
AEROoffice V5.7.9 2023-09-27
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Dongle-ID: 3-3541217

Boresight Misalignment Calculations
29/05/2024 7:15:03

Project: Pol-Cal 2024 E-M4-IMU IIf
Projectfile: C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\24_SPASA_POL-CAL-TALavera_31CM_M4\

Used input data:

Platform Solution: C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\24_SPASA_POL-CAL-TALavera_31CM_M4\
Event Mark File : C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\24_SPASA_POL-CAL-TALavera_31CM_M4\
AT Result File : C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\24_SPASA_POL-CAL-TALavera_31CM_M4\
Importformat File: C:\AEROofficeV51\FORMATOS\PTOFORMAT

Coordinate system scalefactor correction for height applied
Using DTM

Local Coordinate System:
UTM - WGS84 SPH - ellipsoidal Altitude
System defined in: built-in coordinate system
Selected Zone: 30N
Meridian Convergence corrected

Loading INS Data
90 usable events found

Loading AT Data
AT input: angles found
90 AT Data Sets imported

90 events with matching eventnumbers found.

Position offset for the single events [m]:

	number	time	east	north	alt	d east	d north	d alt
position:	32016	54959.24	-0.020	-0.002	0.004	-0.020	-0.002	0.004
position:	32017	54976.13	0.026	0.017	-0.006	0.026	0.017	-0.006
position:	32018	54993.25	-0.015	0.012	0.008	-0.015	0.012	0.008
position:	32019	55010.51	0.001	0.025	-0.019	0.001	0.025	-0.019
position:	32020	55027.83	0.010	0.007	-0.092	0.010	0.007	-0.092
position:	32021	55045.30	0.020	0.016	0.076	0.020	0.016	0.076
position:	32022	55062.91	-0.012	0.008	0.064	-0.012	0.008	0.064
position:	32023	55080.55	0.034	0.018	0.066	0.034	0.018	0.066
position:	32024	55098.25	-0.014	0.017	-0.022	-0.014	0.017	-0.022
position:	32025	55116.05	-0.006	0.004	0.014	-0.006	0.004	0.014
position:	32026	55273.75	0.014	-0.012	-0.052	0.014	-0.012	-0.052
position:	32027	55292.15	0.008	-0.018	0.007	0.008	-0.018	0.007
position:	32028	55310.45	0.021	0.006	0.075	0.021	0.006	0.075
position:	32029	55328.66	0.040	-0.049	-0.042	0.040	-0.049	-0.042
position:	32030	55346.83	-0.007	-0.020	-0.027	-0.007	-0.020	-0.027
position:	32031	55364.89	0.005	0.006	0.069	0.005	0.006	0.069
position:	32032	55382.73	0.007	-0.030	-0.094	0.007	-0.030	-0.094
position:	32033	55400.45	-0.007	-0.015	0.016	-0.007	-0.015	0.016
position:	32034	55418.15	0.014	-0.046	-0.053	0.014	-0.046	-0.053
position:	32035	55435.88	-0.002	0.006	-0.001	-0.002	0.006	-0.001
position:	32036	55613.78	0.004	0.018	-0.064	0.004	0.018	-0.064
position:	32037	55630.24	-0.003	0.027	0.050	-0.003	0.027	0.050
position:	32038	55646.71	-0.017	0.029	-0.170	-0.017	0.029	-0.171
position:	32039	55663.10	0.007	0.005	0.217	0.007	0.005	0.217
position:	32040	55679.37	0.030	0.007	0.066	0.030	0.007	0.066
position:	32041	55695.60	0.003	-0.013	-0.019	0.003	-0.013	-0.019
position:	32042	55711.79	0.016	0.000	0.043	0.016	0.000	0.043
position:	32043	55727.93	0.025	-0.004	0.066	0.025	-0.004	0.066
position:	32044	55744.08	-0.020	0.015	-0.084	-0.020	0.015	-0.084
position:	32045	55760.34	-0.011	0.014	0.017	-0.011	0.014	0.017
position:	32046	55983.87	-0.012	0.022	-0.039	-0.012	0.022	-0.039
position:	32047	55998.81	0.055	-0.015	-0.019	0.055	-0.015	-0.019
position:	32048	56013.64	0.002	-0.019	0.024	0.002	-0.019	0.024
position:	32049	56028.45	0.024	0.013	0.002	0.023	0.013	0.002
position:	32050	56043.31	0.010	0.002	-0.065	0.010	0.002	-0.065
position:	32051	56058.21	-0.014	-0.008	0.048	-0.014	-0.008	0.048
position:	32052	56073.11	-0.008	-0.015	-0.103	-0.008	-0.015	-0.103
position:	32053	56087.98	0.024	-0.007	-0.052	0.024	-0.007	-0.052
position:	32054	56102.85	0.005	-0.002	-0.001	0.005	-0.002	-0.001
position:	32055	56117.71	0.032	0.014	0.009	0.032	0.014	0.009
position:	32056	56132.53	0.011	-0.003	-0.073	0.011	-0.003	-0.073

position:	32057	56147.32	0.012	0.015	0.041	0.012	0.015	0.041
position:	32058	56322.96	-0.018	-0.009	-0.042	-0.018	-0.009	-0.042
position:	32059	56343.19	0.002	-0.001	0.072	0.002	-0.001	0.072
position:	32060	56363.30	0.003	-0.031	-0.072	0.003	-0.031	-0.072
position:	32061	56383.32	-0.046	0.014	0.006	-0.046	0.014	0.006
position:	32062	56403.36	-0.056	0.007	0.042	-0.056	0.007	0.042
position:	32063	56423.48	-0.031	0.001	0.101	-0.031	0.001	0.101
position:	32064	56443.58	-0.038	0.026	-0.030	-0.038	0.026	-0.030
position:	32065	56463.52	-0.042	0.021	0.088	-0.042	0.021	0.088
position:	32066	56483.28	-0.002	-0.040	-0.092	-0.002	-0.040	-0.092
position:	32067	56502.86	-0.062	-0.007	0.076	-0.062	-0.007	0.076
position:	32068	56522.43	-0.025	-0.027	-0.069	-0.025	-0.027	-0.069
position:	32069	56541.99	0.026	-0.029	-0.044	0.026	-0.029	-0.044
position:	32070	56677.72	0.007	0.000	-0.101	0.007	0.000	-0.101
position:	32071	56692.85	-0.010	-0.020	-0.061	-0.010	-0.020	-0.061
position:	32072	56707.95	0.030	0.004	-0.034	0.030	0.004	-0.034
position:	32073	56723.00	0.030	0.052	-0.097	0.030	0.052	-0.097
position:	32074	56737.95	0.036	-0.048	0.208	0.036	-0.048	0.208
position:	32075	56752.82	0.004	0.017	-0.006	0.004	0.017	-0.006
position:	32076	56767.65	-0.035	0.033	-0.114	-0.035	0.033	-0.114
position:	32077	56782.47	0.021	0.011	-0.098	0.021	0.011	-0.098
position:	32078	56797.28	0.027	-0.026	-0.162	0.027	-0.026	-0.162
position:	32079	56812.11	0.025	0.016	0.051	0.025	0.016	0.051
position:	32080	56826.97	0.038	0.007	-0.053	0.038	0.007	-0.053
position:	32081	56841.81	0.004	-0.004	0.071	0.004	-0.004	0.071
position:	32082	57011.75	0.014	0.006	0.054	0.014	0.006	0.054
position:	32083	57031.92	-0.032	-0.009	0.143	-0.032	-0.009	0.143
position:	32084	57052.01	0.022	-0.042	0.029	0.022	-0.042	0.029
position:	32085	57072.05	-0.042	-0.017	-0.020	-0.042	-0.017	-0.020
position:	32086	57091.99	-0.029	0.011	0.031	-0.029	0.011	0.031
position:	32087	57111.88	-0.025	0.019	0.114	-0.025	0.019	0.114
position:	32088	57131.73	-0.075	0.021	0.224	-0.075	0.021	0.224
position:	32089	57151.47	0.013	0.032	0.127	0.013	0.032	0.127
position:	32090	57171.09	0.002	0.014	-0.011	0.002	0.014	-0.011
position:	32091	57190.64	-0.013	-0.002	0.036	-0.013	-0.002	0.036
position:	32092	57210.26	0.000	0.000	0.035	0.000	0.000	0.035
position:	32093	57230.08	-0.037	-0.011	0.129	-0.037	-0.011	0.129
position:	32094	57361.87	0.015	-0.007	-0.018	0.015	-0.007	-0.018
position:	32095	57376.70	-0.016	-0.011	0.009	-0.016	-0.011	0.009
position:	32096	57391.51	0.006	0.000	-0.056	0.006	0.000	-0.056
position:	32097	57406.30	-0.007	-0.003	-0.057	-0.007	-0.003	-0.057
position:	32098	57421.02	-0.002	-0.009	-0.052	-0.002	-0.009	-0.052
position:	32099	57435.69	0.012	0.005	-0.065	0.012	0.005	-0.065
position:	32100	57450.35	0.017	0.005	-0.039	0.017	0.005	-0.039
position:	32101	57465.06	-0.013	-0.014	0.015	-0.013	-0.014	0.015
position:	32102	57479.85	0.017	-0.004	-0.016	0.017	-0.004	-0.016
position:	32103	57494.90	0.018	-0.008	-0.033	0.018	-0.008	-0.033
position:	32104	57510.26	-0.023	-0.011	0.012	-0.023	-0.011	0.012
position:	32105	57525.90	0.001	0.028	-0.115	0.001	0.028	-0.115

Average position offset:

East: 0.000 m

North: 0.000 m

Alt: 0.000 m

Position offset RMS:

East: 0.024 m

North: 0.019 m

Alt: 0.076 m

Misalignment angles for the single events [deg]:

	number	time	roll	pitch	yaw	d roll	d pitch	d yaw
angle:	32016	54959.24	0.1012	0.1685	0.2990	0.0010	-0.0022	0.0035
angle:	32017	54976.13	0.1013	0.1683	0.2988	0.0010	-0.0023	0.0033
angle:	32018	54993.25	0.1008	0.1691	0.2976	0.0005	-0.0016	0.0021
angle:	32019	55010.51	0.1003	0.1696	0.2968	0.0000	-0.0011	0.0013
angle:	32020	55027.83	0.1004	0.1699	0.2971	0.0001	-0.0008	0.0016
angle:	32021	55045.30	0.1008	0.1704	0.2983	0.0006	-0.0003	0.0028
angle:	32022	55062.91	0.1005	0.1708	0.2991	0.0002	0.0001	0.0036
angle:	32023	55080.55	0.1008	0.1710	0.2985	0.0005	0.0003	0.0030
angle:	32024	55098.25	0.1010	0.1713	0.2984	0.0008	0.0006	0.0029
angle:	32025	55116.05	0.1008	0.1718	0.2981	0.0006	0.0011	0.0026
angle:	32026	55273.75	0.0977	0.1690	0.2878	-0.0025	-0.0017	-0.0077
angle:	32027	55292.15	0.0986	0.1686	0.2874	-0.0016	-0.0021	-0.0081
angle:	32028	55310.45	0.0989	0.1698	0.2885	-0.0014	-0.0009	-0.0070
angle:	32029	55328.66	0.0979	0.1693	0.2894	-0.0024	-0.0014	-0.0061
angle:	32030	55346.83	0.0985	0.1699	0.2888	-0.0018	-0.0008	-0.0067
angle:	32031	55364.89	0.0984	0.1702	0.2892	-0.0018	-0.0005	-0.0063
angle:	32032	55382.73	0.0981	0.1706	0.2894	-0.0022	-0.0001	-0.0061
angle:	32033	55400.45	0.0979	0.1712	0.2895	-0.0023	0.0005	-0.0060
angle:	32034	55418.15	0.0968	0.1704	0.2890	-0.0035	-0.0003	-0.0065
angle:	32035	55435.88	0.0970	0.1697	0.2887	-0.0032	-0.0010	-0.0068
angle:	32036	55613.78	0.1026	0.1707	0.3024	0.0023	0.0000	0.0069
angle:	32037	55630.24	0.1030	0.1710	0.3030	0.0028	0.0003	0.0075
angle:	32038	55646.71	0.1026	0.1714	0.3030	0.0023	0.0007	0.0075
angle:	32039	55663.10	0.1021	0.1711	0.3019	0.0018	0.0004	0.0064
angle:	32040	55679.37	0.1020	0.1712	0.3012	0.0017	0.0005	0.0057
angle:	32041	55695.60	0.1012	0.1705	0.2999	0.0010	-0.0002	0.0044
angle:	32042	55711.79	0.1016	0.1708	0.2984	0.0014	0.0001	0.0029
angle:	32043	55727.93	0.1022	0.1705	0.2977	0.0019	-0.0002	0.0022

angle:	32044	55744.08	0.1023	0.1702	0.2974	0.0020	-0.0005	0.0019
angle:	32045	55760.34	0.1029	0.1697	0.2972	0.0026	-0.0010	0.0017
angle:	32046	55983.87	0.0978	0.1692	0.2891	-0.0024	-0.0015	-0.0064
angle:	32047	55998.81	0.0987	0.1686	0.2902	-0.0016	-0.0021	-0.0053
angle:	32048	56013.64	0.0999	0.1690	0.2898	-0.0003	-0.0017	-0.0057
angle:	32049	56028.45	0.1002	0.1683	0.2902	-0.0001	-0.0023	-0.0053
angle:	32050	56043.31	0.0998	0.1688	0.2901	-0.0005	-0.0019	-0.0054
angle:	32051	56058.21	0.1014	0.1684	0.2898	0.0011	-0.0023	-0.0057
angle:	32052	56073.11	0.1016	0.1690	0.2904	0.0014	-0.0017	-0.0051
angle:	32053	56087.98	0.1015	0.1694	0.2899	0.0012	-0.0012	-0.0056
angle:	32054	56102.85	0.1012	0.1695	0.2903	0.0009	-0.0012	-0.0052
angle:	32055	56117.71	0.1017	0.1695	0.2907	0.0014	-0.0012	-0.0048
angle:	32056	56132.53	0.1016	0.1700	0.2901	0.0013	-0.0007	-0.0054
angle:	32057	56147.32	0.1024	0.1703	0.2911	0.0021	-0.0004	-0.0044
angle:	32058	56322.96	0.0993	0.1704	0.3024	-0.0010	-0.0003	0.0069
angle:	32059	56343.19	0.1001	0.1712	0.3014	-0.0002	0.0006	0.0059
angle:	32060	56363.30	0.0998	0.1721	0.3007	-0.0005	0.0014	0.0052
angle:	32061	56383.32	0.1003	0.1722	0.3012	0.0000	0.0015	0.0057
angle:	32062	56403.36	0.0992	0.1723	0.3011	-0.0010	0.0016	0.0056
angle:	32063	56423.48	0.0997	0.1724	0.3003	-0.0006	0.0017	0.0048
angle:	32064	56443.58	0.1006	0.1723	0.2989	0.0003	0.0016	0.0034
angle:	32065	56463.52	0.0998	0.1725	0.2985	-0.0004	0.0018	0.0030
angle:	32066	56483.28	0.0998	0.1736	0.2972	-0.0004	0.0029	0.0017
angle:	32067	56502.86	0.1007	0.1734	0.2961	0.0004	0.0027	0.0006
angle:	32068	56522.43	0.1013	0.1735	0.2950	0.0010	0.0028	-0.0005
angle:	32069	56541.99	0.1011	0.1720	0.2946	0.0008	0.0013	-0.0009
angle:	32070	56677.72	0.0995	0.1702	0.2910	-0.0008	-0.0004	-0.0045
angle:	32071	56692.85	0.1010	0.1695	0.2917	0.0008	-0.0012	-0.0038
angle:	32072	56707.95	0.1006	0.1691	0.2915	0.0003	-0.0016	-0.0040
angle:	32073	56723.00	0.1004	0.1685	0.2904	0.0001	-0.0022	-0.0051
angle:	32074	56737.95	0.1013	0.1693	0.2911	0.0011	-0.0014	-0.0044
angle:	32075	56752.82	0.1013	0.1691	0.2912	0.0010	-0.0016	-0.0043
angle:	32076	56767.65	0.1002	0.1701	0.2916	0.0000	-0.0006	-0.0039
angle:	32077	56782.47	0.1005	0.1697	0.2910	0.0002	-0.0010	-0.0045
angle:	32078	56797.28	0.1004	0.1696	0.2912	0.0001	-0.0011	-0.0043
angle:	32079	56812.11	0.1003	0.1699	0.2896	0.0000	-0.0008	-0.0059
angle:	32080	56826.97	0.1008	0.1707	0.2901	0.0005	0.0000	-0.0054
angle:	32081	56841.81	0.1008	0.1716	0.2896	0.0005	0.0009	-0.0059
angle:	32082	57011.75	0.1001	0.1714	0.3033	-0.0001	0.0007	0.0078
angle:	32083	57031.92	0.1008	0.1717	0.3029	0.0005	0.0010	0.0075
angle:	32084	57052.01	0.0999	0.1727	0.3024	-0.0003	0.0020	0.0069
angle:	32085	57072.05	0.1005	0.1734	0.3030	0.0002	0.0027	0.0075
angle:	32086	57091.99	0.1005	0.1739	0.3025	0.0003	0.0033	0.0070
angle:	32087	57111.88	0.0999	0.1739	0.3020	-0.0004	0.0032	0.0065
angle:	32088	57131.73	0.0998	0.1742	0.3012	-0.0005	0.0035	0.0057
angle:	32089	57151.47	0.0997	0.1750	0.3003	-0.0006	0.0043	0.0048
angle:	32090	57171.09	0.1000	0.1751	0.2990	-0.0003	0.0044	0.0035
angle:	32091	57190.64	0.0988	0.1751	0.2989	-0.0015	0.0044	0.0034
angle:	32092	57210.26	0.0983	0.1745	0.2980	-0.0019	0.0038	0.0025
angle:	32093	57230.08	0.0977	0.1736	0.2975	-0.0026	0.0029	0.0020
angle:	32094	57361.87	0.1026	0.1704	0.2969	0.0024	-0.0003	0.0014
angle:	32095	57376.70	0.1017	0.1700	0.2971	0.0015	-0.0007	0.0016
angle:	32096	57391.51	0.1010	0.1694	0.2963	0.0007	-0.0013	0.0008
angle:	32097	57406.30	0.1010	0.1689	0.2960	0.0008	-0.0018	0.0005
angle:	32098	57421.02	0.1007	0.1687	0.2961	0.0004	-0.0020	0.0006
angle:	32099	57435.69	0.1004	0.1690	0.2970	0.0001	-0.0017	0.0015
angle:	32100	57450.35	0.0995	0.1683	0.2969	-0.0008	-0.0024	0.0014
angle:	32101	57465.06	0.0997	0.1687	0.2961	-0.0005	-0.0020	0.0006
angle:	32102	57479.85	0.0991	0.1699	0.2954	-0.0012	-0.0008	-0.0001
angle:	32103	57494.90	0.0993	0.1703	0.2949	-0.0010	-0.0004	-0.0006
angle:	32104	57510.26	0.0987	0.1715	0.2950	-0.0016	0.0008	-0.0005
angle:	32105	57525.90	0.0976	0.1711	0.2954	-0.0027	0.0004	-0.0001

Average Boresight Angles:

Roll: 0.1003 deg
Pitch: 0.1707 deg
Yaw: 0.2955 deg

Boresight Angle RMS:

Roll: 0.0014 deg
Pitch: 0.0017 deg
Yaw: 0.0048 deg

Success!!

Boresight Calculation finished