Metadata SS9802

# CTD - ‘ss9802\_ctd.mat'

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Key | Shape | Unit | Comments |
| Pressure | 'P', | 1x763 | dbar | vector of pressure levels for matrices of temperature and salinity |
| Salinity | 'S', | 101x763 | PSU | matrix, 101 stations, 763 pressure levels, data every 2 dbar from 2 to 1526 dbar |
| Temperature | 'T', | 101x763­ |  | as above; TS90 temperature scale |
| Bottom depth | 'botdepth', | 101x1 |  | bottom depth at each station |
| Latitude | 'lat', | 101x1 | deg |  |
| Longitude | 'lon', | 101x1 | deg |  |
| # of depths | 'ndepths', | 101x1 | - | number of depths (pressures) at each station |
| Pressure at 10 dbar | 'p10db', | 101x153 |  | pressure at centre of each 10 dbar bin, for 10-dbar-bin-averaged data |
| Profile id | 'profilid', | 101x1 | - | id number for each station |
| Potential temperature | 'ptmp', | 101x153 |  | calculated from 10dbar-averaged data |
| Salinity | 'sal', | 75825x1 |  | a single vector of all salinity values (this was converted into the matrix S) |
| Salinity at 10 dbar | 'sal10db', | 101x153 |  | salinity averaged over 10 dbar, from matrix S, averages centred at value in p10db |
|  | 'start\_ind', |  |  | index of start of data for each station, in vectors sal and temp |
| station number | 'station', |  |  | from 1 to 101 |
| Temperature | 'temp', | 75825x1 |  | a single vector of all temperature observations |
| Temperature at 10 dbar | 'temp10db', | 101x153 |  | 10 dbar averaged temperature data |
|  | 'time', | 101x1 |  | Days since 1900 |

763 pressure levels

101 stations

75825 is length of all measurements

# ADCP – ‘ss9802\_adcp.mat’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Key | Shape | Unit | Comments |
| time | 'time' | 4x1087 | [d,m,y,h] |  |
| ship's East-West velocity for the profile | 'unav' | 1x1087 | (m/s, +ve East) |  |
| longitude of the profile | 'lon' | 1x1087 | real degrees, +east |  |
| pressure | 'press' | 43x1087 |  |  |
|  | 'nn1' | 1x1087 |  |  |
| character navigation type | 'cnav' | 3x1087 |  | code:  cnav(1:1) = 'B' Bottom track velocity  cnav(2:2) = 'P' GPS position-derived velocity  cnav(3:3) = 'D' GPS direct velocity  cnav = 'BTr' Bottom track velocity  cnav = 'Unc' No navigation velocity (uncorrected)  cnav = 'rel' "navigation" velocity is actually that of some reference layer, so corrected velocities will be relative to that layer. |
| Quality Control value for each bin. This is the mean of the basic QC statistic for this bin. | 'avqc' | 43x1087 |  | (See section 0.2) In the case of ensemble files (e\_\*), avqc(j) is simply the Verr (see Section 4.3). |
| the "attendance percentage", or the percentage of the profile period for which there was good data in this bin. | 'ipcok' | 43x1087 |  |  |
| North-South velocity of currents relative to ship, for each bin | 'v' | 43x1087 | m/s, +ve north |  |
| ship's North-South velocity for the profile | 'vnav' | 1x1087 | (m/s, +ve North) |  |
|  | 'nn2' | 1x1087 |  |  |
| East-West velocity of currents relative to ship, for each bin | 'u' | 43x1087 | m/s, +ve East |  |
| depth | 'depth' | 1x1087 |  |  |
| latitude of the profile | 'lat' | 1x1087 | real degrees, +north |  |
| Number of bins | 'nbin' | 1x1087 |  |  |

43 pressure levels

1087 stations