

I.O.S.

CTD AND SEASOAR DATA
FROM THE AGULHAS RETROFLECTION ZONE

BY
J.F. READ, R.T. POLLARD & J. SMITHERS

REPORT NO. 245
1987

INSTITUTE OF
OCEANOGRAPHIC SCIENCES
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*Supported by the U.S. Office of Naval Research under Grant N00014-86-G-0023,
Authority 422H002---01/8-30-85*

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DOCUMENT DATA SHEET

AUTHOR READ, J.F., POLLARD, R.T. & SMITHERS, J.	PUBLICATION DATE 1987
TITLE CTD and SeaSoar data from the Agulhas Retroflection Zone.	
REFERENCE Institute of Oceanographic Sciences, Deacon Laboratory, Report, No. 245, 91pp.	
ABSTRACT <p>The primary objective of RRS <i>Discovery</i> Cruise 165A (28 February - 25 March 1987, Principal Scientist Dr J. Luyten, Woods Hole Oceanographic Institution) was to recover ten moorings set two years previously in the Agulhas Current and Retroflection Zone off southern Africa. A full-depth CTD cast was done in the vicinity of each mooring and 3700km of SeaSoar sections were run in the Agulhas Retroflection Zone. The CTD casts are reported as profile plots and listings in this Report, and the SeaSoar data as contoured sections of potential temperature, salinity, density, chlorophyll α and geostrophic shear. Surface currents measured with <i>Discovery</i>'s electromagnetic log are also shown.</p>	
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KEYWORDS CTD DATA SEASOAR SURFACE CURRENTS DISCOVERY/RRS - CRUISE(1987)(165A) AGULHAS CURRENT AGULHAS RETURN CURRENT	CONTRACT PROJECT PG 25 PRICE £24.00

Copies of this report are available from:

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1. NARRATIVE

After sailing from Mauritius, Discovery steamed to the first mooring position (843) where CTD cast 11461 (Table 1) was made. The track plot thereafter is shown in Fig. 1. After recovering the second mooring (842) (CTD 11462), the SeaSoar was deployed (Table 2) and towed parallel to the Agulhas Current towards the next cluster of moorings. Because there was only a short distance to run between moorings 841, 840 and 839 the SeaSoar was not redeployed until all three had been recovered and associated CTD casts (11464-6) completed.

The SeaSoar was deployed for a three day run (Sections 2 and 3) before the next mooring. The tow ran towards 343° to the shelf edge then on a reciprocal course to 40°S (Fig. 2). The SeaSoar had to be recovered because of a cable failure at 40.5°S and 7.5 hours were lost during repair. The run then continued to 41° 39'S 21° 8'E, before altering course to 320° towards mooring 837.

Moorings 837, 838, 834 and 835 were recovered in sequence with 17-19 hour SeaSoar runs between them. Shortly after deploying the SeaSoar to run down to the final mooring (836), the temperature sensor failed (corroded through) and the data were irrecoverable.

After recovering mooring 836, the remainder of the scientific time was spent in a SeaSoar survey of the Retroflexion Zone (Figs. 2 and 3). The survey was interrupted by a cable failure at 52/0253. When the SeaSoar was redeployed 4.5 hours later, it was found that westward progress could not be maintained against the eastward current set and westerly wind, so course was altered to 315° and then 045° until latitude 40° 40'S was reached, at which the next eastward running leg was begun. Less than a day later (53/1400) the survey had to be terminated, as worsening weather made it expedient to recover the SeaSoar while it was still possible. A fire in the main engine while Discovery was hove to terminated further scientific work.

2. DATA ANALYSIS AND CALIBRATION

Most of the data flow and analysis of both CTD and SeaSoar data has been described in detail in two IOS reports for the preceding Discovery cruise, Cruise 164 (Pollard, Read and Smithers, 1987, Pollard, Read, Smithers and Stirling, 1987, herein after PRS and PRSS), which respectively describe the CTD and SeaSoar

processing, and to which the reader is referred. Only differences in processing or cruise specific calibrations will be described here.

2.1 Surface current

Combination of transit satellite fixes and electromagnetic (EM) log data allows surface currents to be calculated (Fig. 3). The EM log had been calibrated on Cruise 162 (Saunders et al, 1986). and the transit satellites were carefully culled to remove satellites with high or low elevations, more than 2 or 3 iterations, or within less than about an hour of a better satellite (Pollard et al, 1987). An average current is then calculated between each remaining pair of satellite fixes by comparing the second fix position with the position obtained by dead-reckoning forward from the first fix using the EM log. These vectors are shown in Fig. 3, and clearly reveal the Agulhas Current and Retroflexion. Currents up to 5 knots were logged. Figs. 2 and 3 together indicate the positions of the SeaSoar sections and CTD casts relative to the Current.

2.2 CTD data logging and reduction

Logging, reduction and calibration of the Neil Brown Instrument Systems (NBIS) CTD are fully described by PRS, to which the reader is referred for details. Likewise, further editing of SeaSoar CTD data is described by PRSS. Only a brief summary will be given here.

All CTD data are initially logged on an NBIS deck unit, written to a DIGIN format tape for backup, displayed on a BBC microcomputer and transferred to a Level A microcomputer, which edited the 16 hz (8 hz for shallow SeaSoar CTD) data before averaging them to one sample per second. The averaged data were then passed to a PDP11/34 computer for calibration and further processing. This route was used throughout Cruise 165A, with only a very few partcasts having to be recovered from backup DIGIN tapes or Level C data. Cruise specific calibration information is described below.

2.3 Deep CTD calibration

Pressure

CTD pressures on Cruise 164 and 165A were checked against a Precision Echo Sounder as described by PRS. The Cruise 165A data were included in that comparison, from which it was concluded that CTD pressures were correct within a few metres. The calibration used was

$$P(\text{dbar}) = 0.1 * P(\text{raw}) - 12.0$$

Temperature

The few reversing thermometer values from the ten casts on Cruise 165A gave no grounds for modifying the long term stable laboratory calibration

$$T(^{\circ}\text{C}) = T(\text{raw}) * 0.0005 * 0.9990317 + 0.0258$$

Salinity

The conductivity cell had fouled three casts before the end of the previous cruise. Using a conductivity ratio of 0.99937 it was concluded that salinities for the last three casts of Cruise 164 were 0.019 too high. After a 16-day break between the last cast of Cruise 164 and the first of Cruise 165A, it was not too surprising that the salinity corrections had changed from -0.019 to about 0.007. Statistics for the 6 levels at which samples were drawn for casts 11462-71 are given in Table 3. Differences between mean bottle and CTD salinities range from 0.008 to -0.002, with some hint of a trend with depth or salinity (Table 3a, right hand column). A simple way to reduce this possible 0.010 salinity trend was to recalibrate salinity as shown in Table 3(b), which was done.

Oxygen

The oxygen sensor drifted less during Cruise 165A than it had on Cruise 164, and it was on occasion possible to fit values of C, ALPHA and BETA in the equation.

$$O_{\text{cal}}(\text{m/l}) = C * O_{\text{RAW}} * \text{EXP}(\text{ALPHA} * T_{\text{L}} + \text{BETA} * P) * O_{\text{sal}}(T, S)$$

to calibration values from several casts at once (Table 4). T_{L} was taken, as before, to be the unlagged CTD temperature. The calibration values are marked

with an asterisk (*) on the profile plots so that the user may himself assess the quality of the final oxygen values. From the standard deviations of bottle minus CTD differences, we estimate the oxygens to be correct within 0.2 ml/l, the quoted error of the Beckman oxygen sensor.

2.4 SeaSoar CTD calibration

Pressure

The default calibration was used, with allowance for a deck offset of 0.4 dbar, namely

$$P_{CAL}(DBAR) = 0.01 * P_{RAW} - 0.4$$

Temperature

Up to the temperature sensor failure on day 47 (16 Feb), the laboratory calibration

$$T_{CAL}(^{\circ}C) = 0.0005 * 0.99987 * T_{RAW} + 0.116$$

was used. When the sensor failed, it was found to be pitted with corrosion at the base of the stem, and it was replaced by the platinum resistance thermometer from an old shallow CTD that was available for spares. The question was, how could the replacement thermometer be calibrated, given that the laboratory calibration was invalid once the sensor was transferred to a different instrument?

First, up and down cast T/S traces were overplotted and the time constant required to match the conductivity and temperature to minimise hystereses in salinity was found by iteration. Prior to the failure the time constant had been 0.18s. After replacement, the time constant had to be increased to the large value of 0.6 seconds.

The temperature calibration was then adjusted in stages until salinities matched those from before the failure. Of course, a wide range of salinities had been encountered for any given temperature as the SeaSoar crossed from Agulhas to Subpolar waters. A tight and distinctive T/S relation prevailed when salinities were highest in Agulhas waters, however, and the envelope of all T/S curves from previous runs was also plotted.

Using a default calibration of

$$T_1 = T_{\text{raw}} * 0.0005$$

salinities were too high by about 0.2 at $T_1 = 21^\circ\text{C}$, and by 0.05 at $T_1 = 10^\circ\text{C}$. Given that 0.1 in salinity is close to 0.1°C in temperature, we deduced, given that salinities are correct, that T_1 is 0.2°C too low at 21°C and 0.05°C too low at 10°C . Hence we derived

$$T_2 = 1.0137 * T_1 - 0.087$$

as a second approximation. Careful comparison of typical T/S curves and their envelope indicated that salinities were too high (T_2 too low, in $^\circ\text{C}$) by about 0.08 at 10°C , 0.04 at 14°C , 0.0 at 18°C , -0.04 at 22°C . A second iteration yielded

$$\begin{aligned} T_3 &= 0.99 * T_2 + 0.18 \\ &= 1.003563 * 0.0005 * T_{\text{raw}} + 0.09387 \end{aligned}$$

No offsets could be detected in T_3/S curves, so T_3 was taken to be the new calibration, within 0.01°C , equivalent to the 0.01 minimum detectable error in salinity.

Salinity

Relative salinity calibration was maintained throughout the SeaSoar runs as described by PRSS. Bottle samples were drawn hourly off the non-toxic supply, and compared with SeaSoar salinities (Fig. 4). The comparison is not as satisfactory as shown in PRSS's Fig. 2, partly because samples were only drawn hourly compared with half-hourly on Cruise 164, partly because of the frequent strong horizontal salinity gradients as the Agulhas Front was crossed and recrossed.

In particular close examination of the apparent calibration drift at day 49.2 revealed no slipping in the T/S curves. On the contrary, they were unusually well defined with a tight T/S relation. We therefore re-examined the calibration samples, and found an unusual jump of 0.1 in the salinity of the substandard at day 48.5. The operator noted the drift at day 49.2, and restandarized the Autolab Salinometer (which had to be used throughout because a faulty cell had put the Guildline Salinometer out of action). We have therefore

ignored the suspect calibration data. Fitting a smooth slowly varying line by eye through the remaining values of B-SSAL, and applying it as a final correction to the CTD salinities as a function of time leads to final calibration comparisons shown in Fig. 5. The mean of the B-SSALC values in Fig. 5 is -0.001, standard deviation 0.015, so we believe salinities to be absolutely calibrated to within 0.015.

Chlorophyll a

With no biologist on Cruise 165A, and in the knowledge that the fluorometer calibration could change by a factor of 3 or more (PRSS) across a front it is not possible to present absolute plots of Chlorophyll a. Productivity was virtually nonexistent in the warm Agulhas water, so the calibration applied is of little significance. Large values are present on the Subpolar side of the front. We have therefore chosen to apply the 'southern' calibration equation found on Cruise 164 to all data from Cruise 165A, namely

$$F_{CAL}(\text{mg}/\text{m}^3) = \exp(1.082 * F_{RAW} - 2.557)$$

but the contour plots should be viewed as showing relative rather than absolute variations in productivity, unless calibration data can be obtained from another source.

3. DISPLAY

Cruise 164 track plots are shown in Figs. 1 and 2, and the surface currents (Section 2.1) are shown in Fig. 3.

A profile plot and summary listing of standard levels is provided for each cast on pages 24-43.

The SeaSoar data are gridded and contoured exactly as described by PRSS and displayed on pages 44-91. Note that the contour plots of T,S and Ch1a are of 4 km horizontal averages, but density SIGMA0 is further smoothed over 12 km, and geostrophic velocities are effectively calculated from the difference between two 4 km averages 12 km apart. On a few plots the contouring program has inadequately labelled the bold contours. The reader should be able to work out their values, by making use of overlaps between sequential plots, and by noting that the bold contour spacing is 1°C for temperature, 0.2 for salinity, 0.2 kg/m³ for density, 0.2 mg/m³ for Chl a, and 10 cm/s for velocity. Note that some

sections have been reversed (i.e. Distance Run increases from right to left), so that sections usually run from west to east, or from north to south across the page. Geostrophic velocities are positive if the current (relative to 325 dbar) crossed the ship's bow from port to starboard, i.e. left to right in the direction of the ship's track.

4. ACKNOWLEDGEMENTS

These data were collected on Cruise 165A of RRS Discovery, with Dr James Luyten of the Woods Hole Oceanographic Institution as Principal Scientist, Mike Harding as Master, and Ian 'Wiggy' Bennett as Chief Engineer. We are grateful to all scientists and crew for their help in collecting these data sets.

Discovery was still lacking a generator following the fire on Cruise 164 (Pollard et al, 1987) and another serious fire occurred in the windings of one of the two motors driving the propellor shaft while Discovery was hove to at the end of the SeaSoar runs described here. Again, it was quickly extinguished by the valiant efforts of the Chief Engineer and his staff, but plans to complete the SeaSoar survey of the Agulhas Retroflexion with further east west legs gradually working northwards had to be abandoned, as the ship limped into Cape Town, and we were grateful to reach harbour in safety.

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TABLE 1
CTD casts - Cruise 165A

Station	Start date	Start time GMT	Down time GMT	End time GMT	Latitude (S)	Longitude (E)	Depth (corr m)	Height off bottom (m)	Near Mooring
CTD11462	5/2	1114	1220	1335	35° 7.6'	25°38.2'	4136	-	843
CTD11463	6/2	0520	0642	0818	35°58.5'	27° 2.6'	4663	-	842
CTD11464	7/2	1920	2047	2213	37°14.2'	23° 4.1'	5347	70	841
CTD11465	8/2	1953	2122	2257	38°11.6'	22°58.1'	5324	-	840
CTD11466	9/2	1322	1440	1606	37°55.9'	21° 0.8'	4744	45	839
CTD11467	12/2	1745	1918	2041	40° 7.9'	19°47.5'	4985	10	837
CTD11468	13/2	1906	2021	2150	38°58.0'	18°33.3'	4700	8	838
CTD11469	15/2	0306	0425	0555	37°57.2'	15°34.0'	4833	10	834
CTD11470	16/2	0600	0725	0859	40°11.1'	16°34.8'	4961	12	835
CTD11471	17/2	0700	0817	0947	41°57.3'	17°46.4'	4761	40	836

TABLE 2

SeaSoar Runs - Cruise 165A

Section	Time day/HHMM	Distrun km	Latitude S	Longitude E	Course	Computer Runs	Duration		Comments
							Time (hrs)	Distance (km)	
1	37/0946	3679	36° 2.0'	26°59.8'	250°	1, 2	27.1	374	Deploy SeaSoar Recover SeaSoar (Recover moorings 843, 842)
	38/1250	4053	37°13.3'	23° 8.6'					
2	40/1845	4547	37°46.7'	20°52.0'	343°	3	35.4	477	Deploy SeaSoar a/c a/c Cable failure, recover
	41/0153	4627	37° 7.9'	20°36.6'	160°	4, 5			
	42/0202	4968	39°59.6'	21°58.2'	180°				
	42/0611	5024	40°29.7'	21°56.7'					
3	42/1331	5057	40°38.4'	21°37.3'	200°	6	22.0	326	Deploy SeaSoar a/c Recover SeaSoar
	42/2210	5181	41°39.5'	21° 8.0'	320°	7			
	43/1130	5383	40°12.4'	19°45.8'					
4	43/2127	5424	40° 5.5'	19°46.7'	320°	8	17.0	249	Recover mooring 837 Deploy SeaSoar a/c Recover SeaSoar
	44/1320	5655	38°14.4'	18°34.7'	000°				
	44/1426	5673	38° 4.8'	18°36.0'					
5	44/2233	5701	37°57.9'	18°31.5'	270°	9	18.6	260	Recover mooring 838 Deploy SeaSoar Recover SeaSoar
	45/1709	5961	38° 2.0'	15°34.8'					
									Recover mooring 834

TABLE 2

SeaSoar Runs - Cruise 165A (continued)

Section	Time day/HHMM	Distrun km	Latitude S	Longitude E	Course	Computer Runs	Duration		Comments	
							Time (hrs)	Distance (km)		
6	46/0700	6013	37°58.9'	15°35.1'	160°	10	19.0	255	Deploy SeaSoar	
	47/0158	6268	40° 7.6'	16°34.2'					Recover SeaSoar	
Recover mooring 835										
	47/0948	6288	40°14.2'	16°36.2'	160°				Deploy SeaSoar	
	47/1310	6338	40°37.3'	16°53.7'					Temp. sensor failure, data irrecoverable, recover and steam on	
Recover mooring 836										
7	48/1109	6536	41°55.6'	17°45.5'	045°	11, 12			Deploy SeaSoar	
	49/0424	6792	40° 8.6'	19°36.6'	270°	12, 13			a/c	
	49/2217	7047	40° 7.3'	16°36.7'	130°	13, 14			a/c	
	50/1841	7350	41°56.2'	19°16.1'	090°	15			a/c	
	51/0340	7495	41°57.6'	20°57.4'	000°	16			a/c	
	51/0824	7568	41°19.4'	20°58.4'	270°	16, 17			a/c	
	52/0253	7816	41°19.9'	18° 0.7'			87.7	1280	Cable failure, recover	
	Recover mooring 835									
	8	52/0721	7831	41°27.2'	17°58.7'	315°	18			Deploy SeaSoar after repair
		52/1132	7873	41°13.0'	17°37.4'	045°	18, 19			a/c to increase speed
52/1710		7960	40°41.6'	18°22.5'	080°	19, 20			a/c	
53/0702		8212	40°32.4'	21°20.5'	045°				a/c	
53/1400		8315	39°55.2'	22° 5.9'			30.7	484	Recover SeaSoar while still possible to do so in worsening weather	

Total distance run: 3705km

Total duration: 257.5 hours = 10d 17.5h

TABLE 3

(a) Salinity calibrations on Cruise 165A

Position in water column	No. in sample	$S_B - S_{CTD}$		S_{CTD}	
		mean	std.dev.	mean	std.dev.
Surface	9	-0.002	0.003	35.570	.079
Thermocline	9	0.003	0.004	35.017	.185
Oxygen maximum	10	0.007	0.005		
Oxygen minimum	10	0.008	0.006		
3000dbar	8	0.007	0.003		
Bottom	10	0.003	0.003		
Bottom 4 levels	38	0.006	0.005	34.642	.160

(b) Comparison of corrected salinities

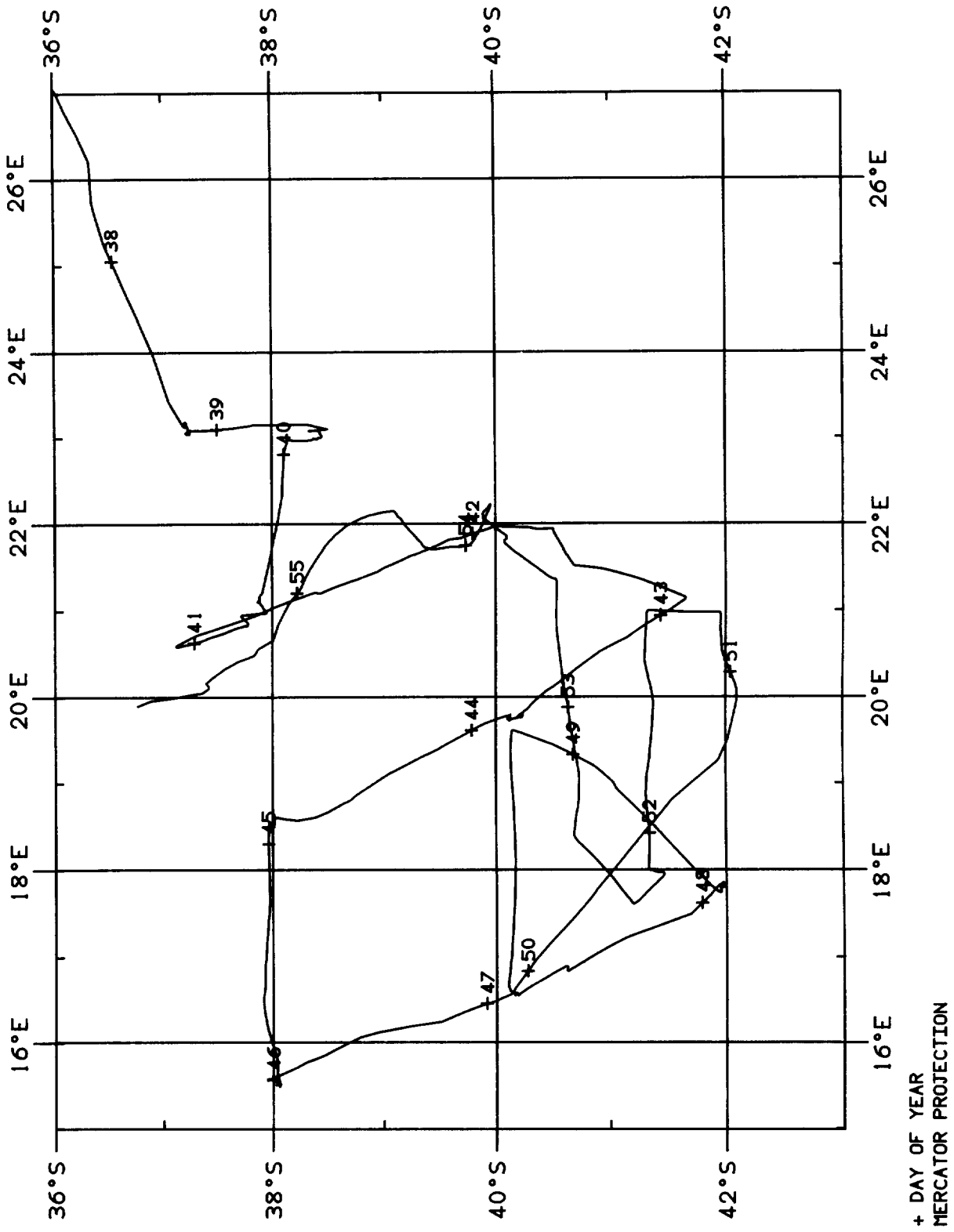
$$S_{CORR} = 0.9909095 * S_{CTD} + 0.3213$$

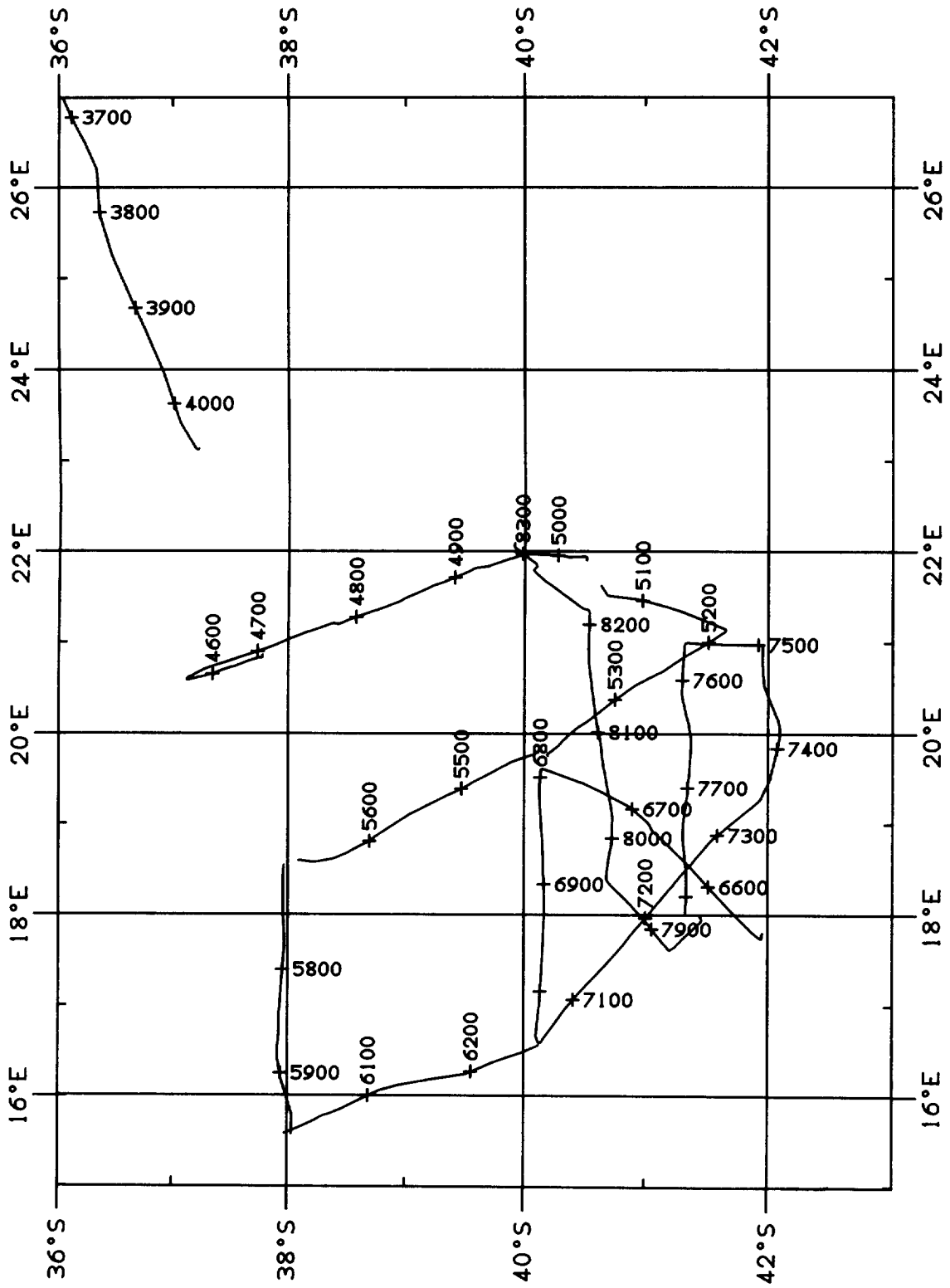
S_{CTD}	S_{COR}
35.570	35.568
35.017	35.020
34.642	34.648

TABLE 4

Oxygen calibration constants on Cruise 165A

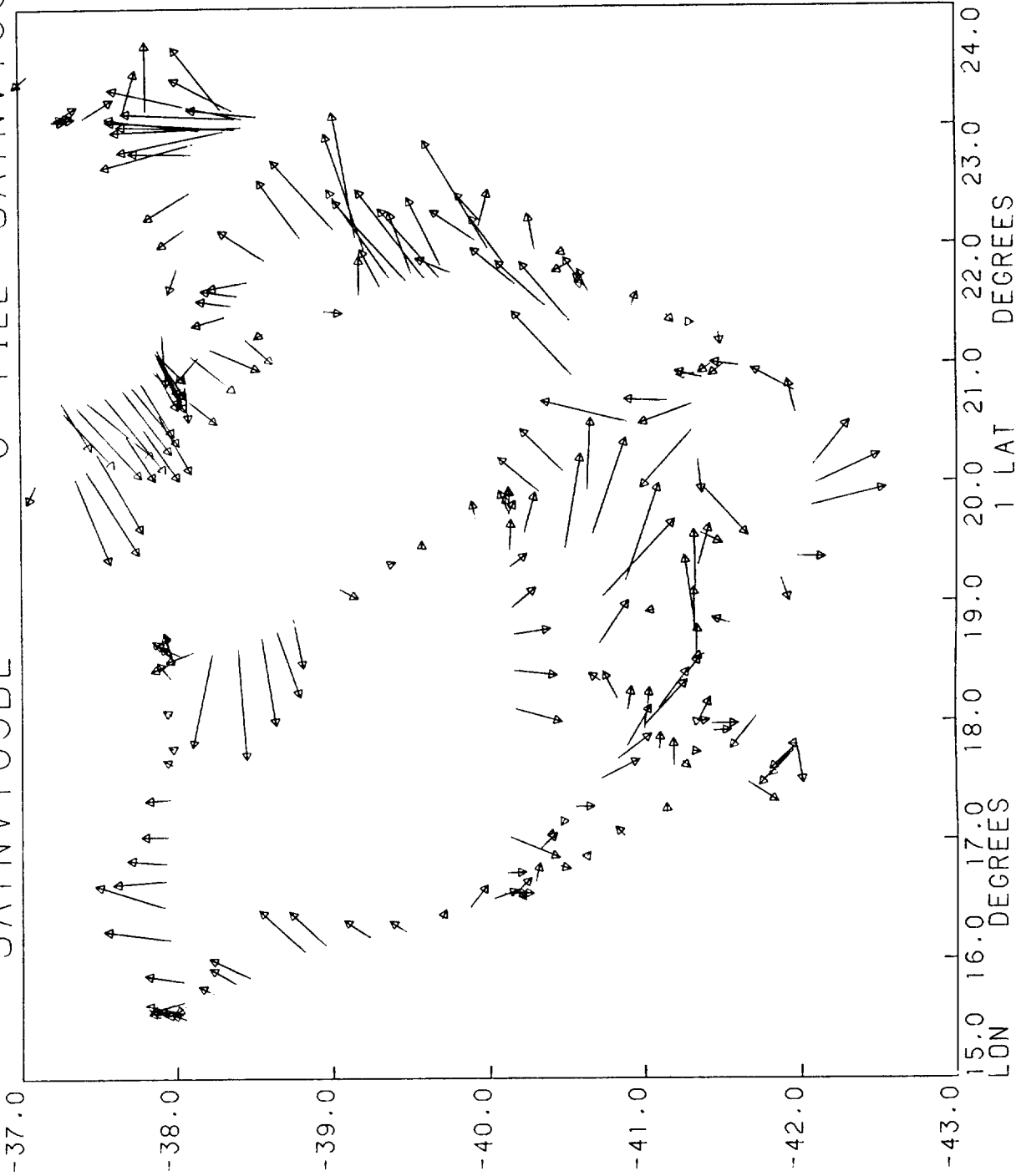
Cast 114--	$C * 10^3$	ALPHA ($^{\circ}C^{-1}$)	BETA * 10^3 (DBAR $^{-1}$)	No. in sample	std.dev. of $O_B - O_{CTD}$ (ml/l)
62	1.398	-0.0322	0.143	6	0.06
65	1.551	-0.0343	0.126	6	0.22
63-66	1.471	-0.0344	0.135	24	0.20
67-71	1.331	-0.0343	0.133	29	0.24





+ DISTANCE RUN (KM)
MERCATOR PROJECTION

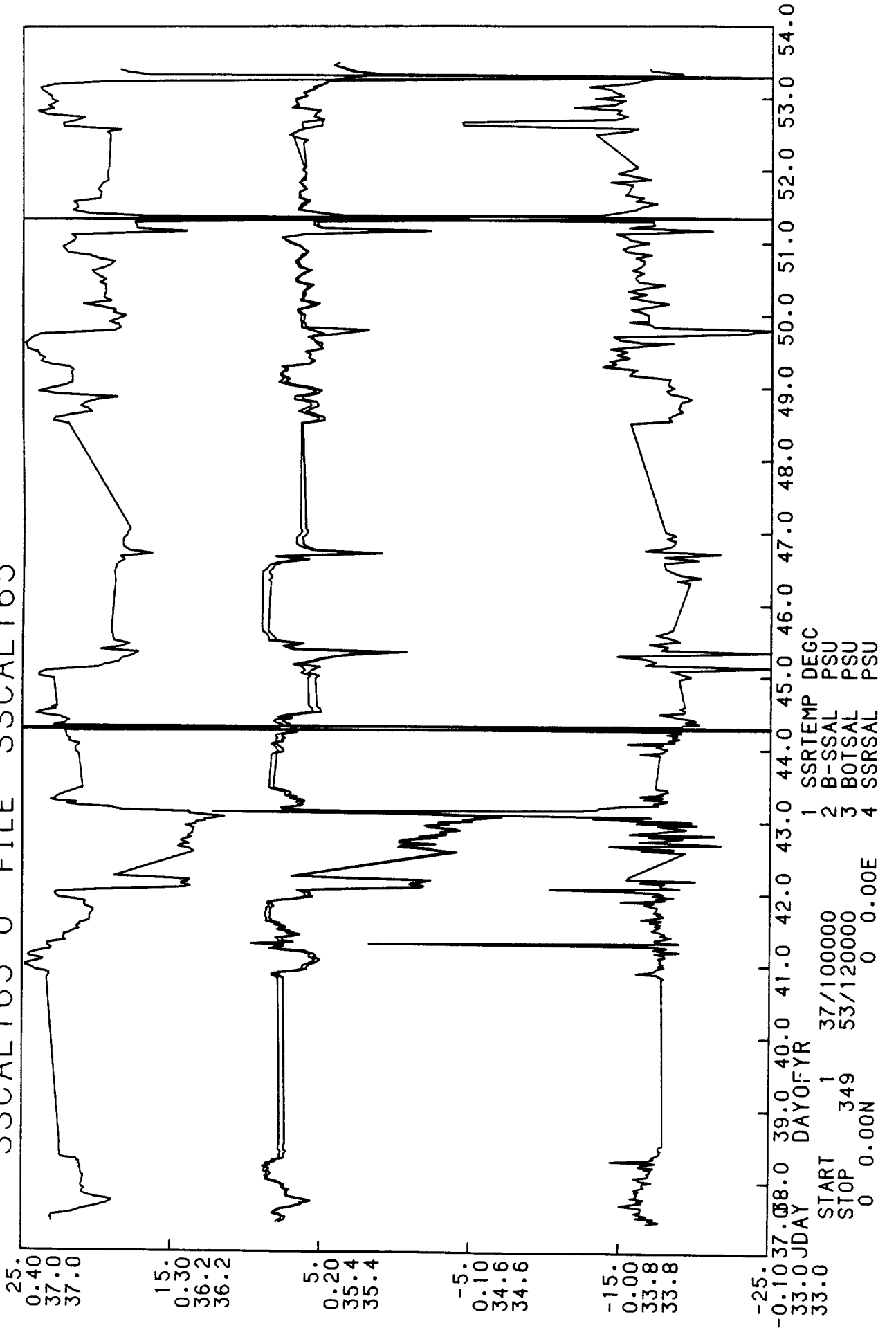
SATNV165BL 0 FILE: SATNV165



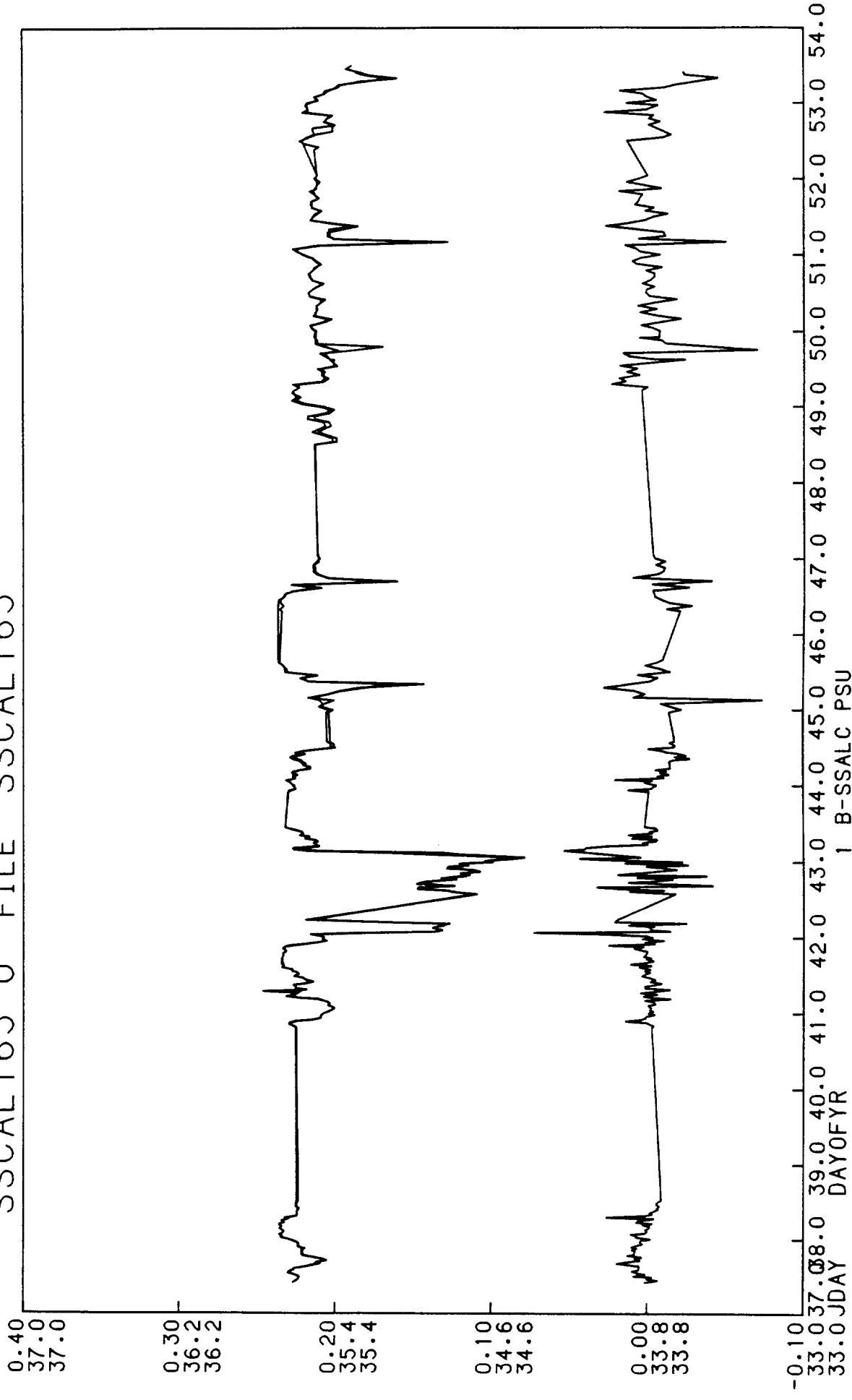
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STOP 479 55/165824
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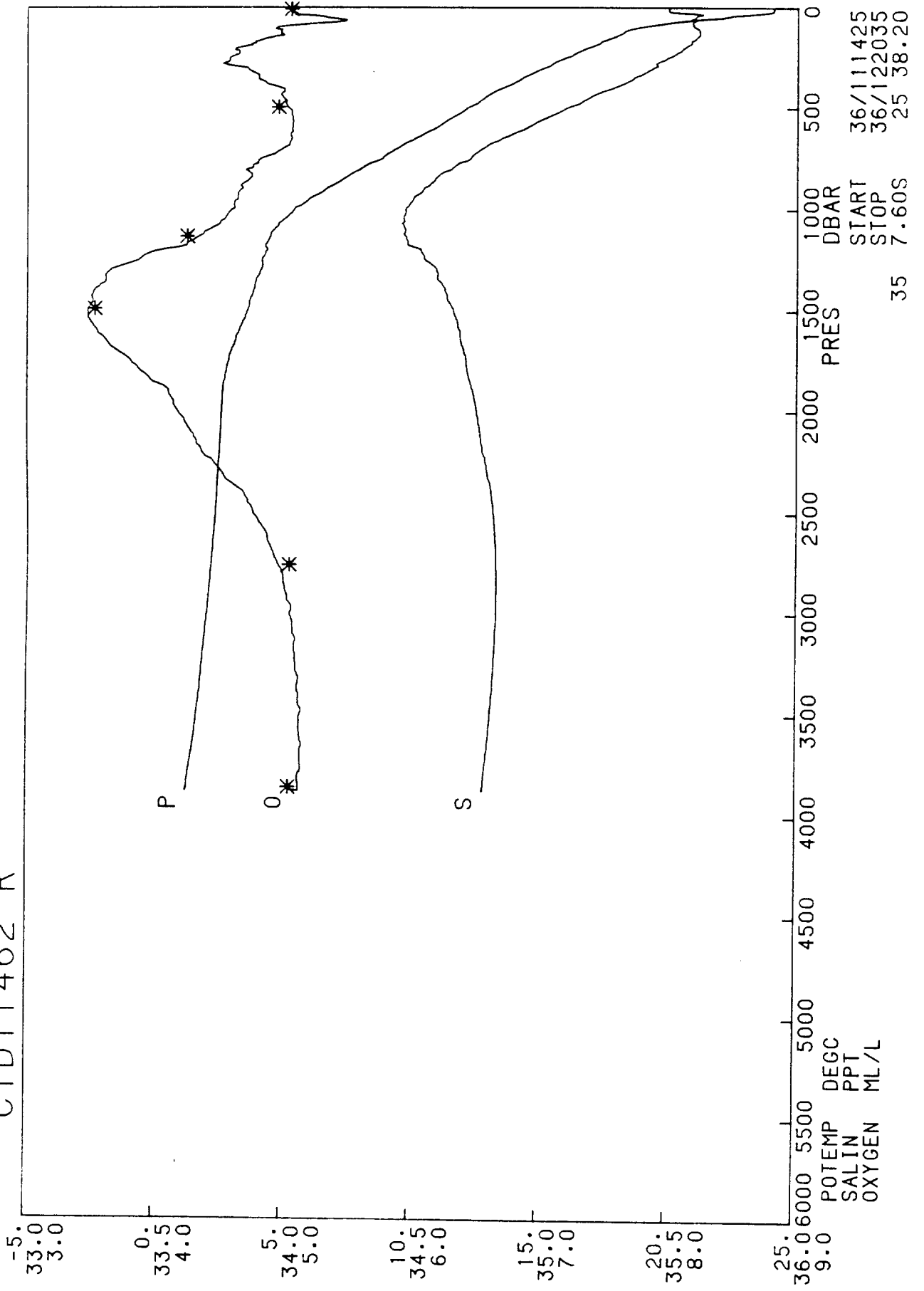


SSCAL165 0 FILE SSCAL165



33.0 JDAY
37.0 39.0 40.0 41.0 42.0 43.0 44.0 45.0 46.0 47.0 48.0 49.0 50.0 51.0 52.0 53.0 54.0
33.0 DAYOFYR
START 1 37/100000
STOP 349 53/120000
0 0.00N 0 0.00E
1 B-SSALC PSU
2 BOTSAI PSU
3 SSRSALC PSU

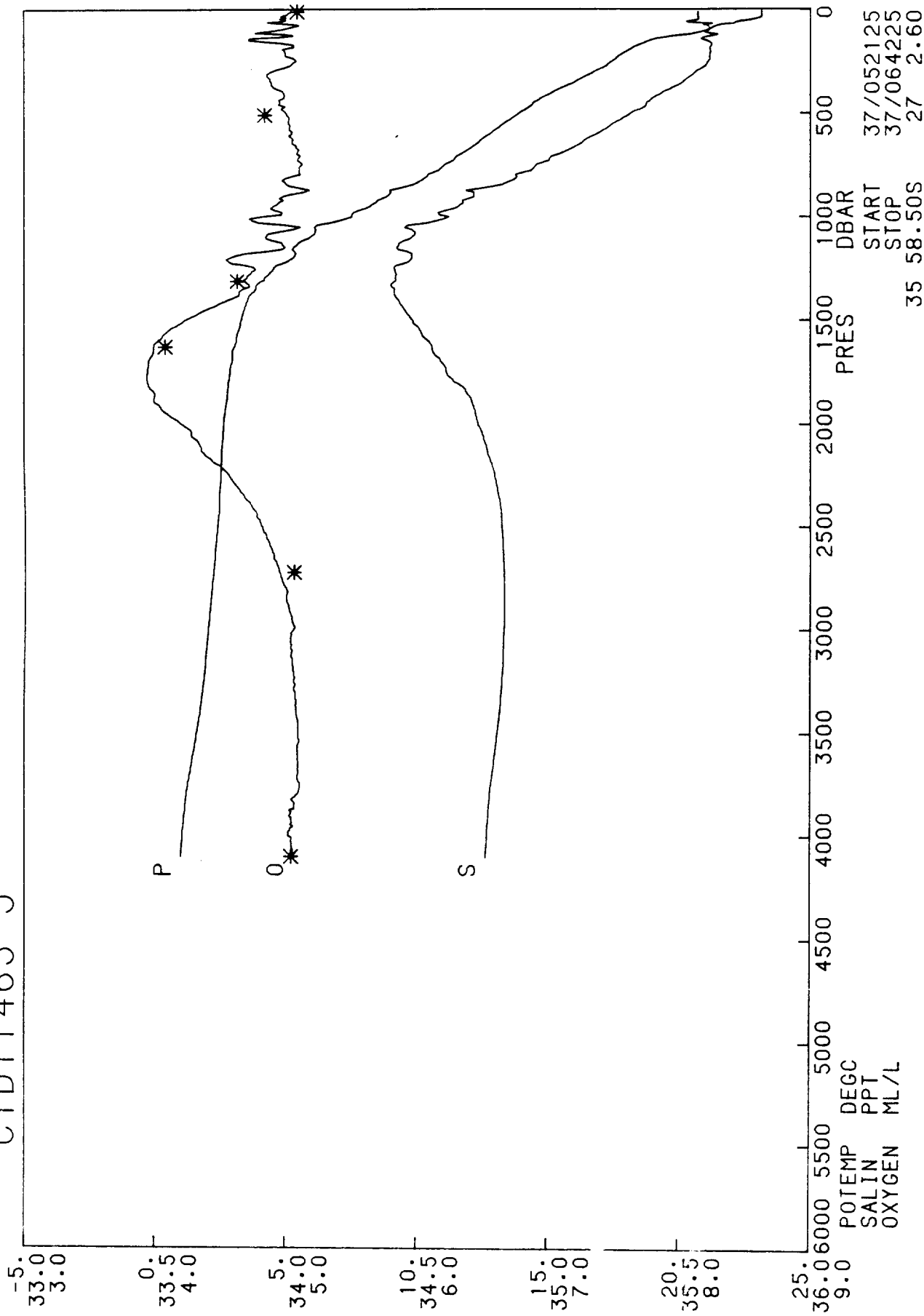
CTD11462 R



DISCOVERY 165 STATION 11462

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	SIGMA0 KG/M ³	SIG2000 KG/M ³	SIG4000 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	24.067	35.499	5.08	24.065	24.001	32.330	40.302	0.039	1532.8	10.	390.35	-999.000
20.	23.975	35.507	5.07	23.971	24.036	32.367	40.341	0.078	1532.8	20.	387.50	3.304
40.	22.428	35.606	5.25	22.420	24.561	32.933	40.946	0.151	1529.3	40.	338.28	9.113
60.	20.989	35.602	5.48	20.978	24.960	33.373	41.425	0.216	1525.8	60.	301.05	7.949
80.	19.696	35.592	5.20	19.681	25.298	33.751	41.839	0.272	1522.6	79.	269.57	7.323
100.	18.720	35.606	4.94	18.702	25.562	34.044	42.162	0.324	1520.2	99.	245.17	6.469
120.	18.249	35.618	4.98	18.228	25.690	34.188	42.319	0.371	1519.2	119.	233.70	4.511
140.	17.967	35.612	4.96	17.943	25.756	34.263	42.403	0.418	1518.7	139.	228.09	3.252
160.	17.551	35.595	4.82	17.524	25.845	34.367	42.520	0.463	1517.8	159.	220.22	3.784
180.	17.263	35.581	4.75	17.233	25.906	34.437	42.599	0.506	1517.3	179.	215.17	3.102
200.	16.842	35.557	4.64	16.809	25.988	34.534	42.709	0.548	1516.3	198.	207.91	3.643
220.	16.487	35.537	4.65	16.452	26.057	34.615	42.802	0.589	1515.5	218.	201.93	3.337
240.	16.206	35.511	4.61	16.168	26.103	34.671	42.868	0.629	1515.0	238.	198.14	2.732
260.	15.790	35.480	4.58	15.749	26.175	34.758	42.969	0.668	1514.0	258.	191.82	3.418
280.	15.487	35.449	4.53	15.443	26.220	34.814	43.036	0.706	1513.4	278.	188.07	2.713
300.	15.169	35.440	4.71	15.123	26.285	34.890	43.122	0.743	1512.7	298.	182.49	3.225
320.	14.811	35.411	4.76	14.762	26.342	34.961	43.205	0.779	1511.8	317.	177.50	3.068
340.	14.477	35.378	4.81	14.426	26.389	35.021	43.277	0.814	1511.1	337.	173.43	2.799
360.	14.214	35.351	4.82	14.161	26.425	35.067	43.332	0.849	1510.5	357.	170.50	2.437
380.	13.923	35.320	4.88	13.867	26.463	35.116	43.392	0.882	1509.9	377.	167.34	2.510
400.	13.557	35.279	4.98	13.500	26.508	35.175	43.464	0.916	1509.0	397.	163.44	2.743
450.	12.850	35.184	5.00	12.788	26.578	35.274	43.590	0.996	1507.3	446.	157.64	2.201
500.	12.193	35.097	5.04	12.127	26.640	35.363	43.704	1.073	1505.8	496.	152.54	2.082
550.	11.570	35.015	5.07	11.499	26.696	35.445	43.810	1.148	1504.4	545.	147.96	1.988
600.	10.957	34.940	5.06	10.882	26.750	35.525	43.916	1.221	1503.0	595.	143.36	1.981
700.	9.454	34.771	4.99	9.373	26.879	35.720	44.172	1.359	1499.1	694.	131.49	2.179
800.	8.063	34.653	4.72	7.979	27.004	35.908	44.420	1.484	1495.5	793.	119.40	2.174
900.	6.709	34.544	4.67	6.623	27.111	36.080	44.651	1.599	1491.8	892.	108.46	2.062
1000.	5.481	34.475	4.59	5.394	27.213	36.241	44.870	1.702	1488.5	990.	97.62	2.030
1100.	4.698	34.475	4.41	4.608	27.304	36.372	45.037	1.795	1486.9	1089.	88.32	1.880
1200.	4.439	34.536	4.03	4.342	27.381	36.461	45.138	1.880	1487.6	1188.	81.47	1.635
1300.	4.202	34.598	3.64	4.099	27.456	36.548	45.236	1.958	1488.4	1287.	74.79	1.614
1400.	3.935	34.630	3.52	3.825	27.510	36.615	45.316	2.031	1489.0	1385.	69.88	1.411
1500.	3.713	34.663	3.47	3.597	27.559	36.676	45.387	2.098	1489.7	1484.	65.40	1.352
1600.	3.389	34.688	3.55	3.268	27.611	36.745	45.471	2.161	1490.1	1582.	60.26	1.426
1700.	3.099	34.703	3.70	2.973	27.651	36.800	45.541	2.219	1490.5	1681.	56.16	1.289
1800.	2.903	34.717	3.89	2.770	27.680	36.840	45.591	2.274	1491.4	1779.	53.29	1.107
1900.	2.783	34.739	4.11	2.643	27.709	36.876	45.633	2.326	1492.6	1878.	50.73	1.055
2000.	2.745	34.754	4.18	2.597	27.725	36.894	45.653	2.376	1494.1	1976.	49.76	0.754
2100.	2.713	34.767	4.28	2.556	27.739	36.909	45.671	2.425	1495.7	2074.	48.98	0.708
2200.	2.674	34.778	4.37	2.509	27.751	36.924	45.688	2.474	1497.2	2173.	48.28	0.688
2300.	2.620	34.796	4.52	2.447	27.771	36.947	45.713	2.522	1498.7	2271.	46.81	0.855
2400.	2.576	34.812	4.69	2.394	27.788	36.967	45.736	2.568	1500.2	2369.	45.60	0.803
2500.	2.539	34.821	4.77	2.348	27.800	36.981	45.752	2.613	1501.8	2467.	44.96	0.665
2600.	2.480	34.827	4.87	2.280	27.810	36.995	45.769	2.658	1503.2	2565.	44.22	0.691
2700.	2.427	34.831	4.93	2.219	27.818	37.006	45.783	2.701	1504.7	2663.	43.73	0.623
2800.	2.372	34.833	5.00	2.155	27.825	37.017	45.797	2.745	1506.1	2761.	43.26	0.616
2900.	2.312	34.833	5.03	2.087	27.831	37.026	45.810	2.788	1507.6	2859.	42.90	0.578
3000.	2.268	34.832	5.05	2.034	27.834	37.032	45.819	2.831	1509.1	2957.	42.82	0.490
3100.	2.197	34.828	5.08	1.954	27.838	37.040	45.831	2.874	1510.5	3055.	42.47	0.570
3200.	2.132	34.825	5.10	1.881	27.841	37.048	45.843	2.916	1511.9	3153.	42.15	0.557
3300.	2.072	34.821	5.12	1.812	27.843	37.054	45.852	2.958	1513.4	3251.	41.95	0.515
3400.	2.000	34.816	5.13	1.731	27.845	37.060	45.863	3.000	1514.8	3348.	41.66	0.543
3500.	1.915	34.810	5.13	1.638	27.848	37.068	45.876	3.041	1516.1	3446.	41.17	0.597
3600.	1.835	34.803	5.13	1.550	27.849	37.074	45.886	3.082	1517.5	3544.	40.80	0.555
3700.	1.720	34.795	5.14	1.427	27.851	37.083	45.902	3.122	1518.7	3641.	39.95	0.684
3800.	1.604	34.786	5.12	1.303	27.853	37.092	45.918	3.162	1519.9	3739.	39.09	0.682

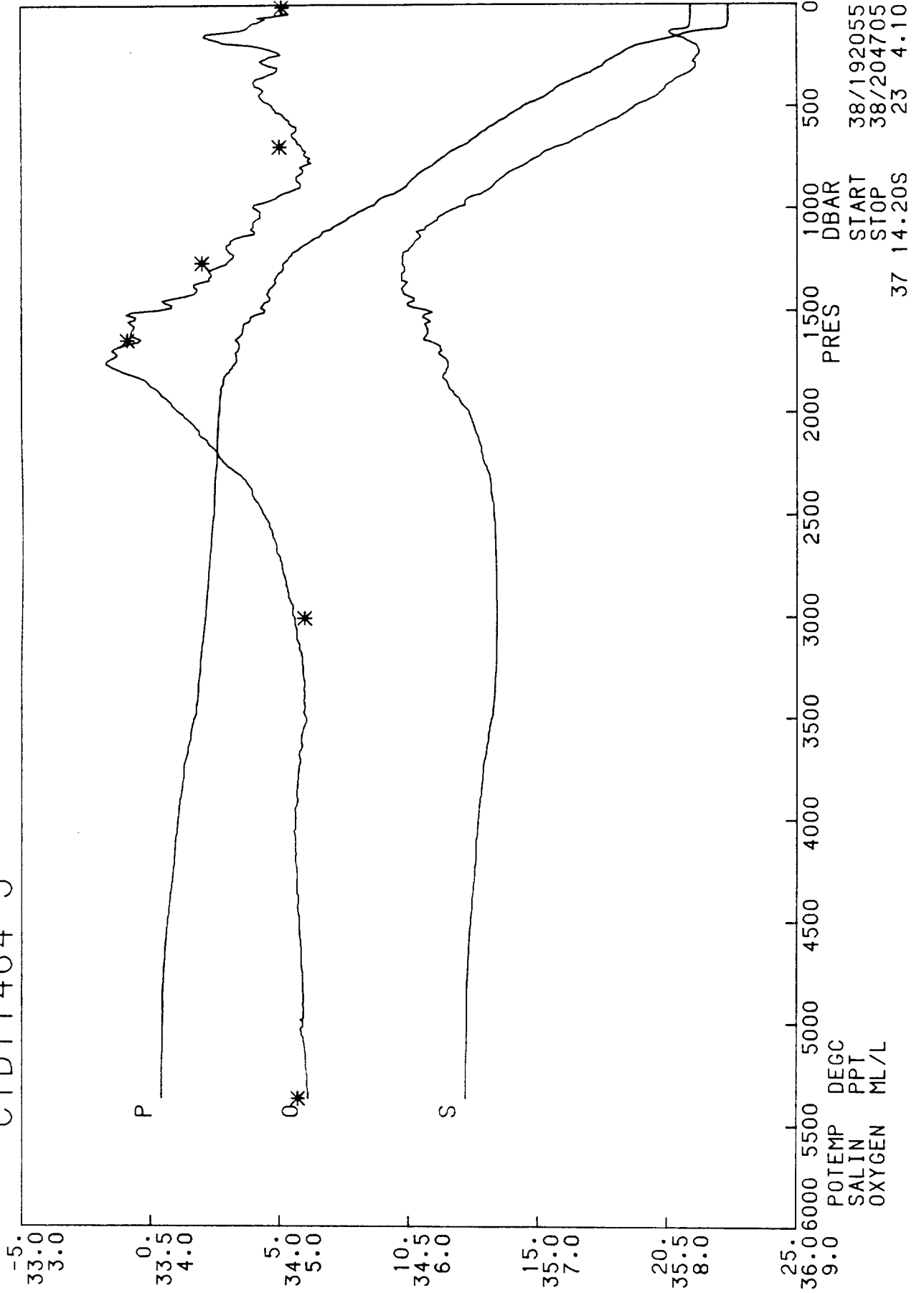
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DISCOVERY 165 STATION 11463

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	SIGMA0 KG/M ³	SIG2000 KG/M ³	SIG4000 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
20.	23.148	35.572	5.02	23.143	24.328	32.680	40.674	0.072	1530.8	20.	359.68	-999.000
40.	23.075	35.576	5.00	23.067	24.353	32.707	40.704	0.144	1530.9	40.	358.13	2.002
60.	22.225	35.533	4.91	22.213	24.564	32.943	40.962	0.214	1529.0	60.	338.81	5.786
80.	21.413	35.609	5.09	21.398	24.850	33.251	41.291	0.279	1527.3	79.	312.40	6.726
100.	21.068	35.611	4.94	21.049	24.947	33.358	41.408	0.340	1526.7	99.	303.96	3.921
120.	20.421	35.642	4.97	20.399	25.147	33.577	41.645	0.400	1525.3	119.	285.64	5.639
140.	19.160	35.583	4.73	19.134	25.434	33.903	42.008	0.454	1522.1	139.	258.94	6.761
160.	18.704	35.620	4.91	18.676	25.579	34.062	42.180	0.504	1521.2	159.	245.84	4.802
180.	18.317	35.618	5.06	18.286	25.675	34.171	42.301	0.552	1520.4	179.	237.31	3.931
200.	18.054	35.620	4.99	18.020	25.743	34.248	42.385	0.599	1520.0	198.	231.56	3.289
220.	17.781	35.616	5.00	17.743	25.808	34.322	42.468	0.645	1519.5	218.	226.02	3.233
240.	17.597	35.616	5.07	17.556	25.854	34.374	42.525	0.690	1519.3	238.	222.36	2.706
260.	17.365	35.605	5.05	17.322	25.902	34.430	42.589	0.734	1518.9	258.	218.38	2.798
280.	17.156	35.588	5.00	17.109	25.941	34.476	42.642	0.777	1518.6	278.	215.36	2.497
300.	16.828	35.563	4.90	16.779	26.000	34.546	42.723	0.820	1517.9	298.	210.30	3.100
320.	16.532	35.544	4.86	16.479	26.056	34.613	42.799	0.861	1517.3	317.	205.54	3.019
340.	16.218	35.523	4.88	16.164	26.113	34.681	42.878	0.902	1516.7	337.	200.62	3.060
360.	15.941	35.503	4.89	15.884	26.162	34.740	42.946	0.942	1516.1	357.	196.52	2.824
380.	15.565	35.470	4.92	15.506	26.223	34.814	43.033	0.981	1515.3	377.	191.22	3.157
400.	15.245	35.437	4.98	15.184	26.269	34.873	43.103	1.018	1514.6	397.	187.22	2.787
450.	14.518	35.375	4.96	14.450	26.382	35.013	43.268	1.110	1513.0	446.	177.60	2.737
500.	13.988	35.317	5.00	13.915	26.451	35.102	43.376	1.197	1512.1	496.	172.20	2.155
550.	13.405	35.249	5.02	13.327	26.520	35.194	43.490	1.282	1510.9	545.	166.54	2.186
600.	12.875	35.186	5.05	12.792	26.580	35.275	43.591	1.364	1509.9	595.	161.78	2.036
700.	11.724	35.031	5.09	11.632	26.684	35.427	43.787	1.521	1507.5	694.	153.18	1.947
800.	10.513	34.880	5.08	10.414	26.787	35.582	43.991	1.670	1504.7	793.	144.07	1.971
900.	8.986	34.720	4.99	8.884	26.917	35.780	44.253	1.808	1500.6	891.	131.23	2.247
1000.	7.632	34.614	4.85	7.528	27.040	35.965	44.497	1.934	1497.1	990.	118.74	2.199
1100.	6.061	34.482	4.85	5.960	27.149	36.150	44.752	2.045	1492.5	1089.	106.37	2.167
1200.	5.414	34.482	4.59	5.309	27.228	36.261	44.893	2.147	1491.5	1188.	98.49	1.761
1300.	4.300	34.418	4.70	4.196	27.303	36.393	45.078	2.241	1488.5	1286.	89.29	1.867
1400.	3.672	34.427	4.59	3.565	27.374	36.496	45.212	2.326	1487.6	1385.	81.49	1.718
1500.	3.418	34.482	4.24	3.305	27.443	36.579	45.307	2.405	1488.3	1484.	74.96	1.578
1600.	3.228	34.541	4.03	3.109	27.509	36.654	45.390	2.477	1489.2	1582.	68.96	1.517
1700.	3.083	34.591	3.95	2.957	27.563	36.715	45.458	2.543	1490.3	1681.	64.14	1.376
1800.	2.943	34.643	3.94	2.810	27.617	36.776	45.526	2.605	1491.5	1779.	59.24	1.383
1900.	2.872	34.712	4.00	2.731	27.680	36.842	45.595	2.660	1492.9	1878.	53.87	1.437
2000.	2.777	34.734	4.20	2.628	27.706	36.874	45.632	2.713	1494.2	1976.	51.62	1.004
2100.	2.722	34.764	4.34	2.565	27.736	36.906	45.667	2.763	1495.7	2074.	49.32	1.010
2200.	2.691	34.788	4.48	2.526	27.759	36.930	45.693	2.812	1497.3	2173.	47.72	0.883
2300.	2.654	34.806	4.62	2.480	27.777	36.951	45.715	2.859	1498.9	2271.	46.51	0.806
2400.	2.620	34.820	4.74	2.437	27.791	36.967	45.734	2.905	1500.4	2369.	45.60	0.737
2500.	2.552	34.824	4.82	2.361	27.802	36.982	45.752	2.950	1501.8	2467.	44.87	0.691
2600.	2.492	34.830	4.88	2.293	27.812	36.996	45.769	2.995	1503.3	2565.	44.16	0.685
2700.	2.435	34.833	4.94	2.227	27.820	37.007	45.784	3.039	1504.7	2663.	43.65	0.628
2800.	2.370	34.834	5.00	2.153	27.827	37.018	45.799	3.082	1506.1	2761.	43.15	0.625
2900.	2.312	34.835	5.02	2.086	27.833	37.028	45.812	3.125	1507.6	2859.	42.72	0.599
3000.	2.255	34.833	5.06	2.020	27.836	37.035	45.823	3.168	1509.0	2957.	42.51	0.530
3100.	2.198	34.830	5.05	1.955	27.839	37.041	45.832	3.210	1510.5	3055.	42.38	0.499
3200.	2.153	34.827	5.06	1.901	27.841	37.047	45.841	3.252	1512.0	3153.	42.31	0.476
3300.	2.076	34.822	5.07	1.816	27.844	37.054	45.852	3.295	1513.4	3250.	41.96	0.563
3400.	1.991	34.816	5.08	1.722	27.846	37.062	45.865	3.336	1514.7	3348.	41.51	0.590
3500.	1.864	34.806	5.09	1.588	27.848	37.071	45.882	3.377	1515.9	3446.	40.66	0.690
3600.	1.742	34.797	5.09	1.458	27.851	37.081	45.898	3.418	1517.0	3544.	39.79	0.691
3700.	1.612	34.787	5.09	1.321	27.852	37.091	45.916	3.457	1518.2	3641.	38.82	0.707
3800.	1.486	34.778	5.09	1.189	27.854	37.100	45.932	3.495	1519.4	3739.	37.84	0.705
3900.	1.411	34.771	5.03	1.105	27.855	37.105	45.942	3.533	1520.7	3836.	37.41	0.547
4000.	1.347	34.766	5.02	1.032	27.855	37.110	45.951	3.570	1522.2	3934.	37.02	0.532
4100.	1.301	34.763	5.05	0.976	27.856	37.114	45.958	3.607	1523.7	4031.	36.78	0.476

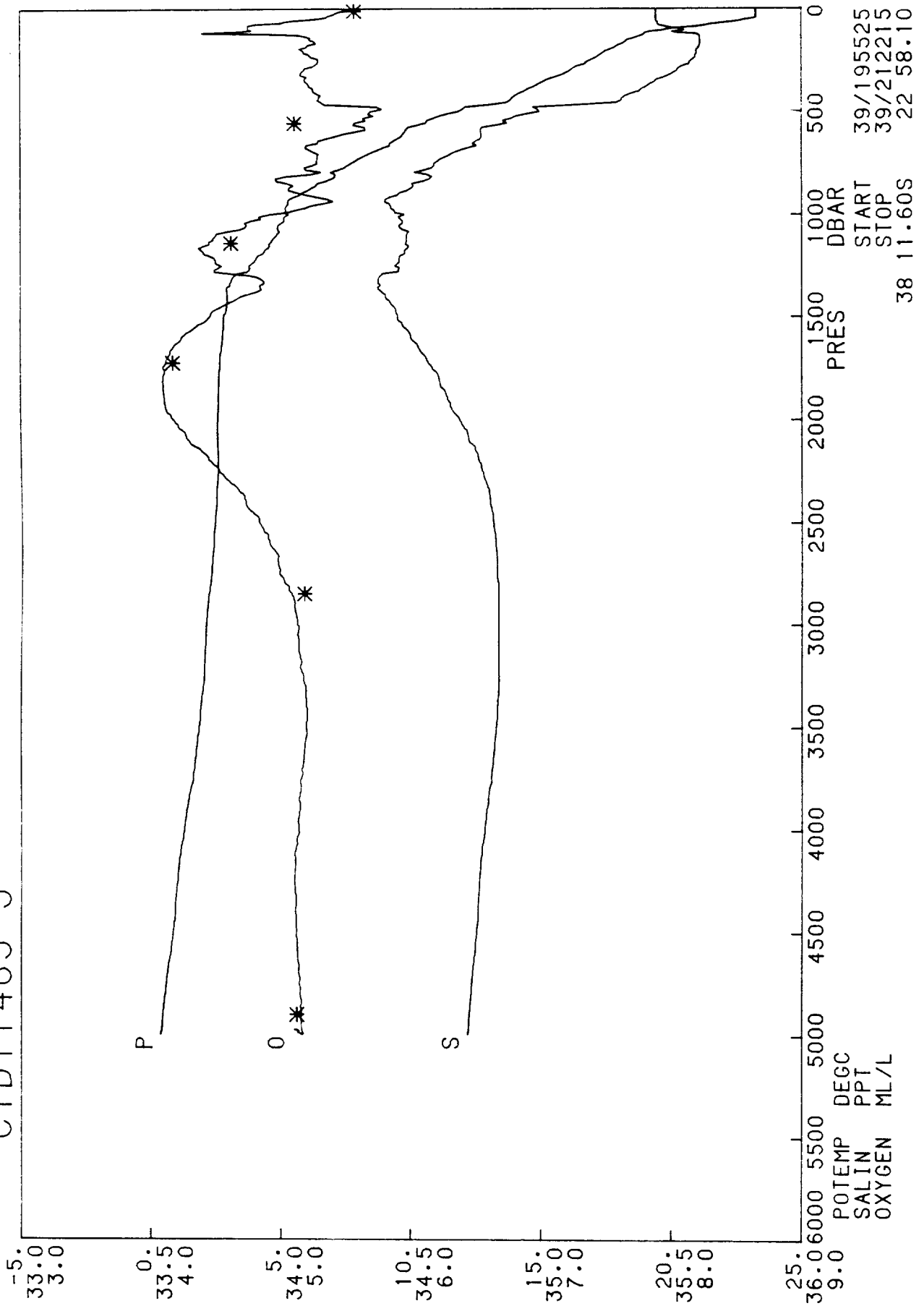
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DISCOVERY 165 STATION 11464

PRES	TEMP	SALIN	DO	POTEMP	SIGMA0	SIG2000	SIG4000	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	KG/M ³	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
20.	22.356	35.590	5.01	22.352	24.568	32.942	40.957	0.067	1528.8	20.	336.75	-999.000
40.	22.361	35.590	5.01	22.353	24.568	32.942	40.957	0.135	1529.1	40.	337.62	-0.119
60.	22.359	35.589	4.88	22.347	24.569	32.943	40.958	0.202	1529.4	60.	338.41	0.338
80.	22.359	35.588	4.85	22.343	24.570	32.944	40.959	0.270	1529.8	79.	339.18	0.358
100.	22.334	35.585	4.77	22.314	24.575	32.950	40.966	0.338	1530.0	99.	339.52	0.930
120.	21.949	35.552	4.72	21.925	24.659	33.046	41.073	0.405	1529.3	119.	332.24	3.673
140.	20.721	35.511	4.46	20.694	24.968	33.390	41.451	0.469	1526.3	139.	303.55	7.001
160.	20.204	35.551	4.44	20.174	25.137	33.575	41.650	0.528	1525.3	159.	288.12	5.194
180.	19.498	35.584	4.55	19.465	25.348	33.808	41.903	0.583	1523.7	179.	268.66	5.803
200.	18.816	35.613	4.80	18.781	25.547	34.027	42.142	0.635	1522.2	198.	250.40	5.628
220.	18.459	35.621	4.93	18.420	25.644	34.136	42.261	0.685	1521.5	218.	241.80	3.947
240.	18.223	35.621	5.00	18.181	25.704	34.203	42.336	0.732	1521.1	238.	236.84	3.083
260.	17.932	35.608	4.91	17.888	25.767	34.276	42.417	0.779	1520.6	258.	231.50	3.183
280.	17.668	35.601	4.86	17.620	25.827	34.344	42.494	0.825	1520.1	278.	226.43	3.110
300.	17.509	35.608	4.93	17.458	25.872	34.395	42.550	0.870	1520.0	298.	222.78	2.700
320.	17.202	35.596	4.98	17.149	25.937	34.471	42.635	0.914	1519.4	317.	217.17	3.248
340.	16.902	35.572	4.92	16.846	25.991	34.535	42.709	0.957	1518.8	337.	212.62	2.963
360.	16.528	35.538	4.85	16.469	26.054	34.611	42.798	0.999	1518.0	357.	207.14	3.209
380.	16.193	35.516	4.80	16.132	26.115	34.684	42.882	1.040	1517.3	377.	201.82	3.168
400.	15.847	35.494	4.82	15.783	26.178	34.760	42.969	1.080	1516.5	397.	196.29	3.217
450.	15.329	35.454	4.85	15.259	26.266	34.866	43.093	1.176	1515.7	446.	189.27	2.408
500.	14.488	35.374	4.94	14.413	26.389	35.021	43.277	1.268	1513.8	496.	178.51	2.873
550.	13.893	35.317	5.03	13.812	26.472	35.127	43.405	1.355	1512.6	545.	171.56	2.382
600.	13.217	35.232	5.12	13.132	26.547	35.229	43.532	1.439	1511.1	595.	165.27	2.280
700.	12.034	35.067	5.17	11.940	26.654	35.384	43.733	1.601	1508.6	694.	156.45	1.970
800.	10.864	34.927	5.16	10.763	26.762	35.541	43.936	1.752	1506.0	793.	147.03	2.003
900.	9.920	34.816	5.14	9.813	26.841	35.662	44.096	1.895	1504.2	891.	140.22	1.751
1000.	8.458	34.678	4.81	8.349	26.968	35.855	44.351	2.028	1500.3	990.	127.34	2.241
1100.	7.113	34.563	4.78	7.003	27.074	36.024	44.579	2.150	1496.7	1089.	116.03	2.099
1200.	5.843	34.501	4.59	5.734	27.192	36.204	44.816	2.259	1493.3	1188.	103.11	2.204
1300.	5.228	34.485	4.47	5.115	27.253	36.296	44.937	2.359	1492.4	1286.	96.82	1.599
1400.	4.711	34.476	4.36	4.593	27.306	36.374	45.040	2.453	1492.0	1385.	91.42	1.489
1500.	4.555	34.575	3.98	4.430	27.402	36.478	45.150	2.541	1493.1	1484.	83.01	1.792
1600.	3.690	34.573	3.85	3.565	27.491	36.611	45.325	2.617	1491.2	1582.	72.48	1.974
1700.	3.486	34.622	3.71	3.355	27.550	36.680	45.404	2.687	1492.1	1681.	67.05	1.461
1800.	3.187	34.644	3.78	3.050	27.597	36.743	45.481	2.752	1492.5	1779.	62.24	1.381
1900.	2.867	34.671	4.06	2.726	27.647	36.810	45.564	2.811	1492.9	1877.	56.81	1.447
2000.	2.805	34.733	4.22	2.656	27.703	36.868	45.625	2.866	1494.4	1976.	52.10	1.357
2100.	2.753	34.760	4.37	2.596	27.730	36.898	45.658	2.917	1495.9	2074.	50.04	0.970
2200.	2.731	34.782	4.52	2.565	27.750	36.920	45.681	2.966	1497.5	2172.	48.69	0.835
2300.	2.671	34.810	4.67	2.497	27.778	36.951	45.715	3.014	1498.9	2270.	46.48	0.995
2400.	2.632	34.819	4.79	2.448	27.790	36.965	45.731	3.060	1500.5	2369.	45.83	0.676
2500.	2.604	34.829	4.87	2.412	27.800	36.978	45.745	3.105	1502.1	2467.	45.30	0.641
2600.	2.535	34.833	4.94	2.335	27.811	36.992	45.764	3.150	1503.5	2565.	44.52	0.703
2700.	2.476	34.836	4.99	2.267	27.819	37.004	45.779	3.194	1504.9	2663.	44.03	0.629
2800.	2.433	34.838	5.03	2.215	27.824	37.012	45.790	3.238	1506.4	2761.	43.81	0.544
2900.	2.383	34.839	5.07	2.156	27.830	37.021	45.802	3.282	1507.9	2859.	43.48	0.577
3000.	2.344	34.841	5.11	2.107	27.835	37.029	45.812	3.325	1509.4	2957.	43.28	0.533
3100.	2.268	34.840	5.13	2.024	27.842	37.040	45.827	3.368	1510.8	3055.	42.68	0.646
3200.	2.193	34.838	5.18	1.940	27.847	37.050	45.842	3.411	1512.2	3152.	42.13	0.629
3300.	2.134	34.834	5.18	1.872	27.849	37.056	45.851	3.453	1513.7	3250.	41.96	0.510
3400.	2.090	34.831	5.19	1.819	27.850	37.060	45.858	3.495	1515.2	3348.	42.00	0.433
3500.	1.964	34.820	5.21	1.685	27.852	37.070	45.875	3.536	1516.3	3446.	41.19	0.685
3600.	1.825	34.808	5.17	1.540	27.853	37.079	45.892	3.577	1517.4	3543.	40.34	0.690
3700.	1.652	34.793	5.16	1.361	27.854	37.090	45.913	3.617	1518.4	3641.	39.03	0.789
3800.	1.558	34.785	5.14	1.259	27.855	37.097	45.925	3.655	1519.7	3738.	38.47	0.596
3900.	1.445	34.775	5.14	1.138	27.855	37.104	45.939	3.693	1520.9	3836.	37.70	0.649
4000.	1.358	34.767	5.12	1.043	27.855	37.110	45.950	3.731	1522.2	3933.	37.13	0.588
4100.	1.269	34.760	5.12	0.945	27.856	37.116	45.962	3.768	1523.6	4031.	36.45	0.613
4200.	1.247	34.758	5.12	0.913	27.857	37.119	45.966	3.804	1525.2	4128.	36.47	0.365
4300.	1.171	34.752	5.13	0.828	27.857	37.124	45.976	3.840	1526.6	4225.	35.90	0.576
4400.	1.081	34.744	5.14	0.730	27.857	37.130	45.987	3.876	1527.9	4323.	35.16	0.624
4500.	1.003	34.738	5.15	0.643	27.858	37.135	45.997	3.911	1529.3	4420.	34.49	0.597
4600.	0.941	34.732	5.16	0.572	27.857	37.139	46.005	3.945	1530.8	4517.	34.03	0.531
4700.	0.906	34.729	5.17	0.527	27.857	37.142	46.010	3.979	1532.4	4614.	33.83	0.433
4800.	0.863	34.724	5.18	0.473	27.857	37.145	46.016	4.012	1533.9	4711.	33.54	0.470
4900.	0.857	34.724	5.18	0.456	27.857	37.146	46.018	4.046	1535.6	4809.	33.65	0.282
5000.	0.856	34.723	5.18	0.443	27.857	37.147	46.020	4.080	1537.4	4906.	33.81	0.243
5100.	0.862	34.722	5.19	0.437	27.857	37.147	46.020	4.114	1539.1	5003.	34.10	0.145
5200.	0.840	34.719	5.20	0.404	27.857	37.149	46.024	4.148	1540.8	5099.	34.01	0.388
5300.	0.852	34.719	5.21	0.404	27.857	37.149	46.024	4.182	1542.6	5196.	34.37	-0.077

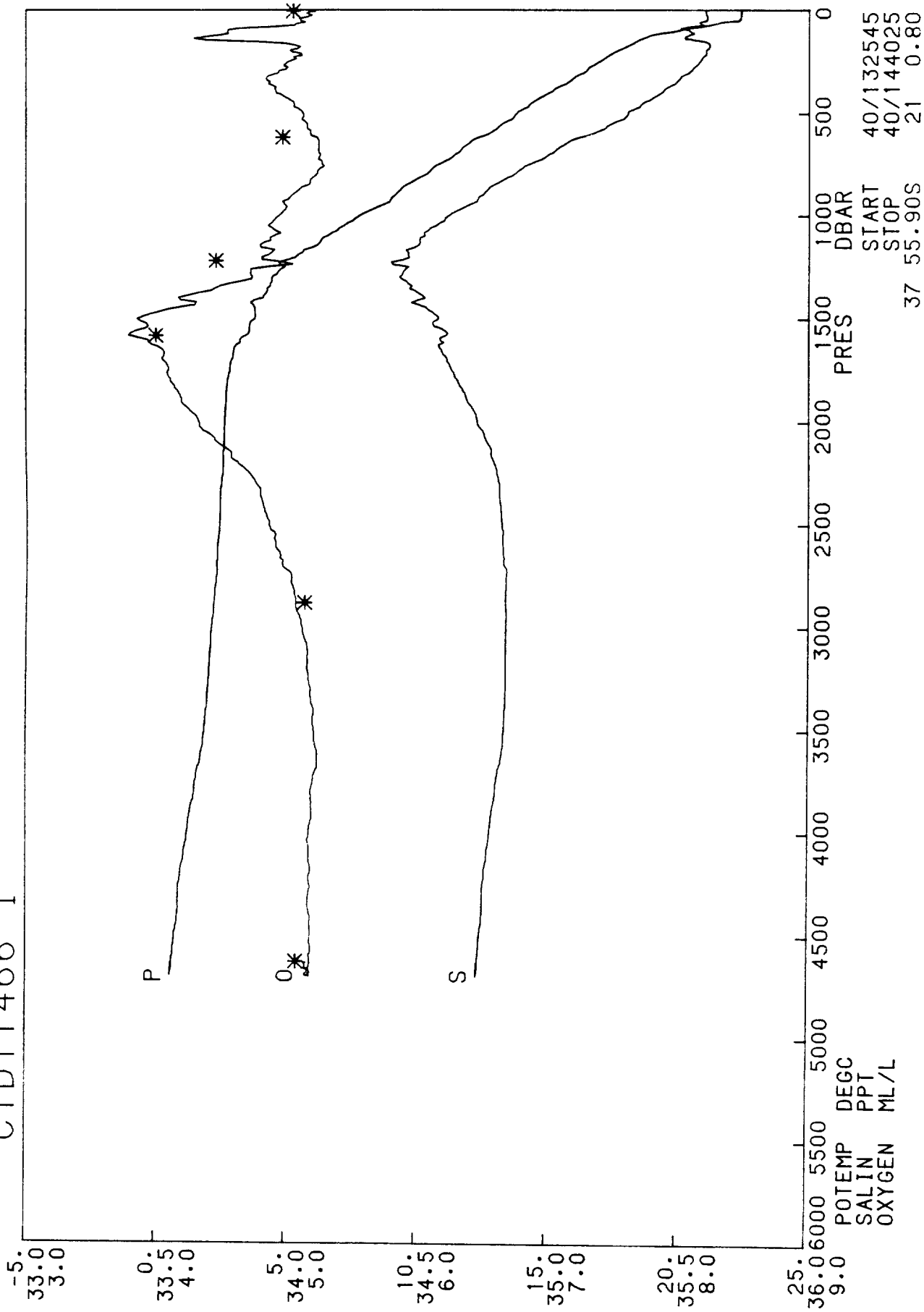
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DISCOVERY 165 STATION 11465

PRES	TEMP	SALIN	DO	POTEMP	SIGMA0	SIG2000	SIG4000	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	KG/M ³	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	23.253	35.443	5.56	23.251	24.198	32.549	40.542	0.037	1530.7	10.	371.56	-999.000
20.	23.263	35.443	5.43	23.259	24.196	32.547	40.540	0.074	1530.9	20.	372.21	-0.833
40.	23.265	35.443	5.36	23.257	24.197	32.547	40.541	0.149	1531.3	40.	373.02	0.322
60.	22.671	35.444	5.10	22.659	24.370	32.737	40.746	0.222	1530.1	60.	357.35	5.235
80.	21.405	35.456	4.78	21.390	24.735	33.138	41.181	0.290	1527.1	79.	323.30	7.609
100.	19.924	35.544	4.75	19.905	25.203	33.649	41.732	0.351	1523.5	99.	279.44	8.613
120.	19.023	35.537	4.54	19.001	25.433	33.907	42.016	0.405	1521.3	119.	258.22	6.047
140.	18.674	35.611	5.21	18.650	25.578	34.063	42.182	0.455	1520.7	139.	245.09	4.807
160.	18.282	35.611	5.26	18.254	25.678	34.175	42.306	0.503	1520.0	159.	236.27	3.991
180.	17.973	35.610	5.21	17.942	25.755	34.262	42.402	0.549	1519.4	179.	229.70	3.490
200.	17.671	35.599	5.16	17.637	25.822	34.339	42.488	0.595	1518.8	198.	223.98	3.278
220.	17.372	35.597	5.20	17.335	25.893	34.420	42.579	0.639	1518.3	218.	217.86	3.379
240.	17.130	35.589	5.25	17.090	25.946	34.482	42.648	0.682	1517.9	238.	213.45	2.923
260.	16.810	35.572	5.29	16.767	26.010	34.556	42.733	0.724	1517.2	258.	207.98	3.208
280.	16.458	35.545	5.26	16.413	26.072	34.631	42.820	0.765	1516.5	278.	202.59	3.187
300.	16.197	35.523	5.18	16.149	26.117	34.685	42.883	0.806	1516.0	298.	198.90	2.702
320.	15.903	35.499	5.16	15.852	26.167	34.746	42.953	0.845	1515.4	317.	194.73	2.845
340.	15.441	35.462	5.20	15.388	26.243	34.838	43.061	0.883	1514.2	337.	187.92	3.532
360.	15.089	35.432	5.20	15.034	26.298	34.907	43.142	0.920	1513.4	357.	183.09	3.024
380.	14.788	35.405	5.22	14.731	26.344	34.964	43.210	0.957	1512.8	377.	179.17	2.760
400.	14.454	35.380	5.25	14.394	26.398	35.030	43.288	0.992	1512.0	397.	174.52	2.969
450.	13.830	35.301	5.30	13.765	26.470	35.127	43.407	1.077	1510.7	446.	168.71	2.217
500.	11.916	34.995	5.70	11.851	26.614	35.349	43.702	1.159	1504.8	496.	154.75	3.206
550.	10.684	34.861	5.62	10.617	26.737	35.524	43.925	1.233	1501.2	545.	143.09	2.940
600.	9.842	34.770	5.57	9.772	26.812	35.635	44.071	1.302	1498.9	595.	136.17	2.327
700.	8.577	34.665	5.26	8.501	26.935	35.815	44.305	1.433	1495.7	694.	124.88	2.118
800.	7.080	34.536	5.28	7.001	27.053	36.004	44.559	1.552	1491.5	792.	113.05	2.139
900.	5.874	34.453	5.16	5.794	27.146	36.156	44.766	1.660	1488.4	891.	103.40	1.936
1000.	5.383	34.473	4.91	5.297	27.223	36.257	44.890	1.759	1488.1	990.	96.40	1.673
1100.	4.939	34.485	4.50	4.847	27.285	36.341	44.994	1.853	1487.9	1089.	90.72	1.523
1200.	4.239	34.460	4.45	4.144	27.342	36.434	45.121	1.940	1486.7	1188.	84.50	1.569
1300.	3.307	34.382	4.78	3.213	27.372	36.514	45.248	2.022	1484.3	1286.	79.60	1.399
1400.	3.066	34.404	4.70	2.966	27.412	36.567	45.313	2.100	1485.0	1385.	75.78	1.242
1500.	2.920	34.449	4.45	2.813	27.462	36.624	45.378	2.174	1486.1	1483.	71.30	1.325
1600.	2.879	34.501	4.24	2.764	27.508	36.672	45.427	2.243	1487.7	1582.	67.59	1.221
1700.	2.785	34.560	4.13	2.663	27.564	36.732	45.491	2.308	1489.0	1680.	62.74	1.369
1800.	2.752	34.609	4.10	2.621	27.607	36.776	45.537	2.369	1490.6	1779.	59.31	1.180
1900.	2.729	34.642	4.11	2.590	27.636	36.807	45.568	2.428	1492.2	1877.	57.14	0.984
2000.	2.721	34.687	4.18	2.574	27.673	36.844	45.606	2.483	1493.9	1976.	54.35	1.085
2100.	2.717	34.723	4.29	2.561	27.703	36.874	45.636	2.536	1495.6	2074.	52.27	0.971
2200.	2.747	34.761	4.46	2.581	27.732	36.902	45.662	2.588	1497.5	2172.	50.43	0.929
2300.	2.720	34.788	4.61	2.544	27.756	36.927	45.689	2.637	1499.1	2270.	48.73	0.903
2400.	2.686	34.804	4.73	2.502	27.773	36.946	45.710	2.685	1500.7	2368.	47.64	0.781
2500.	2.632	34.817	4.83	2.439	27.789	36.965	45.731	2.732	1502.2	2467.	46.52	0.785
2600.	2.597	34.825	4.91	2.395	27.799	36.977	45.746	2.778	1503.7	2565.	46.01	0.637
2700.	2.542	34.830	4.98	2.331	27.808	36.990	45.762	2.824	1505.2	2663.	45.39	0.665
2800.	2.495	34.836	5.03	2.276	27.818	37.002	45.777	2.869	1506.7	2761.	44.82	0.649
2900.	2.403	34.837	5.11	2.175	27.827	37.017	45.796	2.913	1508.0	2859.	43.94	0.723
3000.	2.353	34.836	5.13	2.117	27.831	37.025	45.807	2.957	1509.5	2956.	43.72	0.541
3100.	2.332	34.836	5.14	2.086	27.833	37.028	45.812	3.001	1511.1	3054.	43.93	0.379
3200.	2.304	34.837	5.15	2.049	27.837	37.034	45.820	3.045	1512.7	3152.	43.89	0.477
3300.	2.266	34.837	5.19	2.001	27.841	37.041	45.829	3.089	1514.2	3250.	43.77	0.501
3400.	2.181	34.831	5.20	1.907	27.844	37.049	45.842	3.132	1515.6	3348.	43.35	0.594
3500.	2.112	34.826	5.20	1.829	27.846	37.055	45.852	3.176	1517.0	3445.	43.07	0.544
3600.	2.027	34.818	5.18	1.737	27.847	37.061	45.864	3.219	1518.3	3543.	42.69	0.573
3700.	1.950	34.811	5.16	1.650	27.847	37.067	45.874	3.261	1519.7	3640.	42.41	0.536
3800.	1.818	34.800	5.15	1.511	27.849	37.076	45.891	3.303	1520.8	3738.	41.48	0.712
3900.	1.681	34.789	5.14	1.368	27.851	37.086	45.909	3.344	1521.9	3835.	40.39	0.741
4000.	1.587	34.782	5.14	1.265	27.852	37.094	45.922	3.384	1523.3	3933.	39.67	0.642
4100.	1.466	34.771	5.11	1.137	27.852	37.101	45.936	3.423	1524.4	4030.	38.82	0.673
4200.	1.376	34.764	5.11	1.038	27.853	37.108	45.948	3.462	1525.8	4128.	38.13	0.627
4300.	1.306	34.759	5.11	0.959	27.854	37.114	45.958	3.499	1527.2	4225.	37.58	0.580
4400.	1.262	34.756	5.11	0.905	27.855	37.118	45.965	3.537	1528.7	4322.	37.31	0.486
4500.	1.195	34.749	5.12	0.829	27.855	37.122	45.974	3.574	1530.2	4420.	36.85	0.547
4600.	1.113	34.743	5.13	0.738	27.856	37.128	45.985	3.610	1531.5	4517.	36.13	0.621
4700.	0.997	34.734	5.13	0.615	27.857	37.136	45.999	3.646	1532.8	4614.	34.97	0.729
4800.	0.916	34.728	5.14	0.525	27.857	37.142	46.010	3.680	1534.1	4711.	34.19	0.628
4900.	0.836	34.721	5.16	0.435	27.857	37.147	46.020	3.714	1535.5	4808.	33.43	0.620

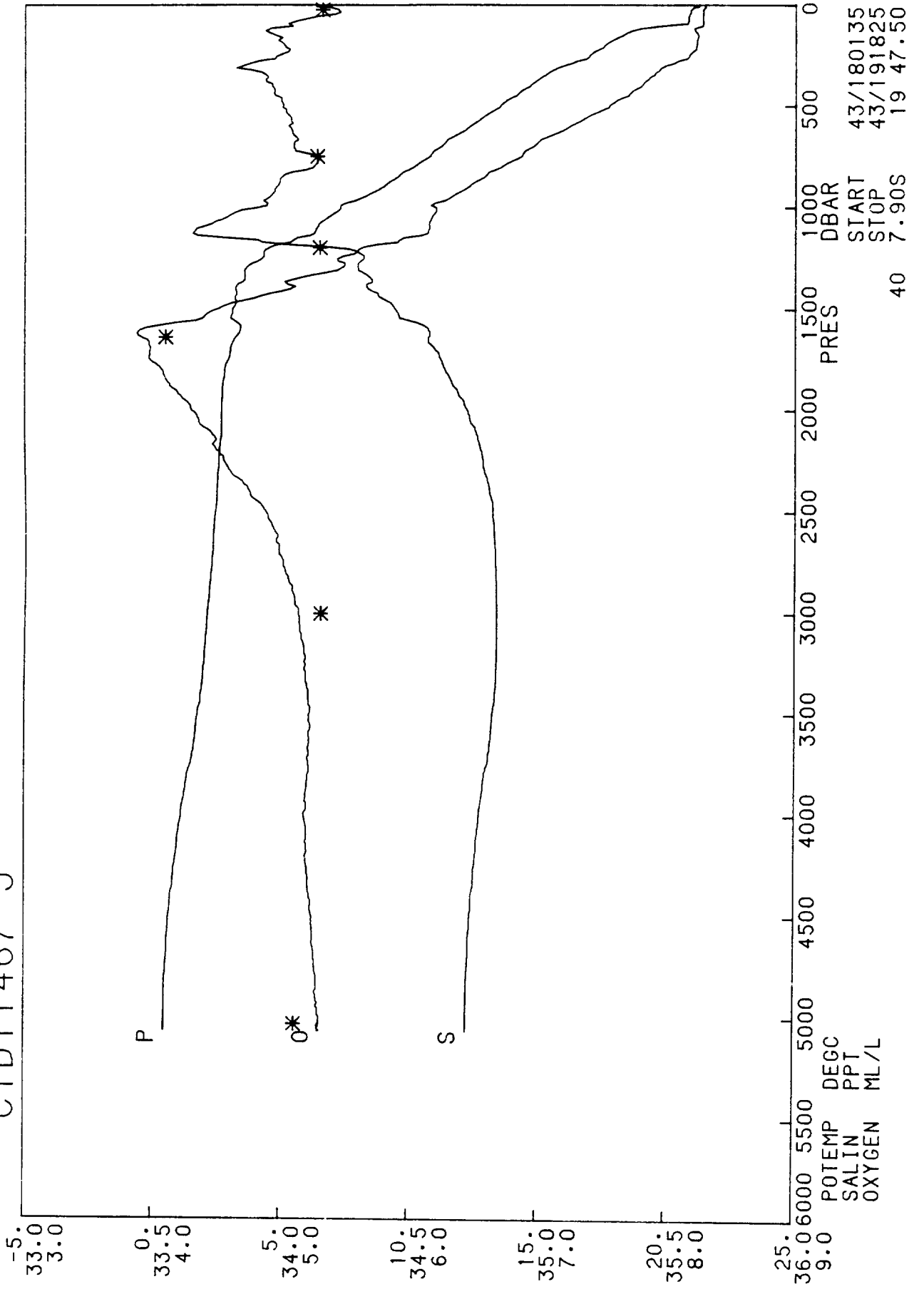
CTD11466 I



DISCOVERY 165 STATION 11466

PRES	TEMP	SALIN	DO	POTEMP	SIGMA0	SIG2000	SIG4000	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	KG/M ³	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	22.407	35.606	5.17	22.405	24.565	32.938	40.951	0.034	1528.7	10.	336.59	-999.000
20.	22.407	35.608	5.17	22.403	24.567	32.939	40.953	0.067	1528.9	20.	336.84	0.777
40.	22.372	35.611	5.11	22.364	24.581	32.954	40.969	0.135	1529.2	40.	336.37	1.482
60.	21.590	35.582	5.12	21.578	24.779	33.175	41.211	0.201	1527.4	60.	318.31	5.602
80.	20.904	35.546	4.93	20.889	24.942	33.358	41.413	0.263	1525.9	79.	303.62	5.075
100.	19.964	35.542	4.54	19.946	25.190	33.635	41.717	0.321	1523.6	99.	280.63	6.287
120.	19.012	35.543	4.50	18.991	25.440	33.915	42.024	0.375	1521.3	119.	257.53	6.300
140.	18.596	35.536	4.31	18.571	25.541	34.029	42.151	0.425	1520.4	139.	248.60	4.015
160.	18.300	35.613	4.93	18.272	25.675	34.172	42.302	0.474	1520.0	159.	236.56	4.614
180.	17.992	35.620	5.10	17.961	25.757	34.264	42.403	0.520	1519.4	179.	229.43	3.619
200.	17.649	35.606	5.04	17.615	25.832	34.350	42.500	0.566	1518.8	198.	222.97	3.463
220.	17.373	35.601	5.12	17.336	25.896	34.423	42.582	0.610	1518.3	218.	217.54	3.200
240.	17.141	35.588	5.06	17.101	25.942	34.478	42.644	0.653	1517.9	238.	213.79	2.729
260.	16.880	35.575	4.99	16.837	25.996	34.540	42.715	0.695	1517.4	258.	209.33	2.938
280.	16.616	35.558	5.00	16.570	26.046	34.599	42.782	0.737	1516.9	278.	205.18	2.844
300.	16.466	35.544	4.94	16.417	26.070	34.629	42.817	0.777	1516.8	298.	203.47	2.000
320.	16.157	35.514	4.87	16.106	26.120	34.690	42.889	0.818	1516.2	317.	199.29	2.851
340.	15.944	35.499	4.85	15.890	26.158	34.736	42.942	0.857	1515.8	337.	196.23	2.496
360.	15.708	35.482	4.87	15.652	26.199	34.785	42.999	0.896	1515.4	357.	192.87	2.595
380.	15.362	35.452	4.91	15.303	26.254	34.853	43.079	0.934	1514.6	377.	188.10	3.012
400.	15.128	35.435	4.92	15.067	26.293	34.901	43.135	0.972	1514.2	397.	184.88	2.542
450.	14.444	35.365	5.05	14.377	26.390	35.023	43.281	1.062	1512.8	446.	176.82	2.539
500.	13.871	35.307	5.12	13.798	26.467	35.123	43.402	1.149	1511.7	496.	170.52	2.287
550.	13.331	35.243	5.16	13.253	26.530	35.207	43.506	1.233	1510.7	545.	165.49	2.088
600.	12.784	35.167	5.19	12.701	26.583	35.282	43.602	1.315	1509.6	595.	161.36	1.930
700.	11.547	35.004	5.26	11.456	26.696	35.446	43.814	1.470	1506.8	694.	151.80	2.025
800.	10.406	34.868	5.23	10.309	26.796	35.595	44.009	1.618	1504.3	792.	143.04	1.939
900.	9.240	34.747	5.04	9.137	26.899	35.750	44.212	1.755	1501.6	891.	133.48	1.988
1000.	7.905	34.622	4.94	7.799	27.007	35.919	44.439	1.884	1498.1	990.	122.48	2.086
1100.	6.648	34.526	4.90	6.542	27.108	36.080	44.656	2.001	1494.8	1089.	111.70	2.046
1200.	5.474	34.469	4.82	5.368	27.212	36.242	44.871	2.108	1491.8	1188.	100.22	2.084
1300.	4.560	34.436	4.74	4.453	27.290	36.366	45.039	2.203	1489.6	1286.	91.33	1.842
1400.	4.206	34.532	4.17	4.093	27.404	36.497	45.186	2.290	1490.0	1385.	80.61	1.992
1500.	3.901	34.581	3.87	3.783	27.475	36.584	45.287	2.366	1490.4	1483.	73.86	1.615
1600.	3.353	34.589	3.89	3.233	27.535	36.673	45.403	2.437	1489.8	1582.	67.02	1.616
1700.	3.021	34.616	4.05	2.896	27.588	36.743	45.489	2.501	1490.1	1680.	61.55	1.455
1800.	2.864	34.656	4.11	2.732	27.635	36.797	45.551	2.561	1491.1	1779.	57.28	1.301
1900.	2.818	34.694	4.20	2.677	27.670	36.835	45.591	2.617	1492.7	1877.	54.51	1.086
2000.	2.774	34.731	4.33	2.626	27.704	36.872	45.630	2.669	1494.2	1976.	51.81	1.076
2100.	2.760	34.769	4.47	2.602	27.736	36.904	45.663	2.720	1495.9	2074.	49.46	1.019
2200.	2.735	34.795	4.63	2.568	27.761	36.930	45.690	2.768	1497.5	2172.	47.79	0.899
2300.	2.663	34.815	4.77	2.489	27.783	36.956	45.720	2.815	1498.9	2270.	45.98	0.924
2400.	2.616	34.820	4.82	2.433	27.792	36.968	45.735	2.861	1500.4	2369.	45.54	0.618
2500.	2.596	34.826	4.86	2.404	27.799	36.977	45.745	2.906	1502.0	2467.	45.38	0.534
2600.	2.540	34.830	4.91	2.339	27.807	36.989	45.760	2.951	1503.5	2565.	44.87	0.636
2700.	2.516	34.836	4.97	2.306	27.815	36.998	45.771	2.996	1505.1	2663.	44.62	0.560
2800.	2.472	34.841	5.05	2.253	27.824	37.010	45.785	3.040	1506.6	2761.	44.09	0.636
2900.	2.423	34.841	5.07	2.195	27.828	37.017	45.796	3.084	1508.1	2859.	43.93	0.526
3000.	2.357	34.841	5.12	2.121	27.835	37.028	45.810	3.128	1509.5	2957.	43.41	0.629
3100.	2.329	34.841	5.16	2.083	27.837	37.033	45.817	3.171	1511.1	3054.	43.52	0.420
3200.	2.284	34.840	5.16	2.029	27.841	37.039	45.826	3.215	1512.6	3152.	43.36	0.517
3300.	2.240	34.839	5.19	1.975	27.845	37.046	45.836	3.258	1514.1	3250.	43.21	0.514
3400.	2.188	34.836	5.21	1.914	27.848	37.052	45.845	3.301	1515.6	3348.	43.06	0.508
3500.	2.125	34.833	5.21	1.842	27.850	37.059	45.856	3.344	1517.0	3445.	42.75	0.555
3600.	2.034	34.827	5.23	1.743	27.853	37.067	45.869	3.387	1518.4	3543.	42.22	0.618
3700.	1.856	34.809	5.22	1.559	27.853	37.078	45.890	3.429	1519.3	3641.	41.03	0.772
3800.	1.767	34.801	5.19	1.462	27.853	37.083	45.901	3.469	1520.6	3738.	40.60	0.571
3900.	1.610	34.788	5.19	1.299	27.854	37.094	45.920	3.509	1521.6	3836.	39.37	0.772
4000.	1.518	34.779	5.18	1.198	27.854	37.100	45.931	3.548	1522.9	3933.	38.83	0.590
4100.	1.391	34.768	5.18	1.064	27.855	37.108	45.947	3.587	1524.1	4030.	37.84	0.703
4200.	1.267	34.758	5.18	0.932	27.856	37.116	45.962	3.624	1525.3	4128.	36.76	0.719
4300.	1.193	34.752	5.17	0.849	27.856	37.122	45.972	3.661	1526.7	4225.	36.21	0.574
4400.	1.185	34.751	5.18	0.831	27.857	37.123	45.975	3.697	1528.4	4322.	36.36	0.292
4500.	1.078	34.742	5.18	0.716	27.856	37.130	45.988	3.733	1529.6	4420.	35.44	0.672
4600.	1.008	34.737	5.18	0.637	27.857	37.135	45.997	3.768	1531.1	4517.	34.83	0.582

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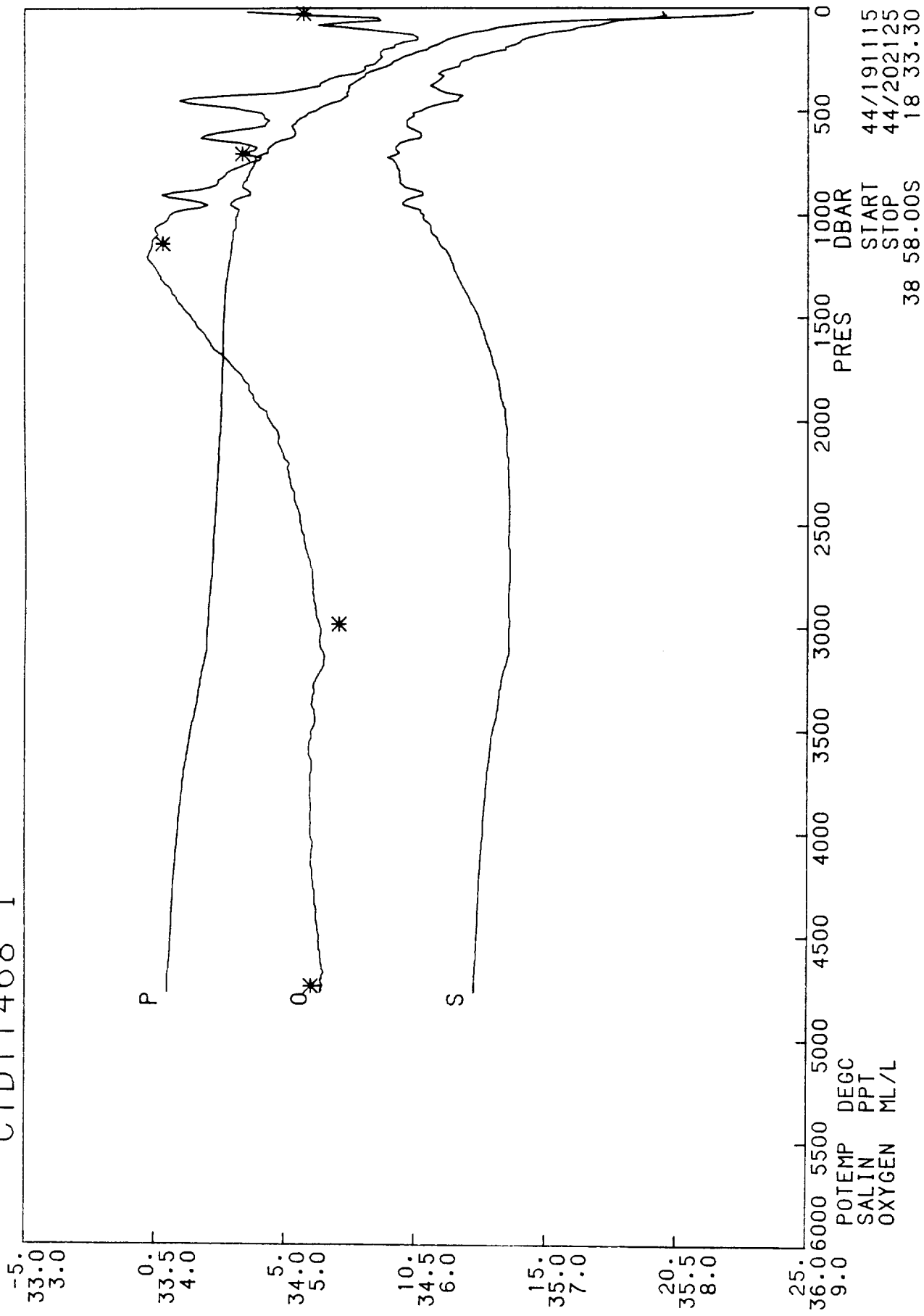


START 43/180135
STOP 43/191825
40 7.90S 19 47.50

DISCOVERY 165 STATION 11467

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	SIGMA0 KG/M ³	SIG2000 KG/M ³	SIG4000 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	21.100	35.649	5.35	21.098	24.963	33.372	41.420	0.030	1525.3	10.	298.72	-999.000
20.	20.960	35.642	5.43	20.957	24.996	33.409	41.462	0.060	1525.1	20.	295.98	3.238
40.	20.901	35.641	5.43	20.894	25.012	33.428	41.482	0.119	1525.3	40.	295.25	1.606
60.	20.844	35.640	5.25	20.833	25.028	33.445	41.501	0.178	1525.5	60.	294.58	1.571
80.	20.841	35.640	5.11	20.825	25.030	33.447	41.503	0.237	1525.8	79.	295.21	0.567
100.	19.987	35.637	5.08	19.969	25.256	33.700	41.780	0.295	1523.8	99.	274.29	6.009
120.	18.823	35.608	4.89	18.801	25.538	34.017	42.132	0.347	1520.8	119.	248.22	6.681
140.	18.401	35.619	4.92	18.377	25.653	34.146	42.273	0.395	1520.0	139.	237.93	4.288
160.	18.072	35.619	5.00	18.044	25.737	34.241	42.377	0.442	1519.3	159.	230.67	3.651
180.	17.798	35.616	4.99	17.767	25.802	34.315	42.460	0.488	1518.9	179.	225.11	3.238
200.	17.593	35.614	5.03	17.559	25.852	34.371	42.523	0.532	1518.6	198.	221.10	2.810
220.	17.357	35.608	5.06	17.320	25.905	34.433	42.592	0.576	1518.2	218.	216.65	2.937
240.	17.091	35.590	5.01	17.051	25.956	34.493	42.661	0.619	1517.7	238.	212.45	2.862
260.	16.942	35.579	4.95	16.899	25.984	34.526	42.699	0.661	1517.6	258.	210.47	2.121
280.	16.469	35.537	4.80	16.423	26.063	34.622	42.810	0.703	1516.5	278.	203.42	3.593
300.	16.003	35.491	4.69	15.955	26.137	34.712	42.916	0.743	1515.3	297.	196.91	3.464
320.	15.628	35.470	4.76	15.578	26.206	34.795	43.012	0.781	1514.5	317.	190.80	3.364
340.	15.369	35.452	4.87	15.317	26.251	34.849	43.075	0.819	1514.0	337.	187.11	2.695
360.	15.126	35.430	4.89	15.071	26.289	34.896	43.130	0.856	1513.5	357.	184.00	2.506
380.	14.906	35.413	4.89	14.848	26.324	34.940	43.182	0.893	1513.1	377.	181.14	2.418
400.	14.723	35.399	4.93	14.663	26.354	34.977	43.225	0.929	1512.9	397.	178.83	2.217
450.	14.144	35.342	4.97	14.077	26.436	35.080	43.349	1.016	1511.8	446.	172.22	2.337
500.	13.583	35.274	5.01	13.511	26.502	35.169	43.458	1.101	1510.7	496.	166.96	2.128
550.	12.969	35.195	5.07	12.893	26.566	35.258	43.570	1.183	1509.4	545.	161.74	2.113
600.	12.429	35.123	5.06	12.347	26.618	35.332	43.665	1.263	1508.3	595.	157.61	1.923
700.	11.315	34.980	5.09	11.225	26.719	35.480	43.856	1.416	1506.0	693.	149.23	1.920
800.	10.271	34.858	5.25	10.173	26.812	35.617	44.036	1.561	1503.8	792.	141.33	1.860
900.	9.065	34.728	4.96	8.964	26.911	35.771	44.240	1.697	1500.9	891.	131.94	1.971
1000.	7.403	34.599	4.82	7.302	27.061	35.997	44.538	1.822	1496.2	990.	116.31	2.427
1100.	6.486	34.576	4.36	6.381	27.169	36.148	44.730	1.932	1494.3	1089.	105.62	2.034
1200.	4.585	34.313	5.42	4.487	27.188	36.265	44.938	2.035	1487.9	1187.	99.78	1.550
1300.	3.702	34.298	5.46	3.604	27.268	36.390	45.107	2.131	1485.9	1286.	90.54	1.854
1400.	3.313	34.338	5.07	3.211	27.338	36.480	45.215	2.218	1486.0	1385.	83.57	1.621
1500.	3.207	34.444	4.50	3.098	27.432	36.579	45.318	2.297	1487.3	1483.	75.20	1.757
1600.	3.512	34.574	3.91	3.390	27.508	36.637	45.360	2.370	1490.5	1582.	70.17	1.405
1700.	3.140	34.600	3.98	3.013	27.565	36.714	45.454	2.438	1490.6	1680.	64.20	1.516
1800.	2.924	34.640	4.07	2.791	27.617	36.777	45.528	2.499	1491.4	1779.	59.19	1.396
1900.	2.835	34.685	4.17	2.695	27.661	36.825	45.581	2.557	1492.7	1877.	55.40	1.237
2000.	2.817	34.725	4.30	2.668	27.696	36.861	45.617	2.611	1494.4	1975.	52.81	1.059
2100.	2.816	34.756	4.43	2.658	27.722	36.887	45.643	2.663	1496.1	2073.	51.11	0.905
2200.	2.747	34.779	4.50	2.581	27.747	36.916	45.675	2.713	1497.5	2172.	49.12	0.958
2300.	2.701	34.792	4.60	2.526	27.761	36.933	45.695	2.762	1499.0	2270.	48.18	0.748
2400.	2.660	34.812	4.75	2.477	27.782	36.956	45.720	2.809	1500.6	2368.	46.72	0.856
2500.	2.605	34.825	4.88	2.412	27.797	36.975	45.742	2.855	1502.1	2466.	45.58	0.789
2600.	2.548	34.831	4.95	2.347	27.808	36.989	45.760	2.900	1503.5	2564.	44.86	0.690
2700.	2.523	34.835	4.98	2.313	27.814	36.997	45.770	2.945	1505.1	2662.	44.73	0.522
2800.	2.467	34.838	5.03	2.249	27.821	37.007	45.783	2.989	1506.6	2760.	44.31	0.607
2900.	2.414	34.839	5.09	2.186	27.828	37.017	45.796	3.033	1508.0	2858.	43.89	0.601
3000.	2.358	34.841	5.14	2.122	27.835	37.027	45.810	3.077	1509.5	2956.	43.47	0.604
3100.	2.321	34.841	5.16	2.075	27.838	37.034	45.818	3.121	1511.0	3054.	43.40	0.488
3200.	2.277	34.840	5.18	2.022	27.842	37.040	45.828	3.164	1512.6	3152.	43.27	0.506
3300.	2.223	34.838	5.19	1.959	27.845	37.047	45.838	3.207	1514.0	3249.	43.06	0.531
3400.	2.149	34.833	5.21	1.876	27.848	37.054	45.850	3.250	1515.4	3347.	42.70	0.573
3500.	2.030	34.824	5.22	1.750	27.850	37.064	45.866	3.292	1516.6	3445.	41.96	0.671
3600.	1.950	34.818	5.22	1.661	27.852	37.071	45.877	3.334	1518.0	3542.	41.53	0.583
3700.	1.842	34.808	5.22	1.545	27.853	37.078	45.891	3.375	1519.2	3640.	40.93	0.625
3800.	1.648	34.791	5.21	1.346	27.853	37.090	45.914	3.416	1520.1	3737.	39.44	0.829
3900.	1.543	34.783	5.19	1.233	27.855	37.098	45.928	3.455	1521.3	3835.	38.68	0.654
4000.	1.425	34.772	5.18	1.108	27.855	37.105	45.942	3.493	1522.5	3932.	37.84	0.665
4100.	1.311	34.763	5.20	0.986	27.856	37.114	45.957	3.530	1523.8	4030.	36.89	0.690
4200.	1.239	34.757	5.19	0.905	27.857	37.119	45.966	3.567	1525.2	4127.	36.39	0.559
4300.	1.148	34.750	5.22	0.806	27.857	37.125	45.978	3.603	1526.5	4224.	35.65	0.627
4400.	1.046	34.742	5.23	0.696	27.857	37.132	45.991	3.638	1527.8	4322.	34.76	0.662
4500.	0.995	34.737	5.25	0.635	27.858	37.136	45.998	3.673	1529.3	4419.	34.40	0.497
4600.	0.949	34.732	5.25	0.579	27.857	37.139	46.004	3.707	1530.8	4516.	34.15	0.459
4700.	0.931	34.731	5.26	0.550	27.857	37.141	46.008	3.741	1532.5	4613.	34.11	0.364
4800.	0.881	34.726	5.28	0.491	27.857	37.144	46.014	3.775	1534.0	4710.	33.76	0.492
4900.	0.884	34.725	5.28	0.482	27.857	37.145	46.015	3.809	1535.7	4807.	33.98	0.207
5000.	0.885	34.725	5.31	0.472	27.857	37.145	46.017	3.843	1537.5	4904.	34.19	0.213

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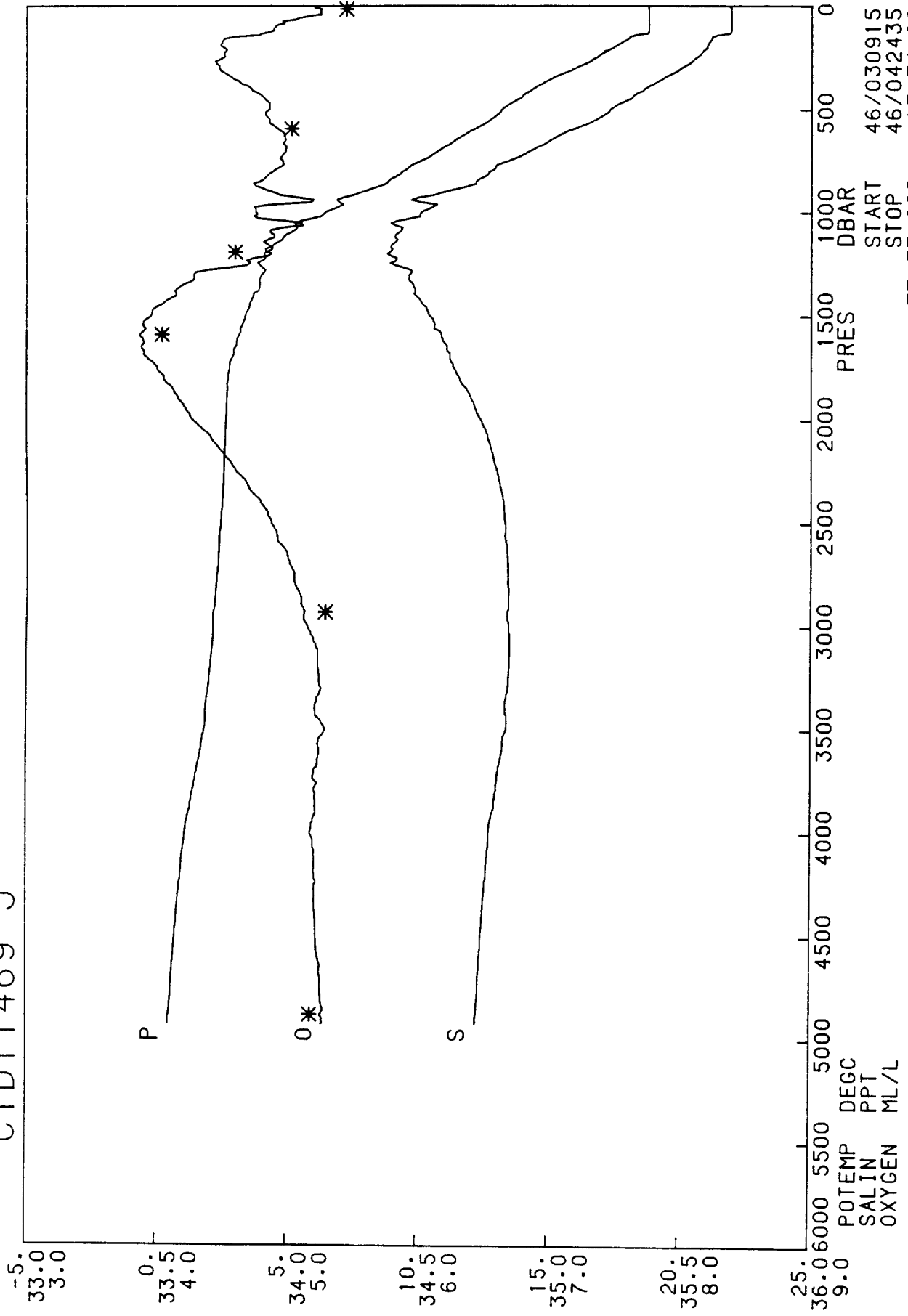


START 44/191115
STOP 44/202125
38 58.00S 18 33.30

DISCOVERY 165 STATION 11468

PRES	TEMP	SALIN	DO	POTEMP	SIGMA0	SIG2000	SIG4000	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	KG/M ³	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻³ KG/M ³	CY/HR
20.	22.864	35.445	4.75	22.860	24.313	32.674	40.678	0.072	1529.9	20.	361.07	-999.000
40.	21.044	35.437	5.39	21.037	24.812	33.226	41.279	0.141	1525.4	40.	313.75	8.938
60.	16.417	35.275	5.72	16.408	25.865	34.428	42.620	0.194	1512.4	60.	214.51	12.889
80.	14.057	35.210	5.30	14.045	26.340	34.988	43.259	0.232	1505.2	79.	169.82	8.687
100.	12.968	35.107	5.56	12.954	26.486	35.176	43.487	0.264	1501.9	99.	156.43	4.826
120.	12.118	35.007	5.85	12.102	26.576	35.300	43.644	0.295	1499.2	119.	148.32	3.803
140.	11.560	34.942	6.01	11.542	26.631	35.379	43.744	0.324	1497.5	139.	143.42	3.008
160.	11.114	34.901	5.96	11.095	26.682	35.448	43.831	0.352	1496.3	159.	139.03	2.859
180.	10.806	34.873	5.84	10.784	26.716	35.496	43.891	0.380	1495.5	179.	136.18	2.363
200.	10.467	34.842	5.77	10.443	26.753	35.547	43.955	0.406	1494.6	198.	133.06	2.453
220.	9.952	34.777	5.73	9.927	26.791	35.607	44.037	0.433	1493.0	218.	129.69	2.531
240.	9.507	34.716	5.74	9.480	26.818	35.655	44.103	0.458	1491.6	238.	127.33	2.164
260.	9.176	34.675	5.70	9.148	26.840	35.692	44.155	0.484	1490.7	258.	125.45	1.968
280.	8.961	34.665	5.63	8.930	26.867	35.729	44.201	0.509	1490.2	278.	123.18	2.116
300.	8.501	34.620	5.60	8.469	26.904	35.787	44.278	0.533	1488.8	298.	119.83	2.504
320.	8.105	34.586	5.54	8.072	26.938	35.839	44.348	0.557	1487.6	317.	116.71	2.422
340.	7.943	34.599	5.36	7.908	26.973	35.881	44.396	0.580	1487.3	337.	113.73	2.367
360.	7.703	34.578	5.29	7.667	26.992	35.912	44.437	0.602	1486.7	357.	112.05	1.849
380.	7.472	34.559	5.25	7.435	27.010	35.941	44.477	0.624	1486.2	377.	110.49	1.789
400.	7.455	34.590	5.08	7.416	27.038	35.969	44.505	0.646	1486.5	397.	108.24	2.085
450.	7.144	34.657	4.19	7.101	27.135	36.079	44.628	0.698	1486.2	446.	99.66	2.514
500.	6.163	34.515	4.72	6.118	27.154	36.147	44.742	0.747	1483.0	496.	97.51	1.402
550.	5.488	34.466	4.87	5.442	27.200	36.226	44.852	0.795	1481.0	545.	93.07	1.854
600.	5.425	34.508	4.54	5.375	27.241	36.270	44.899	0.840	1481.7	595.	89.76	1.630
700.	4.378	34.435	4.70	4.325	27.303	36.386	45.065	0.927	1479.0	694.	83.44	1.586
800.	3.670	34.436	4.55	3.613	27.377	36.496	45.210	1.006	1477.7	792.	76.12	1.667
900.	3.712	34.526	4.09	3.647	27.445	36.562	45.273	1.079	1479.6	891.	70.68	1.459
1000.	3.230	34.529	4.11	3.160	27.494	36.636	45.371	1.148	1479.2	990.	65.78	1.390
1100.	3.056	34.571	4.01	2.980	27.544	36.695	45.438	1.211	1480.2	1089.	61.40	1.316
1200.	2.972	34.629	3.94	2.889	27.599	36.754	45.501	1.271	1481.6	1187.	56.81	1.342
1300.	2.848	34.660	4.04	2.758	27.636	36.797	45.550	1.326	1482.7	1286.	53.72	1.134
1400.	2.783	34.701	4.16	2.686	27.674	36.839	45.595	1.378	1484.2	1385.	50.59	1.138
1500.	2.744	34.740	4.28	2.639	27.710	36.877	45.634	1.427	1485.7	1483.	47.82	1.082
1600.	2.722	34.765	4.40	2.608	27.733	36.901	45.659	1.474	1487.3	1582.	46.31	0.866
1700.	2.724	34.791	4.54	2.602	27.754	36.922	45.681	1.520	1489.1	1680.	45.01	0.822
1800.	2.705	34.816	4.68	2.575	27.776	36.945	45.704	1.564	1490.7	1779.	43.60	0.846
1900.	2.668	34.828	4.76	2.530	27.790	36.961	45.723	1.607	1492.2	1877.	42.80	0.713
2000.	2.659	34.844	4.88	2.512	27.804	36.976	45.738	1.650	1493.9	1975.	42.14	0.678
2100.	2.610	34.847	4.94	2.454	27.812	36.986	45.751	1.692	1495.3	2074.	41.83	0.582
2200.	2.580	34.853	5.02	2.416	27.820	36.997	45.764	1.733	1496.9	2172.	41.54	0.574
2300.	2.526	34.854	5.04	2.354	27.826	37.006	45.776	1.775	1498.4	2270.	41.31	0.555
2400.	2.488	34.858	5.08	2.308	27.833	37.015	45.788	1.816	1499.9	2368.	41.05	0.558
2500.	2.439	34.857	5.12	2.250	27.837	37.023	45.798	1.857	1501.4	2466.	40.97	0.500
2600.	2.386	34.854	5.15	2.188	27.839	37.028	45.807	1.898	1502.8	2564.	40.99	0.461
2700.	2.363	34.859	5.19	2.156	27.846	37.037	45.817	1.939	1504.4	2662.	40.77	0.540
2800.	2.312	34.856	5.21	2.096	27.849	37.043	45.826	1.979	1505.9	2760.	40.75	0.466
2900.	2.256	34.853	5.23	2.032	27.852	37.049	45.836	2.020	1507.4	2858.	40.62	0.505
3000.	2.226	34.857	5.27	1.992	27.857	37.057	45.846	2.061	1509.0	2956.	40.42	0.526
3100.	2.210	34.857	5.27	1.966	27.860	37.061	45.851	2.101	1510.6	3054.	40.61	0.378
3200.	2.060	34.838	5.28	1.810	27.857	37.067	45.866	2.142	1511.6	3152.	40.15	0.598
3300.	1.924	34.822	5.22	1.667	27.855	37.073	45.879	2.182	1512.7	3250.	39.74	0.575
3400.	1.807	34.812	5.22	1.543	27.856	37.082	45.895	2.221	1513.9	3347.	39.03	0.650
3500.	1.630	34.794	5.20	1.360	27.855	37.091	45.914	2.260	1514.8	3445.	37.99	0.725
3600.	1.510	34.783	5.18	1.232	27.855	37.098	45.928	2.297	1516.0	3543.	37.30	0.632
3700.	1.375	34.772	5.20	1.091	27.856	37.108	45.945	2.334	1517.1	3640.	36.27	0.709
3800.	1.307	34.766	5.19	1.014	27.857	37.113	45.954	2.370	1518.6	3738.	35.91	0.513
3900.	1.221	34.759	5.19	0.920	27.857	37.119	45.965	2.406	1519.9	3835.	35.30	0.590
4000.	1.172	34.755	5.19	0.862	27.858	37.123	45.973	2.441	1521.4	3933.	35.05	0.469
4100.	1.107	34.749	5.20	0.788	27.857	37.126	45.980	2.476	1522.8	4030.	34.69	0.503
4200.	1.044	34.743	5.21	0.716	27.857	37.131	45.989	2.510	1524.3	4127.	34.27	0.521
4300.	1.005	34.740	5.23	0.667	27.858	37.134	45.995	2.544	1525.8	4225.	34.06	0.440
4400.	0.977	34.736	5.24	0.629	27.857	37.136	45.999	2.578	1527.5	4322.	34.01	0.374
4500.	0.949	34.733	5.26	0.591	27.857	37.138	46.003	2.612	1529.1	4419.	33.93	0.386
4600.	0.920	34.730	5.27	0.551	27.857	37.140	46.007	2.646	1530.7	4516.	33.80	0.404
4700.	0.853	34.725	5.28	0.476	27.857	37.145	46.016	2.680	1532.1	4614.	33.22	0.562

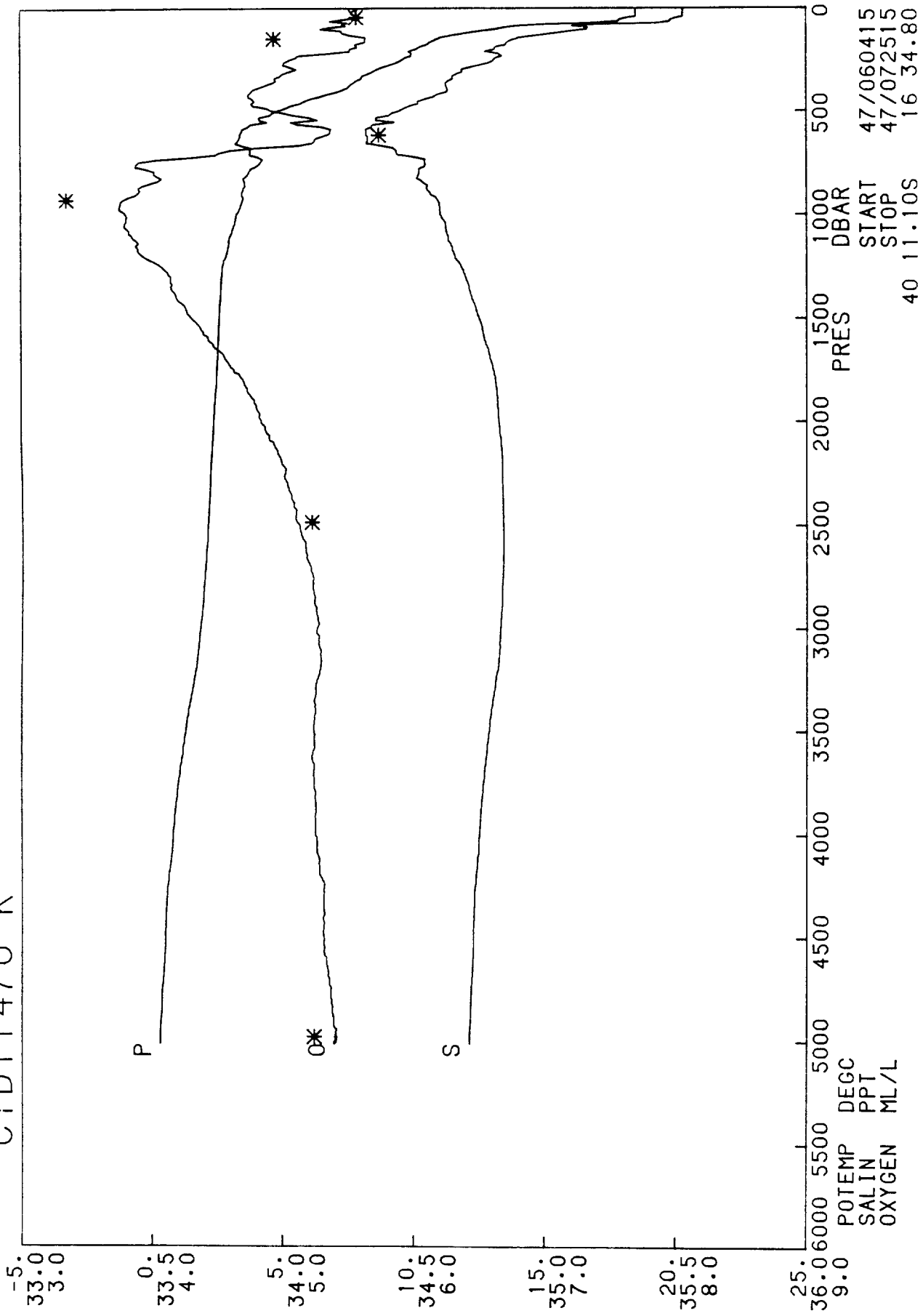
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DISCOVERY 165 STATION 11469

PRES DB	TEMP DEGC	SALIN PSU	DO ML/L	POTEMP DEGC	SIGMA0 KG/M ³	SIG2000 KG/M ³	SIG4000 KG/M ³	DYNHT DYN.M	SNDV M/S	DEPTH M	SVANOM 10 ⁻⁸ KG/M ³	BVFR CY/HR
10.	18.793	35.693	5.23	18.791	25.606	34.085	42.198	0.024	1519.0	10.	237.54	-999.000
20.	18.795	35.694	5.25	18.792	25.606	34.085	42.198	0.048	1519.2	20.	237.91	0.209
40.	18.796	35.694	5.25	18.789	25.607	34.086	42.199	0.095	1519.5	40.	238.60	0.374
60.	18.805	35.693	5.08	18.794	25.605	34.084	42.197	0.143	1519.9	60.	239.54	-0.532
80.	18.810	35.693	4.97	18.796	25.605	34.084	42.197	0.191	1520.2	79.	240.33	-0.184
100.	18.813	35.694	4.90	18.795	25.605	34.084	42.197	0.239	1520.6	99.	241.09	0.170
120.	18.804	35.693	4.88	18.782	25.607	34.087	42.200	0.287	1520.9	119.	241.61	0.635
140.	18.305	35.640	4.77	18.281	25.694	34.189	42.319	0.335	1519.7	139.	234.09	3.712
160.	17.991	35.617	4.51	17.964	25.755	34.261	42.400	0.382	1519.1	159.	228.94	3.132
180.	17.719	35.605	4.49	17.688	25.813	34.329	42.477	0.427	1518.6	179.	224.04	3.064
200.	17.474	35.600	4.51	17.440	25.870	34.394	42.549	0.471	1518.2	198.	219.33	3.010
220.	17.172	35.583	4.52	17.135	25.930	34.465	42.630	0.514	1517.7	218.	214.22	3.116
240.	16.922	35.569	4.52	16.882	25.980	34.523	42.696	0.557	1517.2	238.	210.14	2.827
260.	16.665	35.548	4.47	16.623	26.025	34.577	42.759	0.599	1516.8	258.	206.42	2.716
280.	16.397	35.529	4.46	16.352	26.074	34.635	42.826	0.639	1516.3	278.	202.38	2.809
300.	16.025	35.501	4.48	15.977	26.139	34.714	42.917	0.679	1515.4	298.	196.70	3.258
320.	15.671	35.477	4.51	15.621	26.202	34.789	43.004	0.718	1514.6	317.	191.25	3.195
340.	15.289	35.444	4.56	15.237	26.263	34.865	43.093	0.756	1513.7	337.	185.89	3.169
360.	14.982	35.418	4.61	14.927	26.311	34.924	43.163	0.793	1513.1	357.	181.80	2.814
380.	14.690	35.390	4.67	14.633	26.354	34.978	43.227	0.829	1512.4	377.	178.22	2.653
400.	14.423	35.362	4.72	14.363	26.390	35.024	43.283	0.864	1511.9	397.	175.20	2.469
450.	13.855	35.302	4.83	13.790	26.465	35.121	43.400	0.950	1510.8	446.	169.19	2.244
500.	13.242	35.231	4.85	13.171	26.538	35.218	43.520	1.033	1509.5	496.	163.27	2.225
550.	12.792	35.171	4.86	12.716	26.583	35.281	43.600	1.114	1508.8	545.	159.98	1.778
600.	12.089	35.071	4.94	12.009	26.643	35.371	43.717	1.193	1507.1	595.	154.83	2.088
700.	10.821	34.922	4.98	10.734	26.763	35.545	43.941	1.342	1504.2	694.	144.38	2.087
800.	9.479	34.772	4.88	9.386	26.877	35.718	44.169	1.481	1500.9	792.	133.80	2.077
900.	7.948	34.597	4.88	7.853	26.980	35.890	44.408	1.610	1496.6	891.	123.31	2.047
1000.	6.533	34.510	4.76	6.438	27.108	36.086	44.667	1.727	1492.7	990.	109.83	2.256
1100.	5.155	34.420	4.88	5.062	27.208	36.254	44.899	1.831	1488.7	1089.	98.40	2.075
1200.	4.197	34.383	4.87	4.103	27.285	36.380	45.071	1.924	1486.4	1188.	89.66	1.821
1300.	4.112	34.464	4.28	4.009	27.359	36.458	45.152	2.010	1487.8	1286.	83.48	1.554
1400.	3.815	34.491	4.15	3.707	27.411	36.525	45.234	2.092	1488.3	1385.	78.54	1.409
1500.	3.493	34.546	3.95	3.379	27.487	36.617	45.341	2.167	1488.7	1483.	71.25	1.661
1600.	3.228	34.590	3.88	3.109	27.548	36.692	45.428	2.235	1489.3	1582.	65.35	1.507
1700.	2.998	34.622	3.92	2.873	27.595	36.751	45.498	2.298	1490.0	1680.	60.84	1.337
1800.	2.846	34.658	4.05	2.715	27.638	36.802	45.556	2.357	1491.1	1779.	56.90	1.256
1900.	2.812	34.705	4.17	2.671	27.679	36.844	45.601	2.412	1492.7	1877.	53.64	1.161
2000.	2.790	34.741	4.27	2.641	27.710	36.877	45.634	2.464	1494.3	1976.	51.33	1.012
2100.	2.760	34.770	4.43	2.603	27.737	36.905	45.664	2.515	1495.9	2074.	49.41	0.945
2200.	2.737	34.791	4.56	2.571	27.757	36.926	45.686	2.563	1497.5	2172.	48.13	0.822
2300.	2.711	34.811	4.68	2.536	27.776	36.947	45.708	2.611	1499.1	2270.	46.93	0.804
2400.	2.666	34.826	4.79	2.483	27.793	36.966	45.730	2.657	1500.6	2369.	45.76	0.799
2500.	2.620	34.833	4.88	2.427	27.803	36.979	45.746	2.703	1502.1	2467.	45.17	0.660
2600.	2.563	34.838	4.94	2.362	27.812	36.992	45.762	2.747	1503.6	2565.	44.57	0.660
2700.	2.535	34.844	5.02	2.325	27.820	37.002	45.773	2.792	1505.2	2663.	44.32	0.561
2800.	2.476	34.845	5.06	2.257	27.827	37.012	45.787	2.836	1506.6	2761.	43.90	0.609
2900.	2.438	34.847	5.11	2.210	27.832	37.020	45.798	2.880	1508.2	2859.	43.69	0.543
3000.	2.388	34.848	5.16	2.150	27.838	37.029	45.810	2.923	1509.6	2957.	43.40	0.564
3100.	2.361	34.851	5.23	2.115	27.843	37.036	45.819	2.967	1511.2	3054.	43.27	0.513
3200.	2.298	34.848	5.24	2.042	27.847	37.044	45.830	3.010	1512.7	3152.	43.01	0.551
3300.	2.231	34.842	5.26	1.966	27.848	37.049	45.839	3.053	1514.1	3250.	42.89	0.500
3400.	2.146	34.834	5.21	1.873	27.849	37.056	45.851	3.095	1515.4	3348.	42.59	0.556
3500.	2.103	34.835	5.29	1.821	27.854	37.063	45.861	3.138	1516.9	3445.	42.26	0.558
3600.	1.968	34.821	5.24	1.679	27.853	37.071	45.876	3.180	1518.1	3543.	41.62	0.646
3700.	1.824	34.806	5.20	1.528	27.852	37.079	45.892	3.221	1519.1	3641.	40.80	0.681
3800.	1.678	34.797	5.21	1.375	27.856	37.091	45.913	3.261	1520.2	3738.	39.50	0.790
3900.	1.541	34.784	5.22	1.231	27.856	37.100	45.930	3.300	1521.3	3836.	38.51	0.710
4000.	1.403	34.771	5.18	1.086	27.856	37.107	45.945	3.338	1522.4	3933.	37.56	0.696
4100.	1.312	34.766	5.20	0.987	27.858	37.116	45.959	3.375	1523.8	4030.	36.72	0.660
4200.	1.258	34.761	5.21	0.924	27.858	37.120	45.966	3.412	1525.2	4128.	36.44	0.487
4300.	1.173	34.753	5.21	0.830	27.858	37.125	45.976	3.448	1526.6	4225.	35.85	0.586
4400.	1.120	34.748	5.22	0.768	27.858	37.128	45.983	3.484	1528.1	4322.	35.52	0.494
4500.	1.062	34.742	5.22	0.700	27.858	37.132	45.991	3.519	1529.6	4420.	35.14	0.514
4600.	1.012	34.738	5.24	0.640	27.858	37.136	45.998	3.554	1531.1	4517.	34.82	0.488
4700.	0.960	34.733	5.26	0.579	27.857	37.139	46.004	3.589	1532.6	4614.	34.46	0.498
4800.	0.933	34.730	5.26	0.541	27.857	37.141	46.009	3.623	1534.2	4711.	34.36	0.395
4900.	0.859	34.723	5.27	0.458	27.857	37.146	46.018	3.657	1535.6	4808.	33.68	0.598

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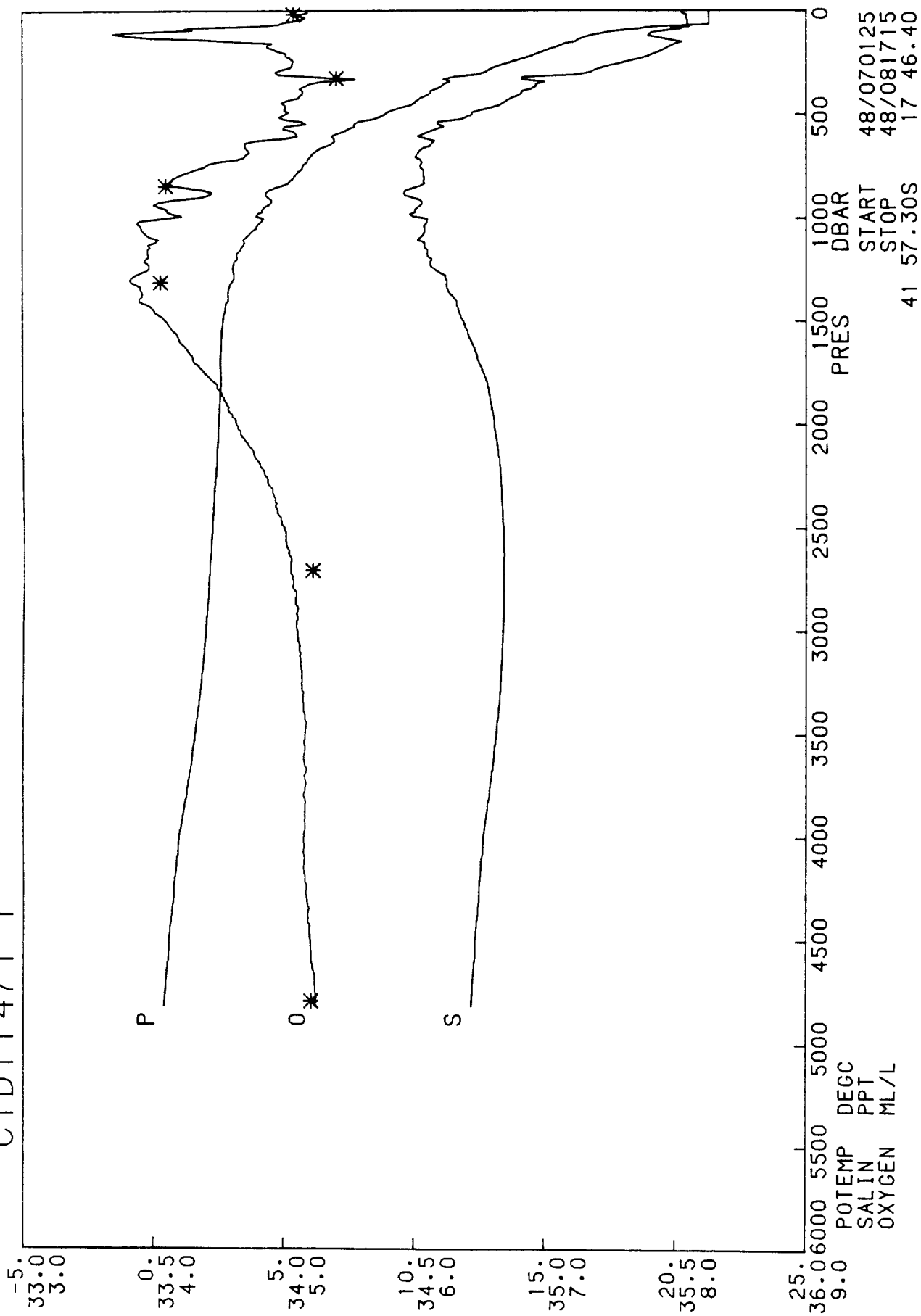


START 47/060415
STOP 47/072515
40 11.10S 16 34.80

DISCOVERY 165 STATION 11470

PRES	TEMP	SALIN	DO	POTEMP	SIGMA0	SIG2000	SIG4000	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	KG/M ³	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	18.515	35.531	5.55	18.513	25.552	34.042	42.165	0.024	1518.0	10.	242.66	-999.000
20.	18.517	35.531	5.52	18.513	25.552	34.042	42.165	0.049	1518.2	20.	243.05	-0.138
40.	18.436	35.525	5.57	18.429	25.568	34.061	42.187	0.097	1518.3	40.	242.21	1.631
60.	17.839	35.480	5.39	17.829	25.683	34.196	42.341	0.144	1516.8	60.	232.01	4.266
80.	14.504	35.167	5.47	14.493	26.211	34.843	43.100	0.186	1506.6	79.	182.05	9.179
100.	13.170	35.165	5.31	13.156	26.490	35.172	43.475	0.220	1502.6	99.	156.09	6.650
120.	12.040	35.040	5.47	12.024	26.616	35.343	43.689	0.250	1499.0	119.	144.48	4.505
140.	11.152	34.915	5.62	11.135	26.686	35.450	43.831	0.278	1496.1	139.	138.15	3.379
160.	10.763	34.865	5.63	10.744	26.717	35.499	43.895	0.305	1495.0	159.	135.56	2.270
180.	10.460	34.838	5.57	10.438	26.750	35.544	43.953	0.332	1494.2	179.	132.82	2.318
200.	10.098	34.803	5.52	10.075	26.786	35.596	44.020	0.358	1493.2	198.	129.74	2.437
220.	9.989	34.826	5.35	9.963	26.823	35.638	44.065	0.384	1493.2	218.	126.66	2.431
240.	9.770	34.819	5.11	9.743	26.855	35.679	44.115	0.409	1492.7	238.	124.00	2.279
260.	9.483	34.797	5.03	9.454	26.885	35.722	44.171	0.434	1492.0	258.	121.38	2.264
280.	9.054	34.743	5.03	9.024	26.913	35.770	44.236	0.458	1490.7	278.	118.90	2.205
300.	8.620	34.688	5.10	8.588	26.939	35.815	44.301	0.481	1489.3	297.	116.63	2.116
320.	8.303	34.667	5.01	8.269	26.972	35.862	44.361	0.504	1488.5	317.	113.71	2.352
340.	8.069	34.653	4.95	8.034	26.996	35.898	44.407	0.527	1487.9	337.	111.60	2.041
360.	7.810	34.629	4.94	7.774	27.016	35.930	44.451	0.549	1487.2	357.	109.85	1.884
380.	7.605	34.629	4.86	7.567	27.047	35.970	44.499	0.570	1486.8	377.	107.19	2.249
400.	7.310	34.633	4.78	7.272	27.092	36.029	44.571	0.592	1486.0	397.	103.01	2.752
450.	5.979	34.530	4.78	5.940	27.189	36.190	44.792	0.640	1481.4	446.	93.35	2.645
500.	4.886	34.447	4.93	4.847	27.254	36.311	44.965	0.685	1477.8	496.	86.53	2.235
550.	4.328	34.395	5.17	4.287	27.274	36.360	45.042	0.728	1476.2	545.	84.46	1.326
600.	3.499	34.324	5.37	3.458	27.302	36.432	45.155	0.769	1473.5	595.	81.07	1.606
700.	3.833	34.438	4.53	3.782	27.361	36.472	45.177	0.849	1476.7	693.	76.99	1.289
800.	3.780	34.523	4.02	3.722	27.435	36.548	45.255	0.922	1478.2	792.	70.92	1.532
900.	3.528	34.567	3.89	3.464	27.496	36.621	45.340	0.991	1478.9	891.	65.55	1.450
1000.	3.326	34.605	3.80	3.256	27.546	36.682	45.411	1.054	1479.7	990.	61.20	1.321
1100.	3.101	34.634	3.85	3.024	27.590	36.738	45.478	1.113	1480.5	1089.	57.26	1.263
1200.	2.936	34.661	3.94	2.853	27.628	36.784	45.532	1.169	1481.4	1187.	54.04	1.157
1300.	2.775	34.700	4.15	2.686	27.674	36.839	45.595	1.220	1482.5	1286.	49.90	1.280
1400.	2.739	34.725	4.19	2.641	27.698	36.864	45.622	1.269	1484.0	1385.	48.29	0.882
1500.	2.696	34.753	4.31	2.591	27.724	36.893	45.653	1.317	1485.5	1483.	46.34	0.946
1600.	2.674	34.772	4.44	2.562	27.742	36.912	45.673	1.362	1487.1	1582.	45.27	0.772
1700.	2.638	34.795	4.57	2.517	27.765	36.937	45.700	1.407	1488.7	1680.	43.68	0.878
1800.	2.616	34.814	4.70	2.487	27.783	36.956	45.720	1.450	1490.3	1779.	42.59	0.774
1900.	2.562	34.822	4.78	2.426	27.794	36.971	45.738	1.492	1491.8	1877.	41.92	0.676
2000.	2.519	34.827	4.84	2.374	27.802	36.982	45.751	1.534	1493.3	1975.	41.55	0.590
2100.	2.484	34.835	4.92	2.331	27.812	36.994	45.766	1.575	1494.8	2073.	41.08	0.621
2200.	2.430	34.839	4.99	2.269	27.821	37.006	45.781	1.616	1496.3	2172.	40.58	0.622
2300.	2.392	34.840	5.04	2.222	27.826	37.013	45.790	1.656	1497.8	2270.	40.53	0.484
2400.	2.349	34.841	5.08	2.171	27.830	37.020	45.800	1.697	1499.3	2368.	40.43	0.497
2500.	2.307	34.842	5.12	2.120	27.835	37.028	45.811	1.737	1500.8	2466.	40.29	0.510
2600.	2.269	34.843	5.17	2.074	27.840	37.035	45.820	1.777	1502.3	2564.	40.16	0.503
2700.	2.218	34.840	5.21	2.014	27.843	37.042	45.829	1.817	1503.8	2662.	40.10	0.476
2800.	2.168	34.838	5.23	1.956	27.845	37.047	45.838	1.857	1505.3	2760.	40.05	0.466
2900.	2.132	34.836	5.26	1.911	27.847	37.052	45.845	1.897	1506.8	2858.	40.13	0.414
3000.	2.054	34.830	5.26	1.824	27.849	37.059	45.857	1.937	1508.2	2956.	39.85	0.539
3100.	1.995	34.828	5.29	1.757	27.853	37.066	45.868	1.977	1509.6	3054.	39.52	0.550
3200.	1.914	34.821	5.28	1.668	27.854	37.072	45.878	2.017	1511.0	3152.	39.29	0.517
3300.	1.789	34.808	5.25	1.535	27.853	37.079	45.893	2.056	1512.1	3249.	38.73	0.607
3400.	1.641	34.795	5.25	1.381	27.854	37.089	45.911	2.094	1513.2	3347.	37.78	0.702
3500.	1.543	34.787	5.23	1.275	27.855	37.096	45.923	2.131	1514.4	3445.	37.22	0.594
3600.	1.443	34.777	5.23	1.168	27.855	37.102	45.935	2.168	1515.7	3542.	36.69	0.579
3700.	1.329	34.769	5.23	1.047	27.857	37.111	45.950	2.204	1516.9	3640.	35.83	0.663
3800.	1.241	34.761	5.25	0.950	27.857	37.117	45.962	2.240	1518.3	3737.	35.26	0.579
3900.	1.160	34.754	5.25	0.861	27.857	37.122	45.972	2.275	1519.6	3835.	34.73	0.561
4000.	1.103	34.750	5.25	0.795	27.858	37.126	45.980	2.310	1521.1	3932.	34.37	0.502
4100.	1.048	34.745	5.27	0.731	27.858	37.130	45.987	2.344	1522.6	4030.	34.06	0.480
4200.	0.962	34.737	5.29	0.636	27.858	37.136	45.998	2.378	1523.9	4127.	33.37	0.597
4300.	0.897	34.732	5.31	0.562	27.857	37.140	46.006	2.411	1525.4	4224.	32.91	0.524
4400.	0.868	34.729	5.31	0.524	27.858	37.142	46.011	2.443	1527.0	4322.	32.78	0.397
4500.	0.864	34.728	5.32	0.508	27.858	37.143	46.013	2.476	1528.7	4419.	32.93	0.241
4600.	0.837	34.725	5.33	0.471	27.858	37.145	46.017	2.509	1530.3	4516.	32.83	0.387
4700.	0.800	34.721	5.36	0.424	27.857	37.148	46.022	2.542	1531.9	4613.	32.59	0.441
4800.	0.761	34.718	5.37	0.375	27.858	37.151	46.028	2.574	1533.5	4710.	32.28	0.464
4900.	0.727	34.715	5.39	0.331	27.858	37.154	46.033	2.606	1535.0	4807.	32.05	0.433
5000.	0.713	34.713	5.40	0.305	27.857	37.155	46.036	2.638	1536.7	4904.	32.04	0.335

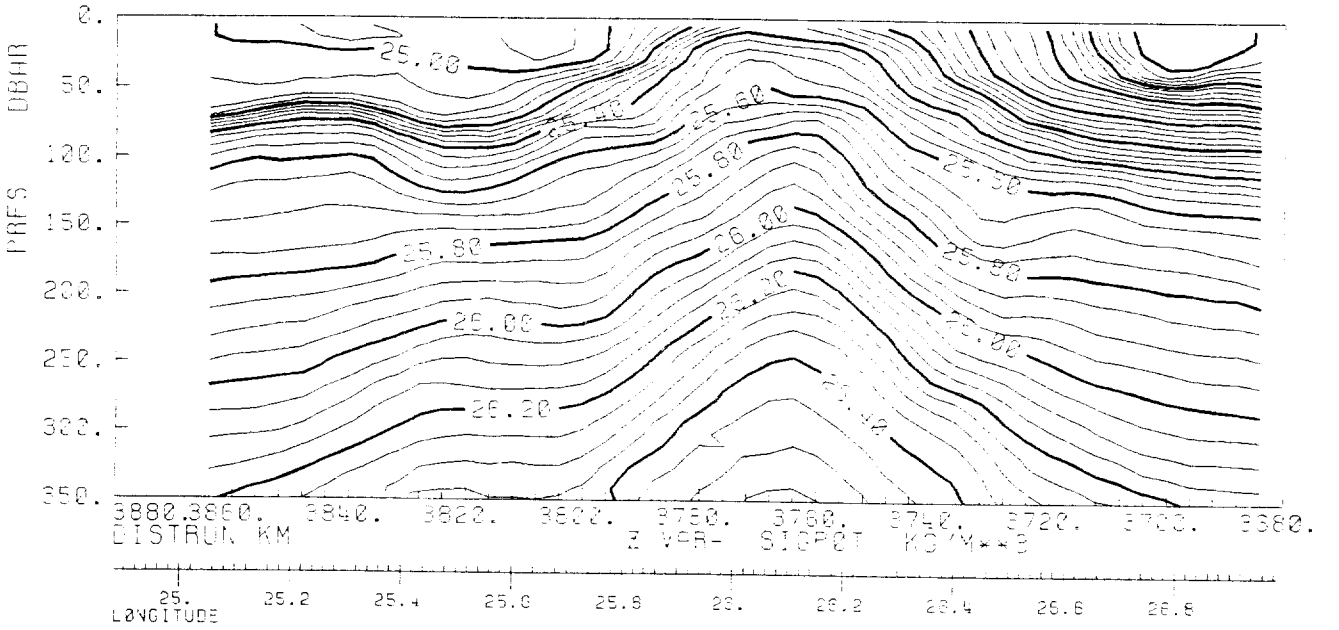
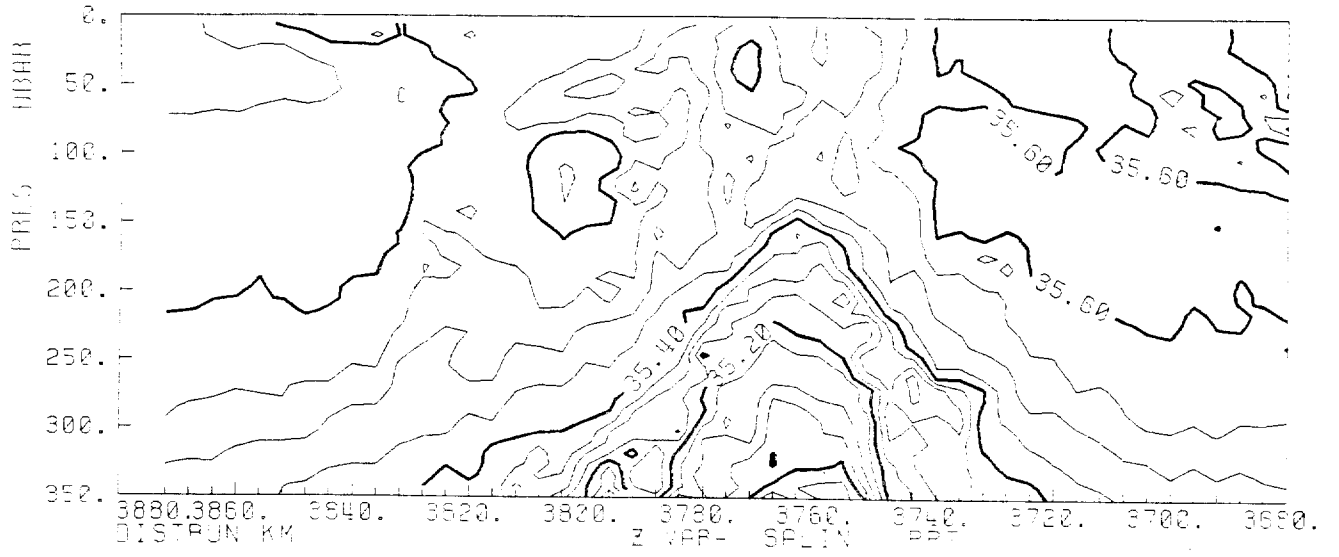
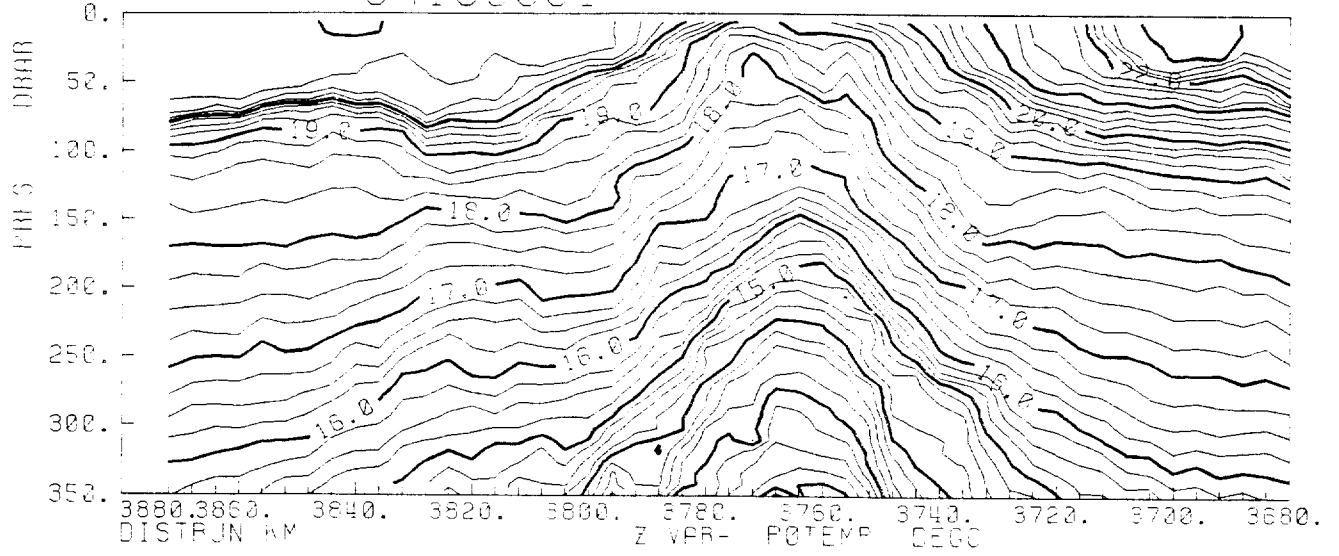
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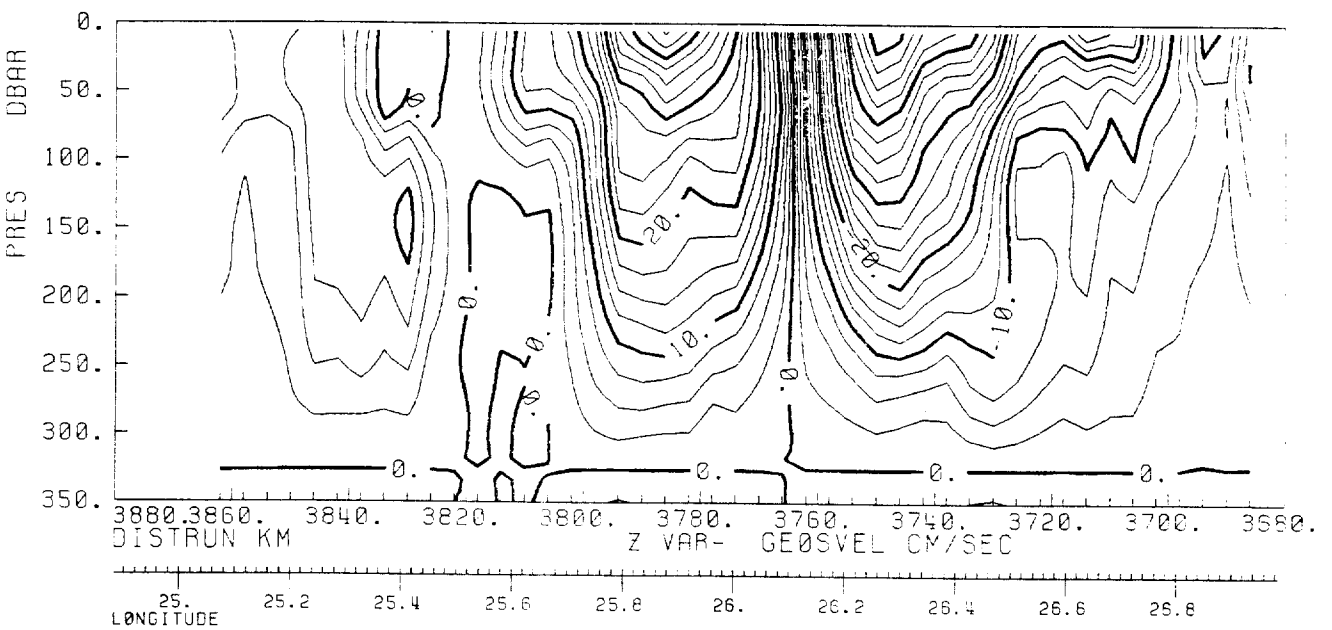
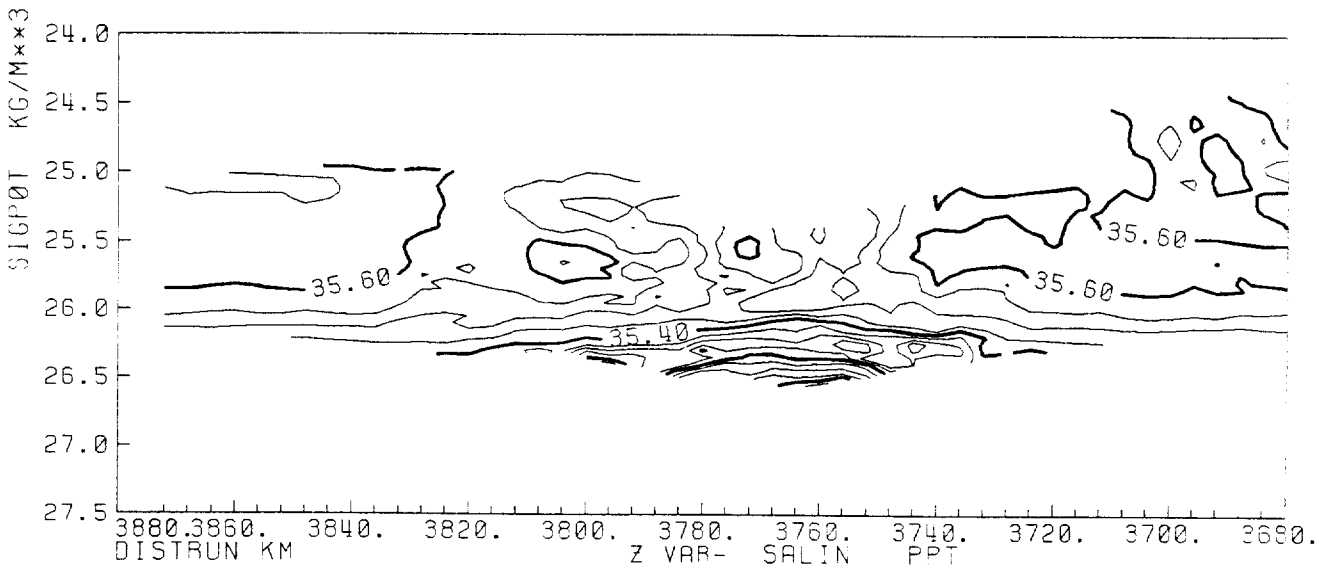
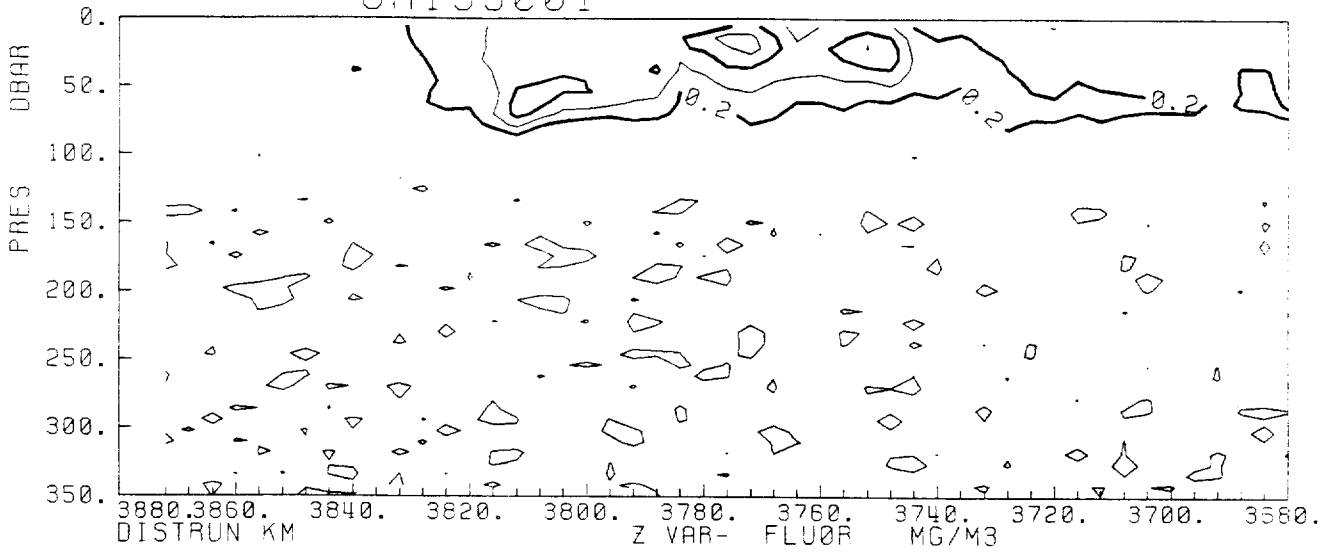
DISCOVERY 165 STATION 11471

PRES	TEMP	SALIN	DO	POTEMP	SIGMA0	SIG2000	SIG4000	DYNHT	SNDV	DEPTH	SVANOM	BVFR
DB	DEGC	PSU	ML/L	DEGC	KG/M ³	KG/M ³	KG/M ³	DYN.M	M/S	M	10 ⁻⁸ KG/M ³	CY/HR
10.	21.283	35.528	5.18	21.281	24.821	33.226	41.271	0.031	1525.7	10.	312.25	-999.000
20.	21.295	35.542	5.10	21.291	24.828	33.233	41.277	0.062	1525.9	20.	311.95	1.549
40.	21.302	35.545	5.15	21.294	24.830	33.235	41.278	0.125	1526.3	40.	312.64	0.473
60.	21.307	35.547	4.98	21.296	24.831	33.236	41.280	0.187	1526.6	60.	313.35	0.447
80.	19.054	35.510	4.45	19.039	25.402	33.875	41.983	0.246	1520.7	79.	259.62	9.517
100.	17.622	35.431	3.99	17.605	25.700	34.221	42.373	0.295	1516.8	99.	231.84	6.887
120.	16.771	35.397	3.79	16.751	25.879	34.428	42.608	0.339	1514.6	119.	215.41	5.342
140.	16.301	35.478	4.40	16.278	26.052	34.617	42.810	0.381	1513.6	139.	199.60	5.243
160.	15.783	35.496	4.91	15.758	26.185	34.768	42.978	0.420	1512.3	159.	187.50	4.614
180.	15.374	35.465	4.89	15.347	26.254	34.852	43.076	0.456	1511.4	179.	181.49	3.335
200.	14.913	35.432	4.98	14.883	26.331	34.946	43.186	0.492	1510.2	198.	174.70	3.522
220.	14.516	35.394	5.02	14.483	26.389	35.018	43.272	0.527	1509.2	218.	169.71	3.063
240.	13.981	35.331	5.07	13.946	26.455	35.105	43.379	0.560	1507.8	238.	163.83	3.295
260.	13.462	35.266	5.07	13.425	26.513	35.183	43.475	0.592	1506.3	258.	158.75	3.078
280.	13.032	35.209	5.03	12.993	26.556	35.244	43.552	0.623	1505.2	278.	154.98	2.697
300.	12.733	35.166	4.94	12.692	26.584	35.283	43.603	0.654	1504.4	297.	152.81	2.141
320.	11.723	34.949	5.21	11.681	26.610	35.352	43.712	0.684	1501.1	317.	150.21	2.291
340.	11.350	34.968	5.38	11.307	26.695	35.452	43.826	0.714	1500.2	337.	142.45	3.717
360.	11.174	34.967	5.18	11.128	26.727	35.492	43.872	0.742	1499.9	357.	139.79	2.302
380.	10.889	34.943	5.13	10.842	26.760	35.537	43.929	0.770	1499.2	377.	136.95	2.362
400.	10.672	34.911	5.15	10.623	26.775	35.560	43.961	0.797	1498.7	396.	135.92	1.594
450.	10.028	34.837	5.00	9.975	26.830	35.644	44.071	0.863	1497.1	446.	131.32	1.965
500.	8.951	34.723	5.01	8.896	26.918	35.780	44.252	0.927	1493.9	495.	122.95	2.516
550.	7.784	34.596	5.15	7.728	26.997	35.913	44.436	0.986	1490.2	545.	115.10	2.430
600.	7.015	34.527	5.10	6.958	27.052	36.005	44.562	1.043	1488.0	594.	109.76	2.038
700.	6.126	34.509	4.71	6.063	27.157	36.152	44.749	1.147	1486.1	693.	100.13	1.936
800.	5.493	34.540	4.18	5.425	27.261	36.287	44.913	1.242	1485.3	792.	90.62	1.911
900.	4.487	34.494	4.36	4.417	27.339	36.417	45.091	1.329	1482.8	891.	82.34	1.784
1000.	4.251	34.538	4.09	4.173	27.401	36.490	45.175	1.408	1483.5	990.	77.08	1.457
1100.	3.584	34.519	4.02	3.503	27.453	36.578	45.295	1.482	1482.4	1088.	71.34	1.501
1200.	3.299	34.568	3.94	3.213	27.521	36.659	45.391	1.550	1482.9	1187.	65.07	1.547
1300.	3.175	34.627	3.82	3.082	27.580	36.725	45.462	1.613	1484.1	1286.	59.95	1.413
1400.	2.985	34.663	3.89	2.885	27.627	36.781	45.527	1.671	1485.0	1384.	55.74	1.297
1500.	2.794	34.690	4.10	2.689	27.666	36.831	45.586	1.724	1485.9	1483.	52.08	1.217
1600.	2.738	34.723	4.21	2.625	27.697	36.865	45.624	1.775	1487.3	1581.	49.63	1.032
1700.	2.703	34.751	4.32	2.582	27.724	36.893	45.653	1.824	1488.9	1680.	47.73	0.937
1800.	2.743	34.783	4.48	2.612	27.747	36.914	45.672	1.871	1490.8	1778.	46.45	0.819
1900.	2.689	34.798	4.56	2.550	27.764	36.934	45.695	1.917	1492.3	1877.	45.30	0.792
2000.	2.654	34.810	4.64	2.507	27.777	36.950	45.713	1.962	1493.8	1975.	44.54	0.700
2100.	2.621	34.821	4.73	2.466	27.790	36.965	45.730	2.006	1495.4	2073.	43.83	0.688
2200.	2.587	34.831	4.82	2.423	27.802	36.979	45.746	2.049	1496.9	2171.	43.21	0.665
2300.	2.516	34.836	4.90	2.344	27.812	36.993	45.764	2.092	1498.3	2270.	42.48	0.691
2400.	2.473	34.839	4.94	2.292	27.819	37.003	45.776	2.135	1499.8	2368.	42.19	0.569
2500.	2.430	34.843	5.00	2.240	27.826	37.013	45.789	2.177	1501.3	2466.	41.88	0.570
2600.	2.399	34.845	5.03	2.201	27.831	37.020	45.798	2.218	1502.9	2564.	41.79	0.498
2700.	2.351	34.842	5.05	2.144	27.834	37.025	45.807	2.260	1504.4	2662.	41.81	0.458
2800.	2.336	34.845	5.08	2.120	27.838	37.031	45.813	2.302	1506.0	2760.	41.90	0.430
2900.	2.289	34.843	5.10	2.064	27.841	37.037	45.822	2.344	1507.5	2858.	41.84	0.482
3000.	2.243	34.840	5.10	2.009	27.843	37.042	45.830	2.386	1509.0	2955.	41.83	0.459
3100.	2.192	34.837	5.12	1.949	27.845	37.048	45.839	2.428	1510.5	3053.	41.75	0.484
3200.	2.121	34.833	5.14	1.869	27.848	37.055	45.851	2.469	1511.9	3151.	41.42	0.560
3300.	2.048	34.829	5.15	1.788	27.852	37.063	45.863	2.510	1513.3	3249.	41.02	0.577
3400.	1.959	34.823	5.16	1.691	27.854	37.071	45.876	2.551	1514.6	3346.	40.53	0.601
3500.	1.866	34.815	5.16	1.590	27.855	37.078	45.888	2.591	1515.9	3444.	40.07	0.585
3600.	1.774	34.806	5.15	1.490	27.855	37.084	45.900	2.631	1517.2	3542.	39.65	0.567
3700.	1.658	34.796	5.16	1.366	27.856	37.092	45.914	2.671	1518.4	3639.	38.93	0.647
3800.	1.558	34.787	5.16	1.259	27.856	37.098	45.926	2.709	1519.7	3737.	38.33	0.606
3900.	1.418	34.775	5.16	1.112	27.857	37.107	45.943	2.747	1520.8	3834.	37.29	0.717
4000.	1.293	34.764	5.15	0.980	27.857	37.115	45.958	2.784	1521.9	3932.	36.35	0.686
4100.	1.228	34.758	5.16	0.905	27.857	37.119	45.967	2.820	1523.4	4029.	35.95	0.526
4200.	1.154	34.751	5.17	0.822	27.857	37.124	45.976	2.856	1524.8	4126.	35.44	0.557
4300.	1.110	34.748	5.18	0.770	27.858	37.128	45.983	2.891	1526.3	4224.	35.19	0.465
4400.	1.030	34.741	5.19	0.681	27.858	37.133	45.993	2.926	1527.7	4321.	34.55	0.592
4500.	0.952	34.734	5.21	0.594	27.858	37.138	46.003	2.960	1529.1	4418.	33.93	0.579
4600.	0.915	34.731	5.21	0.547	27.858	37.141	46.008	2.994	1530.7	4515.	33.70	0.446
4700.	0.842	34.724	5.24	0.464	27.857	37.146	46.017	3.027	1532.1	4612.	33.08	0.576
4800.	0.784	34.720	5.24	0.397	27.858	37.150	46.026	3.060	1533.6	4709.	32.53	0.551

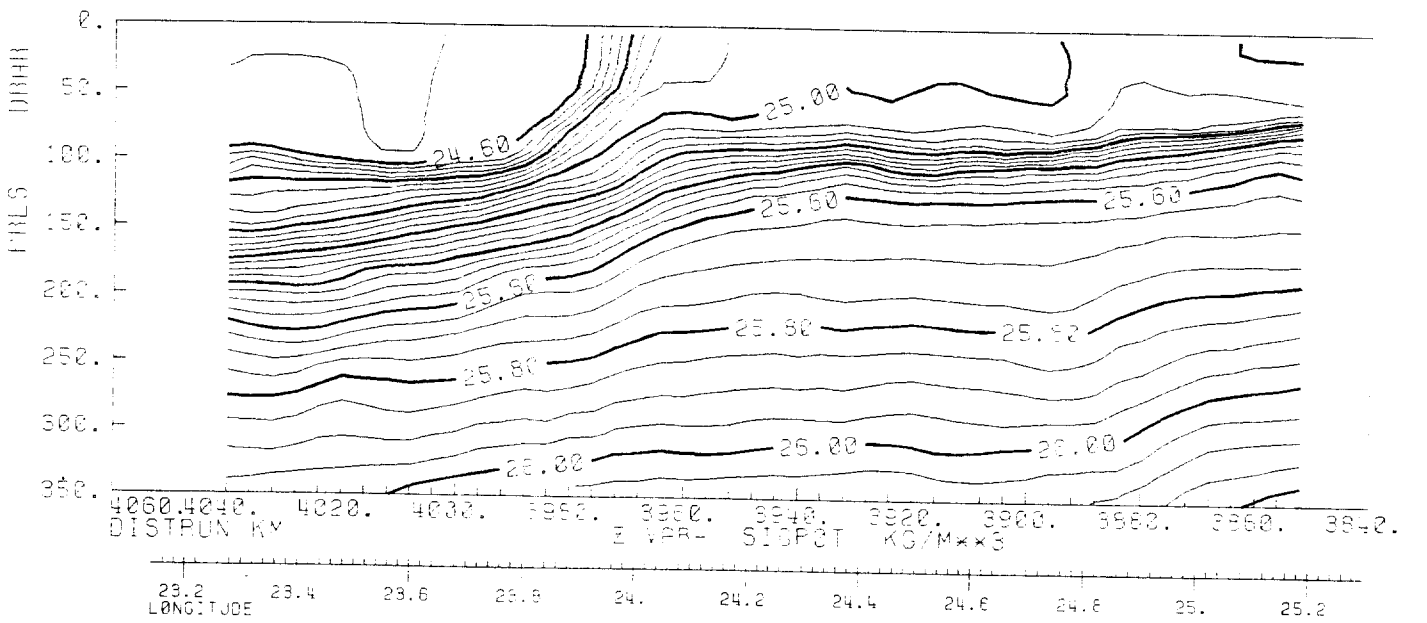
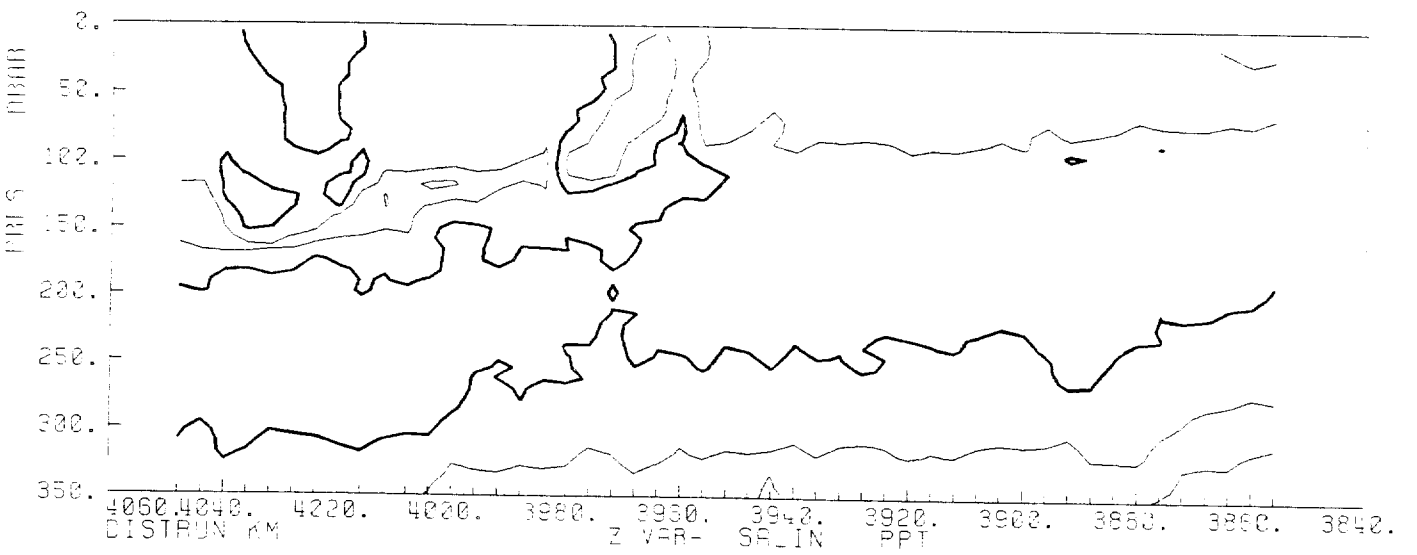
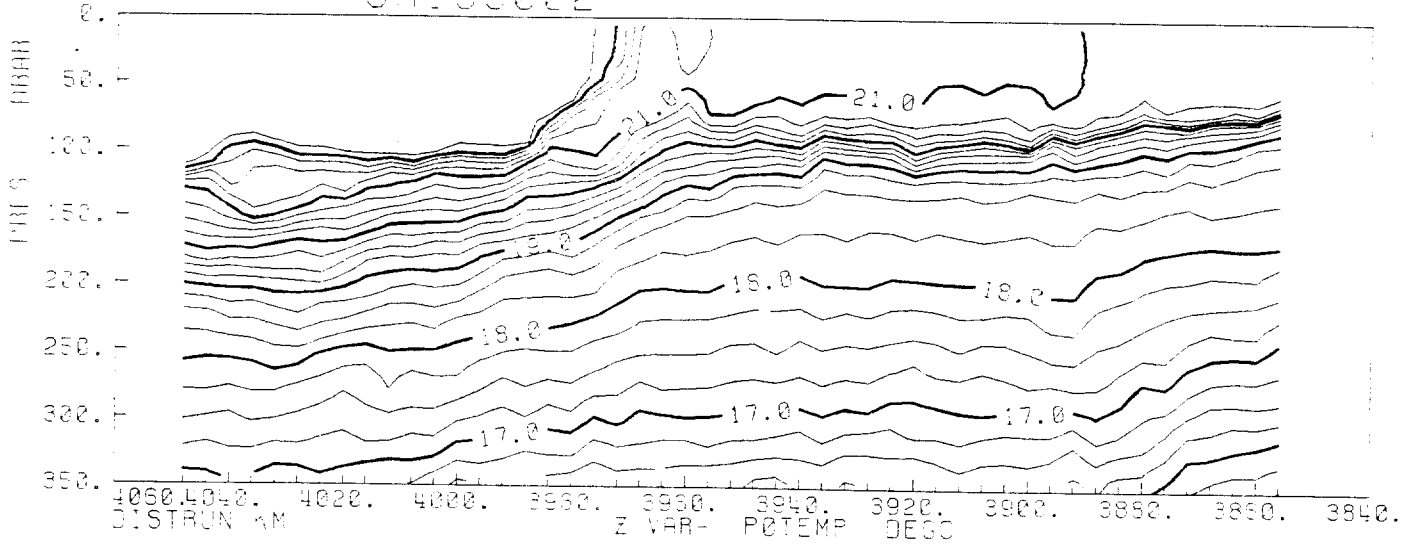
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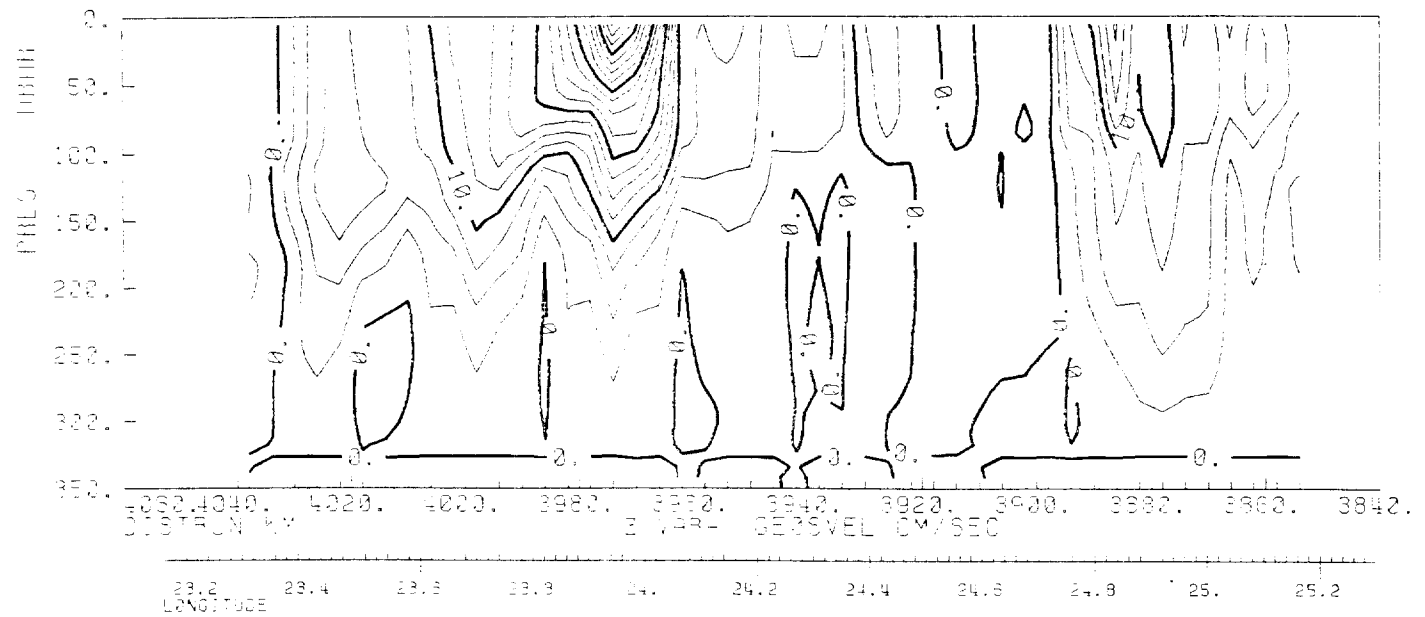
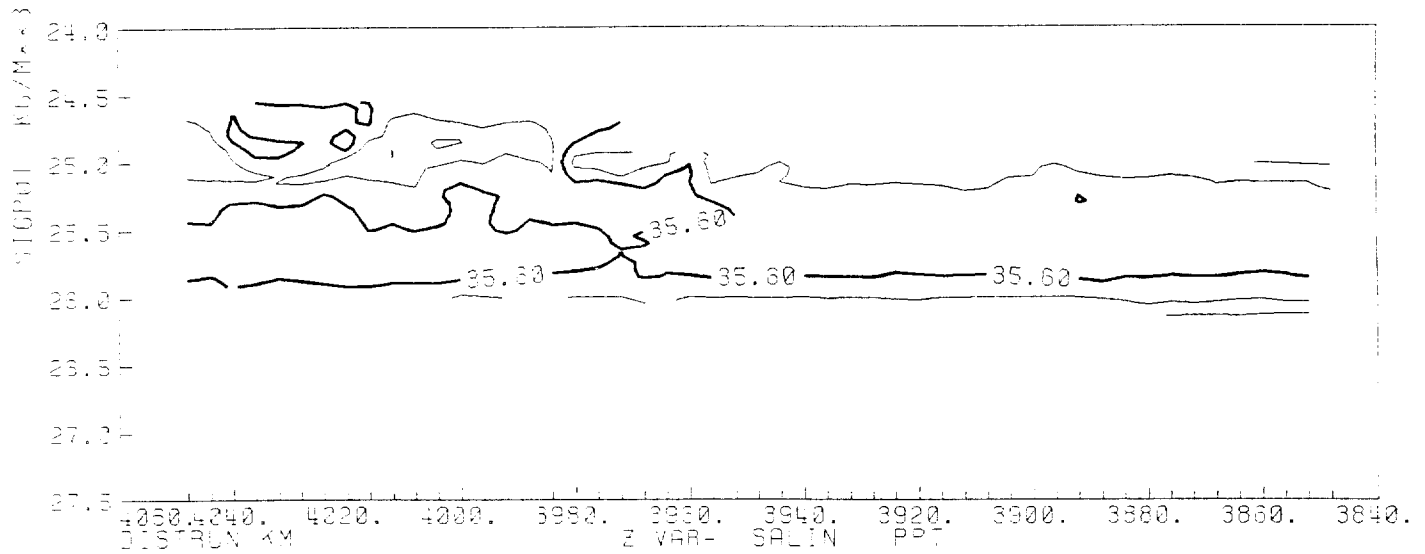
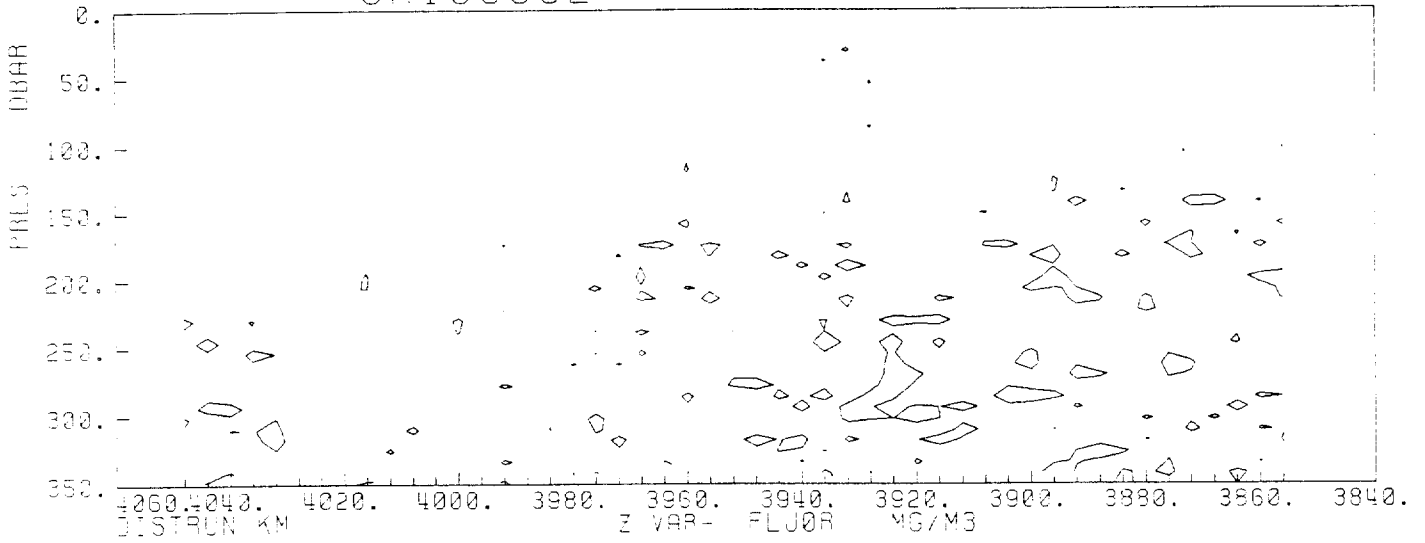
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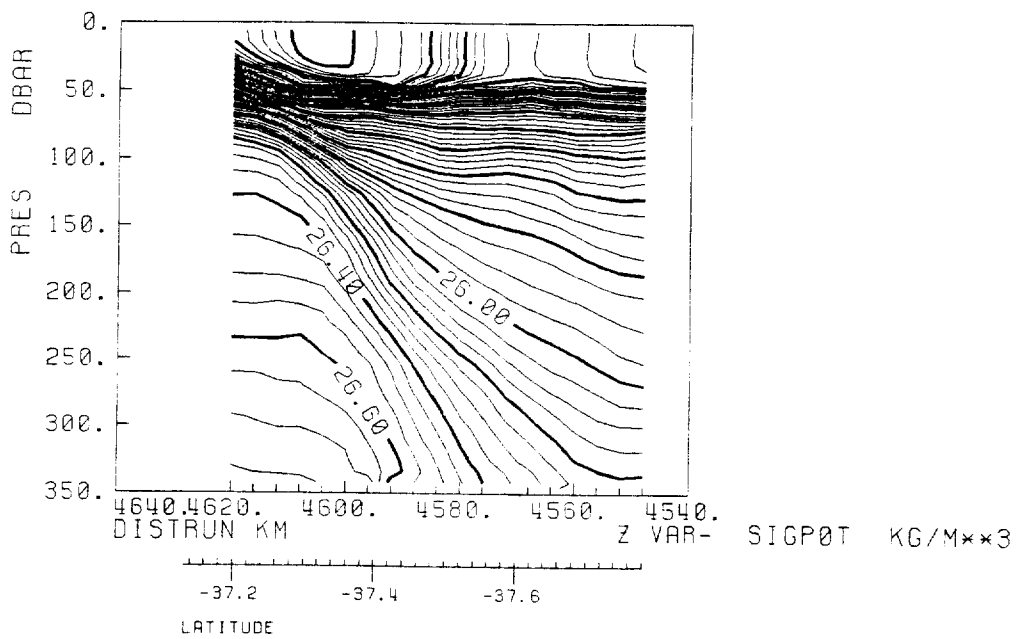
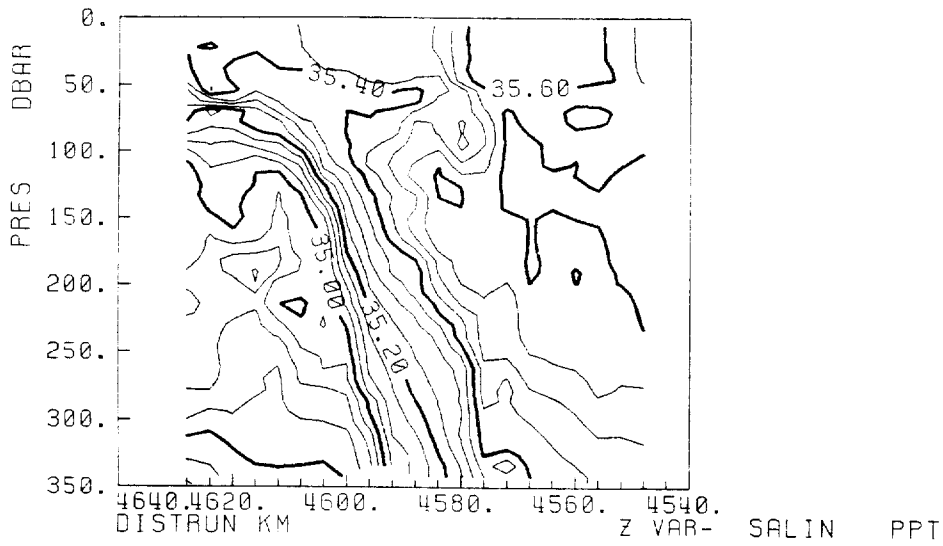
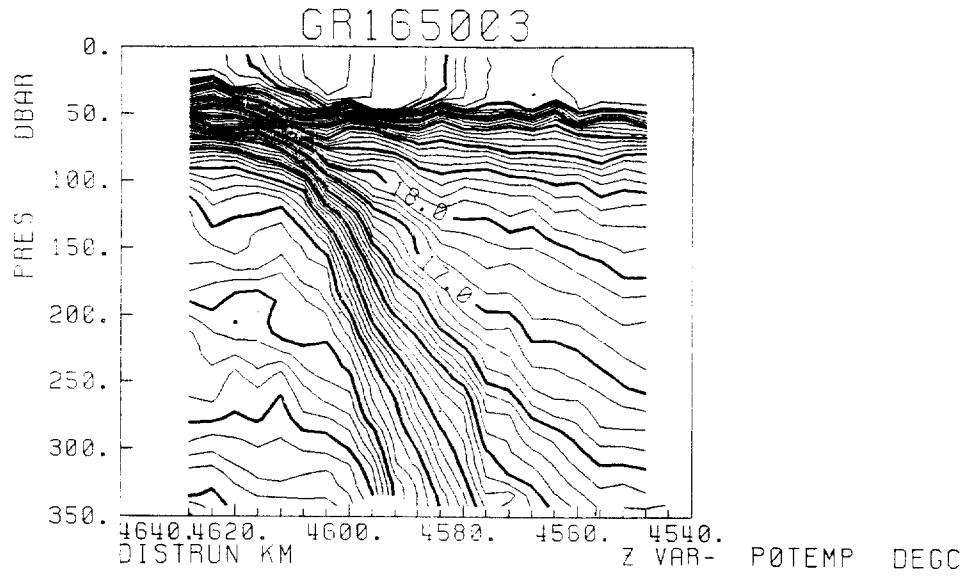


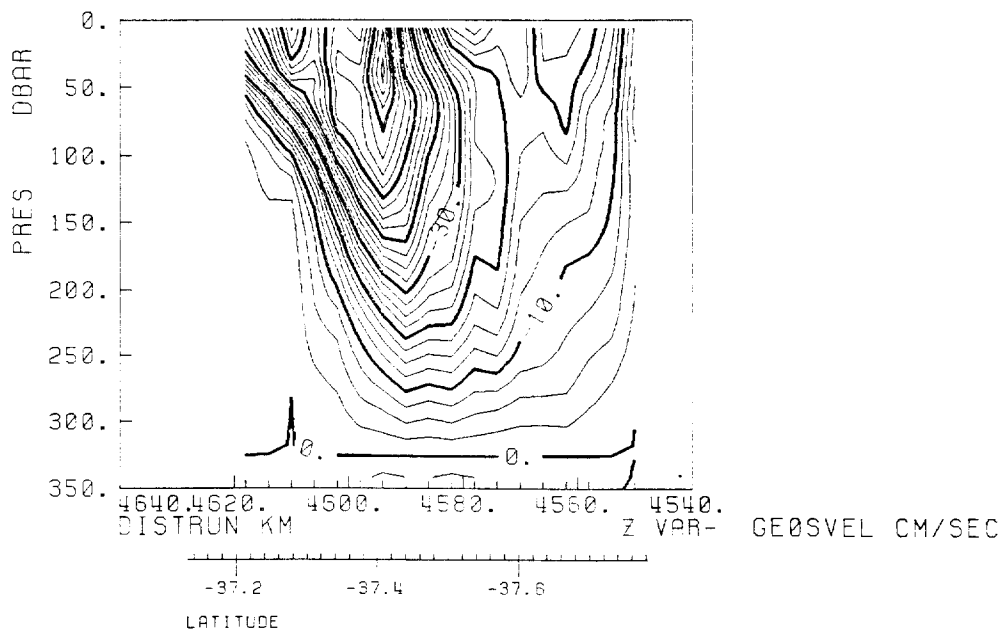
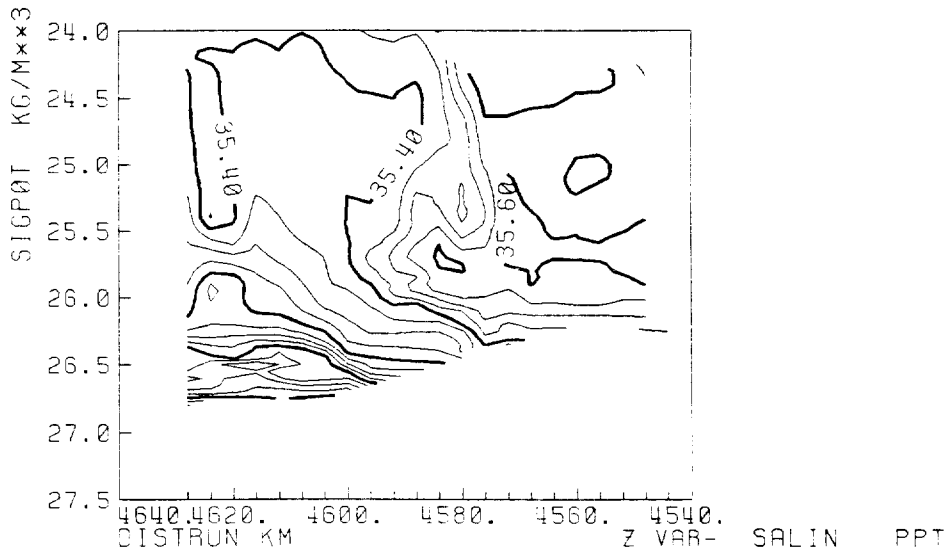
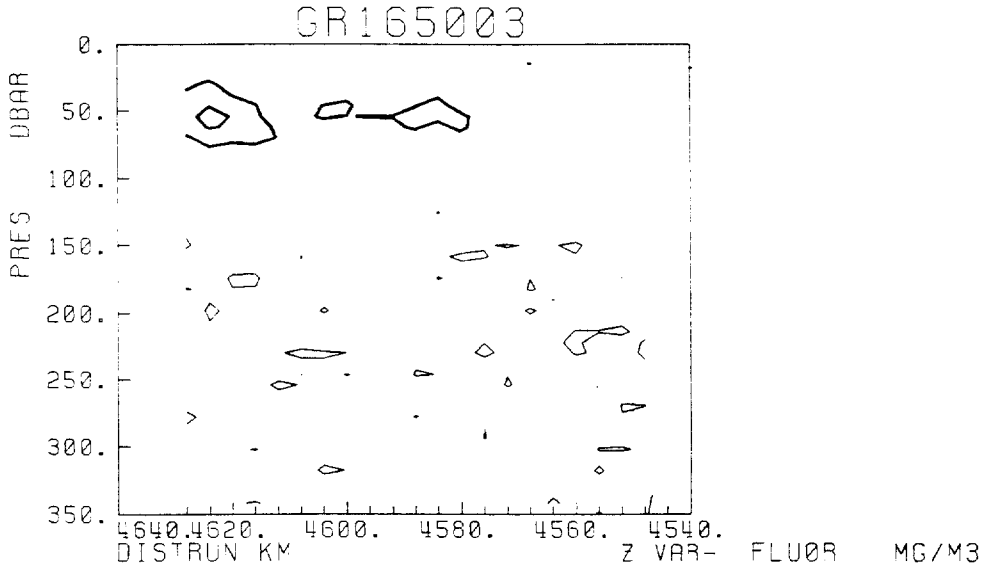
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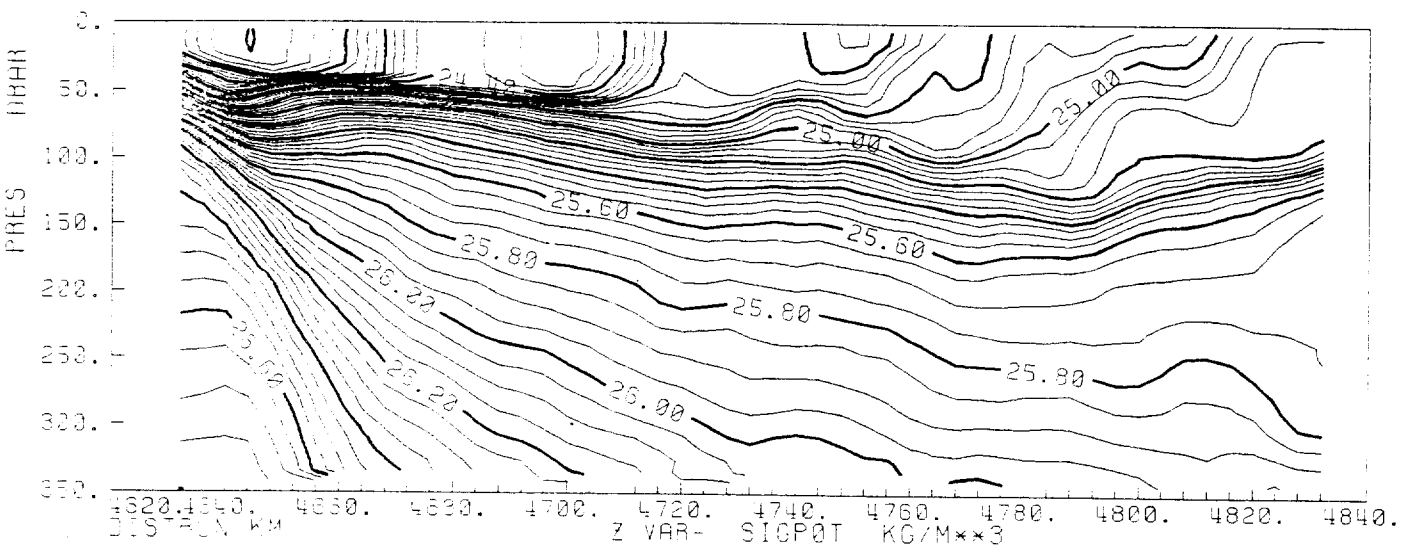
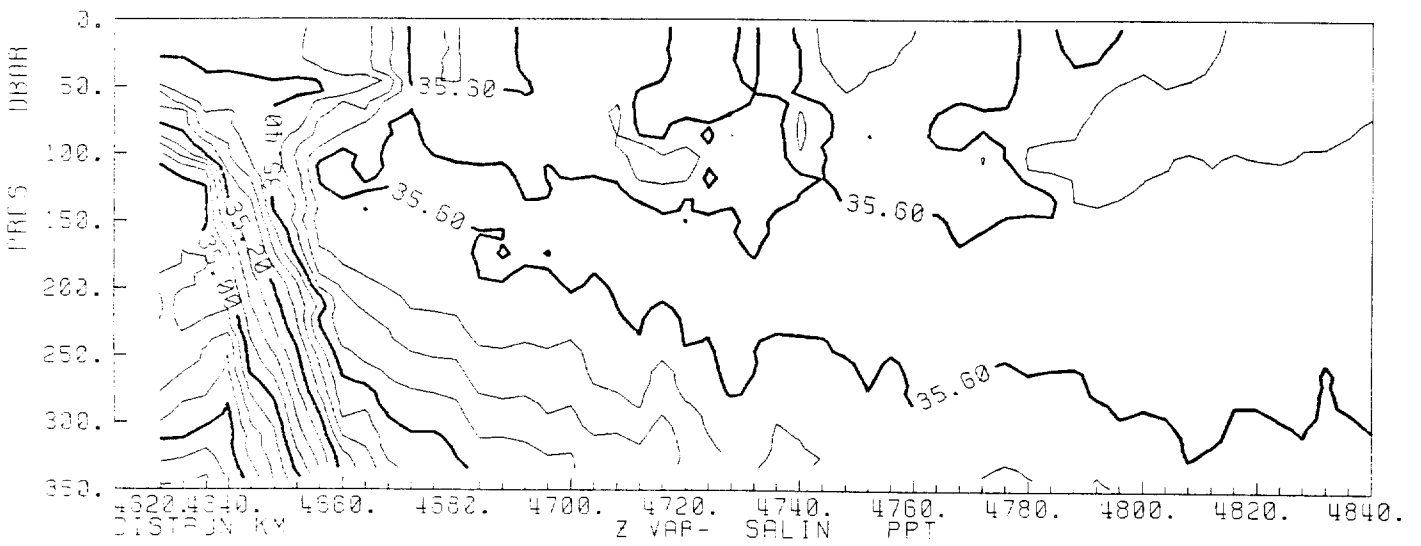
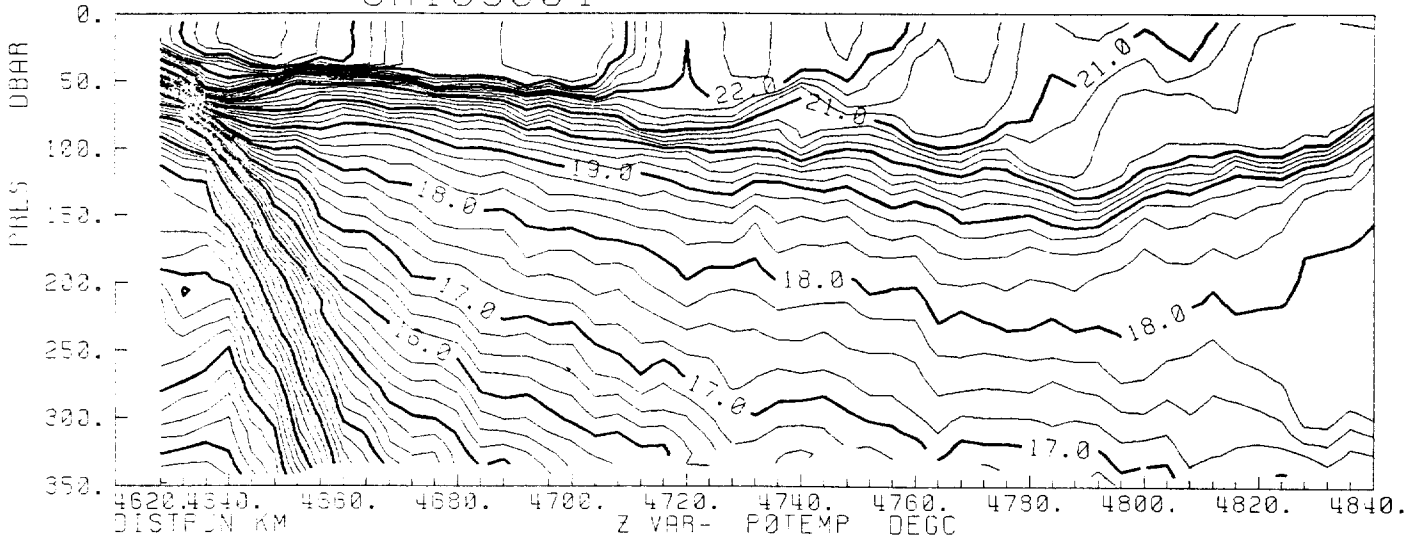
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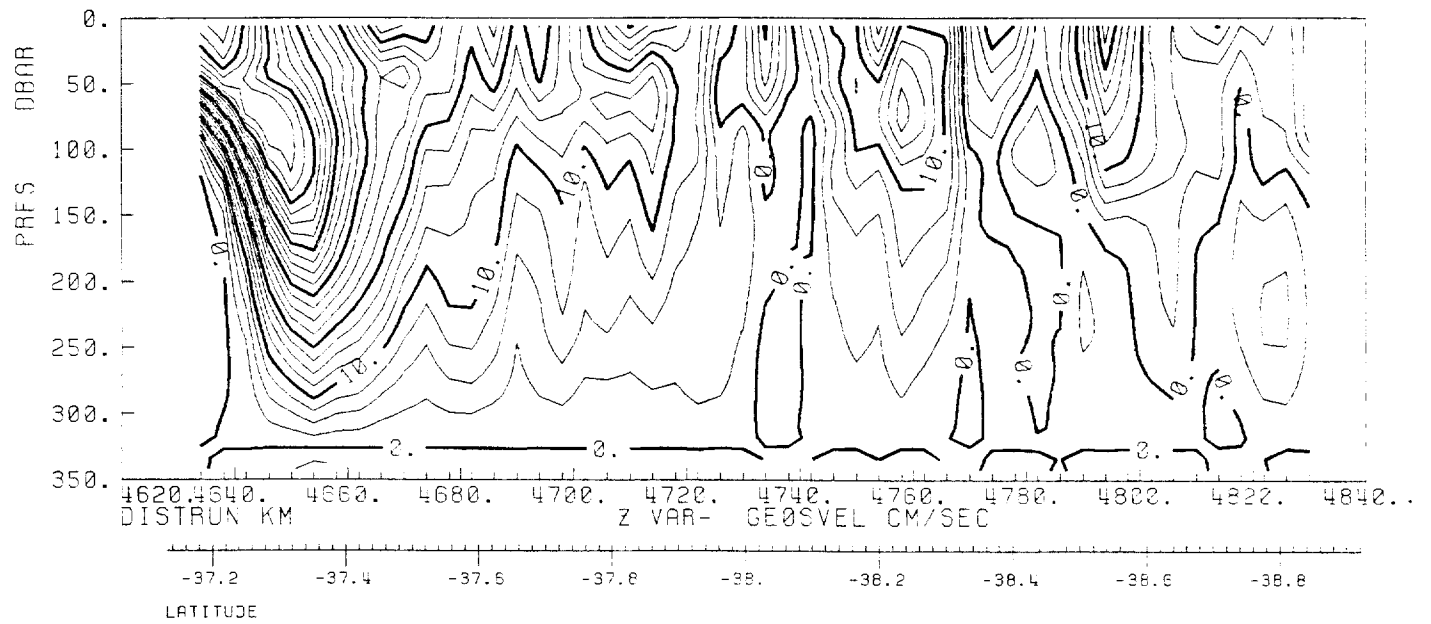
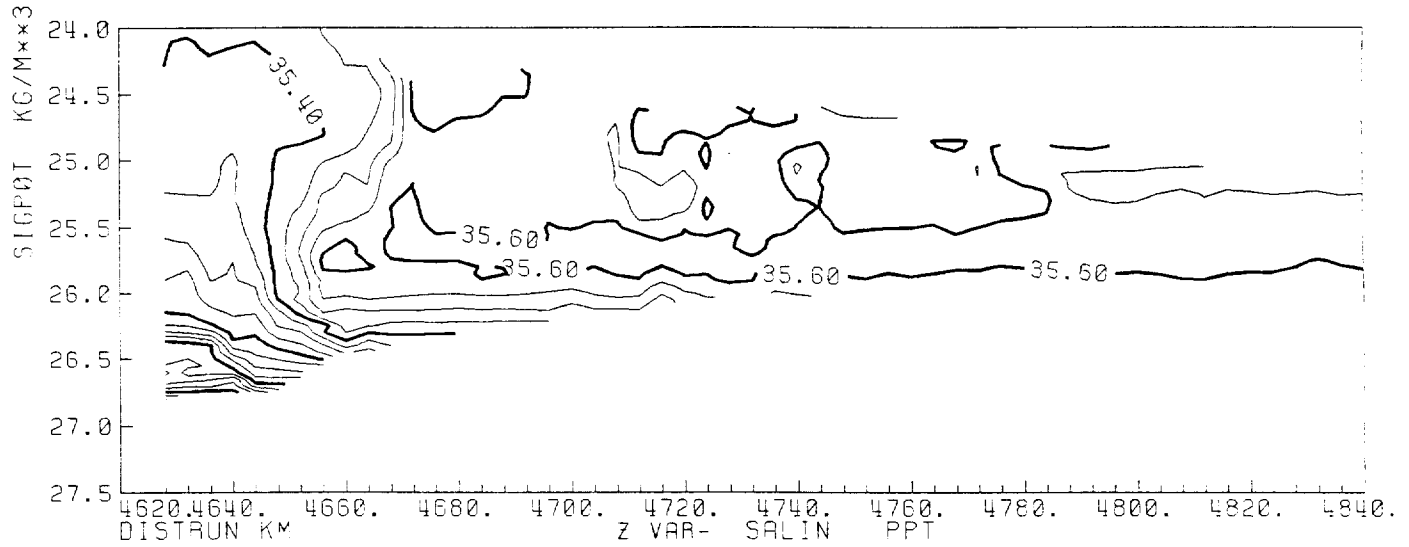
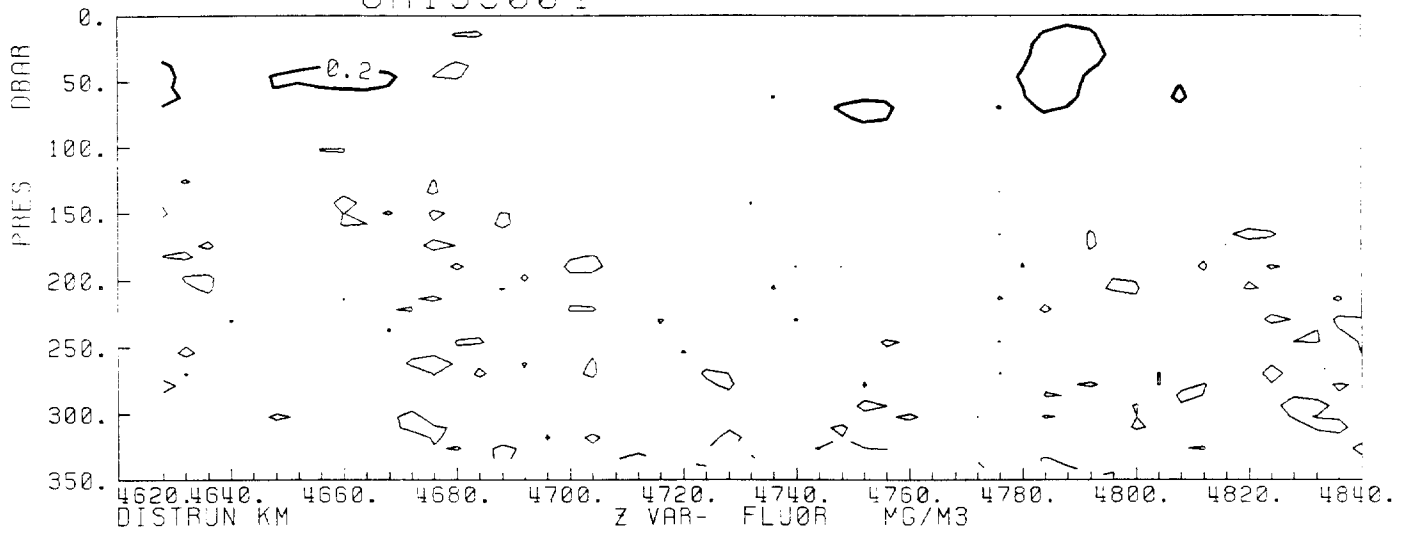


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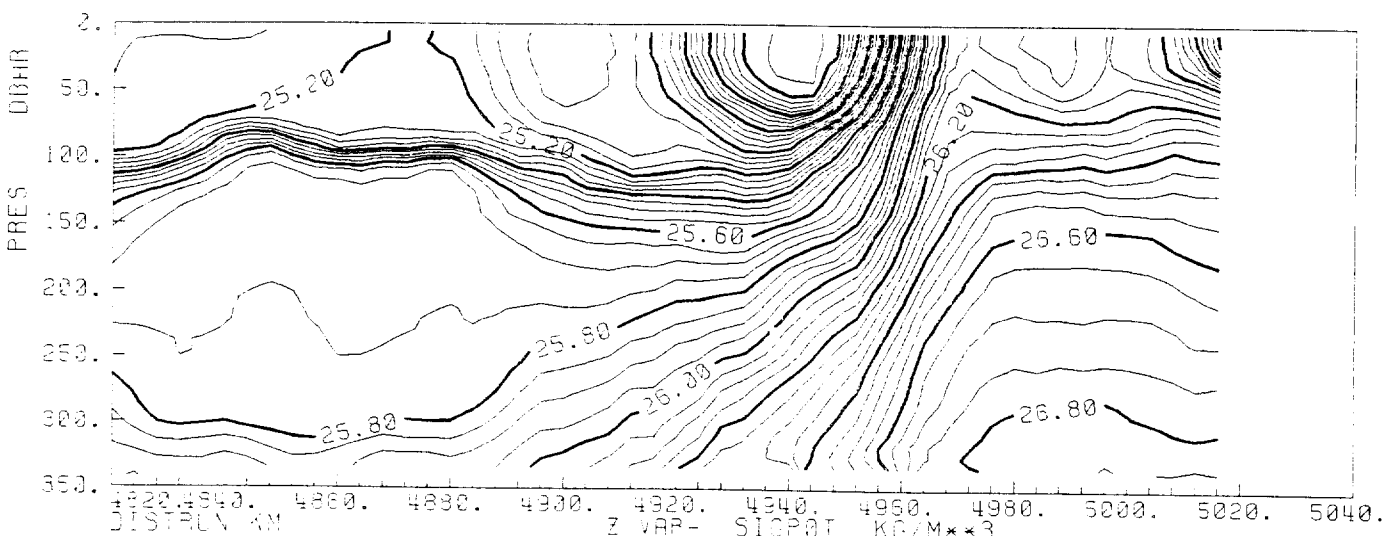
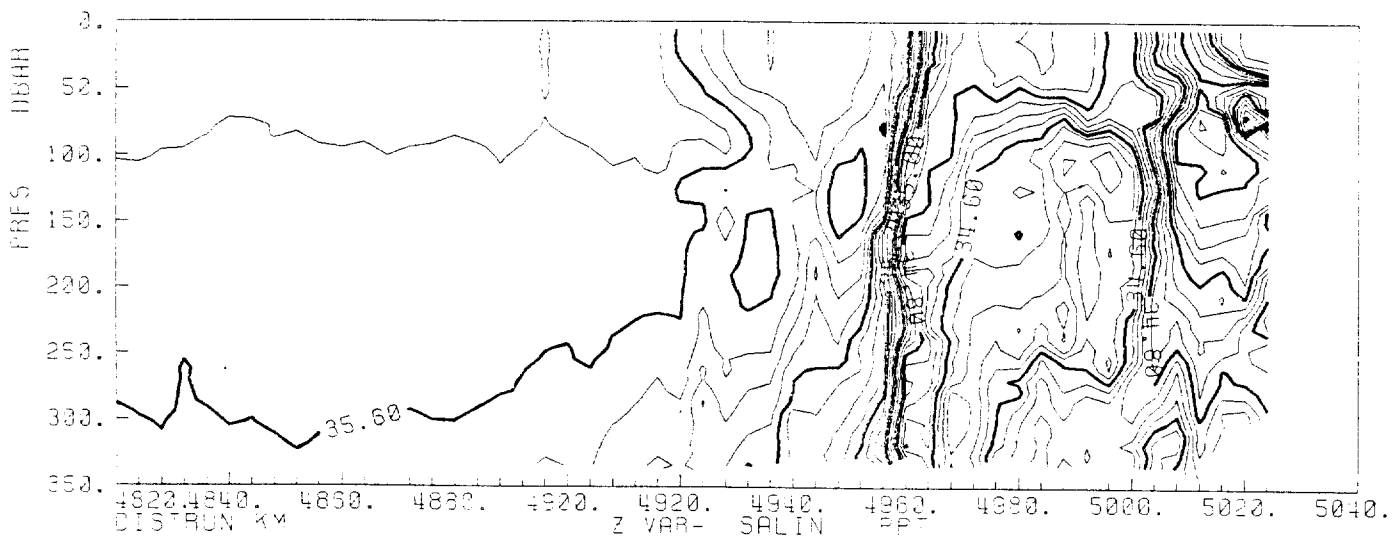
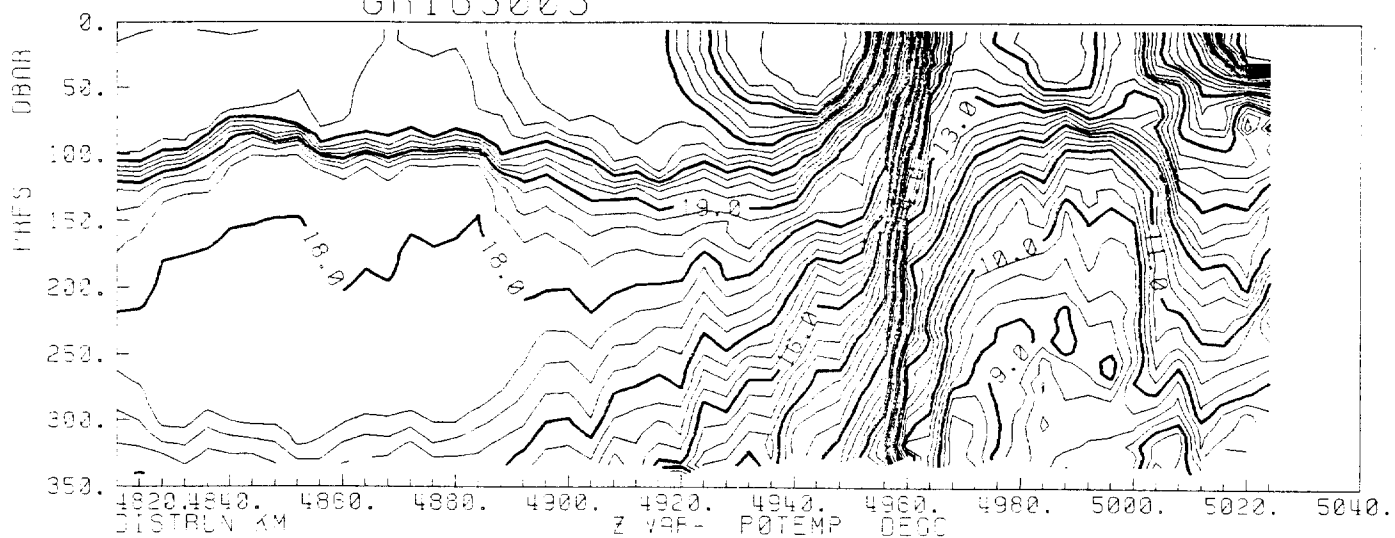


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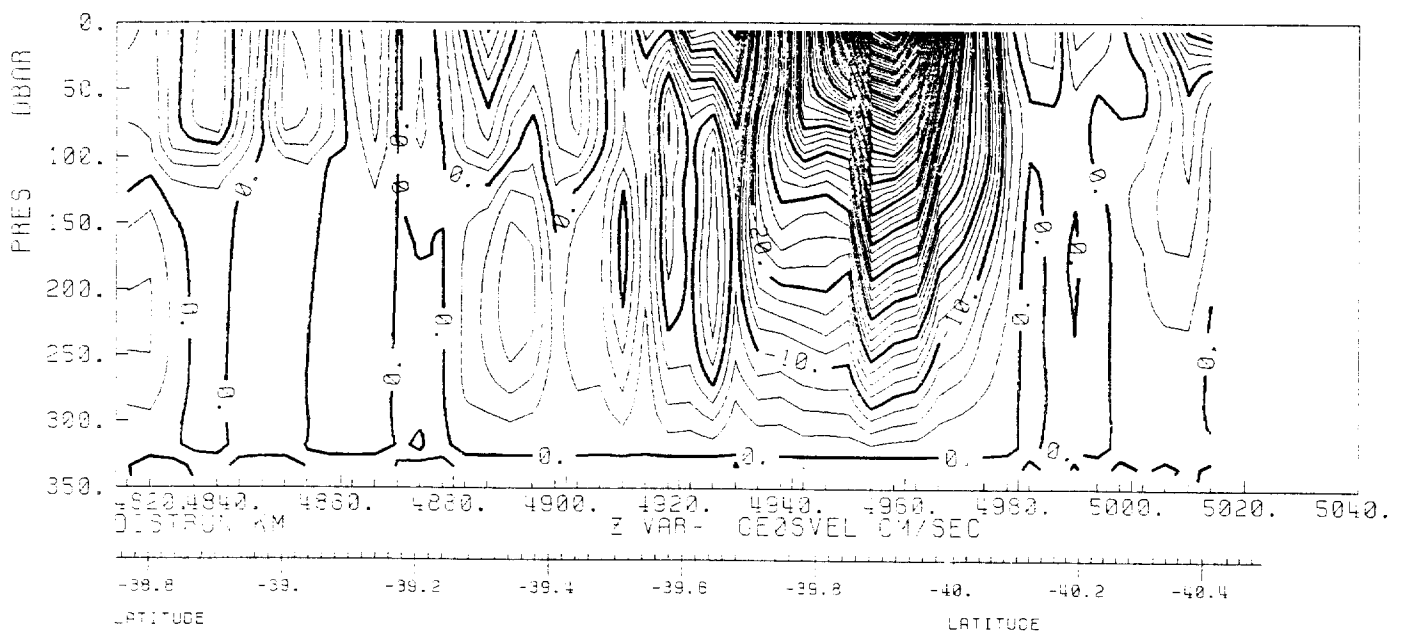
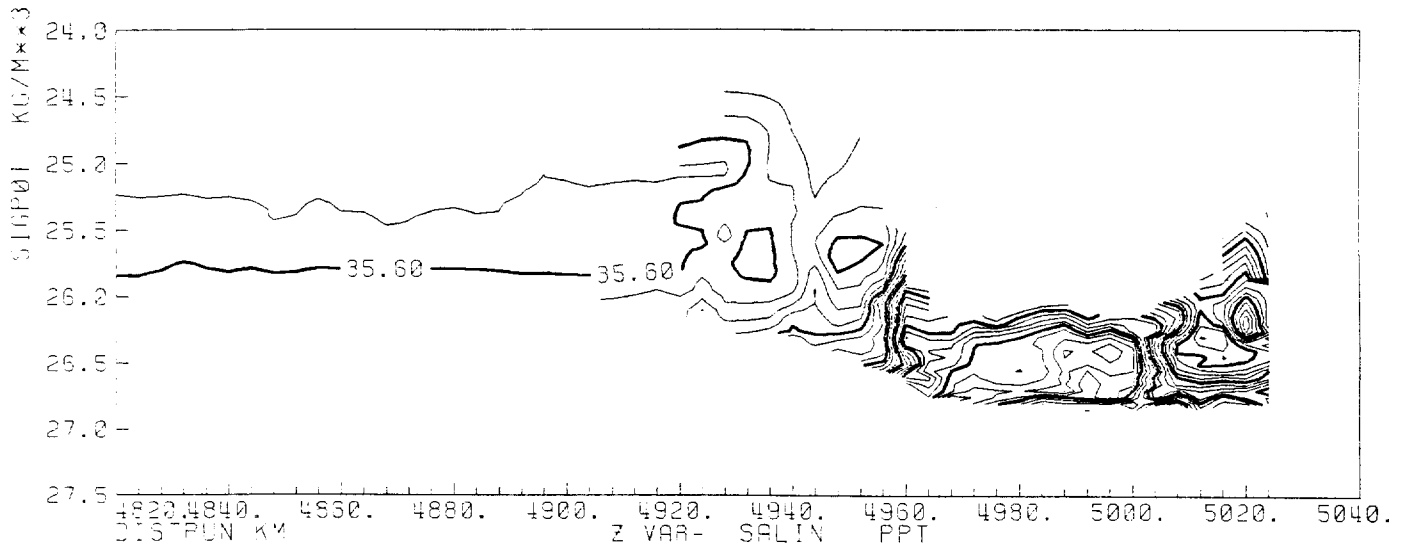
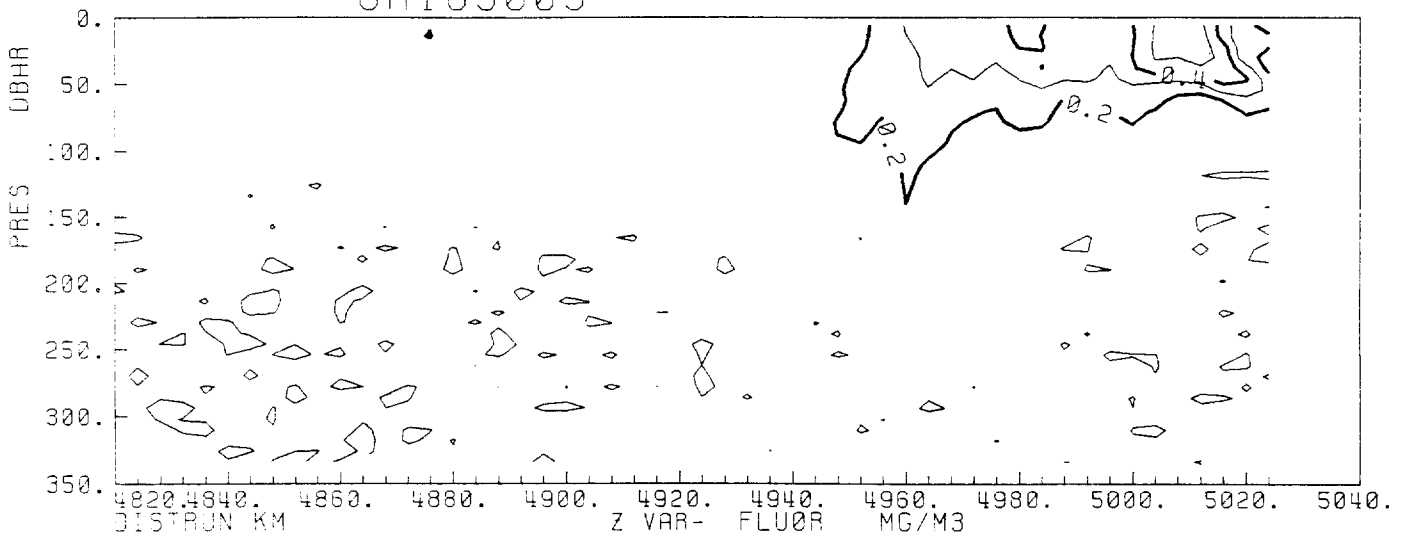


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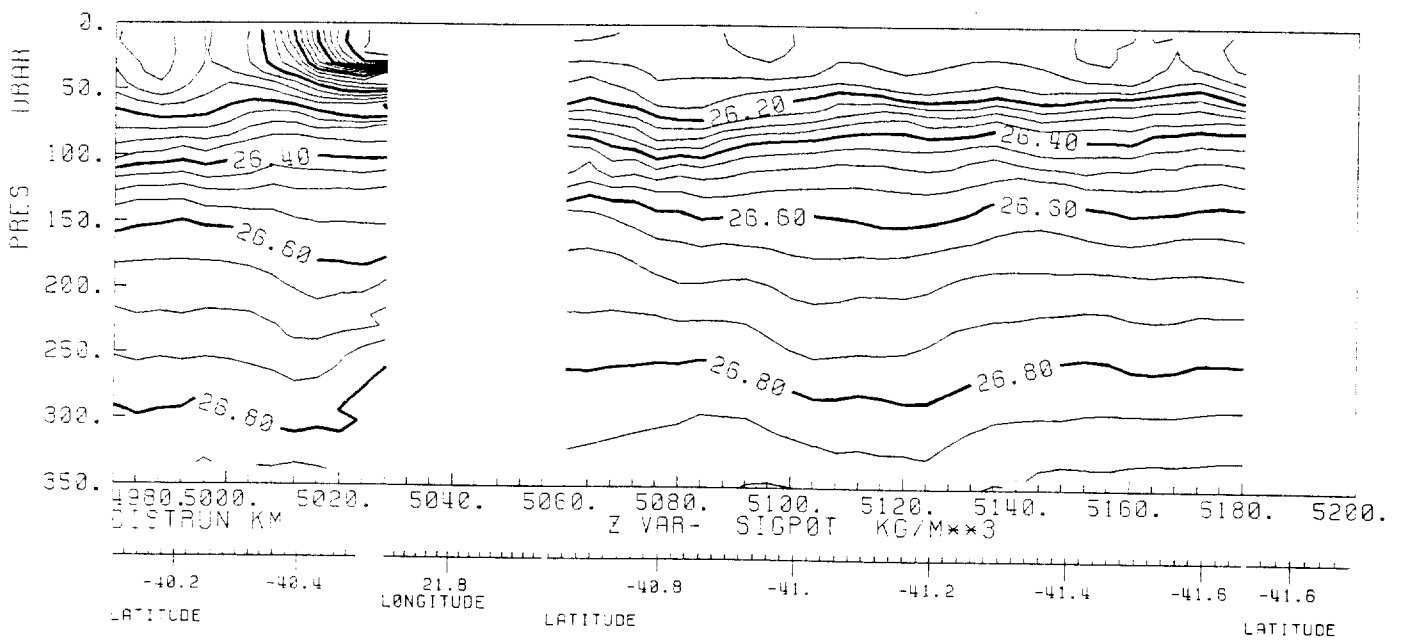
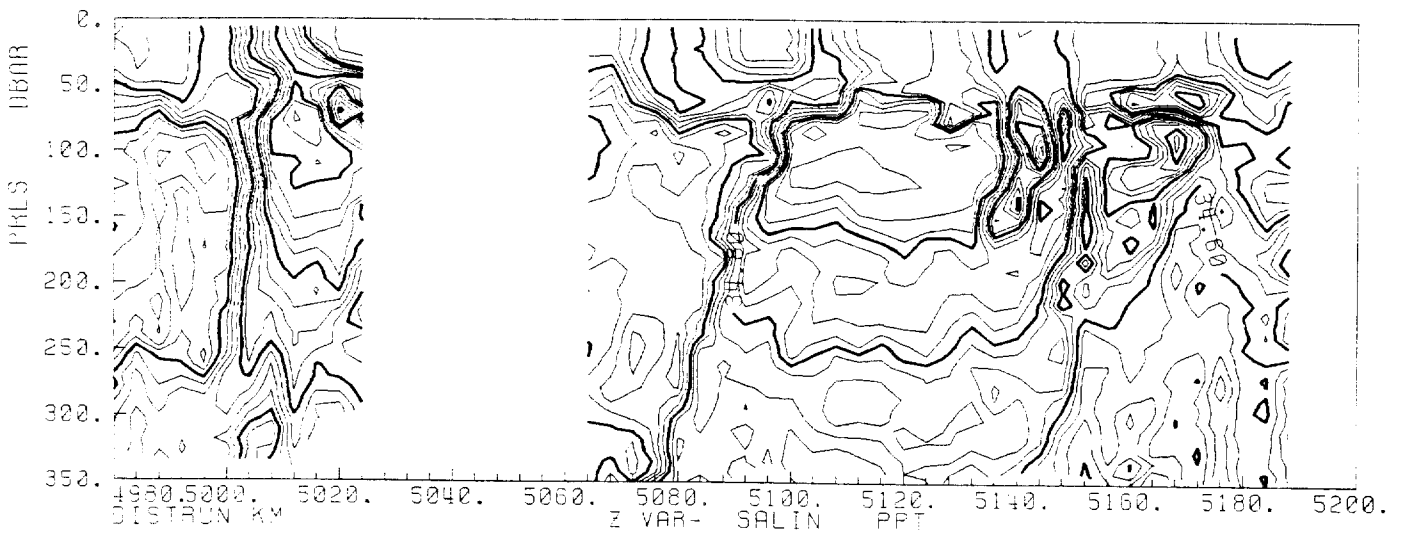
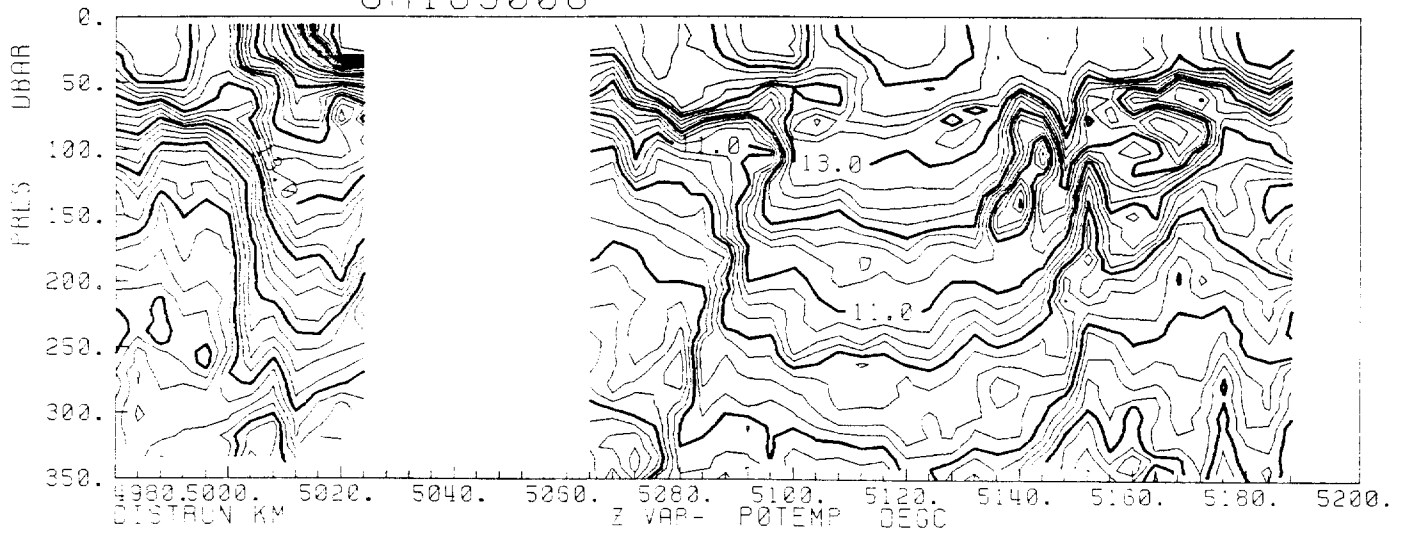


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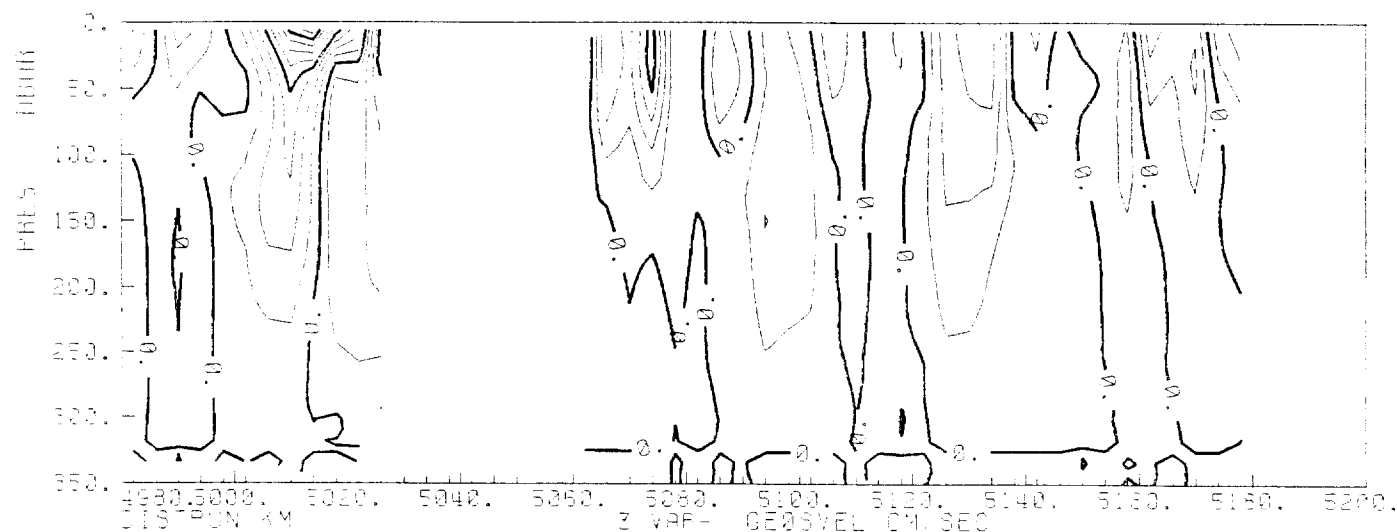
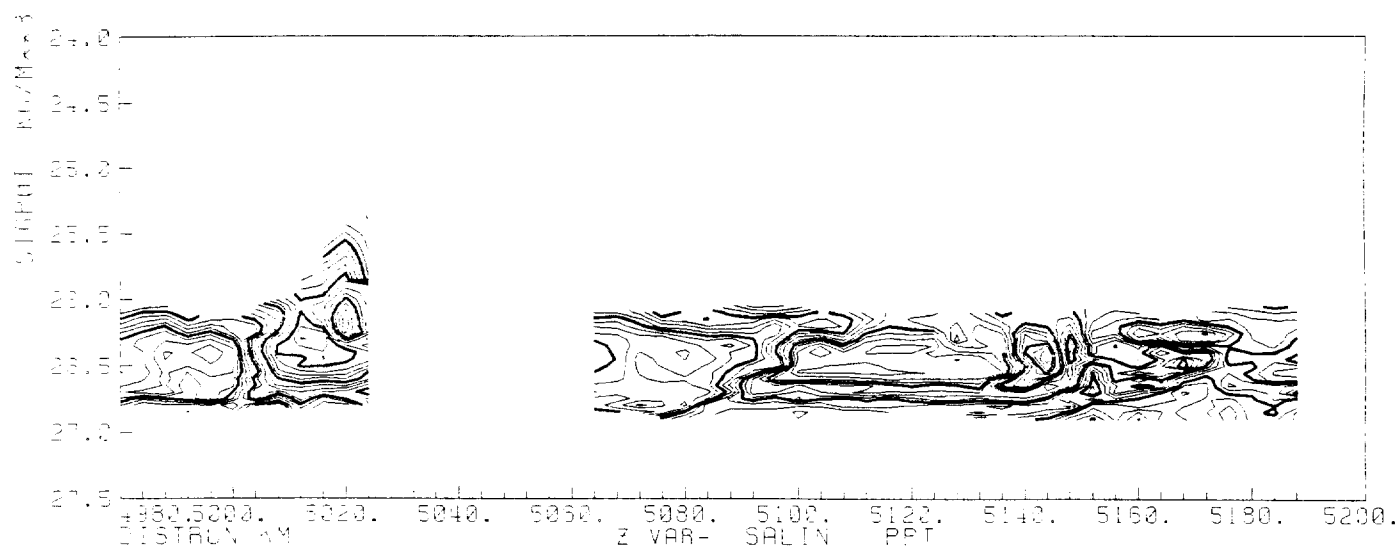
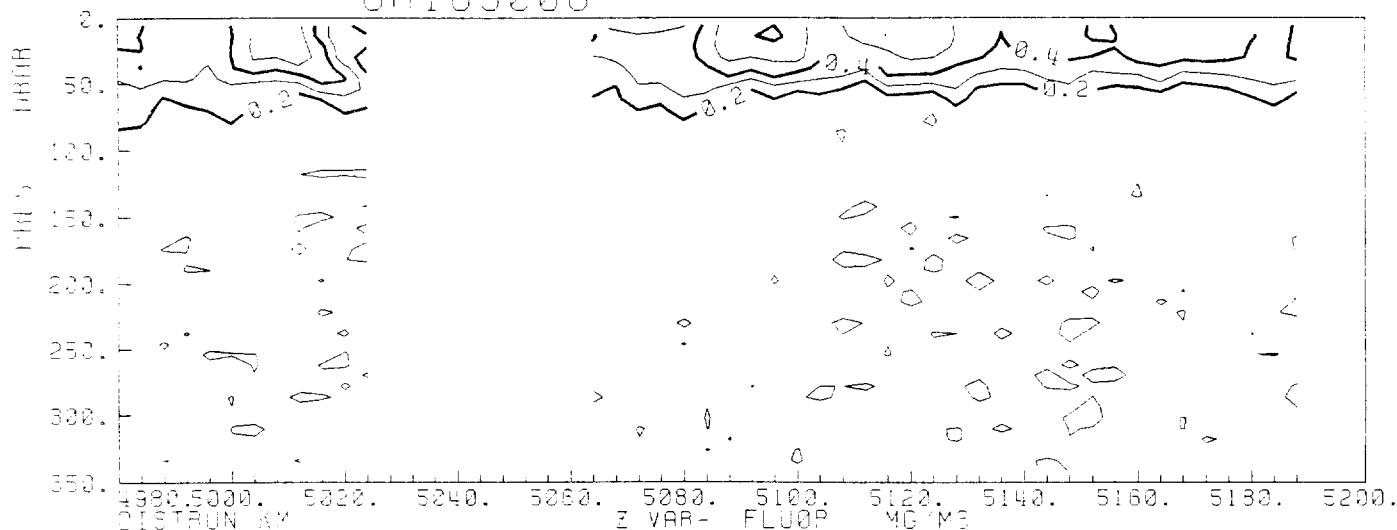
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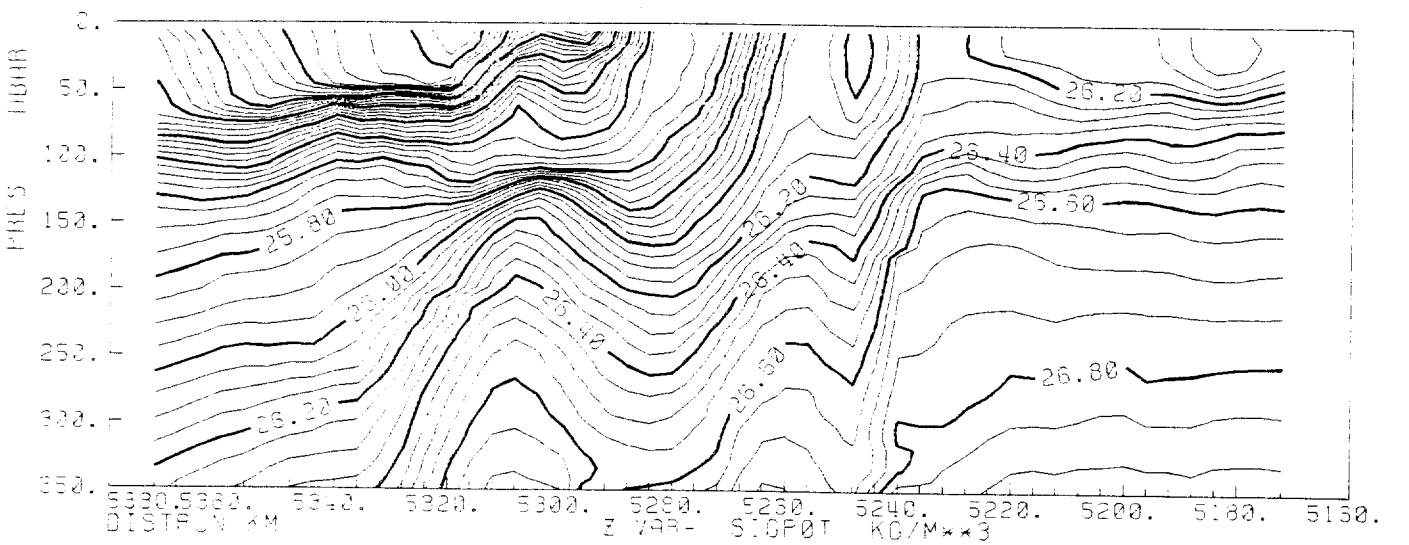
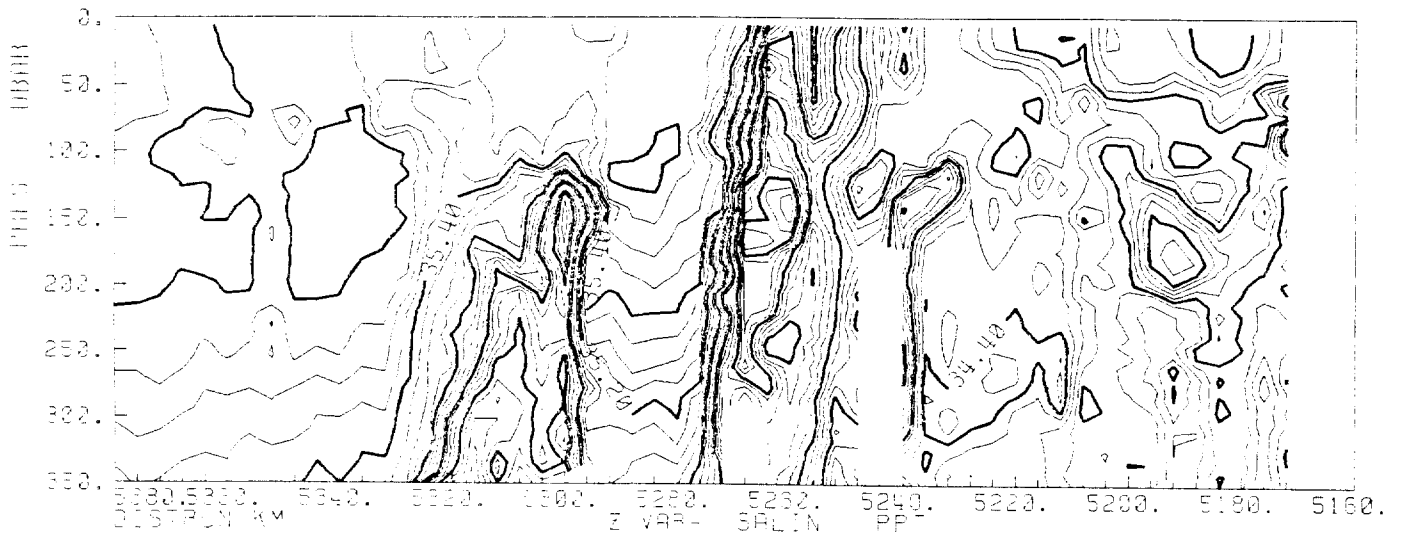
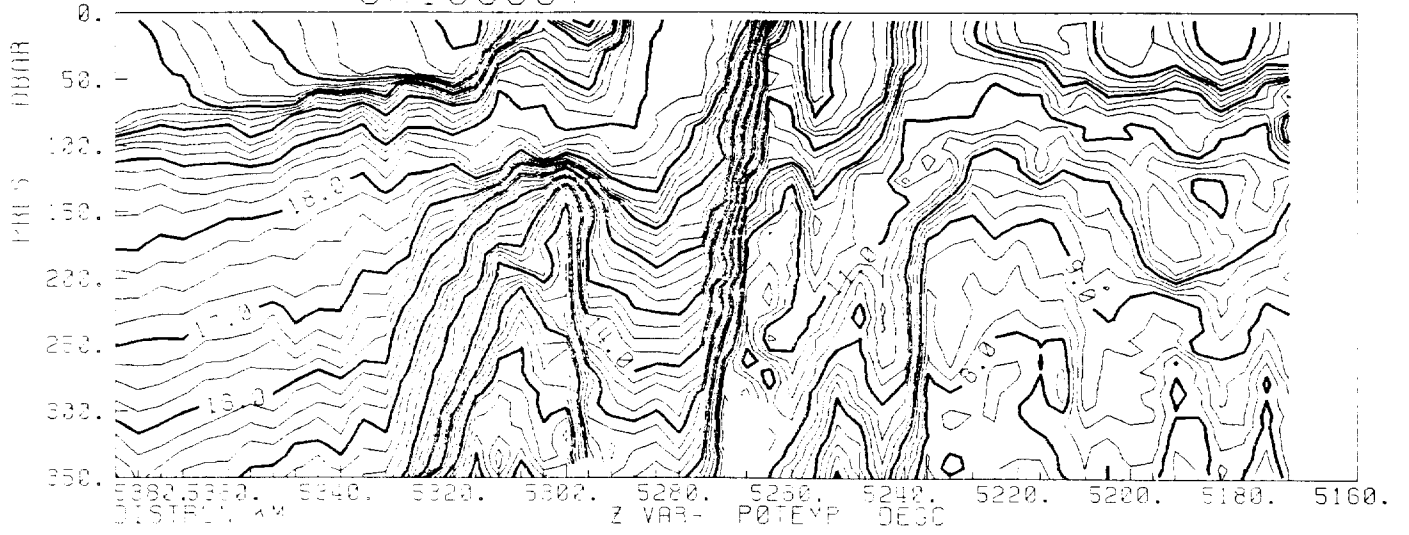


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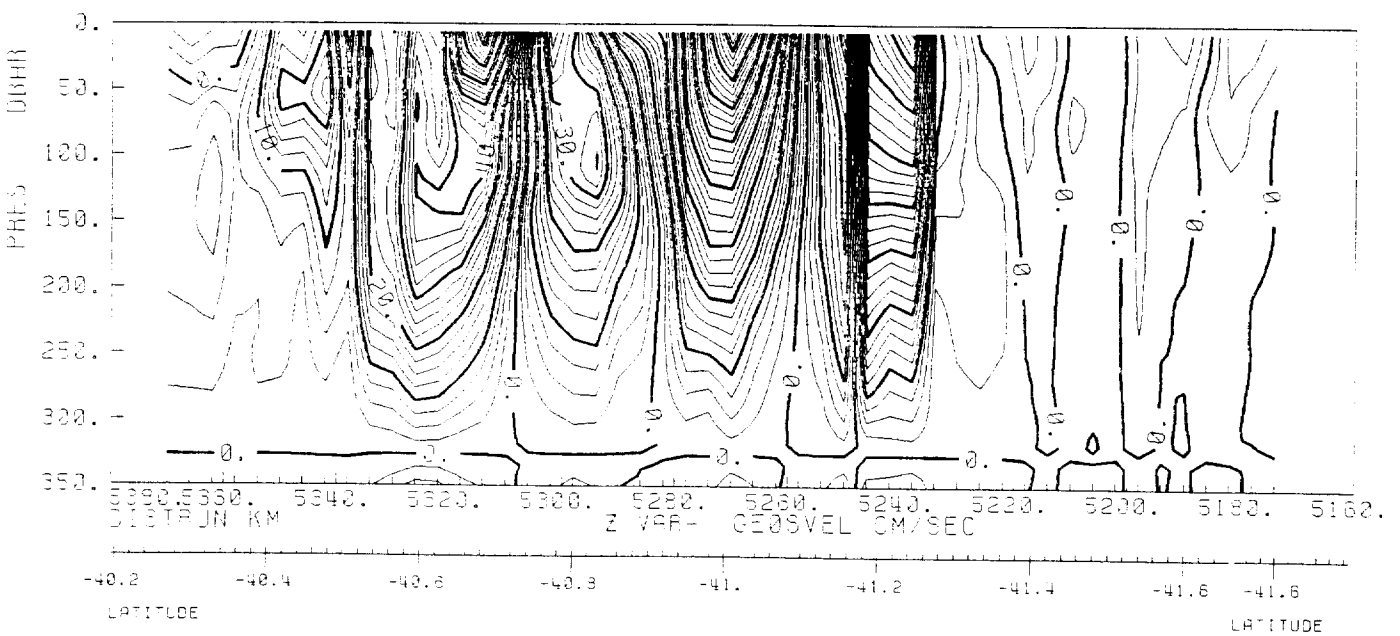
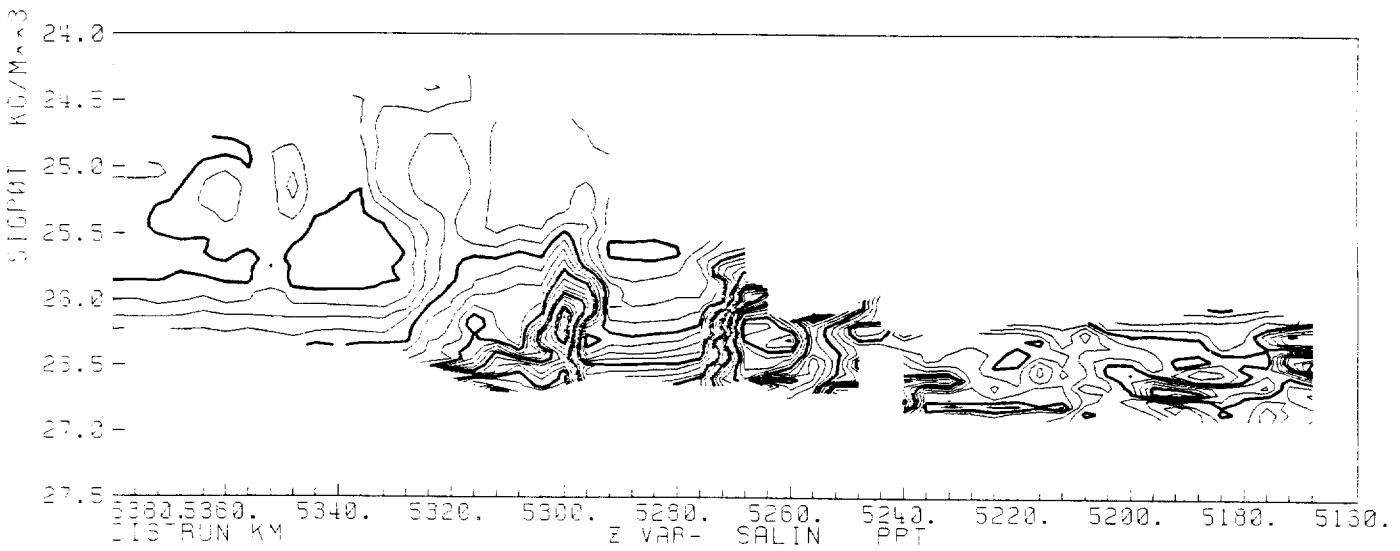
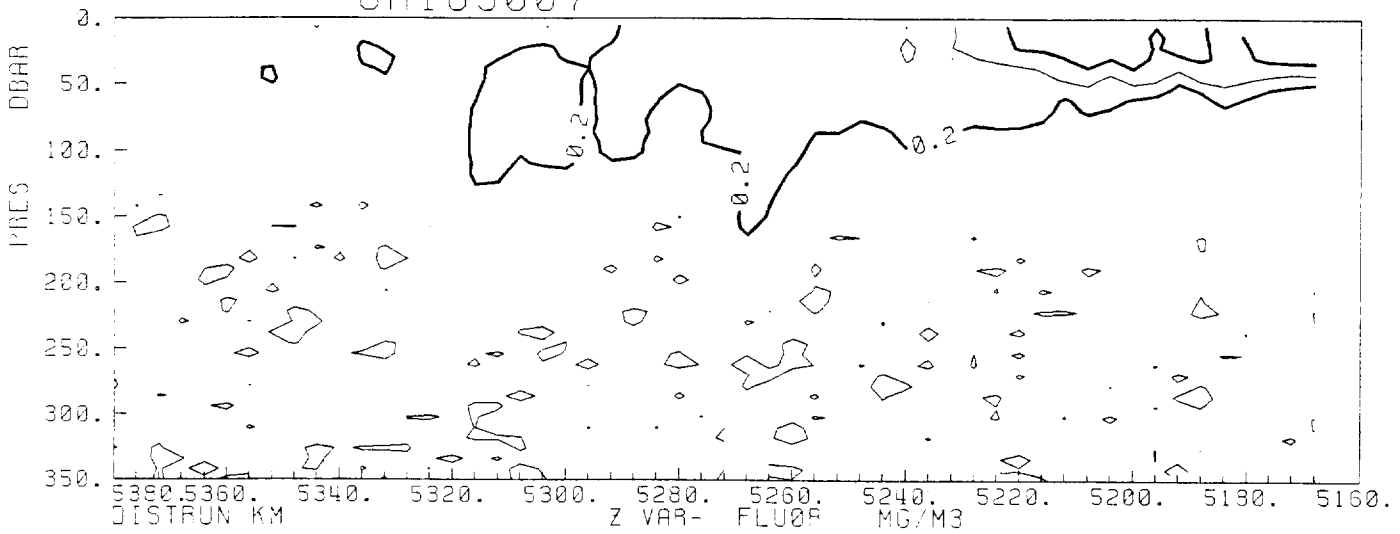
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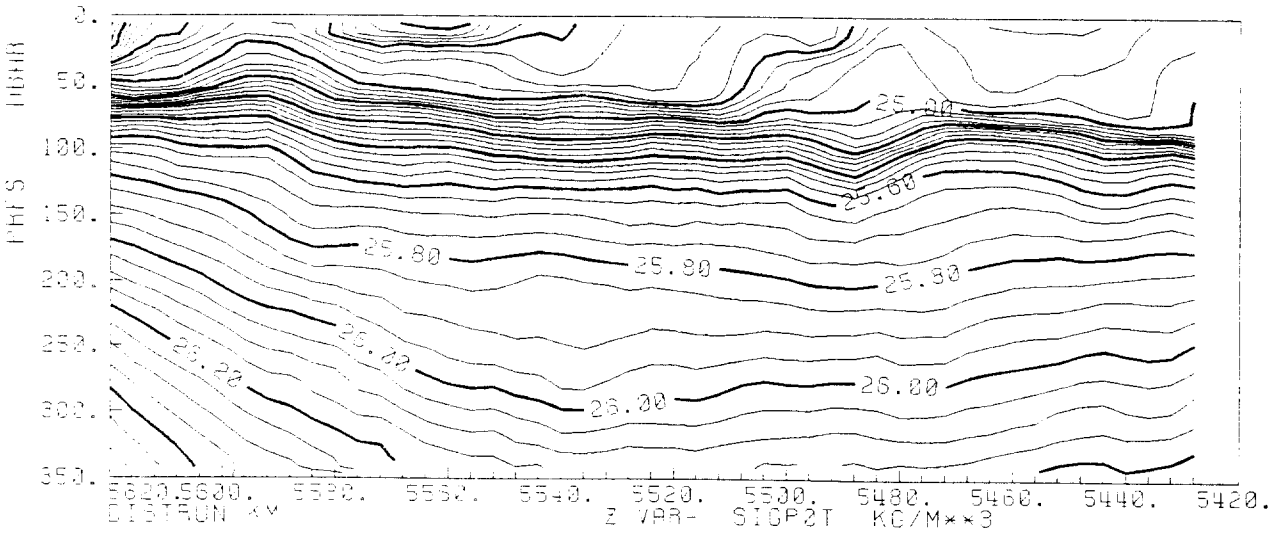
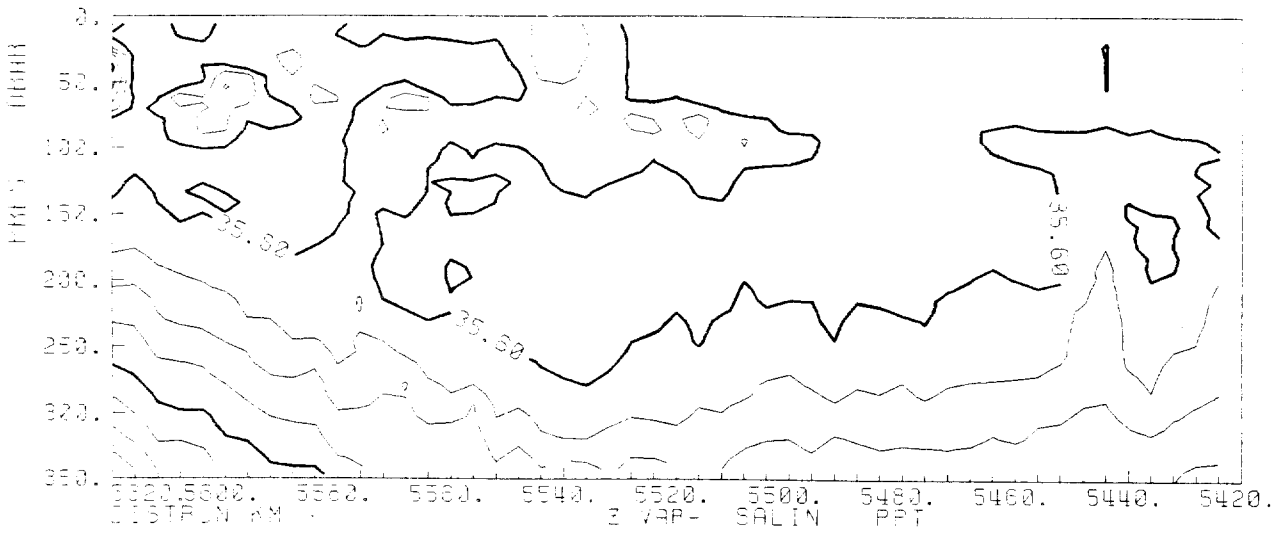
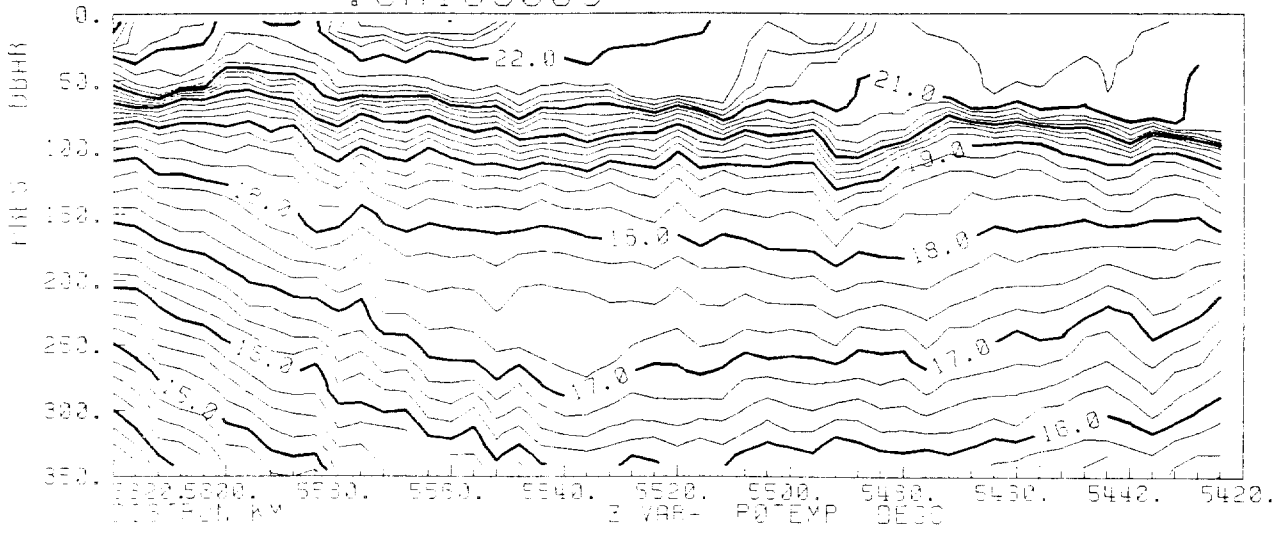
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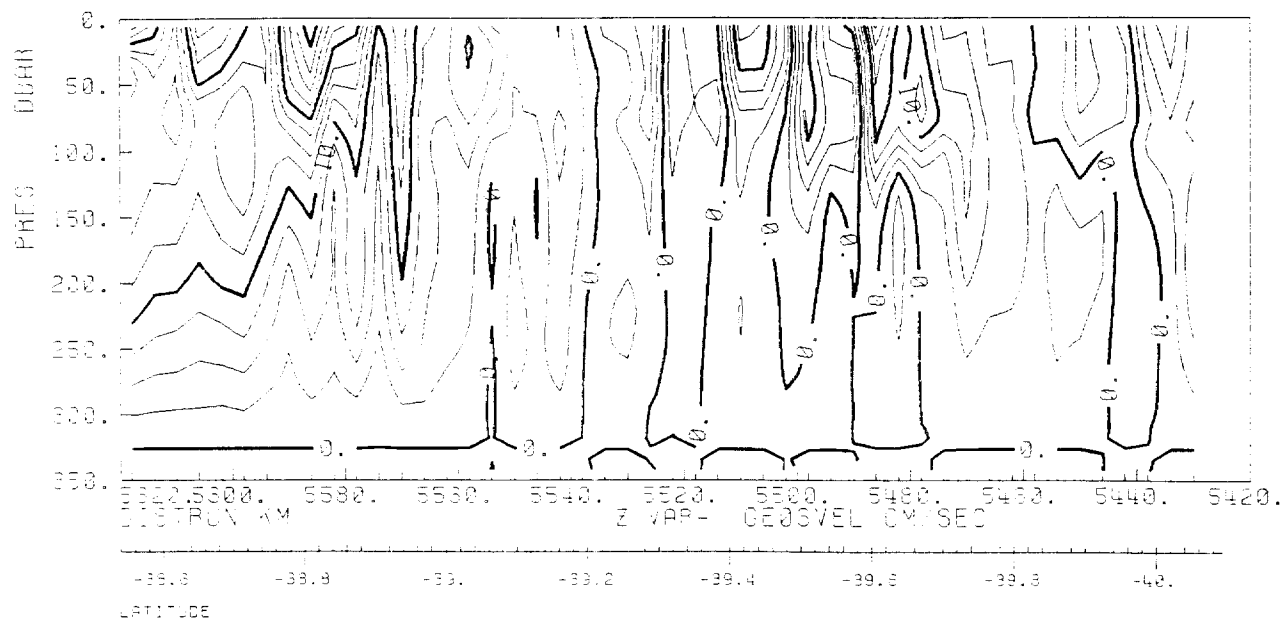
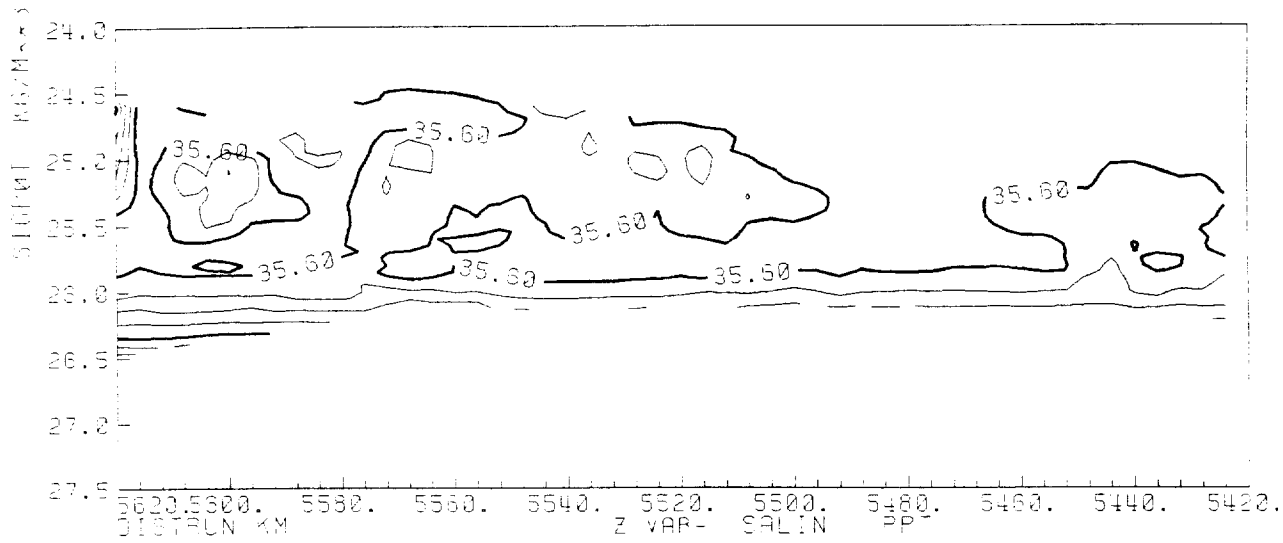
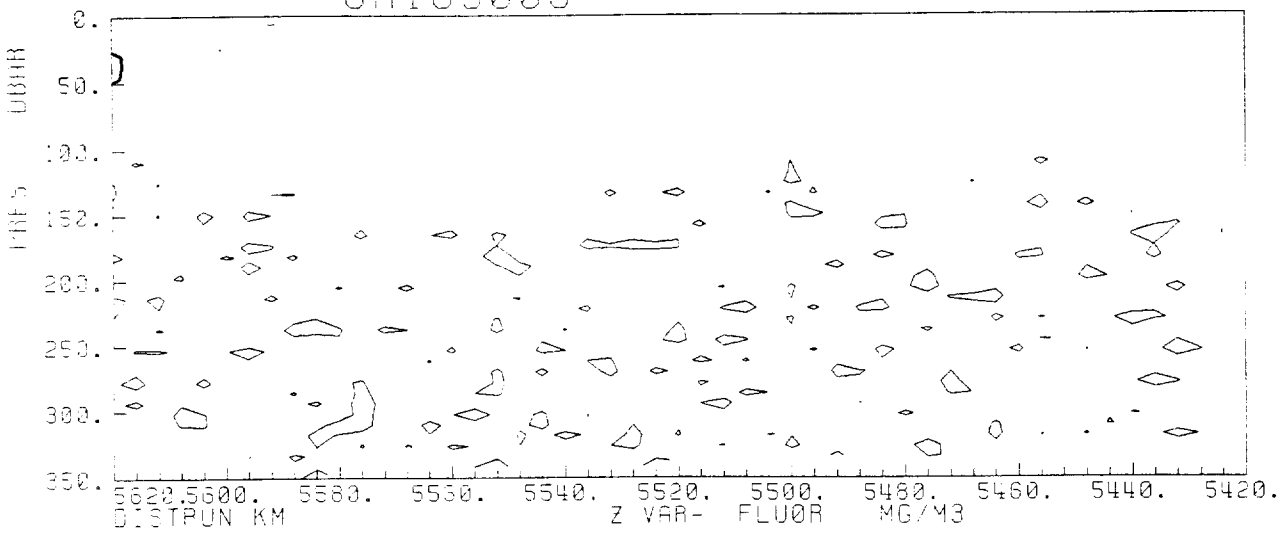
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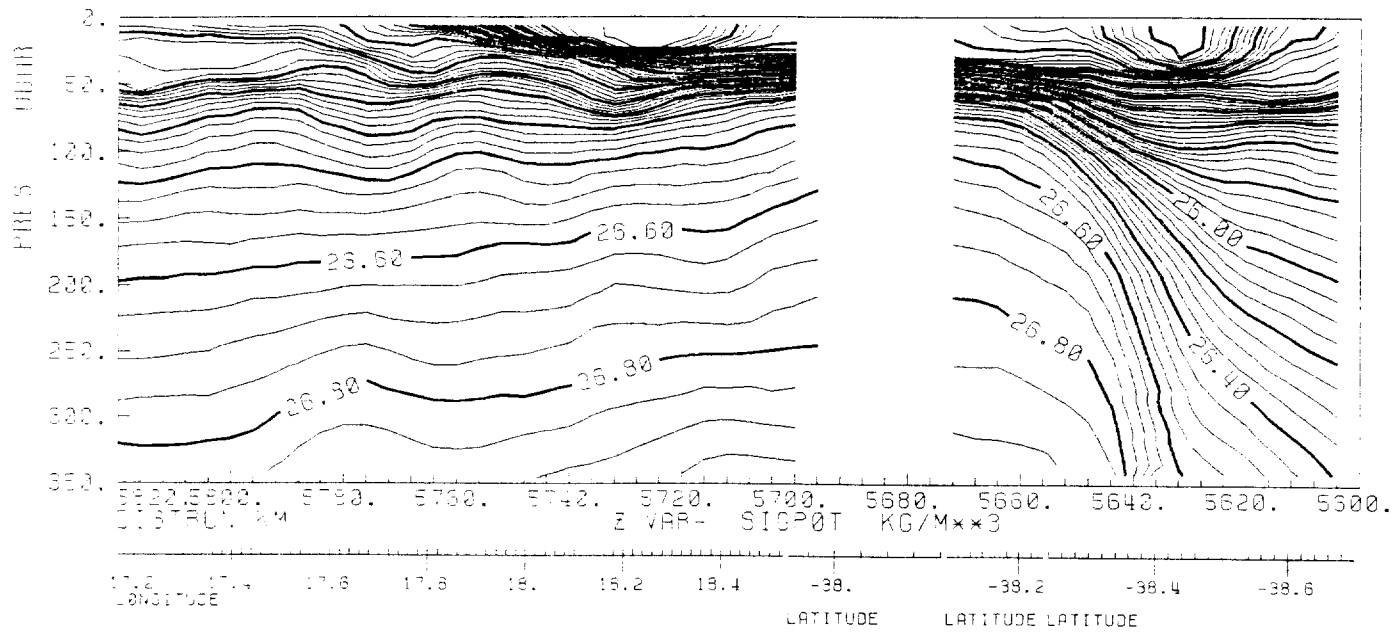
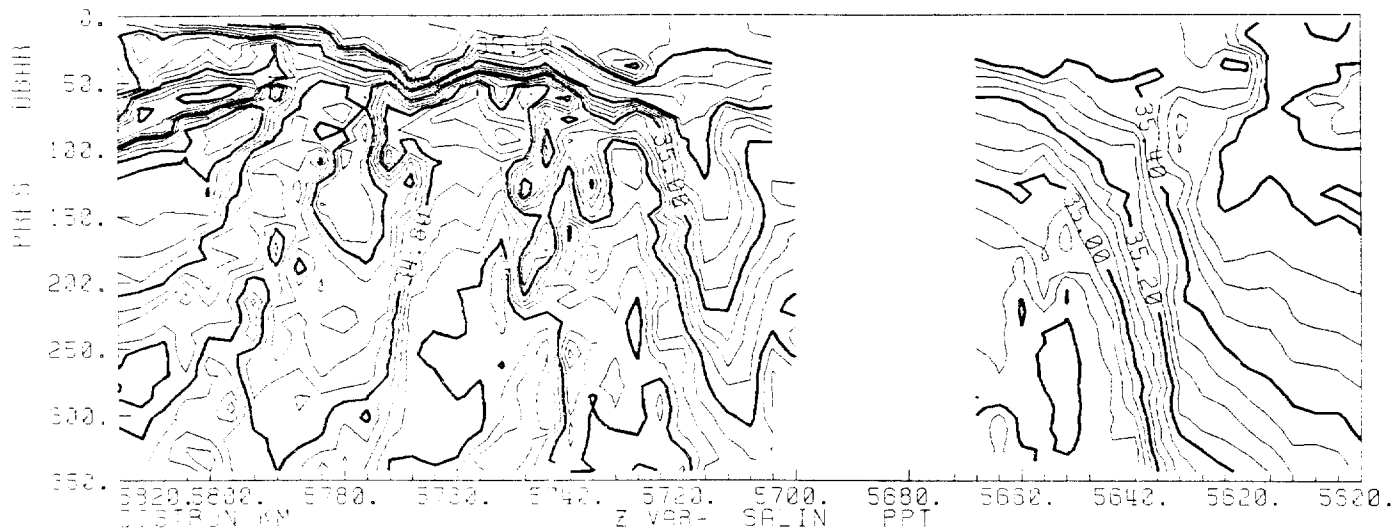
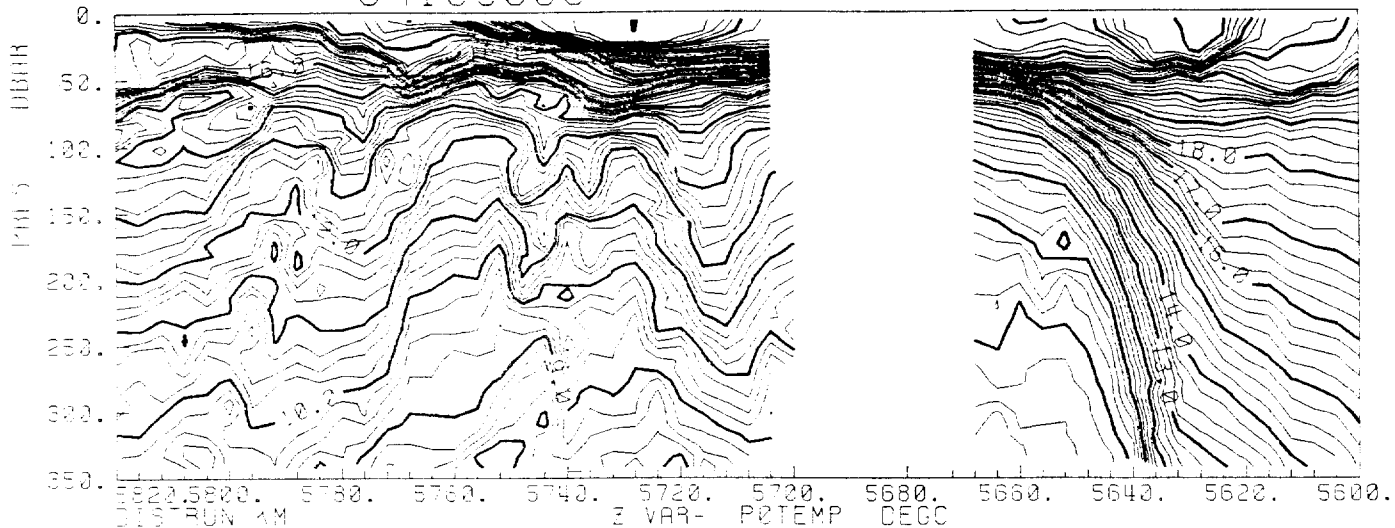


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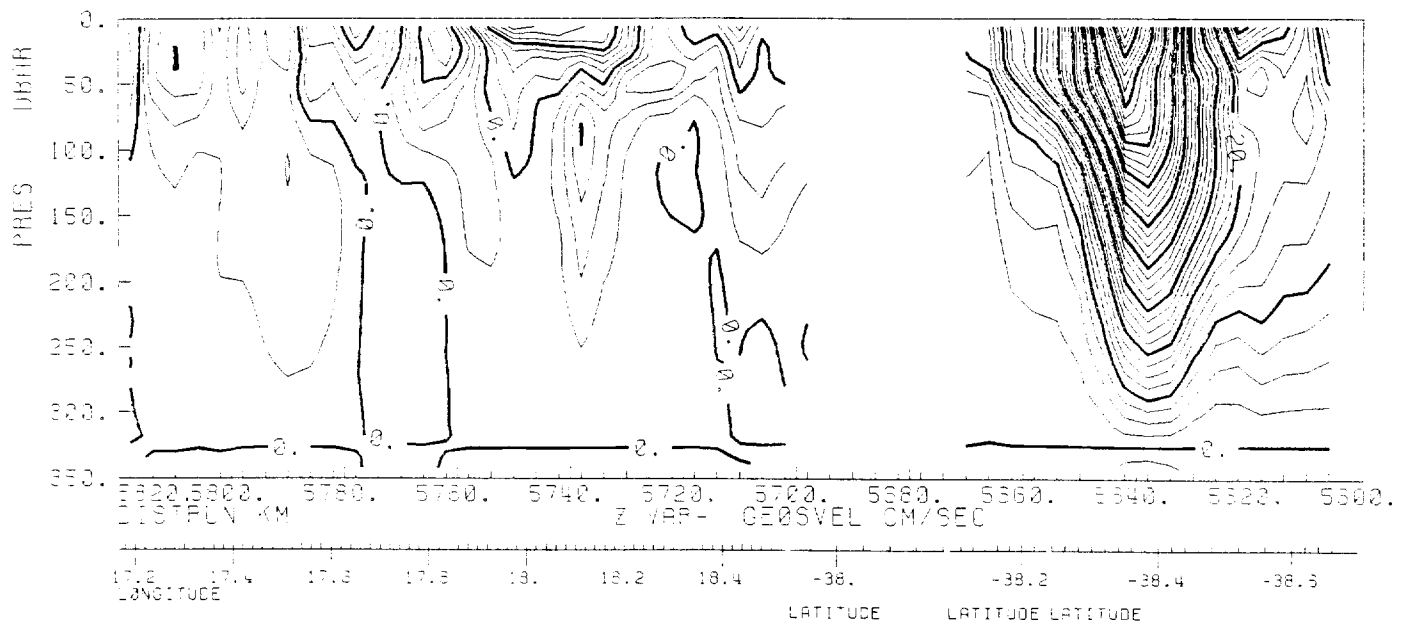
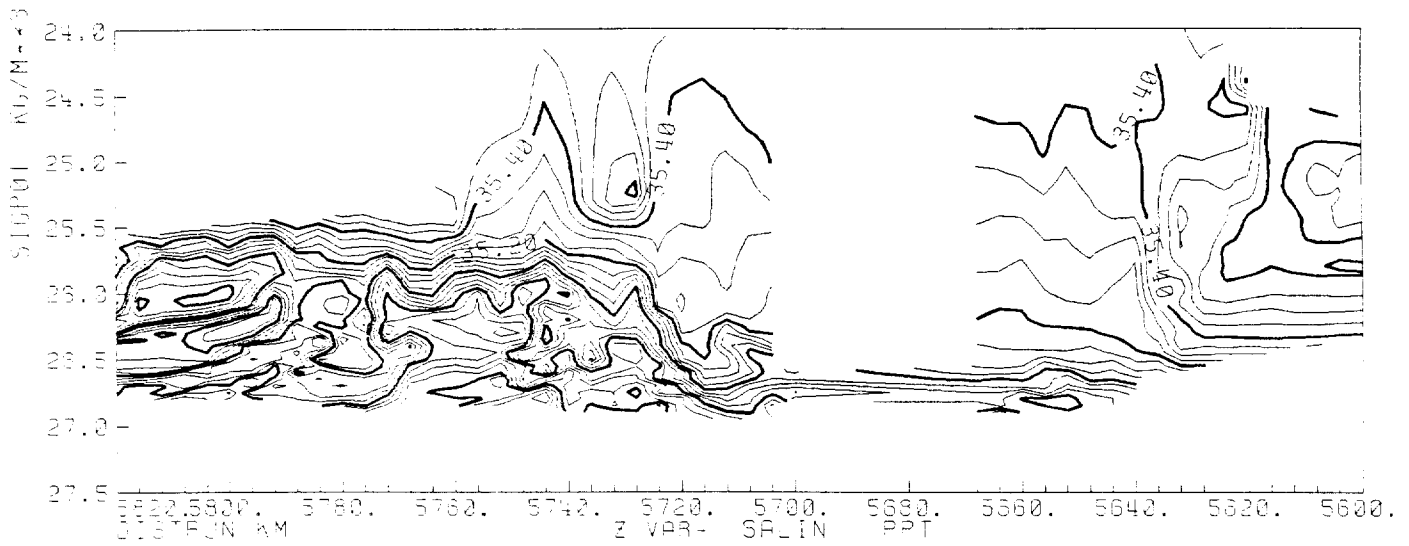
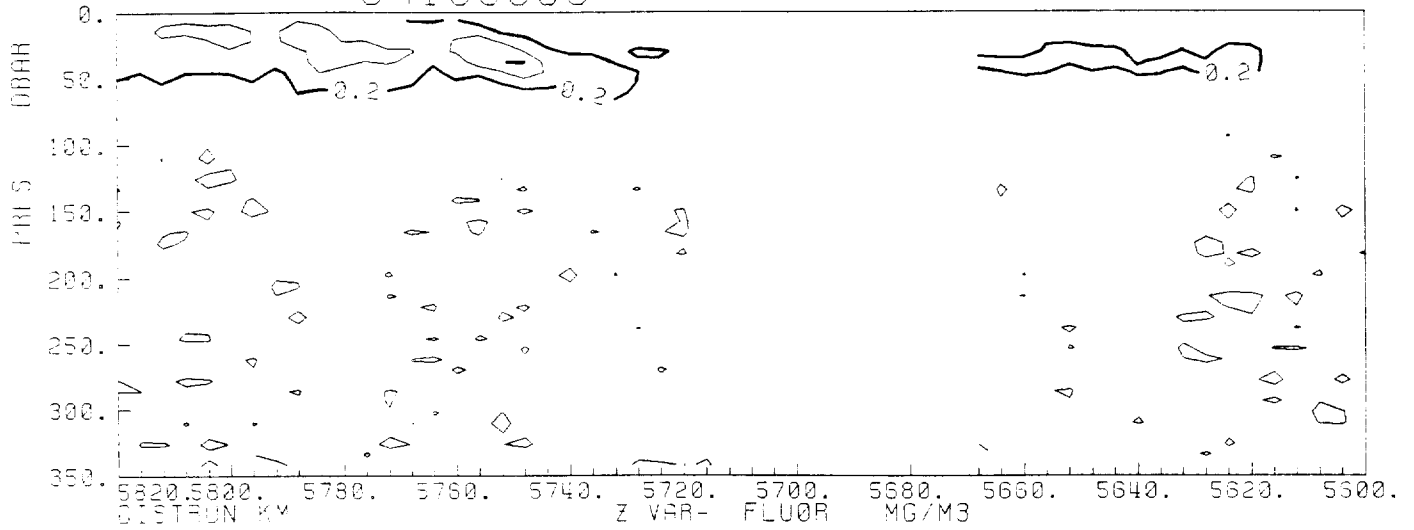
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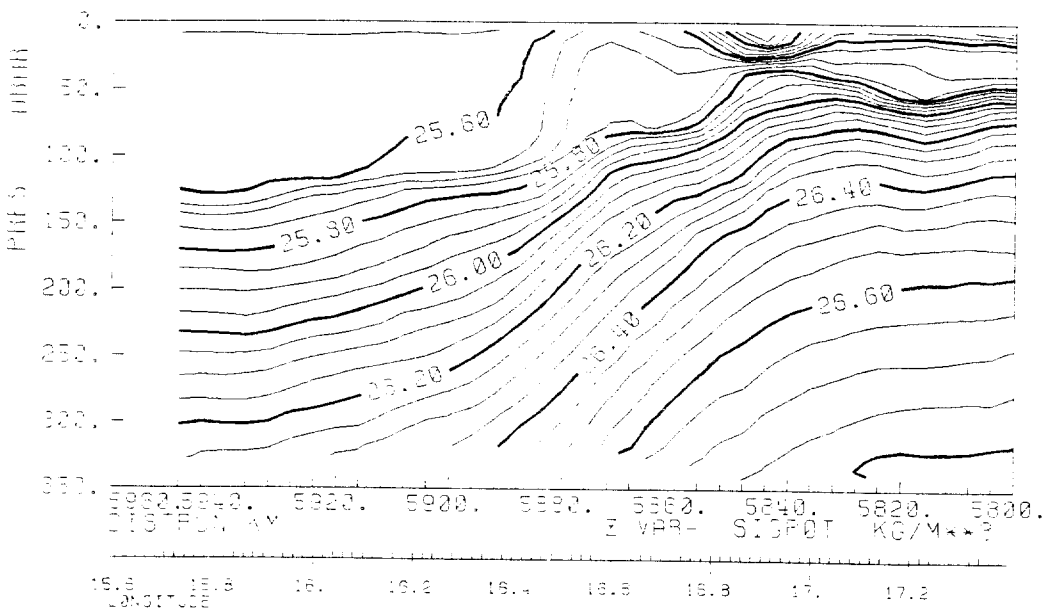
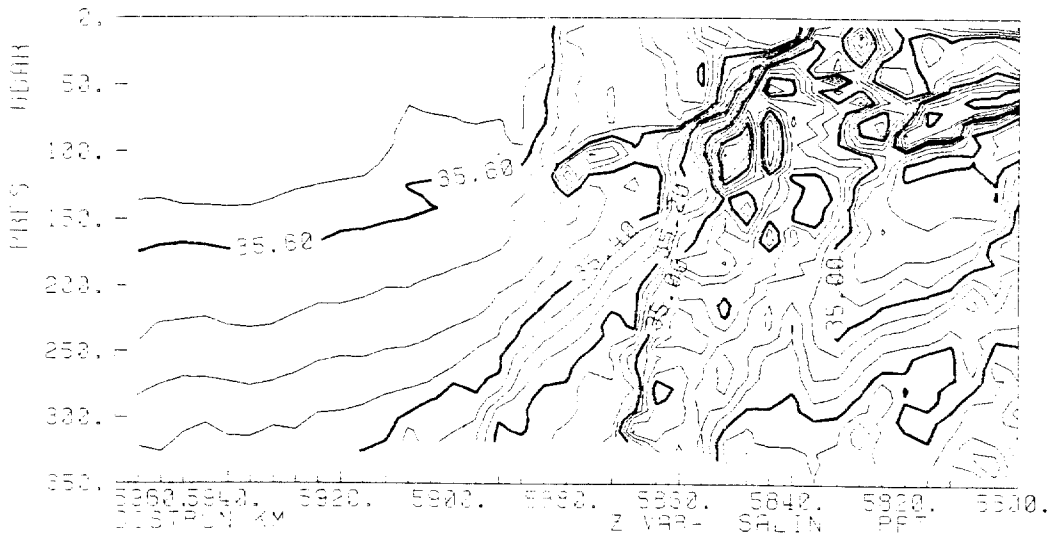
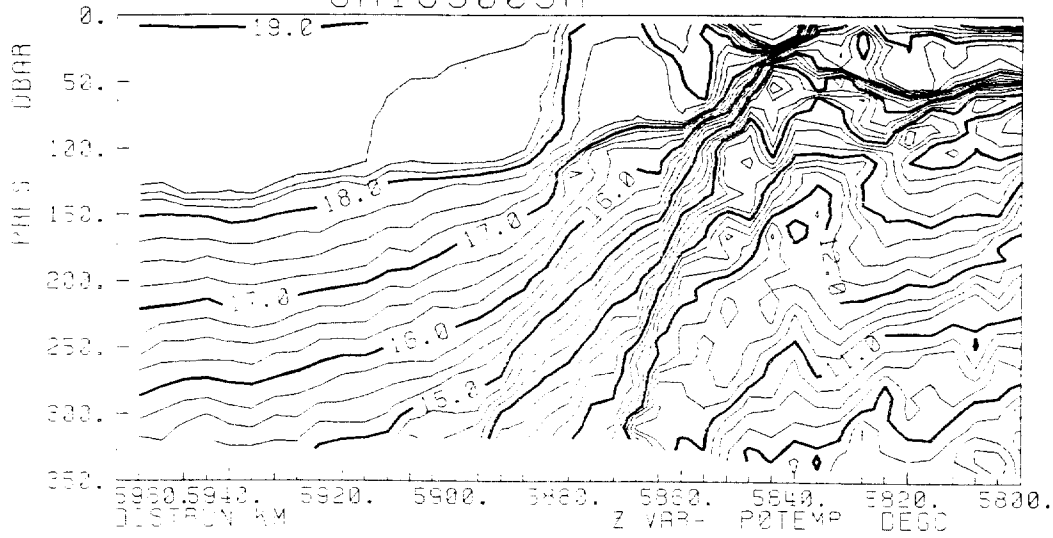
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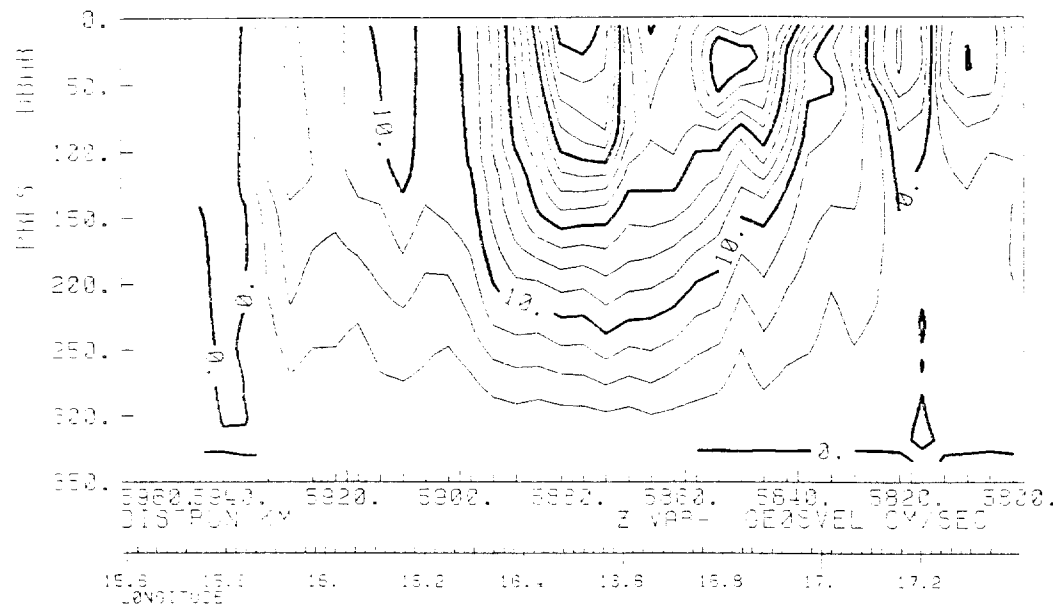
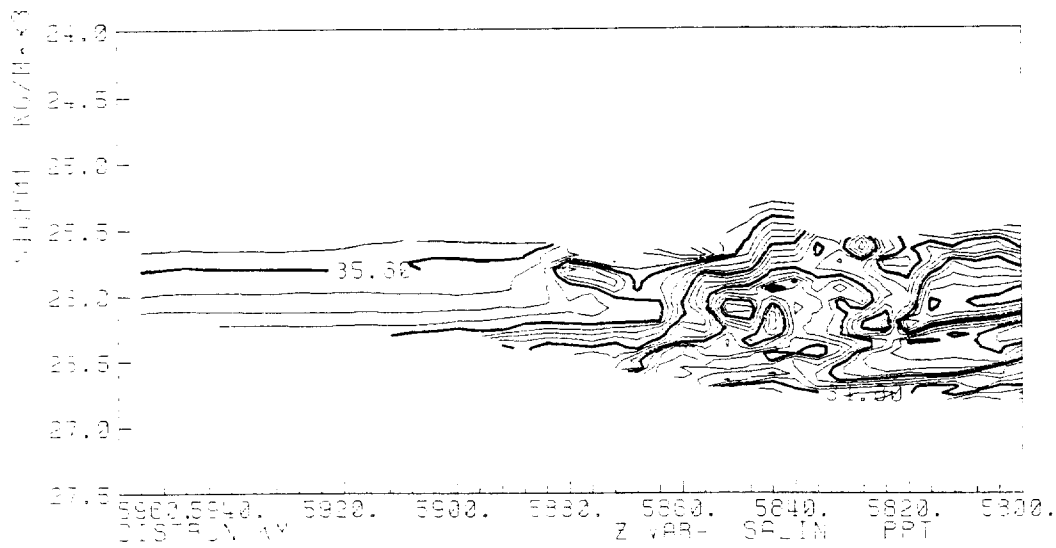
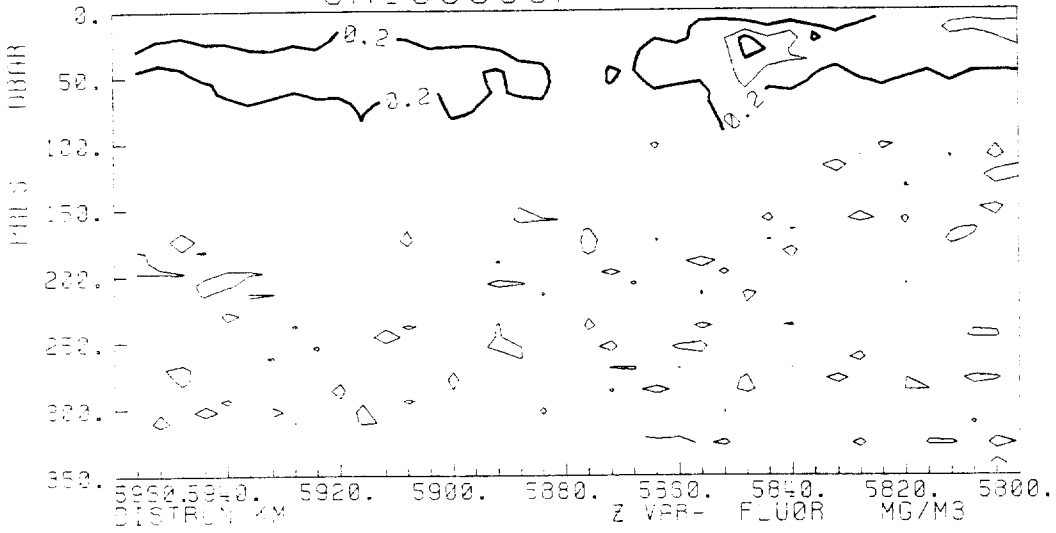
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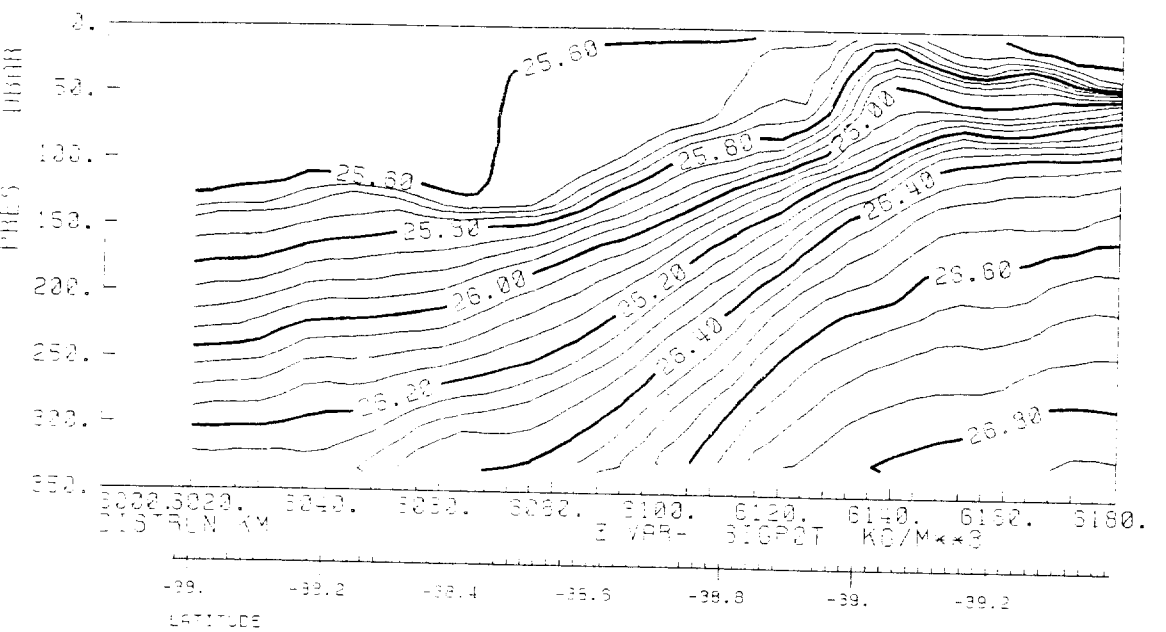
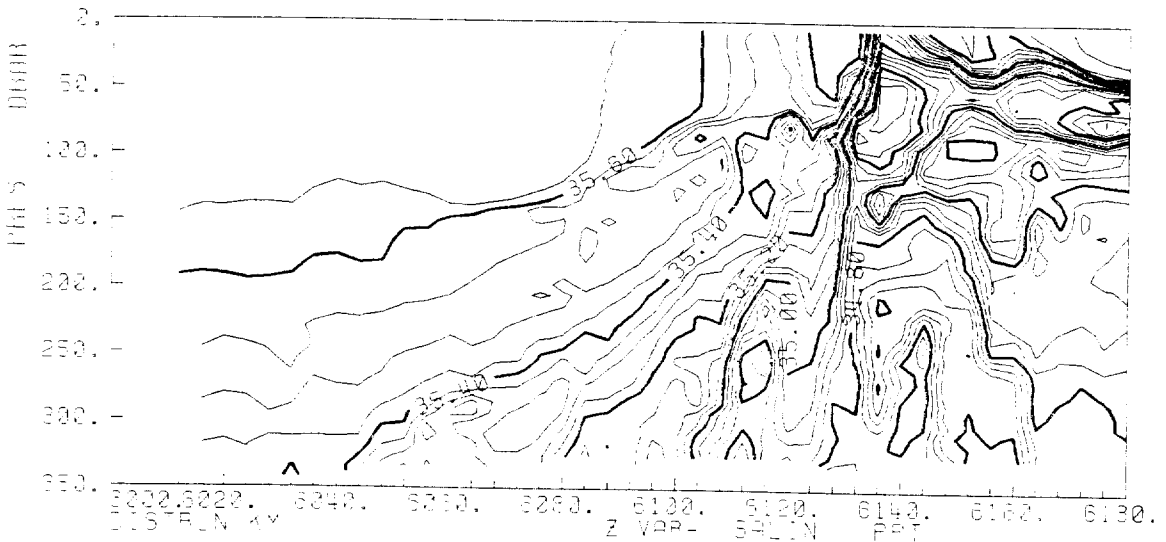
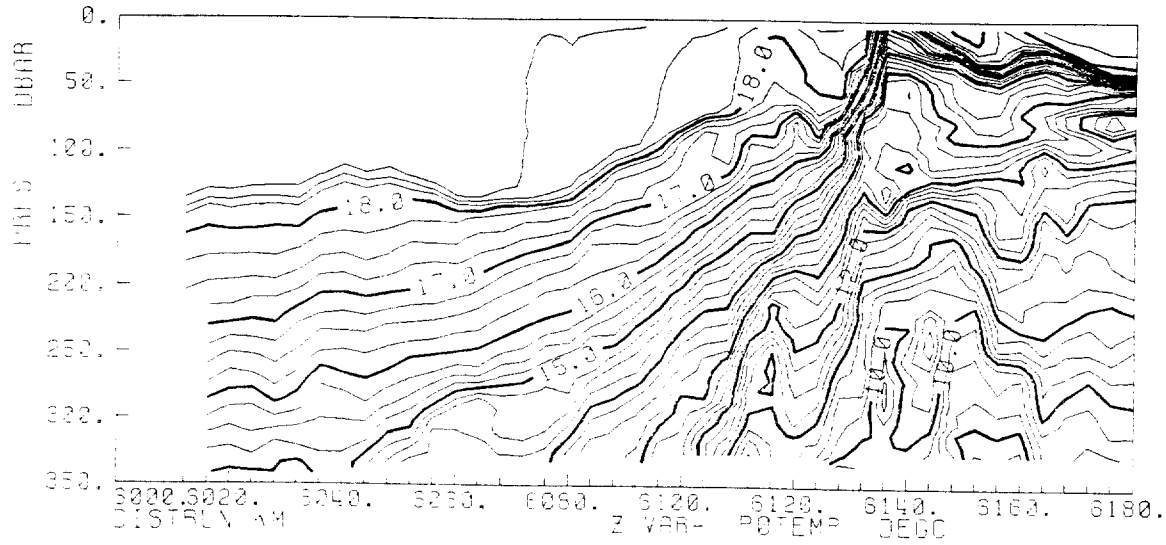
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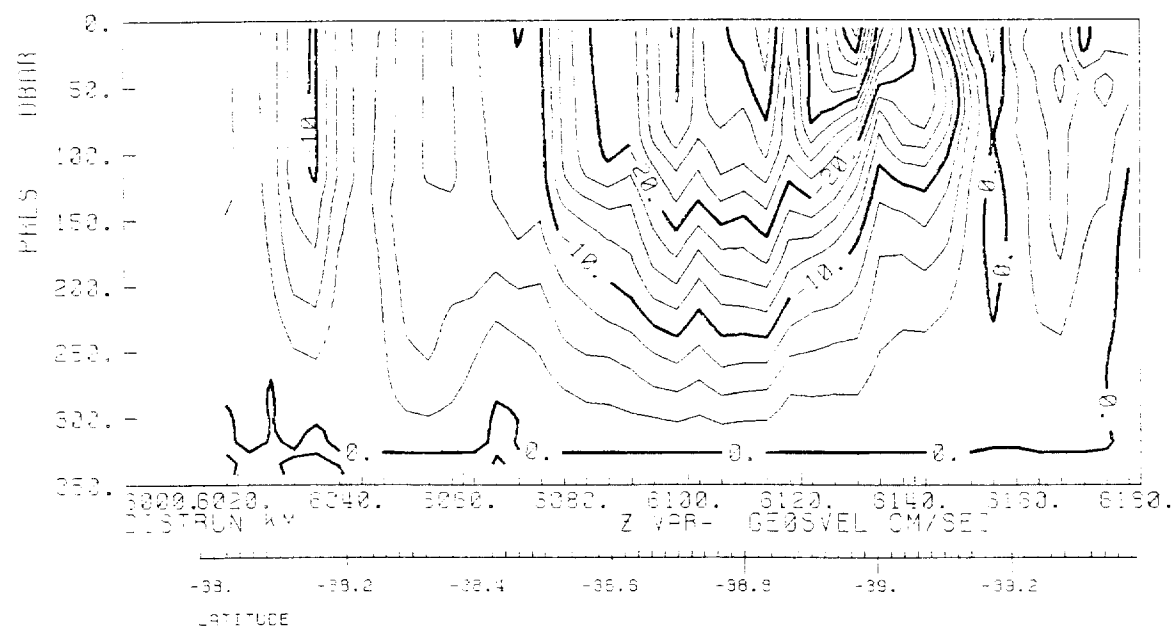
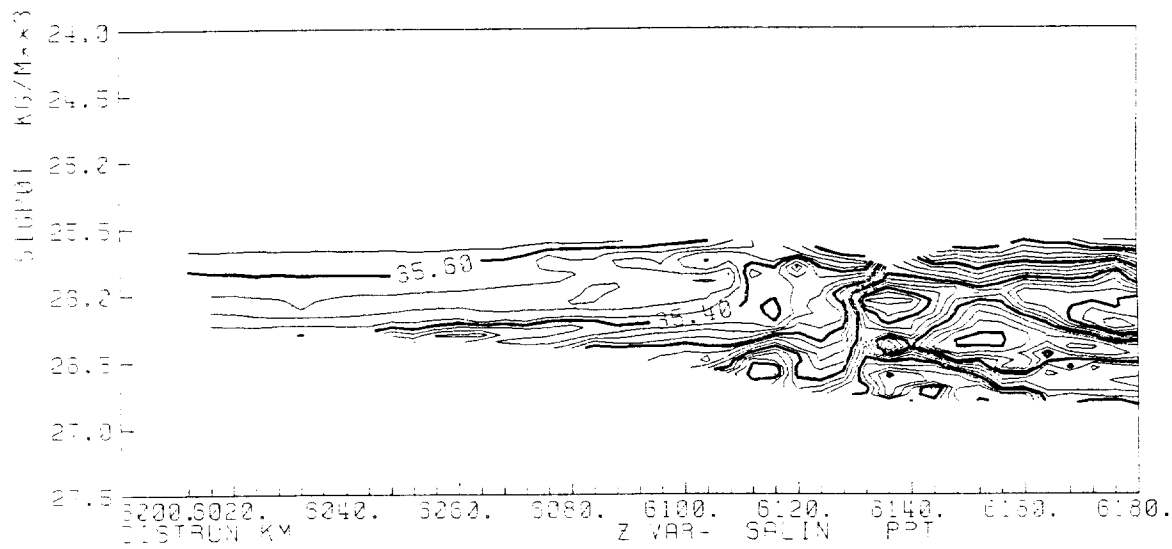
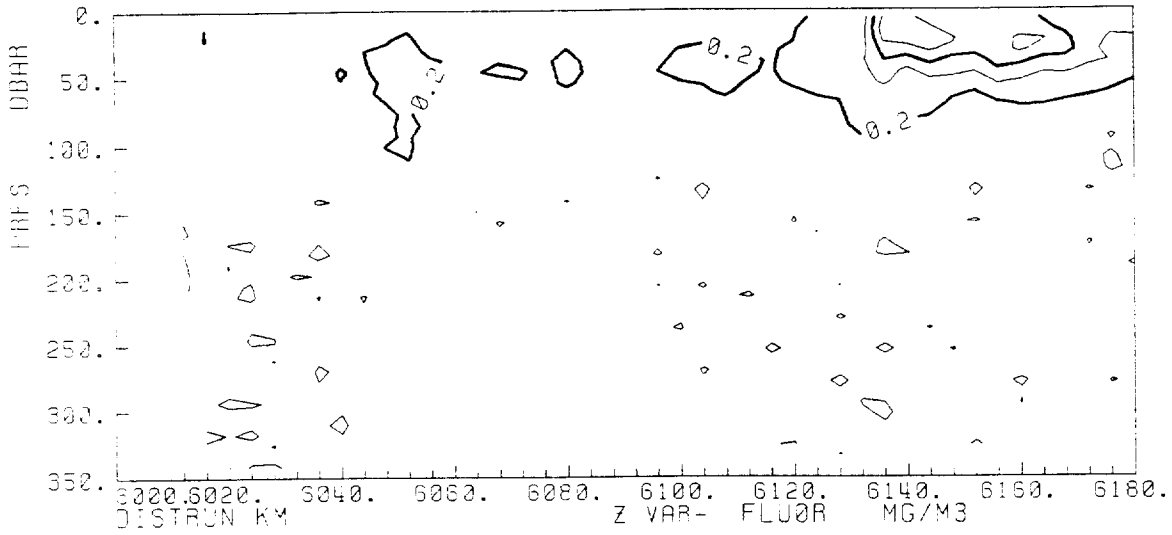
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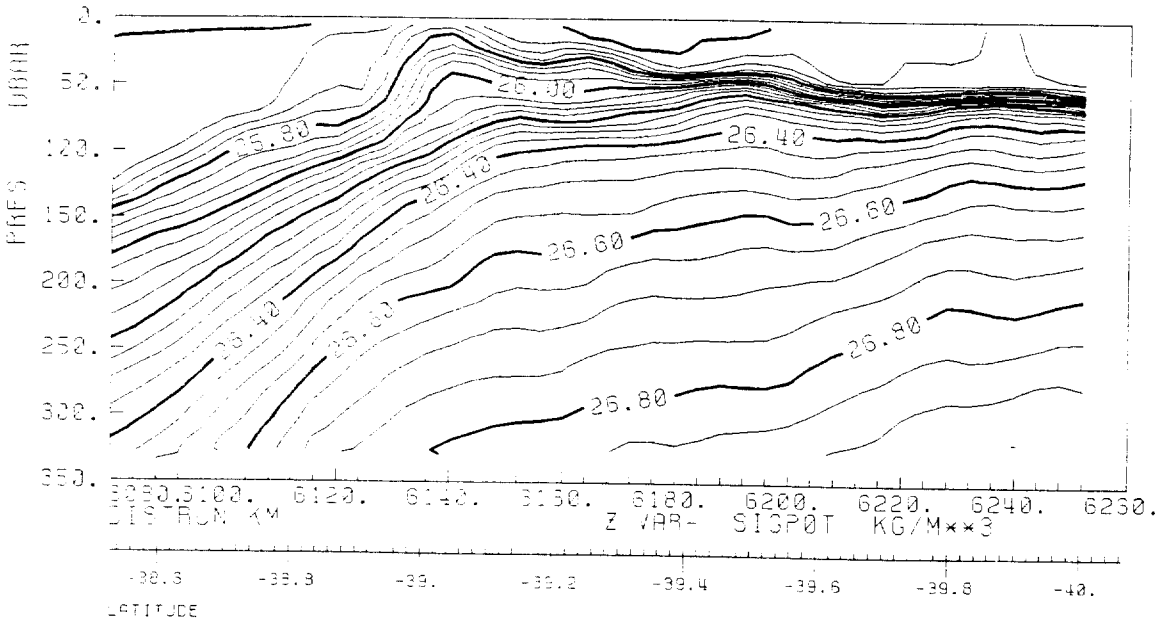
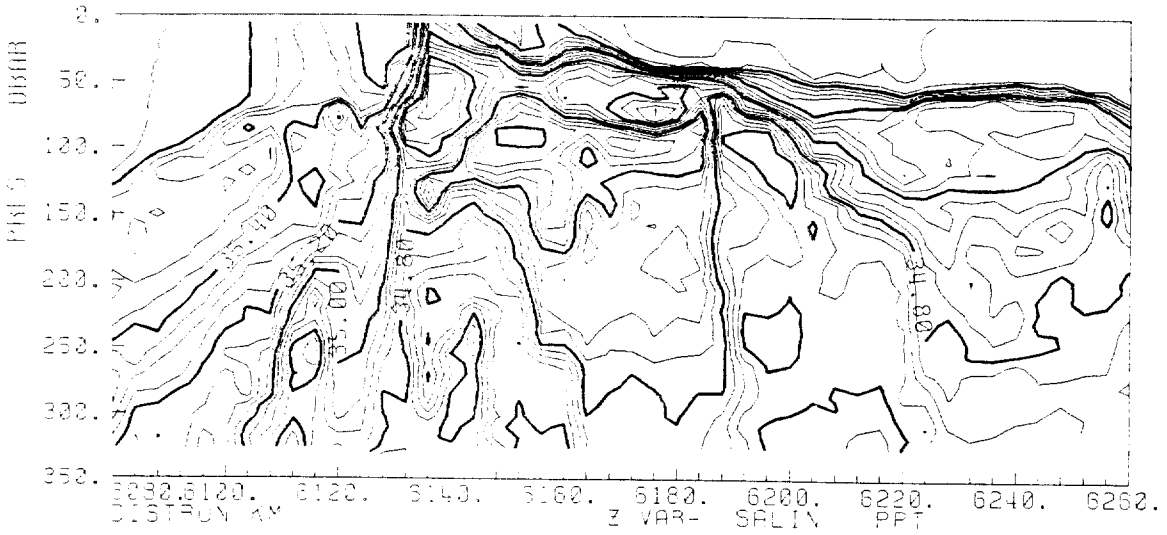
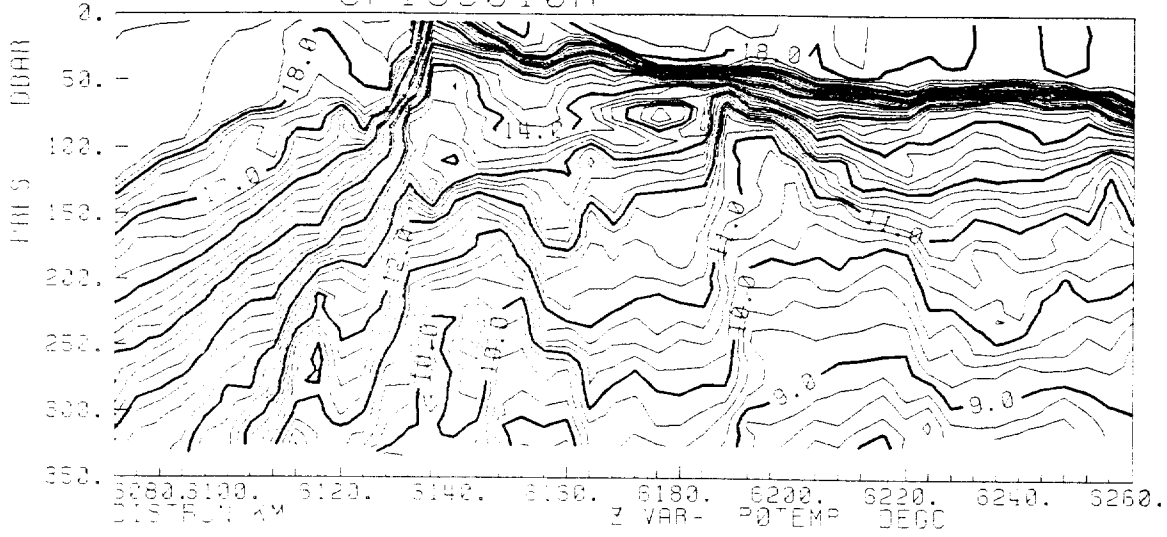
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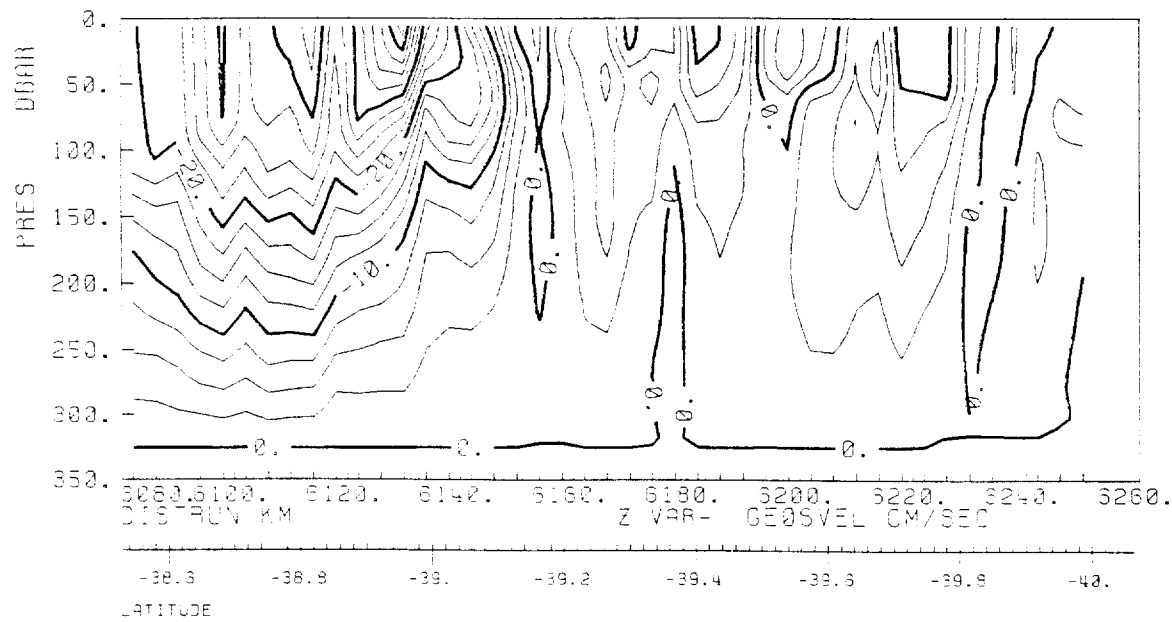
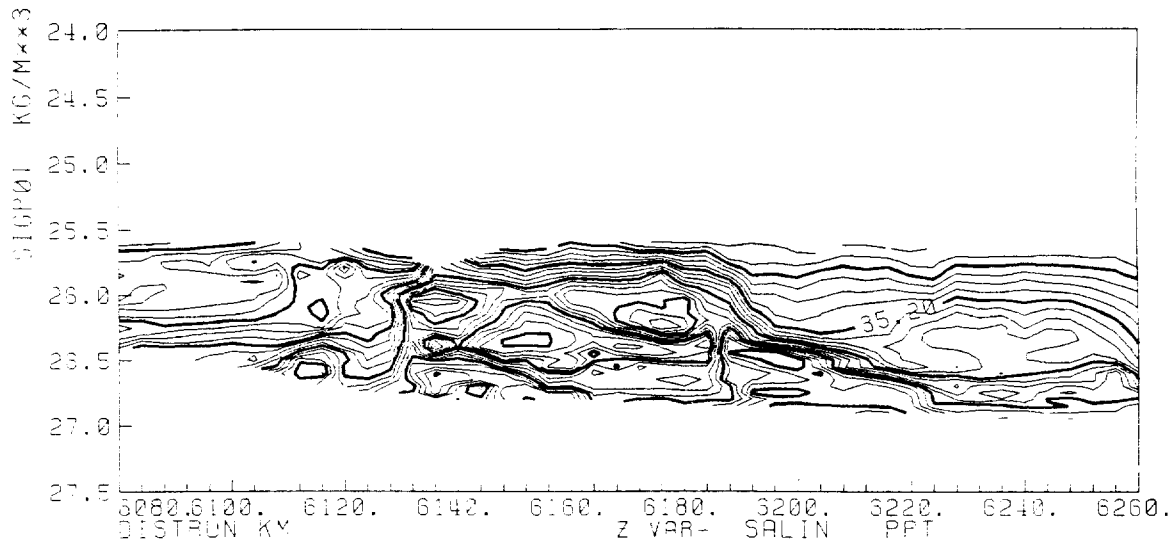
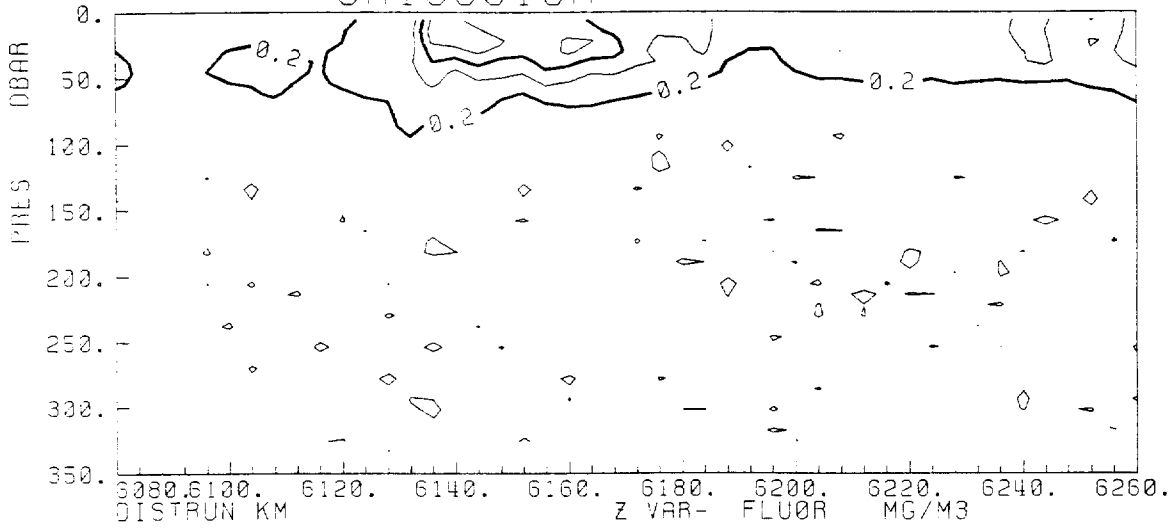
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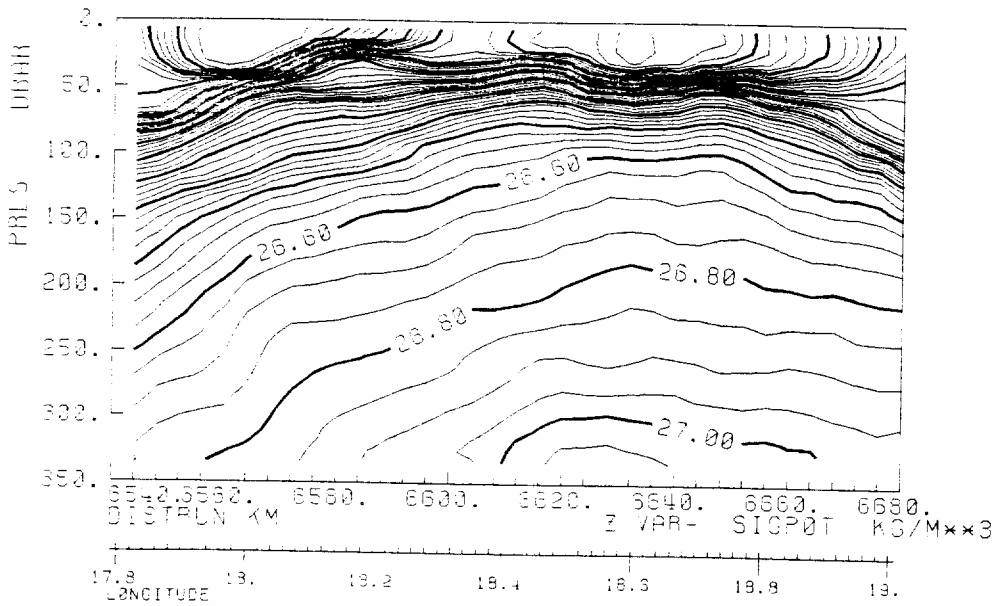
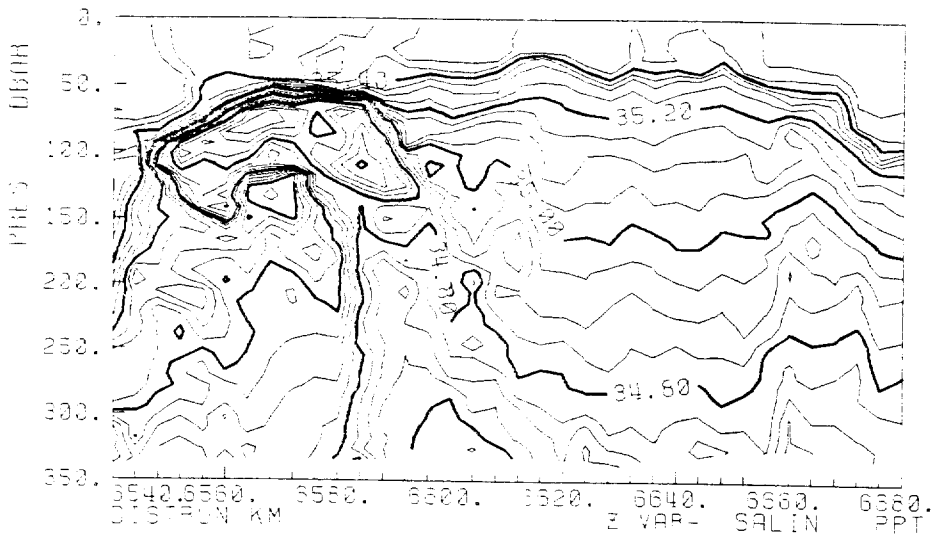
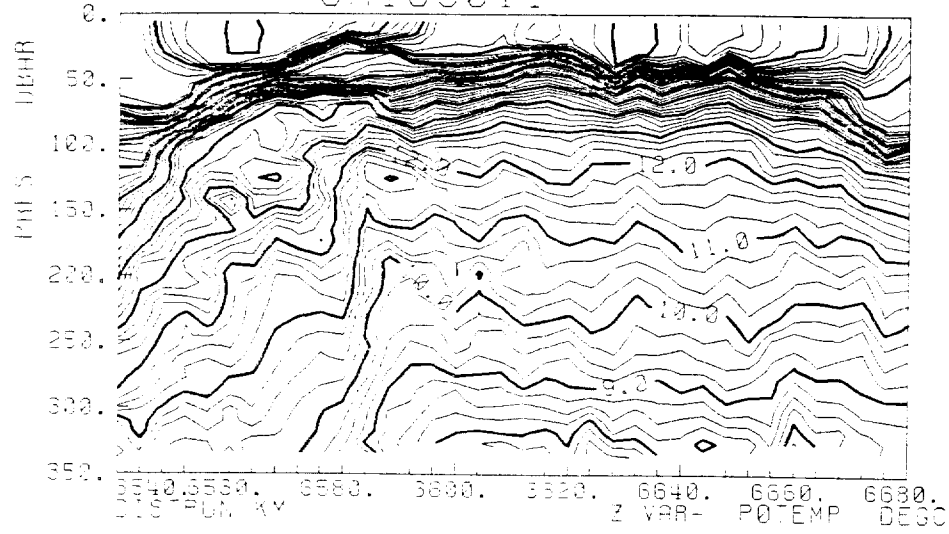
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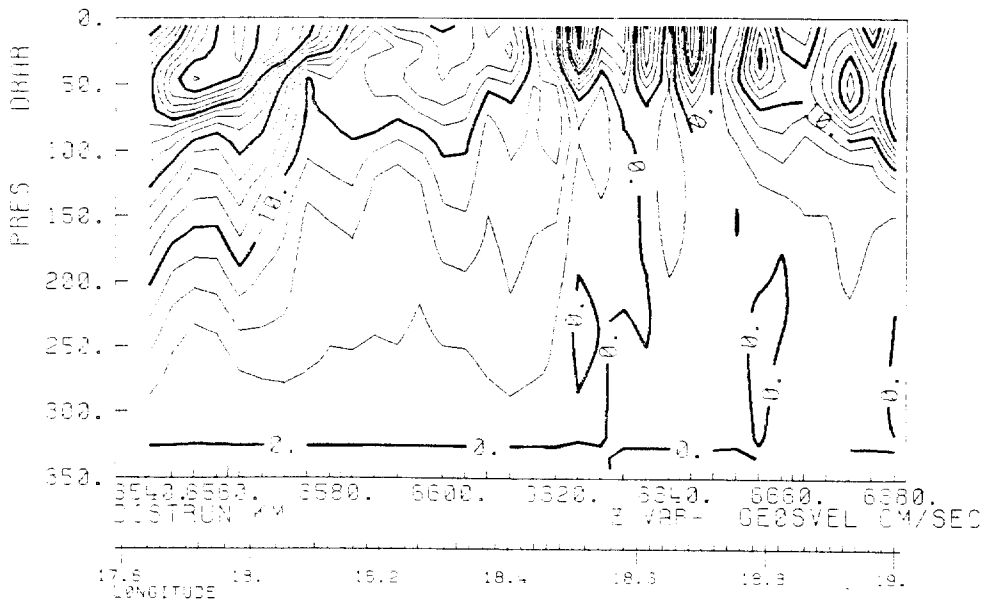
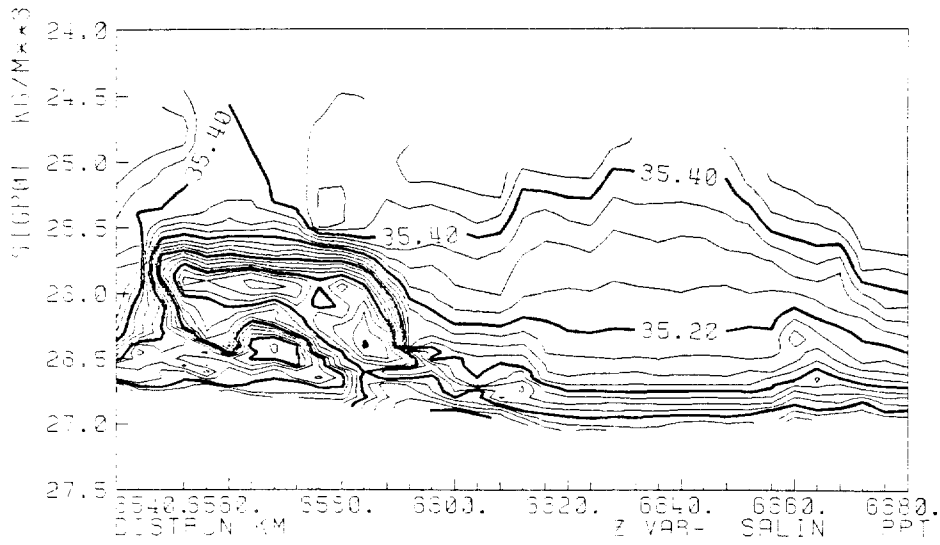
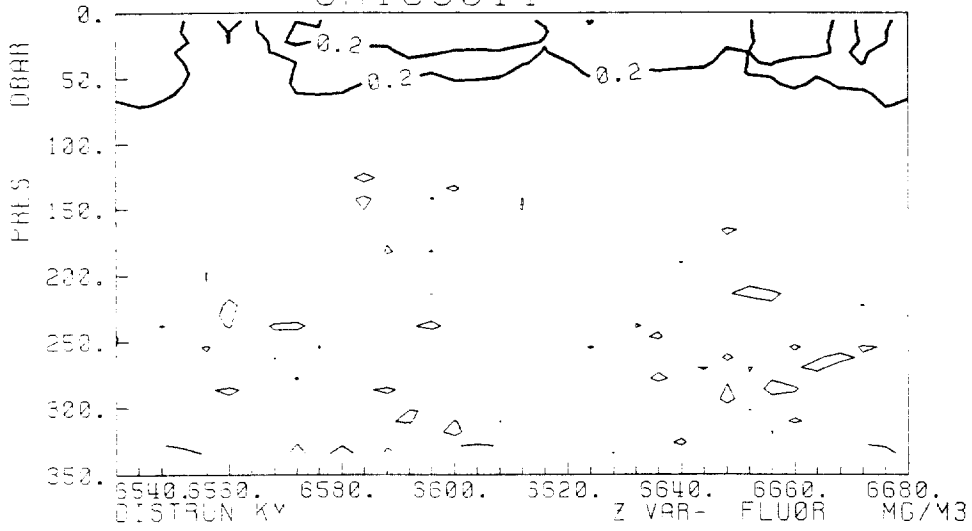
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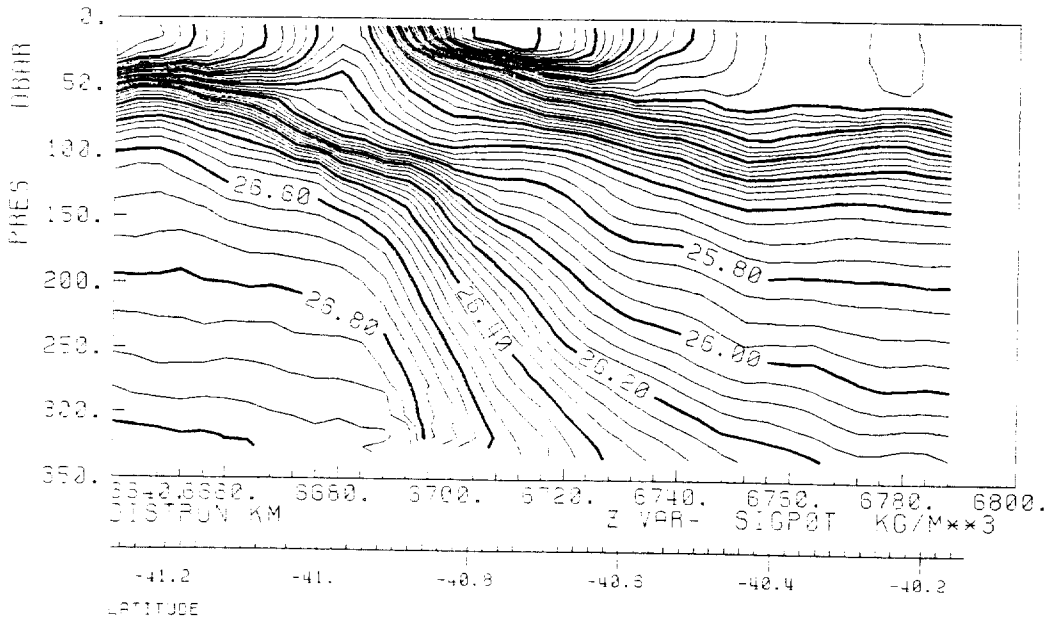
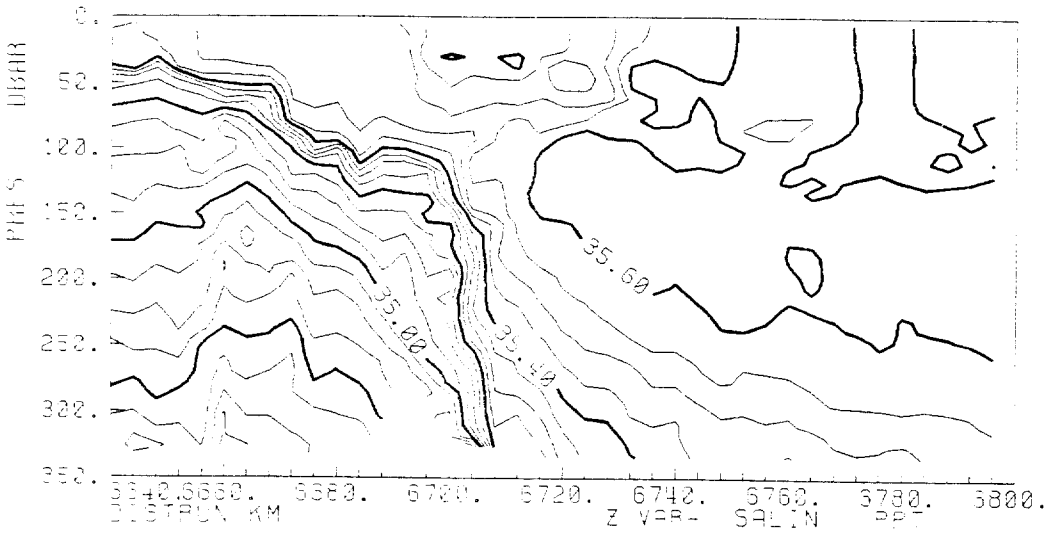
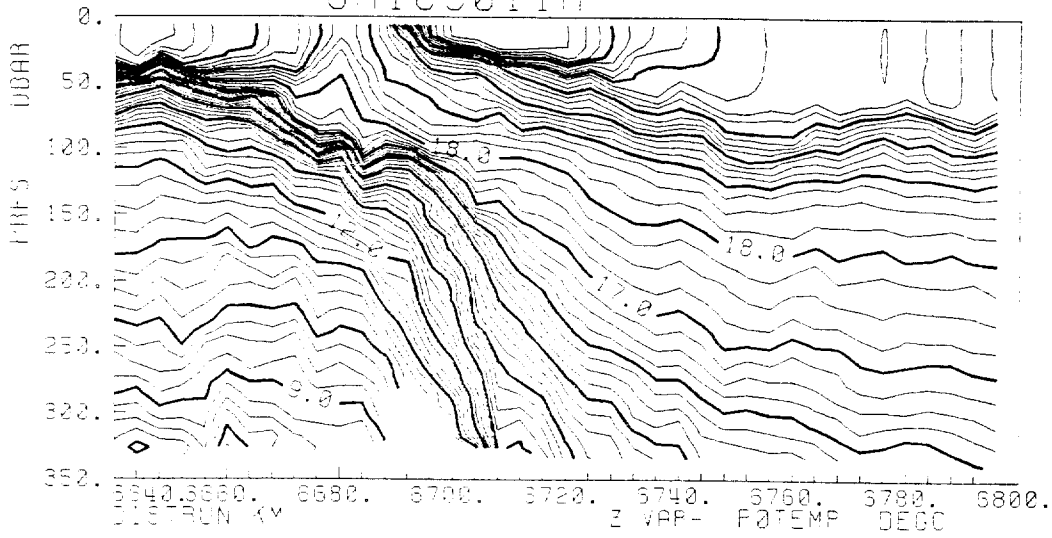
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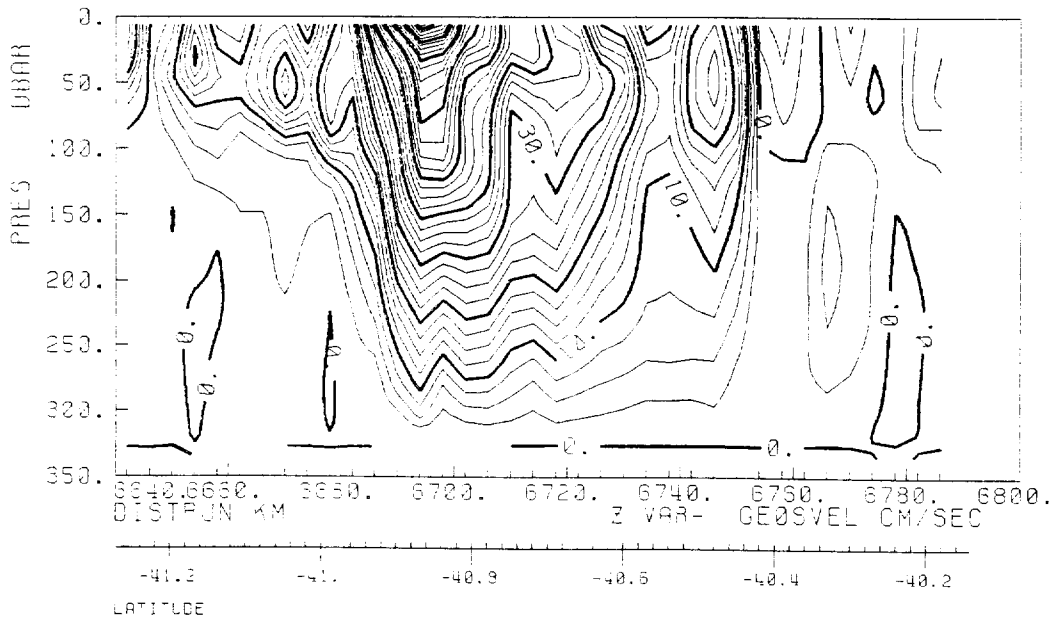
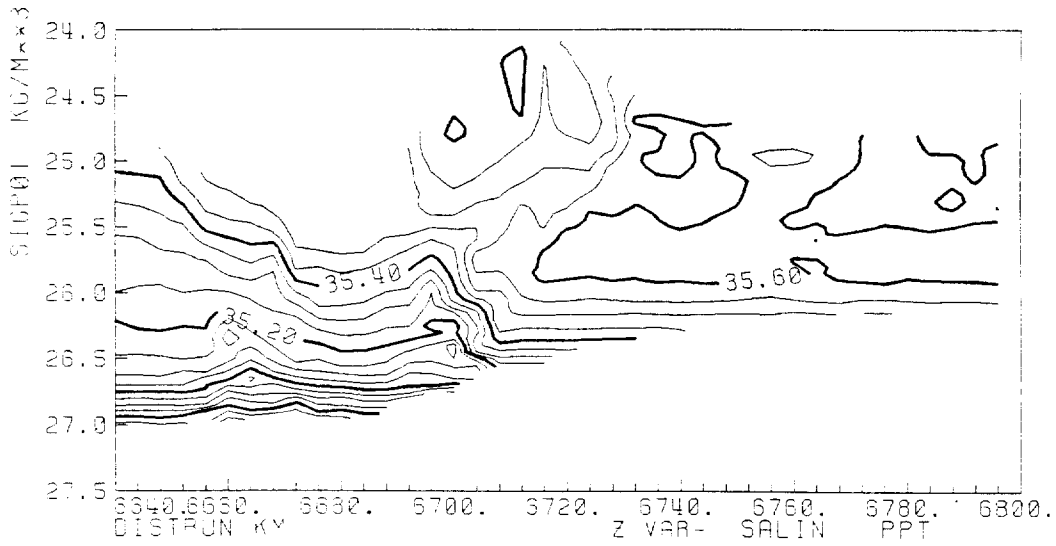
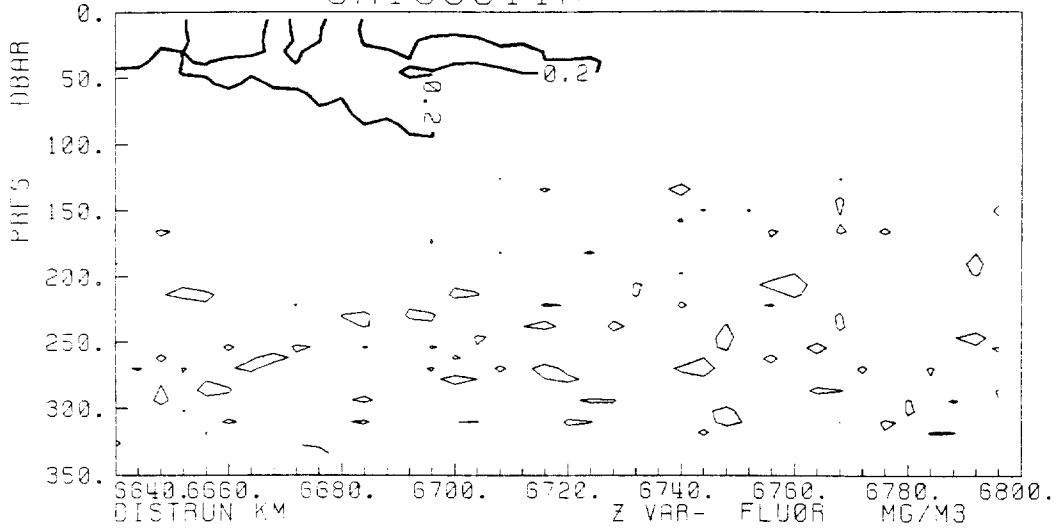
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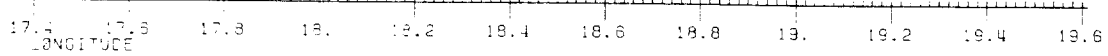
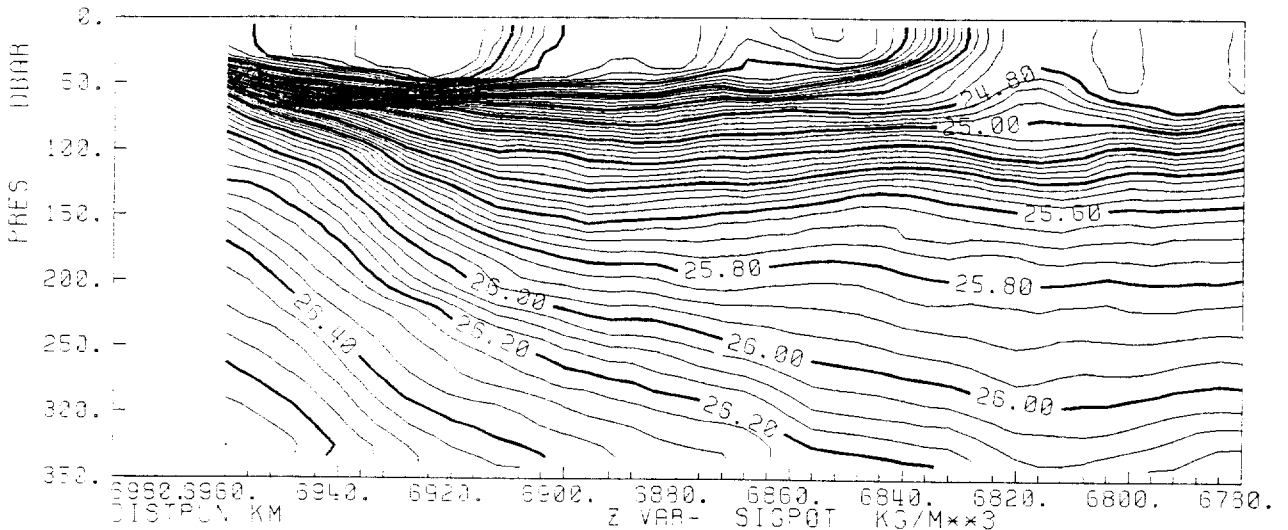
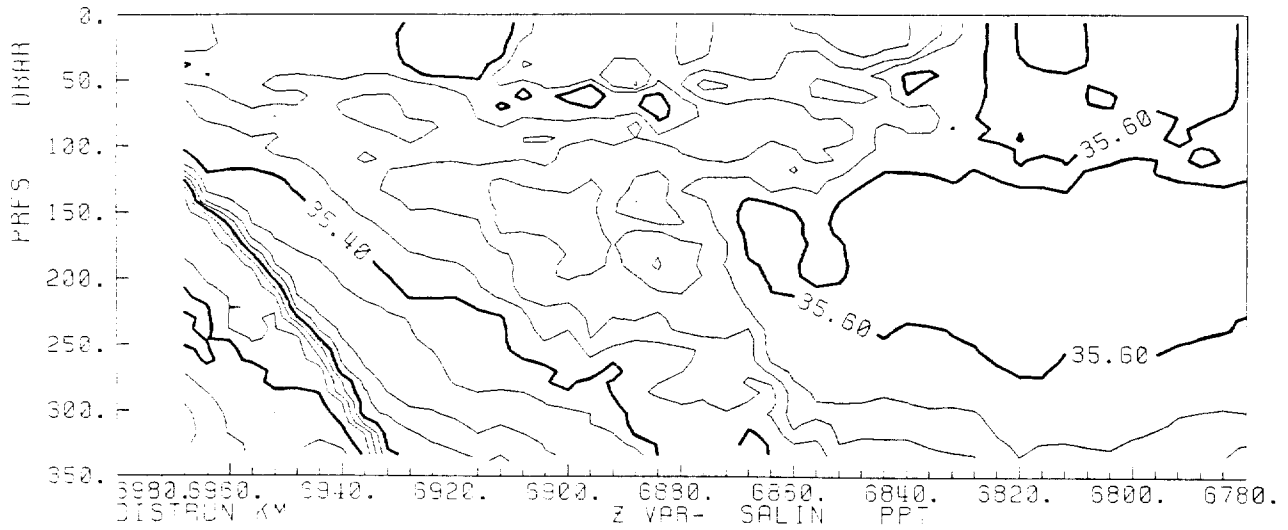
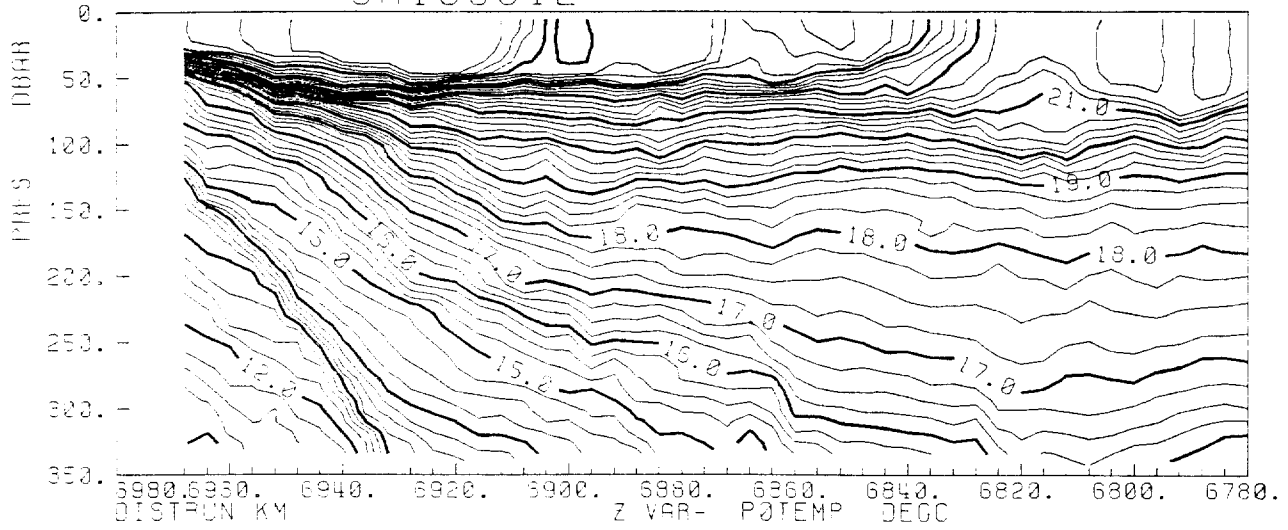
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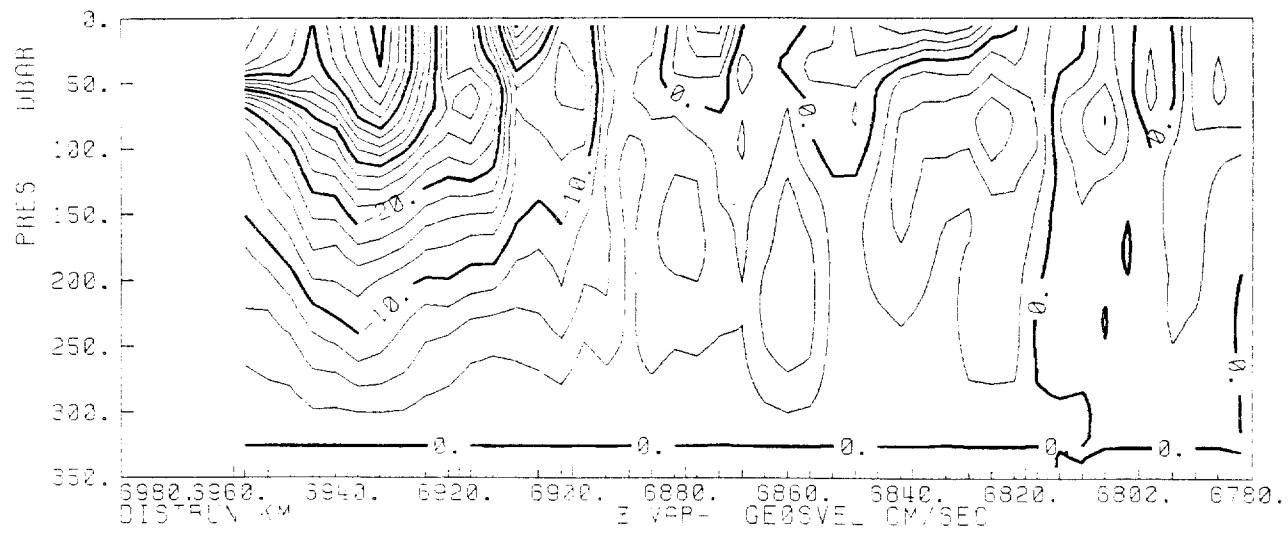
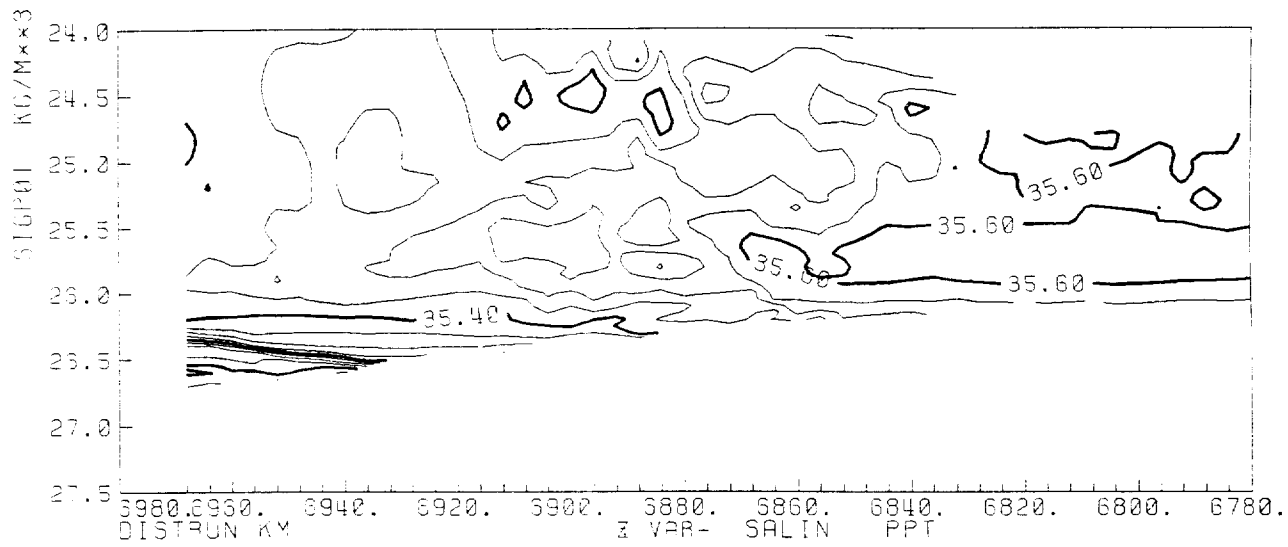
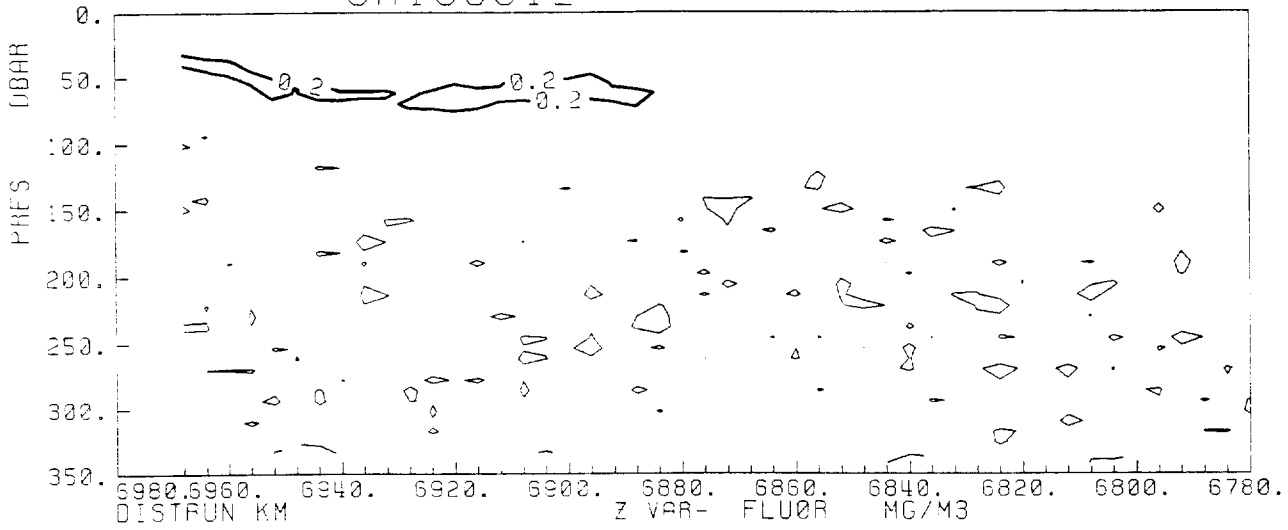
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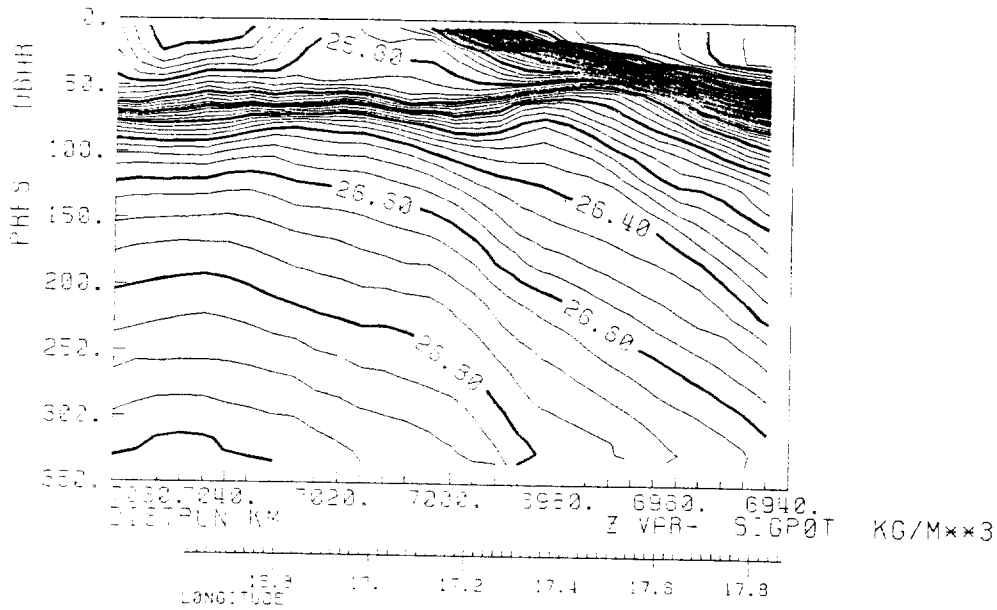
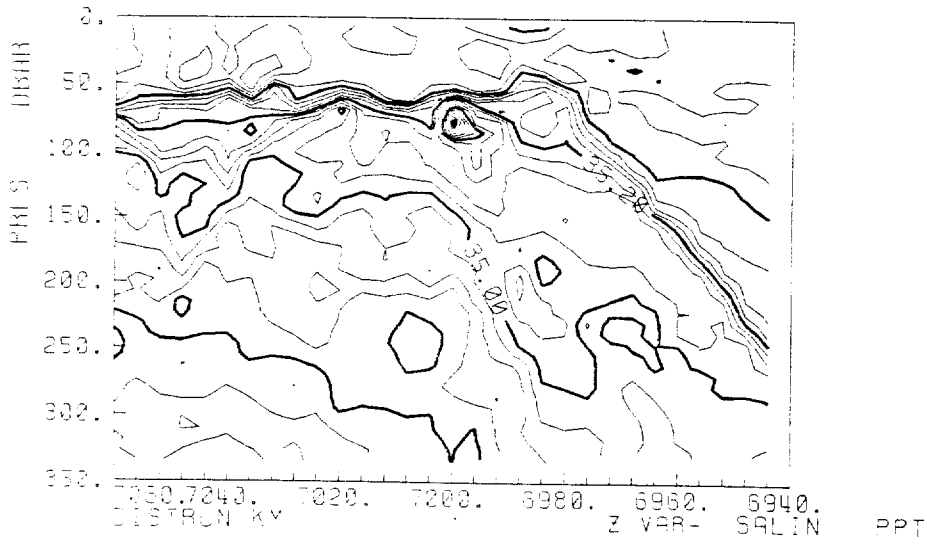
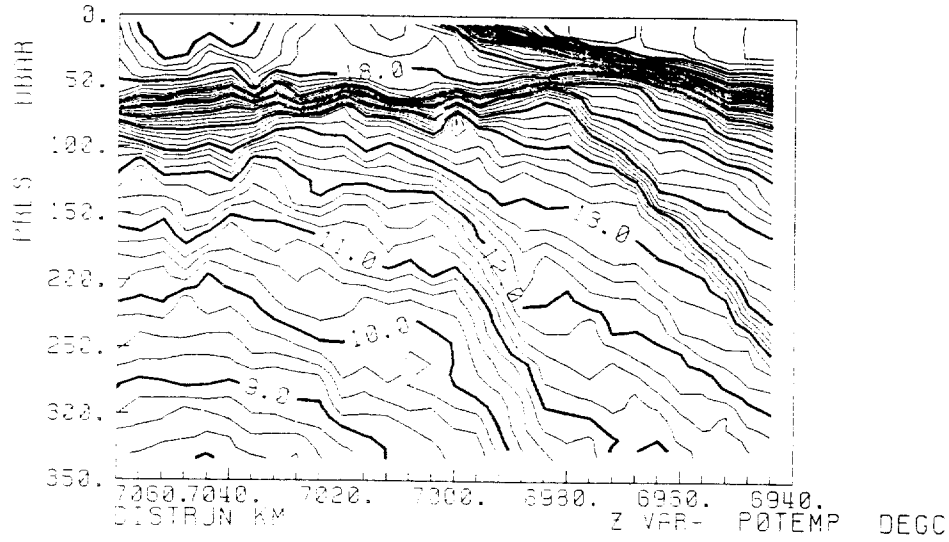


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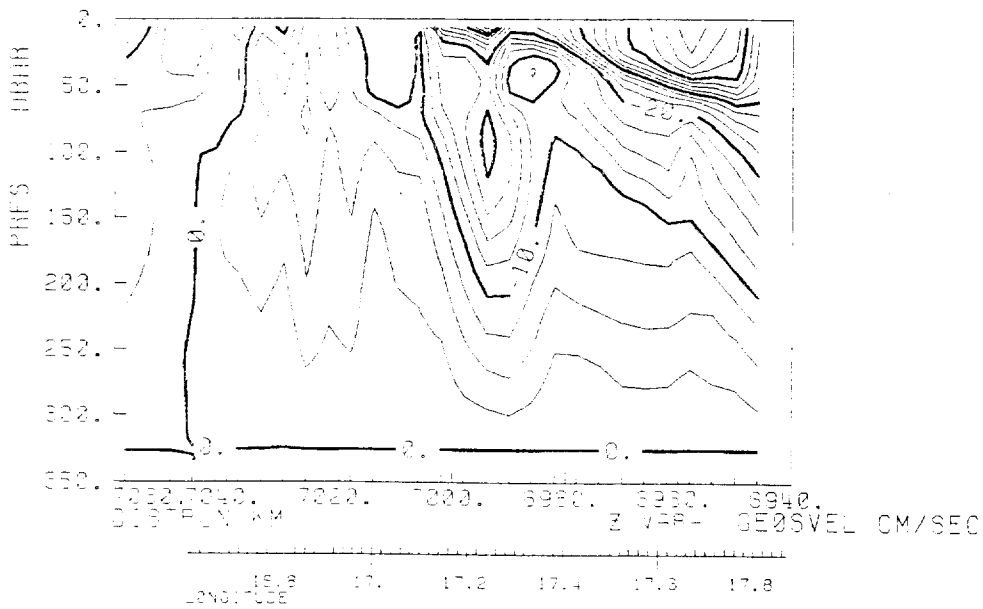
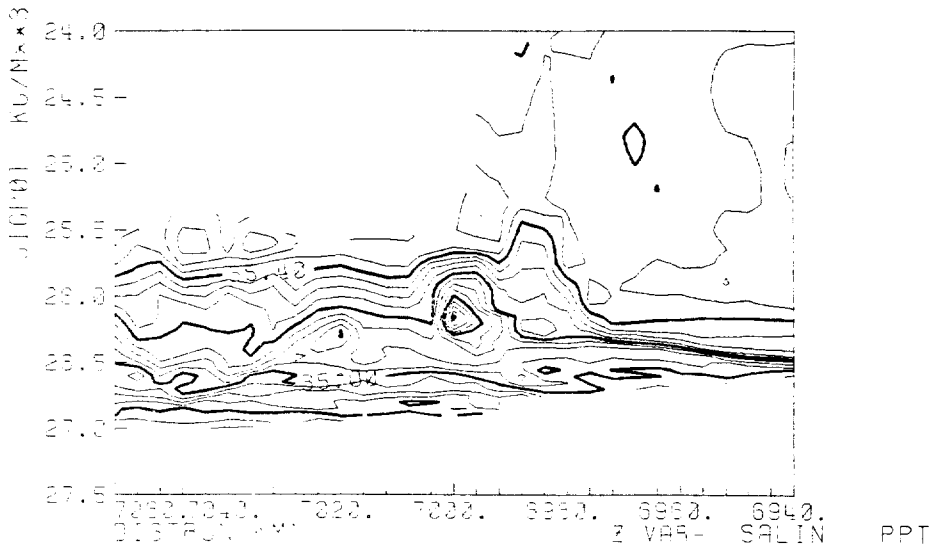
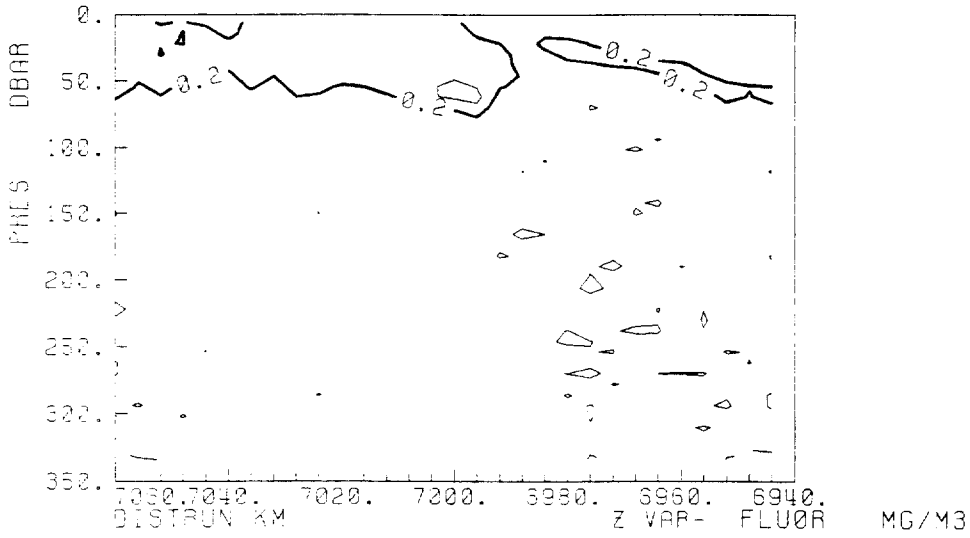


17.5 17.6 17.8 18.0 18.2 18.4 18.6 18.8 19.0 19.2 19.4 19.6

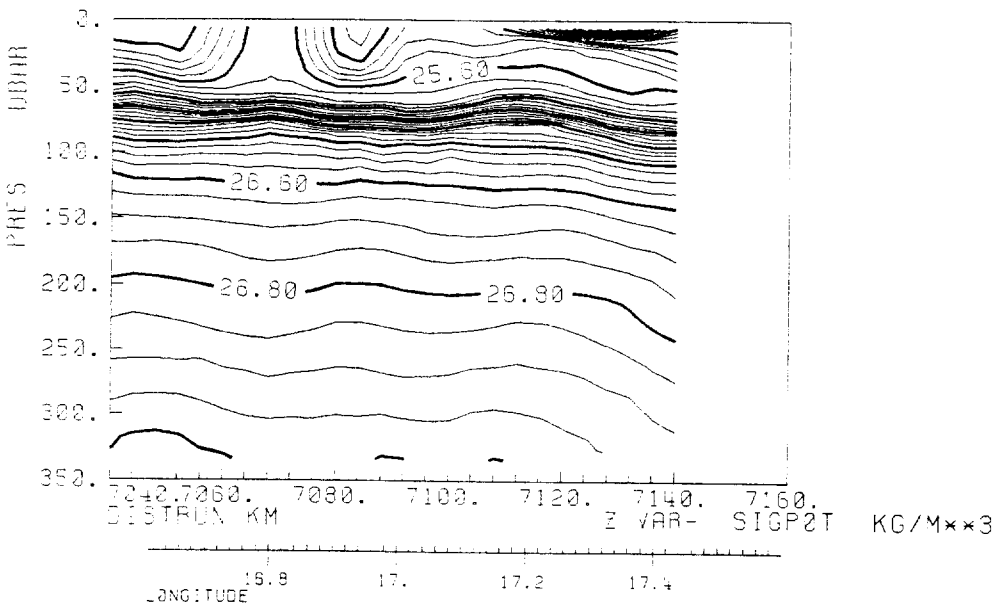
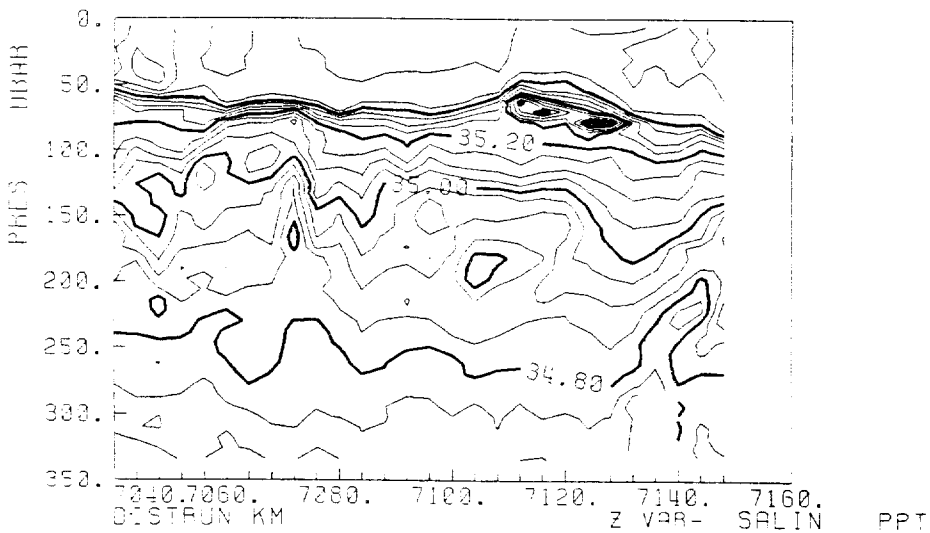
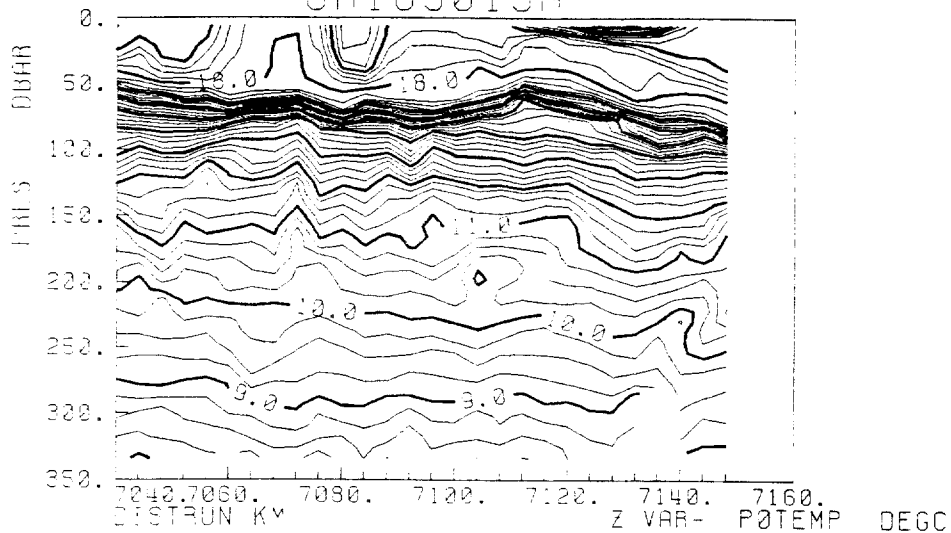
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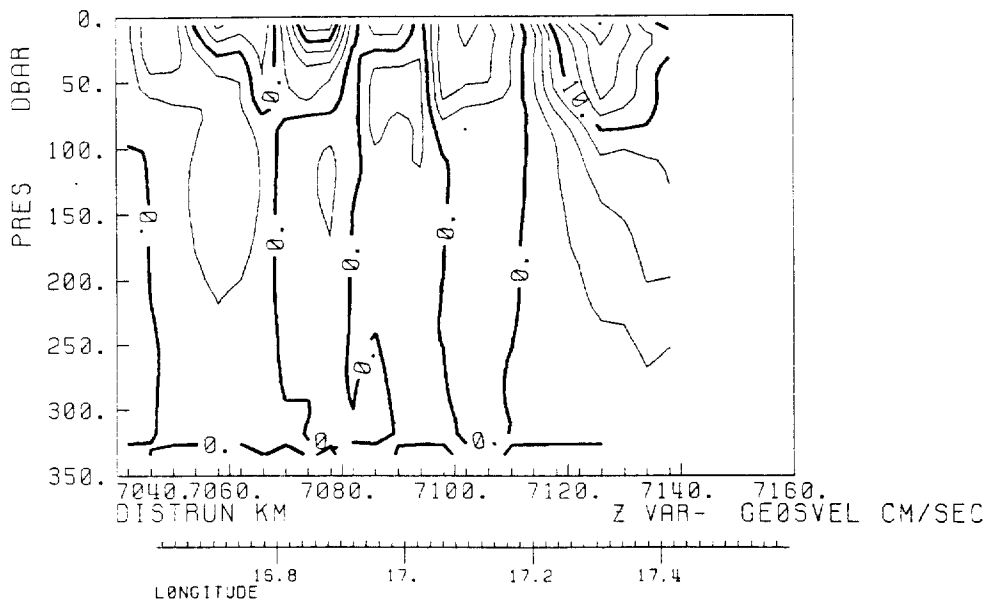
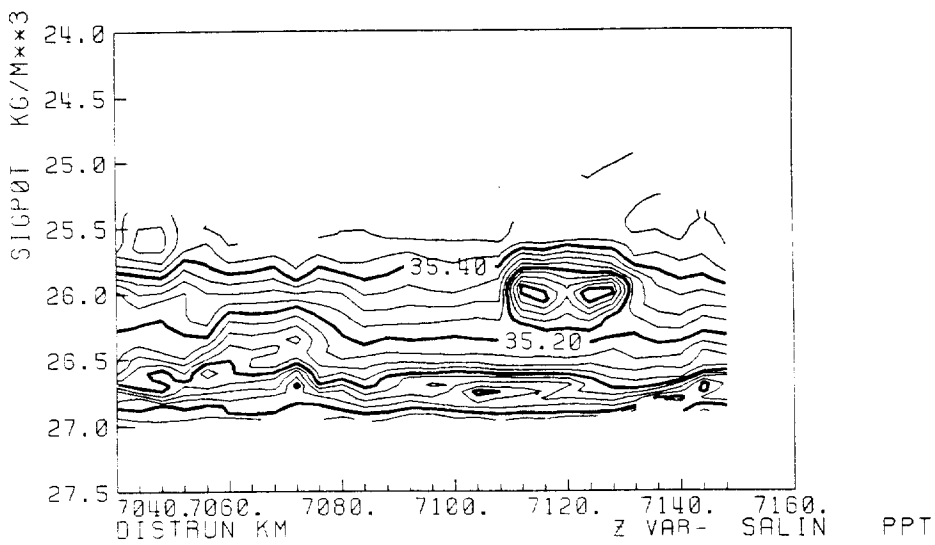
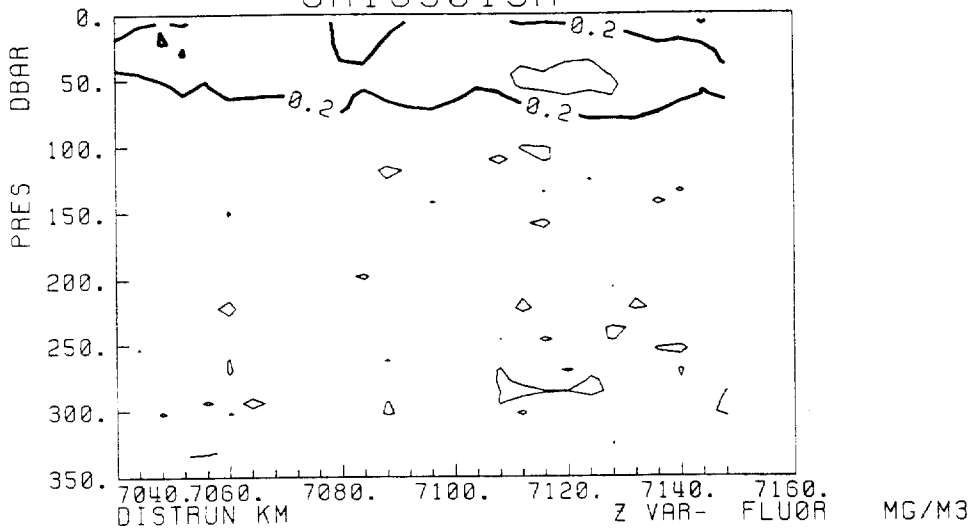
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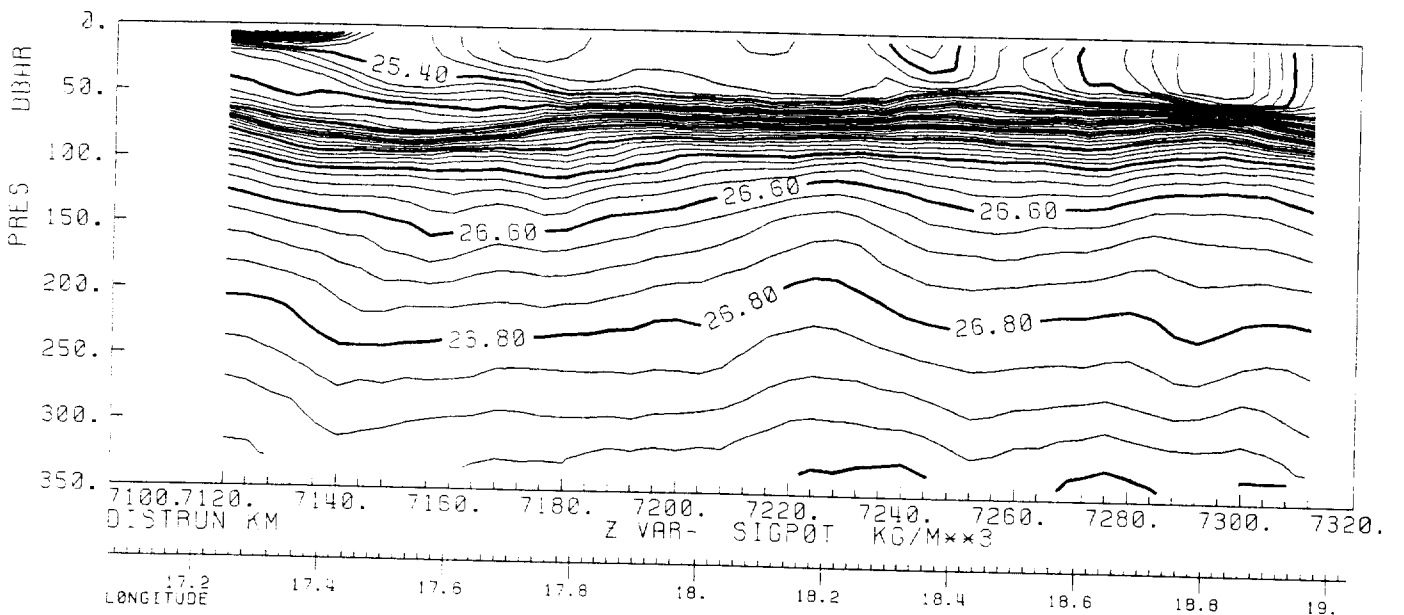
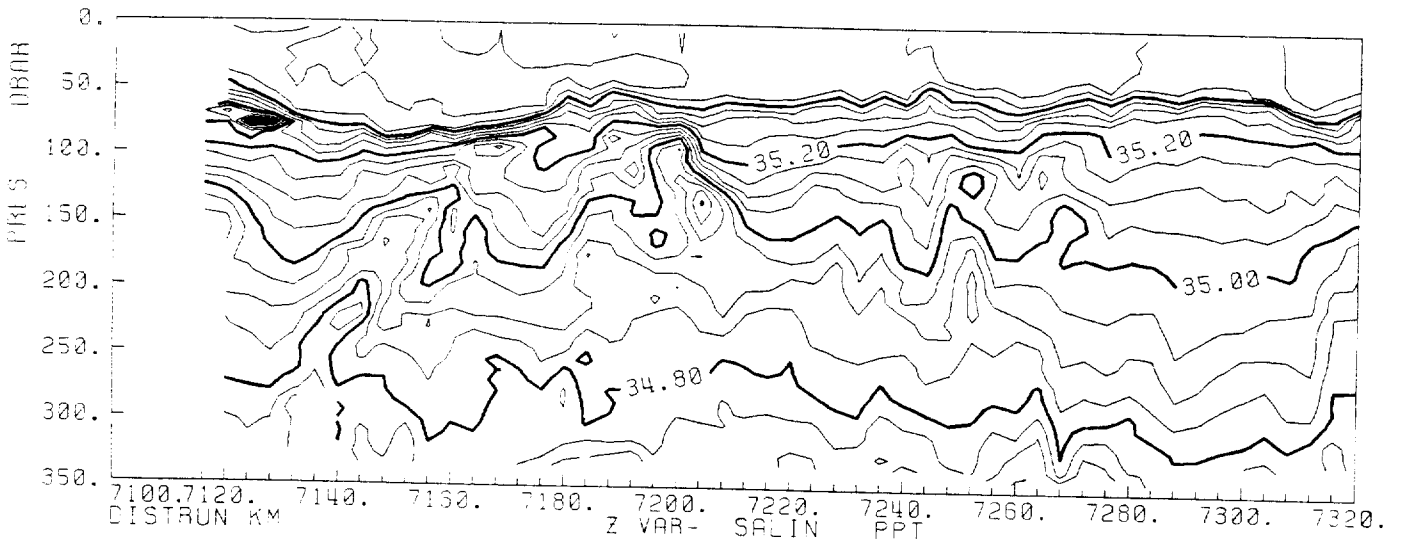
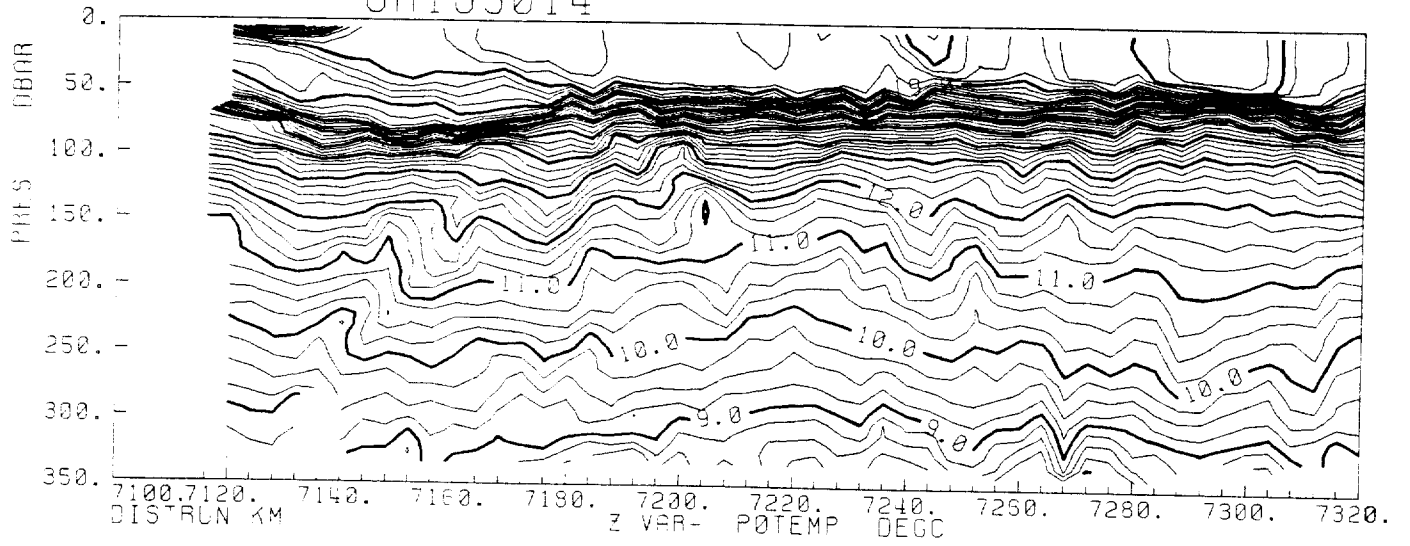
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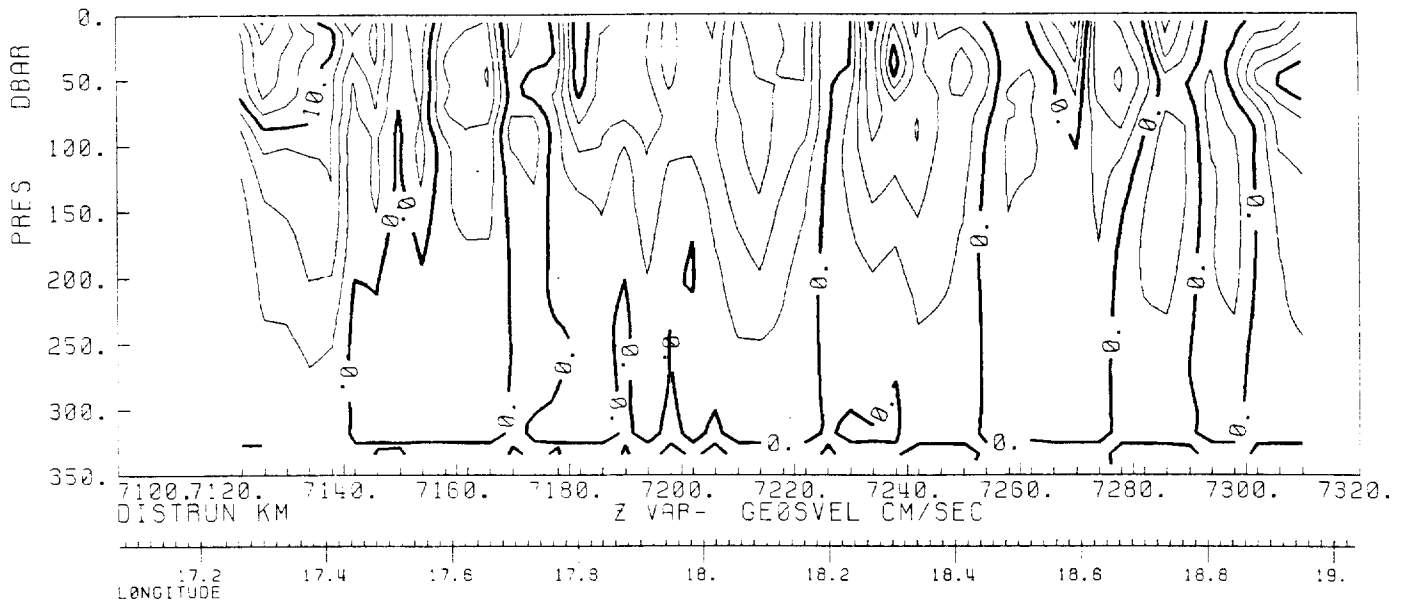
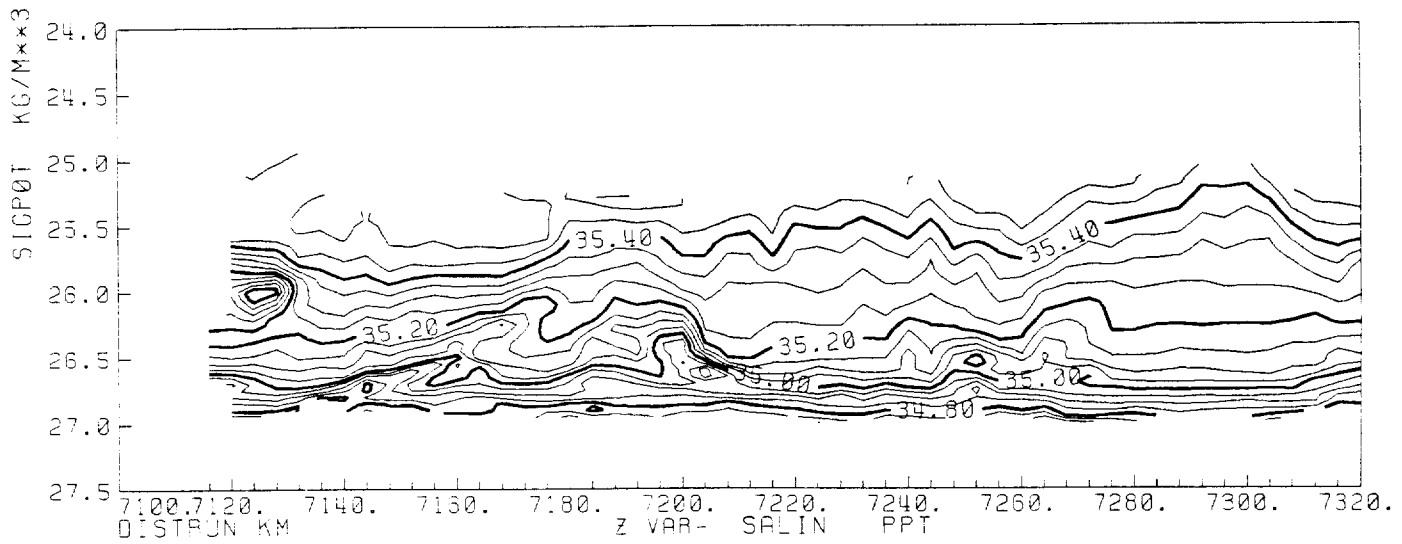
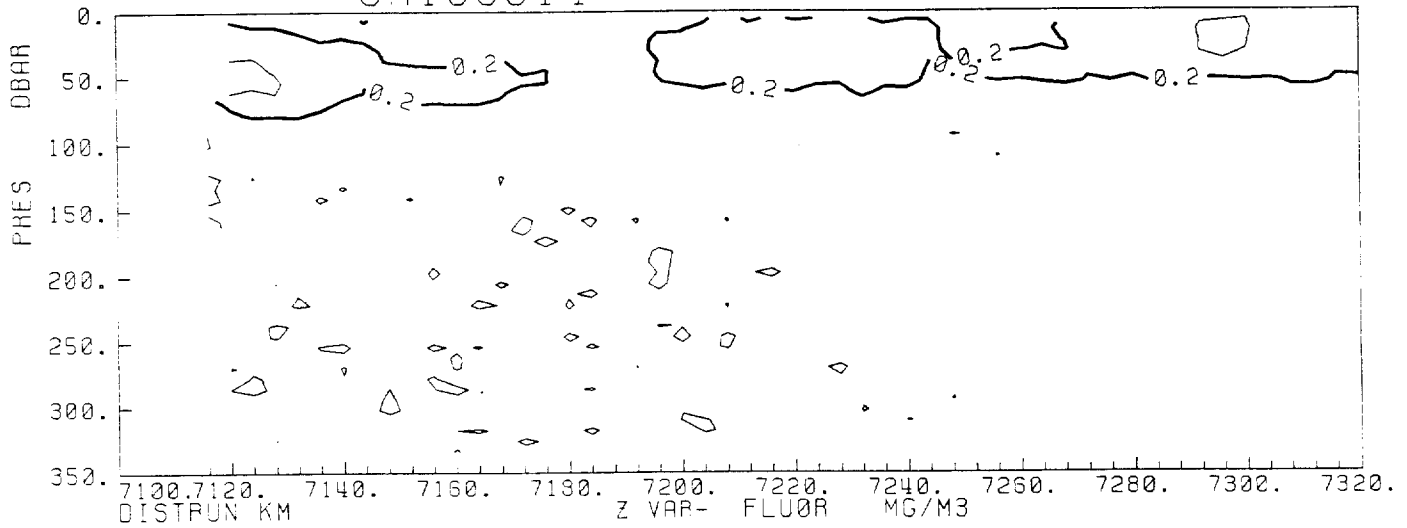
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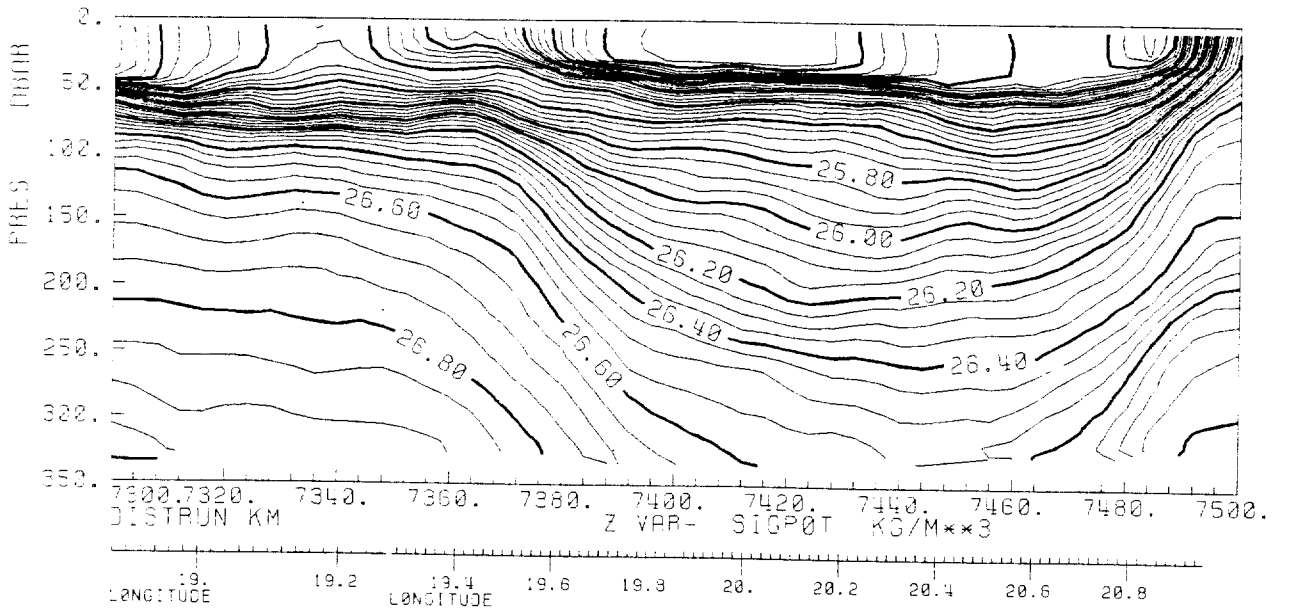
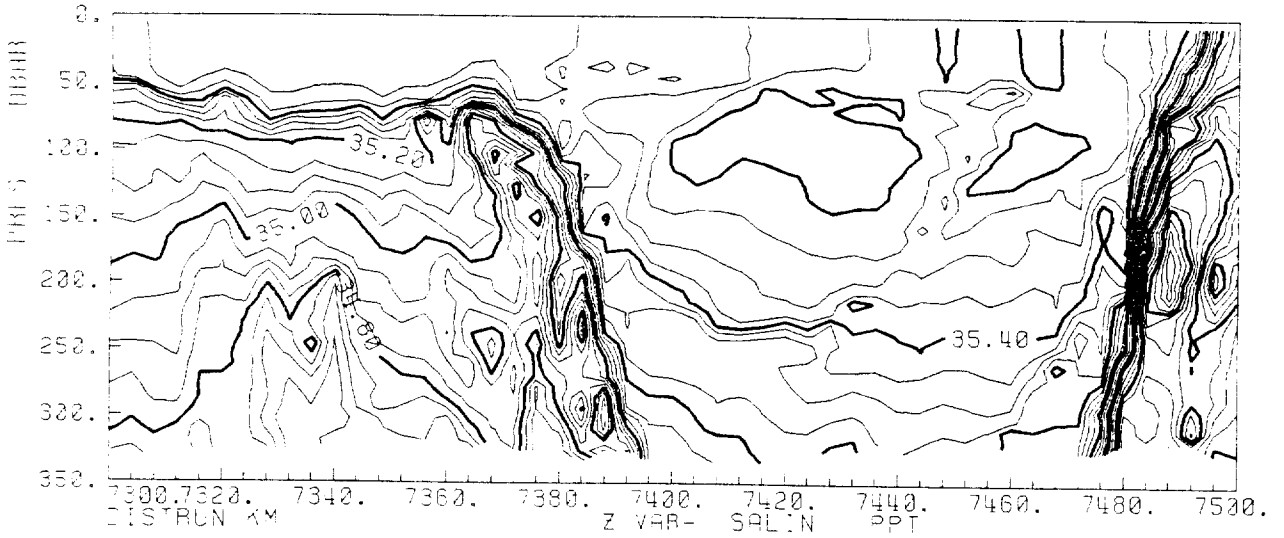
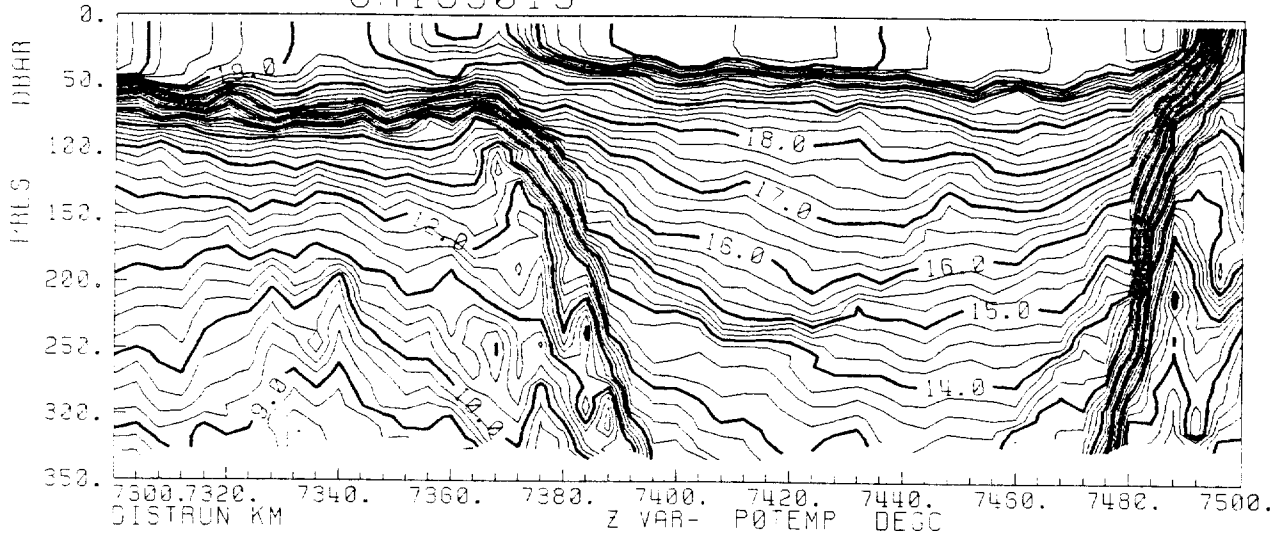


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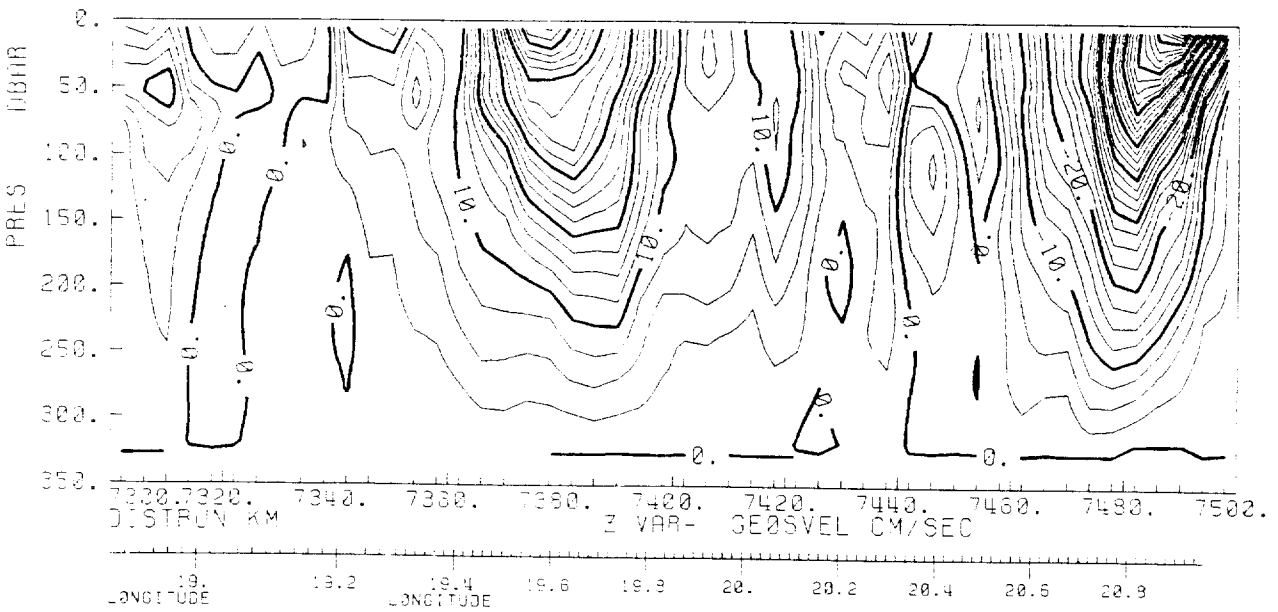
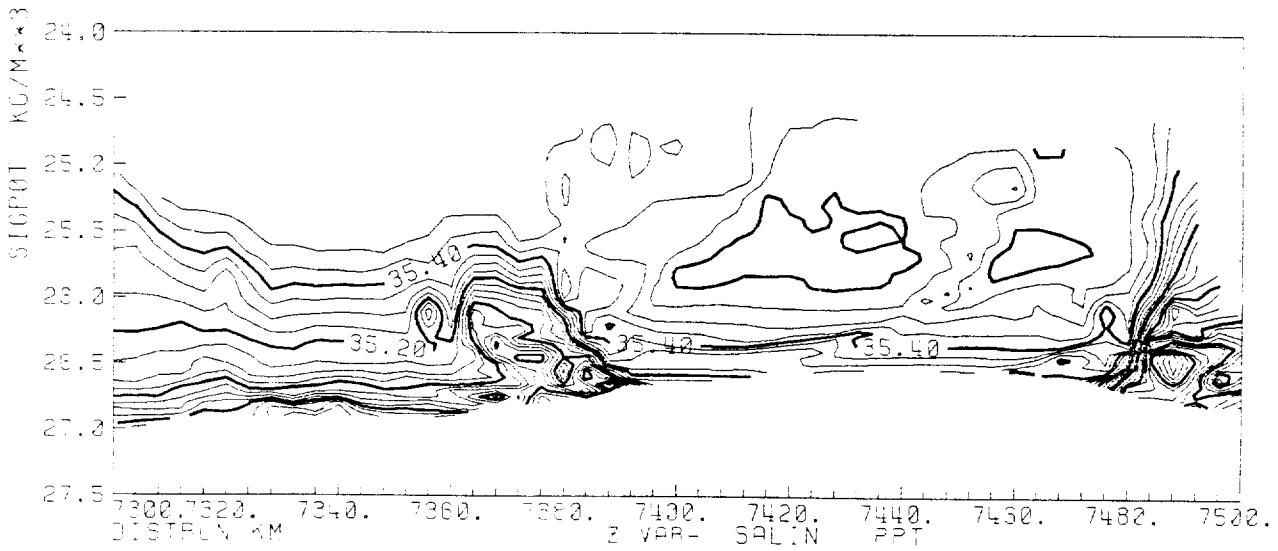
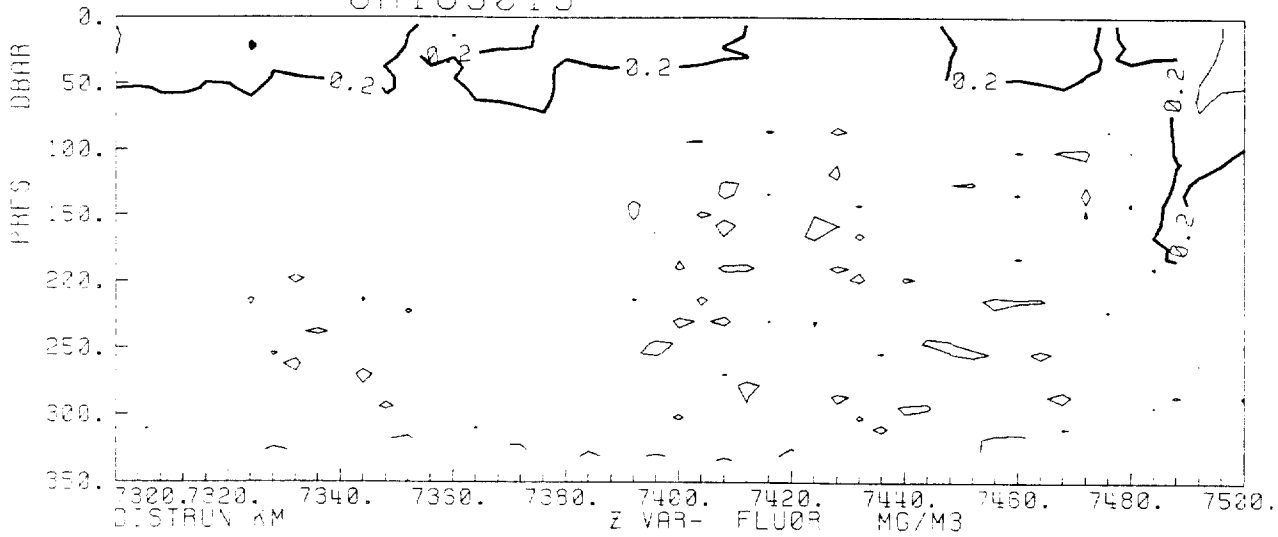


LONGITUDE
17.2 17.4 17.6 17.8 18.0 18.2 18.4 18.6 18.8 19.

GR165015

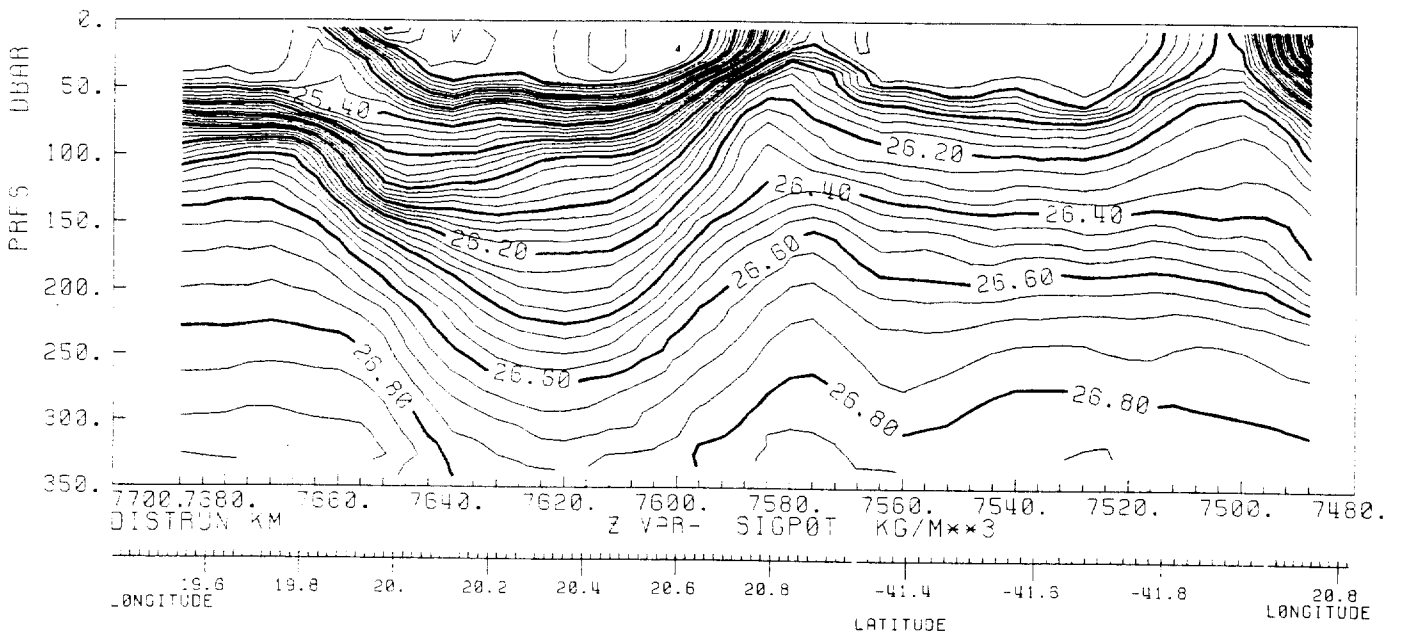
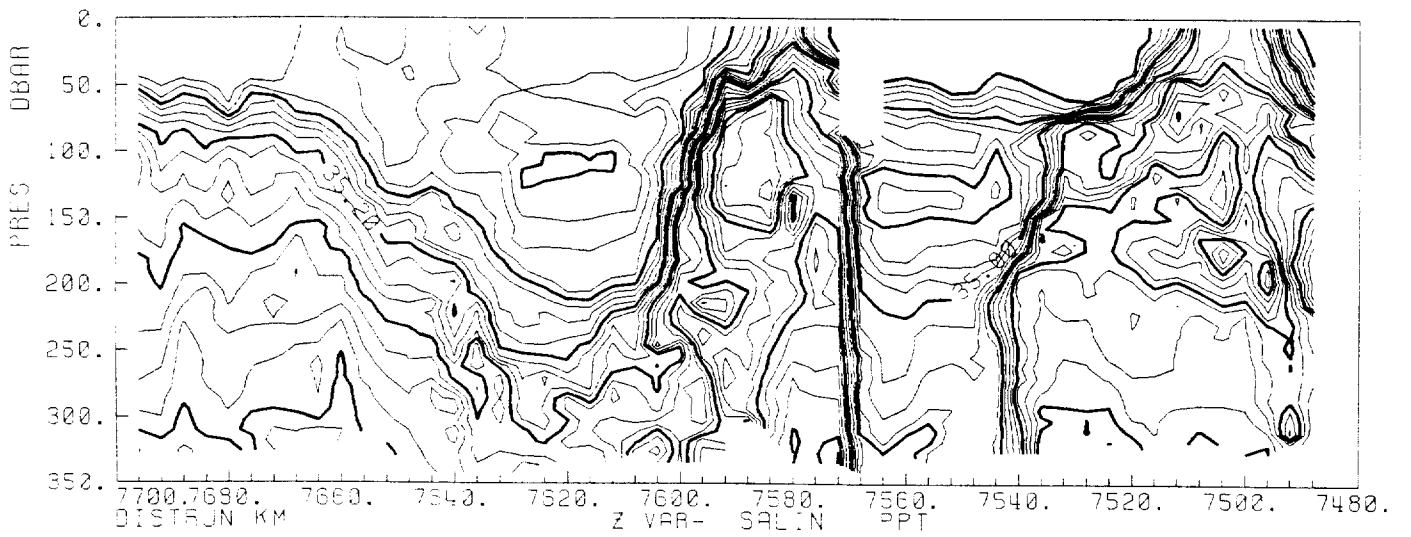
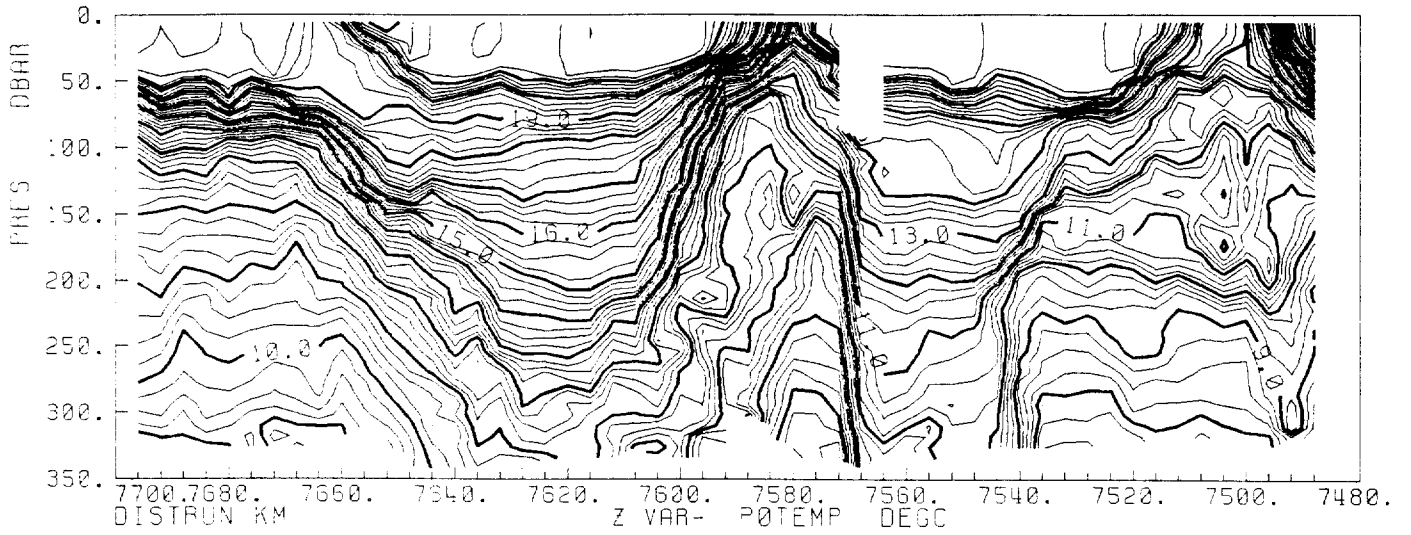


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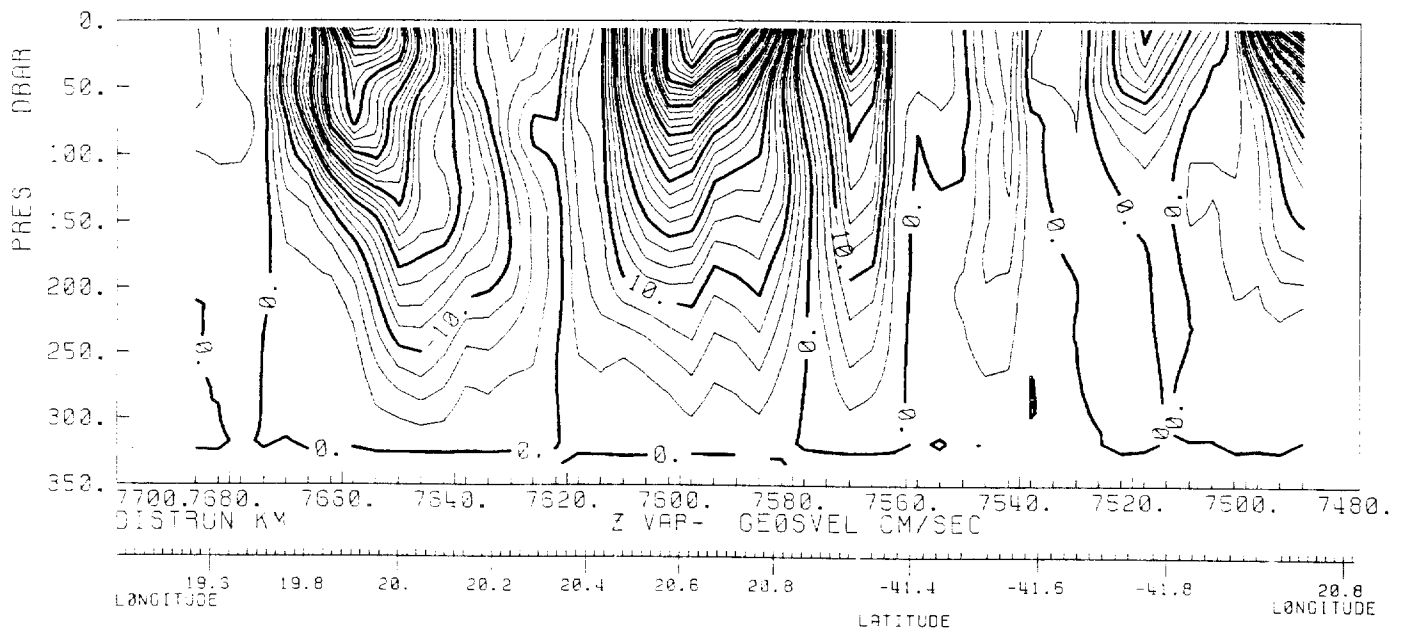
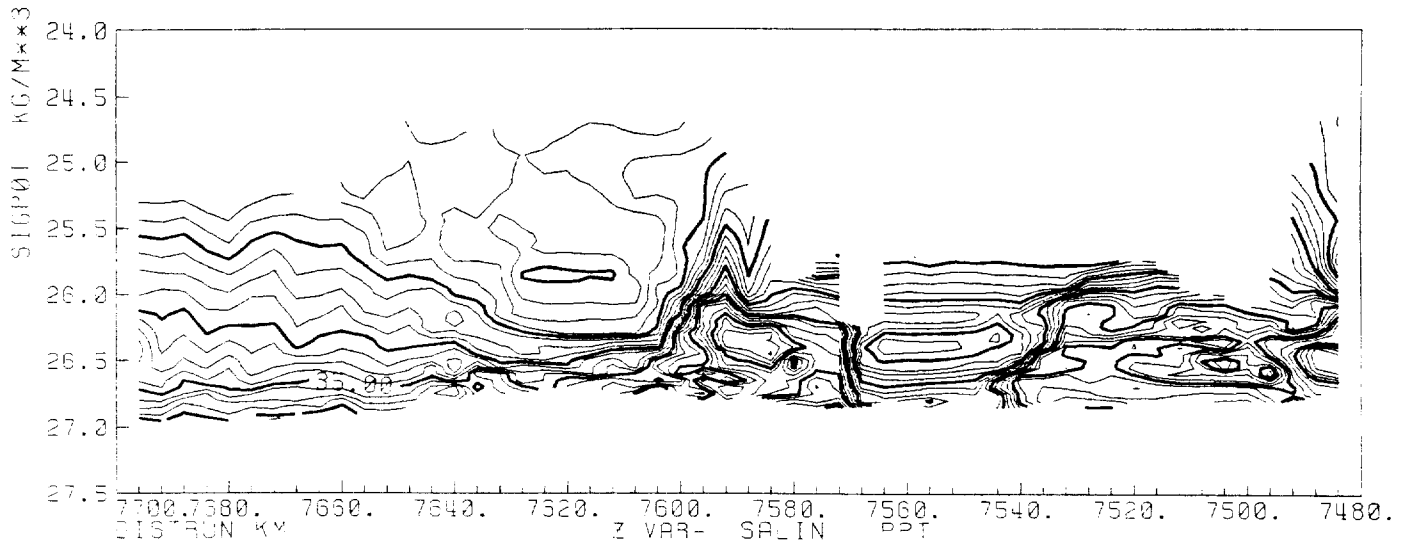
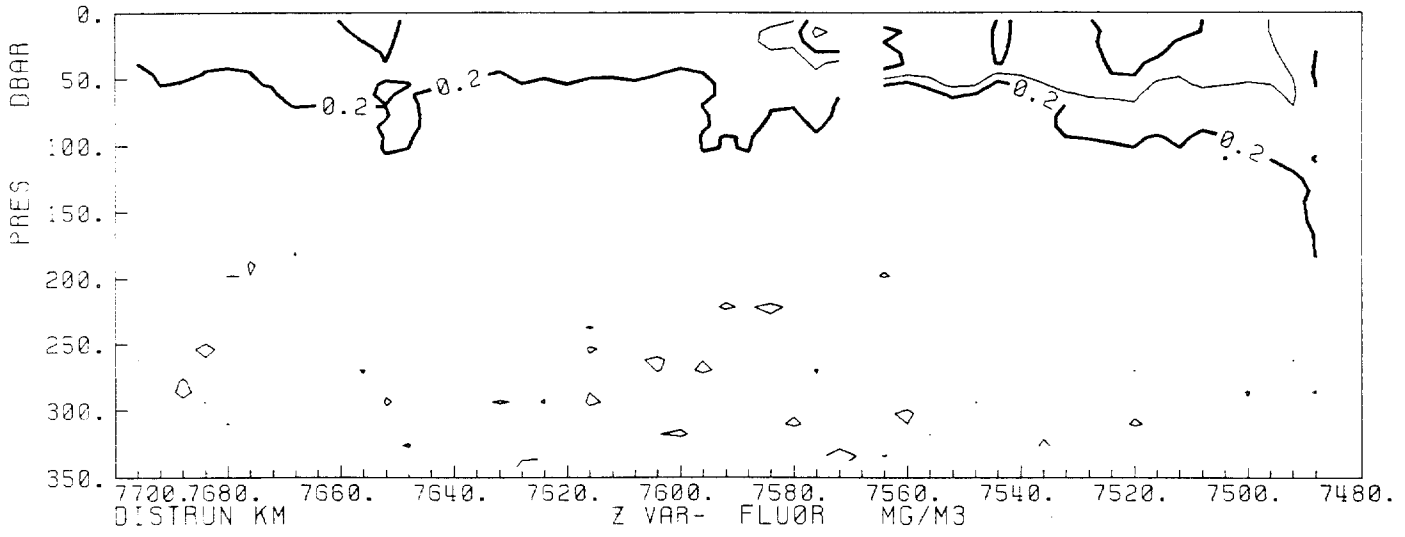


19.2 19.4 19.6 19.8 20.0 20.2 20.4 20.6 20.8
LONGITUDE

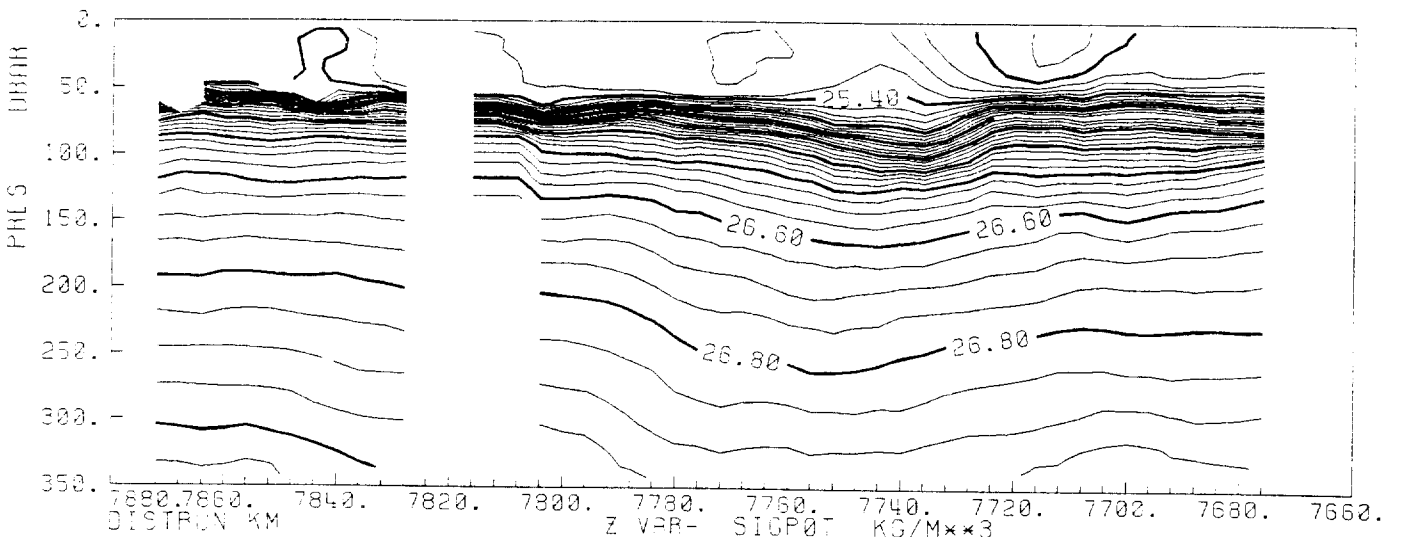
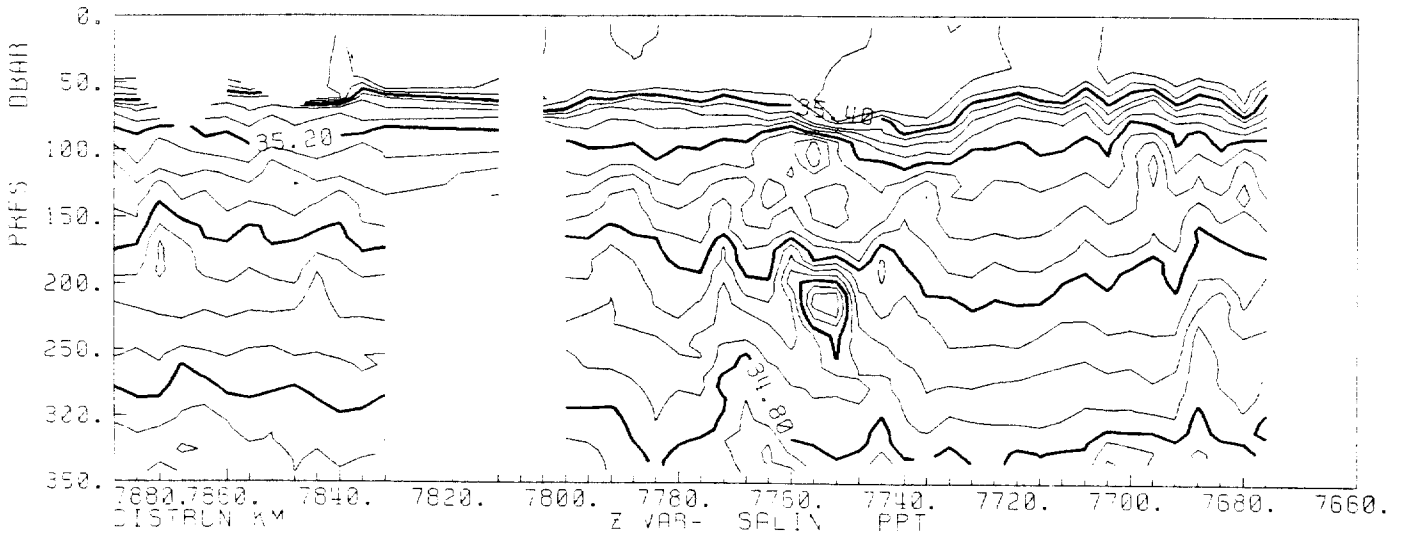
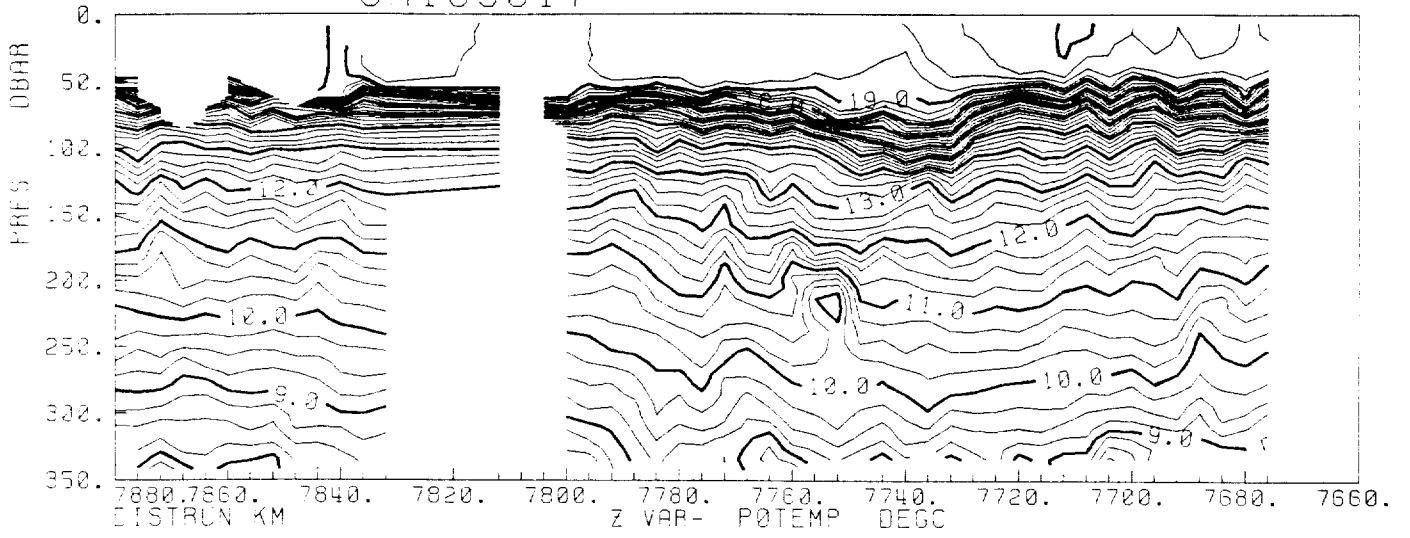
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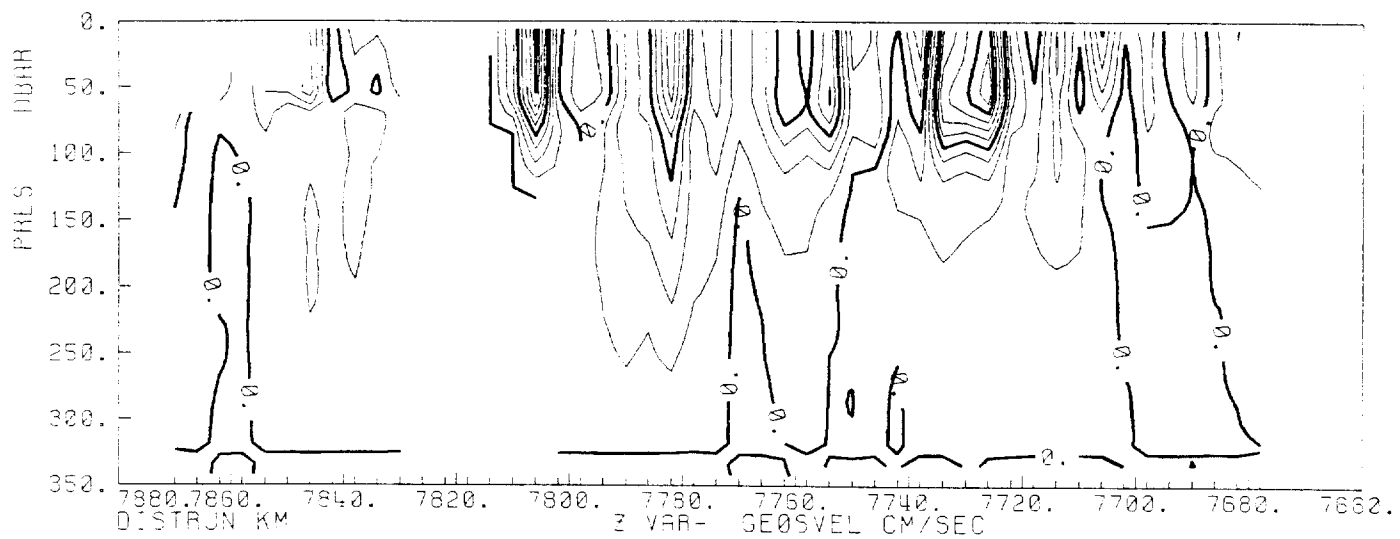
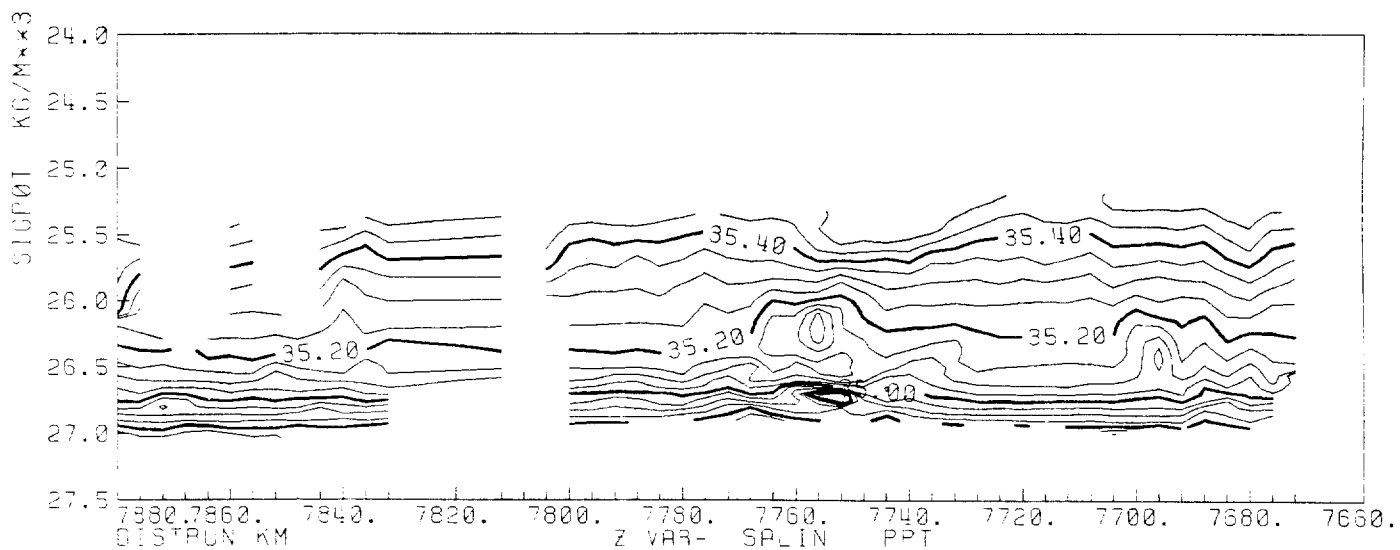
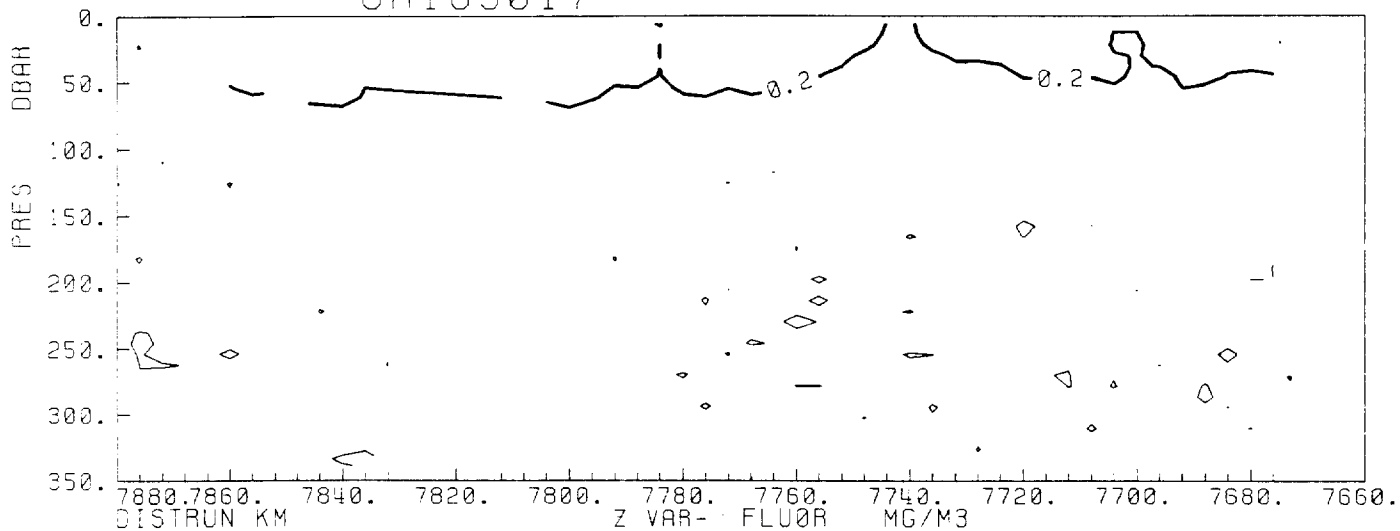


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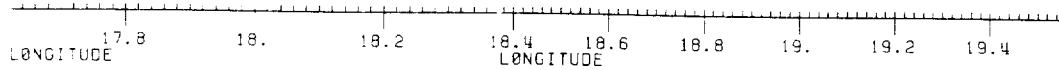
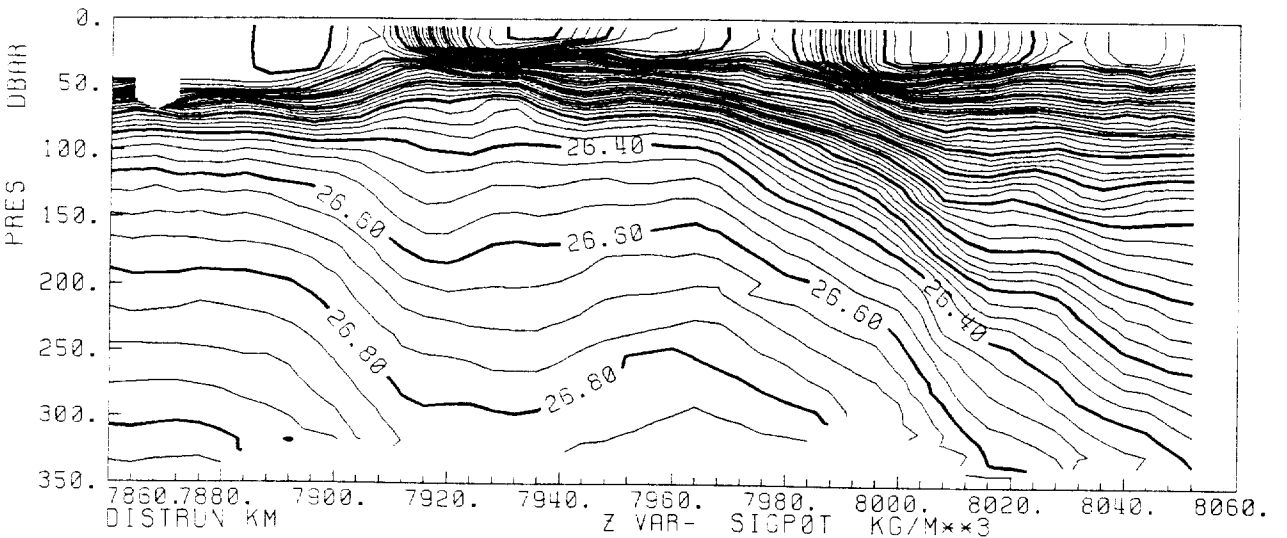
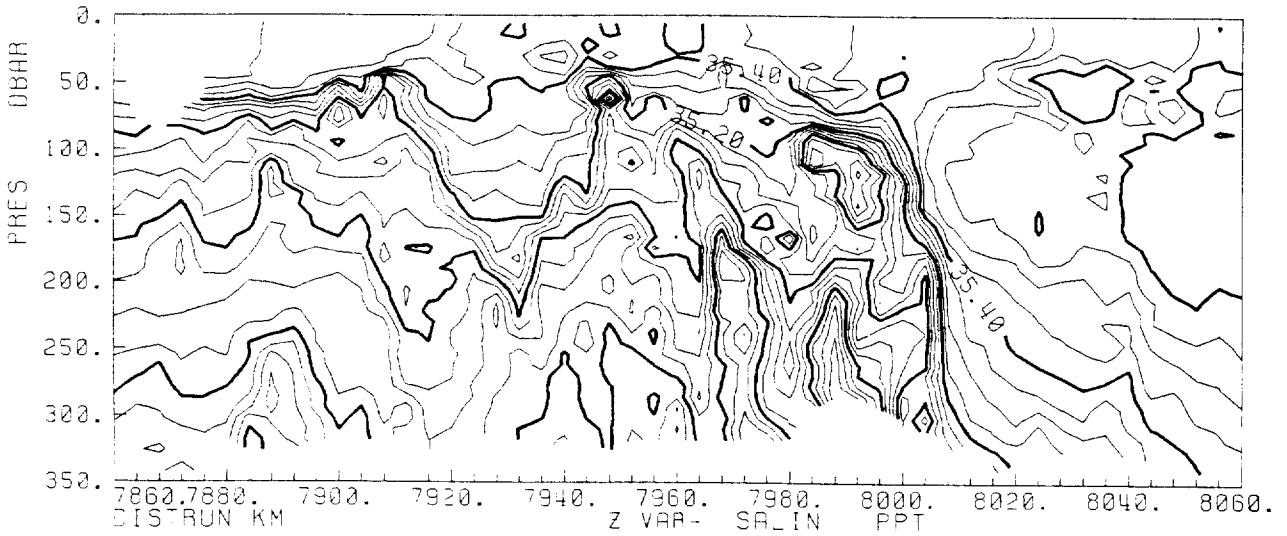
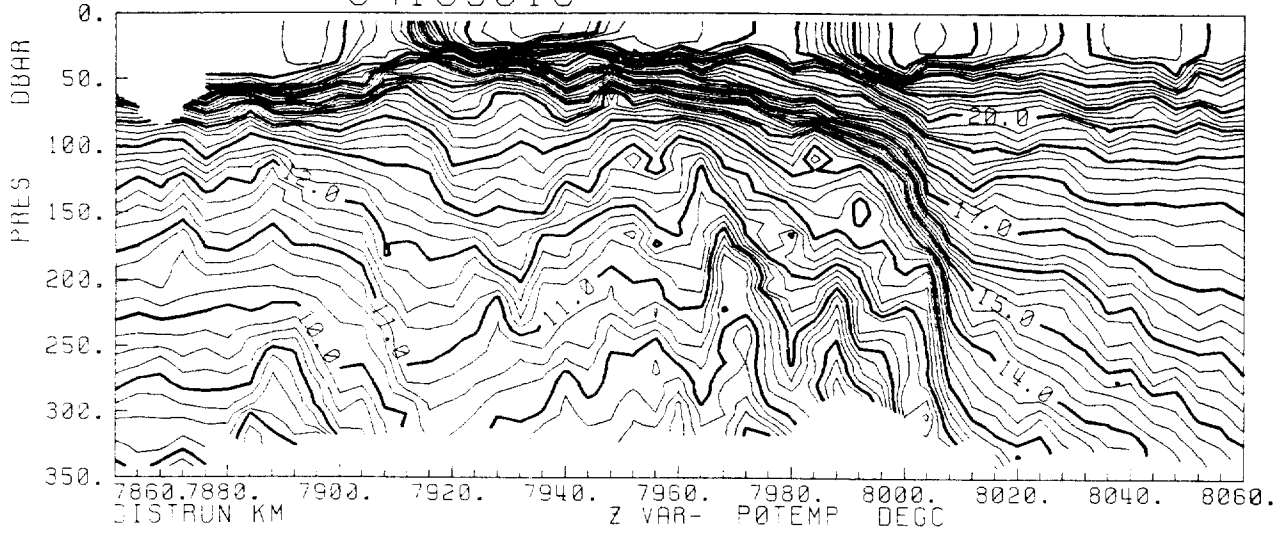
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LATITUDE -41.4

GR165017

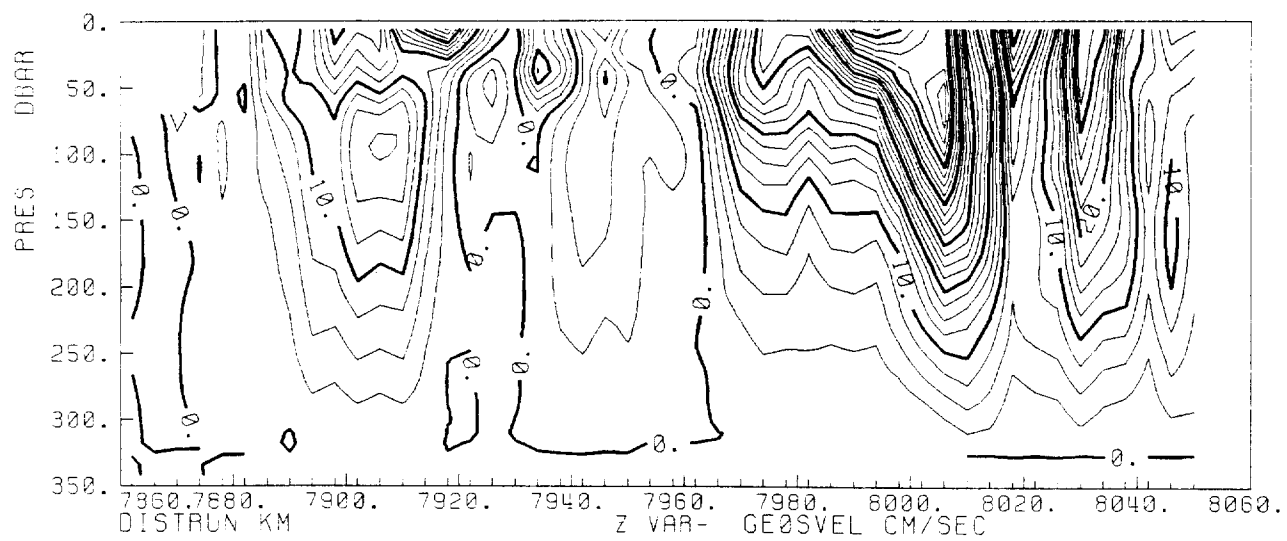
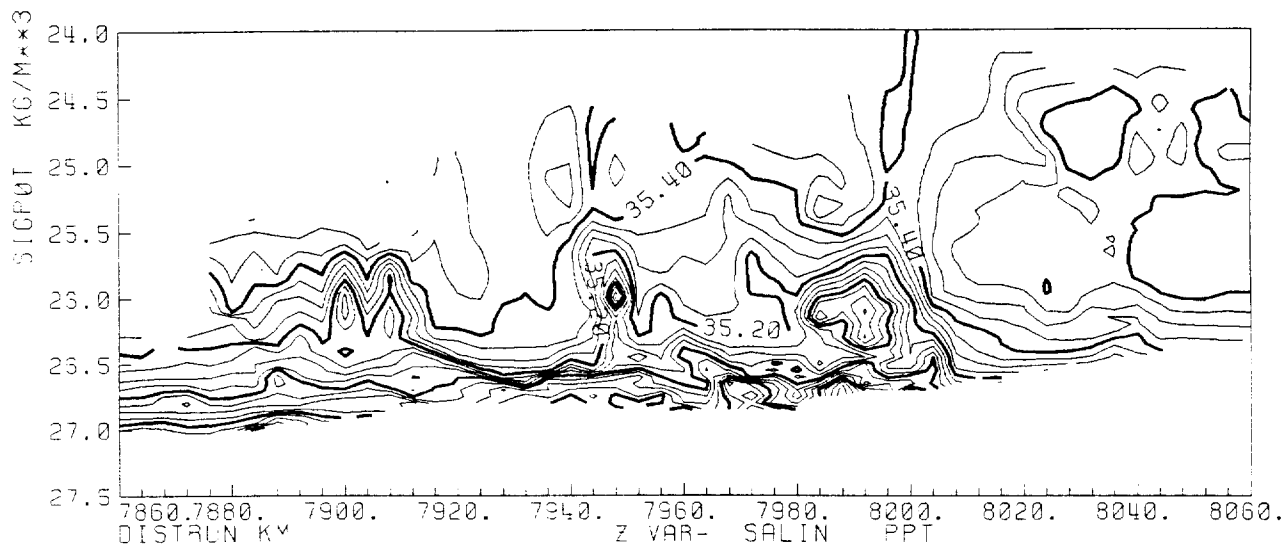
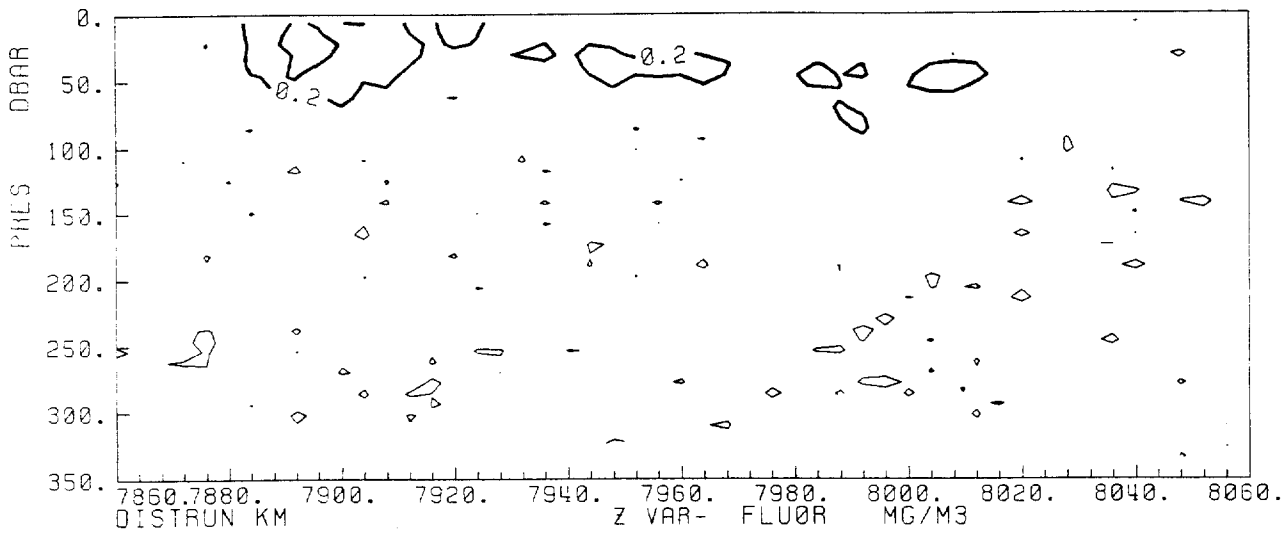


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LATITUDE

GR165018

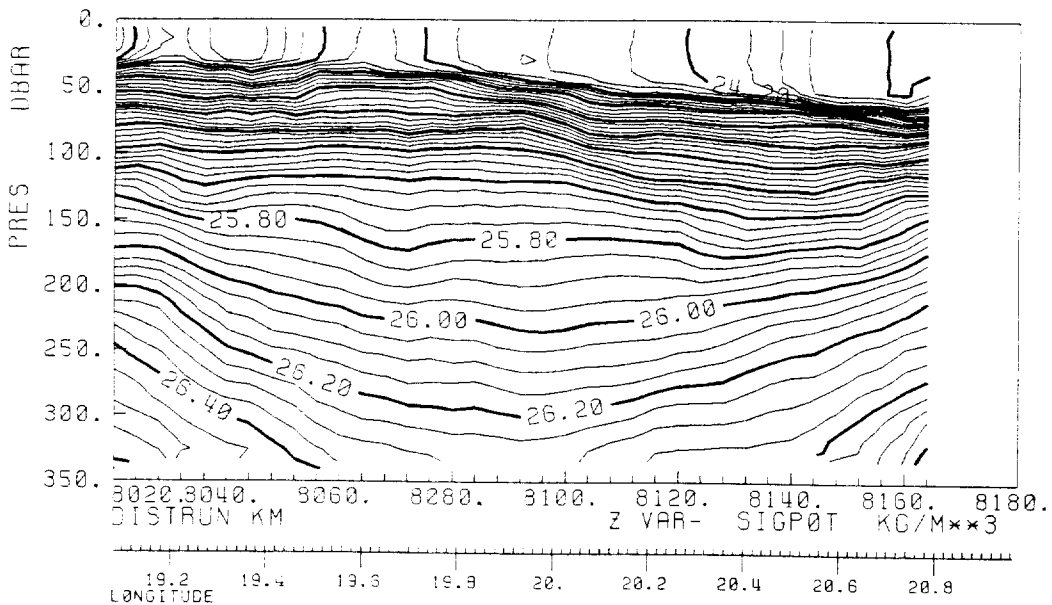
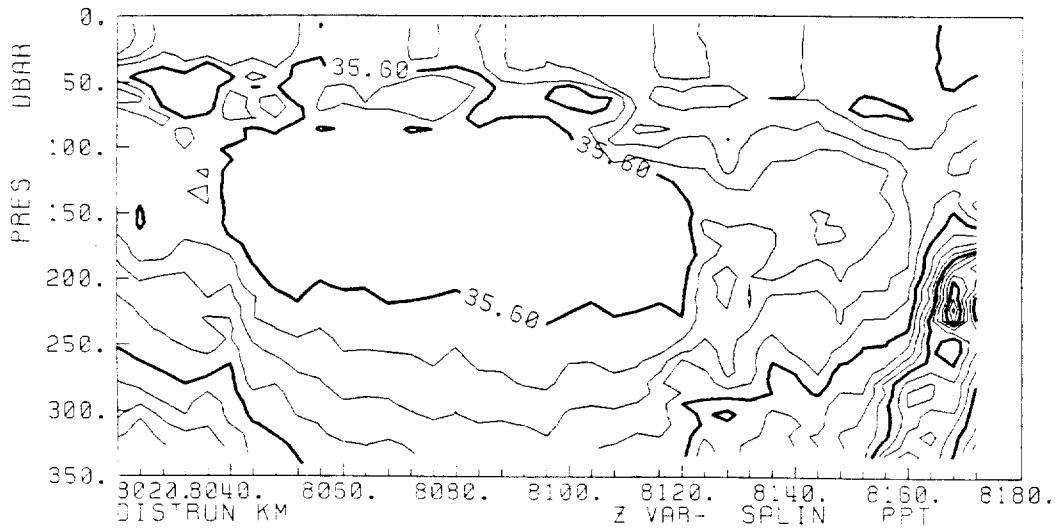
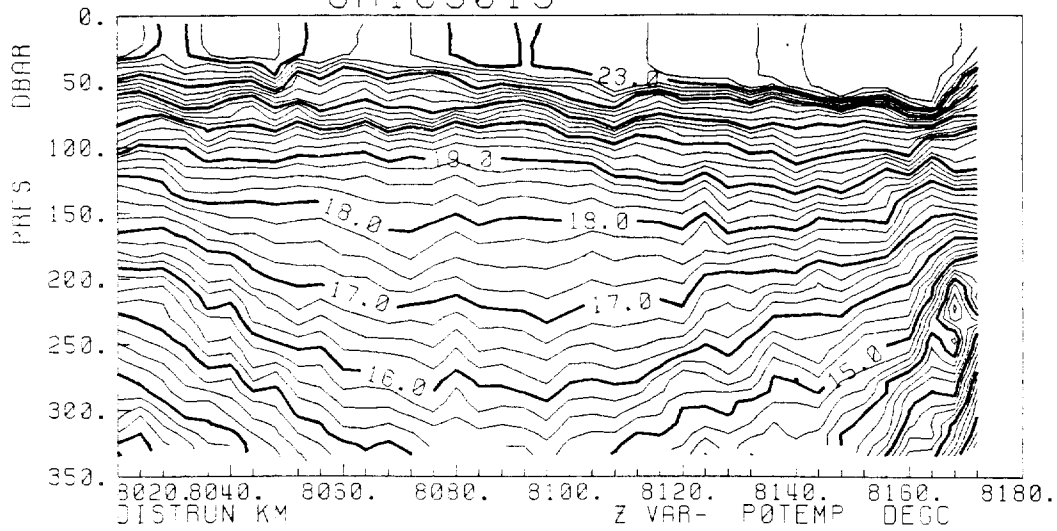


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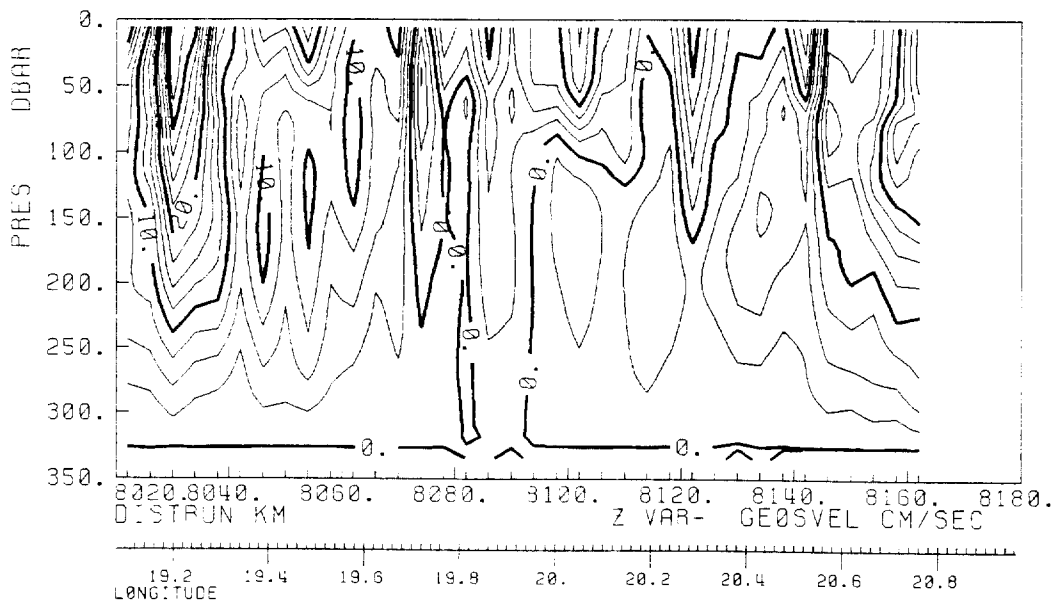
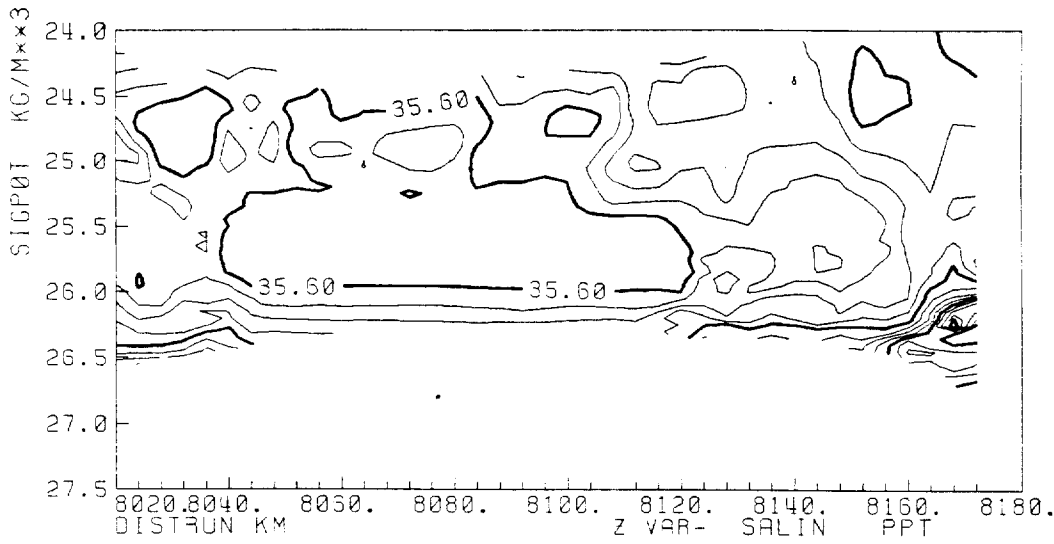
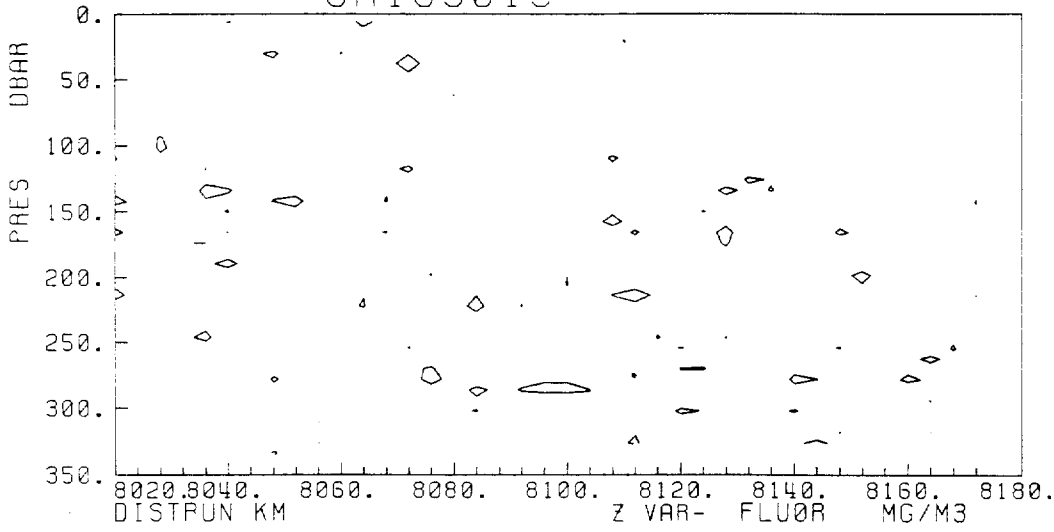


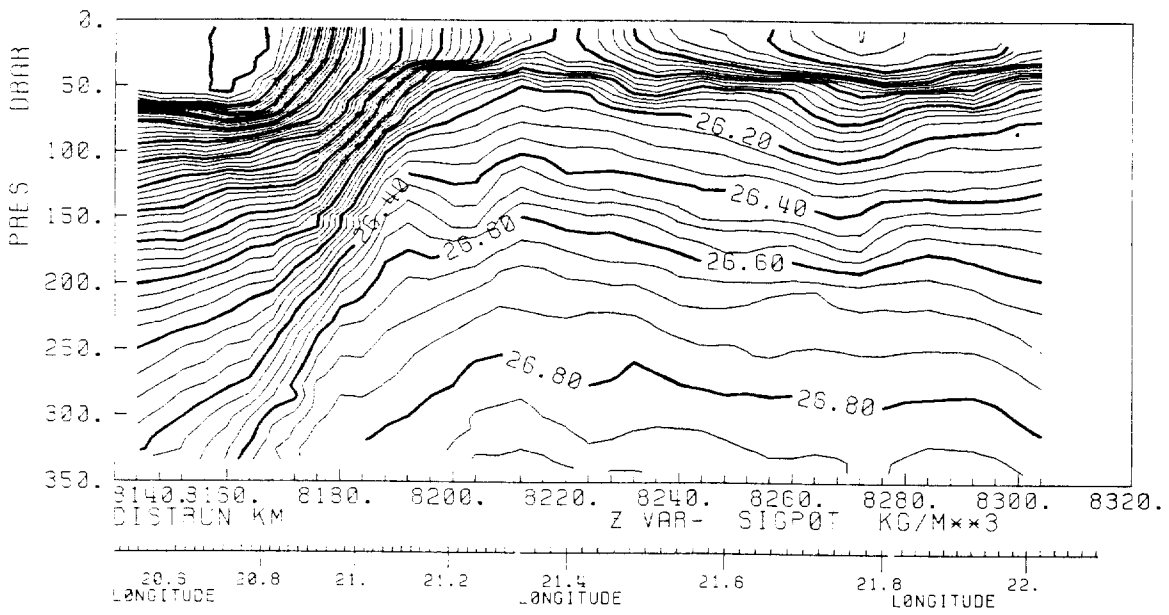
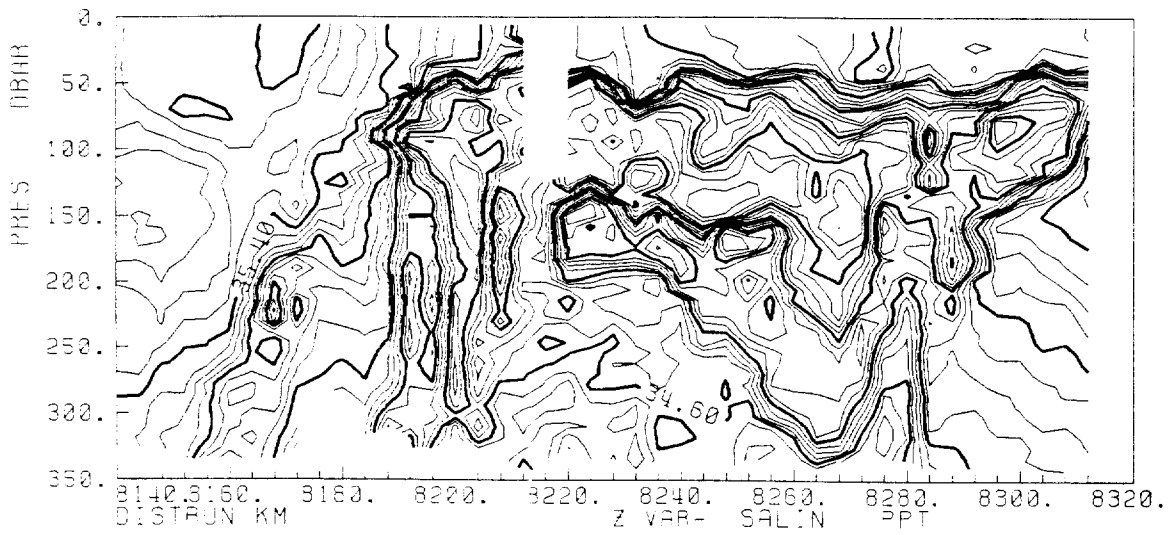
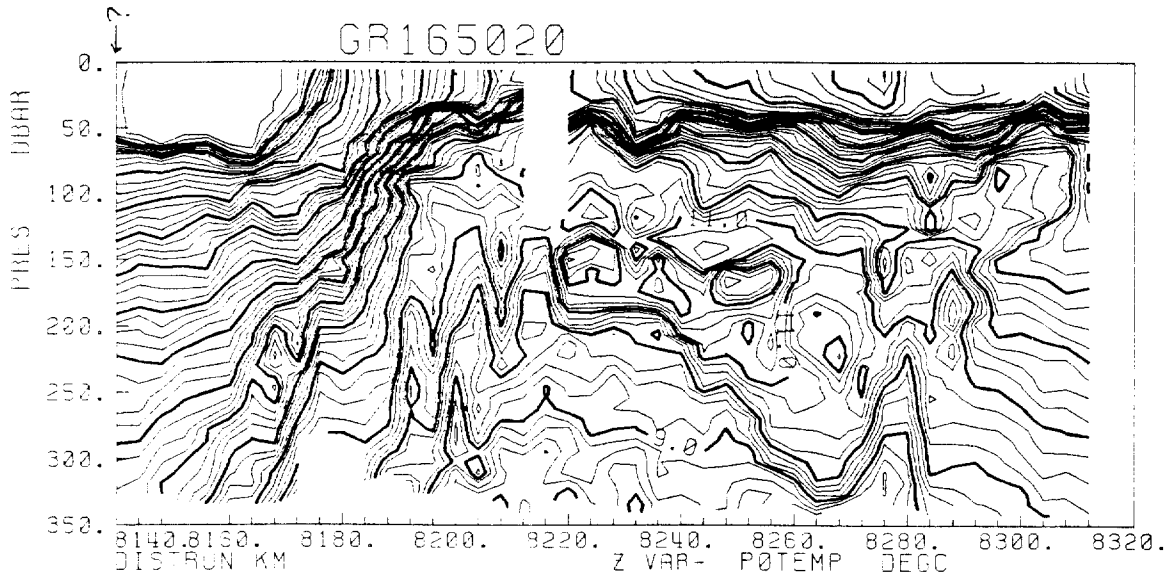
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LONGITUDE

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