README for Surface Meteorological Dataset during MR11-07 (as of May 28, 2013)

Revised on December 5, 2013

"smet10min.dat" contains 10-min mean values of surface meteorological data as ASCII format. Time stamp is the end of average. Original data were sampled at every 6 sec for SMET and EPCS data, 10 sec for SOAR, and 2-sec for Seasnake SST.

This data set was produced from two surface meteorological measurement systems (SMET/MIRAI Surface Meteorological observation system, and SOAR/Shipboard Oceanographic and Atmospheric Radiation measurement system), and two sea surface temperature measurement systems (EPCS/ Sea surface water monitoring system for in-take SST, and Sea-snake floating thermistor for skin-SST. Details of these systems can be found in MIRAI MR11-07 Cruise report. Available from http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR11-07_leg1-2_all.pdf

Sensor types and their equipped height from the sea level

Barometer (pressure):	Setra System, Model-370	... 13 m
* converted to 0 m sea level		
Thermometer (T, RH) :	Vaisala, HMP45A	... 21 m
Thermometer (intake SST) :	SeaBird Electronics, SBE38	... -5 m
Thermometer (skin SST) :	Campbell Sci., Thermistor 107	... a few cm
Anemometer (wind) :	R. M. Young, 05106	... 25 m
* converted to 10-m height value according to Kondo (1975, 1976)		
Rain gauge (rainfall) :	R.M.Young, 50202	... 24 m
Radiometer (short wave) :	Eppley, PSP	... 25 m
Radiometer (long wave) :	Eppley, PIR	... 25 m

Observation Period

Leg-1	12:00 25 Sept 2011	-	00:00 26 Oct 2011
Leg-2	00:00 29 Oct 2011	-	03:00 01 Dec 2011

Parameters and their units

Time in UTC expressed as YYYYMMDDHHMM
Time in Julian day (1.0000 = January 1, 0000Z)
longitude (degree East)
latitude (degree North)
pressure (hPa)
air temperature (degree Celsius)
dew point temperature (degree Celsius)

relative humidity (%)
in-take sea surface temperature (degree Celsius)
Sea-snake sea surface temperature (degree Celsius)
10-m zonal wind component (m/sec)
10-m meridional wind component (m/sec)
precipitation (mm/hr)
downward shortwave radiation (W/m2)
downward longwave radiation (W/m2)

Missing values are expressed as "9999".

Remarks as of December 5, 2013
Wrong location was recorded in the previous data set for the data below.

Wrong)	201110121720	85.972	-5.607
Corrected)	201110121720	80.495	-8.011

For more information

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