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1 FILE: reach_raw_20230712224726.230 OP1689269428158
2
3 2005 NOTE: The IGS precise and IGS rapid orbits were not available
4 2005 at processing time. The IGS ultra-rapid orbit was/will be used to
5 2005 process the data.
6
7 NGS OPUS-RS SOLUTION REPORT
8 =====
9 All computed coordinate accuracies are listed as 1-sigma RMS values.
10 For additional information: https://www.ngs.noaa.gov/OPUS/about.jsp#accuracy
11
12 USER: bryanenfinger@enfinger.com DATE: July 13, 2023
13 RINEX FILE: reac193w.23o TIME: 17:32:11 UTC
14
15
16 SOFTWARE: rsgps 1.38 RS252.prl 1.99.3 START: 2023/07/12 22:48:00
17 EPHEMERIS: igu22703.eph [ultra-rapid] STOP: 2023/07/12 23:59:00
18 NAV FILE: brdc1930.23n OBS USED: 4509 / 5238 : 86%
19 ANT NAME: EML_REACH_RS2 NONE QUALITY IND. 6.87/ 27.65
20 ARP HEIGHT: 2.000 NORMALIZED RMS: 0.484
21
22 REF FRAME: NAD_83(2011) (EPOCH:2010.0000) ITRF2014 (EPOCH:2023.52870)
23
24 X: 863565.686(m) 0.006(m) 863564.765(m) 0.006(m)
25 Y: -5176278.989(m) 0.019(m) -5176277.507(m) 0.019(m)
26 Z: 3613135.662(m) 0.013(m) 3613135.564(m) 0.013(m)
27
28 LAT: 34 43 38.88509 0.006(m) 34 43 38.91230 0.006(m)
29 E LON: 279 28 17.41224 0.005(m) 279 28 17.38614 0.005(m)
30 W LON: 80 31 42.58776 0.005(m) 80 31 42.61386 0.005(m)
31 EL HGT: 133.907(m) 0.022(m) 132.525(m) 0.022(m)
32 ORTHO HGT: 164.467(m) 0.027(m) [NAVD88 (Computed using GEOID18)]
33 ORTHO HGT: 539.589(usft)0.089(usft)
34
35 UTM COORDINATES STATE PLANE COORDINATES
36 UTM (Zone 17) SPC (3900 SC)
37 Northing (Y) [meters] 3842922.176 321060.625
38 Easting (X) [meters] 543167.805 652783.206
39 Convergence [degrees] 0.26860833 0.26140000
40 Point Scale 0.99962297 0.99996410
41 Combined Factor 0.99960196 0.99994308
42
43 STATE PLANE COORDINATES - International Foot
44 SPC (3900 SC)
45 Northing (Y) [feet] 1053348.507
46 Easting (X) [feet] 2141677.185
47 Convergence [degrees] 0.26140000
48 Point Scale 0.99996410
49 Combined Factor 0.99994308
50
51 US NATIONAL GRID DESIGNATOR: 17SNU4316842922(NAD 83)
52
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BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE (m)
DG7402	NCPO POLKTON CORS ARP	N345933.172	W0801037.857	43553.3
DI1682	NCLU LUMBERTON CORS ARP	N343736.336	W0790439.694	133425.9
AH6714	COLA COLUMBIA CORS ARP	N340451.557	W0810718.015	90097.0
DF6318	NC77 I77 WELCOME CNTR CORS ARP	N350721.254	W0805458.467	56361.2
DG5755	NCAL ALBEMARLE CORS ARP	N352017.303	W0801248.525	73595.8
DJ8943	NCWH WHITEVILLE CORS ARP	N341649.590	W0784259.331	173632.6
DO8857	GAAU AUGUSTA UTILITIES CORS ARP	N332817.117	W0820201.783	196731.5
DH3838	NCMO MOORESVILLE CORS ARP	N353446.877	W0804812.536	97813.9
DM3995	NCRO ROCKINGHAM CORS ARP	N345751.987	W0794747.740	71916.9

NEAREST NGS PUBLISHED CONTROL POINT

AJ5388	EA 61	N344506.014	W0803118.256	2755.3
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Residuals of position determined by individual baselines from the final position

	X	Y	Z	East	North	Up
ncpo	-0.006	0.022	-0.021	-0.002	-0.004	-0.030
nclu	-0.008	0.025	-0.012	-0.004	0.005	-0.028
cola	0.013	-0.010	0.010	0.011	0.001	0.015
nc77	0.000	0.011	-0.006	0.002	0.001	-0.012
ncal	-0.001	-0.025	0.010	-0.005	-0.005	0.026
ncwh	-0.004	0.019	-0.014	-0.001	-0.001	-0.024
gaau	0.001	0.010	-0.007	0.003	-0.000	-0.011
ncmo	0.002	-0.020	0.005	-0.001	-0.007	0.019
ncro	0.002	-0.003	0.018	0.001	0.013	0.013

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.