README for Surface Meteorological Data during MR21-03

May 18, 2023

"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.

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 one sea surface water monitoring system (TSG/Thermosalinograph). Details of these systems can be found in MIRAI MR21-03 Cruise report. Available from
https://www.godac.jamstec.go.jp/cr_catalog/external/metadata/MR21-03_all/file/MR21-03_all.pdf

Sensor types whose data are adopted 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, HMP155	... 21 m
Thermometer (intake SST) :	SeaBird Electronics, SBE38	... -5 m
Anemometer (wind) :	R. M. Young, 05106	... 25 m
Rain gauge (rainfall) :	R. M. Young, 50202	... 24 m
Radiometer (short wave) :	Hukseflux Thermal Sensors B.V., SR20	... 25 m
Radiometer (long wave) :	Hukseflux Thermal Sensors B.V., IR20	... 25 m

Remarks. Pressure, T/RH data are adopted from SMET, SST is from TSG, and others are taken from SOAR.

Observation Period (in UTC)

May 26, 2021, 01:10 - July 6, 2021, 23:00

Parameters and their units (format = 1x, a12, f9.4, 2f9.3, 7f7.1, f8.2, 2f6.0)

Date and Time “YYYYMMDDHHMM” (UTC)
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)
zonal wind component (m/sec)
meridional wind component (m/sec)
precipitation (mm/hr)
downward shortwave radiation (W/m2)
downward longwave radiation (W/m2)

Remarks. Missing values are expressed as "9999".

For more information

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