

Program name/version: Local Output - version 2016-A, August 30, 2016

The user is: Earl F. Burkholder
Program used on: August 30, 2016
The input file for program is: Ch14BKfile.002.dat
The name of this output file is: Ch14Local.002.txt Renamed: Figure 14.2.docx

Points in the BURKORD™ project file are (see Figure 14.1):

PT	X/Y/Z			Station
101	124,517.6456	-4,609,735.8120	4,391,808.8308	FOLA
102	182,409.4822	-4,611,414.9387	4,387,983.5454	SHAN
103	102,706.4161	-4,657,769.2234	4,341,771.6025	WAWN
104	149,899.212	-4,637,713.1689	4,361,716.038	WEBE
105	153,059.6302	-4,666,858.8124	4,330,615.8037	RASN
106	114,970.9392	-4,680,260.7531	4,317,398.7872	PARO
107	115,561.9544	-4,706,440.3003	4,289,090.7472	WATH
108	164,796.2521	-4,679,186.5077	4,316,889.724	SIW2
109	170,846.0935	-4,702,276.0736	4,291,680.3173	KEHA

List of stored correlations:

PT to Pt

101 102	104 101	107 101
101 103	104 102	107 102
101 104	104 103	107 103
101 105	104 105	107 104
101 106	104 106	107 105
101 107	104 107	107 106
101 108	104 108	107 108
101 109	104 109	107 109
102 101	105 101	108 101
102 103	105 102	108 102
102 104	105 103	108 103
102 105	105 104	108 104
102 106	105 106	108 105
102 107	105 107	108 106
102 108	105 108	108 107
102 109	105 109	108 109
103 101	106 101	109 101
103 102	106 102	109 102
103 104	106 103	109 103
103 105	106 104	109 104
103 106	106 105	109 105
103 107	106 107	109 106
103 108	106 108	109 107
103 109	106 109	109 108

Notes:

1. The horizontal distance (HD) between points is in meters.
2. The HD lies in the tangent plane from 'here' to 'there'.
3. The HD 'there' to 'here' is slightly different due to Earth curvature and elevation differences.
3. A single HD can be computed as the mean of forward and back. But, that is not the point.
4. The point of this printout is a comparison of network accuracy and local accuracy.

5. The standard deviations of the inverses are given in meters.
6. Network accuracies reflect the assumed uncertainties at the two control stations.
7. Local accuracies reflect the observed quality of each point with respect to its 'point-pair.'
8. Network accuracy can be one of two values based on use of station covariance information:
 - a.) Nominal network accuracy is based only on the diagonal values in the station covariance matrix.
 - b.) Full network accuracy is based on using the full station covariance matrix values.
9. The number of decimal places shown cannot be justified except to show where differences first occur.

Sta. to Sta.	Horizontal Distance	Nominal Network Accuracy	Full network Accuracy	Local Accuracy	Baseline
<u>Points that are directly connected with baselines</u>					
FOLA - SHAN	58,041.558 m	0.003635 m	0.003617 m	0.001730 m	BL 1
SHAN - FOLA	58,041.956 m	0.003635 m	0.003614 m	0.001726 m	
FOLA - WAWN	72,708.361 m	0.006747 m	0.004094 m	0.002457 m	BL 2
WAWN - FOLA	72,708.143 m	0.006732 m	0.004072 m	0.002423 m	
FOLA - WEBE	48,296.083 m	0.005757 m	0.003936 m	0.002044 m	BL 3
WEBE - FOLA	48,295.792 m	0.005750 m	0.003928 m	0.002032 m	
SHAN - WEBE	49,381.015 m	0.006833 m	0.004052 m	0.002023 m	BL 4
WEBE - SHAN	49,380.378 m	0.006822 m	0.004039 m	0.002004 m	
WAWN - WEBE	55,019.436 m	0.005553 m	0.003980 m	0.001796 m	BL 5
WEBE - WAWN	55,019.270 m	0.005567 m	0.003995 m	0.001806 m	
WAWN - RASN	52,368.694 m	0.004397 m	0.003993 m	0.001722 m	BL 6
RASN - WAWN	52,368.543 m	0.004391 m	0.003987 m	0.00172 m	
WAWN - PARO	35,359.795 m	0.008612 m	0.004470 m	0.002227 m	BL 7
PARO - WAWN	35,359.697 m	0.008602 m	0.004456 m	0.002217 m	
WEBE - RASN	42,739.449 m	0.008015 m	0.004525 m	0.002088 m	BL 8
RASN - WEBE	42,739.455 m	0.008005 m	0.004511 m	0.002081 m	
SHAN - SIW2	99,784.717 m	0.008204 m	0.004343 m	0.002758 m	BL 9
SIW2 - SHAN	99,784.116 m	0.008178 m	0.004306 m	0.002727 m	
RASN - SIW2	21,865.935 m	0.006930 m	0.004367 m	0.002367 m	BL 10
SIW2 - RASN	21,866.083 m	0.006924 m	0.004359 m	0.002363 m	
RASN - PARO	42,485.641 m	0.005102 m	0.003856 m	0.001384 m	BL 11
PARO - RASN	42,485.647 m	0.005092 m	0.003849 m	0.001382 m	
PARO - SIW2	49,838.93 m	0.003717 m	0.003708 m	0.001184 m	BL 12
SIW2 - PARO	49,839.26 m	0.003721 m	0.003709 m	0.001184 m	
PARO - WATH	38,562.394 m	0.009195 m	0.004487 m	0.002091 m	BL 13
WATH - PARO	38,562.109 m	0.009183 m	0.004470 m	0.002085 m	
WATH - SIW2	62,764.719 m	0.006125 m	0.003963 m	0.001687 m	BL 14
SIW2 - WATH	62,765.598 m	0.006143 m	0.003982 m	0.001698 m	
WATH - KEHA	55,500.287 m	0.003695 m	0.003650 m	0.002088 m	BL 15
KEHA - WATH	55,500.951 m	0.003699 m	0.003653 m	0.002092 m	

SIW2 - KEHA	34,716.511 m	0.006154 m	0.003976 m	0.002586 m	BL 16
KEHA - SIW2	34,716.441 m	0.006147 m	0.003968 m	0.002572 m	

Points that are NOT directly connected with baselines

FOLA - RASN	88,441.711 m	0.005989 m	0.00418 m	0.002622 m
RASN - FOLA	88,441.188 m	0.005974 m	0.00416 m	0.002598 m
FOLA - PARO	102,961.780 m	0.006996 m	0.004044 m	0.002638 m
PARO - FOLA	102,961.184 m	0.006976 m	0.004017 m	0.002604 m
FOLA - WATH	141,353.316 m	0.007123 m	0.004131 m	0.002986 m
WATH - FOLA	141,351.453 m	0.007093 m	0.004091 m	0.002941 m
FOLA - SIW2	109,807.701 m	0.005941 m	0.003977 m	0.002647 m
SIW2 - FOLA	109,807.795 m	0.005922 m	0.003952 m	0.002617 m
FOLA - KEHA	143,989.991 m	0.003822 m	0.003606 m	0.00288 m
KEHA - FOLA	143,989.821 m	0.003818 m	0.003603 m	0.002872 m
SHAN - WAWN	103,132.188 m	0.006415 m	0.004139 m	0.002373 m
WAWN - SHAN	103,131.170 m	0.006387 m	0.004104 m	0.002330 m
SHAN - RASN	85,007.403 m	0.007895 m	0.004429 m	0.002729 m
RASN - SHAN	85,006.316 m	0.007873 m	0.004402 m	0.002704 m
SHAN - PARO	119,452.217 m	0.007674 m	0.004185 m	0.002521 m
PARO - SHAN	119,450.706 m	0.007643 m	0.004143 m	0.002478 m
SHAN - WATH	152,562.475 m	0.008274 m	0.004370 m	0.002965 m
WATH - SHAN	152,559.417 m	0.008231 m	0.004311 m	0.002911 m
SHAN - KEHA	132,898.399 m	0.006684 m	0.004028 m	0.003188 m
KEHA - SHAN	132,897.328 m	0.006663 m	0.004003 m	0.003150 m
WAWN - WATH	72,864.854 m	0.009045 m	0.004560 m	0.002870 m
WATH - WAWN	72,864.114 m	0.009023 m	0.004528 m	0.002846 m
WAWN - SIW2	70,233.801 m	0.005198 m	0.004023 m	0.002027 m
SIW2 - WAWN	70,234.071 m	0.005184 m	0.004011 m	0.002014 m
WAWN - KEHA	95,564.023 m	0.005536 m	0.003948 m	0.002930 m
KEHA - WAWN	95,564.198 m	0.005520 m	0.003936 m	0.002907 m
WEBE - PARO	70,669.265 m	0.007779 m	0.004172 m	0.002182 m
PARO - WEBE	70,669.283 m	0.007761 m	0.004148 m	0.002165 m
WEBE - WATH	105,717.578 m	0.008391 m	0.004366 m	0.002798 m
WATH - WEBE	105,716.823 m	0.008363 m	0.004327 m	0.002773 m
WEBE - SIW2	62,858.831 m	0.007866 m	0.004334 m	0.002624 m
SIW2 - WEBE	62,859.264 m	0.007851 m	0.004313 m	0.002611 m
WEBE - KEHA	97,527.111 m	0.006294 m	0.003992 m	0.003116 m
KEHA - WEBE	97,527.585 m	0.006280 m	0.003977 m	0.003092 m

RASN - WATH	68,534.636 m	0.007529 m	0.004341 m	0.002461 m
WATH - RASN	68,534.139 m	0.007509 m	0.004317 m	0.002455 m
RASN - KEHA	55,557.524 m	0.005977 m	0.004160 m	0.003185 m
KEHA - RASN	55,557.787 m	0.005968 m	0.004149 m	0.003166 m
PARO - KEHA	65,330.044 m	0.004743 m	0.003781 m	0.002470 m
KEHA - PARO	65,330.344 m	0.004735 m	0.003775 m	0.002457 m