

## Minified Polygon Grid File Specification (.min.pgrd)

### File Header:

Position	Field	Type	Value	Number	Byte Order
Byte 0	Bounding box	double	Minimum latitude	1	Big
Byte 8	Bounding box	double	Minimum longitude	1	Big
Byte 16	Bounding box	double	Maximum latitude	1	Big
Byte 24	Bounding box	double	Maximum longitude	1	Big
Byte 32	Interval between points	double	Latitude interval	1	Big
Byte 40	Interval between points	double	Longitude interval	1	Big
Byte 48	Latitude line count	Int	Number of equal latitude lines	1	Big
Byte 52	Index identifier type	Int	Identifier type index (1 – byte, 2 – short)	1	Big
Byte 56 + lineIndex*4	Start position of latitude line	Int	Byte offset	lineCount	Big

**Line Header:**

Position	Field	Type	Value	Number	Byte Order
Byte 0	Line size	Int	Byte length of line	1	Big
Byte 4	Part count	Int	Number separate parts	1	Big
Byte 8	Short overflows count	Int	Number short overflows	1	Big
Byte 12 +(overflowCount*6)	Short overflow	[Int, Short]	Segment offset of overflow, overflow index	overflowCount	Big
Byte 12 +(overflowCount*6) + (partCount*4)	Part start position	Int	Byte offset of start part start	partCount	Big

**Part Header:**

Position	Field	Type	Value	Number	Byte Order
0	startLongitude	Float	Longitude of first point in part	1	Big
4	pointCount	Int	Number of points in part	1	Big

**Point Layout:**

Position	Field	Type	Value	Number	Byte Order
0	Segment index	Byte or short	Segment's associated index	1	Big
1 or 2	Segment length	Int	Segment length in number of points	1	Big