



Application Note

Date : September 8, 2008

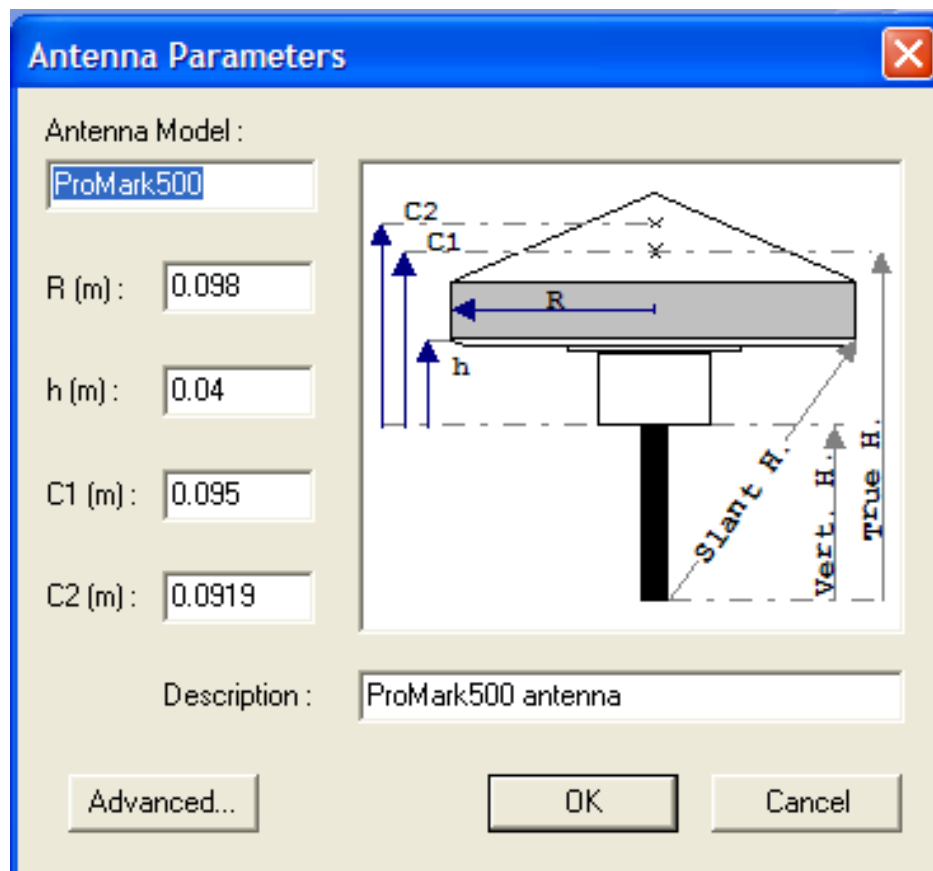
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Product: ProMark500

Subject: ProMark500 antenna parameters in GNSS Solutions

- **The National Geodetic Survey has completed the ProMark500 antenna calibration**
More information about antenna calibration at the NGS is available from their web page at:
<http://www.ngs.noaa.gov/ANTCAL/>
- **Find the instructions for editing the antenna parameters on pages 87 through 90 of the GNSS Solutions Reference Manual**

The ProMark500 antenna parameters as defined in GNSS Solutions are shown in the following screen shots:



Antenna Advanced Parameters

L1

North (mm): (Satellite elevation dependent offset)

East (mm):

Height (mm): +

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L2

North (mm): (Satellite elevation dependent offset)

East (mm):

Height (mm): +

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OK Cancel

- Use the data from the NGS antenna calibration together with the NGS instructions for how to read the calibration data

The existing parameters are quickly modified to match the NGS calibration data as shown in the following screen shots.

Antenna Parameters

Antenna Model :

R (m) :

h (m) :

C1 (m) :

C2 (m) :

Description :

Advanced... OK Cancel

Antenna Advanced Parameters

L1

North (mm) :

-0.8

East (mm) :

-1.4

Height (mm) :

101.8

(Satellite elevation dependent offset)

0°

5°

10°

15°

20°

25°

30°

35°

40°

45°

50°

55°

60°

65°

70°

75°

80°

85°

90°

+

0.0

0.0

-5.1

-1.6

1.1

3.2

4.8

5.8

6.3

6.5

6.4

6.0

5.4

4.7

3.7

2.8

1.9

0.9

0.0

L2

North (mm) :

0.8

East (mm) :

-1.1

Height (mm) :

86.2

(Satellite elevation dependent offset)

0°

5°

10°

15°

20°

25°

30°

35°

40°

45°

50°

55°

60°

65°

70°

75°

80°

85°

90°

+

0.0

0.0

-6.8

-4.9

-3.0

-1.1

0.5

1.7

2.6

3.0

3.0

2.7

2.0

1.1

0.2

-0.6

-1.1

-0.9

0.0

OK

Cancel

These instructions represent my interpretation of the information on the NGS antenna calibration web site and how to apply that information to the antenna parameters defined in GNSS Solutions. Data integrity requires the end user to take responsible charge, make an independent evaluation of the data, and edit the antenna parameters appropriately.

If you find an error in the parameters shown please report the error to my email address at pstevenson@magellangps.com