

SIO86 format XBT data:

A format created by Dean Roemmich and Bruce Cornuelle at SIO back in 1986 for collecting XBT data. Originally used "r" for the 1/10 second raw data, then switched to "s" for the 2m block averaged data. The next step in the sequence is "e" files - which are "s" files that have been "edited" (or QC'd).

Example of files with notation (LMG0301 data used to illustrate):

Unzip SFILES.ZIP to get the actual data files:
LMG0301S.001 through LMG0301S.073. I'll refer to these as "s" files.

Unzip DAT.ZIP to get the synopsis data file "STATIONS.DAT".

Note this data set used Sippican Deep Blue XBT's using the old fall rate coefficients: $a=6.472$, $b=-2.16$

"s" file format:

A sample of the first 5 lines of an "s" file (LMG0301S.001)

```
001  0 .000 99.00  .00
1- 1-2003 17:30:14
1 9445
3 9103
5 9104
```

record 1:

column notes

```
1-2  blank
3-5  drop number in that cruise (001)
6-35 ignore the rest
```

record 2:

column notes

```
1  blank
2-11 date (DD-MM-YEAR)
12-13 blank
14-21 time (HH:MM:SS)
```

record 3- end of file:

column notes

- 1-3 depth in meters (in 2 m increment samplings)
- 4 blank
- 5-9 temperature in degrees Celsius (multiply by 0.001)

 Synopsis data file format: "STATIONS.DAT"

Sample from LMG0301:

 001 1 8.633 1/ 1/ 3 17:30:14 -54.801 295.031 -3 0 -1 n
 002 2 7.178 1/ 1/ 3 18:25:29 -54.902 295.036 -3 0 -1 n
 003 4 6.775 1/ 1/ 3 18:28:56 -54.907 295.036 -3 0 -4 n
 004 5 5.350 1/ 1/ 3 19: 9:17 -55.002 295.038 -3 0 -1 n
 005 6 4.023 1/ 1/ 3 19:47:35 -55.102 295.060 -3 0 -1 n

column notes

- 1 blank
- 2-4 drop number - this will match the last 3 digits of the LMG0301S.###
and inside LMG0301S.### record 1, cols 3-5.
- 5-9 ignore
- 10 launcher tube number
- 11-17 700 m temperature (or deepest if last depth is shallower than 700m)
- 18 blank
- 19-26 date (DD/MM/YY)
- 27 blank
- 28-35 time (HH:MM:SS)
- 36-37 blank
- 38-44 latitude in decimal (South negative) (f7.3)
- 45-46 blank
- 47-53 longitude in decimal (0-360 East) (f7.3)
- 54-60 ignore
- 61-62 "good data" code: 1 = good, -1 = bad
0 = data not QC'd yet for coding.
- 63-80 ignore