

Digisonde™ Portable Sounder Data Format

DVL Data Format

1. Example

```

DVL V2 419 HA419 42.0 288.0 2005/08/26 238 06:18:56 53.12 5.39 -130.16 10.28
292.20 2.49 140.94 10.24 32.26 1.73 Com 305 410 2.10 2.71
DVL V2 419 HA419 42.0 288.0 2005/08/26 238 06:33:55 39.61 9.51 -104.38 6.10
290.90 5.86 112.24 2.62 33.13 3.58 Com 355 440 2.09 2.72
DVL V2 419 HA419 42.0 288.0 2005/08/26 238 06:48:55 67.33 7.61 -165.79 19.93
291.65 5.57 178.89 15.14 29.96 5.22 Com 315 505 2.08 2.72
    
```

2. Description

The record consists of two parts: the header and the data record.

A complete record in Fortran style is: (A3, x, A2, X, I3, X, A5, X, F5.1, X, F5.1, X, I4, X, I2, X, I2, X, I3, X, I2, X, I2, X, I2, 10F10.2, X, A3, 2I7, 2F7.2) .

There are 28 columns separated by space or “:” or “/”, and the sampling rate is 15 minutes.

Coordinate system convention:

COM means Compass

GEO means Geographic

CGm means Corrected Geromagnetic

No.	Item	Format Code	Units	Default Invalid	Data Range	Description
01	DVL	A3	/	/	/	Data Format
02	V#	A2	/	/	/	Version
03	SID	I3	/	/	/	Station code
04	URSIc	A5	/	/	/	/
05	LAT	F5.1	Degree	/	-90-90	/
06	LONG	F5.1	Degree	/	0-360	/
07	YEAR	I4		/	/	/
08	Month	I2		/	1-12	/
09	Day of month	I2		/	1-31	/

No.	Item	Format Code	Units	Default Invalid	Data Range	Description
10	Day of year	I3		/	1-366	/
11	Hour	I2	hour	/	0-23	/
12	Minutes	I2	minute	/	0-59	/
13	Second	I2	second	/	0-59	/
14	Vx	F10.2	m/s	/	-1000-1000	/
15	Vx.err	F10.2	m/s	/	-200-200	/
16	Vy	F10.2	m/s	/	-1000-1000	/
17	Vy.err	F10.2	m/s	/	-200-200	/
18	Az	F10.2	degree	/	-180-180	/
19	Az.err	F10.2	degree	/	-90-90	/
20	Vh	F10.2	m/s	/	-1000-1000	/
21	Vh.err	F10.2	m/s	/	-200-200	/
22	Vz	F10.2	m/s	/	-200-200	/
23	Vz.err	F10.2	m/s	/	-50-50	/
24	Cordinate	A3	/	/	/	/
25	Bottom height of measurements	I6	km	/	60-500	/
26	Top height of measurements	I6	km	/	200-1000	/
27	Lower operating frequency	F7.2	MHz	/	1-20	/
28	Upper operating frequency	F7.2	MHz	/	1-20	/