



## TECHNICAL SUPPORT

### SMS Formats

This is an alternative input process through ASCII file. With the guidance of a template, it could be a quicker means for manual input involving large set of observations. The main characteristics of this format are field identifiers for station records and observations.

#### Station Identifier

Station identifiers provide station records and header information. It consists of 23 characters with four fields of information and in the following format:

<b>Fields</b>	<Identifier>	<Field1>	<Field2>	<Field3>
<b>Width</b>	9 Chars	5 Chars	5 Chars	1 Char
<b>Location</b>	1-9	11-15	17-21	23
<b>Content</b>	STNHEADER	StnName	Instr Ht	Circle

As an example, consider an instrument station P104, where the height of instrument is 1.573m. Assuming the default circle type, 1, then this information should be represented in the form below:

```
[12345678901234567890123]
  STNHEADER P104 1.573 1
```

where the first line is a template to ensure that data fields are in correct positions.

#### Point Identifier

A Point identifier provides information for each observation. It consists of 65 characters with seven data fields, in the following format:

<b>Fields</b>	<Identifier>	<Field1>	<Field2>	<Field3>
<b>Width</b>	9 Chars	5 Chars	10 Chars	5 Chars
<b>Location</b>	1-9	11-15	17-26	28-32
<b>Content</b>	POINTINFO	PointName	F/Code	Tgt Height

<b>Fields</b>	<Field4>	<Field5>	<Field6>
<b>Width</b>	10 Chars	10 Chars	10 Chars
<b>Location</b>	34-43	45-54	56-65
<b>Content</b>	Hz Angle	Vt Angle	Slope Dist

To illustrate, consider an observation to a point, station P105, where the height of target is 1.755m. If the observed direction is 145° 35' 25", vertical angle is 89° 45' 36" and slope distance is 245.2563m then this information should be represented in the form below:

```
[1234567890123456789012345678901234567901234567890123456789012345]
  POINTINFO P105 xxxxxxxxxx 1.755 145.3525 089.4536 245.2563
```

where xxxxxxxxxx is the feature code. Angles may also be entered in the format DDDMMSS.

Collecting these formats together, a set observations from a station P1500, to P179 and S1501 may be input with a text editor and presented as follows:

```
STNHEADER 1500 1.500 1
POINTINFO 179 xxxxxxxxxx 1.500 00000000 0900000 23.3100
POINTINFO S1501 xxxxxxxxxx 1.500 133.185800 0900000 21.2254
```