

DPOS REPORT
JAVAD POST-PROCESSING SERVICE
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USER:
FILE: 3001

DATE: 04.04.2019
TIME: 01:37:44.830 GPS time

SOFTWARE: DPOS(3/26/2019 1:42:02 PM) START: 2019/04/03 03:52:34.000 PM
EPHEMERIS: brdc STOP: 2019/04/03 07:43:23.000 PM
OBS USED: 11924 / 11934 TIME SPAN: 231 min
ANT NAME: JAVTRIUMPH_2A NONE Geometry factor: 9.2
ANT HEIGHT: Slant(SHMP) - 5.170 survey feet FIXED AMB: Yes
ANT DELTA N/E/H: 0.000/0.000/0.000 OVERALL RMS: 0.081 survey feet

REF FRAME: NAD83(2011) (EPOCH:2010.0000)

IGS08 (EPOCH:2019.2534)

X:	3068870.762(sft)	0.047(sft)	3068867.902(sft)	0.047(sft)
Y:	-16611078.225(sft)	0.047(sft)	-16611073.404(sft)	0.047(sft)
Z:	12310238.493(sft)	0.047(sft)	12310238.201(sft)	0.047(sft)

LAT:	N 36 15 58.26637	0.047(sft)	N 36 15 58.29479	0.047(sft)
E LON:	E 280 28 02.21188	0.047(sft)	E 280 28 02.18822	0.047(sft)
W LON:	W 79 31 57.78812	0.047(sft)	W 79 31 57.81178	0.047(sft)
EL HGT:	674.290(sft)	0.047(sft)	669.874(sft)	0.047(sft)
ORTHO HGT:	775.880(sft)	0.047(sft)	[NAVD88 (Computed using GEOID12B)]	

	UTM COORDINATES	STATE PLANE COORDINATES
	UTM (Zone 17)	SPC (NAD83(2011) /3200 North Carolina)
Northing (Y) [survey feet]	13170811.446	916222.596
Easting (X) [survey feet]	847000.716	1842942.762
Convergence [degrees]	0.86807689	-0.30746959
Point Scale	0.99981404	1.00002930
Combined Factor	0.99978179	0.99999704

US NATIONAL GRID DESIGNATOR: NONE

		BASE STATIONS USED		
PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(sft)
NONE	DRV5(CORS)	N 36 57 31.136 W	76 33 23.9019	909052.1
NONE	DRV6(CORS)	N 36 57 30.556 W	76 33 23.2129	909090.6
NONE	KYTL(CORS)	N 37 29 00.176 W	82 32 07.6953	983674.8
NONE	TN1B(CORS)	N 36 28 39.465 W	82 48 41.9627	968345.5

RESIDUALS OF POSITION						
VECTOR	dX,sft	dY,sft	dZ,sft	dN,sft	dE,sft	dU,sft
DRV5 - 3001	-0.132	0.024	-0.122	-0.070	-0.125	-0.111
DRV6 - 3001	-0.133	0.105	-0.029	0.052	-0.112	-0.120
KYTL - 3001	0.120	-0.027	0.076	0.033	0.113	0.084
TN1B - 3001	0.110	-0.084	0.056	-0.015	0.093	0.116

Solution name: TN1B - 3001 / Solution 1
Processed at: 4/4/2019 1:37:25 AM
Begin time: 03/04/2019 15:52:34.000
End time: 03/04/2019 19:43:23.000
Time span, min: 231
Rec interval, sec: 30.000
Ephemeris: Broadcast
Cut off angle,°: 12
Processing mode: Auto
Frequency: L1 + L2
Used satellites: GPS(16)/GLONASS(11)
Solution type: Fixed
Temperature, °C: 20
Pressure, hPa: 980
Humidity, %: 50

Used observations: L1, L2, P1, P2

Begin point		End point
Point name:	TN1B	3001
Session name:	tn1b0930.19d	Base1_02032019
Receiver type:	TPS NETG3	JAVAD TRIUMPH2
Receiver number:	-Unknown-	00037
Receiver ID:	401-01326	014NCYOOD95AA1K6A742KICKQG
Antenna type:	TPSG3_A1 NONE	JAVTRIUMPH_2A NONE

Serial number: 374-0677
Antenna ARP height, m: 0.000 1.564
Phase center variations: On On
Longitude: W 82°48'41.990158" W 79°31'57.810254"
Latitude: N 36°28'39.492397" N 36°15'58.295487"
Ellipsoid height, m: 1075.9571 669.9845
X, m: 642540.4436 935392.8475
Y, m: -5094571.8130 -5063065.3072
Z, m: 3771134.3760 3752168.1451

DX, m: 292852.4039
DY, m: 31506.5058
DZ, m: -18966.2308
Baseline length, m: 295152.3476

SX, m: 1.486E-1
SY, m: 1.509E-1
SZ, m: 1.501E-1
SL, m: 2.596E-1

Covariance matrix:: X Y Z
X 2.209E-2
Y -1.634E-6 2.277E-2
Z 1.202E-6 -6.485E-6 2.254E-2

Ellipsoidal distance, m: 295166.3011
Forward azimuth: 93°35'07.4862
Back azimuth: 275°31'48.9076
Elevation angle forward: -1°20'53.6773
Elevation angle backward: -1°18'00.8295
Height difference, m: -123.7407

Measurement used: 11802 of 11854 (0% discarded)
RMS residual: 0.0184
Fix ratio: 99.78%

Solution name: KYTL - 3001 / Solution 1
Processed at: 4/4/2019 1:37:31 AM
Begin time: 03/04/2019 15:52:34.000
End time: 03/04/2019 19:43:23.000
Time span, min: 231
Rec interval, sec: 30.000
Ephemeris: Broadcast
Cut off angle, °: 12
Processing mode: Auto
Frequency: L1 + L2
Used satellites: GPS(16)/GLONASS(12)
Solution type: Fixed
Temperature, °C: 20
Pressure, hPa: 980
Humidity, %: 50

Used observations: L1, L2, P1, P2

	Begin point	End point
Point name:	KYTL	3001
Session name:	kyt10930.19d	Base1_02032019
Receiver type:	TRIMBLE NETR5	JAVAD TRIUMPH2
Receiver number:	-Unknown-	00037
Receiver ID:	4618K01164	014NCYOOD95AA1K6A742KICKQG
Antenna type:	TRM55971.00 NONE	JAVTRIUMPH_2A NONE
Serial number:	30137174	
Antenna ARP height, m:	0.000	1.564
Phase center variations:	On	On
Longitude:	W 82°32'07.723111"	W 79°31'57.810421"
Latitude:	N 37°29'00.204905"	N 36°15'58.294284"
Ellipsoid height, m:	609.2067	669.9940
X, m:	658352.9246	935392.8478
Y, m:	-5024728.0901	-5063065.3318
Z, m:	3860214.4138	3752168.1169

DX, m: 277039.9232
DY, m: -38337.2416
DZ, m: -108046.2969

Baseline length, m: 299824.7245

SX, m: 1.510E-1
SY, m: 1.531E-1
SZ, m: 1.524E-1
SL, m: 2.635E-1

Covariance matrix::

	X	Y	Z
X	2.279E-2		
Y	-1.453E-6	2.344E-2	
Z	1.070E-6	-5.924E-6	2.321E-2

Ellipsoidal distance, m: 299843.1549
Forward azimuth: 115°52'00.2100
Back azimuth: 297°40'08.2176
Elevation angle forward: -1°20'33.8492
Elevation angle backward: -1°20'59.6666
Height difference, m: 18.5280

Measurement used: 11924 of 11934 (0% discarded)
RMS residual: 0.0159
Fix ratio: 99.56%

Solution name: DRV6 - 3001 / Solution 1
Processed at: 4/4/2019 1:37:37 AM
Begin time: 03/04/2019 15:52:34.000
End time: 03/04/2019 19:43:23.000
Time span, min: 231
Rec interval, sec: 30.000
Ephemeris: Broadcast
Cut off angle, °: 12
Processing mode: Auto
Frequency: L1 + L2
Used satellites: GPS(16)
Solution type: Fixed
Temperature, °C: 20
Pressure, hPa: 980
Humidity, %: 50

Used observations: L1, L2, P1, P2

	Begin point	End point
Point name:	DRV6	3001
Session name:	drv60930.19d	Base1_02032019
Receiver type:	TRIMBLE NETRS	JAVAD TRIUMPH2
Receiver number:	-Unknown-	00037
Receiver ID:	4744140967	014NCYOOD95AA1K6A742KICKQG
Antenna type:	TRM41249USCG SCIT	JAVTRIUMPH_2A NONE
Serial number:	60004112	
Antenna ARP height, m:	0.000	1.564
Phase center variations:	On	On
Longitude:	W 76°33'23.233676"	W 79°31'57.813163"
Latitude:	N 36°57'30.586548"	N 36°15'58.294470"
Ellipsoid height, m:	-74.9234	669.7897
X, m:	1186322.8560	935392.7708
Y, m:	-4962927.5136	-5063065.2915
Z, m:	3813699.9347	3752168.0847

DX, m: -250930.0853
DY, m: -100137.7779
DZ, m: -61531.8499
Baseline length, m: 277091.4124

SX, m: 1.395E-1
SY, m: 1.415E-1
SZ, m: 1.408E-1
SL, m: 2.436E-1

Covariance matrix::

	X	Y	Z
X	1.947E-2		
Y	-1.327E-6	2.002E-2	
Z	1.013E-6	-5.015E-6	1.983E-2

Ellipsoidal distance, m: 277109.1412
Forward azimuth: -105°12'12.1378

Back azimuth: 73°01'16.6633
Elevation angle forward: -1°11'47.9047
Elevation angle backward: -1°17'25.9368
Height difference, m: 226.9890

Measurement used: 7094 of 7096 (0% discarded)
RMS residual: 0.0155
Fix ratio: 98.75%

Solution name: DRV5 - 3001 / Solution 1
Processed at: 4/4/2019 1:37:40 AM
Begin time: 03/04/2019 15:52:34.000
End time: 03/04/2019 19:43:23.000
Time span, min: 231
Rec interval, sec: 30.000
Ephemeris: Broadcast
Cut off angle, °: 12
Processing mode: Auto
Frequency: L1 + L2
Used satellites: GPS (16)
Solution type: Fixed
Temperature, °C: 20
Pressure, hPa: 980
Humidity, %: 50

Used observations: L1, L2, P1, P2

	Begin point	End point
Point name:	DRV5	3001
Session name:	drv50930.19d	Base1_02032019
Receiver type:	TRIMBLE NETRS	JAVAD TRIUMPH2
Receiver number:	-Unknown-	00037
Receiver ID:	4744140903	014NCYOOD95AA1K6A742KICKQG
Antenna type:	TRM41249USCG SCIT	JAVTRIUMPH_2A NONE
Serial number:	60004112	
Antenna ARP height, m:	0.000	1.564
Phase center variations:	On	On
Longitude:	W 76°33'23.922626"	W 79°31'57.812920"
Latitude:	N 36°57'31.166856"	N 36°15'58.294943"
Ellipsoid height, m:	-74.7446	669.7578
X, m:	1186303.7889	935392.7737
Y, m:	-4962921.0575	-5063065.2742
Z, m:	3813714.2621	3752168.0907

DX, m: -250911.0151
DY, m: -100144.2167
DZ, m: -61546.1713
Baseline length, m: 277079.6507

SX, m: 1.395E-1
SY, m: 1.414E-1
SZ, m: 1.408E-1
SL, m: 2.434E-1

Covariance matrix::

	X	Y	Z
X	1.945E-2		
Y	-1.130E-6	1.999E-2	
Z	8.717E-7	-4.706E-6	1.981E-2

Ellipsoidal distance, m: 277097.3760
Forward azimuth: -105°12'28.7101
Back azimuth: 73°01'00.4901
Elevation angle forward: -1°11'47.7560
Elevation angle backward: -1°17'25.7069
Height difference, m: 226.9248

Measurement used: 7294 of 7294 (0% discarded)
RMS residual: 0.0159
Fix ratio: 99.90%