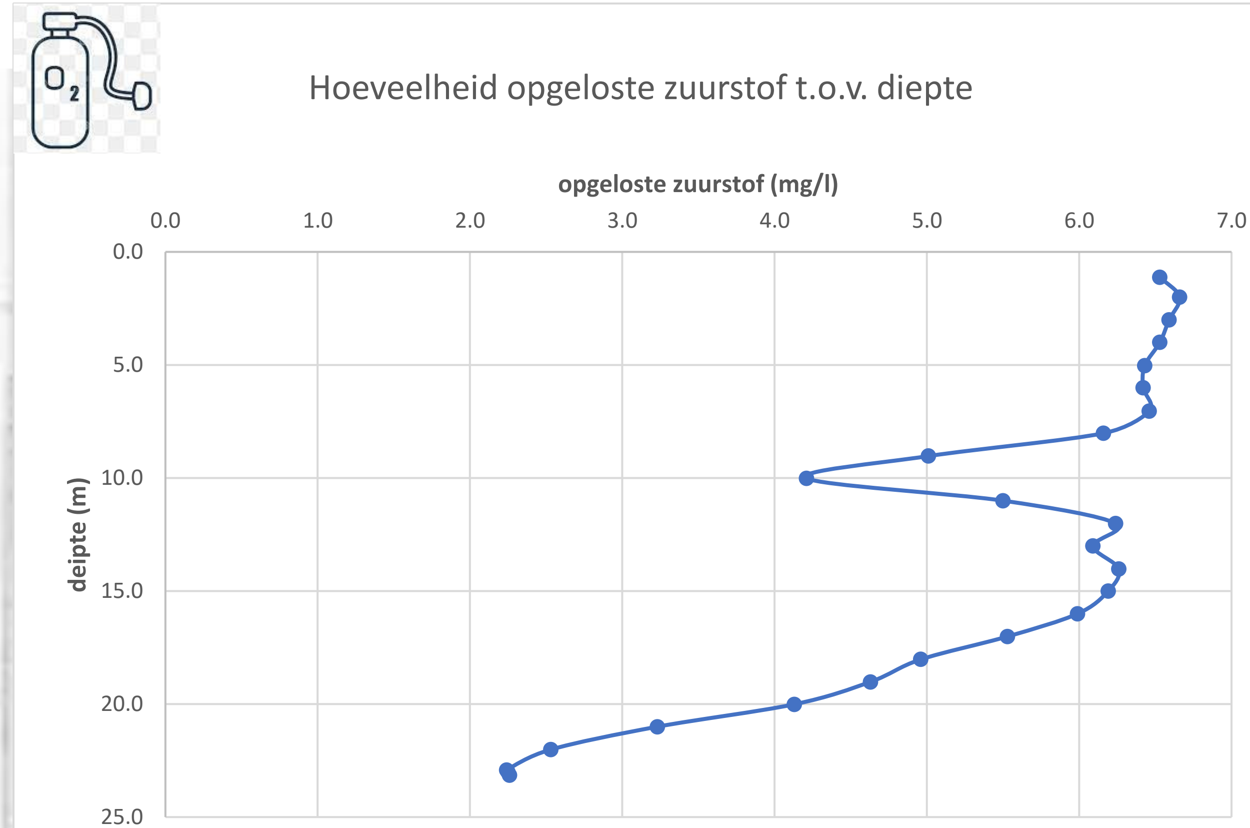


- in orogenic belts, most [illegible] plot near continental geotherms, implying
  - controlling factor is overall heat distribution

[illegible] low, so:
[illegible]), isotherms are depressed

(uplift; [illegible]), isotherms are elevated

[illegible] in porphyroblasts

[illegible] assemblage records highest T
[illegible] features

- overall time scale: ~50 ± 25 My

- why don't we only see low assemblage
  - reaction time is slow at lower T
  - volatiles are driven off during prograde path

9/9

0800 Antan started { 1.2700 9.037 847 025
1000 " stopped - antan ✓ 9.037 846 995 correct
13"UC (032) MP - MC ~~1.982147000~~ ~~2.130476415~~ (~~-3~~) 4.615925059(-2)
(033) PRO 2 2.130476415
correct 2.130676415
Relays 6-2 in 033 failed special speed test
In relay " 10,000 test.
Relays changed

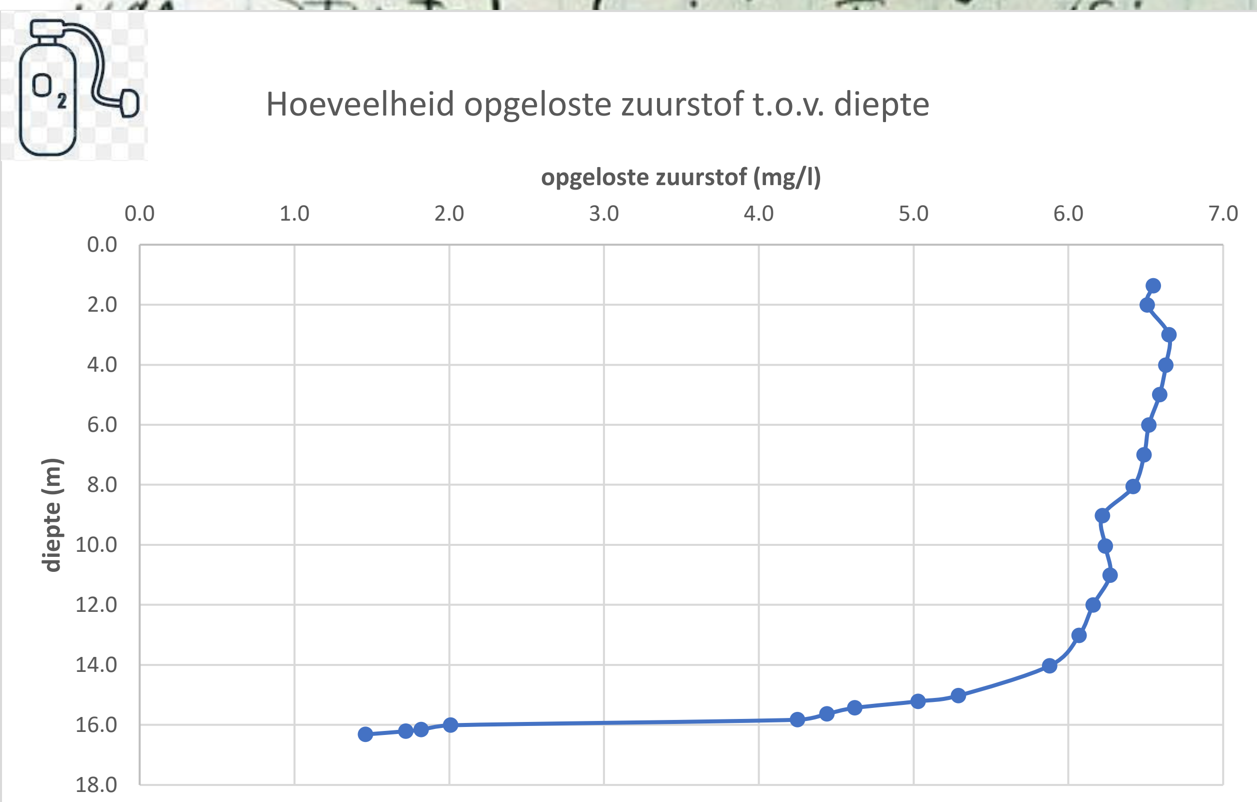
Relay 2145
Relay 3370

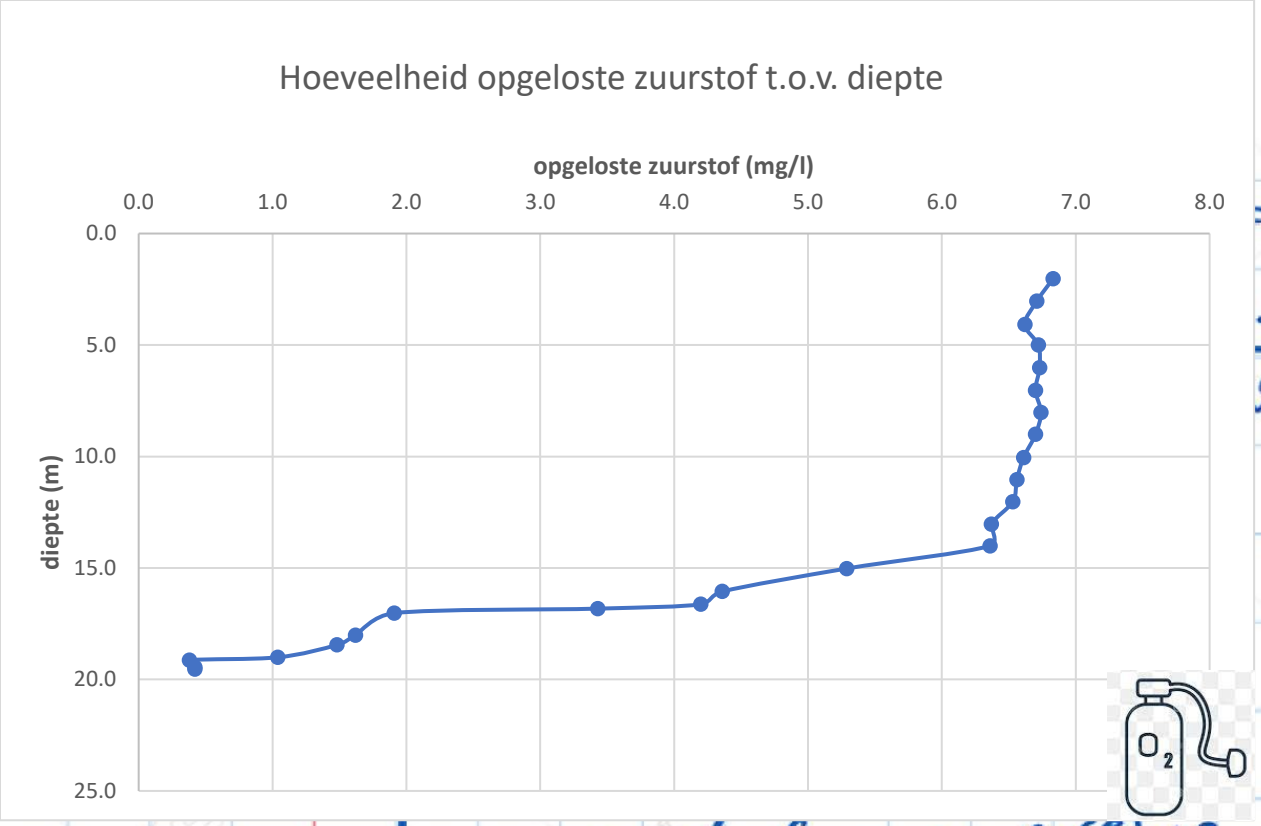
...heck)

...o Panel F

...elay.

...eing found.





$$I_n(x) = i^{-n} J_{(x)}(ix);$$

$$\frac{I_n(x)}{\pi} \; i \; y_1 = \sum_{k=0}^{\infty} a_k x^{n+2k};$$

$$y = C_1 y_1 + C_2 y_2$$

$$y_2 = A y_1 \int \frac{e^{-\int p\,dx}}{y_1^2} dx;$$

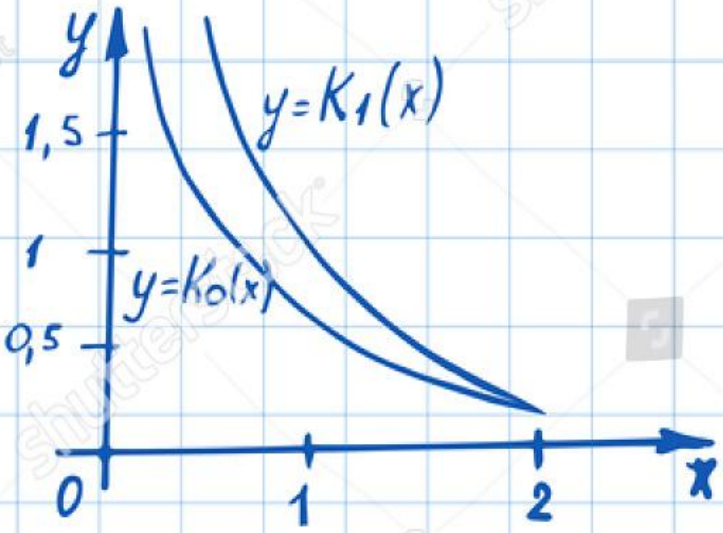
$$y = \frac{1}{A} \int_{x_0} F(\xi) e^{\int p(\xi) d\xi} [y_2(x) y_1(\xi) - y_1(x) y_2(\xi)] d\xi.$$

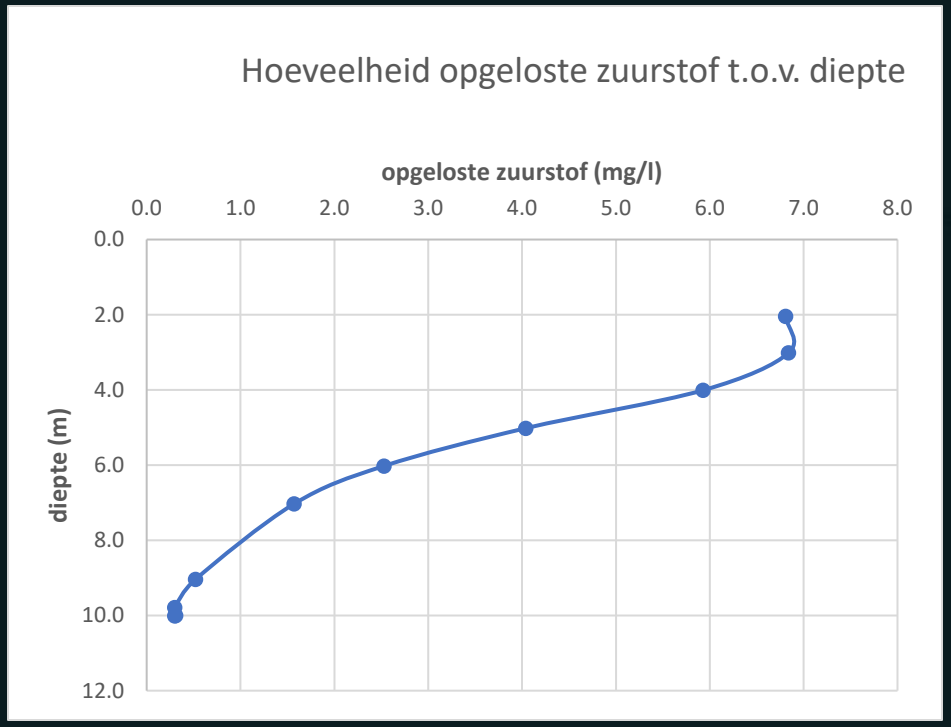
$$r(r-1) + p(0)r + q(0) = 0.$$

$$J_{n-1}(x) + J_{n+1}(x) = \frac{2n}{x} J_n(x);$$

$$J_{2n}(x) = \frac{2}{\pi} \int_0^{\pi/2} \cos(x \sin\varphi) \cos 2n\varphi \, d\varphi;$$

$$J_{1/2}(x) = \sqrt{\frac{2}{\pi x}} \sin x; \quad O\left(\frac{1}{x}\right)$$





$$T = 2\pi\sqrt{\frac{a^3}{\mu}}$$

$$\mu = G \times M(sun)$$

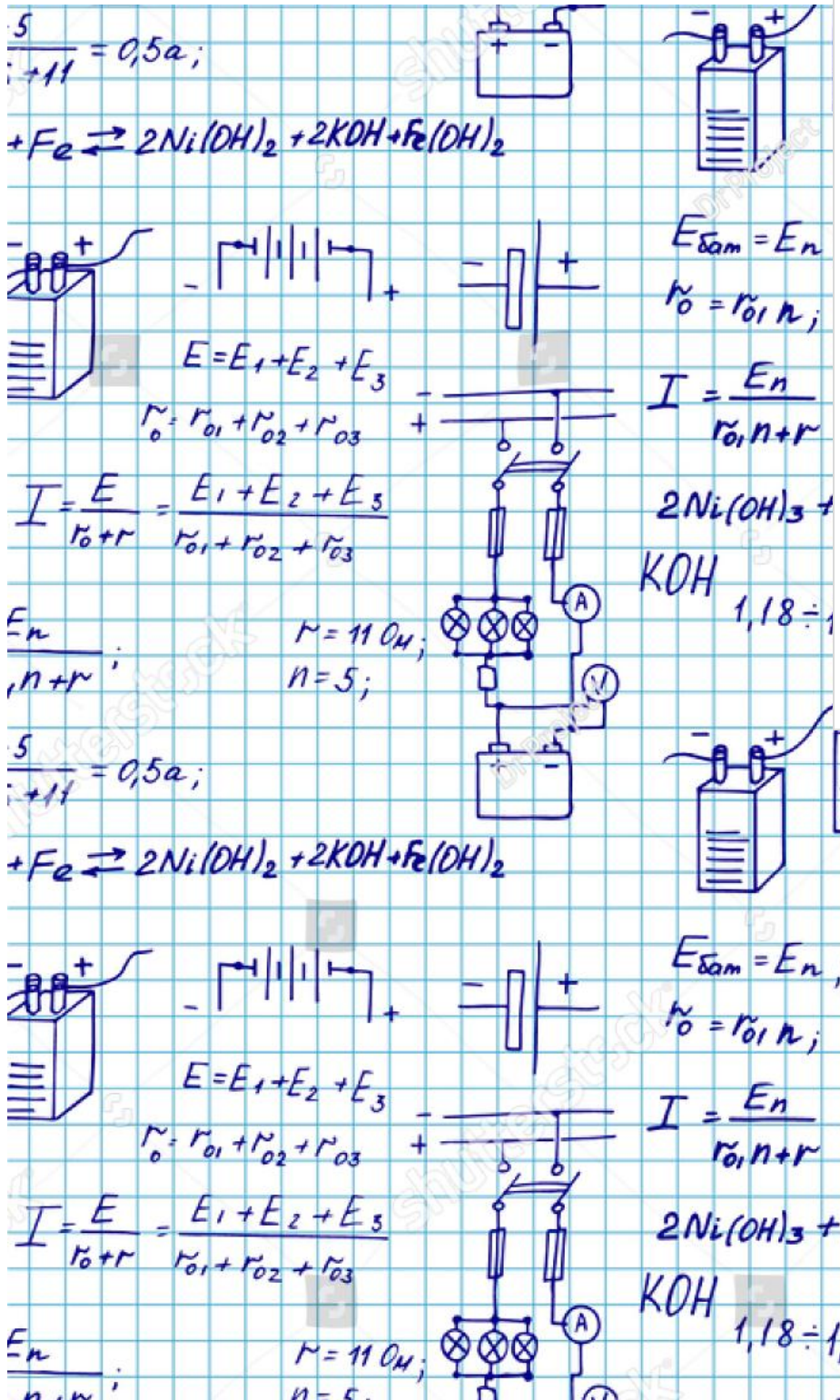
$$T = 2\pi\sqrt{\frac{149{,}597{,}887.5^3\,km}{132{,}712{,}440{,}018\,km^3\,s^{-2}}}$$

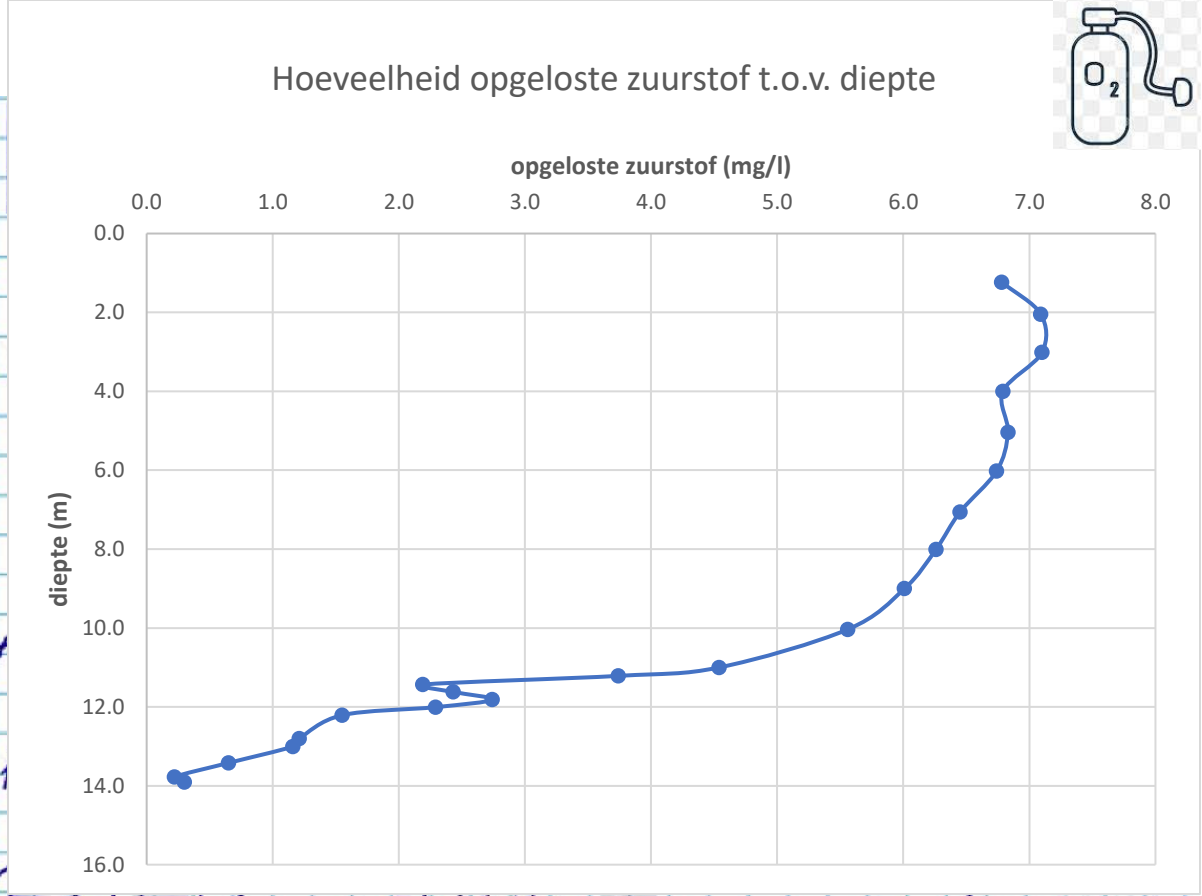
$$T = 2\pi(5022643.737)\,s$$

$$T = 31558201.33 \text{ seconds}$$

$$31558201.33s \times \frac{1 \text{ minute}}{60 \text{ seconds}} = 525{,}970 \text{ minutes}$$

$$525{,}970 \times \frac{1 \text{ hour}}{60 \text{ minutes}} \times \frac{1 \text{ day}}{24 \text{ hours}} \approx \underline{\underline{365.25}}$$


$E = E_1 + E_2 + E_3$
$r_0 = r_{01} + r_{02} + r_{03}$
$I = \frac{E}{r_0 + r} = \frac{E_1 + E_2 + E_3}{r_{01} + r_{02} + r_{03}}$
$r = 11\ Ом;$
$n = 5;$
$E_{бат} = E_n$
$r_0 = r_{01} n;$
$I = \frac{E_n}{r_{01} n + r}$
$I = \frac{1,2 \cdot 5}{0,2 \cdot 5 + 11} = 0,5a;$
$2Ni(OH)_3 + 2KOH + Fe \rightleftarrows 2Ni(OH)_2 + 2KOH + Fe(OH)_2$
KOH 1,18÷1,20


Hoeveelheid opgeloste zuurstof t.o.v. diepte
opgeloste zuurstof (mg/l)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
diepte (m)
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0

Transect data for the Gulf of Mexico from NECOP website (http://www.aoml.noaa.gov/ocd/necop/) for July 24-29,1993

Transect I

Date	Trn.	Stn.	Lat.	Long.	Depth	D.O.	Sal.	Temp.	Density
			deg:min	deg:min	(m)	(mg/L)	(ppt.)	(Cent.)	Sigma-t
28-7-1993	I	1	29:32.00'	92:45.00'	2,0	6,8	27,3	30,3	15,9
28-7-1993	I	1	29:32.00'	92:45.00'	3,0	6,8	27,4	30,3	16,0
28-7-1993	I	1	29:32.00'	92:45.00'	4,0	5,9	27,7	30,0	16,3
28-7-1993	I	1	29:32.00'	92:45.00'	5,0	4,0	27,6	29,8	16,3
28-7-1993	I	1	29:32.00'	92:45.00'	6,0	2,5	27,7	29,5	16,4
28-7-1993	I	1	29:32.00'	92:45.00'	7,0	1,6	27,9	29,2	16,7
28-7-1993	I	1	29:32.00'	92:45.00'	9,0	0,5	29,3	28,4	18,0
28-7-1993	I	1	29:32.00'	92:45.00'	9,8	0,3	30,4	28,0	18,9
28-7-1993	I	1	29:32.00'	92:45.00'	10,0	0,3	30,4	27,9	19,0
28-7-1993	I	1	29:32.00'	92:45.00'	10,0	0,3	30,5	27,9	19,0
Station 1 Depth = 10.0 meters									
28-7-1993	I	2	29:24.50'	92:45.00'	1,2	6,8	26,6	31,2	15,1
28-7-1993	I	2	29:24.50'	92:45.00'	2,0	7,1	27,0	31,0	15,4
28-7-1993	I	2	29:24.50'	92:45.00'	3,0	7,1	27,2	30,7	15,6
28-7-1993	I	2	29:24.50'	92:45.00'	4,0	6,8	27,3	30,2	15,9
28-7-1993	I	2	29:24.50'	92:45.00'	5,0	6,8	27,3	30,1	16,0
28-7-1993	I	2	29:24.50'	92:45.00'	6,0	6,7	27,3	30,1	16,0
28-7-1993	I	2	29:24.50'	92:45.00'	7,1	6,5	27,4	29,9	16,0
28-7-1993	I	2	29:24.50'	92:45.00'	8,0	6,3	27,4	29,9	16,1
28-7-1993	I	2	29:24.50'	92:45.00'	9,0	6,0	27,5	29,8	16,2
28-7-1993	I	2	29:24.50'	92:45.00'	10,0	5,6	27,5	29,7	16,2
28-7-1993	I	2	29:24.50'	92:45.00'	11,0	4,5	27,5	29,5	16,3
28-7-1993	I	2	29:24.50'	92:45.00'	11,2	3,7	27,6	29,4	16,4
28-7-1993	I	2	29:24.50'	92:45.00'	11,4	2,2	27,5	29,3	16,4
28-7-1993	I	2	29:24.50'	92:45.00'	11,6	2,4	27,7	29,2	16,5
28-7-1993	I	2	29:24.50'	92:45.00'	11,8	2,7	28,1	29,0	16,9
28-7-1993	I	2	29:24.50'	92:45.00'	12,0	2,3	28,0	29,0	16,8
28-7-1993	I	2	29:24.50'	92:45.00'	12,2	1,6	28,7	29,1	17,3
28-7-1993	I	2	29:24.50'	92:45.00'	12,8	1,2	29,5	28,3	18,1
28-7-1993	I	2	29:24.50'	92:45.00'	13,0	1,2	30,6	27,9	19,1
28-7-1993	I	2	29:24.50'	92:45.00'	13,4	0,7	30,9	27,5	19,5
28-7-1993	I	2	29:24.50'	92:45.00'	13,8	0,2	31,7	27,2	20,2
28-7-1993	I	2	29:24.50'	92:45.00'	13,9	0,3	31,8	27,2	20,3
Station 2 Depth = 13.9 meters									
28-7-1993	I	3	29:17.70'	92:45.00'	1,4	6,6	25,4	31,5	14,1
28-7-1993	I	3	29:17.70'	92:45.00'	2,0	6,5	25,4	31,5	14,1
28-7-1993	I	3	29:17.70'	92:45.00'	3,0	6,7	26,2	30,5	15,0
28-7-1993	I	3	29:17.70'	92:45.00'	4,0	6,6	26,8	30,6	15,4
28-7-1993	I	3	29:17.70'	92:45.00'	5,0	6,6	27,4	30,5	15,9
28-7-1993	I	3	29:17.70'	92:45.00'	6,0	6,5	27,8	30,4	16,2
28-7-1993	I	3	29:17.70'	92:45.00'	7,0	6,5	27,9	30,4	16,3
28-7-1993	I	3	29:17.70'	92:45.00'	8,1	6,4	28,2	30,2	16,6
28-7-1993	I	3	29:17.70'	92:45.00'	9,0	6,2	28,9	30,2	17,1
28-7-1993	I	3	29:17.70'	92:45.00'	10,0	6,2	29,2	30,2	17,3
28-7-1993	I	3	29:17.70'	92:45.00'	11,0	6,3	29,6	30,2	17,6
28-7-1993	I	3	29:17.70'	92:45.00'	12,0	6,2	29,7	30,0	17,8
28-7-1993	I	3	29:17.70'	92:45.00'	13,0	6,1	29,8	29,9	17,9

28-7-1993	I	3	29:17.70'	92:45.00'	14,0	5,9	29,9	29,7	18,0
28-7-1993	I	3	29:17.70'	92:45.00'	15,0	5,3	30,4	29,0	18,6
28-7-1993	I	3	29:17.70'	92:45.00'	15,2	5,0	30,5	29,0	18,7
28-7-1993	I	3	29:17.70'	92:45.00'	15,4	4,6	30,5	29,1	18,6
28-7-1993	I	3	29:17.70'	92:45.00'	15,6	4,4	30,6	28,8	18,9
28-7-1993	I	3	29:17.70'	92:45.00'	15,8	4,3	31,1	28,1	19,4
28-7-1993	I	3	29:17.70'	92:45.00'	16,0	2,0	31,7	27,5	20,1
28-7-1993	I	3	29:17.70'	92:45.00'	16,2	1,8	31,7	27,4	20,1
28-7-1993	I	3	29:17.70'	92:45.00'	16,2	1,7	31,9	27,2	20,3
28-7-1993	I	3	29:17.70'	92:45.00'	16,3	1,5	32,0	27,2	20,4
Station 3 Depth = 16.3 meters									
28-7-1993	I	4	29:10.50'	92:45.00'	2,0	6,8	25,4	31,1	14,2
28-7-1993	I	4	29:10.50'	92:45.00'	3,0	6,7	26,5	31,2	15,0
28-7-1993	I	4	29:10.50'	92:45.00'	4,1	6,6	27,2	30,8	15,6
28-7-1993	I	4	29:10.50'	92:45.00'	5,0	6,7	27,6	30,4	16,1
28-7-1993	I	4	29:10.50'	92:45.00'	6,0	6,7	28,2	30,5	16,5
28-7-1993	I	4	29:10.50'	92:45.00'	7,0	6,7	28,8	30,5	16,9
28-7-1993	I	4	29:10.50'	92:45.00'	8,0	6,7	29,1	30,3	17,2
28-7-1993	I	4	29:10.50'	92:45.00'	9,0	6,7	29,3	30,3	17,3
28-7-1993	I	4	29:10.50'	92:45.00'	10,0	6,6	29,4	30,4	17,4
28-7-1993	I	4	29:10.50'	92:45.00'	11,0	6,6	29,6	30,3	17,6
28-7-1993	I	4	29:10.50'	92:45.00'	12,0	6,5	30,0	30,2	17,9
28-7-1993	I	4	29:10.50'	92:45.00'	13,0	6,4	30,5	29,7	18,4
28-7-1993	I	4	29:10.50'	92:45.00'	14,0	6,4	30,8	29,6	18,7
28-7-1993	I	4	29:10.50'	92:45.00'	15,0	5,3	31,5	28,9	19,4
28-7-1993	I	4	29:10.50'	92:45.00'	16,1	4,4	32,0	27,8	20,2
28-7-1993	I	4	29:10.50'	92:45.00'	16,6	4,2	32,5	27,3	20,8
28-7-1993	I	4	29:10.50'	92:45.00'	16,8	3,4	32,6	27,2	20,9
28-7-1993	I	4	29:10.50'	92:45.00'	17,0	1,9	32,7	27,1	20,9
28-7-1993	I	4	29:10.50'	92:45.00'	18,0	1,6	34,0	25,4	22,4
28-7-1993	I	4	29:10.50'	92:45.00'	18,5	1,5	34,0	25,3	22,5
28-7-1993	I	4	29:10.50'	92:45.00'	19,0	1,0	34,0	25,3	22,5
28-7-1993	I	4	29:10.50'	92:45.00'	19,1	0,4	34,2	25,0	22,7
28-7-1993	I	4	29:10.50'	92:45.00'	19,4	0,4	34,2	24,9	22,8
28-7-1993	I	4	29:10.50'	92:45.00'	19,5	0,4	34,2	24,9	22,8
Station 4 Depth = 19.5 meters									
28-7-1993	I	5	29:03.00'	92:45.00'	1,1	6,5	26,0	31,7	14,5
28-7-1993	I	5	29:03.00'	92:45.00'	2,0	6,7	26,2	31,0	14,9
28-7-1993	I	5	29:03.00'	92:45.00'	3,0	6,6	26,1	30,9	14,8
28-7-1993	I	5	29:03.00'	92:45.00'	4,0	6,5	26,3	31,0	14,9
28-7-1993	I	5	29:03.00'	92:45.00'	5,0	6,4	26,5	31,0	15,0
28-7-1993	I	5	29:03.00'	92:45.00'	6,0	6,4	26,9	30,6	15,5
28-7-1993	I	5	29:03.00'	92:45.00'	7,0	6,5	27,7	30,5	16,1
28-7-1993	I	5	29:03.00'	92:45.00'	8,0	6,2	28,0	30,3	16,4
28-7-1993	I	5	29:03.00'	92:45.00'	9,0	5,0	28,4	29,8	16,8
28-7-1993	I	5	29:03.00'	92:45.00'	10,0	4,2	29,1	29,5	17,5
28-7-1993	I	5	29:03.00'	92:45.00'	11,0	5,5	30,3	29,6	18,4
28-7-1993	I	5	29:03.00'	92:45.00'	12,0	6,2	31,0	29,6	18,9
28-7-1993	I	5	29:03.00'	92:45.00'	13,0	6,1	31,2	29,3	19,1
28-7-1993	I	5	29:03.00'	92:45.00'	14,0	6,3	31,6	29,5	19,4
28-7-1993	I	5	29:03.00'	92:45.00'	15,0	6,2	31,8	29,1	19,6
28-7-1993	I	5	29:03.00'	92:45.00'	16,0	6,0	32,1	28,8	20,0

28-7-1993	I	5	29:03.00'	92:45.00'	17,0	5,5	32,5	28,4	20,4
28-7-1993	I	5	29:03.00'	92:45.00'	18,0	5,0	32,9	27,6	20,9
28-7-1993	I	5	29:03.00'	92:45.00'	19,0	4,6	33,1	27,0	21,3
28-7-1993	I	5	29:03.00'	92:45.00'	20,0	4,1	33,8	25,8	22,2
28-7-1993	I	5	29:03.00'	92:45.00'	21,0	3,2	34,5	24,7	23,0
28-7-1993	I	5	29:03.00'	92:45.00'	22,0	2,5	34,8	24,3	23,4
28-7-1993	I	5	29:03.00'	92:45.00'	22,9	2,2	34,8	24,3	23,4
28-7-1993	I	5	29:03.00'	92:45.00'	23,0	2,3	34,8	24,2	23,4
28-7-1993	I	5	29:03.00'	92:45.00'	23,1	2,3	34,8	24,1	23,5
Station 5 Depth = 23.1 meters									

Units for variables:
Trn. Transect
Stn. = Station
Lat. = Latitude in degrees: minutes. hundredths of a minute (deg:min)
Long.= Longitude in degrees: minutes. hundredths of a minute (deg:min)
Depth in meters (m)
D.O. = Dissolved Oxygen in milligrams per liter (mg/L)
Sal. = Salinity in parts per thousand (ppt.)
Temp. = Temperature in degrees Centigrade (Cent.)
Density (Sigma-t).

Note: Longitude for several stations was incorrect in the orginal data and changed on this data set