Search

Surfer 6 Binary Grid File Format

Surfer 6 grid files .GRD use a layout similar to the [Surfer 6 Text grid format](#). The only difference is in the identification string and that **Surfer 6** grid files are binary. Data types used in **Surfer 6** grid files include:

Type	Description
char	single byte
short	16 bit signed integer
float	32 bit single precision floating point value
double	64 bit double precision floating point value

The **Surfer 6** format has the following layout:

Element	Type	Description
id	char	4 byte identification string 'DSBB' which identifies the file as aSurfer6binary grid file.
nx	short	number of grid lines along the X axis (columns)
ny	short	number of grid lines along the Y axis (rows)
xlo	double	minimum X value of the grid
xhi	double	maximum X value of the grid
ylo	double	minimum Y value of the grid
yhi	double	maximum Y value of the grid
zlo	double	minimum Z value of the grid. NoData nodes are not included in the minimum.

zhi	double	maximum Z value of the grid. NoData nodes are not included in the maximum. Note that if all nodes are assigned NoData, the zlo=zhi= 1.71041e38.
z11, z12, …	float	first row of the grid. Each row has a constant Y coordinate. The first row corresponds to ylo, and the last row corresponds to yhi. Within each row, the Z values are ordered from xlo to xhi. NoData values appear as 1.71041e38.
z21, z22, …	float	second row of the grid
z31, z32, …	float	third row of the grid
…	float	all other rows of the grid up to yhi

See Also
[File Format Chart](#)
[Grid Files](#)
[Surfer 6 Grid Export Automation](#)
[Surfer 6 Grid Export Dialog](#)
[Surfer 6 Text Grid Format](#)
[Surfer 7 Grid Files](#)