

EMDR20 All Sky Meteor Radar Data Format

VEL Record (non beam steering)

Magic number: 0x2070xxxx where “xxxx” is the revision number of the record. Used if VEL analysis is applied to vertical beam DBS or all sky meteor system MET analysed data.

Revision 0x0000: Used for results which do not use beam steering (e.g. all sky meteor)

Parameter	Description	Data Type	Data Size	Allowable Values
Lowest height 1	The first (lowest) sampled height for the first sampling region (m).	Integer	4	0 - ?
Height Interval 1	The height interval between samples in the first sampling region (m).	Integer	4	0 - ?
Height extent 1	The range of sampled heights in the first sampling region (m).	Integer	4	0 - ?

VEL-MET Postanalysed Data Record

Magic number: 0x2071xxxx where “xxxx” is the revision number of the record.

Revision 0x0003: two dimensional velocity and “turbulent velocity” estimation

Parameter	Description	Data Type	Data Size	Allowable Values
Error code	Analysis error code	Integer	4	1 -18
Horizontal Velocity	Horizontal velocity components (Zonal, Meridional)	Float Array	4 × 2	? , ms ⁻¹
Turbulent Velocity	Turbulent (residual RMS) velocity	Float	4	? , ms ⁻¹
Number of accepted data	Number of data used for velocity estimate	Integer	4	0 -
SNR	Signal to noise ratio of detected event	Float	4	? , dB
Power	Signal power of detected event	Float	4	0 - ? , dB