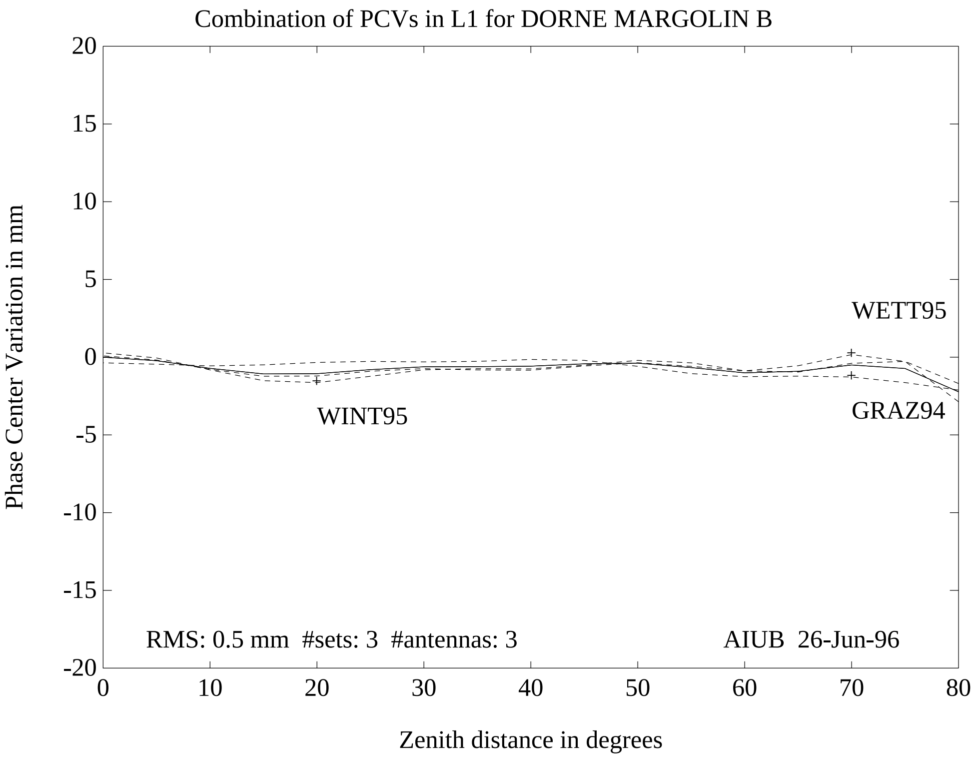
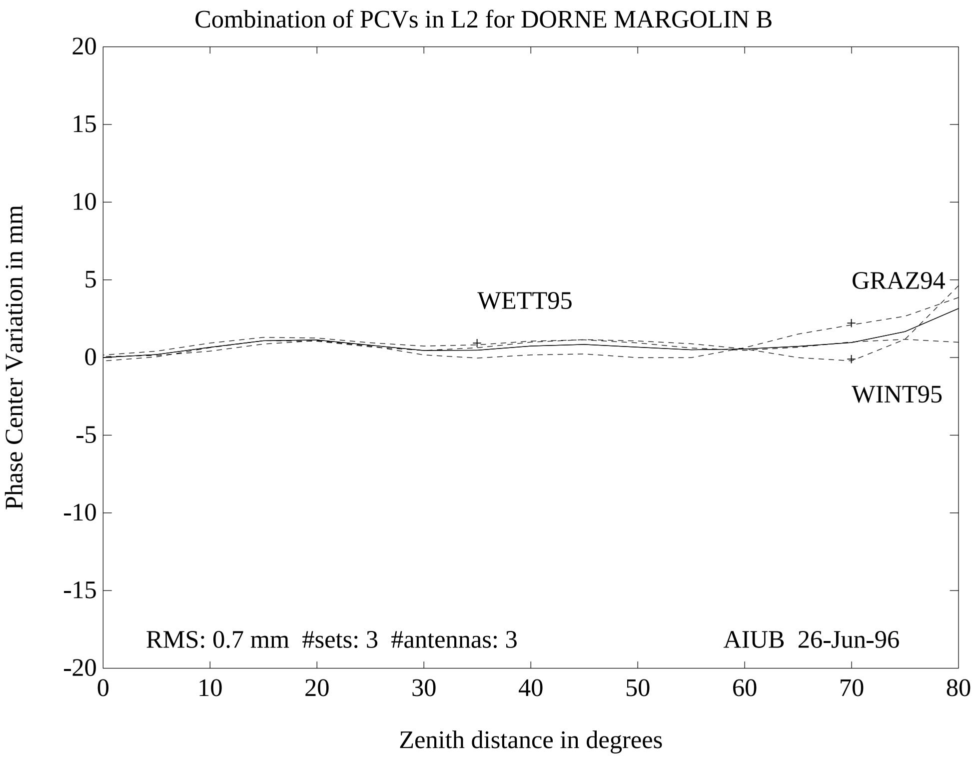
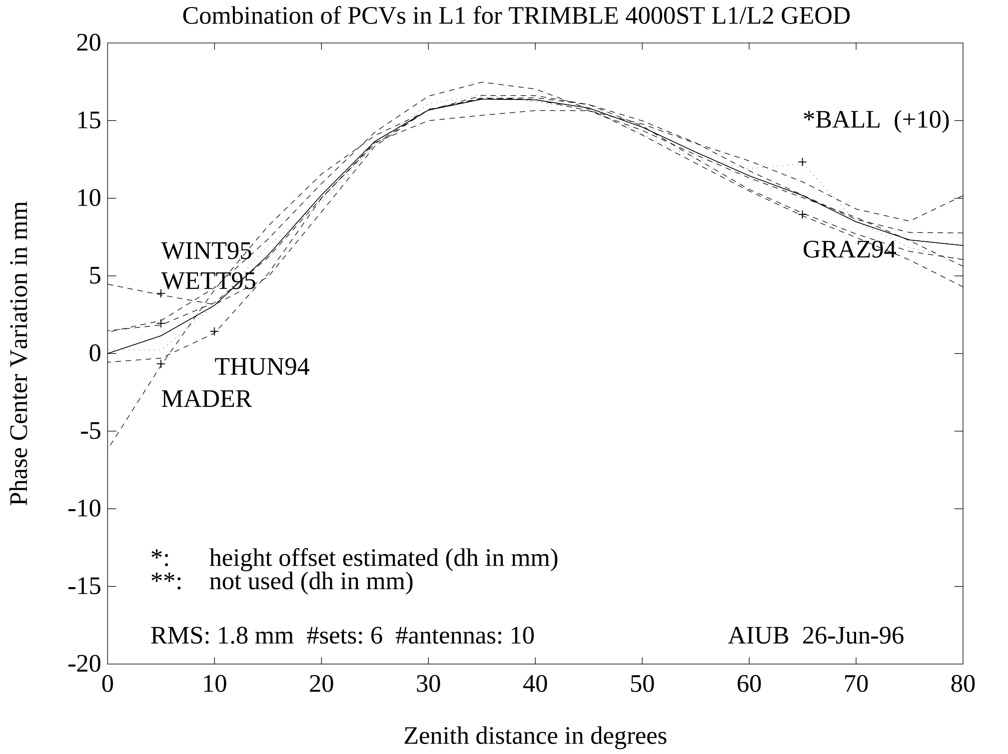
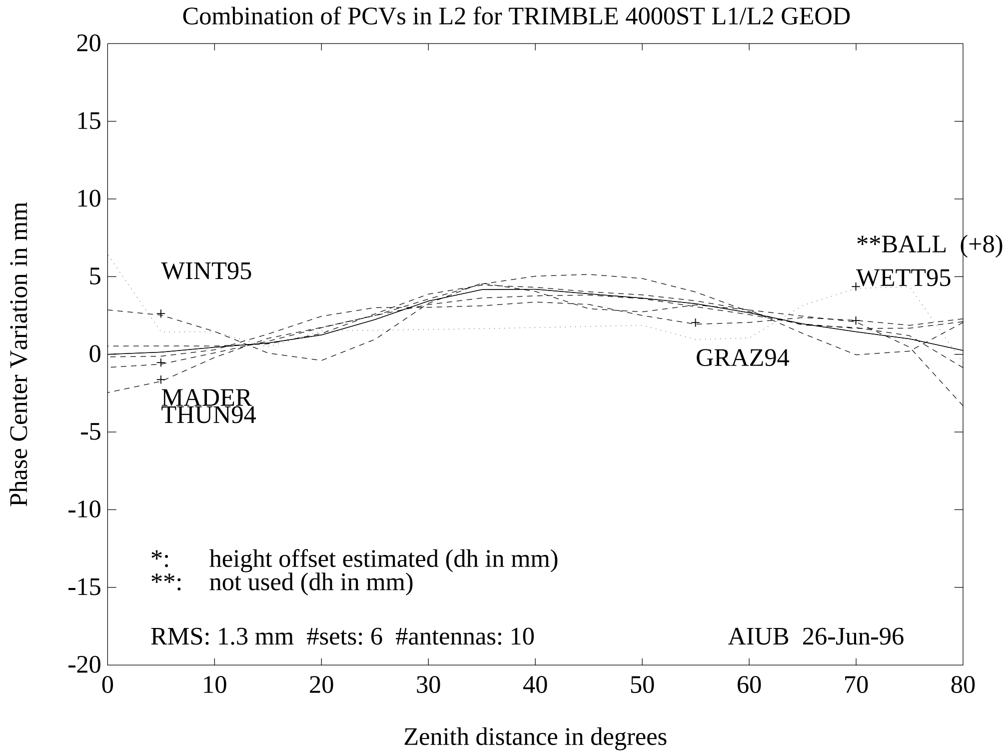
Combination of Elevation-Dependent Phase Center Corrections

Antenna Calibration Set IGS_01, June 30, 1996

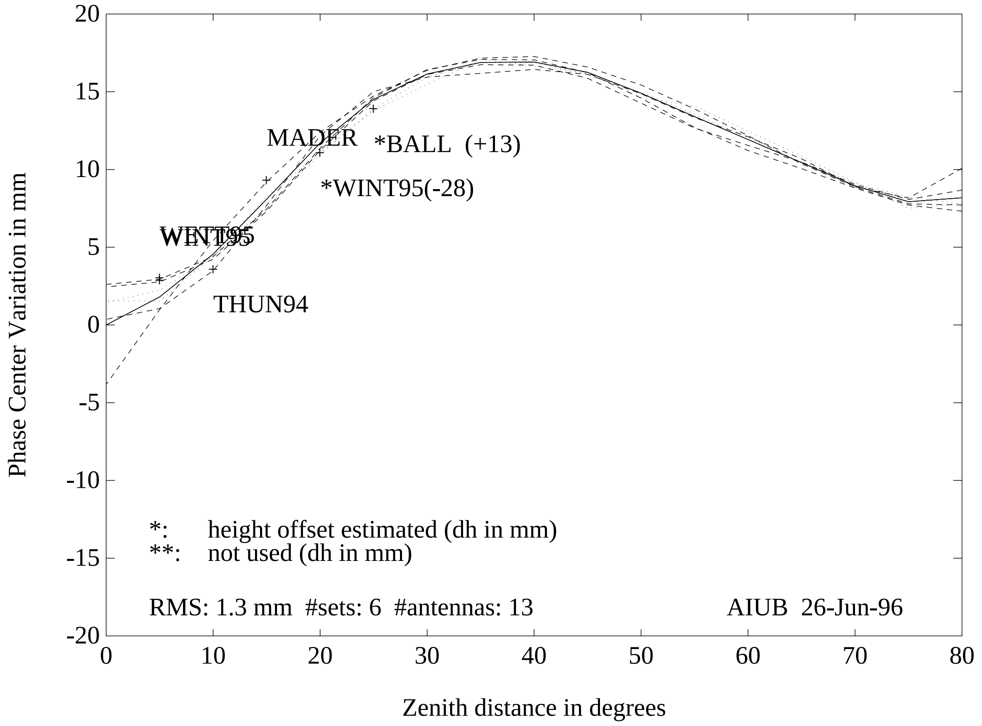




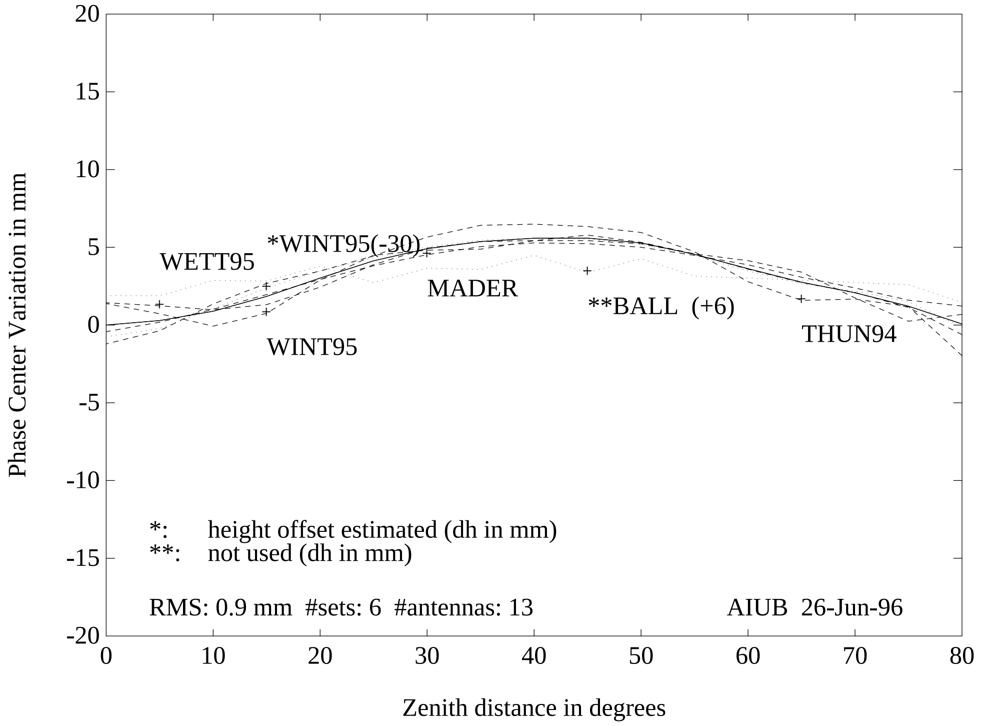

Combination of PCVs in L1 for TRIMBLE 4000ST L1/L2 GEOD
Phase Center Variation in mm
Zenith distance in degrees
*BALL (+10)
GRAZ94
WINT95
WETT95
THUN94
MADER
*: height offset estimated (dh in mm)
**: not used (dh in mm)
RMS: 1.8 mm #sets: 6 #antennas: 10
AIUB 26-Jun-96

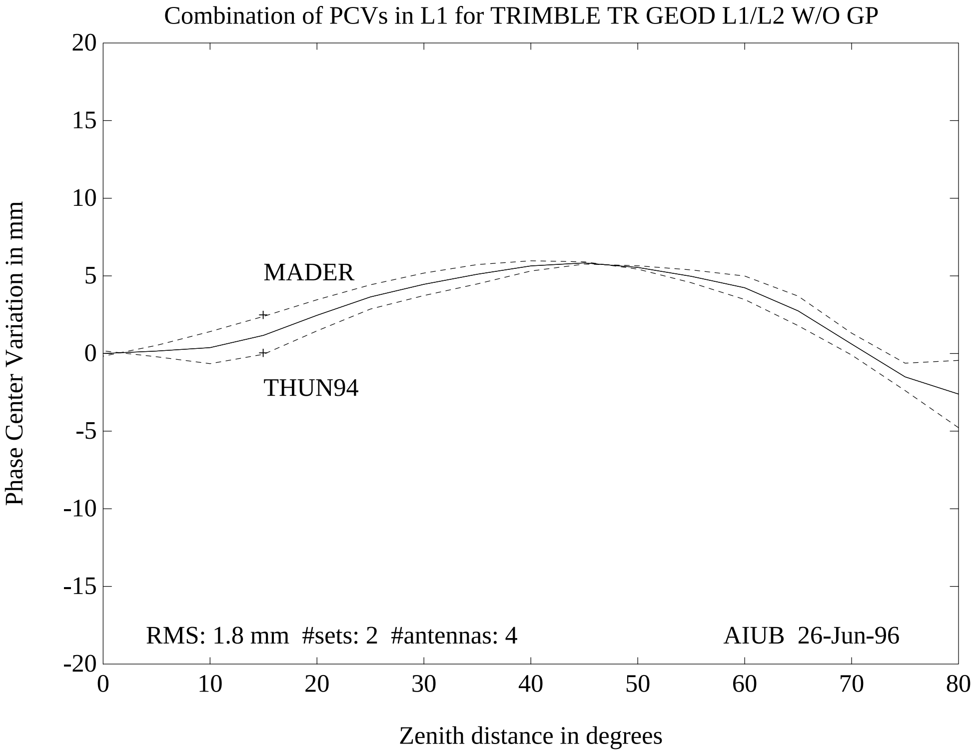

Combination of PCVs in L2 for TRIMBLE 4000ST L1/L2 GEOD
Phase Center Variation in mm
Zenith distance in degrees
**BALL (+8)
WETT95
WINT95
GRAZ94
MADER
THUN94
*: height offset estimated (dh in mm)
**: not used (dh in mm)
RMS: 1.3 mm #sets: 6 #antennas: 10
AIUB 26-Jun-96

Combination of PCVs in L1 for TRIMBLE TR GEOD L1/L2 GP

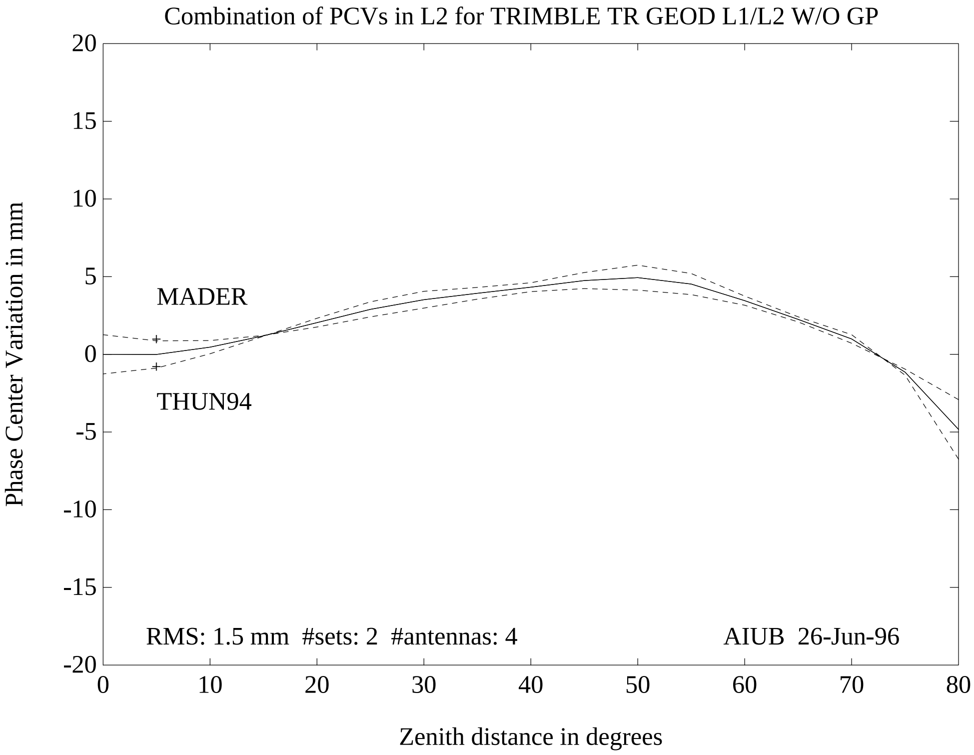


Combination of PCVs in L2 for TRIMBLE TR GEOD L1/L2 GP

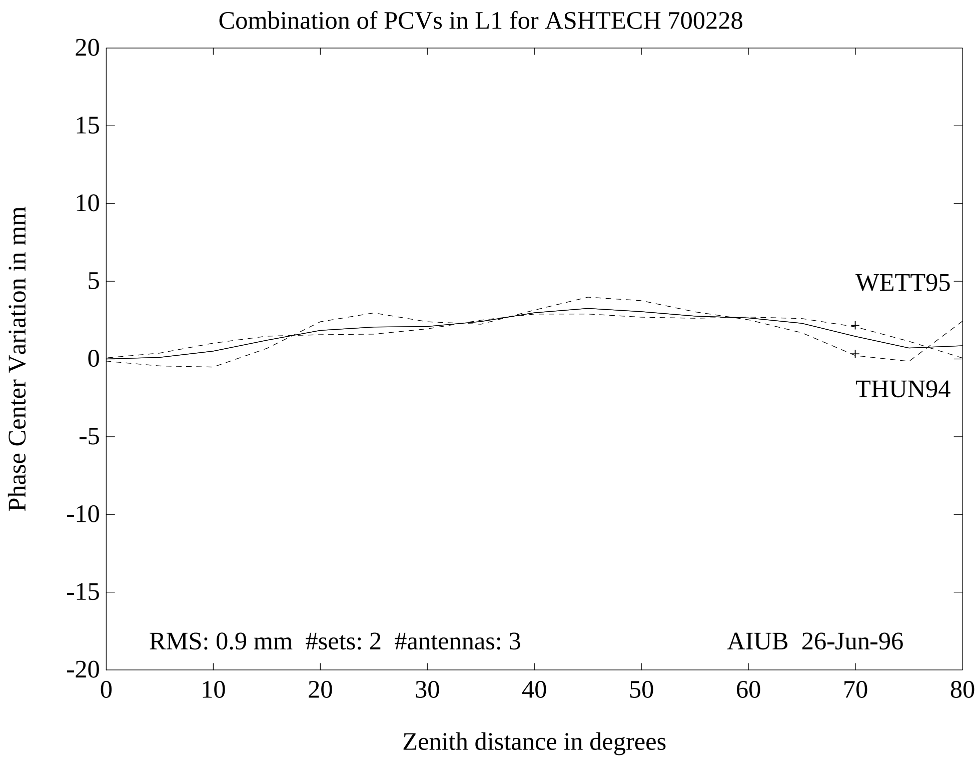




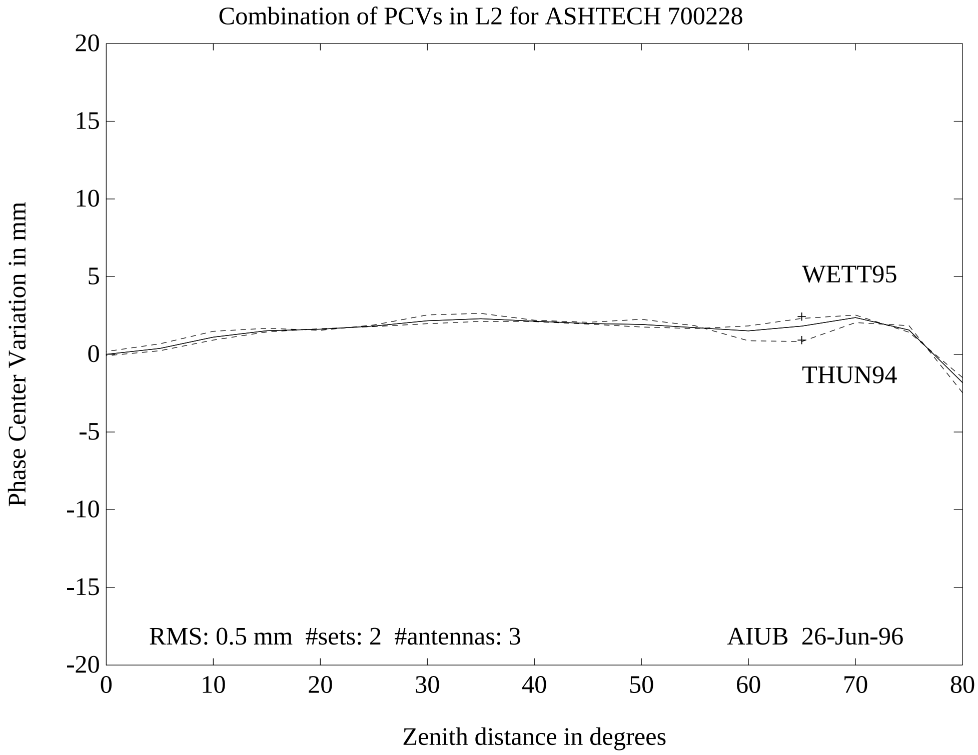
Combination of PCVs in L1 for TRIMBLE TR GEOD L1/L2 W/O GP
Phase Center Variation in mm
MADER
THUN94
RMS: 1.8 mm #sets: 2 #antennas: 4
AIUB 26-Jun-96
Zenith distance in degrees



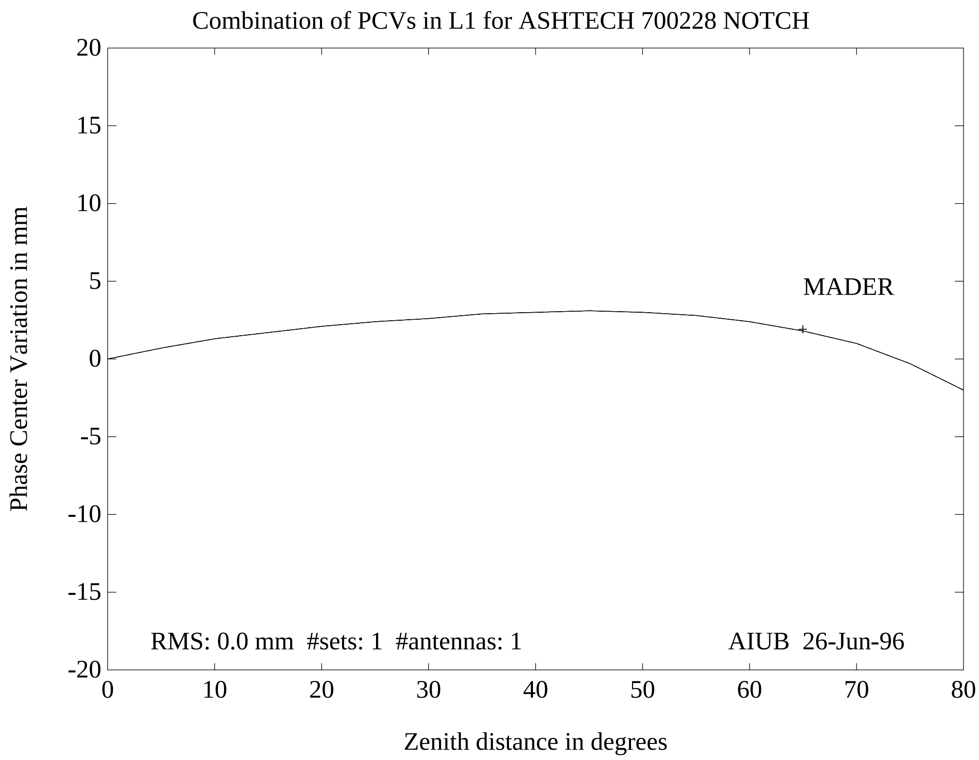
Combination of PCVs in L2 for TRIMBLE TR GEOD L1/L2 W/O GP
Phase Center Variation in mm
MADER
THUN94
RMS: 1.5 mm #sets: 2 #antennas: 4
AIUB 26-Jun-96
Zenith distance in degrees

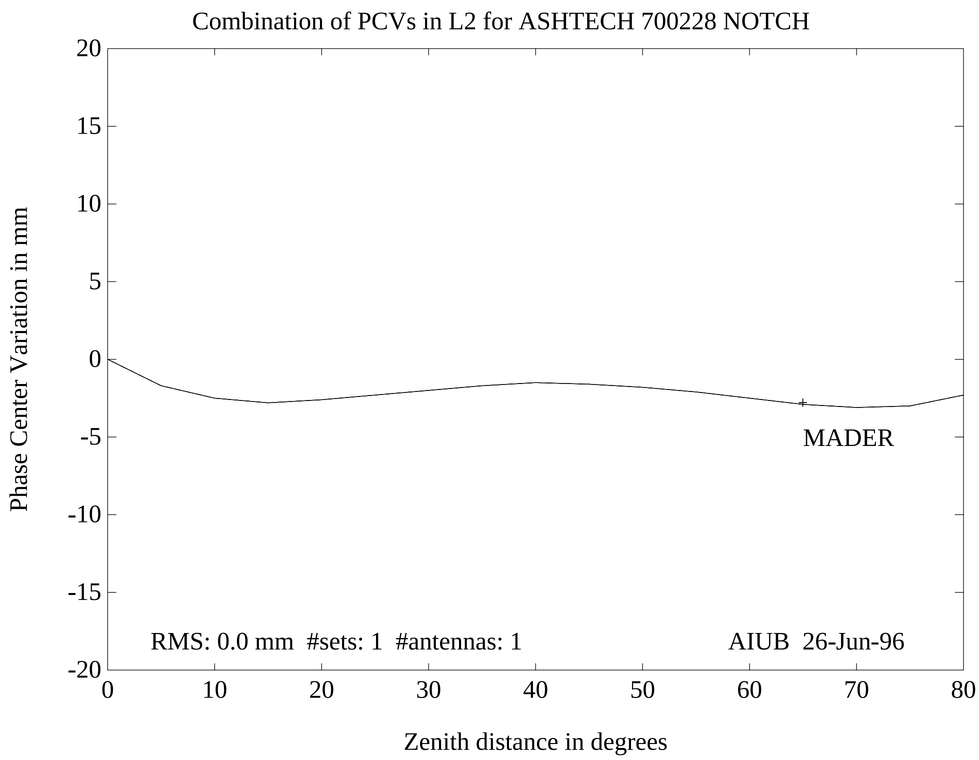


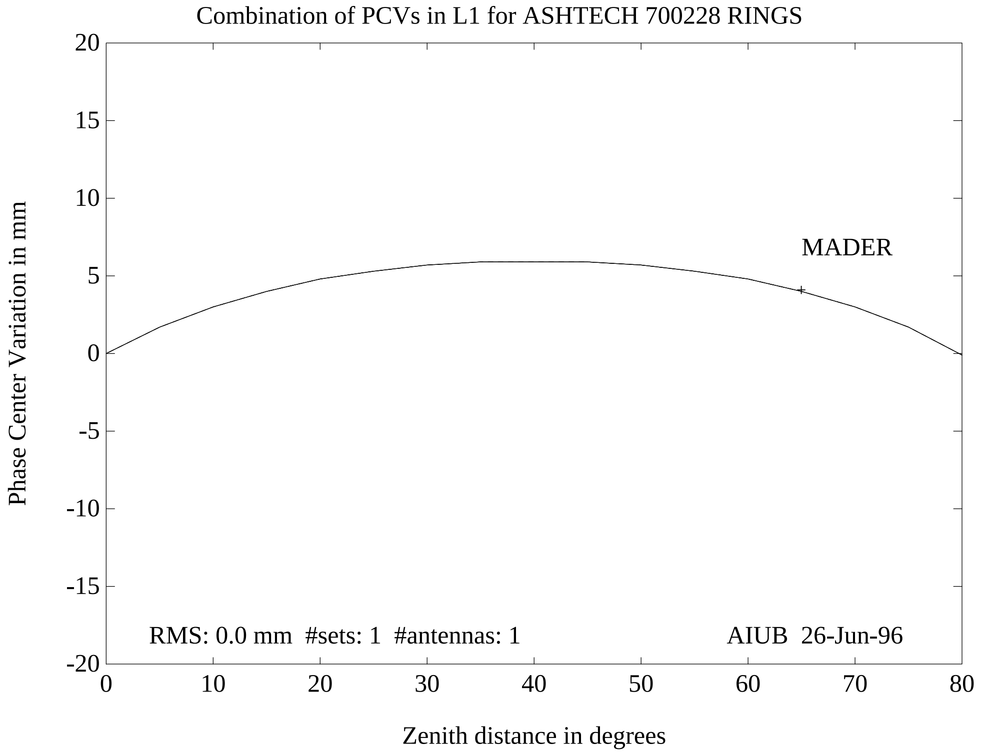
Combination of PCVs in L1 for ASHTECH 700228
Phase Center Variation in mm
Zenith distance in degrees
WETT95
THUN94
RMS: 0.9 mm #sets: 2 #antennas: 3
AIUB 26-Jun-96

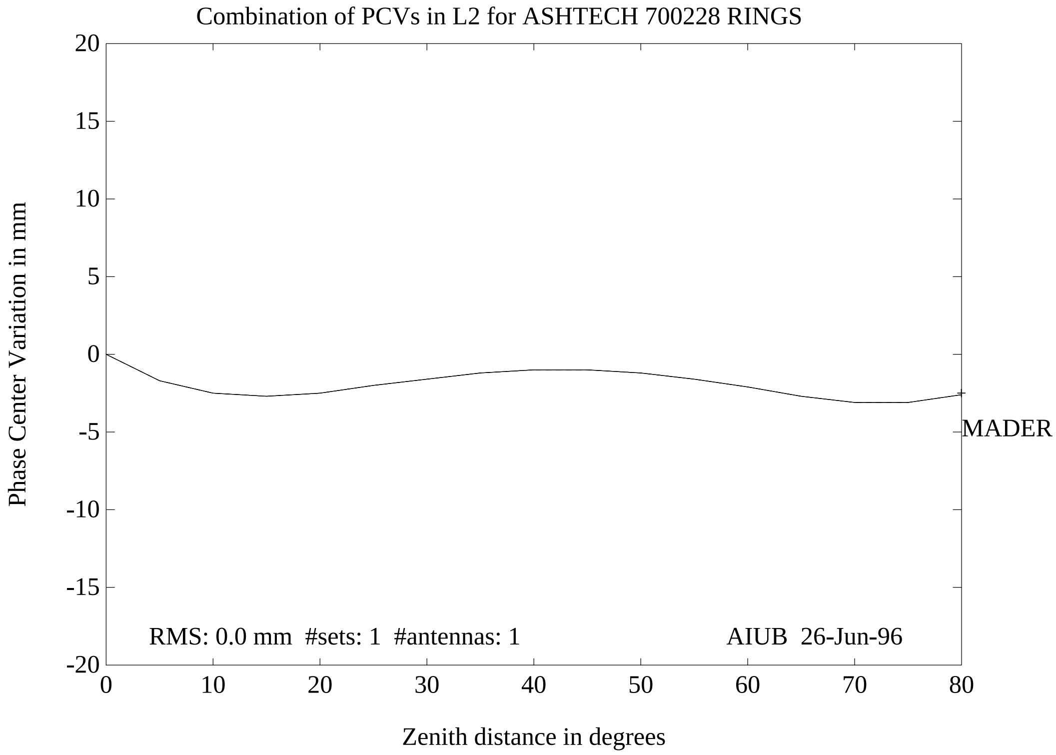


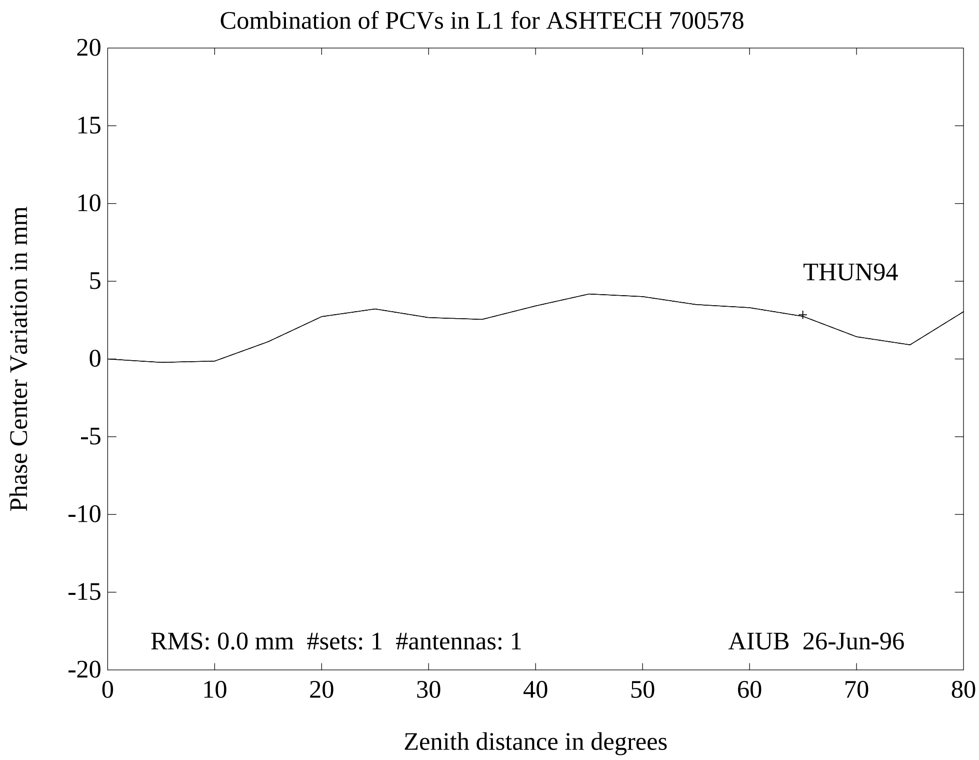
Combination of PCVs in L2 for ASHTECH 700228
Phase Center Variation in mm
Zenith distance in degrees
WETT95
THUN94
RMS: 0.5 mm #sets: 2 #antennas: 3
AIUB 26-Jun-96

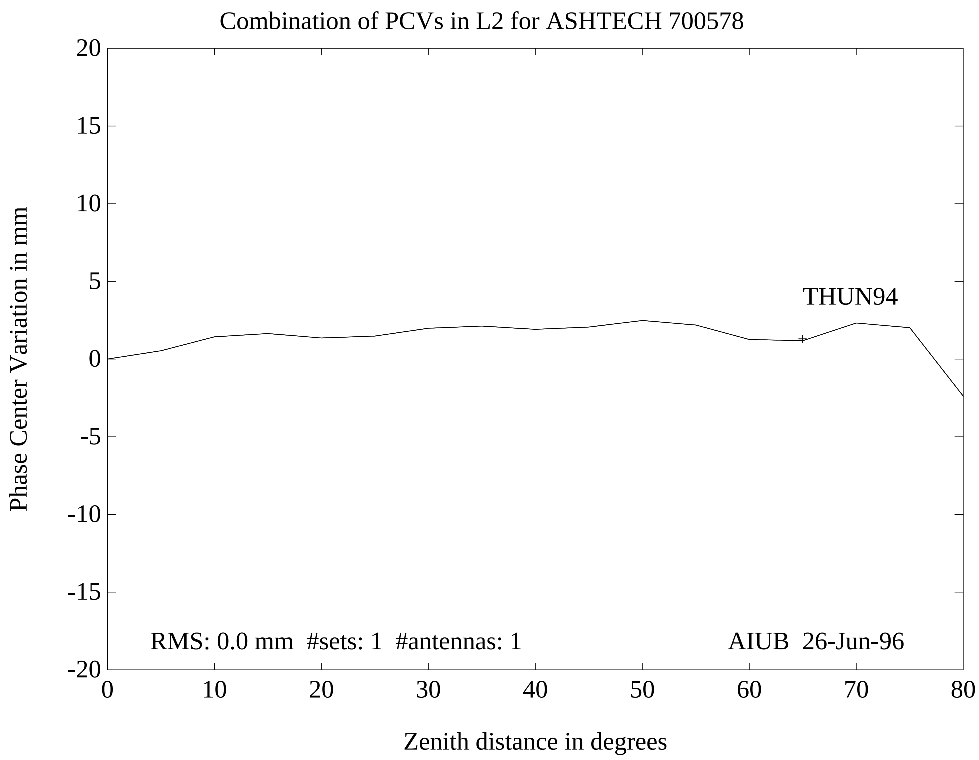

Combination of PCVs in L1 for ASHTECH 700228 NOTCH
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

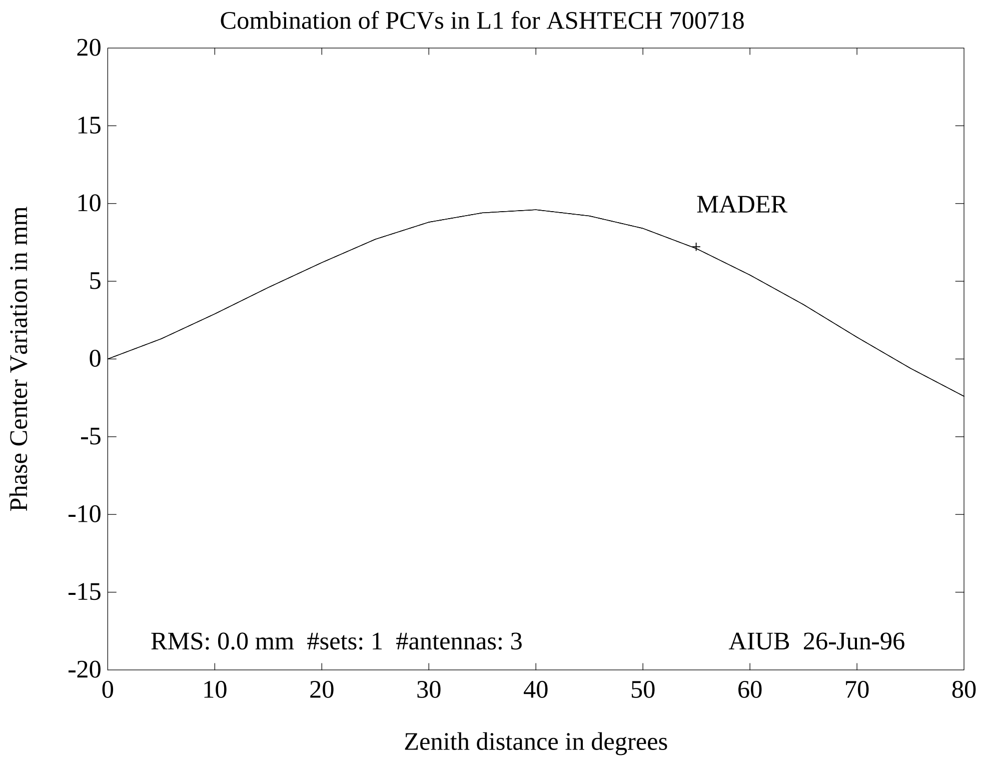

Combination of PCVs in L2 for ASHTECH 700228 NOTCH
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

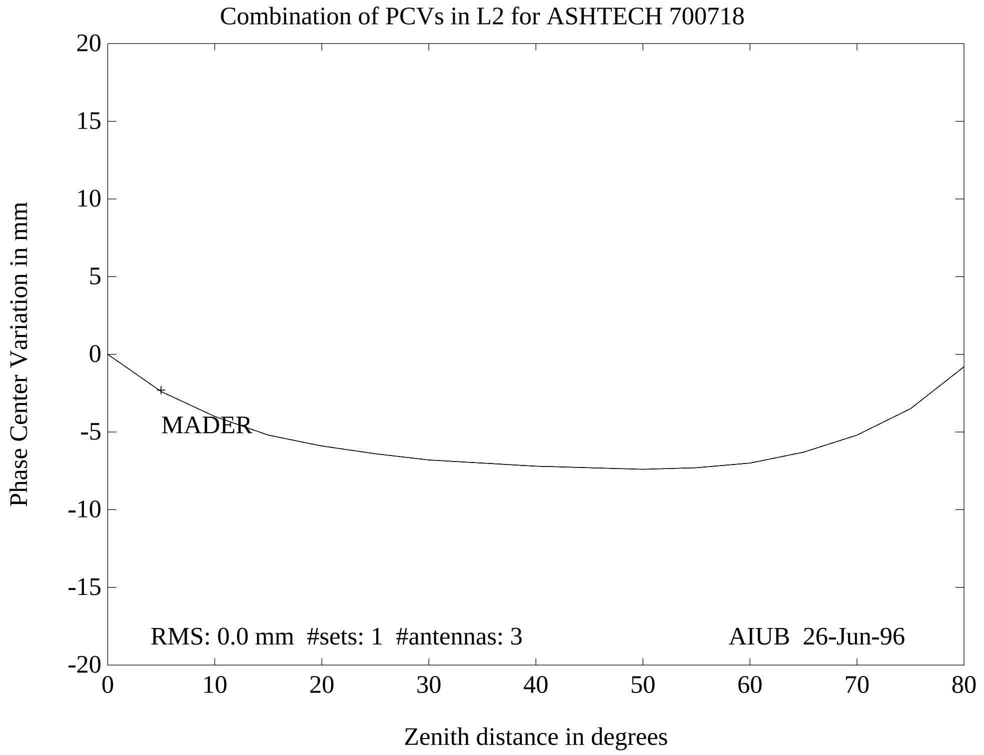

Combination of PCVs in L1 for ASHTECH 700228 RINGS
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

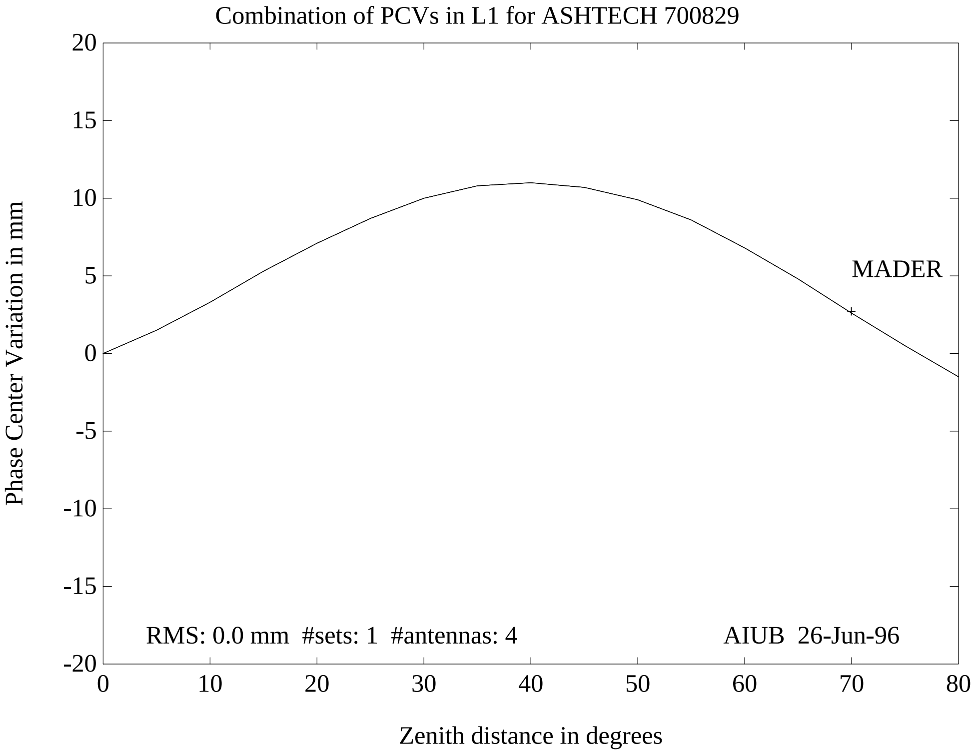

Combination of PCVs in L2 for ASHTECH 700228 RINGS
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

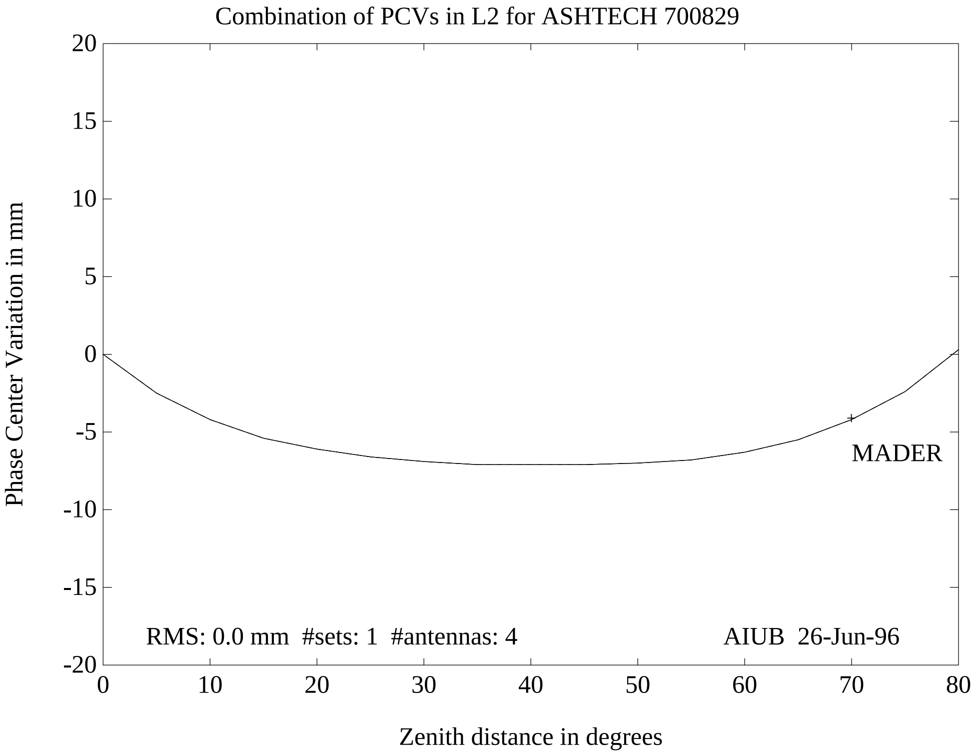

Combination of PCVs in L1 for ASHTECH 700578
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
THUN94
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

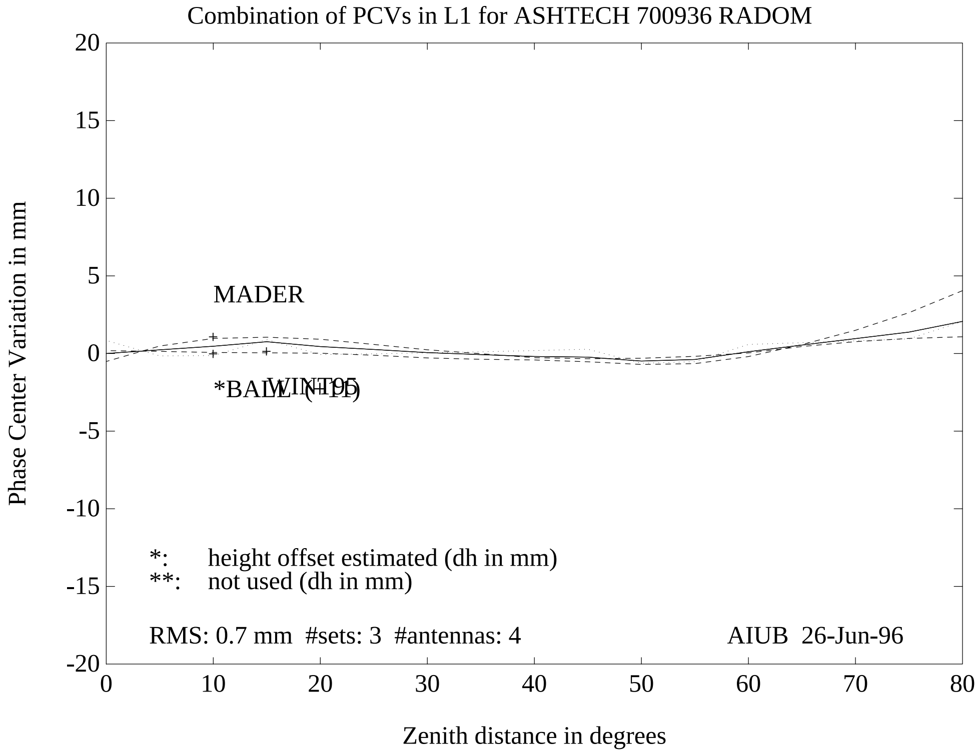

Combination of PCVs in L2 for ASHTECH 700578
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
THUN94
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

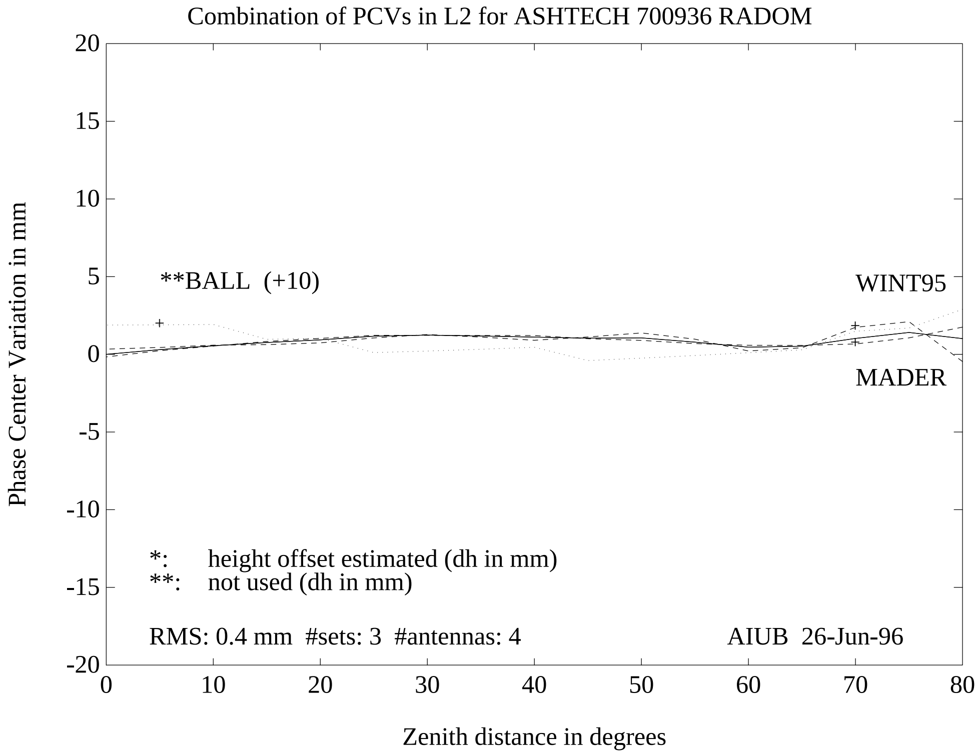

Combination of PCVs in L1 for ASHTECH 700718
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 3
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

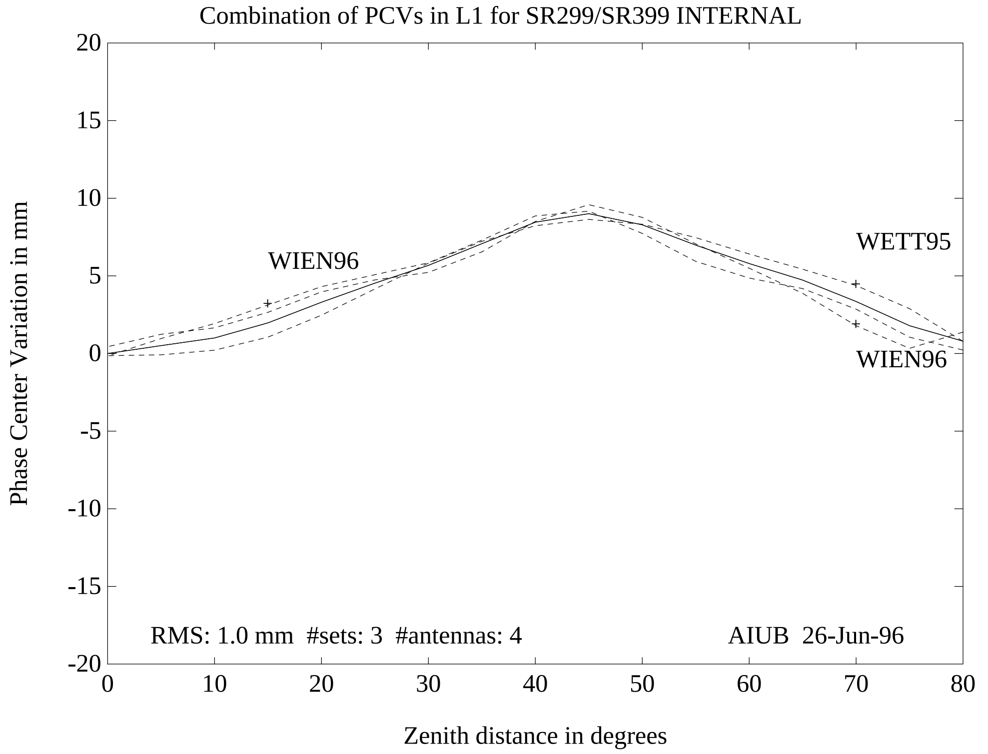

Combination of PCVs in L2 for ASHTECH 700718
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 3
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

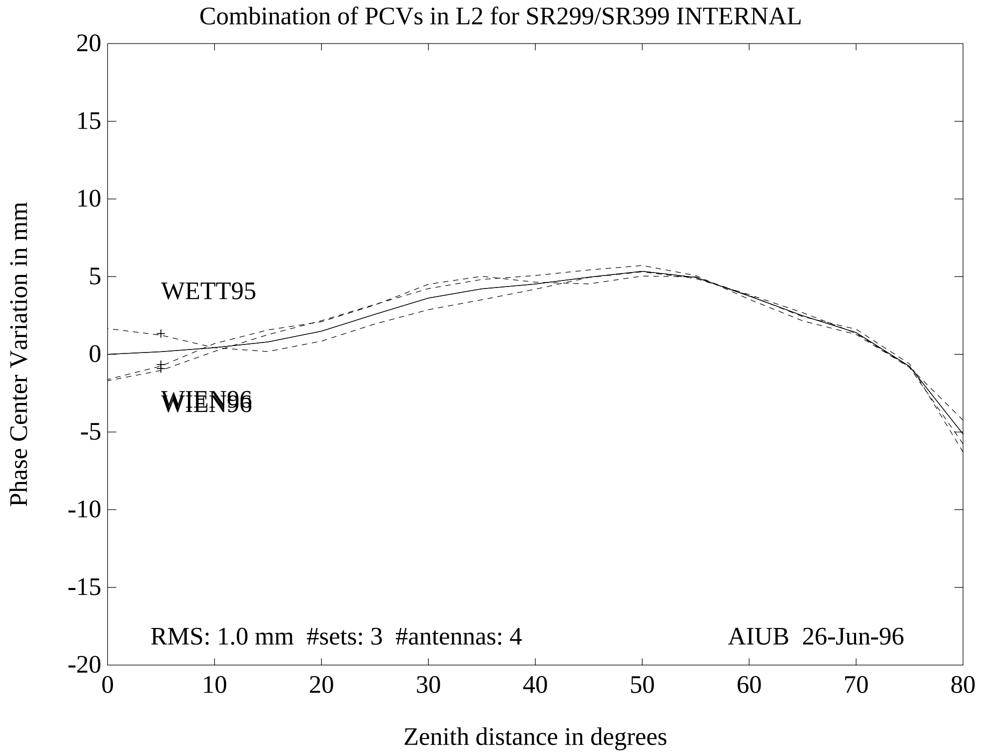

Combination of PCVs in L1 for ASHTECH 700829
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 4
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

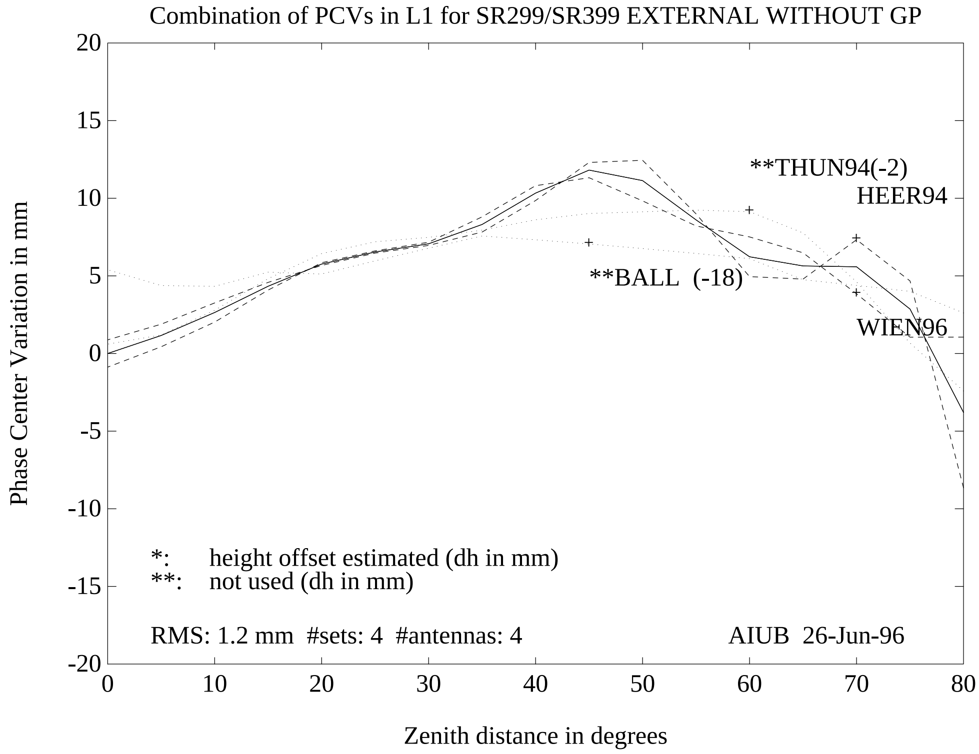

Combination of PCVs in L2 for ASHTECH 700829
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
RMS: 0.0 mm #sets: 1 #antennas: 4
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees

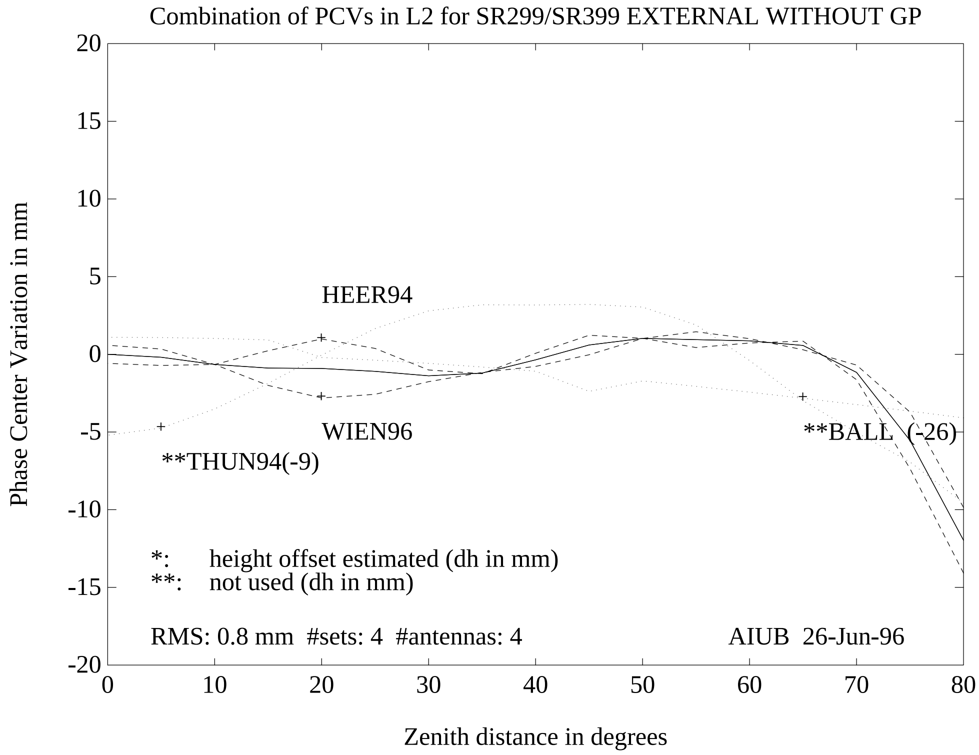

Combination of PCVs in L1 for ASHTECH 700936 RADOM
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
MADER
*BALL (+11)
WINT95
*: height offset estimated (dh in mm)
**: not used (dh in mm)
RMS: 0.7 mm #sets: 3 #antennas: 4
AIUB 26-Jun-96
0 10 20 30 40 50 60 70 80
Zenith distance in degrees

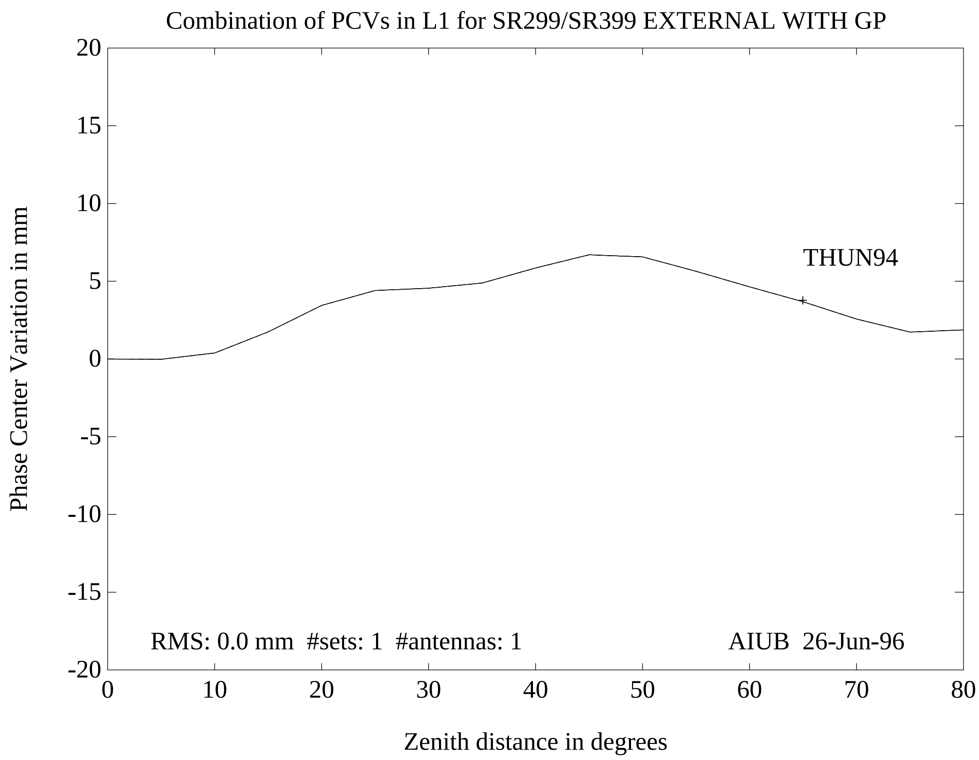

Combination of PCVs in L2 for ASHTECH 700936 RADOM
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
**BALL (+10)
WINT95
MADER
*: height offset estimated (dh in mm)
**: not used (dh in mm)
RMS: 0.4 mm #sets: 3 #antennas: 4
AIUB 26-Jun-96
0 10 20 30 40 50 60 70 80
Zenith distance in degrees

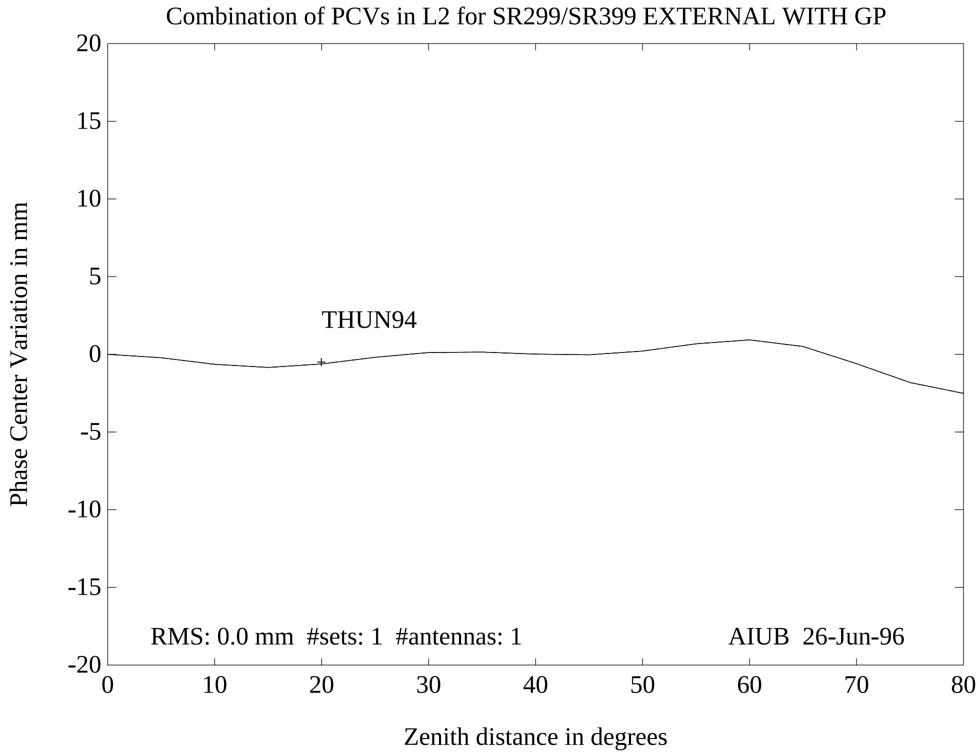

Combination of PCVs in L1 for SR299/SR399 INTERNAL
Phase Center Variation in mm
Zenith distance in degrees
WIEN96
WETT95
WIEN96
RMS: 1.0 mm #sets: 3 #antennas: 4
AIUB 26-Jun-96

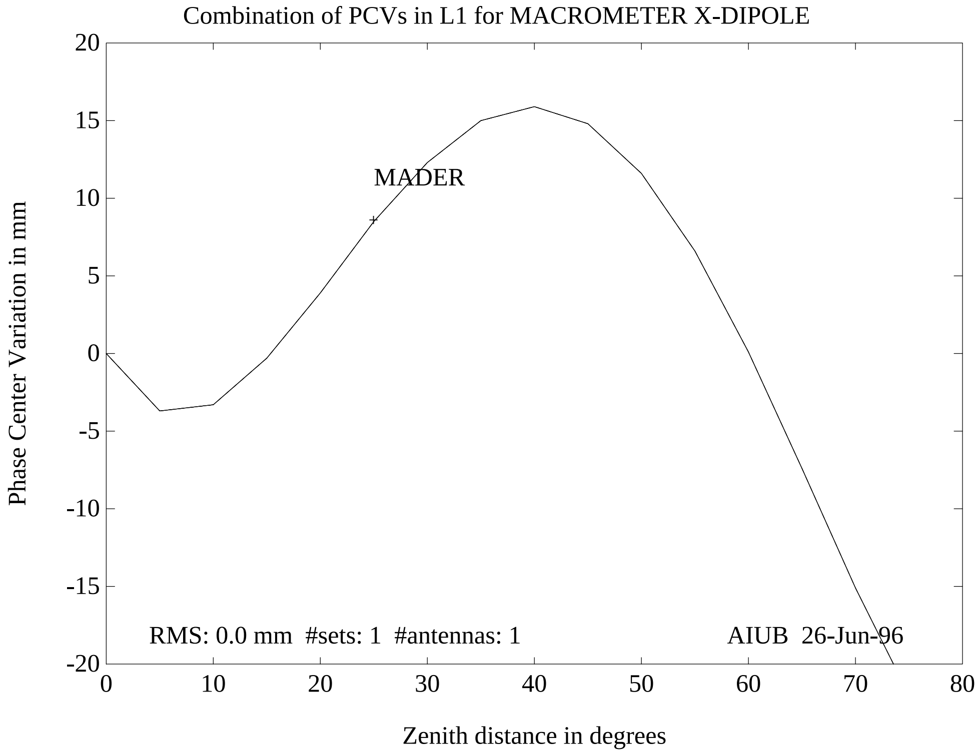

Combination of PCVs in L2 for SR299/SR399 INTERNAL
Phase Center Variation in mm
Zenith distance in degrees
WETT95
WIEN96
RMS: 1.0 mm #sets: 3 #antennas: 4
AIUB 26-Jun-96

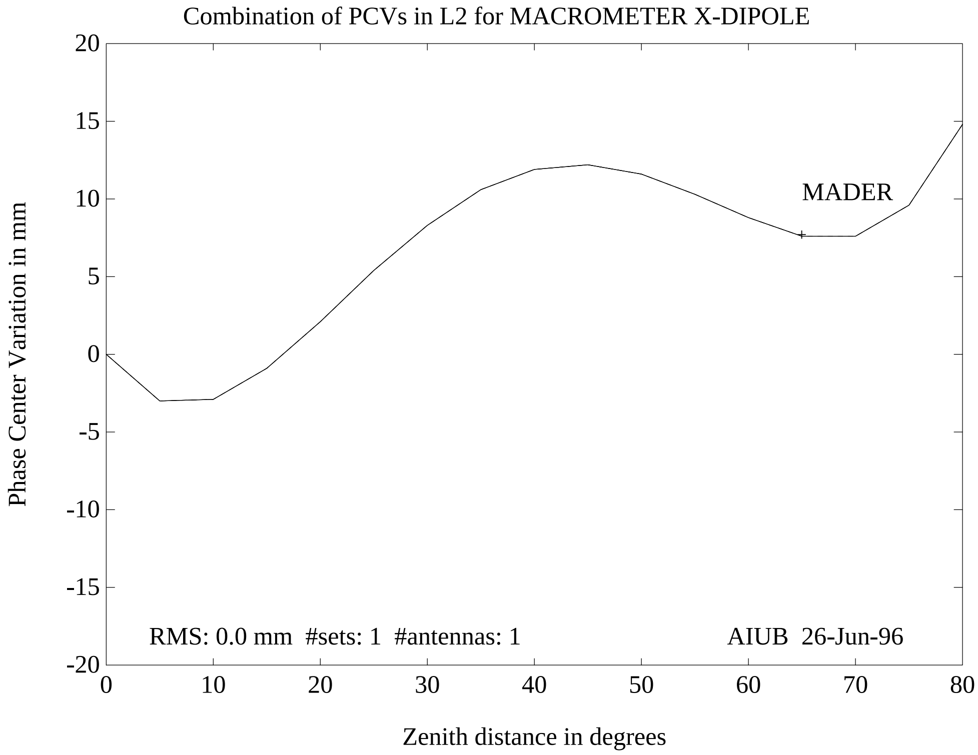

Combination of PCVs in L1 for SR299/SR399 EXTERNAL WITHOUT GP
Phase Center Variation in mm
Zenith distance in degrees
**THUN94(-2)
HEER94
**BALL (-18)
WIEN96
*: height offset estimated (dh in mm)
**: not used (dh in mm)
RMS: 1.2 mm #sets: 4 #antennas: 4
AIUB 26-Jun-96

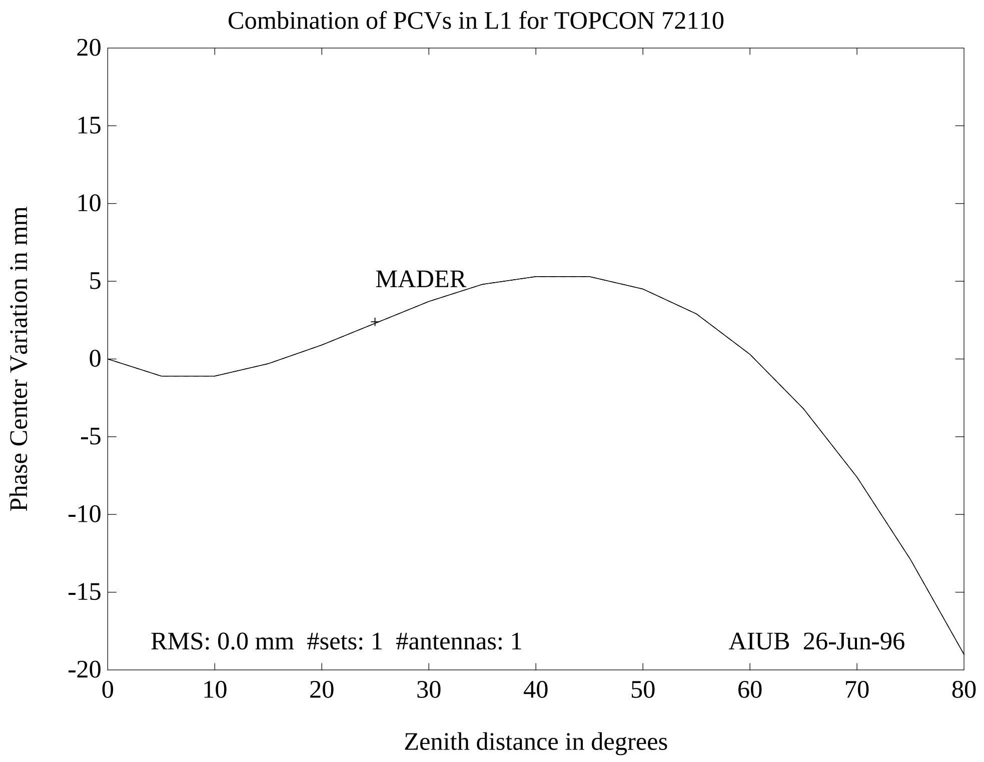

Combination of PCVs in L2 for SR299/SR399 EXTERNAL WITHOUT GP
Phase Center Variation in mm
Zenith distance in degrees
HEER94
WIEN96
**THUN94(-9)
**BALL (-26)
*: height offset estimated (dh in mm)
**: not used (dh in mm)
RMS: 0.8 mm #sets: 4 #antennas: 4
AIUB 26-Jun-96

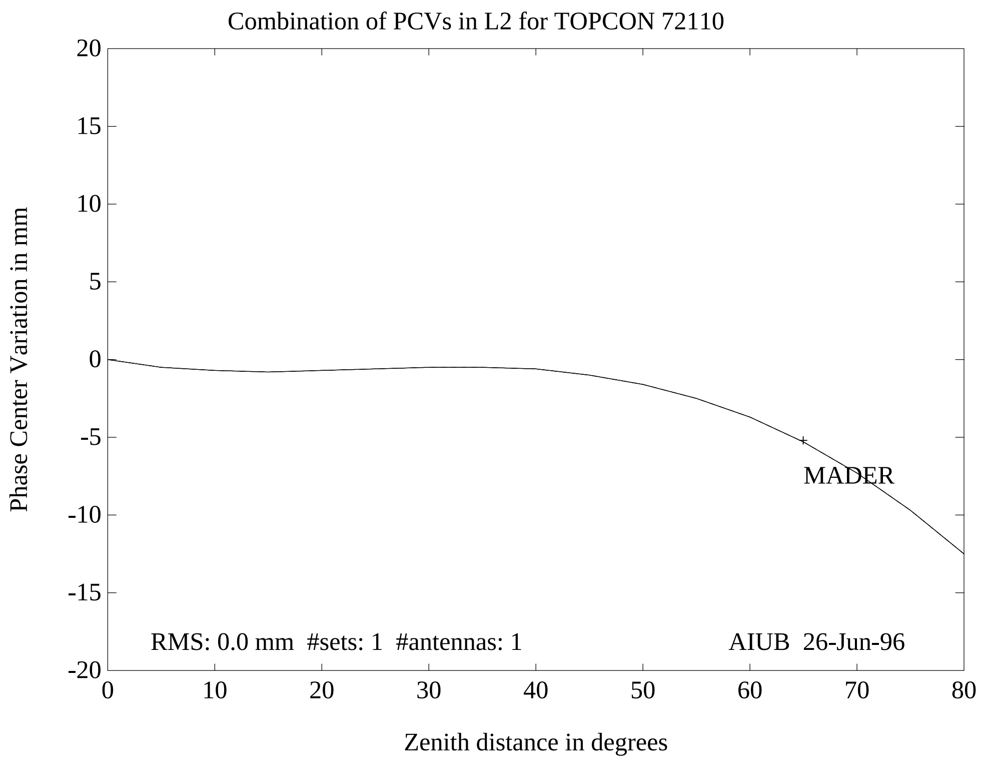

Combination of PCVs in L1 for SR299/SR399 EXTERNAL WITH GP
Phase Center Variation in mm
Zenith distance in degrees
THUN94
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
20
15
10
5
0
-5
-10
-15
-20
0
10
20
30
40
50
60
70
80

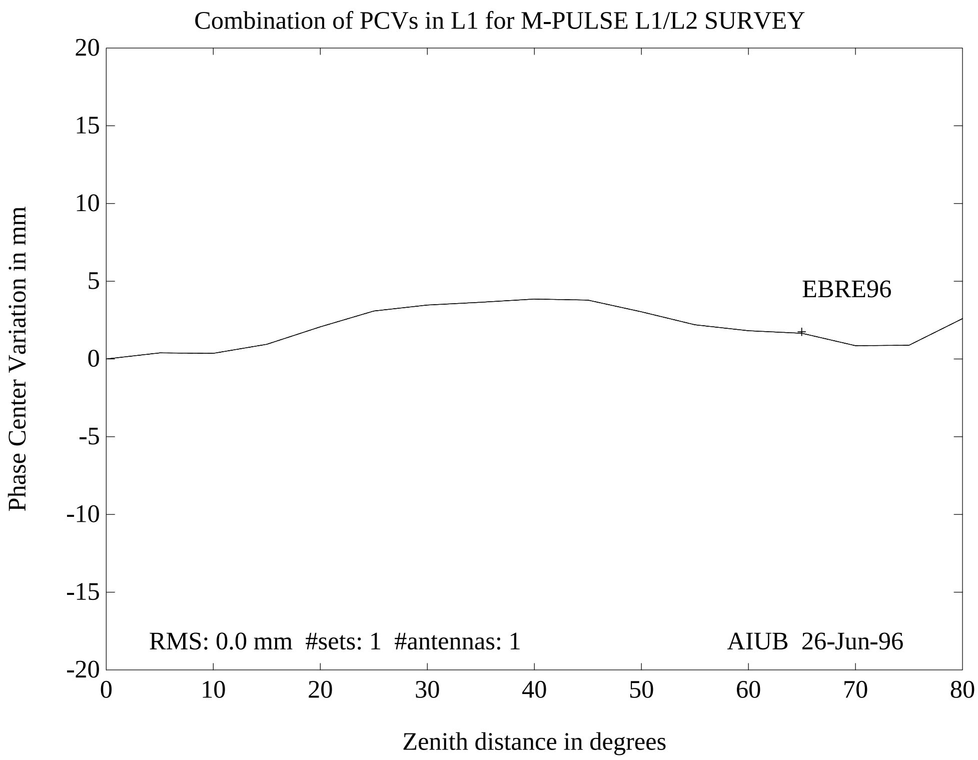

Combination of PCVs in L2 for SR299/SR399 EXTERNAL WITH GP
Phase Center Variation in mm
Zenith distance in degrees
THUN94
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
20
15
10
5
0
-5
-10
-15
-20
0
10
20
30
40
50
60
70
80

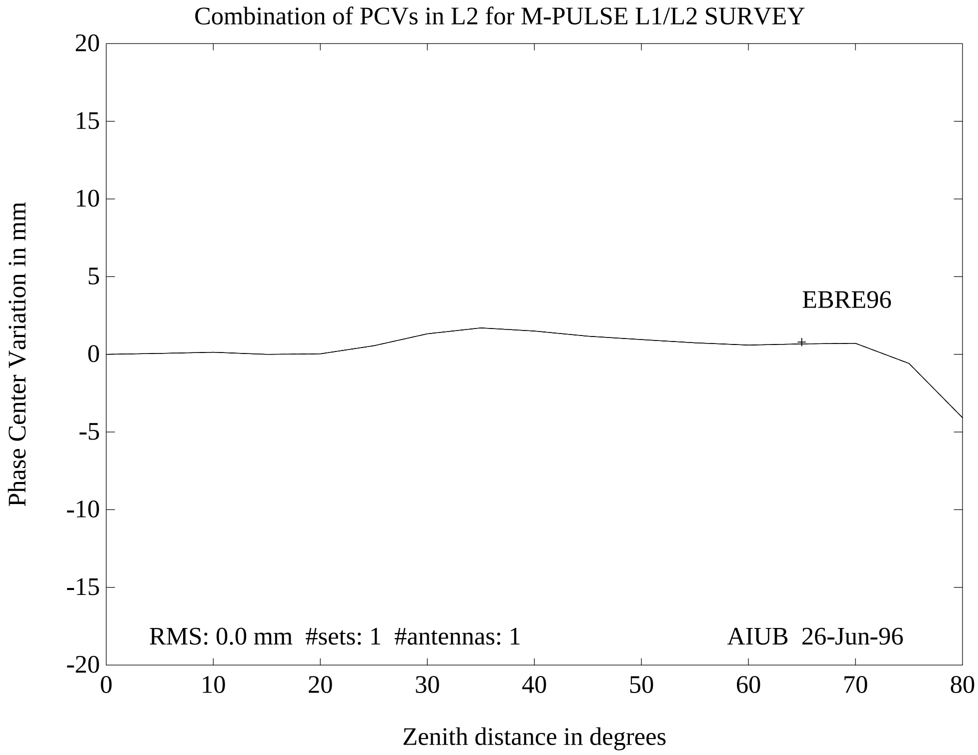

Combination of PCVs in L1 for MACROMETER X-DIPOLE
Phase Center Variation in mm
Zenith distance in degrees
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
20
15
10
5
0
-5
-10
-15
-20
0
10
20
30
40
50
60
70
80

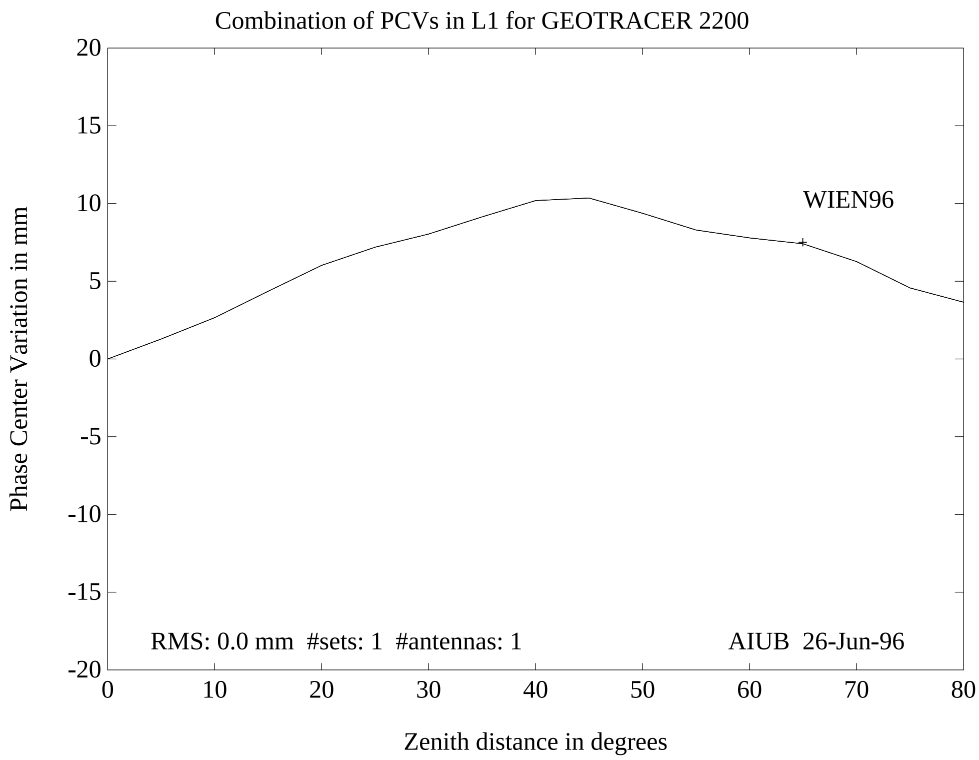

Combination of PCVs in L2 for MACROMETER X-DIPOLE
Phase Center Variation in mm
Zenith distance in degrees
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
20
15
10
5
0
-5
-10
-15
-20
0
10
20
30
40
50
60
70
80

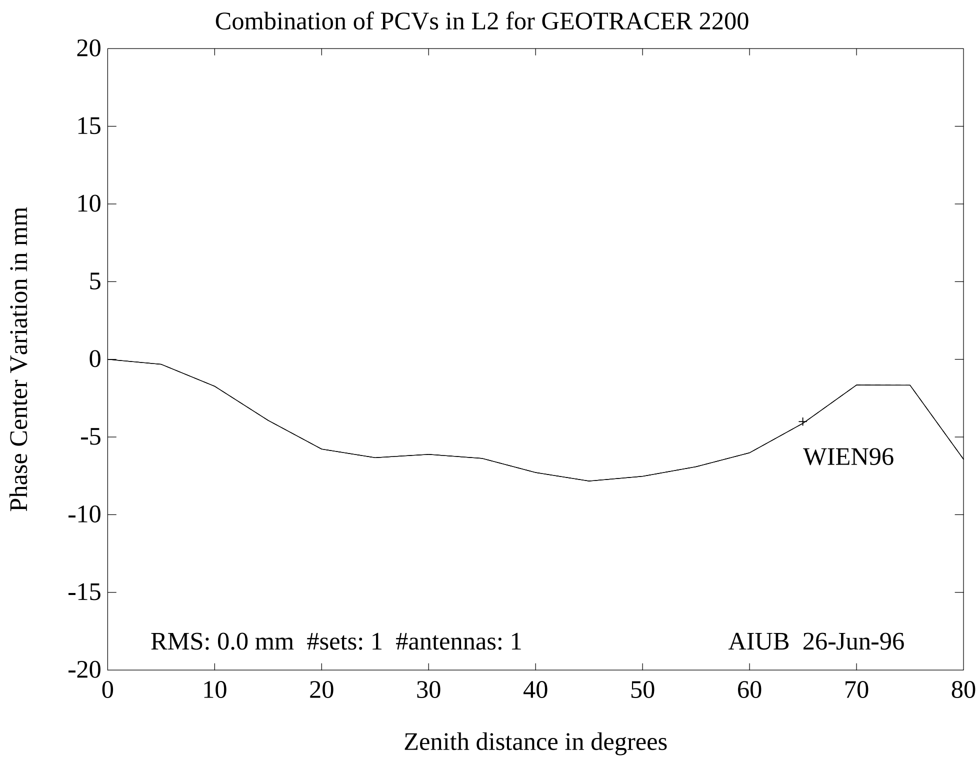

Combination of PCVs in L1 for TOPCON 72110
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
0
10
20
30
40
50
60
70
80
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
Zenith distance in degrees


Combination of PCVs in L2 for TOPCON 72110
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
0
10
20
30
40
50
60
70
80
MADER
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
Zenith distance in degrees


Combination of PCVs in L1 for M-PULSE L1/L2 SURVEY
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
EBRE96
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees


Combination of PCVs in L2 for M-PULSE L1/L2 SURVEY
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
EBRE96
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees


Combination of PCVs in L1 for GEOTRACER 2200
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
WIEN96
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees


Combination of PCVs in L2 for GEOTRACER 2200
Phase Center Variation in mm
20
15
10
5
0
-5
-10
-15
-20
WIEN96
RMS: 0.0 mm #sets: 1 #antennas: 1
AIUB 26-Jun-96
0
10
20
30
40
50
60
70
80
Zenith distance in degrees