Format Description for USAP RVDAS Radiometer

Data

Data is received from the RVDAS system via RS-232 serial connections. A time tag is added at the beginning of each line of data in the form,

```
yy+dd:hh:mm:ss.sss [data stream from instrument]
```

where

All times are reported in UTC.

The delimiters that separate fields in the raw data files are often spaces and commas but can be other characters such as : = @. Occasionally no delimiter is present. Care should be taken when reprocessing the data that the field's separations are clearly understood.

In the sections below a sample data string is shown, followed by a table that lists the data contained in the string..

United States Antarctic Program

Underway Data /RVDAS/LMGUW

lpuv - GUV2511 & PUV2510

```
03+354:15:56:13.346 122003 155612 -.00007 4.632E-4 8.417E-5 1.027E-4 3.824E-2
-4.492E-6 5.196E-4 5.2E-1 2.793E-3 23.876 -.804 26.812 26.852 -1.238 3.525
.000099 2.581E1 5.058E1 1.442E1 2.73E0 6.136E1 1.406E-1 6.187E1 39.989
```

Field Data Format Unit

yy = two-digit year ddd = day of year
hh = 2 digit hour of the day mm = 2 digit minute ss.sss = seconds

GUV only

Field	Data	Units
1	RVDAS Time Tag	
2	GUV Computer Date	mmddyy
3	GUV Computer Time	hhmmss
4	Ed0Gnd - GUV	Volts
5	Ed0320 - GUV	µW/cm^{2}nm
6	Ed0340 - GUV	µW/cm^{2}nm
7	Ed0313 - GUV	µW/cm^{2}nm
8	Ed0305 - GUV	µW/cm^{2}nm
9	Ed0380 - GUV	µW/cm^{2}nm
10	Ed0PAR - GUV	µE/cm^{2}sec
11	Ed0395 - GUV	µW/cm^{2}nm
12	Ed0Temp - GUV	°C

GUV and PUV

Field	Data	Units
1	RVDAS Time Tag	
2	GUV Computer Date	mmddyy
3	GUV Computer Time	hhmmss
4	EdZGnd -PUV	Volts
5	EdZ305 -PUV	µW/cm^{2}nm
6	EdZ313 -PUV	µW/cm^{2}nm
7	EdZ320 -PUV	µW/cm^{2}nm
8	EdZ395 -PUV	µW/cm^{2}nm
9	EdZ340 -PUV	µW/cm^{2}nm
10	EdZPAR -PUV	µE/cm^{2}sec
11	LuZChl -PUV	µE/srm^{2}sec
12	EdZ380 -PUV	µW/cm^{2}nm
13	WTemp -PUV	°C
14	Depth -PUV	m
15	EdZTemp -PUV	°C
16	LuZTemp -PUV	°C
17	Tilt -PUV	Degrees
18	Roll -PUV	Degrees

19	Ed0Gnd - GUV	Volts
20	Ed0320 - GUV	$\mu W/cm^2nm$
21	Ed0340 - GUV	$\mu W/cm^2nm$
22	Ed0313 - GUV	$\mu W/cm^2nm$
23	Ed0305 - GUV	$\mu W/cm^2nm$
24	Ed0380 - GUV	$\mu W/cm^2nm$
25	Ed0PAR - GUV	$\mu E/cm^2sec$
26	Ed0395 - GUV	$\mu W/cm^2nm$
27	Ed0Temp - GUV	°C