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PRECISION LEVELLING IN THE DETTIFOSS AREA

During July and August 1971

Prepared for ORKUSTOFNUN
by
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REPORT

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The bench marks A total of 69 permanent bench marks were established along three separate levelling profiles (Figure 1). Each bench mark consists of a brass marker with slightly convex surface, about 38 mm in diameter. These markers are placed in solid rock by drilling a hole 16 mm in diameter and about 50 millimeters deep for the tip of the marker which are fastened into these holes with concrete. Bench marks made this way have proven to be quite stable in other areas in Iceland, and less than one percent of the bench marks constructed during the last six years have become unusable due to shifts relative to the foundation of as much as 0.5 millimeters. Smaller shifts can usually not be detected. The configuration of the profiles is shown on Figure 1, and the coordinates of each bench mark is given in Table 5. Each bench mark is indicated in the field by a small rock cairn and the bench mark number is stamped in the surface of each marker.

Method of levelling The levelling was done with Wild N-3 precision level using Wild 21-A fixed legs tripod and two invar levelling rods (Wild GPL-3). Whenever the distance between adjacent bench marks was less than 60 meters, and the elevation difference of these was less than 2.5 meters, the level was placed at equal distance (preferable with 10 centimeters accuracy) from both bench marks, with the invar rods on both bench marks. The height of the level was more than 0.5 meters above the highest ground along either sight line. If the distance between adjacent bench marks was greater than 60 meters or the elevation difference was greater than 2.5 meters, one or more rod stations were selected between the bench marks. The level position

relative to the rods was the same as before.

The levelling rods have two scales, one offset relative to the other. The readings of the scales were made in the following order:

1. Lower scale on backward rod.
2. Lower scale on forward rod.
3. Higher scale on forward rod.
4. Higher scale on backward rod.

Reading 2 is subtracted from reading 1, and reading 3 is subtracted from reading 4, so two individual elevation differences between the two rods are obtained. The average of these two values is calculated, to obtain the elevation difference of the two rods.

This whole procedure is usually repeated three times without moving the rods or the level, except for turning the level towards the two rods. In case the three elevation values obtained this way differ from each other by more than 0.1 millimeter a fourth observation is made.

As the observations are finished at one level site, the backwards rod is moved to a forward location and the level is moved to a location midways between the rods and the same sequence of readings is made.

When a levelling profile has been completed from one end to the other end, the whole profile is levelled in the same way by moving in opposite direction along the profile. The average elevation differences of adjacent bench marks as obtained by the two traverses of the profile are compared, and if there is a difference of 0.2 millimeters or more between the two values, a third levelling is conducted on the bench mark interval where this excessive difference was observed.

Final analysis of elevation differences A computer program has been written to compute the real elevation difference between any pair of bench marks with the greatest possible accuracy. This program also computes the probable error of each elevation difference. Ths most probable elevation difference is obtained by subduing any observation which deviates from the average value of each series of observation, by computing a weighting factor for each observation.

At each level station there are actually obtained six or eight independent values of the elevation differences of the two rods for each coverage of the profile. Each of these values is read and calculated to the nearest 1/100 of a millimeter. We can call these individual values H1, H2, H3, H4, H5, H6, (H7, H8). A weighting factor is calculated for each of these values. This weighting factor is called W1, W2, W3, W4, W5, W6, (W7, W8). The best possible value of the elevation difference, H01 is then obtained as follows:

$$H01 = \Sigma HW / \Sigma W$$

The problem in this treatment is to determine the value of the weighting factors so the above equation gives the best possible value of the elevation difference of the two rods. The following method to calculate the weighting factors has been used on the data from the Dettifoss levelling:

First step: All W's set equal 1

Second step: H01 computed (first approximation)

Third step: $Wi = 0.0001/(0.0001 + (H01 - Hi)^2)$

Fourth step: Go back to second step five times.

In this computation H01 and Hi are in centimeters and the constant 0.0001 is an arbritary one, based on the experience of older levellings which

shows that errors exceeding 0.01 centimeters are rather infrequent. The fifth approximation of H01 is accepted as the final value of the elevation difference between the two rod sites. The weight for this value of H01 is computed from the standard deviation of the individual observations applying the weight factors. The elevation difference of two adjacent bench marks is found from each coverage of the profile by simple addition of the H01 values and the standard error is found by conventional methods. The final values for the elevation differences of adjacent bench marks is to take the weighted average of the values for each coverage of the profile, using a weight factor corresponding to the standard error of each value included in the average.

The standard error in this final result is computed in two ways (Table 3), a: by using the probable values of the individual H01 values, and b: by using the differences in the calculated elevation differences for the two or more coverages of the profile. The larger of these two values is accepted as the standard error in the elevation difference between the bench marks.

The probable error quoted in Table 4 is the 50% error, that is 50% of the calculated values should be less than this away from the correct value. To obtain any other confidence limit of the observation, it may be assumed that the errors follow the Gaussian distribution, although this is not quite true, as large errors in our result are more frequent than the Gaussian distribution predicts.

The 95% confidence level is obtained by multiplying the probable error by 2.9 and the 99% confidence level requires multiplication of the probable error by 3.8.

THERMAL EXPANSION OF THE RODS

As all profile sections were levelled at least two times, and the air temperature was usually not the same during the two levellings, the levelling data can be used to obtain approximate values of the thermal expansion coefficient of the invar tapes on the levelling rods.

If the temperature during the two levellings is T1 and T2 and the observed elevation difference of the two markers is H1 and H2, than with no errors in the observations we find the thermal expansion coefficient Tc as follows:

$$Tc = \frac{H1-H2}{H(T2-T1)}$$

where H is the true elevation difference of the markers. The errors in H1 and H2 are frequently very large compared with the thermal expansion of the rods, so only observations over profile intervals where the product H(T2-T1) has a large numerical value can be used in estimating the thermal expansion. The following table gives the result of a study of the thermal expansion of the levelling rods.

H in cm, T in °C	N	Tc	S.E.
$\lvert H(T2-T1)\rvert > 1000$	9	$2.90 \cdot 10^{-6}$/°C	$1.2 \cdot 10^{-6}$/°C
$400 < \lvert H(T2-T1)\rvert < 1000$	11	10.72	5
$100 < \lvert H(T2-T1)\rvert < 400$	17	-15.06	14
$100 < \lvert H(T2-T1)\rvert < 1000$	28	2.58	
$\lvert H(T2-T1)\rvert > 100$	37	2.76	

N is the number of observations in each group. S.E. is the standard error of each calculated value of Tc. All individual observations were given a weight proportional to $\lvert H(T2-T1)\rvert$. This study indicates that the thermal expansion coefficient of the invar rods is between $2 \cdot 10^{-6}$ and $4 \cdot 10^{-6}$ per °C.

TABULATED RESULT OF LEVELLING

The following tables are computer print-out of the levelling result. The table headed "Data Input" lists all the data used in the computations. Each line gives the pertinent data from one complete observation, usually the data of two pages in the field books.

Tables 1 and 2 give stages in the computation of the data and Table 3 gives the final values of the computed elevation difference of every two adjacent bench marks. The values of Table 3 are given for five assumed values of the thermal expansion coefficient Tc.

Table 4 gives the computed elevation of each bench mark relative to the first bench mark of each profile and the probable error of each value. The elevation differences of adjacent bench marks and their probable error are also given.

bench mark no.

Intermediate level stations

Day Mo year of levelling

DATA INPUT FROM PROFILE 1 39 28 7 1971

100	200	1	140	140	175	175	173	465	458	472	465	465	465	0	0	0	0
200	201	1	132	132	207	207	6	573	579	575	572	572	575	0	0	0	0
201	300	1	134	134	221	221	75	326	319	330	320	323	316	0	0	0	0
300	301	1	130	130	235	235	64	289	283	285	288	296	287	0	0	0	0
301	400	1	120	125	210	210	231	344	348	342	346	343	350	0	0	0	0
400	401	1	130	131	181	179	250	776	770	771	773	776	778	0	0	0	0
401	500	1	130	132	180	180	223	528	530	533	525	535	527	0	0	0	0
500	501	1	131	145	272	275	55	765	764	759	760	760	758	0	0	0	0
501	600	1	134	118	253	253	147	156	178	171	174	180	164	0	0	0	0
600	601	1	123	125	258	258	56	96	107	100	97	100	103	0	0	0	0
601	700	1	130	128	246	246	45	763	756	760	772	765	770	0	0	0	0
700	701	1	125	125	255	255	149	222	212	210	212	206	212	0	0	0	0
701	800	1	130	123	260	260	76	880	879	878	885	877	876	0	0	0	0
800	801	1	121	119	112	111	176	305	295	298	301	299	296	0	0	0	0
801	802	1	120	114	175	175	192	763	753	758	764	765	762	0	0	0	0
802	900	1	114	116	216	216	68	668	650	652	652	650	654	0	0	0	0
900	1000	1	117	122	225	225	0	465	469	459	457	461	469	0	0	0	0
1000	1100	1	112	110	240	243	8	892	899	890	884	887	884	0	0	0	0
1100	1101	1	110	106	261	261	45	276	283	291	278	279	272	0	0	0	0
1101	1200	1	102	102	232	231	71	750	751	752	752	747	747	0	0	0	0
1200	1201	1	104	105	226	226	130	177	189	189	184	182	184	0	0	0	0
1201	1300	1	110	118	150	150	196	585	581	580	579	579	584	0	0	0	0
1300	1400	1	106	109	202	202	4	604	595	591	601	600	600	0	0	0	0
1400	1401	1	102	106	195	195	205	568	558	557	563	562	562	0	0	0	0
1401	1402	1	110	108	165	165	205	701	685	691	694	697	697	0	0	0	0
1402	1403	1	100	100	226	226	34	412	405	395	402	406	401	0	0	0	0
1403	1500	1	100	102	236	236	31	42	33	40	31	36	35	0	0	0	0
1500	1501	1	99	97	246	246	172	542	543	554	550	549	550	0	0	0	0
1501	1600	1	99	99	265	268	35	225	230	234	241	245	245	237	236	0	0
1600	1601	1	100	100	176	176	203	351	364	367	364	365	368	0	0	0	0
1601	1602	1	100	99	110	110	173	869	867	865	867	868	861	0	0	0	0
1602	1700	1	99	98	174	175	209	785	779	779	781	784	780	0	0	0	0
1700	1701	1	96	95	255	255	0	272	270	275	274	270	261	0	0	0	0
1701	1702	1	93	92	276	279	88	868	879	874	873	877	872	0	0	0	0
1702	1800	1	92	92	263	262	105	535	596	601	600	597	602	0	0	0	0
1900	1901	1	112	110	215	215	2	194	212	212	207	213	209	0	0	0	0
1901	1902	1	107	105	245	245	3	756	755	759	749	754	751	0	0	0	0
1902	1903	1	104	103	217	220	215	51	42	54	56	52	54	0	0	0	0
1903	2000	1	100	99	248	248	123	337	339	338	334	334	333	0	0	0	0
2000	2100	1	170	170	251	251	135	588	554	576	563	570	571	564	563	0	0
2100	2200	1	175	160	206	207	140	712	712	691	707	695	696	694	696	0	0
2200	2201	1	150	145	261	260	0	50	66	40	72	48	36	62	49	0	0
2201	2300	1	160	145	250	248	16	850	850	830	838	843	856	846	843	0	0
2300	2301	1	155	160	249	249	20	316	325	310	315	328	320	330	320	0	0
2301	2400	1	170	165	246	246	16	959	944	951	944	956	961	962	960	0	0
2400	2401	1	170	175	251	251	11	725	721	710	710	713	710	714	699	0	0
2401	2500	1	175	176	246	247	26	552	557	556	572	571	545	546	557	0	0
2500	2501	1	155	155	248	250	72	973	930	954	945	951	956	948	950	0	0
2501	2600	1	145	155	248	251	52	732	720	726	720	713	708	707	707	0	0
2600	2700	1	155	152	254	256	176	840	841	842	835	838	834	0	0	0	0
2700	2701	1	145	143	258	259	94	198	203	200	207	208	208	0	0	0	0
2701	2800	1	142	148	170	172	99	848	854	848	844	851	846	0	0	0	0
2800	2801	1	145	154	220	220	4	890	894	889	883	891	891	0	0	0	0
2801	2900	1	149	149	276	277	102	5	19	19	18	21	20	0	0	0	0
2900	2901	1	148	142	249	250	9	968	960	969	970	976	970	0	0	0	0
2901	3000	1	140	132	254	257	62	271	268	261	264	259	267	0	0	0	0
3000	3001	1	130	132	250	250	2	950	946	960	952	955	950	0	0	0	0
3001	3100	1	131	125	243	243	46	340	335	330	329	326	331	0	0	0	0
3100	3200	1	120	120	259	258	19	236	239	229	222	221	225	222	224	0	0
3200	3201	1	115	110	250	253	12	898	907	908	900	907	911	0	0	0	0
3201	3300	1	110	106	246	249	68	124	127	129	136	132	131	0	0	0	0
3300	3301	1	100	95	216	218	30	885	877	877	876	871	873	0	0	0	0

3301	3400	1	95	94	226	225	13	238	249	249	245	249	246	0	0	0	0
3400	3401	1	94	94	240	240	142	622	628	619	623	623	616	0	0	0	0
3401	3500	1	94	90	244	246	50	120	120	117	116	116	112	0	0	0	0
3500	3501	1	90	85	257	255	12	720	708	710	708	702	707	0	0	0	0
3501	3600	1	85	84	252	253	127	120	126	128	125	126	123	0	0	0	0
3600	3601	1	80	80	248	249	7	357	360	354	356	365	352	0	0	0	0
3601	3700	1	80	80	249	249	201	0	6	8	7	7	1	0	0	0	0
3700	3701	1	79	80	254	256	142	630	631	627	625	629	631	0	0	0	0
3701	3800	1	75	75	230	229	212	172	169	171	177	183	176	0	0	0	0
3800	3900	1	75	75	250	250	0	500	498	504	508	499	501	0	0	0	0
3900	3800	2	75	80	250	250	0	504	504	505	508	506	512	0	0	0	0
3800	3701	2	81	85	229	230	212	159	165	155	165	163	164	0	0	0	0
3701	3700	2	85	90	256	254	142	586	592	602	611	610	604	610	604	0	0
3700	3601	2	85	80	249	249	200	963	961	954	956	958	956	0	0	0	0
3601	3600	2	80	85	249	248	7	394	392	402	399	399	401	0	0	0	0
3600	3501	2	85	86	251	252	127	998	992	994	997	998	998	0	0	0	0
3501	3500	2	80	90	258	255	11	830	831	832	826	830	826	0	0	0	0
3500	3401	2	90	90	245	244	49	686	683	683	691	693	690	0	0	0	0
3401	3400	2	85	90	243	240	142	207	182	200	200	201	204	0	0	0	0
3400	3301	2	95	91	226	224	13	238	240	231	239	230	230	0	0	0	0
3301	3300	2	90	85	221	216	30	868	864	866	872	876	875	0	0	0	0
3300	3201	2	88	90	248	250	64	790	799	798	800	800	796	0	0	0	0
3201	3200	2	90	95	251	251	16	245	245	245	243	244	240	0	0	0	0
3200	3100	2	100	100	258	250	19	224	239	226	232	225	230	0	0	0	0
3100	3001	2	98	100	244	242	46	136	140	135	150	135	147	0	0	0	0
3001	3000	2	100	103	249	250	2	760	758	764	752	750	760	0	0	0	0
3000	2901	2	99	105	257	255	62	585	593	582	590	591	592	0	0	0	0
2901	2900	2	95	90	251	248	9	650	648	644	645	642	643	0	0	0	0
2900	2801	2	90	90	270	275	101	886	895	885	882	890	890	0	0	0	0
2801	2800	2	90	91	220	218	4	760	757	761	762	760	751	0	0	0	0
2800	2701	2	92	95	173	172	99	844	841	845	845	843	843	0	0	0	0
2701	2700	2	94	95	256	264	94	192	193	187	198	197	190	0	0	0	0
2700	2600	2	100	100	260	253	176	843	853	850	854	857	858	0	0	0	0
2600	2501	2	99	99	252	248	52	348	347	344	351	347	348	0	0	0	0
2501	2500	2	100	100	250	248	73	322	322	322	329	314	323	0	0	0	0
2500	2401	2	95	95	247	245	26	676	672	670	668	669	677	0	0	0	0
2401	2400	2	392	90	253	252	11	581	575	581	582	585	587	0	0	0	0
2400	2301	2	85	85	246	246	16	703	696	695	704	704	694	0	0	0	0
2301	2300	2	80	80	250	250	20	45	37	40	39	47	51	0	0	0	0
2300	2201	2	81	80	249	249	19	945	944	949	954	951	953	0	0	0	0
2201	2200	2	80	75	262	261	0	155	137	138	150	145	147	0	0	0	0
2200	2100	2	75	75	210	205	140	708	708	704	700	699	698	0	0	0	0
2100	2000	2	77	80	253	252	135	586	588	588	588	582	579	0	0	0	0
2000	1903	2	75	75	245	247	123	283	282	266	284	277	279	0	0	0	0
1903	1902	2	73	73	221	218	214	624	624	617	626	622	617	0	0	0	0
1902	1901	2	73	73	246	243	3	180	195	189	187	192	189	0	0	0	0
1901	1900	2	72	72	213	213	2	298	302	302	302	298	296	0	0	0	0
1900	1801	2	70	70	219	220	69	328	321	322	325	333	331	0	0	0	0
1801	1800	2	70	70	202	200	244	875	875	874	877	880	879	0	0	0	0
1700	1602	2	85	90	173	168	208	980	992	991	987	992	985	0	0	0	0
1602	1601	2	95	93	95	95	177	347	351	349	352	350	351	0	0	0	0
1601	1600	2	90	100	176	171	200	666	674	666	665	671	676	0	0	0	0
1600	1501	2	102	105	267	266	31	783	773	770	768	771	770	0	0	0	0
1501	1500	2	100	100	244	246	129	89	86	84	86	86	92	0	0	0	0
1400	1300	2	105	110	204	201	4	609	610	601	602	603	598	0	0	0	0
1300	1201	2	117	120	148	150	186	357	350	355	347	344	352	0	0	0	0
1201	1200	2	120	120	227	226	180	423	424	423	431	415	423	0	0	0	0
1200	1101	2	110	109	233	230	71	575	579	573	568	570	565	0	0	0	0
1101	1100	2	110	115	261	261	45	106	95	93	94	96	96	0	0	0	0
1100	1000	2	115	113	242	241	8	880	873	886	883	879	881	0	0	0	0
1000	900	2	112	110	224	222	0	465	459	449	457	457	457	0	0	0	0
900	802	2	110	108	221	213	68	625	612	610	610	613	616	0	0	0	0
802	801	2	112	112	176	175	193	340	350	350	352	354	351	0	0	0	0
801	800	2	112	111	113	111	175	746	752	751	755	743	751	0	0	0	0
800	701	2	110	99	264	259	76	685	698	679	689	692	685	0	0	0	0
701	700	2	96	97	255	255	149	398	403	403	405	408	408	0	0	0	0

700	601	2	95	95	247	246	45	307	313	314	311	320	310	0	0	0	0
601	600	2	95	86	257	260	56	559	560	554	557	551	556	0	0	0	0
600	501	2	85	82	253	252	146	910	923	911	907	916	918	0	0	0	0
501	500	2	82	85	275	272	66	20	23	28	29	26	26	0	0	0	0
500	401	2	85	84	179	179	223	987	989	999	997	994	992	0	0	0	0
401	400	2	75	75	178	180	250	320	322	323	322	325	322	0	0	0	0
400	301	2	69	68	209	210	230	965	968	970	974	972	974	0	0	0	0
301	300	2	68	68	239	231	64	660	660	663	657	661	659	0	0	0	0
300	201	2	125	123	218	223	75	596	604	607	598	598	603	0	0	0	0
201	200	2	124	130	207	206	6	284	278	276	282	282	281	0	0	0	0
200	100	2	133	135	175	175	173	464	465	467	465	466	465	0	0	0	0
1400	1401	3	127	128	196	193	205	656	652	655	654	652	655	0	0	0	0
1401	1402	3	132	140	165	164	205	194	189	188	186	183	189	0	0	0	0
1402	1403	3	138	138	226	225	35	264	263	256	262	260	263	0	0	0	0
1403	1500	3	132	135	235	236	30	590	587	588	587	596	588	0	0	0	0
1800	1801	3	112	115	200	200	244	289	293	288	289	283	288	0	0	0	0
1801	1900	3	117	120	218	220	69	917	919	922	920	923	929	0	0	0	0
1800	1702	4	130	132	262	263	105	569	560	557	560	556	553	0	0	0	0
1702	1701	4	124	126	279	276	88	899	897	901	902	910	906	0	0	0	0
1701	1700	4	120	120	255	255	0	267	268	267	262	265	262	0	0	0	0
1500	1403	4	136	134	236	235	30	902	902	904	897	894	892	0	0	0	0
1403	1402	4	135	140	225	226	34	850	846	847	844	852	849	0	0	0	0
1402	1401	4	135	135	164	165	205	438	431	432	440	436	440	0	0	0	0
1401	1400	4	133	129	193	196	205	502	500	508	514	520	516	517	515	0	0
9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATA INPUT FROM PROFILE 51 70 4 8 1371

5100	5200	1	100	100	185	185	37	830	830	826	835	830	837	0	0	0	0
5300	5301	1	105	105	136	198	202	695	680	685	687	681	691	0	0	0	0
5301	5400	1	108	115	100	100	130	579	594	576	582	580	578	0	0	0	0
5400	5600	1	115	115	192	192	92	454	456	468	481	473	472	470	483	0	0
5500	5600	1	116	116	265	265	39	578	573	580	570	572	572	0	0	0	0
5600	5700	1	120	116	310	310	8	566	566	614	641	635	638	645	655	0	0
5700	5701	1	116	113	160	160	198	895	898	894	900	389	891	0	0	0	0
5701	5800	1	117	117	200	200	4	37	42	34	46	50	47	0	0	0	0
5800	5900	1	118	118	239	239	214	152	158	158	158	160	159	0	0	0	0
5900	6000	1	120	120	244	244	39	57	67	54	54	56	55	0	0	0	0
6000	6001	1	122	124	199	199	60	606	618	619	615	610	616	0	0	0	0
6001	6100	1	120	122	180	180	81	39	41	45	41	42	43	0	0	0	0
6100	6101	1	120	108	230	230	109	813	807	809	811	809	807	0	0	0	0
6101	6200	1	100	99	230	230	158	965	961	958	959	956	961	0	0	0	0
6200	6300	1	98	85	289	908	193	152	162	154	157	153	158	0	0	0	0
6300	6400	1	86	86	313	313	217	395	406	391	400	394	389	0	0	0	0
6300	6500	1	76	76	203	203	72	100	98	98	101	101	102	0	0	0	0
6500	6501	1	72	72	239	239	29	722	723	716	714	716	712	0	0	0	0
6501	6600	1	68	60	208	208	65	850	850	852	846	852	854	0	0	0	0
6600	6700	1	60	59	185	185	198	246	246	233	241	239	233	0	0	0	0
6700	6701	1	125	99	190	190	173	712	708	711	704	708	703	0	0	0	0
6701	6702	1	95	105	341	341	51	850	845	852	843	850	847	0	0	0	0
6702	6800	1	105	105	217	217	133	2	3	3	999	0	999	0	0	0	0
6800	6900	1	106	110	133	133	61	954	952	950	950	951	952	0	0	0	0
6900	7000	1	112	120	107	107	133	924	924	922	924	929	928	0	0	0	0
7000	6900	2	125	130	107	107	133	929	923	932	932	932	930	0	0	0	0
6900	6800	2	130	118	133	133	61	960	958	955	947	959	953	0	0	0	0
6800	6702	2	120	130	217	217	132	952	951	962	947	958	960	0	0	0	0
6702	6701	2	120	122	341	341	51	846	842	853	855	871	845	841	856	0	0
6701	6700	2	120	124	190	190	173	730	728	731	733	729	728	0	0	0	0
6700	6600	2	119	122	185	185	198	237	232	246	240	242	236	0	0	0	0
6600	6501	2	125	124	208	208	67	357	349	348	353	349	349	0	0	0	0
6501	6500	2	127	134	239	239	30	218	208	210	206	209	203	0	0	0	0
6500	6300	2	125	133	203	203	32	105	102	102	98	105	102	0	0	0	0
6400	6300	2	82	81	313	313	217	390	394	388	388	389	394	0	0	0	0
6300	6200	2	97	98	313	966	193	172	174	190	185	200	201	192	198	0	0
6200	6101	2	115	115	230	230	159	118	113	119	112	113	123	0	0	0	0
6101	6100	2	115	115	230	230	109	990	992	987	985	980	979	0	0	0	0
6100	6001	2	115	110	180	180	81	281	279	284	280	281	285	0	0	0	0
6001	6000	2	112	120	199	199	59	375	381	374	377	380	377	0	0	0	0
6000	5900	2	118	118	244	244	39	60	59	66	64	63	63	0	0	0	0
5900	5800	2	116	115	239	239	214	180	165	165	163	164	162	0	0	0	0
5800	5701	2	112	109	200	200	2	84	79	80	81	81	84	0	0	0	0
5701	5700	2	102	100	160	160	206	16	14	14	11	17	11	0	0	0	0
5700	5600	2	99	99	310	310	8	626	628	631	631	628	632	0	0	0	0
5600	5500	2	120	120	265	265	39	581	572	566	570	559	565	560	568	0	0
5600	5400	2	98	95	192	192	92	454	456	465	463	462	463	0	0	0	0
5400	5301	2	98	98	100	100	127	371	370	373	372	375	371	0	0	0	0
5301	5300	2	96	93	198	198	265	910	910	902	909	908	910	0	0	0	0
5300	5202	2	86	83	94	94	68	309	309	313	299	305	302	0	0	0	0
5202	5201	2	83	78	171	173	123	267	271	264	266	268	266	0	0	0	0
5201	5200	2	78	68	200	200	109	544	555	548	538	547	544	0	0	0	0
5200	5100	2	68	59	185	185	37	824	821	814	819	821	823	0	0	0	0
5200	5201	3	55	55	200	200	109	290	296	301	292	292	295	0	0	0	0
5201	5202	3	55	50	173	171	123	248	236	253	246	252	249	0	0	0	0
5202	5300	3	50	50	94	94	68	562	561	569	568	571	569	0	0	0	0
9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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8100	8200	1	190	190	117	117	43	893	903	900	905	909	901	0	0	0	0
8200	8201	1	188	184	263	263	53	602	606	611	602	605	602	0	0	0	0
8201	8300	1	178	183	271	271	128	445	443	452	442	452	446	0	0	0	0
8300	8301	1	176	185	175	175	75	206	201	202	210	200	206	0	0	0	0
8301	8400	1	190	190	175	175	111	502	502	496	503	500	502	0	0	0	0
8400	8500	1	165	162	305	305	144	645	645	638	642	644	650	0	0	0	0
8500	8501	1	160	160	188	188	25	75	73	75	76	77	76	0	0	0	0
8501	8600	1	165	165	268	268	52	887	882	887	888	890	881	0	0	0	0
8600	8601	1	163	160	249	245	239	667	664	682	670	679	675	671	670	0	0
8601	8700	1	165	158	113	113	66	811	810	803	807	804	804	0	0	0	0
8700	8701	1	168	170	168	168	111	466	464	469	464	463	461	0	0	0	0
8701	8800	1	172	175	176	176	49	519	510	514	508	507	508	0	0	0	0
8800	8900	1	178	130	243	243	59	396	403	402	394	391	397	0	0	0	0
8900	9000	1	188	183	171	171	1	558	559	572	571	569	572	573	568	0	0
9000	8900	2	170	170	171	171	1	567	574	565	558	558	568	0	0	0	0
8900	8800	2	170	168	243	243	59	398	408	408	406	409	400	0	0	0	0
8800	8701	2	165	155	176	176	47	991	983	983	981	987	974	0	0	0	0
8701	8700	2	155	150	168	168	112	994	999	984	982	990	986	994	996	0	0
8700	8601	2	150	155	113	113	62	58	60	60	61	57	63	0	0	0	0
8601	8600	2	154	150	246	249	244	428	431	430	424	426	425	0	0	0	0
8600	8501	2	150	149	268	268	53	407	414	415	406	410	410	0	0	0	0
8501	8500	2	145	146	188	188	25	531	533	534	534	535	537	0	0	0	0
8500	8400	2	125	118	305	305	144	657	658	664	655	672	662	660	657	0	0
8400	8301	2	115	112	175	175	111	600	589	594	582	586	584	0	0	0	0
8301	8300	2	110	112	175	175	75	280	283	282	286	281	283	0	0	0	0
8300	8201	2	113	106	271	271	128	447	432	431	431	430	435	0	0	0	0
8201	8200	2	103	102	263	263	53	626	632	627	621	618	625	0	0	0	0
8200	8100	2	102	102	117	117	43	904	898	895	900	895	901	0	0	0	0
9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 1 PROFILE 1 28 7 1971

STATIONS			TEMP(°C)	DIST(m)	HEIGHT (cm)	ST.E. (cm)	W
100	200	1	14.00	35.00	173.4653	.0016	.4038
200	201	1	13.20	41.40	6.5742	.0011	.8807
201	300	1	13.40	44.20	75.3221	.0021	.2321
300	301	1	13.00	47.00	64.2876	.0017	.3499
301	400	1	12.25	42.00	231.3454	.0013	.6195
400	401	1	13.05	36.00	260.7740	.0013	.5776
401	500	1	13.10	36.00	223.5296	.0016	.4104
500	501	1	13.80	54.70	65.7609	.0012	.7360
501	600	1	12.60	50.60	147.1723	.0035	.0817
600	601	1	12.40	51.60	-56.1003	.0016	.3788
601	700	1	12.90	49.20	-45.7659	.0018	.3015
700	701	1	12.50	51.00	-149.2117	.0019	.2861
701	800	1	12.65	52.00	-76.8789	.0012	.6451
800	801	1	12.00	22.30	-176.2988	.0015	.4708
801	802	1	11.70	35.00	-192.7626	.0010	1.0000
802	900	1	11.50	43.20	-68.5526	.0020	.2581
900	1000	1	11.95	45.00	-.4633	.0022	.2058
1000	1100	1	11.10	48.30	8.8843	.0013	.5604
1100	1101	1	10.80	52.20	-45.2790	.0024	.1707
1101	1200	1	10.20	49.30	71.7509	.0019	.2833
1200	1201	1	10.45	45.20	180.1843	.0018	.3005
1201	1300	1	11.40	30.00	186.5814	.0012	.7193
1300	1400	1	10.75	40.40	-4.5989	.0019	.2868
1400	1401	1	10.40	39.00	-205.5615	.0016	.4035
1401	1402	1	10.90	33.00	-205.5347	.0022	.2097
1402	1403	1	10.00	45.20	-34.4035	.0022	.2082
1403	1500	1	10.10	47.20	-31.0360	.0017	.3372
1500	1501	1	9.80	49.20	-132.5482	.0019	.2766
1501	1600	1	9.90	53.30	35.2370	.0024	.1670
1600	1601	1	10.00	35.20	-203.3649	.0010	.9311
1601	1602	1	9.95	22.00	-173.8663	.0011	.7820
1602	1700	1	9.85	35.00	-209.7329	.0018	.3149
1700	1701	1	9.55	51.00	.2710	.0019	.3071
1701	1702	1	9.25	55.50	88.8739	.0016	.4089
1702	1800	1	9.20	52.50	105.5535	.0012	.6928
1800	1901	1	11.10	43.00	2.2096	.0022	.2118
1901	1902	1	10.50	49.00	3.7540	.0015	.4636
1902	1903	1	10.35	43.70	-215.0523	.0017	.3290
1903	2000	1	9.95	49.60	-123.3350	.0010	.9415
2000	2100	1	17.00	50.20	-135.5672	.0030	.1077
2100	2200	1	16.75	41.30	-140.6980	.0030	.1137
2200	2201	1	14.75	52.10	.0504	.0043	.0551
2201	2300	1	15.25	49.80	-16.8452	.0026	.1510
2300	2301	1	15.75	49.80	20.3204	.0024	.1669
2301	2400	1	16.75	49.20	-16.9562	.0026	.1509
2400	2401	1	17.25	50.20	11.7125	.0024	.1750
2401	2500	1	17.55	49.30	25.5553	.0032	.0991
2500	2501	1	15.50	49.80	-72.2506	.0028	.1256
2501	2600	1	15.00	49.30	-52.7155	.0035	.0812
2600	2700	1	15.35	51.00	-176.8384	.0014	.5417
2700	2701	1	14.40	51.60	-94.2042	.0018	.2976
2701	2800	1	14.50	34.20	99.8434	.0014	.4793
2800	2801	1	14.95	44.00	-4.8699	.0014	.5072
2801	2900	1	14.90	55.30	102.0184	.0018	.3119
2900	2901	1	14.50	49.90	-9.9692	.0019	.2806
2901	3000	1	13.60	51.10	-62.2651	.0019	.2827
3000	3001	1	13.10	50.00	2.3518	.0019	.2768
3001	3100	1	12.30	48.60	-46.3314	.0019	.2640
3100	3200	1	12.00	51.70	-19.2257	.0022	.2024
3200	3201	1	11.25	50.30	12.9055	.0021	.2329
3201	3300	1	10.80	49.50	68.1228	.0017	.3541

3300	3301	1	9.75	43.40	-30.8750	.0018	.3058
3301	3400	1	9.45	45.10	13.2463	.0016	.4152
3400	3401	1	9.40	48.00	142.6218	.0016	.3808
3401	3500	1	9.20	49.00	-50.1169	.0012	.6822
3500	3501	1	8.75	51.30	-12.7084	.0021	.2372
3501	3600	1	8.45	50.50	-127.1248	.0011	.7837
3600	3601	1	8.00	49.70	7.3570	.0018	.2987
3601	3700	1	8.00	49.30	201.0050	.0014	.4962
3700	3701	1	7.85	51.00	142.6289	.0010	1.0000
3701	3800	1	7.50	45.00	-212.1743	.0020	.2432
3800	3900	1	7.50	50.00	.5014	.0015	.4546
3900	3800	2	7.75	50.00	-.5063	.0012	.6699
3800	3701	2	8.30	45.90	212.1622	.0016	.3915
3701	3700	2	8.75	51.00	-142.6046	.0027	.1335
3700	3601	2	8.25	48.30	-200.9579	.0014	.5093
3601	3600	2	8.25	49.70	-7.3381	.0016	.3732
3600	3501	2	8.55	50.30	127.9348	.0016	.3831
3501	3500	2	8.50	51.30	11.8292	.0011	.8946
3500	3401	2	9.00	48.90	49.6877	.0018	.3022
3401	3400	2	8.75	48.30	-142.2013	.0024	.1733
3400	3301	2	9.30	45.00	-13.2346	.0021	.2219
3301	3300	2	8.75	43.70	30.8702	.0021	.2257
3300	3201	2	8.80	49.80	-64.7976	.0014	.4799
3201	3200	2	9.25	50.20	-16.2437	.0008	1.0000
3200	3100	2	10.00	50.80	19.2286	.0022	.2097
3100	3001	2	9.90	48.60	46.1354	.0027	.1369
3001	3000	2	10.15	49.90	-2.7594	.0029	.1219
3000	2901	2	10.20	51.20	62.5892	.0018	.3187
2901	2900	2	9.25	49.30	9.6452	.0013	.6284
2900	2801	2	9.00	54.50	-101.8979	.0019	.2864
2801	2800	2	9.05	43.80	4.7590	.0015	.4306
2800	2701	2	9.35	34.50	-99.8435	.0006	1.0000
2701	2700	2	9.45	52.00	94.1928	.0017	.3381
2700	2600	2	10.00	51.30	176.3532	.0021	.2324
2600	2501	2	9.90	50.00	52.3475	.0009	1.0000
2501	2500	2	10.00	49.80	73.3222	.0018	.3183
2500	2401	2	9.50	49.20	-26.6718	.0016	.4100
2401	2400	2	24.10	50.50	-11.5820	.0016	.3807
2400	2301	2	8.55	49.20	16.6094	.0021	.2219
2301	2300	2	8.00	50.00	-20.0423	.0023	.1944
2300	2201	2	8.05	49.80	16.9495	.0017	.3326
2201	2200	2	7.75	52.30	-.1455	.0029	.1194
2200	2100	2	7.50	41.50	140.7027	.0019	.2708
2100	2000	2	7.85	50.50	135.5855	.0015	.4170
2000	1903	2	7.50	49.30	123.2709	.0022	.2031
1903	1902	2	7.30	43.90	214.6219	.0016	.3917
1902	1901	2	7.30	48.80	-3.1891	.0019	.2676
1901	1900	2	7.20	42.50	-2.2987	.0011	.8133
1900	1801	2	7.00	43.90	69.3266	.0021	.2371
1801	1800	2	7.00	40.20	244.8766	.0010	1.0000
1700	1602	2	8.75	34.10	208.9683	.0019	.2673
1602	1601	2	9.40	19.00	177.3509	.0007	1.0000
1601	1600	2	9.50	34.70	200.6694	.0020	.2508
1600	1501	2	10.35	53.30	-31.7715	.0018	.3086
1501	1500	2	10.00	49.00	129.0870	.0011	.7573
1400	1300	2	10.75	40.50	4.6039	.0020	.2616
1300	1201	2	11.65	29.80	-186.3509	.0020	.2447
1201	1200	2	12.00	45.30	-180.4232	.0019	.2874
1200	1101	2	10.35	46.30	-71.5716	.0021	.2339
1101	1100	2	11.25	52.20	45.0959	.0016	.3863
1100	1000	2	11.40	49.30	-8.8825	.0018	.2952
1000	900	2	11.10	44.60	.4575	.0019	.2775
900	802	2	10.90	43.40	68.6133	.0020	.2564
802	801	2	11.20	35.10	193.3503	.0017	.3534
801	800	2	11.15	22.40	175.7499	.0018	.3192
800	701	2	10.45	52.30	76.6856	.0018	.3250

701	700	2	9.65	51.00	149.4043	.0015	.4378
700	601	2	9.50	49.30	45.3122	.0017	.3410
601	600	2	9.05	51.70	56.5561	.0013	.6115
600	501	2	8.35	50.50	-146.8138	.0025	.1661
501	500	2	8.35	54.70	-65.0255	.0013	.5500
500	401	2	8.45	35.80	-223.8830	.0019	.2705
401	400	2	7.50	35.80	-260.3223	.0007	1.0000
400	301	2	6.85	41.90	-230.8706	.0015	.4687
301	300	2	6.80	47.00	-64.6600	.0008	1.0000
300	201	2	12.40	44.10	-75.6009	.0018	.3063
201	200	2	12.70	41.30	-6.7806	.0012	.6831
200	100	2	13.40	35.00	-173.4653	.0004	1.0000
1400	1401	3	12.75	38.90	-205.6340	.0007	1.0000
1401	1402	3	13.60	32.80	-205.1681	.0014	.4779
1402	1403	3	13.80	45.10	-35.2615	.0012	.7381
1403	1500	3	13.35	47.10	-30.5890	.0013	.5938
1800	1801	3	11.35	40.00	-244.2865	.0011	.7812
1801	1900	3	11.85	43.80	-69.8213	.0016	.3825
1800	1702	4	13.10	52.50	-105.5585	.0020	.2480
1702	1701	4	12.50	55.50	-88.8021	.0019	.2712
1701	1700	4	12.00	51.00	-.2652	.0011	.8356
1500	1403	4	13.50	47.10	30.8087	.0021	.2287
1403	1402	4	13.75	45.10	34.8480	.0012	.7083
1402	1401	4	13.50	32.90	205.4363	.0016	.3706
1401	1400	4	13.10	38.90	205.5130	.0025	.1604

TABLE 1 PROFILE 51 4 9 1971

STATIONS			TEMP	DIST	HEIGHT	ST.E.	W
5100	5200	1	10.00	37.00	-37.8312	.0016	.3789
5300	5301	1	10.50	39.60	-262.5860	.0019	.2630
5301	5400	1	11.15	20.00	-130.5799	.0012	.7353
5400	5500	1	11.50	38.40	-92.4712	.0027	.1363
5500	5600	1	11.60	53.00	-39.5740	.0017	.3404
5600	5700	1	11.80	62.00	-9.5433	.0051	.0388
5700	5701	1	11.45	32.00	199.3545	.0017	.3419
5701	5800	1	11.50	40.00	4.0432	.0026	.1474
5800	5900	1	11.80	47.80	214.1504	.0014	.4799
5900	6000	1	12.00	49.60	39.0532	.0017	.3843
6000	6001	1	12.30	39.30	59.3145	.0020	.2450
6001	6100	1	12.10	36.00	91.0425	.0013	.5752
6100	6101	1	11.40	46.00	-109.4093	.0010	1.0000
6101	6200	1	9.05	46.00	159.9589	.0012	.6435
6200	6300	1	9.15	19.70	193.1559	.0015	.4324
6300	6400	1	8.50	62.60	-217.3950	.0024	.1679
6300	6500	1	7.50	40.60	32.1000	.0007	1.0000
6500	6501	1	7.20	47.30	28.7169	.0019	.2934
6501	6600	1	6.40	41.60	-55.9508	.0011	.8357
6600	6700	1	5.85	37.00	199.2406	.0020	.2331
6700	6701	1	11.15	38.00	173.7077	.0015	.4430
6701	6702	1	10.00	68.20	51.8479	.0014	.4953
6702	6800	1	10.50	43.40	133.0010	.0008	1.0000
6800	6900	1	10.80	26.60	61.9515	.0056	1.0000
6900	7000	1	11.60	21.40	133.9251	.0011	.6034
7000	6900	2	12.75	21.40	-133.9300	.0013	.5650
6900	6800	2	12.40	26.60	-61.9359	.0019	.2804
6800	6702	2	12.50	43.40	-132.9551	.0025	.1559
6702	6701	2	12.10	68.20	-51.9493	.0031	.1049
6701	6700	2	12.20	38.00	-173.7299	.0003	1.0000
6700	6600	2	12.05	37.00	-199.2388	.0020	.2527
6600	6501	2	12.45	41.60	67.3605	.0014	.5271
6501	6500	2	13.05	47.80	-30.2085	.0019	.2855
6500	6300	2	12.80	40.60	-32.1024	.0010	.9241
6400	6300	2	8.15	62.60	217.3920	.0016	.4043
6300	6200	2	9.05	127.90	-193.1315	.0058	.0697
6200	6101	2	11.50	46.00	-159.1161	.0018	.3040
6101	6100	2	11.50	46.00	109.9837	.0013	.3179
6100	6001	2	11.25	75.00	-81.2816	.0010	1.0000
6001	6000	2	11.60	39.30	-69.3773	.0011	.7888
6000	5900	2	11.90	48.80	-39.0625	.0011	.8894
5900	5800	2	11.55	47.80	-214.1548	.0019	.2783
5800	5701	2	11.05	40.00	2.0313	.0010	1.0000
5701	5700	2	10.10	32.00	-205.0138	.0010	.9545
5700	5600	2	9.90	62.00	9.5204	.0010	1.0000
5600	5500	2	12.00	53.00	39.5670	.0022	.2002
5600	5400	2	9.55	38.40	92.4609	.0018	.3028
5400	5301	2	9.80	20.00	127.3720	.0007	1.0000
5301	5300	2	9.45	39.60	265.9085	.0012	.7165
5300	5202	2	8.45	18.80	68.3063	.0021	.2186
5202	5201	2	8.05	34.40	123.2569	.0010	1.0000
5201	5200	2	7.30	40.00	108.5458	.0021	.2206
5200	5100	2	6.35	37.00	37.8206	.0014	.5165
5200	5201	3	5.50	40.00	-108.2541	.0016	.4106
5201	5202	3	5.25	34.40	-123.2434	.0021	.2221
5202	5300	3	5.00	18.80	-68.5870	.0017	.3404

TABLE 1 PROFILE 81 7 8 1971

STATIONS			TEMP	DIST	HEIGHT	S.T.E.	W
8100	8200	1	19.00	23.40	43.9021	.0021	.2356
8200	8201	1	18.60	52.60	63.6044	.0014	.5100
8201	8300	1	18.05	54.20	128.4464	.0018	.2989
8300	8301	1	18.05	35.00	-75.2040	.0016	.4043
8301	8400	1	19.00	35.00	111.5010	.0010	.9803
8400	8500	1	16.35	61.00	-144.6440	.0016	.4154
8500	8501	1	16.00	37.60	-26.0753	.0006	1.0000
8501	8600	1	16.50	53.60	-52.8860	.0015	.4658
8600	8601	1	16.15	49.50	-239.6717	.0021	.2292
8601	8700	1	16.15	22.60	-66.9064	.0014	.4977
8700	8701	1	16.90	33.60	-111.4644	.0011	.8235
8701	8800	1	17.40	35.20	-49.5104	.0018	.3035
8800	8900	1	18.40	48.60	-59.3971	.0019	.2716
8900	9000	1	18.55	34.20	1.5690	.0019	.2719
9000	8900	2	17.00	34.20	-1.5651	.0025	.1551
8900	8800	2	16.90	48.60	59.4053	.0019	.2695
8800	8701	2	16.00	35.20	47.9834	.0022	.2061
8701	8700	2	15.25	33.60	112.9809	.0023	.1964
8700	8601	2	15.25	22.60	62.0598	.0009	1.0000
8601	8600	2	15.20	49.50	244.4273	.0012	.7402
8600	8501	2	14.95	53.60	53.4103	.0015	.4430
8501	8500	2	14.55	37.60	25.5340	.0009	1.0000
8500	8400	2	12.15	61.00	144.6613	.0019	.2701
8400	8301	2	11.35	35.00	-111.5382	.0027	.1393
8301	8300	2	11.10	35.00	75.2625	.0008	1.0000
8300	8201	2	10.85	54.20	-128.4329	.0020	.2578
8201	8200	2	10.25	52.60	-63.6249	.0020	.2624
8200	8100	2	10.20	23.40	-43.9988	.0015	.4685

TABLE 2 PROFILE 1 28 7 1971

STATIONS			TEMP °C	DIST m	HEIGHT cm	S.E. cm	W
1	2	1	14.00	35.00	173.4653	.0016	.4038
2	3	1	13.38	85.60	81.8963	.0023	.1837
3	4	1	12.41	39.00	295.6330	.0021	.2236
4	5	1	13.07	72.00	484.3036	.0020	.2399
5	6	1	12.97	105.30	212.9332	.0037	.0736
6	7	1	12.62	100.80	-101.8662	.0024	.1679
7	8	1	12.55	103.00	-226.0906	.0022	.1982
8	9	1	11.79	100.50	-437.7140	.0026	.1444
9	10	1	11.95	45.00	-.4633	.0022	.2058
10	11	1	11.10	48.30	8.8843	.0013	.5604
11	12	1	9.17	98.50	26.4718	.0031	.1065
12	13	1	10.93	75.20	366.7657	.0022	.2119
13	14	1	10.75	40.40	-4.5989	.0019	.2868
14	15	1	10.57	164.40	-476.8957	.0039	.0666
15	16	1	9.76	102.50	-97.3113	.0031	.1041
16	17	1	9.93	92.20	-587.0141	.0023	.1827
17	18	1	9.22	159.00	194.7434	.0027	.1400
19	20	1	10.19	185.30	-332.4245	.0033	.0913
20	21	1	17.00	50.20	-135.5672	.0030	.1077
21	22	1	16.75	41.30	-140.3980	.0030	.1137
22	23	1	15.25	101.90	-16.7948	.0050	.0404
23	24	1	10.71	99.00	3.3642	.0036	.0792
24	25	1	17.46	99.50	38.2878	.0040	.0633
25	26	1	15.29	99.70	-125.6662	.0045	.0493
26	27	1	15.35	51.00	-176.8384	.0014	.5417
27	28	1	16.17	85.80	5.3442	.0023	.1836
28	29	1	14.90	99.30	97.1235	.0023	.1931
29	30	1	13.72	101.00	-72.2342	.0027	.1408
30	31	1	12.79	98.60	-43.3795	.0027	.1351
31	32	1	12.00	51.70	-19.2257	.0022	.2024
32	33	1	10.87	99.80	31.0354	.0027	.1405
33	34	1	9.98	88.50	-17.6297	.0024	.1761
34	35	1	9.51	97.00	92.5049	.0020	.2444
35	36	1	8.48	101.80	-139.8331	.0023	.1821
36	37	1	8.00	99.50	208.3620	.0023	.1865
37	38	1	6.58	96.90	-69.5454	.0023	.1971
38	39	1	7.50	50.00	.5014	.0015	.4546
39	38	2	7.75	50.00	-.5063	.0012	.6699
38	37	2	7.38	96.90	69.5576	.0032	.0996
37	36	2	8.25	99.50	-208.3560	.0022	.2154
36	35	2	8.55	101.60	139.8240	.0019	.2682
35	34	2	8.62	97.20	-92.5136	.0030	.1101
34	33	2	8.34	88.70	17.6355	.0030	.1119
33	32	2	8.97	100.00	-81.0413	.0016	.3696
32	31	2	10.00	50.80	19.2286	.0022	.2097
31	30	2	9.98	98.50	43.3800	.0039	.0645
30	29	2	10.07	101.10	72.2345	.0022	.2115
29	28	2	9.00	98.30	-97.1289	.0024	.1720
28	27	2	7.68	86.50	-5.8507	.0018	.2994
27	26	2	10.00	51.30	176.8532	.0021	.2324
26	25	2	9.96	99.80	125.6697	.0020	.2529
25	24	2	13.92	99.70	-39.2539	.0023	.1974
24	23	2	5.25	99.20	-3.3435	.0031	.1036
23	22	2	8.05	102.10	16.8040	.0034	.0879
22	21	2	7.50	41.50	140.7027	.0019	.2708
21	20	2	7.85	50.50	135.5855	.0015	.4170
20	19	2	7.37	184.70	332.4130	.0035	.0804
19	18	2	7.00	84.10	314.2032	.0023	.1917
17	16	2	9.20	87.80	587.0077	.0029	.1211
16	15	2	9.89	102.30	97.3156	.0021	.2192

,	14	13	2	10.75	40.50	4.6035	.0020	.2616
,	13	12	2	11.92	75.10	-366.7742	.0028	.1322
,	12	11	2	10.44	98.50	-26.4757	.0026	.1457
,	11	10	2	11.40	48.30	-8.8825	.0019	.2952
,	10	9	2	11.10	44.60	.4575	.0019	.2775
,	9	8	2	11.13	100.90	437.7135	.0031	.1014
,	8	7	2	9.92	103.30	229.0909	.0023	.1865
,	7	6	2	9.25	101.00	101.8683	.0021	.2189
,	6	5	2	8.35	105.20	-212.3393	.0023	.1276
,	5	4	2	7.94	71.60	-484.3153	.0020	.2419
,	4	3	2	6.84	88.90	-295.6306	.0017	.3585
,	3	2	2	12.42	85.40	-81.8815	.0022	.2121
,	2	1	2	13.40	35.00	-173.4653	.0004	1.0000
,	14	15	3	13.23	164.00	-479.6926	.0024	.1785
,	18	19	3	11.46	83.80	-314.2079	.0020	.2568
,	18	17	4	12.82	159.00	-194.7259	.0030	.1121
,	15	14	4	13.35	164.00	479.6960	.0038	.0680

TABLE 2 PROFILE 51 4 8 1971

STATIONS			TEMP	DIST	HEIGHT	ST.E.	W
, 51	52	1	10.00	37.00	-37.9312	.0016	.3789
, 53	54	1	10.72	59.60	-393.2579	.0023	.1937
, 54	56	1	11.50	38.40	-92.4712	.0027	.1363
, 55	56	1	11.60	53.00	-39.5740	.0017	.3404
, 56	57	1	11.30	62.00	-6.6433	.0051	.0388
, 57	58	1	11.45	72.00	207.9377	.0031	.1030
, 58	59	1	11.30	47.80	214.1604	.0014	.4799
, 59	60	1	12.00	48.80	39.0562	.0017	.3643
, 60	61	1	12.19	75.90	150.6570	.0024	.1718
, 61	62	1	6.71	92.00	40.1505	.0016	.4058
, 62	63	1	9.15	119.70	193.1558	.0015	.4324
, 63	64	1	8.60	62.60	-217.3950	.0024	.1679
, 63	65	1	7.60	40.60	39.1000	.0007	1.0000
, 65	66	1	5.78	89.40	-37.1338	.0021	.2199
, 66	67	1	5.95	37.00	199.2406	.0020	.2381
, 67	68	1	10.74	149.60	359.5566	.0022	.2045
, 68	69	1	10.30	26.30	61.9515	.0006	1.0000
, 69	70	1	11.60	21.40	133.9251	.0011	.8034
, 70	69	2	12.75	21.40	-133.9300	.0013	.5650
, 69	68	2	12.40	26.60	-61.9559	.0019	.2804
, 68	67	2	12.39	149.60	-359.5342	.0041	.0603
, 67	66	2	12.05	37.00	-199.2388	.0020	.2527
, 66	65	2	11.96	89.40	37.1421	.0023	.1352
, 65	63	2	12.00	40.30	-39.1024	.0010	.9241
, 64	63	2	8.15	62.60	217.3220	.0016	.4043
, 63	62	2	8.05	127.00	-193.1315	.0038	.0697
, 62	61	2	11.50	92.00	-40.1324	.0025	.1554
, 61	60	2	11.41	75.80	-150.6599	.0015	.4567
, 60	59	2	11.90	48.80	-39.0625	.0011	.8894
, 59	58	2	11.55	47.30	-214.1648	.0019	.2783
, 58	57	2	10.09	72.00	-207.9325	.0014	.5089
, 57	56	2	9.90	62.00	6.6294	.0010	1.0000
, 56	55	2	12.00	53.00	39.5570	.0022	.2002
, 56	54	2	9.65	38.40	92.4509	.0019	.3028
, 54	53	2	9.56	59.60	393.2304	.0014	.5198
, 53	52	2	7.87	93.20	300.1190	.0032	.0999
, 52	51	2	6.35	37.00	37.5206	.0014	.5165
, 52	53	3	5.28	93.20	-300.1094	.0031	.1013

TABLE 2 PROFILE 81 7 8 1971

STATIONS			TEMP	DIST	HEIGHT	ST.E.	W
. 81	82	1	19.00	23.40	43.9021	.0021	.2356
. 82	83	1	18.23	106.80	192.0508	.0023	.1885
. 83	84	1	20.97	70.00	36.2970	.0019	.2862
. 84	85	1	16.35	61.00	-144.6440	.0016	.4154
. 85	86	1	16.33	91.20	-78.9613	.0016	.4074
. 86	87	1	16.15	72.10	-306.4781	.0025	.1569
. 87	88	1	17.05	68.80	-150.9749	.0021	.2217
. 88	89	1	18.40	48.60	-59.3971	.0019	.2716
. 89	90	1	18.55	34.20	1.5690	.0019	.2719
. 90	89	2	17.00	34.20	-1.5651	.0025	.1551
. 89	88	2	16.90	48.60	59.4053	.0019	.2695
. 88	87	2	15.47	68.80	150.9743	.0032	.1006
. 87	86	2	15.21	72.10	306.4871	.0015	.4739
. 86	85	2	14.82	91.20	78.9443	.0017	.3432
. 85	84	2	12.15	61.00	144.6613	.0019	.2701
. 84	83	2	11.97	70.00	-36.3057	.0028	.1269
. 83	82	2	10.72	106.80	-192.0576	.0028	.1300
. 82	81	2	10.20	23.40	-43.8988	.0015	.4685

TABLE 3 PROFILE 1 28 7 1971 TC = .000000

STATIONS		HEIGHT cm	standard ERROR cm	S.E. 1	S.E. 2
1	2	173.4653	.0010	.0000	.0010
2	3	81.8884	.0074	.0074	.0016
3	4	295.6315	.0013	.0011	.0013
4	5	484.3095	.0059	.0059	.0014
5	6	212.9371	.0029	.0022	.0022
6	7	-101.8674	.0016	.0010	.0016
7	8	-226.0908	.0016	.0001	.0016
8	9	-437.7138	.0020	.0002	.0020
9	10	-.4599	.0029	.0023	.0014
10	11	8.8837	.0011	.0008	.0011
11	12	26.4741	.0020	.0019	.0020
12	13	366.7600	.0041	.0041	.0017
13	14	-4.6011	.0023	.0023	.0014
14	15	-476.6940	.0018	.0011	.0018
15	16	-97.3142	.0020	.0020	.0018
16	17	-587.0116	.0031	.0031	.0018
17	18	194.7356	.0087	.0087	.0020
18	19	-314.2059	.0023	.0023	.0015
19	20	-332.4191	.0057	.0057	.0024
20	21	-135.5817	.0074	.0074	.0014
21	22	-140.7013	.0021	.0021	.0016
22	23	-16.8011	.0043	.0043	.0028
23	24	3.3525	.0102	.0102	.0023
24	25	38.2573	.0060	.0060	.0020
25	26	-125.6691	.0018	.0013	.0018
26	27	-176.9428	.0068	.0068	.0011
27	28	5.6422	.0032	.0032	.0014
28	29	97.1297	.0017	.0002	.0017
29	30	-72.2344	.0017	.0001	.0017
30	31	-43.3797	.0022	.0002	.0022
31	32	-19.2272	.0016	.0014	.0016
32	33	81.0397	.0026	.0026	.0014
33	34	-17.6320	.0028	.0028	.0019
34	35	92.5076	.0040	.0040	.0017
35	36	-139.8277	.0045	.0045	.0015
36	37	208.3588	.0030	.0030	.0016
37	38	-69.5495	.0058	.0058	.0018
38	39	.5043	.0026	.0026	.0010

S.E. 1 is the computed standard error of "HEIGHT" using difference of values obtained in different coverages of the profile

S.E. 2 is the computed standard error of "HEIGHT" using the standard errors of TABLE 2

TABLE 3 PROFILE 1 28 7 1971 TC = .000002

STATIONS		HEIGHT	ERROR		
1	2	173.4558	.0010	.0001	.0010
2	3	81.8887	.0073	.0073	.0016
3	4	295.6351	.0013	.0005	.0013
4	5	484.3138	.0094	.0094	.0014
5	6	212.8392	.0039	.0039	.0022
6	7	-101.8683	.0016	.0014	.0016
7	8	-226.0924	.0016	.0007	.0016
8	9	-437.7168	.0020	.0001	.0020
9	10	-.4599	.0028	.0029	.0014
10	11	8.8837	.0011	.0008	.0011
11	12	26.4743	.0020	.0019	.0020
12	13	366.7717	.0037	.0037	.0017
13	14	-4.6012	.0023	.0023	.0014
14	15	-476.5962	.0018	.0017	.0018
15	16	-97.3152	.0020	.0020	.0018
16	17	-587.0179	.0027	.0027	.0018
17	18	194.7372	.0094	.0094	.0020
18	19	-314.2093	.0015	.0009	.0015
19	20	-332.4232	.0048	.0048	.0024
20	21	-135.5832	.0084	.0084	.0014
21	22	-140.7026	.0033	.0033	.0016
22	23	-16.8012	.0044	.0044	.0028
23	24	3.3525	.0102	.0102	.0023
24	25	38.2573	.0059	.0059	.0020
25	26	-125.5702	.0018	.0018	.0018
26	27	-176.8433	.0076	.0076	.0011
27	28	5.5483	.0032	.0032	.0014
28	29	97.1222	.0017	.0008	.0017
29	30	-72.2349	.0017	.0004	.0017
30	31	-43.3799	.0022	.0003	.0022
31	32	-19.2273	.0016	.0015	.0016
32	33	81.0406	.0028	.0028	.0014
33	34	-17.6322	.0029	.0029	.0019
34	35	92.5087	.0041	.0041	.0017
35	36	-139.8295	.0045	.0045	.0015
36	37	208.3616	.0031	.0031	.0016
37	38	-69.5506	.0057	.0057	.0018
38	39	.5043	.0026	.0026	.0010

TABLE 3 PROFILE 1 28 7 1971 TC = .000004

STATIONS		HEIGHT	ERROR		
1	2	173.4663	.0010	.0002	.0010
2	3	81.8891	.0072	.0072	.0016
3	4	295.6387	.0021	.0021	.0013
4	5	484.3182	.0108	.0108	.0014
5	6	212.9413	.0048	.0048	.0022
6	7	-101.8691	.0017	.0017	.0016
7	8	-226.0941	.0016	.0013	.0016
8	9	-437.7199	.0020	.0003	.0020
9	10	-.4599	.0029	.0029	.0014
10	11	8.8838	.0011	.0008	.0011
11	12	26.4746	.0020	.0019	.0020
12	13	366.7744	.0034	.0034	.0017
13	14	-4.6012	.0023	.0023	.0014
14	15	-476.5984	.0023	.0023	.0018
15	16	-97.3162	.0020	.0020	.0018
16	17	-587.0241	.0023	.0023	.0018
17	18	194.7388	.0101	.0101	.0020
18	19	-314.2128	.0015	.0004	.0015
19	20	-332.4272	.0039	.0039	.0024
20	21	-135.5846	.0034	.0034	.0014
21	22	-140.7040	.0045	.0045	.0016
22	23	-16.8014	.0045	.0045	.0028
23	24	3.3526	.0102	.0102	.0023
24	25	38.2573	.0058	.0058	.0020
25	26	-125.6712	.0023	.0023	.0018
26	27	-176.8437	.0085	.0085	.0011
27	28	5.6483	.0032	.0032	.0014
28	29	97.1298	.0017	.0014	.0017
29	30	-72.2354	.0017	.0006	.0017
30	31	-43.3802	.0022	.0004	.0022
31	32	-19.2275	.0016	.0015	.0016
32	33	81.0415	.0029	.0029	.0014
33	34	-17.6324	.0029	.0029	.0019
34	35	92.5097	.0042	.0042	.0017
35	36	-139.8313	.0045	.0045	.0015
36	37	208.3545	.0031	.0031	.0016
37	38	-69.5517	.0057	.0057	.0018
38	39	.5043	.0026	.0026	.0010

TABLE 3 PROFILE 1 28 7 1971 TC = .000006

STATIONS		HEIGHT	ERROR		
1	2	173.4568	.0018	.0004	.0010
2	3	81.8804	.0071	.0071	.0016
3	4	295.5422	.0037	.0037	.0013
4	5	484.3226	.0133	.0133	.0014
5	6	212.0434	.0059	.0059	.0022
6	7	-101.8700	.0021	.0021	.0016
7	8	-226.0368	.0019	.0019	.0016
8	9	-437.7222	.0020	.0006	.0020
9	10	-.4599	.0029	.0029	.0014
10	11	8.8933	.0011	.0008	.0011
11	12	26.4749	.0020	.0019	.0020
12	13	366.7771	.0030	.0030	.0017
13	14	-4.6012	.0023	.0023	.0014
14	15	-476.7003	.0030	.0030	.0018
15	16	-97.3172	.0020	.0020	.0018
16	17	-587.0304	.0019	.0019	.0018
17	18	194.7405	.0108	.0102	.0020
18	19	-314.2162	.0018	.0018	.0015
19	20	-332.4313	.0026	.0026	.0024
20	21	-135.5850	.0104	.0104	.0014
21	22	-140.7053	.0057	.0057	.0016
22	23	-16.8010	.0046	.0046	.0028
23	24	3.3526	.0102	.0102	.0023
24	25	38.2573	.0056	.0056	.0020
25	26	-125.6723	.0029	.0029	.0018
26	27	-176.8442	.0004	.0004	.0011
27	28	5.6494	.0033	.0033	.0014
28	29	97.1303	.0019	.0019	.0017
29	30	-72.2359	.0017	.0009	.0017
30	31	-43.3805	.0022	.0006	.0022
31	32	-19.8277	.0016	.0016	.0016
32	33	81.0424	.0030	.0030	.0014
33	34	-17.6326	.0029	.0029	.0019
34	35	92.5108	.0042	.0042	.0017
35	36	-139.9331	.0045	.0045	.0015
36	37	208.3673	.0032	.0032	.0016
37	38	-89.5520	.0056	.0056	.0018
38	39	.5043	.0026	.0026	.0010

TABLE 3 PROFILE 1 28 7 1971 TC = .000008

STATIONS		HEIGHT	ERROR		
1	2	173.4673	.0010	.0005	.0010
2	3	81.8888	.0071	.0071	.0016
3	4	295.6458	.0053	.0053	.0013
4	5	484.3269	.0158	.0158	.0014
5	6	212.9455	.0067	.0067	.0022
6	7	-101.8709	.0024	.0024	.0016
7	8	-226.0975	.0025	.0025	.0016
8	9	-437.7260	.0020	.0009	.0020
9	10	-.4600	.0029	.0029	.0014
10	11	8.8840	.0011	.0009	.0011
11	12	26.4751	.0020	.0018	.0020
12	13	366.7798	.0027	.0027	.0017
13	14	-4.6013	.0023	.0023	.0014
14	15	-476.7028	.0037	.0037	.0018
15	16	-97.3182	.0020	.0020	.0018
16	17	-587.0367	.0018	.0014	.0018
17	18	194.7421	.0115	.0115	.0020
18	19	-314.2196	.0032	.0032	.0015
19	20	-332.4354	.0024	.0020	.0024
20	21	-135.5874	.0114	.0114	.0014
21	22	-140.7067	.0069	.0069	.0016
22	23	-16.8017	.0047	.0047	.0028
23	24	3.3527	.0102	.0102	.0023
24	25	38.2573	.0055	.0055	.0020
25	26	-125.6733	.0033	.0033	.0018
26	27	-176.9446	.0102	.0102	.0011
27	28	5.6484	.0033	.0033	.0014
28	29	97.1309	.0025	.0025	.0017
29	30	-72.2364	.0017	.0011	.0017
30	31	-43.3808	.0022	.0007	.0022
31	32	-19.2278	.0016	.0016	.0016
32	33	81.0433	.0032	.0032	.0014
33	34	-17.6328	.0029	.0029	.0019
34	35	92.5119	.0043	.0043	.0017
35	36	-139.8349	.0045	.0045	.0015
36	37	208.3702	.0032	.0032	.0016
37	38	-69.5540	.0056	.0056	.0018
38	39	.5043	.0026	.0026	.0010

TABLE 3 PROFILE 51 4 P 1971 TC = .000000

STATIONS		HEIGHT	ERROR		
51	52	-37.8251	.0052	.0052	.0011
52	53	-300.1142	.0048	.0048	.0022
53	54	-333.2770	.0056	.0056	.0012
54	56	-92.4641	.0048	.0048	.0015
55	56	-39.5714	.0034	.0034	.0014
56	57	-9.6299	.0027	.0027	.0010
57	58	203.9334	.0019	.0019	.0013
58	59	214.1620	.0021	.0021	.0011
59	60	39.0607	.0032	.0032	.0010
60	61	150.6584	.0013	.0008	.0013
61	62	49.1456	.0082	.0082	.0013
62	63	193.1608	.0124	.0124	.0014
63	64	-217.3929	.0014	.0014	.0013
63	65	32.1012	.0017	.0017	.0010
65	66	-37.1376	.0041	.0041	.0016
66	67	198.2396	.0014	.0009	.0014
67	68	358.5515	.0094	.0094	.0019
68	69	61.9524	.0020	.0020	.0010
69	70	133.9271	.0028	.0028	.0010

TABLE 3 PROFILE 51 4 8 1971 TC = .000002

STATIONS		HEIGHT	ERROR		
51	52	-37.8256	.0051	.0051	.0011
52	53	-300.1193	.0040	.0040	.0022
53	54	-393.2810	.0060	.0060	.0012
54	55	-92.4650	.0046	.0046	.0015
55	56	-39.5717	.0034	.0034	.0014
56	57	-9.6300	.0027	.0027	.0010
57	58	203.9353	.0017	.0017	.0013
58	59	214.1634	.0022	.0022	.0011
59	60	39.0609	.0032	.0032	.0010
60	61	150.6594	.0013	.0009	.0013
61	62	49.1463	.0084	.0084	.0013
62	63	153.1630	.0124	.0124	.0014
63	64	-217.3958	.0013	.0013	.0013
63	65	32.1015	.0014	.0014	.0010
65	66	-37.1381	.0039	.0039	.0016
66	67	198.2420	.0021	.0021	.0014
67	68	358.5543	.0099	.0099	.0019
68	69	61.9529	.0020	.0020	.0010
69	70	133.9279	.0027	.0027	.0010

TABLE 3 PROFILE 51 4 8 1971 TC = .000004

STATIONS		HEIGHT	ERROR		
51	52	-37.8262	.0050	.0050	.0011
52	53	-300.1243	.0032	.0032	.0022
53	54	-393.2851	.0064	.0064	.0012
54	56	-92.4659	.0044	.0044	.0015
55	56	-39.5719	.0034	.0034	.0014
56	57	-9.6301	.0027	.0027	.0010
57	58	203.9372	.0015	.0015	.0013
58	59	214.1548	.0022	.0022	.0011
59	60	39.0612	.0032	.0032	.0010
60	61	150.6604	.0013	.0010	.0013
61	62	49.1470	.0086	.0086	.0013
62	63	193.1653	.0124	.0124	.0014
63	64	-217.3988	.0013	.0012	.0013
63	65	32.1018	.0012	.0012	.0010
65	66	-37.1385	.0036	.0036	.0016
66	67	198.2443	.0033	.0033	.0014
67	68	358.5571	.0103	.0103	.0019
68	69	61.9534	.0019	.0019	.0010
69	70	133.9287	.0025	.0025	.0010

TABLE 3 PROFILE 51 4 8 1971 TC = .000006

STATIONS		HEIGHT	ERROR		
51	52	-37.1267	.0048	.0048	.0011
52	53	-300.1294	.0025	.0025	.0022
53	54	-393.2891	.0068	.0068	.0012
54	55	-92.4667	.0043	.0043	.0015
55	56	-39.5722	.0034	.0034	.0014
56	57	-9.6302	.0027	.0027	.0010
57	58	203.9391	.0013	.0013	.0013
58	59	214.1662	.0023	.0023	.0011
59	60	39.0614	.0032	.0032	.0010
60	61	150.9615	.0013	.0012	.0013
61	62	49.1476	.0088	.0088	.0013
62	63	193.1676	.0124	.0124	.0014
63	64	-217.4017	.0013	.0011	.0013
63	65	32.1021	.0010	.0009	.0010
65	66	-37.1390	.0034	.0034	.0016
66	67	198.2467	.0045	.0045	.0014
67	68	358.5599	.0108	.0108	.0019
68	69	61.9539	.0018	.0018	.0010
69	70	133.9295	.0023	.0023	.0010

TABLE 3 PROFILE 51 4 8 1971 TC = .000008

STATIONS		HEIGHT	ERROR		
51	52	-37.8272	.0047	.0047	.0011
52	53	-300.1344	.0022	.0017	.0022
53	54	-393.2931	.0072	.0072	.0012
54	56	-92.4676	.0041	.0041	.0015
55	56	-39.5725	.0035	.0035	.0014
56	57	-9.5303	.0027	.0027	.0010
57	58	203.9410	.0013	.0011	.0013
58	59	214.1677	.0023	.0023	.0011
59	60	39.0617	.0032	.0032	.0010
60	61	150.6625	.0013	.0013	.0013
61	62	49.1423	.0090	.0090	.0013
62	63	193.1698	.0124	.0124	.0014
63	64	-217.4046	.0013	.0010	.0013
63	65	32.1024	.0010	.0007	.0010
65	66	-37.1395	.0032	.0032	.0016
66	67	198.2490	.0057	.0057	.0014
67	68	358.5627	.0113	.0113	.0019
68	69	61.9543	.0017	.0017	.0010
69	70	133.9303	.0021	.0021	.0010

TABLE 3 PROFILE 81 7 8 1971 TC = .000000

STATIONS		HEIGHT	ERROR		
81	82	43.8999	.0016	.0016	.0012
82	83	192.0536	.0034	.0034	.0018
83	84	36.2996	.0040	.0040	.0016
84	85	-144.6508	.0085	.0085	.0012
85	86	-78.9535	.0085	.0085	.0012
86	87	-306.4849	.0039	.0039	.0013
87	88	-160.9747	.0018	.0003	.0018
88	89	-59.4012	.0041	.0041	.0014
89	90	1.5575	.0019	.0019	.0015

TABLE 3 PROFILE 81 7 8 1971 TC = .000002

STATIONS		HEIGHT	ERROR		
81	82	43.9001	.0012	.0012	.0012
82	83	192.0535	.0048	.0048	.0018
83	84	36.2994	.0044	.0044	.0016
84	85	-144.6509	.0091	.0091	.0012
85	86	-78.9534	.0084	.0084	.0012
86	87	-306.4846	.0041	.0041	.0013
87	88	-160.9742	.0018	.0000	.0018
88	89	-59.4009	.0042	.0042	.0014
89	90	1.5676	.0019	.0019	.0015

TABLE 3 PROFILE 81 7 8 1971 TC = .000004

STATIONS		HEIGHT	ERROR		
81	82	43.9002	.0012	.0009	.0012
82	83	192.0535	.0062	.0062	.0018
83	84	36.2992	.0047	.0047	.0016
84	85	-144.6510	.0096	.0096	.0012
85	86	-78.9533	.0083	.0083	.0012
86	87	-306.4843	.0044	.0044	.0013
87	88	-160.9737	.0018	.0002	.0018
88	89	-59.4005	.0043	.0043	.0014
89	90	1.5675	.0019	.0019	.0015

TABLE 3 PROFILE 81 7 9 1971 TC = .000006

STATIONS		HEIGHT	ERROR		
81	82	43.9004	.0012	.0005	.0012
82	83	192.0534	.0076	.0076	.0018
83	84	36.2990	.0050	.0050	.0016
84	85	-144.6511	.0102	.0102	.0012
85	86	-78.9532	.0081	.0081	.0012
86	87	-306.4841	.0046	.0046	.0013
87	88	-160.9732	.0018	.0004	.0018
88	89	-59.4002	.0044	.0044	.0014
89	90	1.5675	.0019	.0019	.0015

TABLE 3 PROFILE 81 7 8 1971 TC = .000008

STATIONS		HEIGHT	ERROR		
81	82	43.9006	.0012	.0001	.0012
82	83	192.0533	.0030	.0030	.0018
83	84	36.2987	.0053	.0053	.0016
84	85	-144.6512	.0108	.0108	.0012
85	86	-78.9531	.0080	.0080	.0012
86	87	-306.4838	.0049	.0049	.0013
87	88	-160.9727	.0018	.0007	.0018
88	89	-59.3999	.0045	.0045	.0014
89	90	1.5675	.0019	.0019	.0015

TABLE 4 PROFILE 1 28 7 1971 TC = .000000

STATIONS		ACCUM. HEIGHT			P . E.		HEIGHT			P.E.	
	1	.000000	M	+/-	.000	MM					
1	2	1.734653	M	+/-	.007	MM	173.4653	CM	+/-	.007	MM
2	3	2.553537	M	+/-	.050	MM	81.8884	CM	+/-	.050	MM
3	4	5.509852	M	+/-	.051	MM	295.6315	CM	+/-	.009	MM
4	5	10.352947	M	+/-	.065	MM	484.3095	CM	+/-	.040	MM
5	6	12.482319	M	+/-	.068	MM	212.9371	CM	+/-	.020	MM
6	7	11.463644	M	+/-	.068	MM	-101.8674	CM	+/-	.011	MM
7	8	9.202736	M	+/-	.069	MM	-226.0908	CM	+/-	.011	MM
8	9	4.825598	M	+/-	.071	MM	-437.7138	CM	+/-	.014	MM
9	10	4.820999	M	+/-	.073	MM	-.4599	CM	+/-	.019	MM
10	11	4.909836	M	+/-	.074	MM	8.8837	CM	+/-	.007	MM
11	12	5.174576	M	+/-	.075	MM	26.4741	CM	+/-	.013	MM
12	13	8.842266	M	+/-	.080	MM	366.7690	CM	+/-	.028	MM
13	14	8.796254	M	+/-	.081	MM	-4.6011	CM	+/-	.016	MM
14	15	4.029314	M	+/-	.082	MM	-476.6940	CM	+/-	.012	MM
15	16	3.056173	M	+/-	.083	MM	-97.3142	CM	+/-	.014	MM
16	17	-2.813943	M	+/-	.085	MM	-587.0116	CM	+/-	.021	MM
17	18	-.866587	M	+/-	.104	MM	194.7356	CM	+/-	.059	MM
18	19	-4.008646	M	+/-	.105	MM	-314.2059	CM	+/-	.016	MM
19	20	-7.332837	M	+/-	.112	MM	-332.4191	CM	+/-	.039	MM
20	21	-8.688654	M	+/-	.123	MM	-135.5817	CM	+/-	.050	MM
21	22	-10.095667	M	+/-	.124	MM	-140.7013	CM	+/-	.014	MM
22	23	-10.263678	M	+/-	.127	MM	-16.8011	CM	+/-	.029	MM
23	24	-10.270153	M	+/-	.144	MM	3.3525	CM	+/-	.069	MM
24	25	-9.847581	M	+/-	.150	MM	38.2573	CM	+/-	.040	MM
25	26	-11.104272	M	+/-	.151	MM	-125.6691	CM	+/-	.012	MM
26	27	-12.872700	M	+/-	.157	MM	-176.8428	CM	+/-	.046	MM
27	28	-12.816218	M	+/-	.158	MM	5.6482	CM	+/-	.021	MM
28	29	-11.844932	M	+/-	.158	MM	97.1287	CM	+/-	.011	MM
29	30	-12.567275	M	+/-	.160	MM	-72.2344	CM	+/-	.011	MM
30	31	-13.001072	M	+/-	.160	MM	-43.3797	CM	+/-	.015	MM
31	32	-13.193344	M	+/-	.161	MM	-19.2272	CM	+/-	.011	MM
32	33	-12.382947	M	+/-	.162	MM	81.0397	CM	+/-	.018	MM
33	34	-12.559267	M	+/-	.163	MM	-17.6320	CM	+/-	.019	MM
34	35	-11.674191	M	+/-	.165	MM	92.5076	CM	+/-	.027	MM
35	36	-13.032467	M	+/-	.168	MM	-139.8277	CM	+/-	.030	MM
36	37	-10.948880	M	+/-	.169	MM	208.3588	CM	+/-	.020	MM
37	38	-11.644374	M	+/-	.173	MM	-69.5495	CM	+/-	.039	MM
38	39	-11.639331	M	+/-	.174	MM	.5043	CM	+/-	.017	MM

Elevation of station in second column in meter above first station of the profile

Elevation of station in second column above station in first column in centimeters.

TABLE 4 PROFILE 1 28 7 1971 TC = .000002

STATIONS		ACCUM. HEIGHT	P . E.	HEIGHT	P.E.
	1	.000000 M +/-	.000 MM		
1	2	1.734658 M +/-	.007 MM	173.4658 CM +/-	.007 MM
2	3	2.553545 M +/-	.050 MM	81.8887 CM +/-	.049 MM
3	4	5.509896 M +/-	.050 MM	295.6351 CM +/-	.009 MM
4	5	10.353035 M +/-	.076 MM	484.3138 CM +/-	.056 MM
5	6	12.482426 M +/-	.080 MM	212.9392 CM +/-	.026 MM
6	7	11.463744 M +/-	.081 MM	-101.8683 CM +/-	.011 MM
7	8	9.202819 M +/-	.082 MM	-226.0924 CM +/-	.011 MM
8	9	4.825651 M +/-	.083 MM	-437.7168 CM +/-	.014 MM
9	10	4.821051 M +/-	.085 MM	-.4599 CM +/-	.019 MM
10	11	4.909889 M +/-	.085 MM	8.8837 CM +/-	.007 MM
11	12	5.174632 M +/-	.086 MM	26.4743 CM +/-	.013 MM
12	13	8.842349 M +/-	.090 MM	366.7717 CM +/-	.025 MM
13	14	8.796337 M +/-	.091 MM	-4.6012 CM +/-	.016 MM
14	15	4.029375 M +/-	.092 MM	-476.6962 CM +/-	.012 MM
15	16	3.056223 M +/-	.093 MM	-97.3152 CM +/-	.014 MM
16	17	-2.813955 M +/-	.095 MM	-587.0179 CM +/-	.018 MM
17	18	-.866583 M +/-	.114 MM	194.7372 CM +/-	.064 MM
18	19	-4.008676 M +/-	.115 MM	-314.2093 CM +/-	.010 MM
19	20	-7.332908 M +/-	.119 MM	-332.4232 CM +/-	.032 MM
20	21	-8.688740 M +/-	.132 MM	-135.5832 CM +/-	.056 MM
21	22	-10.095766 M +/-	.134 MM	-140.7026 CM +/-	.022 MM
22	23	-10.263778 M +/-	.137 MM	-16.8012 CM +/-	.030 MM
23	24	-10.230253 M +/-	.153 MM	3.3525 CM +/-	.069 MM
24	25	-9.847680 M +/-	.159 MM	38.2573 CM +/-	.040 MM
25	26	-11.104382 M +/-	.159 MM	-125.6702 CM +/-	.012 MM
26	27	-12.872815 M +/-	.167 MM	-176.8433 CM +/-	.051 MM
27	28	-12.816332 M +/-	.169 MM	5.6483 CM +/-	.022 MM
28	29	-11.845040 M +/-	.169 MM	97.1292 CM +/-	.011 MM
29	30	-12.567389 M +/-	.169 MM	-72.2349 CM +/-	.011 MM
30	31	-13.001188 M +/-	.170 MM	-43.3799 CM +/-	.015 MM
31	32	-13.193462 M +/-	.170 MM	-19.2273 CM +/-	.011 MM
32	33	-12.383055 M +/-	.171 MM	81.0406 CM +/-	.019 MM
33	34	-12.559377 M +/-	.172 MM	-17.6322 CM +/-	.019 MM
34	35	-11.634291 M +/-	.174 MM	92.5087 CM +/-	.028 MM
35	36	-13.032586 M +/-	.177 MM	-139.8295 CM +/-	.030 MM
36	37	-10.948969 M +/-	.179 MM	208.3616 CM +/-	.021 MM
37	38	-11.644475 M +/-	.182 MM	-69.5506 CM +/-	.039 MM
38	39	-11.639432 M +/-	.183 MM	.5043 CM +/-	.017 MM

TABLE 4 PROFILE 1 28 7 1971 TC = .000004

STATIONS		ACCUM. HEIGHT		P . E.	HEIGHT		P.E.
	1	.000000 M	+/-	.000 MM			
1	2	1.734663 M	+/-	.007 MM	173.4663 CM	+/-	.007 MM
2	3	2.553554 M	+/-	.049 MM	81.8891 CM	+/-	.049 MM
3	4	5.503940 M	+/-	.051 MM	295.6387 CM	+/-	.014 MM
4	5	10.353122 M	+/-	.089 MM	484.3182 CM	+/-	.073 MM
5	6	12.482535 M	+/-	.095 MM	212.9413 CM	+/-	.033 MM
6	7	11.463844 M	+/-	.096 MM	-101.8691 CM	+/-	.012 MM
7	8	9.202903 M	+/-	.096 MM	-226.0941 CM	+/-	.011 MM
8	9	4.825704 M	+/-	.097 MM	-437.7199 CM	+/-	.014 MM
9	10	4.821104 M	+/-	.099 MM	-.4599 CM	+/-	.019 MM
10	11	4.909942 M	+/-	.099 MM	8.8838 CM	+/-	.007 MM
11	12	5.174688 M	+/-	.100 MM	26.4746 CM	+/-	.013 MM
12	13	8.842432 M	+/-	.103 MM	366.7744 CM	+/-	.023 MM
13	14	8.796420 M	+/-	.104 MM	-4.6012 CM	+/-	.016 MM
14	15	4.029436 M	+/-	.105 MM	-476.6984 CM	+/-	.016 MM
15	16	3.056274 M	+/-	.106 MM	-97.3162 CM	+/-	.013 MM
16	17	-2.813967 M	+/-	.107 MM	-587.0241 CM	+/-	.015 MM
17	18	-.866579 M	+/-	.127 MM	194.7388 CM	+/-	.068 MM
18	19	-4.008707 M	+/-	.128 MM	-314.2128 CM	+/-	.010 MM
19	20	-7.332979 M	+/-	.130 MM	-332.4272 CM	+/-	.026 MM
20	21	-8.688825 M	+/-	.145 MM	-135.5846 CM	+/-	.063 MM
21	22	-10.095865 M	+/-	.148 MM	-140.7040 CM	+/-	.030 MM
22	23	-10.263879 M	+/-	.151 MM	-16.8014 CM	+/-	.030 MM
23	24	-10.230353 M	+/-	.166 MM	3.3526 CM	+/-	.069 MM
24	25	-9.847780 M	+/-	.170 MM	38.2573 CM	+/-	.039 MM
25	26	-11.104492 M	+/-	.171 MM	-125.6712 CM	+/-	.015 MM
26	27	-12.872929 M	+/-	.180 MM	-176.3437 CM	+/-	.057 MM
27	28	-12.816446 M	+/-	.182 MM	5.6483 CM	+/-	.022 MM
28	29	-11.845148 M	+/-	.182 MM	97.1298 CM	+/-	.011 MM
29	30	-12.597502 M	+/-	.182 MM	-72.2354 CM	+/-	.011 MM
30	31	-13.001304 M	+/-	.183 MM	-43.3802 CM	+/-	.015 MM
31	32	-13.193579 M	+/-	.183 MM	-19.2275 CM	+/-	.011 MM
32	33	-12.383165 M	+/-	.184 MM	81.0415 CM	+/-	.020 MM
33	34	-12.559489 M	+/-	.185 MM	-17.6324 CM	+/-	.019 MM
34	35	-11.634391 M	+/-	.188 MM	92.5097 CM	+/-	.028 MM
35	36	-13.032704 M	+/-	.190 MM	-139.8313 CM	+/-	.030 MM
36	37	-10.949059 M	+/-	.191 MM	208.3645 CM	+/-	.021 MM
37	38	-11.644576 M	+/-	.195 MM	-69.5517 CM	+/-	.038 MM
38	39	-11.639533 M	+/-	.196 MM	.5043 CM	+/-	.017 MM

TABLE 4 PROFILE 1 28 7 1971 TC = .000006

STATIONS		ACCUM. HEIGHT		P . E.	HEIGHT		P.E.
	1	.000000 M	+/-	.000 MM			
1	2	1.734668 M	+/-	.007 MM	173.4668 CM	+/-	.007 MM
2	3	2.553552 M	+/-	.049 MM	81.8894 CM	+/-	.048 MM
3	4	5.509984 M	+/-	.055 MM	295.6422 CM	+/-	.025 MM
4	5	10.353210 M	+/-	.105 MM	484.3226 CM	+/-	.090 MM
5	6	12.482644 M	+/-	.112 MM	212.9434 CM	+/-	.039 MM
6	7	11.463944 M	+/-	.113 MM	-101.8700 CM	+/-	.014 MM
7	8	9.202986 M	+/-	.114 MM	-226.0958 CM	+/-	.013 MM
8	9	4.825756 M	+/-	.115 MM	-437.7229 CM	+/-	.014 MM
9	10	4.821157 M	+/-	.116 MM	-.4599 CM	+/-	.019 MM
10	11	4.909996 M	+/-	.116 MM	8.8839 CM	+/-	.007 MM
11	12	5.174744 M	+/-	.117 MM	26.4749 CM	+/-	.013 MM
12	13	8.842515 M	+/-	.119 MM	366.7771 CM	+/-	.021 MM
13	14	8.796503 M	+/-	.120 MM	-4.6012 CM	+/-	.016 MM
14	15	4.029497 M	+/-	.122 MM	-476.7006 CM	+/-	.020 MM
15	16	3.056325 M	+/-	.122 MM	-97.3172 CM	+/-	.013 MM
16	17	-2.813980 M	+/-	.123 MM	-587.0304 CM	+/-	.013 MM
17	18	-.866575 M	+/-	.143 MM	194.7405 CM	+/-	.073 MM
18	19	-4.008737 M	+/-	.144 MM	-314.2162 CM	+/-	.012 MM
19	20	-7.339050 M	+/-	.145 MM	-332.4313 CM	+/-	.020 MM
20	21	-8.698910 M	+/-	.161 MM	-135.5960 CM	+/-	.070 MM
21	22	-10.095963 M	+/-	.166 MM	-140.7053 CM	+/-	.038 MM
22	23	-10.253979 M	+/-	.168 MM	-16.8016 CM	+/-	.031 MM
23	24	-10.230452 M	+/-	.182 MM	3.3526 CM	+/-	.069 MM
24	25	-9.847878 M	+/-	.185 MM	38.2573 CM	+/-	.038 MM
25	26	-11.104602 M	+/-	.187 MM	-125.6723 CM	+/-	.019 MM
26	27	-12.873044 M	+/-	.197 MM	-176.8442 CM	+/-	.063 MM
27	28	-12.816560 M	+/-	.198 MM	5.6484 CM	+/-	.022 MM
28	29	-11.845257 M	+/-	.199 MM	97.1303 CM	+/-	.013 MM
29	30	-12.567616 M	+/-	.199 MM	-72.2359 CM	+/-	.011 MM
30	31	-13.001421 M	+/-	.200 MM	-43.3805 CM	+/-	.015 MM
31	32	-13.193697 M	+/-	.200 MM	-19.2277 CM	+/-	.011 MM
32	33	-12.393273 M	+/-	.201 MM	81.0424 CM	+/-	.021 MM
33	34	-12.559599 M	+/-	.202 MM	-17.6326 CM	+/-	.020 MM
34	35	-11.634491 M	+/-	.204 MM	92.5108 CM	+/-	.029 MM
35	36	-13.032822 M	+/-	.206 MM	-139.8331 CM	+/-	.030 MM
36	37	-10.949149 M	+/-	.207 MM	208.3673 CM	+/-	.021 MM
37	38	-11.644677 M	+/-	.211 MM	-69.5529 CM	+/-	.038 MM
38	39	-11.639634 M	+/-	.212 MM	.5043 CM	+/-	.017 MM

TABLE 4 PROFILE 1 28 7 1971 TC = .000008

STATIONS		ACCUM. HEIGHT		P . E.		HEIGHT		P.E.	
	1	.000000	M +/-	.000	MM				
1	2	1.734673	M +/-	.007	MM	173.4673	CM +/-	.007	MM
2	3	2.553570	M +/-	.048	MM	81.8898	CM +/-	.048	MM
3	4	5.510028	M +/-	.060	MM	295.6458	CM +/-	.036	MM
4	5	10.353298	M +/-	.122	MM	484.3269	CM +/-	.107	MM
5	6	12.482753	M +/-	.130	MM	212.9455	CM +/-	.045	MM
6	7	11.464044	M +/-	.131	MM	-101.8709	CM +/-	.016	MM
7	8	9.203069	M +/-	.133	MM	-226.0975	CM +/-	.017	MM
8	9	4.825809	M +/-	.133	MM	-437.7260	CM +/-	.014	MM
9	10	4.821210	M +/-	.135	MM	-.4600	CM +/-	.019	MM
10	11	4.910049	M +/-	.135	MM	8.8840	CM +/-	.007	MM
11	12	5.174800	M +/-	.136	MM	26.4751	CM +/-	.013	MM
12	13	8.842598	M +/-	.137	MM	366.7798	CM +/-	.018	MM
13	14	8.796585	M +/-	.138	MM	-4.6013	CM +/-	.016	MM
14	15	4.029557	M +/-	.140	MM	-476.7028	CM +/-	.025	MM
15	16	3.056375	M +/-	.140	MM	-97.3182	CM +/-	.013	MM
16	17	-2.813992	M +/-	.141	MM	-587.0367	CM +/-	.012	MM
17	18	-.896571	M +/-	.161	MM	194.7421	CM +/-	.078	MM
18	19	-4.009767	M +/-	.162	MM	-314.2196	CM +/-	.022	MM
19	20	-7.333121	M +/-	.163	MM	-332.4354	CM +/-	.016	MM
20	21	-8.699095	M +/-	.180	MM	-135.5974	CM +/-	.077	MM
21	22	-10.096062	M +/-	.186	MM	-140.7067	CM +/-	.046	MM
22	23	-10.264079	M +/-	.189	MM	-16.8017	CM +/-	.032	MM
23	24	-10.230552	M +/-	.201	MM	3.3527	CM +/-	.069	MM
24	25	-9.847979	M +/-	.205	MM	38.2573	CM +/-	.037	MM
25	26	-11.104712	M +/-	.206	MM	-125.6733	CM +/-	.022	MM
26	27	-12.873158	M +/-	.217	MM	-176.8446	CM +/-	.069	MM
27	28	-12.815674	M +/-	.218	MM	5.6484	CM +/-	.023	MM
28	29	-11.845365	M +/-	.219	MM	97.1309	CM +/-	.017	MM
29	30	-12.567729	M +/-	.219	MM	-72.2364	CM +/-	.011	MM
30	31	-13.081537	M +/-	.220	MM	-43.3808	CM +/-	.015	MM
31	32	-13.193815	M +/-	.220	MM	-19.2278	CM +/-	.011	MM
32	33	-12.393392	M +/-	.221	MM	81.0433	CM +/-	.021	MM
33	34	-12.559710	M +/-	.222	MM	-17.6328	CM +/-	.020	MM
34	35	-11.674591	M +/-	.224	MM	92.5119	CM +/-	.029	MM
35	36	-13.072940	M +/-	.226	MM	-139.8349	CM +/-	.030	MM
36	37	-10.949238	M +/-	.227	MM	208.3702	CM +/-	.022	MM
37	38	-11.644778	M +/-	.230	MM	-69.5540	CM +/-	.038	MM
38	39	-11.639735	M +/-	.231	MM	.5043	CM +/-	.017	MM

TABLE 4 PROFILE 51 4 8 1971 TC = .000000

STATIONS		ACCUM. HEIGHT		P . E.	HEIGHT		P.E.
	51	.000000 M	+/-	.000 MM			
51	52	-.378251 M	+/-	.035 MM	-37.8251 CM	+/-	.035 MM
52	53	-3.379393 M	+/-	.049 MM	-300.1142 CM	+/-	.032 MM
53	54	-7.312163 M	+/-	.061 MM	-393.2770 CM	+/-	.038 MM
54	55	-8.236804 M	+/-	.069 MM	-92.4641 CM	+/-	.032 MM
55	56	-7.841090 M	+/-	.073 MM	-39.5714 CM	+/-	.023 MM
56	57	-8.333103 M	+/-	.071 MM	-9.6299 CM	+/-	.018 MM
57	58	-6.293769 M	+/-	.077 MM	203.9334 CM	+/-	.013 MM
58	59	-4.152149 M	+/-	.074 MM	214.1620 CM	+/-	.014 MM
59	60	-3.761542 M	+/-	.077 MM	39.0607 CM	+/-	.022 MM
60	61	-2.254958 M	+/-	.077 MM	150.6584 CM	+/-	.009 MM
61	62	-1.763502 M	+/-	.095 MM	49.1456 CM	+/-	.055 MM
62	63	.158106 M	+/-	.126 MM	193.1608 CM	+/-	.083 MM
63	64	-2.005823 M	+/-	.127 MM	-217.3929 CM	+/-	.009 MM
63	65	.489119 M	+/-	.127 MM	32.1012 CM	+/-	.011 MM
65	66	.117742 M	+/-	.130 MM	-37.1376 CM	+/-	.028 MM
66	67	2.100138 M	+/-	.139 MM	198.2396 CM	+/-	.010 MM
67	68	5.695653 M	+/-	.145 MM	358.5515 CM	+/-	.063 MM
68	69	6.305178 M	+/-	.145 MM	61.9524 CM	+/-	.014 MM
69	70	7.644449 M	+/-	.147 MM	133.9271 CM	+/-	.019 MM

TABLE 4 PROFILE 51 4 3 1971 TC = .000002

STATIONS		ACCUM. HEIGHT		P. E.	HEIGHT		P.E.
	51	.000000 M	+/-	.000 MM			
51	52	-.378256 M	+/-	.034 MM	-37.8256 CM	+/-	.034 MM
52	53	-3.379449 M	+/-	.044 MM	-300.1193 CM	+/-	.027 MM
53	54	-7.312259 M	+/-	.060 MM	-393.2810 CM	+/-	.041 MM
54	56	-8.236903 M	+/-	.067 MM	-92.4650 CM	+/-	.031 MM
56	55	-7.841192 M	+/-	.071 MM	-39.5717 CM	+/-	.023 MM
56	57	-8.333209 M	+/-	.070 MM	-9.6300 CM	+/-	.018 MM
57	58	-6.293956 M	+/-	.071 MM	203.9353 CM	+/-	.012 MM
58	59	-4.152222 M	+/-	.072 MM	214.1634 CM	+/-	.015 MM
59	60	-3.761612 M	+/-	.075 MM	39.0609 CM	+/-	.022 MM
60	61	-2.255018 M	+/-	.076 MM	150.6594 CM	+/-	.009 MM
61	62	-1.763555 M	+/-	.095 MM	49.1463 CM	+/-	.056 MM
62	63	.158075 M	+/-	.126 MM	193.1630 CM	+/-	.083 MM
63	64	-2.005833 M	+/-	.126 MM	-217.3958 CM	+/-	.009 MM
63	65	.488090 M	+/-	.126 MM	32.1015 CM	+/-	.010 MM
65	66	.117709 M	+/-	.123 MM	-37.1381 CM	+/-	.026 MM
66	67	2.100128 M	+/-	.130 MM	198.2420 CM	+/-	.014 MM
67	68	5.685572 M	+/-	.146 MM	358.5543 CM	+/-	.067 MM
68	69	6.305202 M	+/-	.147 MM	61.9529 CM	+/-	.013 MM
69	70	7.644481 M	+/-	.148 MM	133.9279 CM	+/-	.018 MM

TABLE 4 PROFILE 51 4 8 1971 TC = .000004

STATIONS		ACCUM. HEIGHT		P. E.	HEIGHT		P.E.
	51	.000000 M	+/-	.000 MM			
51	52	-.378262 M	+/-	.034 MM	-37.8262 CM	+/-	.034 MM
52	53	-3.379505 M	+/-	.040 MM	-300.1243 CM	+/-	.022 MM
53	54	-7.312355 M	+/-	.050 MM	-393.2851 CM	+/-	.043 MM
54	55	-8.237014 M	+/-	.055 MM	-92.4658 CM	+/-	.030 MM
55	55	-7.841395 M	+/-	.070 MM	-39.5719 CM	+/-	.023 MM
56	57	-8.333315 M	+/-	.063 MM	-9.6301 CM	+/-	.018 MM
57	58	-6.297943 M	+/-	.069 MM	203.3372 CM	+/-	.010 MM
58	59	-4.152294 M	+/-	.071 MM	214.1648 CM	+/-	.015 MM
59	60	-3.761633 M	+/-	.074 MM	39.0612 CM	+/-	.022 MM
60	61	-2.255078 M	+/-	.075 MM	150.6604 CM	+/-	.009 MM
61	62	-1.767609 M	+/-	.084 MM	49.1470 CM	+/-	.058 MM
62	63	.108045 M	+/-	.123 MM	183.1653 CM	+/-	.084 MM
63	64	-2.085943 M	+/-	.126 MM	-217.3988 CM	+/-	.009 MM
63	65	.488062 M	+/-	.126 MM	32.1018 CM	+/-	.008 MM
65	66	.117677 M	+/-	.123 MM	-37.1385 CM	+/-	.025 MM
66	67	2.102120 M	+/-	.131 MM	198.2443 CM	+/-	.022 MM
67	68	5.625601 M	+/-	.148 MM	352.5571 CM	+/-	.070 MM
68	69	6.395225 M	+/-	.143 MM	61.9534 CM	+/-	.013 MM
69	70	7.644512 M	+/-	.150 MM	133.9287 CM	+/-	.017 MM

TABLE 4 PROFILE 51 4 8 1971 TC = .000006

STATIONS		ACCUM. HEIGHT		P. E.	HEIGHT		P.E.
	51	.000000 M	+/-	.000 MM			
51	52	-.378267 M	+/-	.033 MM	-37.8267 CM	+/-	.033 MM
52	53	-3.370561 M	+/-	.037 MM	-300.1294 CM	+/-	.017 MM
53	54	-7.312452 M	+/-	.059 MM	-393.2891 CM	+/-	.046 MM
54	56	-8.237119 M	+/-	.065 MM	-92.4667 CM	+/-	.029 MM
56	55	-7.841397 M	+/-	.070 MM	-39.5722 CM	+/-	.023 MM
56	57	-8.373421 M	+/-	.068 MM	-9.6302 CM	+/-	.018 MM
57	58	-5.274030 M	+/-	.069 MM	203.9391 CM	+/-	.009 MM
58	59	-4.152367 M	+/-	.070 MM	214.1662 CM	+/-	.015 MM
59	60	-3.761753 M	+/-	.073 MM	39.0614 CM	+/-	.022 MM
60	61	-2.255139 M	+/-	.074 MM	150.6615 CM	+/-	.009 MM
61	62	-1.763662 M	+/-	.095 MM	49.1476 CM	+/-	.059 MM
62	63	.168014 M	+/-	.126 MM	193.1676 CM	+/-	.084 MM
63	64	-2.086003 M	+/-	.127 MM	-217.4017 CM	+/-	.009 MM
63	65	.489035 M	+/-	.127 MM	32.1021 CM	+/-	.007 MM
65	66	.117644 M	+/-	.129 MM	-37.1390 CM	+/-	.023 MM
66	67	2.100111 M	+/-	.132 MM	198.2467 CM	+/-	.031 MM
67	68	5.695710 M	+/-	.151 MM	358.5599 CM	+/-	.073 MM
68	69	6.305249 M	+/-	.151 MM	61.9539 CM	+/-	.012 MM
69	70	7.644544 M	+/-	.152 MM	133.9295 CM	+/-	.016 MM

TABLE 4 PROFILE 51 4 8 1971 TC = .000008

STATIONS		ACCUM. HEIGHT		P . E.	HEIGHT		P.E.
	51	.000000 M	+/-	.000 MM			
51	52	-.378272 M	+/-	.032 MM	-37.8272 CM	+/-	.032 MM
52	53	-3.379617 M	+/-	.035 MM	-300.1344 CM	+/-	.015 MM
53	54	-7.312548 M	+/-	.060 MM	-393.2931 CM	+/-	.049 MM
54	55	-8.237224 M	+/-	.066 MM	-92.4676 CM	+/-	.028 MM
55	55	-7.841500 M	+/-	.070 MM	-39.5725 CM	+/-	.023 MM
56	57	-8.333527 M	+/-	.069 MM	-9.6303 CM	+/-	.018 MM
57	58	-5.294117 M	+/-	.069 MM	203.9410 CM	+/-	.009 MM
58	59	-4.152440 M	+/-	.071 MM	214.1677 CM	+/-	.016 MM
59	60	-3.761823 M	+/-	.074 MM	39.0617 CM	+/-	.022 MM
60	61	-2.255199 M	+/-	.075 MM	150.6625 CM	+/-	.009 MM
61	62	-1.763715 M	+/-	.096 MM	49.1483 CM	+/-	.061 MM
62	63	.167983 M	+/-	.123 MM	193.1698 CM	+/-	.084 MM
63	64	-2.006063 M	+/-	.128 MM	-217.4046 CM	+/-	.009 MM
63	65	.489007 M	+/-	.128 MM	32.1024 CM	+/-	.007 MM
65	66	.117612 M	+/-	.129 MM	-37.1395 CM	+/-	.021 MM
66	67	2.100102 M	+/-	.135 MM	198.2490 CM	+/-	.039 MM
67	68	5.685729 M	+/-	.155 MM	358.5627 CM	+/-	.076 MM
68	69	6.305273 M	+/-	.159 MM	61.9543 CM	+/-	.011 MM
69	70	7.644576 M	+/-	.156 MM	133.9303 CM	+/-	.014 MM

TABLE 4 PROFILE 81 7 8 1971 TC = .000000

STATIONS		ACCUM. HEIGHT		P . E.		HEIGHT		P.E.	
	81	.000000	M +/-	.000	MM				
81	82	.438999	M +/-	.011	MM	43.8999	CM +/-	.011	MM
82	83	2.359535	M +/-	.025	MM	192.0536	CM +/-	.023	MM
83	84	2.722531	M +/-	.037	MM	36.2996	CM +/-	.027	MM
84	85	1.279023	M +/-	.068	MM	-144.6508	CM +/-	.057	MM
85	86	.486488	M +/-	.089	MM	-79.9535	CM +/-	.057	MM
86	87	-2.578351	M +/-	.093	MM	-306.4849	CM +/-	.026	MM
87	88	-4.188108	M +/-	.094	MM	-160.3747	CM +/-	.012	MM
88	89	-4.782120	M +/-	.098	MM	-59.4012	CM +/-	.028	MM
89	90	-4.766444	M +/-	.099	MM	1.5676	CM +/-	.013	MM

TABLE 4 PROFILE 81 7 8 1371 TC = .000002

STATIONS		ACCUM. HEIGHT		P . E.	HEIGHT		P.E.
	81	.000000 M	+/-	.000 MM			
81	82	.439001 M	+/-	.009 MM	43.9001 CM	+/-	.008 MM
82	83	2.359536 M	+/-	.033 MM	192.0535 CM	+/-	.032 MM
83	84	2.722530 M	+/-	.044 MM	36.2994 CM	+/-	.029 MM
84	85	1.275021 M	+/-	.076 MM	-144.6509 CM	+/-	.061 MM
85	86	.486487 M	+/-	.094 MM	-78.9534 CM	+/-	.056 MM
86	87	-2.578360 M	+/-	.098 MM	-306.4846 CM	+/-	.028 MM
87	88	-4.188101 M	+/-	.099 MM	-160.3742 CM	+/-	.012 MM
88	89	-4.782110 M	+/-	.103 MM	-59.4009 CM	+/-	.028 MM
89	90	-4.766434 M	+/-	.104 MM	1.5676 CM	+/-	.013 MM

TABLE 4 PROFILE 81 7 8 1971 TC = .000004

STATIONS		ACCUM. HEIGHT		P . E.	HEIGHT		P.E.
	81	.000000 M	+/-	.000 MM			
81	82	.439002 M	+/-	.008 MM	43.9002 CM	+/-	.008 MM
82	83	2.359537 M	+/-	.043 MM	192.0535 CM	+/-	.042 MM
83	84	2.722529 M	+/-	.053 MM	36.2992 CM	+/-	.031 MM
84	85	1.276019 M	+/-	.084 MM	-144.6510 CM	+/-	.065 MM
85	86	.486485 M	+/-	.101 MM	-78.9533 CM	+/-	.056 MM
86	87	-2.578358 M	+/-	.105 MM	-306.4843 CM	+/-	.030 MM
87	88	-4.189035 M	+/-	.106 MM	-160.9737 CM	+/-	.012 MM
88	89	-4.782100 M	+/-	.110 MM	-59.4005 CM	+/-	.029 MM
89	90	-4.766425 M	+/-	.110 MM	1.5675 CM	+/-	.013 MM

TABLE 4 PROFILE 81 7 8 1971 TC = .000006

STATIONS		ACCUM. HEIGHT		P . E.	HEIGHT		P.E.
	81	.000000 M	+/-	.000 MM			
81	82	.439004 M	+/-	.008 MM	43.9004 CM	+/-	.008 MM
82	83	2.359538 M	+/-	.052 MM	192.0534 CM	+/-	.051 MM
83	84	2.722528 M	+/-	.062 MM	36.2990 CM	+/-	.033 MM
84	85	1.276017 M	+/-	.093 MM	-144.6511 CM	+/-	.069 MM
85	86	.486484 M	+/-	.108 MM	-78.9532 CM	+/-	.055 MM
86	87	-2.578356 M	+/-	.112 MM	-306.4841 CM	+/-	.031 MM
87	88	-4.188088 M	+/-	.113 MM	-160.9732 CM	+/-	.012 MM
88	89	-4.782091 M	+/-	.117 MM	-59.4002 CM	+/-	.030 MM
89	90	-4.766415 M	+/-	.117 MM	1.5675 CM	+/-	.013 MM

TABLE 4 PROFILE 81 7 8 1971 TC = .000008

STATIONS		ACCUM. HEIGHT	P . E.	HEIGHT	P.E.
	81	.000000 M +/-	.000 MM		
81	82	.439006 M +/-	.008 MM	43.9006 CM +/-	.008 MM
82	83	2.359539 M +/-	.062 MM	192.0533 CM +/-	.061 MM
83	84	2.722526 M +/-	.071 MM	36.2987 CM +/-	.036 MM
84	85	1.276014 M +/-	.102 MM	-144.6512 CM +/-	.073 MM
85	86	.485483 M +/-	.115 MM	-78.9531 CM +/-	.054 MM
86	87	-2.578355 M +/-	.120 MM	-306.4838 CM +/-	.033 MM
87	88	-4.188082 M +/-	.121 MM	-160.9727 CM +/-	.012 MM
88	89	-4.782081 M +/-	.124 MM	-59.3999 CM +/-	.030 MM
89	90	-4.766406 M +/-	.125 MM	1.5675 CM +/-	.013 MM

EXIT

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C       ICELAND PROGRAM 1970 S.  E. THYSGVASON, NOV 1970
C       COMPUTES ELEVATION DIFFERENCES BETWEEN LEVEL STATIONS AND BENCH
C       MARKS.  FIRST CARD OF DATA CONTAINS TIME OF LEVELLING AND LOWEST
C       AND HIGHEST BENCHMARK NUMBERS OF THE PROFILE
        DIMENSION NA(450),NB(450),NNA(450),NNB(450),KA(450),TA(450)
        DIMENSION DA(450),SA(450),WB(450),NSA(150),NSB(150),KB(150)
        DIMENSION TB(150),DB(150),HC(150),SB(150),WC(150),HE(80),WE(80)
        DIMENSION SD(80),SE(80),NH(12),WA(12),HA(12),NC(10),NAA(10)
        DIMENSION NBB(80),NCC(80),HD(10),WD(10),SC(10),HS(450)
  101   READ(105,100)MDAY,MON,MYEAR,NLOW,NHIG
          IF(MDAY.EQ.99999) GO TO 102
  100   FORMAT(5I5)
        WRITE(108,210)NLOW,NHIG,MDAY,MON,MYEAR
  210   FORMAT(1H1,'DATA INPUT FROM PROFILE',3I5,I3,I8)
        N=0
    1   N=N+1
        READ(105,10)NA(N),NB(N),KA(N),NTA,NTB,NDA,NDB,MIN,NNH,
       1(NH(J),J=1,12)
   10   FORMAT(2I5,I1,4I3,I1,13I3)
        WRITE(108,200)NA(N),NB(N),KA(N),NTA,NTB,NDA,NDB,NNH,
       1(NH(J),J=1,12)
  200   FORMAT(1H ,2I5,I2,4I4,I5,12I4)
        DO 2 I=1,12
        IF(NH(I)) 3,2,3
    3   L=I
    2   CONTINUE
        IF(L) 4,18,4
    4   TTA=(NTA+NTB)
        TA(N)=TTA/20.
        DDA=(NDA+NDB)
        DA(N)=DDA/10.
        DO 5 I=1,L
    5   WA(I)=1
        DO 17 I=1,L
        IF (MIN)6,6,7
    6   HH=NNH*1000+NH(I)
        HA(I)=HH/1000.
        GO TO 8
    7   HH=-NNH*1000-NH(I)
        HA(I)=HH/1000.
    8   IF(HA(I)-HA(1)-0.8) 9,11,11
   11   HA(I)=HA(I)-1.0
        GO TO 13
    9   IF(HA(I)-HA(1)+0.8) 12,12,13
   12   HA(I)=HA(I)+1.0
   13   CONTINUE
        DO 15 J=1,5
        HSUM=0
        WSUM=0
        DO 15 I=1,L
        HSUM=HSUM+HA(I)*WA(I)
   15   WSUM=WSUM+WA(I)
        HMEAN=HSUM/WSUM
        ESUM=0
        DO 16 I=1,L
        DEL=ABS(HMEAN-HA(I))
        WA(I)=0.0001/(0.0001+DEL**2)
   16   ESUM=ESUM+WA(I)*DEL**2
        HB(N)=HMEAN
        AL=L
        SA(N)=SQRT(ESUM*AL/(WSUM*WSUM*(AL-1.)))
        IF(SA(N)) 31,32,31
   32   WB(N)=1.
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      GO TO 19
   31 WB(N)=0.00001/SA(N)**2
      IF(WB(N).GT.1.) WB(N) =1.
   18 IF(NA(N)-9999)19,19,1
   19 N=N-1
      WRITE(108,20) NLOW,MDAY,MON, MYEAR
   20 FORMAT(1H1,'TABLE 1 PROFILE',2I5,I3,I6)
      WRITE(108,30)
   30 FORMAT(1H ,'  STATIONS      TEMP   DIST     HEIGHT      ST.E.      W')
      DO 22 I=1,N
   22 WRITE(108,40) NA(I),NB(I),KA(I),TA(I),DA(I),HB(I),SA(I),WB(I)
   40 FORMAT(1H ,2I5,I2,2F5.2,F12.4,2F8.4)
C     DATA ON EACH PUNCHED CARD HAS BEEN PRINTED AFTER BEING PROCESSED.
C     NEXT STEP IS BASED ENTIRELY ON THE PRINTED OUTPUT
      NN=0
      TSUM=0
      DSUM=0
      HSUM=0
      SESUM=0
      WSUM=0
      DO 41 I=1,N
      NNA(I)=NA(I)/100
      NNB(I)=NB(I)/100
      IF(DSUM)44,43,44
   43 NSA(NN+1)=NNA(I)
   44 TSUM=TSUM+TA(I)*HB(I)
      DSUM=DSUM+DA(I)
      HSUM=HSUM+HB(I)
      SESUM=SESUM+SA(I)**2
      WSUM=WSUM+WB(I)
      IF(NB(I)-NNB(I)*100)41,42,41
   42 NN=NN+1
      NSB(NN)=NNB(I)
      KB(NN)=KA(I)
      TB(NN)=TSUM/HSUM
      DB(NN)=DSUM
      HC(NN)=HSUM
      SB(NN)=SQRT(SESUM)
      WC(NN)=0.00001/SESUM
      IF(WC(NN).GT.1.) WC(NN) =1.
      TSUM=0
      DSUM=0
      HSUM=0
      SESUM=0
      WSUM=0
   41 CONTINUE
      WRITE(108,50) NLOW,MDAY,MON,MYEAR
   50 FORMAT(1H1,' TABLE 2 PROFILE ',2I5,I3,I5)
      WRITE(108,60)
   60 FORMAT(1H0,'STATIONS       TEMP    DIST     HEIGHT      ST.E.      W')
      DO 49 I=1,NN
      IF(NSA(I).EQ. 913) NSA(I)= 909  ; GO TO 45
       IF(NSA(I).EQ.909) NSA (I)=910  ; GO TO 45
      IF(NSA(I).EQ. 910) NSA(I)= 911 ; GO TO 45
      IF(NSA(I).EQ. 911) NSA(I)= 912 ; GO TO 45
      IF(NSA(I).EQ. 912) NSA(I)= 913 ; GO TO 45
      IF(NSA(I).EQ. 914) NSA(I)= 910 ; GO TO 45
   45 CONTINUE
      IF(NSB(I).EQ. 914) NSB(I)= 910 ; GO TO 49
      IF(NSB(I).EQ. 912) NSB(I)= 913 ; GO TO 49
      IF(NSB(I).EQ. 911) NSB(I)= 912 ; GO TO 49
      IF(NSB(I).EQ. 910) NSB(I)= 911 ; GO TO 49
       IF(NSB(I).EQ.909) NSB (I)=910 ; GO TO 49
      IF(NSB(I).EQ. 913) NSB(I)= 909      ; GO TO 49
   49 WRITE(108,70) NSA(I),NSB(I),KB(I),TB(I),DB(I),HC(I),SB(I),WC(I)
   70 FORMAT(2H ,3I4,2F7.2,F12.4,2F8.4)
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C       DATA FOR EACH PINCH MARK INTERVAL HAS NOW BEEN COMPUTED AND PRINTE
        DO 63 I=1,NN
        IF(NSA(I)-NSB(I))63,63,64
   64   HOLD=NSA(I)
        NSA(I)=NSB(I)
        NSB(I)=HOLD
        HC(I)=-HC(I)
   63   CONTINUE
        DO 71 J=1,5
        AJ=J
        TC=(AJ-1.0)*2/10**6
        NP=0
        NNN=NHIG-NLOW
        DO 99 JJ=1,NNN
        KK=0
        KC=0
        DO 98 I=1,NN
        IF(NSA(I)-NLOW-JJ+1)98,72,98
   72   IF(KK)74,73,74
   74   IF(NSB(I)-NSB(JJ))73,73,75
   73   KK=KK+1
        NAA(JJ)=NSA(I)
        NBB(JJ)=NSB(I)
        HA(KK)=HC(I)*(1.+TC*(15.-TB(I)))
        WA(KK)=WC(I)
        SA(KK)=SB(I)
        GO TO 98
   75   NCC(JJ)=NSB(I)
        KC=KC+1
        HD(KC)=HC(I)*(1.+TC*(15.-TB(I)))
        WD(KC)=WC(I)
        SC(KC)=SB(I)
   98   CONTINUE
        IF(KK)81,82,81
   81   NP=NP+1
        HSUM=0
        WSUM=0
        DO 83 I=1,KK
        HSUM=HSUM+HA(I)*WA(I)
   83   WSUM=WSUM+WA(I)
        NA(NP)=NAA(JJ)
        NB(NP)=NBB(JJ)
        HE(NP)=HSUM/WSUM
        IF(WSUM.GT.1.) WSUM=1.
        WE(NP)=WSUM
        SD(NP)=SQRT(.00001/WSUM)
        FP=0
        DO 84 I=1,KK
   84   FP=FP+(HE(NP)-HA(I))**2*WA(I)
        AKK=KK-1
        IF(KK-1)89,91,89
   91   AKK=1.
   89   SE(NP)=SQRT(FP/(WSUM*AKK))
   82   IF(KC)85,98,85
   85   NP=NP+1
        HSUM=0
        WSUM=0
        DO 86 I=1,KC
        HSUM=HSUM+HD(I)*WD(I)
   86   WSUM=WSUM+WD(I)
        NA(NP)=NAA(JJ)
        NB(NP)=NCC(JJ)
        HE(NP)=HSUM/WSUM
        IF(WSUM.GT.1.) WSUM=1.
        WE(NP)=WSUM
         SD(NP)=SQRT(0.00001/WSUM)
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      FB=0
      DO 87 I=1,KC
   87 FB=FB+(HE(NP)-HD(I))**2*WD(I)
         AKC=KC-1
      IF(KC-1)92,93,92
   93 AKC=1.
   92 SE(NP)=SQRT(FB/(WSUM*AKC))
   99 CONTINUE
      WRITE(108,110)NLOW,MDAY,MON,MYEAR,TC
  110 FORMAT(1H1,'TABLE 3   PROFILE ',2I5,I3,I5,' TC =',F9.6)
      WRITE(108,120)
  120 FORMAT(1H0,'STATIONS     HEIGHT       ERROR')
      DO 111 I=1,NP
      IF(SD(I)-SE(I))112,112,113
  112  DB(I)=SE(I)
      GO TO 111
  113  DB(I) =SD(I)
  111 WRITE(108,130)NA(I),NB(I),HE(I),DB(I),SE(I),SD(I)
      NNB(1) = NA(1)
       DO 118 I =1,NP
      HB(I) =0.0
  118 NNB (I+1) = NB(I)
       WB(1) =0.0
        HB(1) = 0.0
       TA(1)= 0.0
      KTT =0
      DO 114 I =1,NP
      K1 =0
      DO 115 II =1,I
      IF(K1.GT.0) GO TO 115
       IFA =1
       IF(KTT.EQ.1) IFA =-1
      IF(NNB(II).EQ.NA(I)) GO TO 117
      GO TO 115
  117 K1 =K1+1
      HB(I+1) =HB(II)+HE(I)*IFA
      TA(I+1) =TA(II)+DB(I)*DB(I)
      WB(I+1) =SQRT(TA(I+1))
      KTT =0
  115 CONTINUE
      IF(I.NE.1.AND.K1.EQ.0.AND.KTT.EQ.0) GO TO 127
      GO TO 114
  127 HOLD=NA(I);NA(I)=NB(I)
      NB(I) =HOLD
      KTT =1
      I =I-1
  114 CONTINUE
      NPP =NP+1
        DO 119 I=1,NPP
      DB(I) = DB(I)*6.745
      WB(I) =WB(I)*6.745
  119 HB(I) =HB(I)*.01
       WRITE(108,121) NLOW,MDAY,MON,MYEAR,TC
      NTC =TC*10.**6     +.5
  121 FORMAT (1H1, 'TABLE 4   PROFILE',2I5,I3,I5,'  TC = ',F9.6)
       WRITE (108,122)
  122 FORMAT (1H0,'STATIONS',4X,'ACCUM. HEIGHT',3X,'    P . E.  ',
     55X,'HEIGHT',10X,' P.E.')
      WRITE(108,123) NLOW,HB(1),TA(1)
       WRITE (108,125)NLOW,HB(1),TA(1),NLOW,NTC    ,MYEAR
  125 FORMAT (5X,I5,F12.6,2H M,F6.3,3H MM,27X,I5,I3,I6)
  123 FORMAT(1H0,I10,F12.6,6H M +/-,F6.3,3H MM)
      DO 116 I = 1,NP
  116 WRITE (108,124) NA(I),NB(I),HB(I+1),WB(I+1),HE(I),DB(I)
  124 FORMAT (1H ,2I5,F12.6,6H M +/-,F6.3,3H MM,7X,F10.4,7H CM +/-,
     6F6.3,3H MM)
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      DO 103 I=1,NP
  103 WRITE(106,126)        NB(I),HB(I+1),WB(I+1),HE(I),DB(I),NLOW,NTC
     G,MYEAR
  126 FORMAT(5X,I5,F12.6,2H M,F6.3,3H MM,F10.4,3H CM,F6.3,3H MM,5X,
     6I5,T3,I0)
  130 FORMAT(1H ,2I5,F12.4,F10.4,4X,2F7.4)
   71 CONTINUE
      GO TO 101
  102 CALL EXIT
      END
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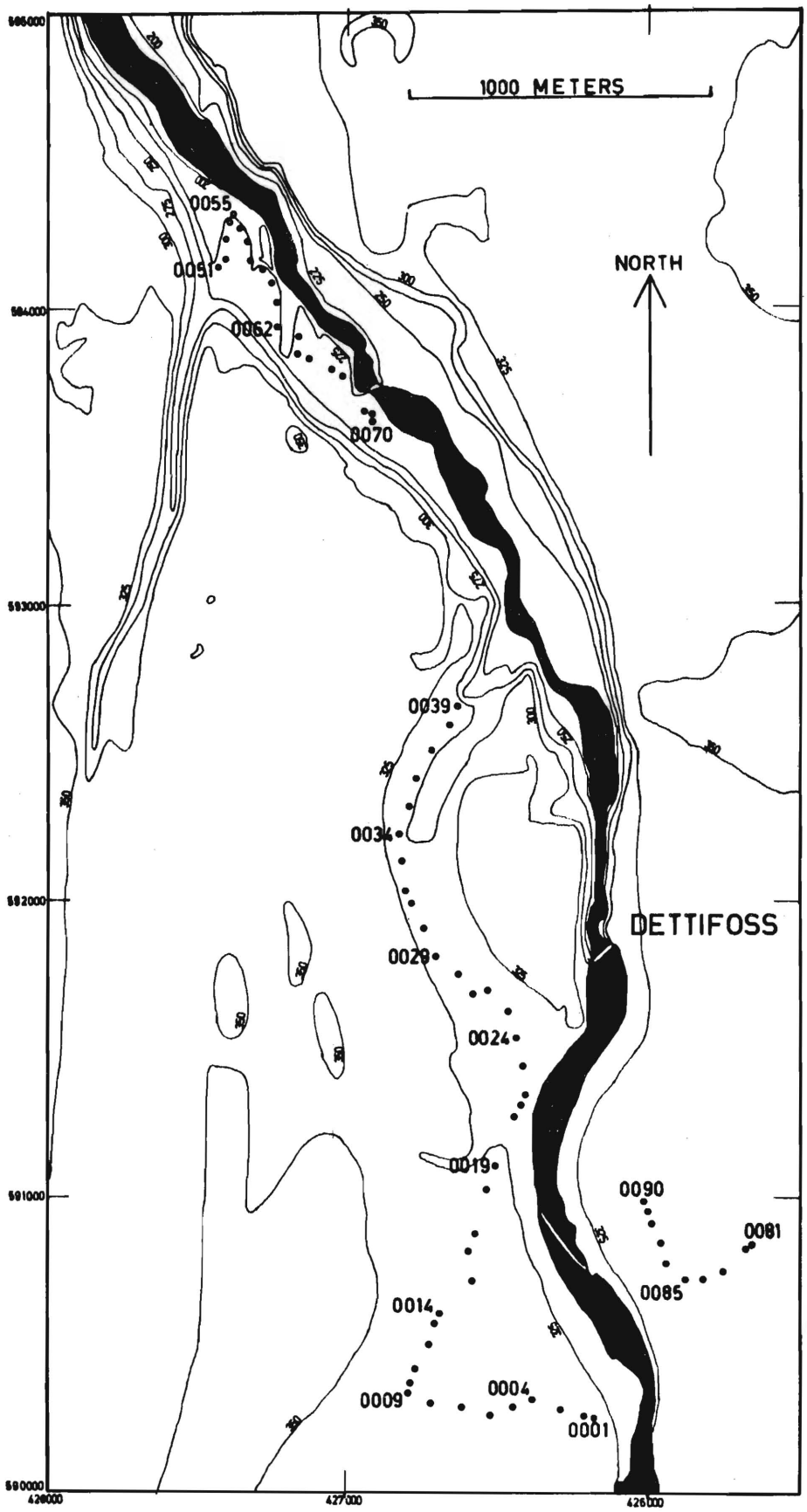

Figure 1. Locations of levelling markers in the Dettifoss area

TABLE 5

Coordinates of level stations near Dettifoss

Profile 1, west of Dettifoss

Station	East meters	North meters
1	-426174	590253
2	209	257
3	290	278
4	381	313
5	442	284
6	-426521	590256
7	618	282
8	720	298
9	797	331
10	791	369
11	-426772	590414
12	730	499
13	713	566
14	697	601
15	588	716
16	-426598	590818
17	575	873
18	541	591024
19	508	101
20	454	263
21	-426429	291306
22	415	342
23	423	441
24	445	535
25	474	629
26	-426541	591701
27	590	685
28	638	780
29	716	812
30	751	906
31	-426798	591990
32	817	592036
33	829	135
34	834	223
35	803	319
36	-426782	592411
37	732	508
38	674	591
39	650	656

TABLE 5 (Continued)

Coordinates of level stations

Profile 50, Hafragil

Station	East meters	North meters
51	-427430	594140
52	408	170
53	409	239
54	394	287
55	380	316
56	-427362	594272
57	330	222
58	322	156
59	284	126
60	258	085
61	-427237	594017
62	231	593934
63	167	845
64	162	907
65	129	831
66	-427048	593793
67	017	775
68	-426944	653
69	915	645
70	911	621

TABLE 5 (Continued)

Coordinates of level stations

Profile 80, Selfoss

Station	East meters	North meters
81	-425656	590846
82	673	829
83	749	754
84	813	727
85	873	724
86	-425933	590784
87	957	848
88	988	910
89	999	955
90	-426010	988