

Network Adjustment

www.MOVE3.com

(c) 1993-2008 Grontmij

Licensed to Leica Geosystems AG


Created: 08/26/2014 13:06:22

Project Information

Project name:	mreza_fasada
Date created:	08/19/2014 11:35:34
Time zone:	1h 00'
Coordinate system name:	WGS 1984
Application software:	LEICA Geo Office 7.0
Processing kernel:	MOVE3 4.0.1

General Information

Adjustment

Type:	Inner constrained
Dimension:	3D
Coordinate system:	Local Grid
Height mode:	Orthometric
Number of iterations:	1
Maximum coord correction in last iteration:	0.0000 m  (tolerance is met)

Stations

Number of (partly) known stations:	0
Number of unknown stations:	25
Total:	25

Observations

Directions:	58 (including 5 free observations)
Distances:	45 (including 6 free observations)
Zenith angles:	58 (including 3 free observations)
Inner constraints:	6
Total:	167 (including 14 free observations)

Unknowns

Coordinates:	75
Orientations:	9
Additional parameters:	2
Total:	86

Degrees of freedom:	81
---------------------	----

Testing

Alfa (multi dimensional):	0.6061
Alfa 0 (one dimensional):	5.0 %
Beta:	80.0 %
Sigma a-priori (GPS):	10.0

Critical value W-test:	1.96
Critical value T-test (2-dimensional):	2.42
Critical value T-test (3-dimensional):	1.89
Critical value F-test:	0.95

Results based on a-posteriori variance factor

Adjustment Results

Coordinates

Station		Coordinate	Corr	Sd
1000	Easting	1000.0011 m	0.0000 m	0.0004 m
	Northing	1000.0002 m	0.0000 m	0.0003 m
	Height	99.9995 m	0.0000 m	0.0003 m
2000	Easting	999.9998 m	0.0000 m	0.0004 m
	Northing	1047.7756 m	0.0000 m	0.0005 m
	Height	98.8694 m	0.0000 m	0.0005 m
3000	Easting	1031.4762 m	0.0000 m	0.0003 m
	Northing	1043.7739 m	0.0000 m	0.0004 m
	Height	99.1016 m	0.0000 m	0.0004 m
4000	Easting	1059.4780 m	0.0000 m	0.0003 m
	Northing	996.1938 m	0.0000 m	0.0003 m
	Height	99.4728 m	0.0000 m	0.0003 m
5000	Easting	1057.3944 m	0.0000 m	0.0003 m
	Northing	969.2889 m	0.0000 m	0.0004 m
	Height	99.5294 m	0.0000 m	0.0003 m
6000	Easting	1043.1971 m	0.0000 m	0.0003 m
	Northing	953.9770 m	0.0000 m	0.0003 m
	Height	99.7416 m	0.0000 m	0.0002 m
7000	Easting	1019.6732 m	0.0000 m	0.0002 m
	Northing	955.9591 m	0.0000 m	0.0003 m
	Height	99.7599 m	0.0000 m	0.0002 m
8000	Easting	993.5697 m	0.0000 m	0.0003 m
	Northing	967.4577 m	0.0000 m	0.0004 m
	Height	99.5100 m	0.0000 m	0.0003 m
F1	Easting	1016.6137 m	0.0000 m	0.0008 m
	Northing	1025.8949 m	0.0000 m	0.0007 m
	Height	106.2676 m	0.0000 m	0.0007 m
F10	Easting	1036.6231 m	0.0000 m	0.0005 m
	Northing	976.1940 m	0.0000 m	0.0004 m
	Height	106.8589 m	0.0000 m	0.0004 m
F11	Easting	1037.1508 m	0.0000 m	0.0006 m
	Northing	981.7722 m	0.0000 m	0.0005 m
	Height	111.0922 m	0.0000 m	0.0006 m
F12	Easting	1038.2326 m	0.0000 m	0.0006 m
	Northing	992.9275 m	0.0000 m	0.0004 m
	Height	106.6840 m	0.0000 m	0.0005 m
F13	Easting	1039.8660 m	0.0000 m	0.0006 m
	Northing	1009.6641 m	0.0000 m	0.0005 m
	Height	106.6453 m	0.0000 m	0.0006 m
F14	Easting	1041.2111 m	0.0000 m	0.0007 m
	Northing	1023.6025 m	0.0000 m	0.0007 m
	Height	106.7517 m	0.0000 m	0.0008 m
F15	Easting	1039.3998 m	0.0000 m	0.0006 m
	Northing	1025.3011 m	0.0000 m	0.0005 m
	Height	100.1008 m	0.0000 m	0.0007 m
F16	Easting	1032.0163 m	0.0000 m	0.0005 m
	Northing	1027.5023 m	0.0000 m	0.0005 m
	Height	107.1937 m	0.0000 m	0.0006 m
F17	Easting	1022.0227 m	0.0000 m	0.0006 m
	Northing	1026.9378 m	0.0000 m	0.0005 m
	Height	100.1070 m	0.0000 m	0.0008 m
F2	Easting	1015.4149 m	0.0000 m	0.0007 m
	Northing	1013.4814 m	0.0000 m	0.0006 m
	Height	108.6268 m	0.0000 m	0.0006 m

F3	Easting	1013.9168 m	0.0000 m	0.0005 m
	Northing	998.0313 m	0.0000 m	0.0004 m
	Height	106.2268 m	0.0000 m	0.0004 m
F4	Easting	1012.5843 m	0.0000 m	0.0005 m
	Northing	984.1242 m	0.0000 m	0.0004 m
	Height	105.9341 m	0.0000 m	0.0003 m
F5	Easting	1010.9406 m	0.0000 m	0.0009 m
	Northing	967.3634 m	0.0000 m	0.0007 m
	Height	106.2865 m	0.0000 m	0.0008 m
F6	Easting	1012.6001 m	0.0000 m	0.0004 m
	Northing	962.9527 m	0.0000 m	0.0004 m
	Height	100.5314 m	0.0000 m	0.0003 m
F7	Easting	1023.7613 m	0.0000 m	0.0003 m
	Northing	961.9668 m	0.0000 m	0.0004 m
	Height	100.1526 m	0.0000 m	0.0002 m
F8	Easting	1032.4624 m	0.0000 m	0.0004 m
	Northing	961.0352 m	0.0000 m	0.0003 m
	Height	100.2244 m	0.0000 m	0.0002 m
F9	Easting	1035.2891 m	0.0000 m	0.0004 m
	Northing	962.2720 m	0.0000 m	0.0004 m
	Height	106.6995 m	0.0000 m	0.0003 m

Observations and Residuals

	Station	Target	Adj obs	Resid	Resid (ENH)	Sd
R0	8000	F4	37° 35' 09.0"	-0° 00' 01.0"	-	0° 00' 02.6"
S0			26.0887 m	0.0001 m	-	0.0003 m
Z0			75° 44' 38.2"	0° 00' 00.1"	-	0° 00' 02.6"
R0	8000	F3	22° 27' 53.2"	-0° 00' 01.2"	-	0° 00' 02.3"
S0			37.3350 m	0.0011 m	-	0.0003 m
Z0			79° 38' 05.7"	0° 00' 00.3"	-	0° 00' 02.1"
R0	8000	7000	102° 35' 38.6"	0° 00' 02.1"	-	0° 00' 02.6"
S0			28.5254 m	0.0002 m	-	0.0003 m
Z0			89° 29' 52.2"	0° 00' 01.1"	-	0° 00' 02.2"
R0	6000	F9	41° 33' 03.5"	0° 00' 10.0"	-	0° 00' 06.6"
S0			13.4075 m	0.0009 m	-	0.0005 m
Z0			58° 44' 16.6"	0° 00' 01.0"	-	0° 00' 04.3"
R0	6000	F8	28° 30' 31.8"	-0° 00' 09.0"	-	0° 00' 05.4"
S0			12.8566 m	0.0022 m	-	0.0003 m
Z0			87° 50' 53.2"	0° 00' 00.7"	-	0° 00' 03.6"
R0	6000	F7	17° 31' 48.5"	-0° 00' 01.8"	-	0° 00' 04.7"
S0			21.0184 m	-0.0017 m	-	0.0003 m
Z0			88° 52' 47.7"	0° 00' 01.7"	-	0° 00' 02.3"
R0	6000	F10	68° 41' 58.3"	0° 00' 02.4"	-	0° 00' 05.0"
S0			24.2382 m	-0.0021 m	-	0.0004 m
Z0			72° 55' 25.3"	-0° 00' 00.8"	-	0° 00' 03.4"
R0	6000	5000	128° 01' 11.5"	-0° 00' 02.2"	-	0° 00' 04.5"
S0			20.8825 m	0.0002 m	-	0.0004 m
Z0			90° 34' 52.7"	0° 00' 00.5"	-	0° 00' 02.6"
R0	6000	4000	106° 16' 20.2"	-0° 00' 00.5"	-	0° 00' 03.9"
S0			45.2489 m	-0.0004 m	-	0.0003 m
Z0			90° 20' 22.5"	0° 00' 02.1"	-	0° 00' 01.6"
R0	5000	F9	29° 33' 10.3"	-0° 00' 04.7"	-	0° 00' 03.9"
Z0			72° 49' 18.7"	0° 00' 01.7"	-	0° 00' 03.1"
R0	5000	F14	120° 34' 19.3"	-0° 00' 00.2"	-	0° 00' 03.1"
Z0			82° 44' 14.7"	0° 00' 01.7"	-	0° 00' 02.8"
R0	5000	F13	113° 41' 47.1"	0° 00' 01.2"	-	0° 00' 03.1"
Z0			80° 48' 59.8"	-0° 00' 00.5"	-	0° 00' 02.8"
R0	5000	F12	98° 08' 06.5"	0° 00' 02.4"	-	0° 00' 03.9"
Z0			76° 46' 09.4"	0° 00' 00.7"	-	0° 00' 03.4"
R0	5000	F11	78° 49' 25.8"	0° 00' 06.0"	-	0° 00' 04.5"
Z0			64° 04' 22.0"	0° 00' 01.5"	-	0° 00' 04.1"
R0	5000	F10	65° 33' 08.8"	0° 00' 04.2"	-	0° 00' 04.2"

Z0			71° 29' 16.1"	-0° 00' 01.2"	-	0° 00' 03.6"
R0	5000	7000	27° 42' 06.7"	-0° 00' 03.4"	-	0° 00' 03.1"
Z0			89° 40' 15.7"	0° 00' 05.1"	-	0° 00' 01.6"
R0	5000	4000	141° 35' 32.8"	-0° 00' 03.0"	-	0° 00' 03.3"
Z0			90° 07' 10.0"	0° 00' 02.2"	-	0° 00' 02.4"
R0	4000	F9	31° 03' 51.4"	-0° 00' 01.0"	-	0° 00' 02.2"
S0			42.2856 m	0.0012 m	-	0.0004 m
Z0			80° 09' 39.6"	0° 00' 02.2"	-	0° 00' 02.2"
R0	4000	F14	141° 53' 24.7"	0° 00' 00.0"	-	0° 00' 03.0"
S0			33.7333 m	0.0000 m	-	0.0007 m
Z0			77° 32' 19.9"	-0° 00' 00.7"	-	0° 00' 04.5"
R0	4000	F13	120° 03' 17.7"	-0° 00' 00.1"	-	0° 00' 03.0"
S0			24.8504 m	0.0000 m	-	0.0007 m
Z0			73° 13' 28.6"	0° 00' 00.3"	-	0° 00' 04.5"
R0	4000	F12	76° 49' 55.1"	-0° 00' 00.2"	-	0° 00' 03.0"
S0			22.6727 m	0.0002 m	-	0.0006 m
Z0			71° 27' 20.7"	-0° 00' 00.1"	-	0° 00' 04.3"
R0	4000	F11	52° 42' 46.9"	-0° 00' 00.8"	-	0° 00' 03.0"
S0			29.0089 m	0.0005 m	-	0.0006 m
Z0			66° 23' 20.3"	0° 00' 00.6"	-	0° 00' 03.9"
R0	4000	F10	44° 23' 02.3"	0° 00' 05.0"	-	0° 00' 02.6"
S0			31.2557 m	-0.0001 m	-	0.0005 m
Z0			76° 19' 56.3"	-0° 00' 03.0"	-	0° 00' 03.0"
R0	4000	6000	16° 39' 41.3"	-0° 00' 00.9"	-	0° 00' 01.8"
S0			45.2489 m	0.0002 m	-	0.0003 m
Z0			89° 39' 39.0"	0° 00' 03.5"	-	0° 00' 01.6"
R0	4000	3000	145° 05' 41.3"	0° 00' 00.9"	-	0° 00' 02.7"
S0			55.2105 m	-0.0004 m	-	0.0003 m
Z0			90° 23' 07.3"	0° 00' 00.9"	-	0° 00' 03.1"
R0	3000	F17	59° 47' 31.8"	-0° 00' 00.0"	-	0° 00' 04.5"
S0			19.3351 m	0.0000 m	-	0.0003 m
Z0			87° 01' 13.4"	-0° 00' 00.0"	-	0° 00' 07.2"
R0	3000	F16	28° 34' 37.3"	0° 00' 00.0"	-	0° 00' 04.5"
S0			18.1809 m	0.0000 m	-	0.0003 m
Z0			63° 34' 18.4"	0° 00' 00.5"	-	0° 00' 06.8"
R0	3000	F15	7° 15' 41.6"	0° 00' 00.1"	-	0° 00' 04.5"
S0			20.1256 m	0.0000 m	-	0.0003 m
Z0			87° 09' 16.4"	0° 00' 00.3"	-	0° 00' 06.8"
R0	3000	2000	127° 43' 23.1"	0° 00' 00.0"	-	0° 00' 04.1"
S0			31.7311 m	-0.0001 m	-	0.0003 m
Z0			90° 25' 12.6"	-0° 00' 01.6"	-	0° 00' 04.8"
R0	2000	F16	25° 05' 56.0"	-0° 00' 02.5"	-	0° 00' 07.9"
Z0			77° 36' 39.3"	-0° 00' 01.3"	-	0° 00' 04.5"
R0	2000	F15	22° 27' 26.8"	-0° 00' 03.2"	-	0° 00' 07.8"
Z0			88° 26' 41.1"	-0° 00' 00.9"	-	0° 00' 04.2"
R0	2000	F1	45° 32' 50.3"	0° 00' 10.8"	-	0° 00' 08.5"
Z0			74° 55' 44.1"	-0° 00' 02.2"	-	0° 00' 05.8"
R0	2000	1000	82° 45' 16.5"	-0° 00' 05.1"	-	0° 00' 07.8"
Z0			88° 38' 44.8"	0° 00' 01.2"	-	0° 00' 03.1"
R0	7000	F8	68° 21' 06.2"	0° 00' 01.9"	-	0° 00' 03.9"
S0			13.7678 m	0.0008 m	-	0.0004 m
Z0			88° 03' 56.1"	-0° 00' 01.3"	-	0° 00' 03.0"
R1	7000	F8	134° 34' 44.5"	0° 00' 01.6"	-	0° 00' 03.1"
S0			13.7678 m	0.0008 m	-	0.0004 m
Z0			88° 03' 56.1"	0° 00' 00.2"	-	0° 00' 03.0"
R0	7000	F7	34° 14' 05.0"	0° 00' 00.1"	-	0° 00' 04.0"
S0			7.2774 m	-0.0006 m	-	0.0004 m
Z0			86° 54' 18.9"	-0° 00' 02.6"	-	0° 00' 03.4"
R1	7000	F7	100° 27' 43.3"	-0° 00' 01.7"	-	0° 00' 03.2"
S0			7.2774 m	-0.0001 m	-	0.0004 m
Z0			86° 54' 18.9"	0° 00' 00.4"	-	0° 00' 03.4"
R0	7000	F6	314° 40' 33.1"	-0° 00' 01.4"	-	0° 00' 04.0"
S0			9.9768 m	0.0003 m	-	0.0004 m

			85° 33' 53.1"	-0° 00' 02.9"	-	0° 00' 03.5"
R1	7000	F6	20° 54' 11.4"	0° 00' 00.3"	-	0° 00' 03.3"
S0			9.9768 m	0.0000 m	-	0.0004 m
Z0			85° 33' 53.1"	0° 00' 01.0"	-	0° 00' 03.5"
R0	7000	6000	94° 48' 59.0"	0° 00' 01.4"	-	0° 00' 03.5"
S0			23.6077 m	0.0001 m	-	0.0003 m
Z0			90° 02' 37.7"	0° 00' 02.3"	-	0° 00' 01.8"
R1	7000	6000	161° 02' 37.3"	0° 00' 00.6"	-	0° 00' 02.5"
S0			23.6077 m	-0.0001 m	-	0.0003 m
Z0			90° 02' 37.7"	0° 00' 03.6"	-	0° 00' 01.8"
R0	7000	5000	70° 32' 15.6"	0° 00' 00.2"	-	0° 00' 03.4"
S0			40.0084 m	0.0000 m	-	0.0003 m
Z0			90° 19' 45.5"	0° 00' 03.0"	-	0° 00' 01.6"
R1	7000	5000	136° 45' 53.9"	0° 00' 01.6"	-	0° 00' 02.5"
S0			40.0084 m	-0.0002 m	-	0.0003 m
Z0			90° 19' 45.5"	0° 00' 01.7"	-	0° 00' 01.6"
R0	1000	F5	161° 28' 19.2"	0° 00' 00.0"	-	0° 00' 04.2"
S0			34.9913 m	0.0000 m	-	0.0006 m
Z0			79° 38' 59.4"	-0° 00' 00.0"	-	0° 00' 04.9"
R0	1000	F4	141° 36' 09.0"	0° 00' 00.6"	-	0° 00' 03.3"
S0			21.1097 m	0.0003 m	-	0.0004 m
Z0			73° 40' 20.5"	0° 00' 00.6"	-	0° 00' 03.5"
R0	1000	F3	98° 03' 21.7"	0° 00' 08.1"	-	0° 00' 03.7"
S0			15.3723 m	-0.0008 m	-	0.0004 m
Z0			66° 06' 07.5"	0° 00' 00.1"	-	0° 00' 04.3"
R0	1000	F2	48° 49' 43.3"	0° 00' 00.0"	-	0° 00' 04.2"
S0			22.2209 m	0.0000 m	-	0.0006 m
Z0			67° 09' 12.6"	0° 00' 00.0"	-	0° 00' 04.9"
R0	1000	F1	32° 41' 03.0"	0° 00' 00.5"	-	0° 00' 04.1"
S0			31.3980 m	0.0001 m	-	0.0005 m
Z0			78° 29' 01.3"	0° 00' 01.0"	-	0° 00' 04.4"
R0	1000	8000	191° 10' 54.5"	-0° 00' 06.2"	-	0° 00' 03.2"
S0			33.1760 m	-0.0008 m	-	0.0003 m
Z0			90° 50' 46.8"	0° 00' 01.8"	-	0° 00' 01.9"
R0	8000	1000	359° 59' 59.9"	0° 00' 00.1"	-	0° 00' 02.1"
S0			33.1760 m	-0.0008 m	-	0.0003 m
Z0			89° 09' 14.3"	0° 00' 02.3"	-	0° 00' 01.9"
R0	6000	7000	359° 59' 59.0"	0° 00' 01.0"	-	0° 00' 03.9"
S0			23.6077 m	-0.0001 m	-	0.0003 m
Z0			89° 57' 23.1"	0° 00' 03.5"	-	0° 00' 01.8"
R0	5000	6000	0° 00' 02.6"	-0° 00' 02.6"	-	0° 00' 03.5"
Z0			89° 25' 08.0"	0° 00' 02.5"	-	0° 00' 02.6"
R0	4000	5000	0° 00' 02.8"	-0° 00' 02.8"	-	0° 00' 02.3"
S0			26.9859 m	-0.0005 m	-	0.0004 m
Z0			89° 52' 50.9"	0° 00' 05.1"	-	0° 00' 02.4"
R0	3000	4000	0° 00' 00.1"	-0° 00' 00.1"	-	0° 00' 04.0"
S0			55.2105 m	0.0001 m	-	0.0003 m
Z0			89° 36' 54.5"	0° 00' 02.7"	-	0° 00' 03.1"
R0	1000	2000	0° 00' 03.1"	-0° 00' 03.1"	-	0° 00' 03.8"
S0			47.7896 m	0.0000 m	-	0.0005 m
Z0			91° 21' 16.8"	-0° 00' 00.5"	-	0° 00' 03.1"
R0	7000	8000	293° 46' 24.3"	-0° 00' 00.1"	-	0° 00' 03.4"
S0			28.5254 m	0.0001 m	-	0.0003 m
Z0			90° 30' 08.8"	0° 00' 00.4"	-	0° 00' 02.2"
R0	7000	8000	293° 46' 24.3"	-0° 00' 02.0"	-	0° 00' 03.4"
S0			28.5254 m	-0.0001 m	-	0.0003 m
Z0			90° 30' 08.8"	0° 00' 01.6"	-	0° 00' 02.2"
R1	7000	8000	0° 00' 02.5"	-0° 00' 02.5"	-	0° 00' 02.8"
S0			28.5254 m	-0.0001 m	-	0.0003 m
Z0			90° 30' 08.8"	0° 00' 01.3"	-	0° 00' 02.2"




Absolute Error Ellipses (2D - 39.4% 1D - 68.3%)

Station	A [m]	B [m]	A/B	Phi	Sd Hgt [m]
1000	0.0004	0.0003	1.3	70°	0.0003
2000	0.0005	0.0004	1.3	8°	0.0005
3000	0.0004	0.0003	1.5	38°	0.0004
4000	0.0003	0.0003	1.1	-85°	0.0003
5000	0.0004	0.0003	1.4	-10°	0.0003
6000	0.0003	0.0003	1.1	-9°	0.0002
7000	0.0003	0.0002	1.2	1°	0.0002
8000	0.0004	0.0003	1.5	17°	0.0003
F1	0.0008	0.0006	1.3	-60°	0.0007
F10	0.0005	0.0004	1.2	84°	0.0004
F11	0.0006	0.0005	1.2	70°	0.0006
F12	0.0006	0.0004	1.5	83°	0.0005
F13	0.0007	0.0005	1.4	-61°	0.0006
F14	0.0007	0.0006	1.1	-53°	0.0008
F15	0.0007	0.0004	1.6	50°	0.0007
F16	0.0006	0.0005	1.3	43°	0.0006
F17	0.0006	0.0005	1.1	-88°	0.0008
F2	0.0007	0.0006	1.1	70°	0.0006
F3	0.0005	0.0004	1.3	88°	0.0004
F4	0.0005	0.0004	1.1	60°	0.0003
F5	0.0009	0.0006	1.4	68°	0.0008
F6	0.0005	0.0003	1.4	-34°	0.0003
F7	0.0004	0.0002	1.7	29°	0.0002
F8	0.0004	0.0003	1.1	65°	0.0002
F9	0.0005	0.0004	1.2	-52°	0.0003

Testing and Estimated Errors

Observation Tests

	Station	Target	MDB	Red	BNR	W-Test	T-Test
R0	8000	F4	0° 00' 16.7"	24	4.0	-0.67	
S0			0.0019 m	33	3.9	0.27	
Z0			0° 00' 16.0"	28	4.1	0.08	
R0	8000	F3	0° 00' 13.0"	40	2.6	-0.64	
S0			0.0017 m	42	3.2	4.42	⚠
Z0			0° 00' 11.6"	54	2.3	0.14	
R0	8000	7000	0° 00' 18.5"	20	4.6	1.56	
S0			0.0016 m	48	2.9	0.63	
Z0			0° 00' 12.1"	50	2.5	0.49	
R0	6000	F9	0° 00' 42.2"	26	4.2	2.56	⚠
S0			0.0026 m	53	2.6	1.72	
Z0			0° 00' 29.7"	20	5.4	0.46	
R0	6000	F8	0° 00' 30.5"	49	2.4	-1.65	
S0			0.0022 m	74	1.6	3.73	⚠
Z0			0° 00' 20.5"	43	3.1	0.24	
R0	6000	F7	0° 00' 27.1"	63	1.7	-0.29	
S0			0.0021 m	82	1.3	-2.78	⚠
Z0			0° 00' 15.3"	77	1.4	0.39	
R0	6000	F10	0° 00' 28.2"	58	1.9	0.41	
S0			0.0024 m	61	2.2	-3.80	⚠
Z0			0° 00' 19.1"	49	2.7	-0.24	
R0	6000	5000	0° 00' 26.4"	66	1.5	-0.35	
S0			0.0023 m	73	1.7	0.36	
Z0			0° 00' 16.1"	69	1.7	0.12	
R0	6000	4000	0° 00' 25.0"	74	1.1	-0.08	
S0			0.0022 m	75	1.6	-0.65	
Z0			0° 00' 14.3"	88	0.8	0.47	
R0	5000	F9	0° 00' 22.3"	62	1.8	-0.95	
Z0			0° 00' 19.5"	71	1.7	0.35	
R0	5000	F14	0° 00' 20.2"	75	1.2	-0.03	

Z0			0° 00' 18.7"	77	1.4	0.34	
R0	5000	F13	0° 00' 20.2"	75	1.2	0.23	
Z0			0° 00' 18.7"	77	1.4	-0.10	
R0	5000	F12	0° 00' 22.3"	62	1.8	0.49	
Z0			0° 00' 20.3"	66	1.9	0.15	
R0	5000	F11	0° 00' 25.0"	49	2.5	1.36	
Z0			0° 00' 23.0"	51	2.7	0.35	
R0	5000	F10	0° 00' 23.4"	56	2.1	0.90	
Z0			0° 00' 20.9"	62	2.1	-0.26	
R0	5000	7000	0° 00' 20.3"	74	1.2	-0.62	
Z0			0° 00' 17.2"	92	0.7	0.90	
R0	5000	4000	0° 00' 20.6"	72	1.3	-0.56	
Z0			0° 00' 18.1"	82	1.2	0.40	
R0	4000	F9	0° 00' 12.2"	49	2.5	-0.46	
S0			0.0024 m	61	2.2	2.23	
Z0			0° 00' 15.5"	81	1.2	0.48	
R0	4000	F14	0° 00' 36.2"	5	10.7	0.01	
S0			0.0181 m	1	26.8	0.09	
Z0			0° 00' 31.9"	19	5.6	-0.34	
R0	4000	F13	0° 00' 43.9"	3	13.2	-0.22	
S0			0.0081 m	5	11.6	0.19	
Z0			0° 00' 33.8"	17	6.0	0.13	
R0	4000	F12	0° 00' 57.7"	2	17.5	-0.51	
S0			0.0039 m	23	5.0	0.51	
Z0			0° 00' 28.1"	24	4.8	-0.02	
R0	4000	F11	0° 00' 37.7"	5	11.2	-1.22	
S0			0.0034 m	31	4.1	1.39	
Z0			0° 00' 22.0"	40	3.3	0.19	
R0	4000	F10	0° 00' 16.6"	26	4.2	3.12	
S0			0.0027 m	49	2.8	-0.32	
Z0			0° 00' 17.4"	64	2.0	-0.74	
R0	4000	6000	0° 00' 10.7"	64	1.7	-0.36	
S0			0.0022 m	74	1.6	0.34	
Z0			0° 00' 14.8"	89	0.8	0.75	
R0	4000	3000	0° 00' 18.5"	21	4.9	0.66	
S0			0.0021 m	81	1.3	-0.65	
Z0			0° 00' 18.0"	60	2.2	0.24	
R0	3000	F17					
S0							
Z0							
R0	3000	F16	0° 02' 56.0"	0	34.7	0.10	
S0			0.0096 m	0	28.8	0.06	
Z0			0° 01' 03.1"	10	8.2	0.22	
R0	3000	F15	0° 02' 16.7"	0	27.0	0.26	
S0			0.0176 m	0	53.0	0.25	
Z0			0° 01' 01.7"	10	8.0	0.13	
R0	3000	2000	0° 00' 29.8"	17	5.2	0.00	
S0			0.0067 m	1	20.1	-1.39	
Z0			0° 00' 27.0"	55	2.4	-0.30	
R0	2000	F16	0° 00' 48.6"	70	0.7	-0.21	
Z0			0° 00' 28.1"	71	1.7	-0.18	
R0	2000	F15	0° 00' 48.4"	71	0.7	-0.26	
Z0			0° 00' 27.4"	75	1.5	-0.12	
R0	2000	F1	0° 00' 50.1"	66	1.0	0.91	
Z0			0° 00' 32.5"	53	2.6	-0.35	
R0	2000	1000	0° 00' 48.2"	71	0.6	-0.41	
Z0			0° 00' 25.5"	86	1.0	0.15	
R0	7000	F8	0° 00' 23.9"	69	1.3	0.31	
S0			0.0211 m	99	0.1	0.11	
Z0			0° 00' 22.0"	81	1.3	-0.20	
R1	7000	F8	0° 00' 20.3"	24	4.4	0.92	
S0			0.0021 m	31	4.1	3.50	
Z0			0° 00' 17.0"	44	3.0	0.08	

R0	7000	F7	0° 00' 24.1"	68	1.4	0.02	
S0			0.0208 m	99	0.1	-0.09	
Z0			0° 00' 22.8"	76	1.5	-0.42	
R1	7000	F7	0° 00' 23.0"	18	5.2	-1.07	
S0			0.0027 m	18	5.8	-0.40	
Z0			0° 00' 21.4"	28	4.3	0.18	
R0	7000	F6	0° 00' 24.2"	67	1.4	-0.24	
S0			0.0209 m	99	0.2	0.04	
Z0			0° 00' 22.9"	75	1.5	-0.47	
R1	7000	F6	0° 00' 24.2"	17	5.5	0.24	
S0			0.0209 m	0	49.8	-0.04	
Z0			0° 00' 22.9"	24	4.7	0.47	
R0	7000	6000	0° 00' 22.8"	76	1.0	0.22	
S0			0.0215 m	99	0.1	0.01	
Z0			0° 00' 20.6"	93	0.6	0.33	
R1	7000	6000	0° 00' 14.2"	49	2.3	0.23	
S0			0.0016 m	57	2.4	-0.23	
Z0			0° 00' 12.8"	79	1.2	0.99	
R0	7000	5000	0° 00' 22.6"	77	0.9	0.03	
S0			0.0221 m	99	0.1	0.00	
Z0			0° 00' 20.4"	94	0.5	0.43	
R1	7000	5000	0° 00' 13.9"	52	2.2	0.63	
S0			0.0018 m	41	3.3	-0.67	
Z0			0° 00' 12.4"	84	1.0	0.46	
R0	1000	F5					
S0							
Z0							
R0	1000	F4	0° 00' 19.4"	36	3.3	0.25	
S0			0.0021 m	56	2.5	0.67	
Z0			0° 00' 19.6"	48	2.8	0.18	
R0	1000	F3	0° 00' 25.0"	21	4.8	4.16	⚠
S0			0.0023 m	44	3.1	-2.21	⚠
Z0			0° 00' 28.0"	23	4.9	0.04	
R0	1000	F2					
S0							
Z0							
R0	1000	F1	0° 01' 30.3"	1	19.8	0.89	
S0			0.0066 m	5	11.5	0.68	
Z0			0° 00' 31.5"	18	5.7	0.47	
R0	1000	8000	0° 00' 18.3"	40	2.9	-2.32	⚠
S0			0.0018 m	76	1.6	-1.73	
Z0			0° 00' 14.8"	84	1.0	0.41	
R0	8000	1000	0° 00' 11.8"	49	2.0	0.06	
S0			0.0015 m	53	2.6	-2.72	⚠
Z0			0° 00' 10.9"	61	1.9	0.97	
R0	6000	7000	0° 00' 25.0"	74	1.1	0.15	
S0			0.0021 m	84	1.2	-0.08	
Z0			0° 00' 14.6"	85	1.0	0.78	
R0	5000	6000	0° 00' 21.2"	68	1.5	-0.50	
Z0			0° 00' 18.5"	80	1.3	0.48	
R0	4000	5000	0° 00' 12.8"	44	2.8	-1.37	
S0			0.0024 m	61	2.2	-1.02	
Z0			0° 00' 16.0"	76	1.5	1.17	
R0	3000	4000	0° 00' 28.0"	20	4.8	-0.07	
S0			0.0020 m	22	5.2	0.30	
Z0			0° 00' 22.4"	80	1.3	0.42	
R0	1000	2000	0° 00' 28.9"	16	5.8	-1.81	
S0			0.0042 m	13	7.1	0.01	
Z0			0° 00' 17.6"	60	2.2	-0.13	
R0	7000	8000	0° 00' 22.7"	77	0.9	-0.02	
S0			0.0217 m	99	0.1	0.01	
Z0			0° 00' 20.9"	90	0.8	0.06	
R0	7000	8000	0° 00' 22.7"	77	0.9	-0.33	

S0			0.0217 m	99	0.1	-0.01
Z0			0° 00' 20.9"	90	0.8	0.24
R1	7000	8000	0° 00' 16.5"	36	3.1	-1.16
S0			0.0016 m	54	2.6	-0.31
Z0			0° 00' 13.5"	71	1.6	0.39

Redundancy:

W-Test:
Estimated Errors (Observations)

Estimated Errors For Observations With Rejected W-Tests (max 10)

	Station	Target	W-Test	Fact	Est err
S0	8000	F3	4.42	2.3	0.0027 m
R0	1000	F3	4.16	2.1	0° 00' 37.2"
S0	6000	F10	-3.80	1.9	-0.0033 m
S0	6000	F8	3.73	1.9	0.0030 m
S0	7000	F8	3.50	1.8	0.0026 m
R0	4000	F10	3.12	1.6	0° 00' 18.4"
S0	6000	F7	-2.78	1.4	-0.0021 m
S0	8000	1000	-2.72	1.4	-0.0015 m
R0	6000	F9	2.56	1.3	0° 00' 38.5"
R0	1000	8000	-2.32	1.2	-0° 00' 15.2"