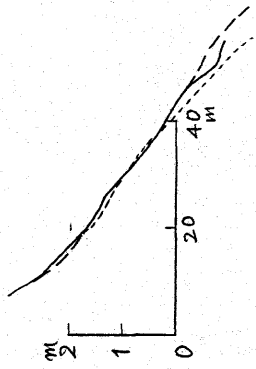
— 8/10
- - - 11/10
- · - 14/10

\bar{v}_i



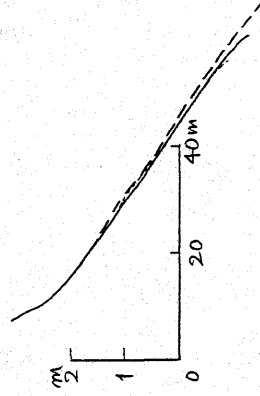
— 14/10
- - - 15/10
- · - 19/10

\bar{v}_i



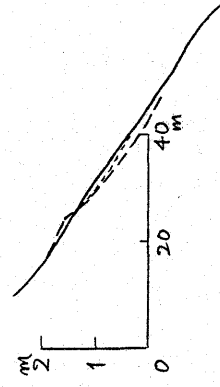
— 19/10/1980
- - - 23/10
- · - 28/10

\bar{v}_i



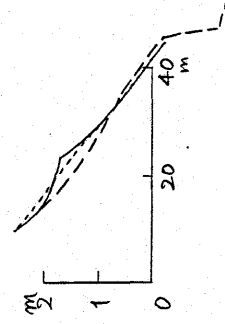
— 28/10
- - - 2/11
- · - 7/11

\bar{v}_i



— 7/11
- - - 12/11
- · - 17/11

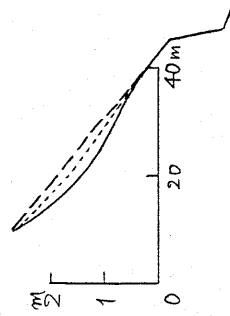
\bar{v}_i



— 17/11
- - - 22/11
- · - 27/11

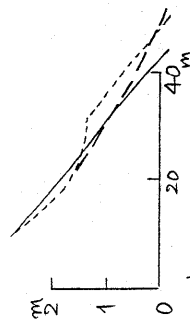
\bar{v}_i

S-450-4



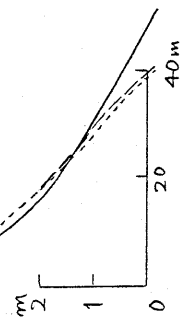
— 27 / 11
--- 2 / 12
- - - 8 / 12

\bar{v}



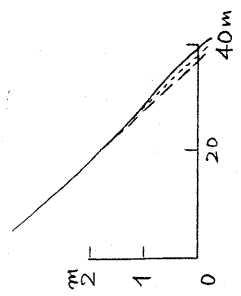
— 8 / 12
--- 15 / 12
- - - 22 / 12

\bar{v}



— 22 / 12
--- 29 / 12
- - - 6 / 1 / 1981

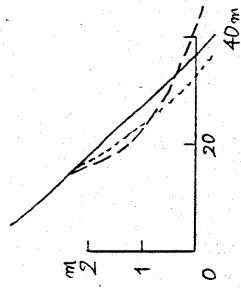
\bar{v}



— 6 / 1
--- 12 / 1
- - - 21 / 1

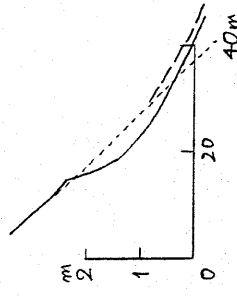
\bar{v}

S-450-5



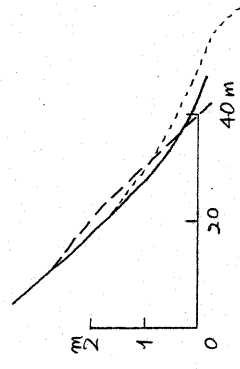
— 21 / 1 / 1981
--- 25 / 1
- - - 1 / 2

\bar{v}



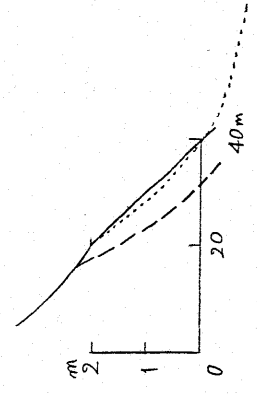
— 1 / 2
--- 8 / 2
- - - 15 / 2

\bar{v}



— 15 / 2
--- 22 / 2
- - - 28 / 2

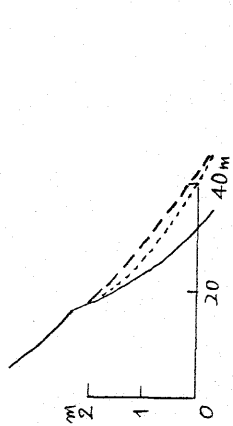
\bar{v}



— 28 / 2
--- 8 / 3
- - - 15 / 3

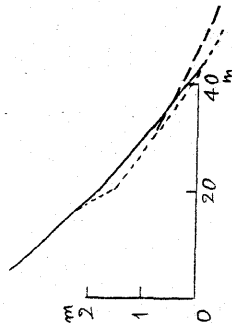
\bar{v}

S-450-6



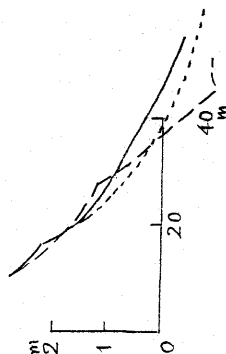
— 15/3/1981
--- 22/3
- - - 29/3

$\frac{V}{\bar{V}}$



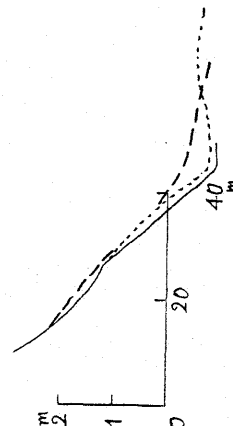
— 29/3
--- 5/4
- - - 11/4

$\frac{V}{\bar{V}}$



— 11/4
--- 19/4
- - - 26/4

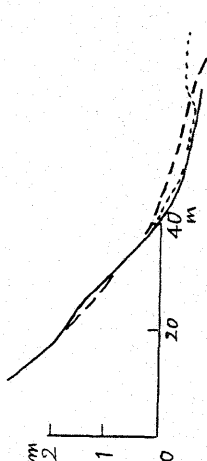
$\frac{V}{\bar{V}}$



— 26/4
--- 3/5
- - - 11/5

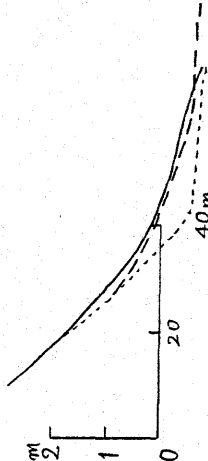
$\frac{V}{\bar{V}}$

S-450-7



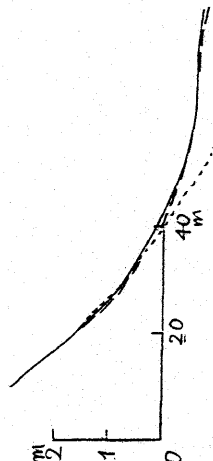
— 11/5/1981
--- 17/5
- - - 24/5

$\frac{V}{\bar{V}}$



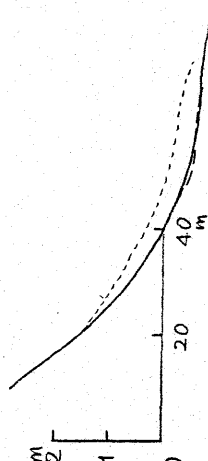
— 24/5
--- 1/6
- - - 7/6

$\frac{V}{\bar{V}}$



— 7/6
--- 15/6
- - - 21/6

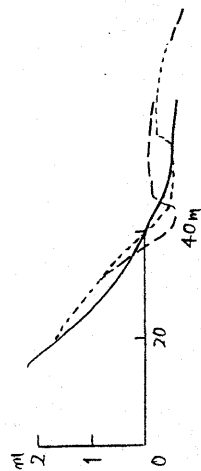
$\frac{V}{\bar{V}}$



— 21/6
--- 28/6
- - - 6/7

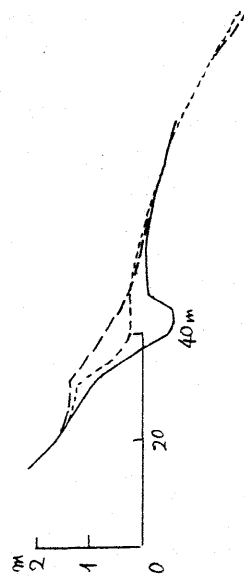
$\frac{V}{\bar{V}}$

S-450-8



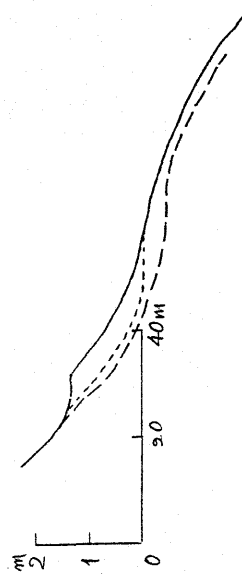
— 6 / 7 / 1981
 - - - 9 / 7
 - · - 14 / 7

\bar{V}



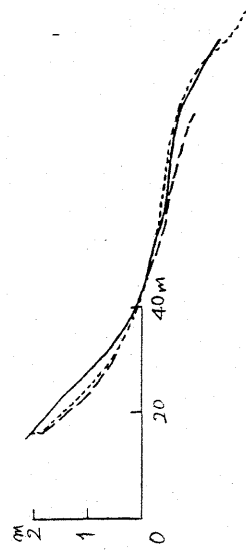
— 14 / 7
 - - - 17 / 7
 - · - 21 / 7

\bar{V}



— 21 / 7
 - - - 24 / 7
 - · - 28 / 7

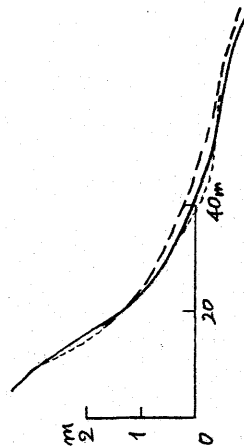
\bar{V}



— 28 / 7
 - - - 31 / 7
 - · - 4 / 8

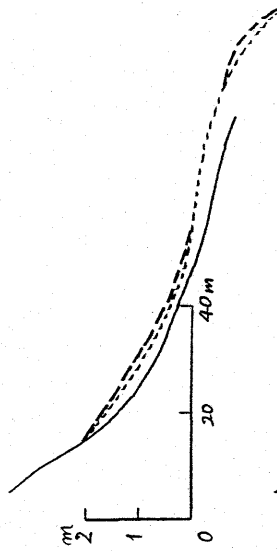
\bar{V}

S-450-9



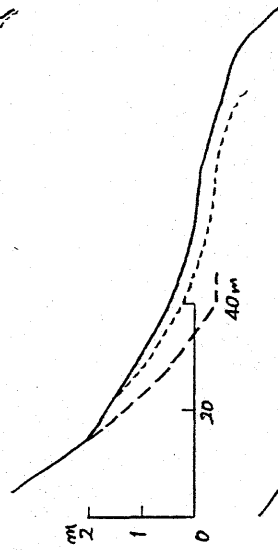
— 4 / 8 / 1981
 - - - 7 / 8
 - · - 12 / 8

\bar{V}



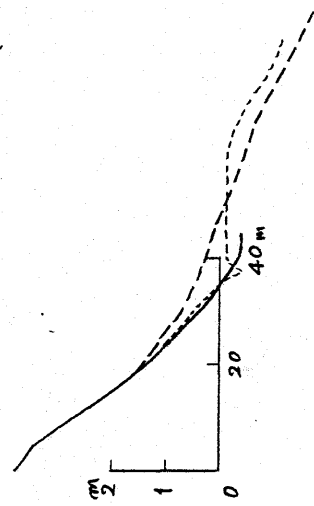
— 12 / 8
 - - - 15 / 8
 - · - 18 / 8

\bar{V}



— 18 / 8
 - - - 20 / 8
 - · - 24 / 8

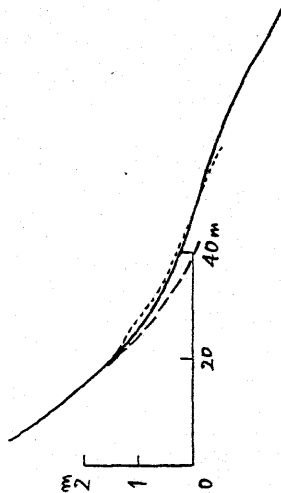
\bar{V}



— 24 / 8
 - - - 27 / 8
 - · - 1 / 9

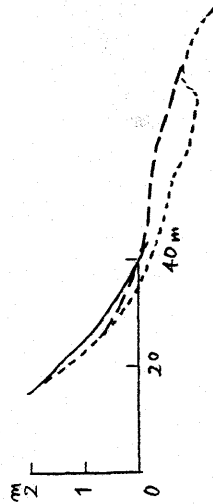
\bar{V}

S-450-10



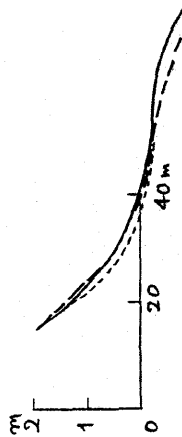
— 1/9/1981
- - - 4/9
- - - 7/9

\bar{y}



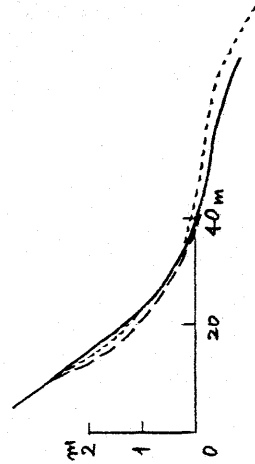
— 7/9
- - - 11/9
- - - 16/9

\bar{y}



— 16/9
- - - 20/9
- - - 25/9

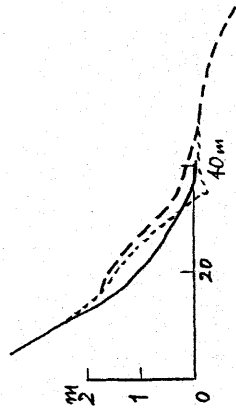
\bar{y}



— 25/9
- - - 29/9
- - - 2/10

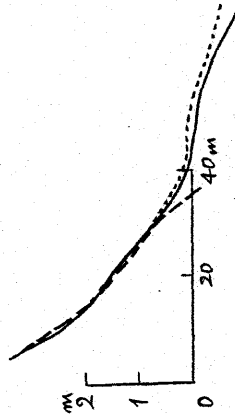
\bar{y}

S-450-11



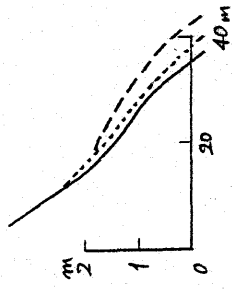
— 2/10/1981
- - - 7/10
- - - 13/10

\bar{y}



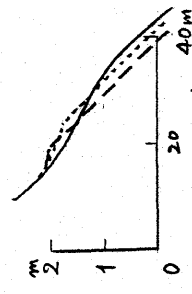
— 13/10
- - - 18/10
- - - 24/10

\bar{y}



— 24/10
- - - 28/10
- - - 2/11

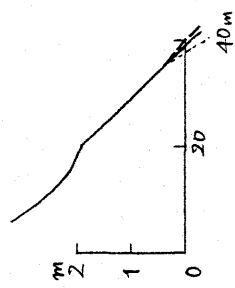
\bar{y}



— 2/11
- - - 8/11
- - - 15/11

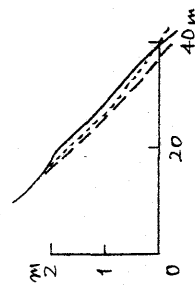
\bar{y}

S-450-12



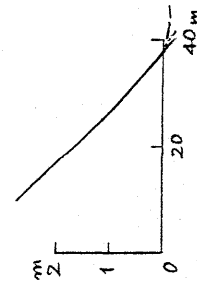
— 15/11/1981
 --- 19/11
 - - - 23/11

\bar{V}



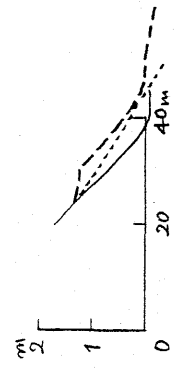
— 23/11
 --- 29/11
 - - - 5/12

\bar{V}



— 5/12
 --- 12/12
 - - - 15/12

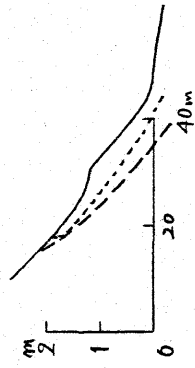
\bar{V}



— 15/12
 --- 22/12
 - - - 29/12

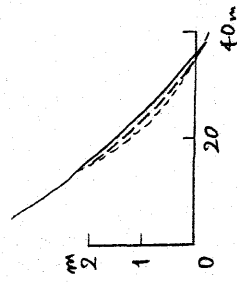
\bar{V}

S-450-13



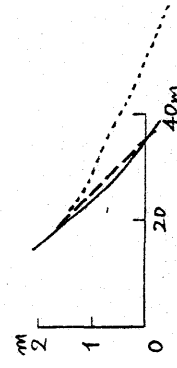
— 29/12/1981
 --- 5/1/1982
 - - - 10/1

\bar{V}



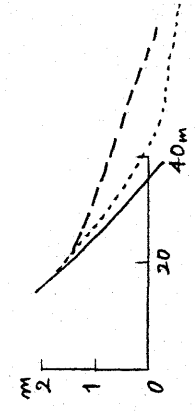
— 10/1
 --- 17/1
 - - - 24/1

\bar{V}



— 24/1
 --- 31/1
 - - - 7/2

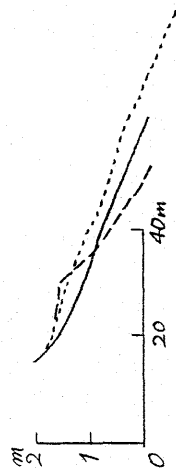
\bar{V}



— 7/2
 --- 14/2
 - - - 21/2

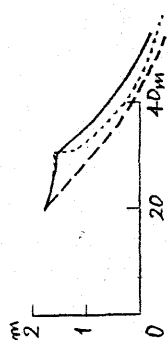
\bar{V}

S-450-14



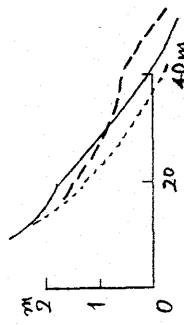
— 21/2/1982
--- 28/2
- - - 6/3

\bar{V}



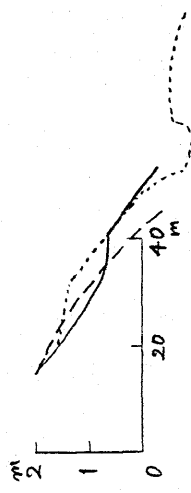
— 6/3
--- 13/3
- - - 18/3

\bar{V}



— 18/3
--- 24/3
- - - 5/4

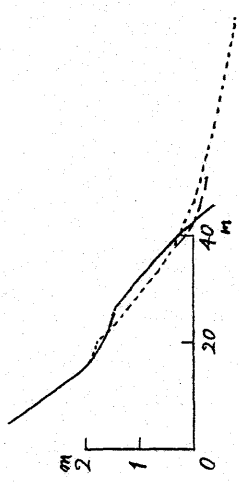
\bar{V}



— 5/4
--- 11/4
- - - 18/4

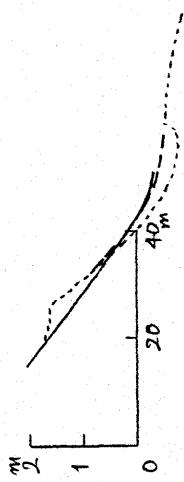
\bar{V}

S-450-15



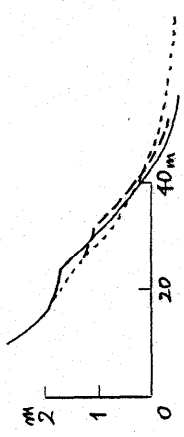
— 18/4/1982
--- 25/4
- - - 1/5

\bar{V}



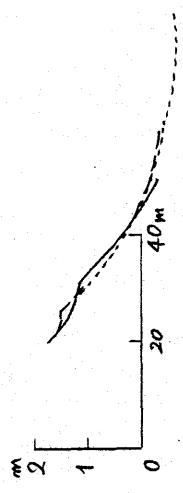
— 1/5
--- 10/5
- - - 19/5

\bar{V}



— 19/5
--- 24/5
- - - 31/5

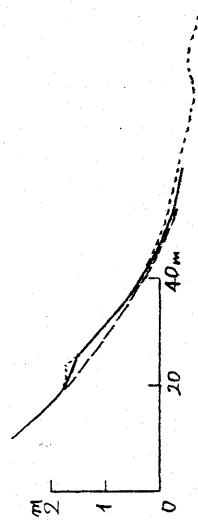
\bar{V}



— 31/5
--- 6/6
- - - 15/6

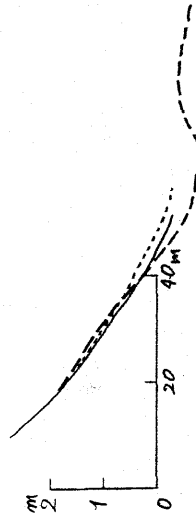
\bar{V}

S-450-16



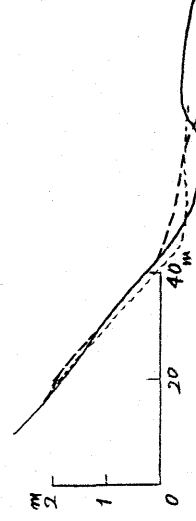
— 15/6/1982
- - - 21/6
- · - 29/6

V



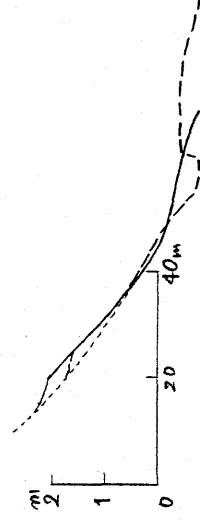
— 29/6
- - - 5/7
- · - 12/7

V



— 12/7
- - - 20/7
- · - 27/7

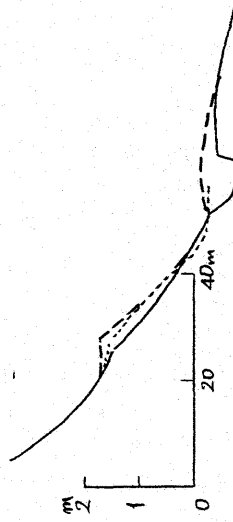
V



— 27/7
- - - 2/8
- · - 9/8

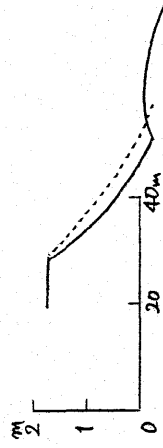
V

S-450-17



— 9/8/1982
- - - 15/8
- · - 23/8

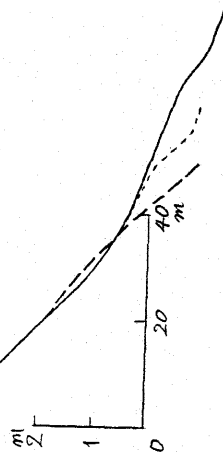
V



— 23/8
- - - 30/8
- · - 30/8

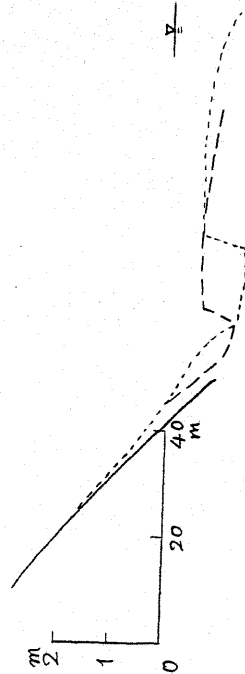
V

S-500-1.



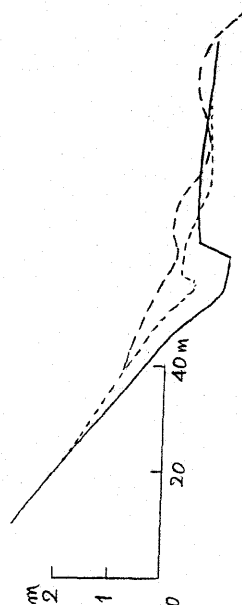
— 28/8/1980
- - - 31/8
- . - 3/9

\bar{v}



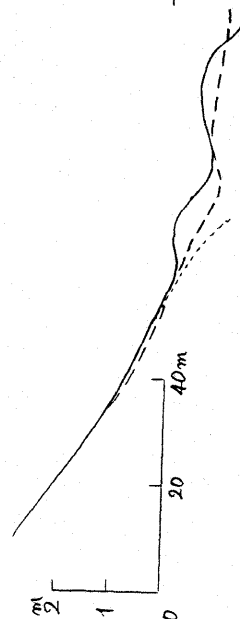
— 3/9
- - - 7/9
- . - 10/9

\bar{v}



— 10/9
- - - 13/9
- . - 16/9

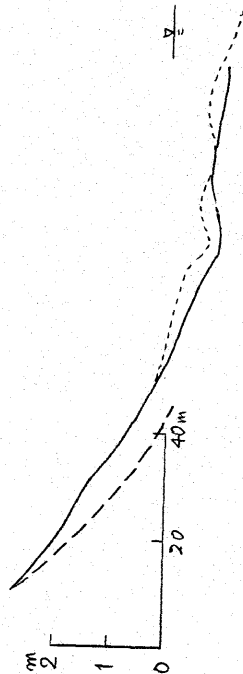
\bar{v}



— 16/9
- - - 20/9
- . - 23/9

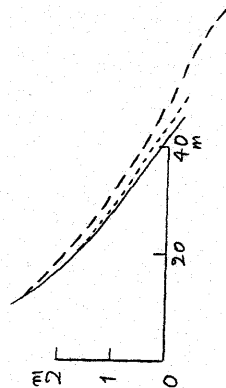
\bar{v}

S-500-2



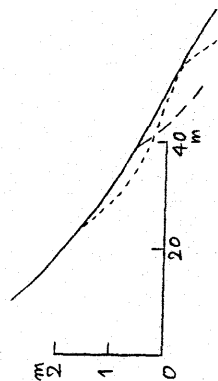
— 23/9/1980
- - - 26/9
- . - 30/9

\bar{v}



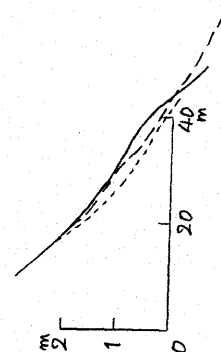
— 30/9
- - - 4/10
- . - 8/10

\bar{v}



— 8/10
- - - 11/10
- . - 14/10

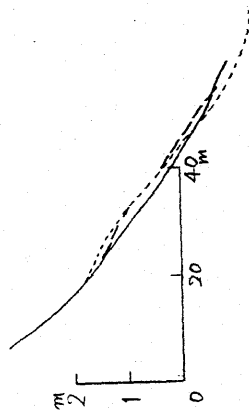
\bar{v}



— 14/10
- - - 15/10
- . - 19/10

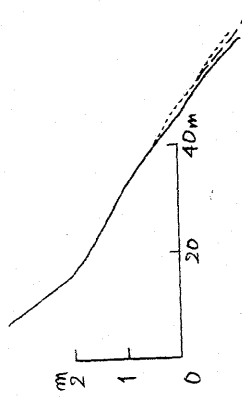
\bar{v}

S-500-3



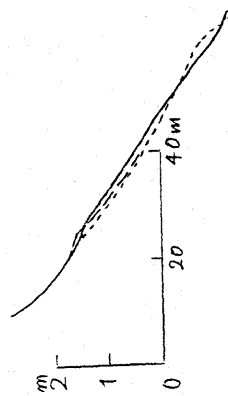
— 19/10/1980
- - - 23/10
- · - 28/10

\bar{y}



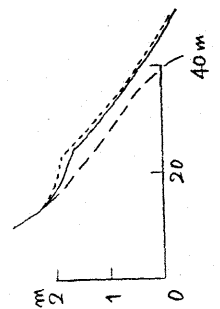
— 28/10
- - - 2/11
- · - 7/11

\bar{y}



— 7/11
- - - 12/11
- · - 17/11

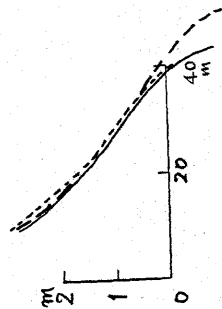
\bar{y}



— 17/11
- - - 22/11
- · - 27/11

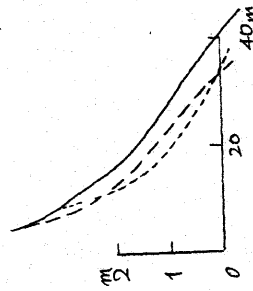
\bar{y}

S-500-4



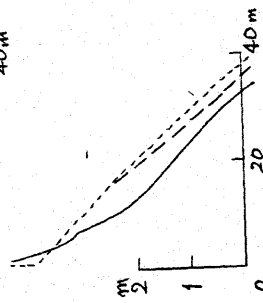
— 27/11/1980
- - - 2/12
- · - 8/12

\bar{y}



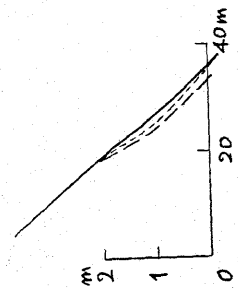
— 8/12
- - - 15/12
- · - 22/12

\bar{y}



— 22/12
- - - 29/12
- · - 6/1/1981

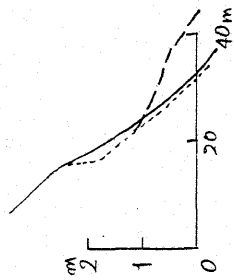
\bar{y}



— 6/1
- - - 12/1
- · - 21/1

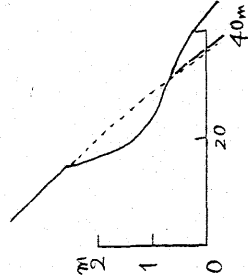
\bar{y}

S-500-5



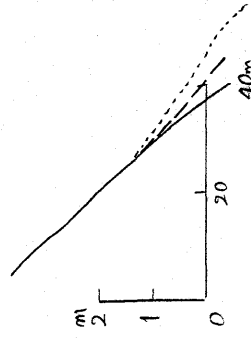
— 15/3/1981
- - - 22/3
- · - 29/3

$\frac{m}{2}$



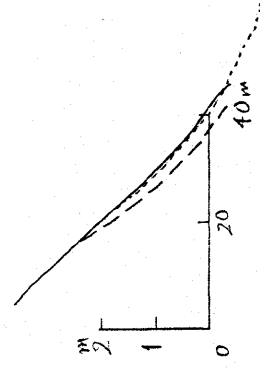
— 29/3
- - - 5/4
- · - 11/4

$\frac{m}{2}$



— 11/4
- - - 19/4
- · - 26/4

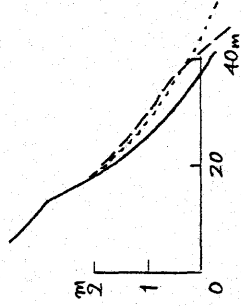
$\frac{m}{2}$



— 26/4
- - - 3/5
- · - 11/5

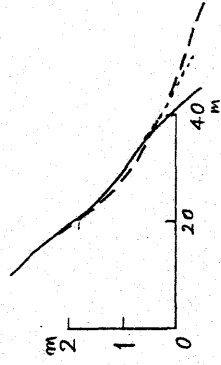
$\frac{m}{2}$

S-500-6



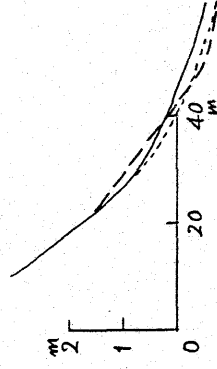
— 21/1/1981
- - - 25/1
- · - 1/2

$\frac{m}{2}$



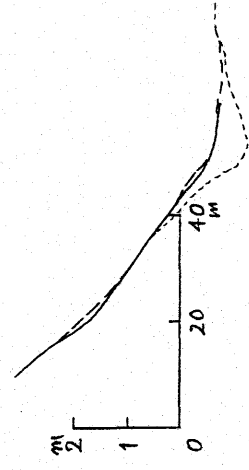
— 1/2
- - - 8/2
- · - 15/2

$\frac{m}{2}$



— 15/2
- - - 22/2
- · - 28/2

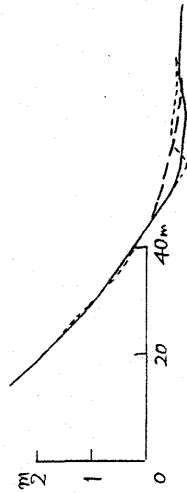
$\frac{m}{2}$



— 28/2
- - - 8/3
- · - 15/3

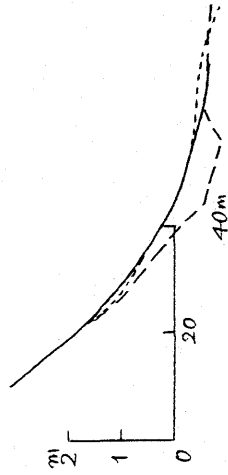
$\frac{m}{2}$

S-500-7



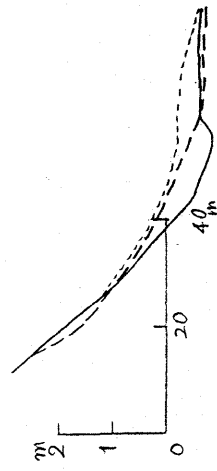
— 11/5/1981
 --- 17/5
 - - - 24/5

\bar{V}



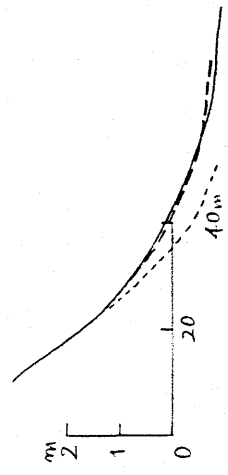
— 24/5
 --- 1/6
 - - - 7/6

\bar{V}



— 7/6
 --- 15/6
 - - - 21/6

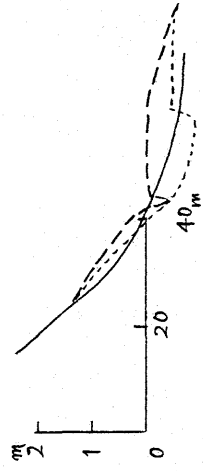
\bar{V}



— 21/6
 --- 28/6
 - - - 6/7

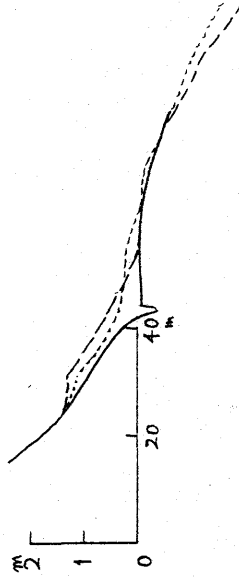
\bar{V}

S-500-8



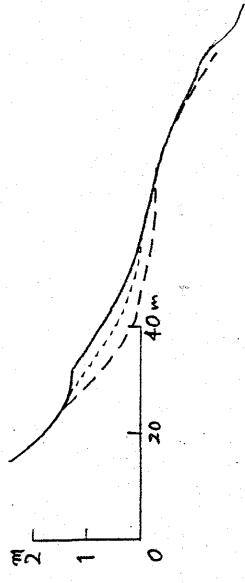
— 6/7/1981
 --- 9/7
 - - - 14/7

\bar{V}



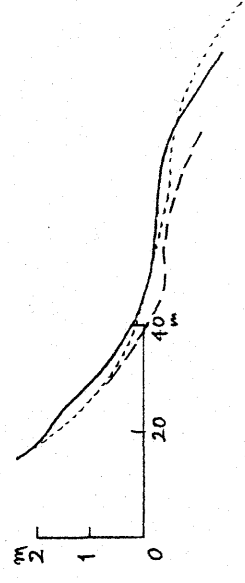
— 14/7
 --- 17/7
 - - - 21/7

\bar{V}



— 21/7
 --- 24/7
 - - - 28/7

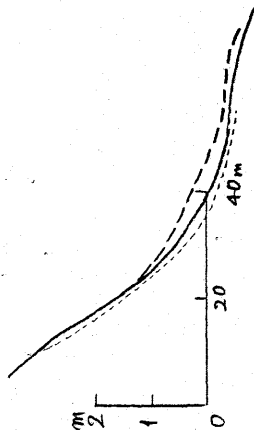
\bar{V}



— 28/7
 --- 31/7
 - - - 4/8

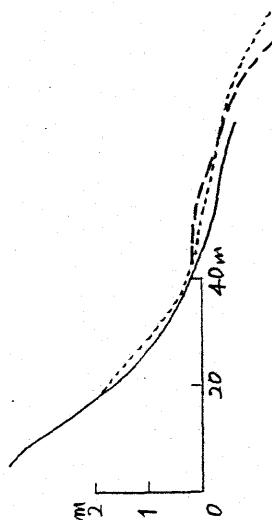
\bar{V}

S-500-9



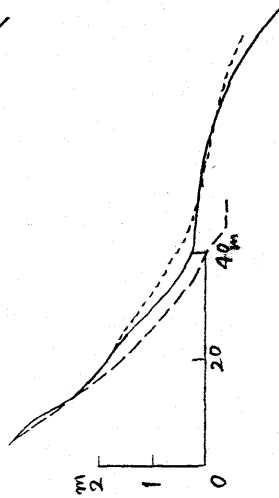
— 4/8/1981
- - - 7/8
- · - 12/8

$\frac{V}{\bar{V}}$



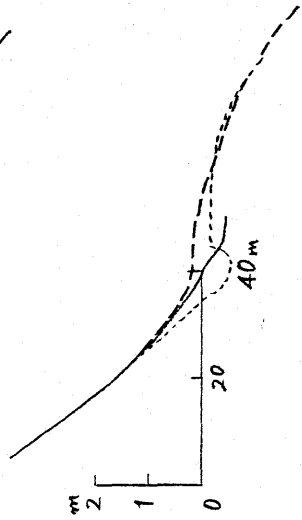
— 12/8
- - - 14/8
- · - 18/8

$\frac{V}{\bar{V}}$



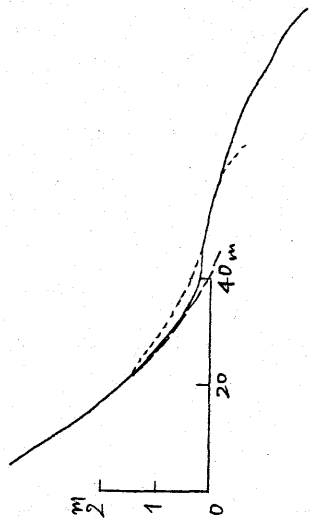
— 18/8
- - - 20/8
- · - 24/8

$\frac{V}{\bar{V}}$



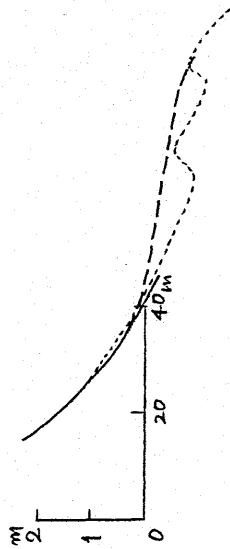
— 24/8
- - - 27/8
- · - 1/9

S-500-10



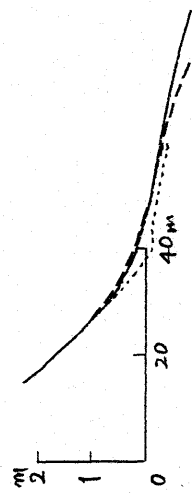
— 1/9/1981
- - - 4/9
- · - 7/9

$\frac{V}{\bar{V}}$



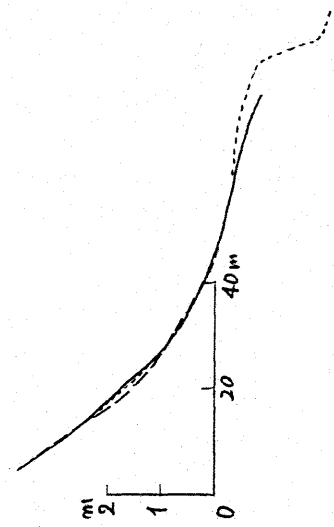
— 7/9
- - - 11/9
- · - 16/9

$\frac{V}{\bar{V}}$



— 16/9
- - - 20/9
- · - 25/9

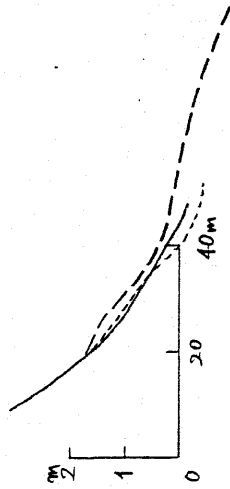
$\frac{V}{\bar{V}}$



— 25/9
- - - 29/9
- · - 2/10

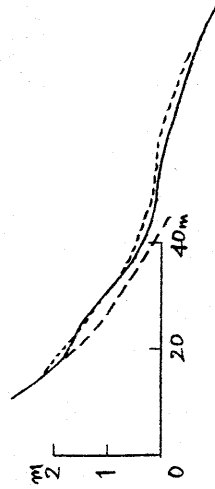
$\frac{V}{\bar{V}}$

S-500-11



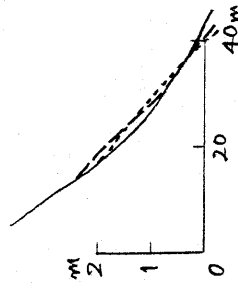
— 2 / 10 / 1981
- - - 7 / 10
- · - 13 / 10

\bar{y}



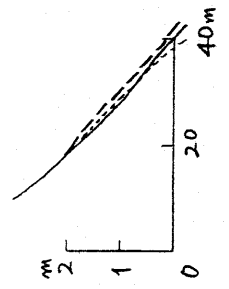
— 13 / 10
- - - 18 / 10
- · - 24 / 10

\bar{y}



— 24 / 10
- - - 28 / 10
- · - 2 / 11

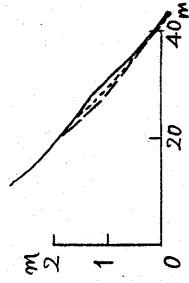
\bar{y}



— 2 / 11
- - - 8 / 11
- · - 15 / 11

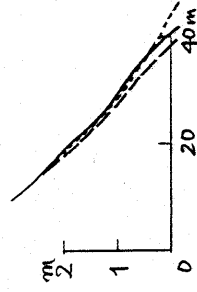
\bar{y}

S-500-12



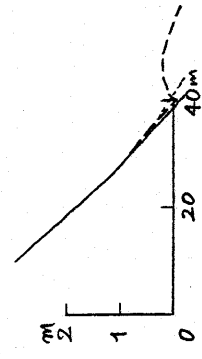
— 15 / 11 / 1981
- - - 19 / 11
- · - 23 / 11

\bar{y}



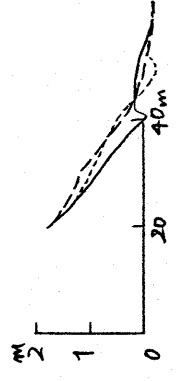
— 23 / 11
- - - 29 / 11
- · - 5 / 12

\bar{y}



— 5 / 12
- - - 12 / 12
- · - 15 / 12

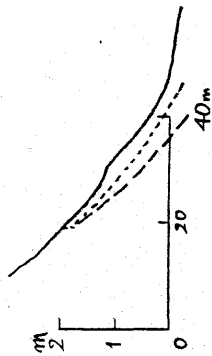
\bar{y}



— 15 / 12
- - - 22 / 12
- · - 29 / 12

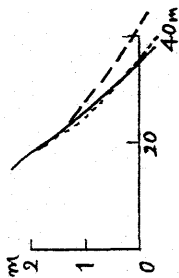
\bar{y}

S-500-13



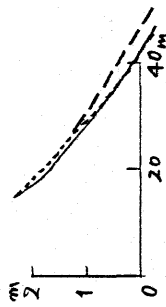
— 29/12/1981
- - - 5/1/1982
- . - 10/1

∇



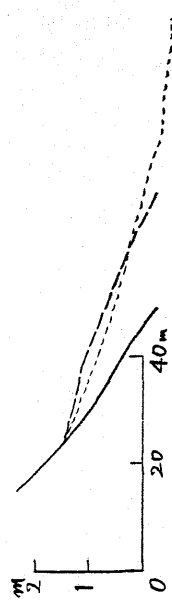
— 10/1
- - - 17/1
- . - 24/1

∇



— 24/1
- - - 31/1
- . - 7/2

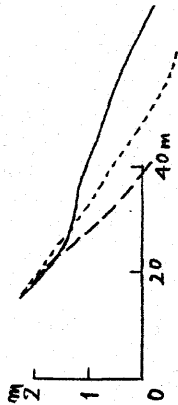
∇



— 7/2
- - - 14/2
- . - 21/2

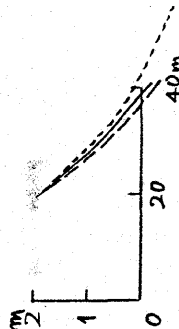
∇

S-500-14



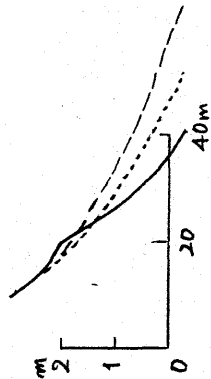
— 21/2/1982
- - - 28/2
- . - 6/3

∇



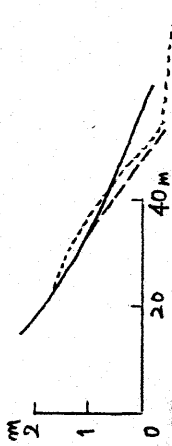
— 6/3
- - - 13/3
- . - 18/3

∇



— 18/3
- - - 24/3
- . - 5/4

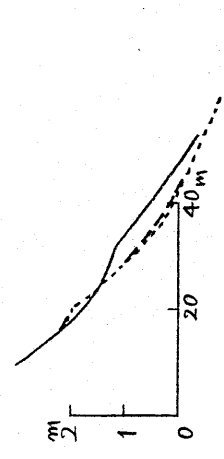
∇



— 5/4
- - - 11/4
- . - 18/4

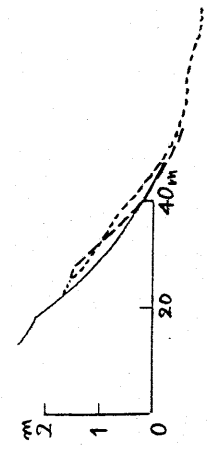
∇

S-500-15



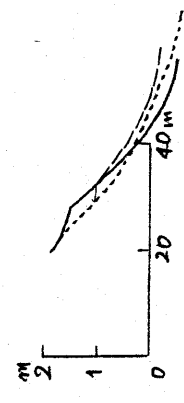
— 18/4/1982
 - - - 25/4
 - · - 1/5

\bar{y}



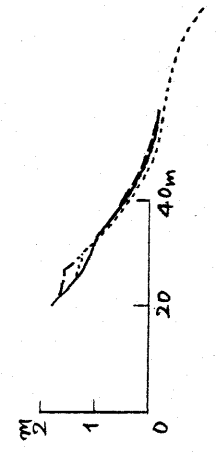
— 1/5
 - - - 10/5
 - · - 17/5

\bar{y}



— 17/5
 - - - 24/5
 - · - 31/5

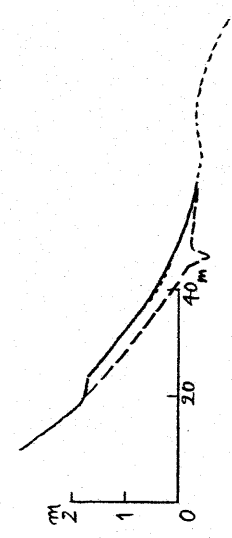
\bar{y}



— 31/5
 - - - 6/6
 - · - 15/6

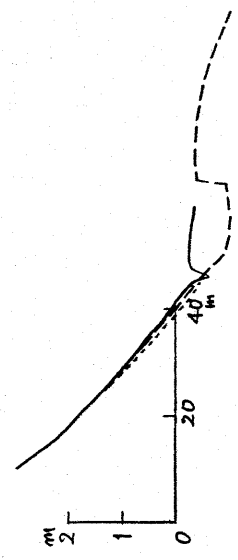
\bar{y}

S-500-16



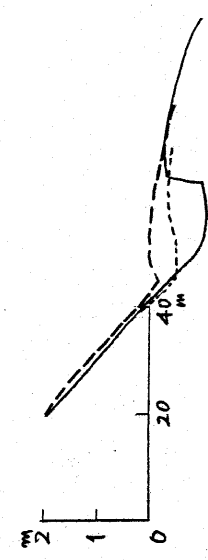
— 15/6/1982
 - - - 21/6
 - · - 29/6

\bar{y}



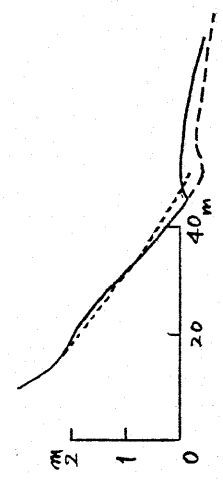
— 29/6
 - - - 5/7
 - · - 12/7

\bar{y}



— 12/7
 - - - 20/7
 - · - 27/7

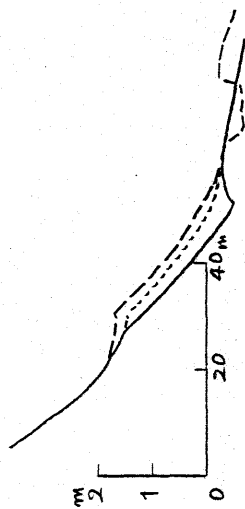
\bar{y}



— 27/7
 - - - 2/8
 - · - 9/8

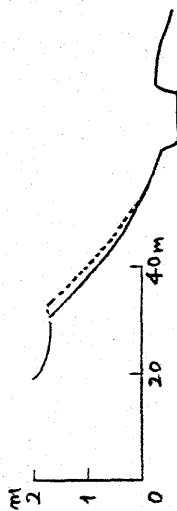
\bar{y}

S-500-17



— 9/8/1982
 ---- 15/8
 23/8

V_z



— 23/8
 ---- 30/8

V_z

APPENDIX 2

TIME-SERIES DATA OF BEACH WIDTH AND VOLUME

As schematically shown in Fig. A(2)-1, the beach width, X , is the horizontal distance between the origin of the coordinate and the point at which the beach profile meets the x -axis. The sediment storage, Q , is the cross-sectional area (per unit alongshore length) bounded by the beach profile, the x -, and the y -axes. The two quantities, X and Q , were averaged over all the survey lines for each site, and they are respectively denoted by \bar{X} and \bar{Q} , which are plotted in relation to the values of 28 August 1980, the first day of the two-year investigation (Figs. A(2)-2 and 3). In these figures, the length of the vertical line indicates the range of maximum and minimum values.

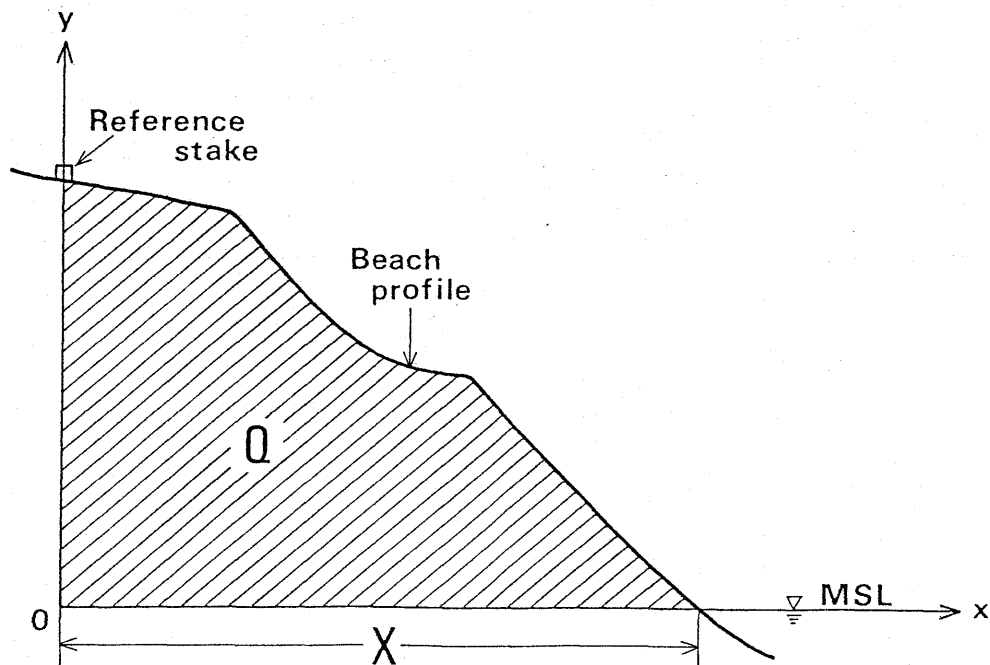
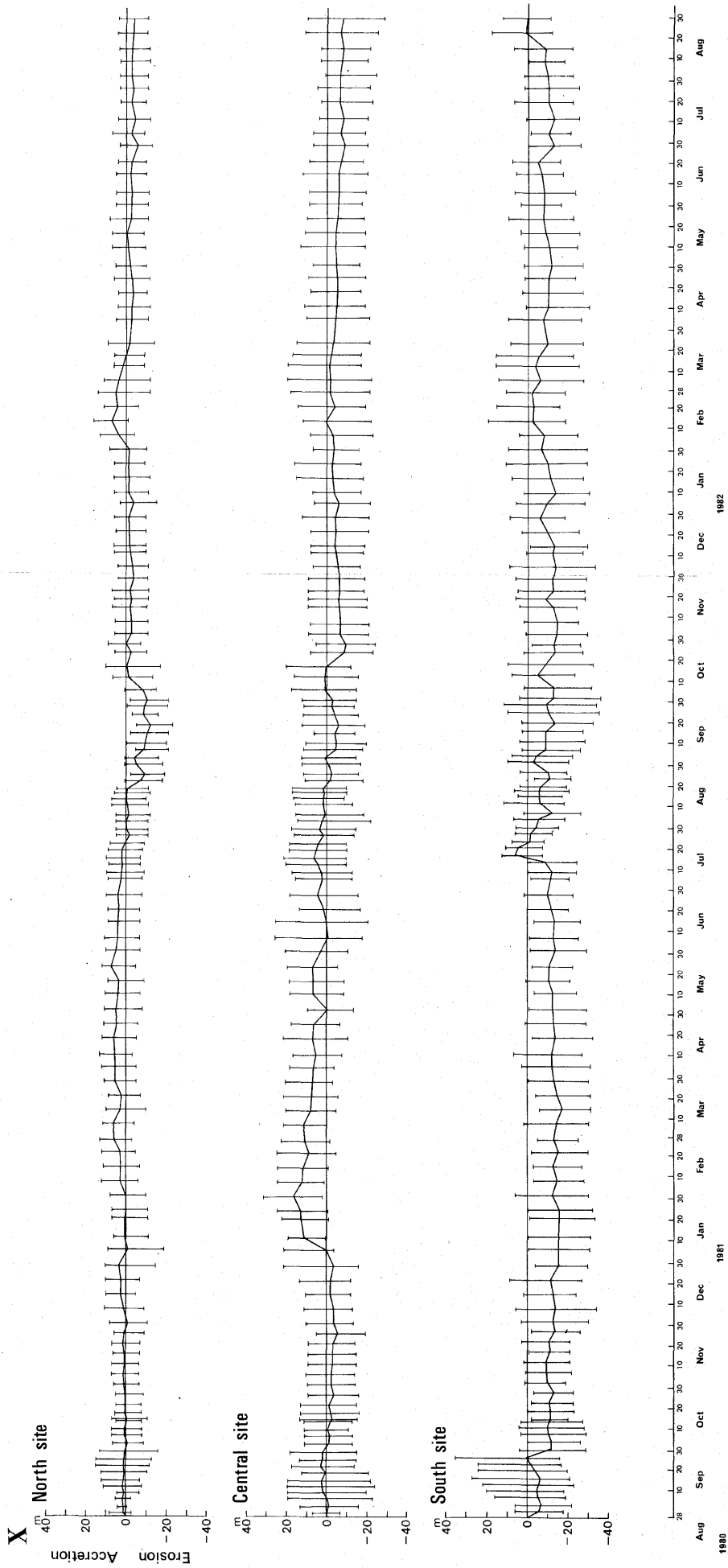
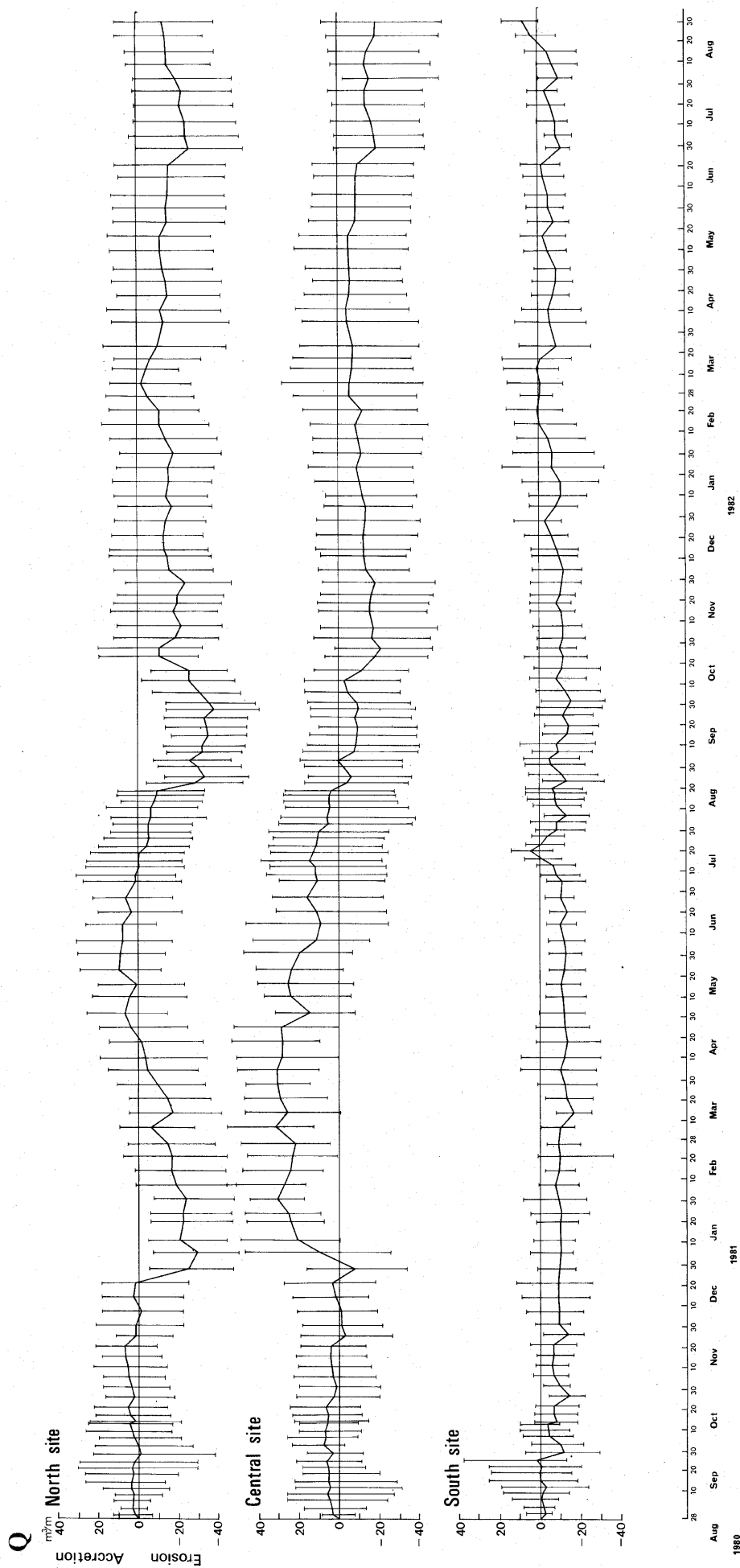


Figure A(2)-1. Schematic diagram for showing beach width and volume.





APPENDIX 3

TIME-SERIES DATA OF WAVE PERIOD, DEEP-WATER
WAVE HEIGHT, AND BREAKER HEIGHT

