

## General Information

### Mission Information

Project name	13284-1805_20190501
Processing date	2019-05-02 12:38:32
Mission date	2019-05-01 15:26:20
Mission duration	02:02:37.000
Processing mode	IN-Fusion SmartBase
GPS Station	ASB

### Rover Hardware Information

Product	POS AV 510 VER6 HW2.5-12
Serial number	S/N7419
IMU type	46
Receiver type	BD982
Antenna type	AV37

## Project File List

### Rover Data Files

File name	File type
190501_152601_INS-GPS_1.raw	POS Data

### Input Files

File Name	File type
Ephm1210.19g	GLONASS Broadcast Ephemeris
Ephm1210.19n	GPS Broadcast Ephemeris
WVCL121A.19g	GLONASS Broadcast Ephemeris
WVOH121A.19n	GPS Broadcast Ephemeris
WVOH121A.19g	GLONASS Broadcast Ephemeris
WVNR121A.19o	GNSS SingleBase
WVNR121A.19n	GPS Broadcast Ephemeris
WVNR121A.19g	GLONASS Broadcast Ephemeris
WVLE121A.19o	GNSS SingleBase
WVLE121A.19n	GPS Broadcast Ephemeris
WVLE121A.19g	GLONASS Broadcast Ephemeris
WVGB121A.19o	GNSS SingleBase
WVGB121A.19n	GPS Broadcast Ephemeris
WVGB121A.19g	GLONASS Broadcast Ephemeris
WVFR121A.19o	GNSS SingleBase
WVFR121A.19n	GPS Broadcast Ephemeris
WVFR121A.19g	GLONASS Broadcast Ephemeris
WVFL121A.19o	GNSS SingleBase
WVFL121A.19n	GPS Broadcast Ephemeris
WVFL121A.19g	GLONASS Broadcast Ephemeris
WVCL121A.19o	GNSS SingleBase
WVCL121A.19n	GPS Broadcast Ephemeris
WVOH121A.19o	GNSS SingleBase
igu20512_18.sp3	GPS Precise Ephemeris
igu20513_18.sp3	GPS Precise Ephemeris
loya121o.19o	GNSS SingleBase
loya121o.19n	GPS Broadcast Ephemeris
loya121o.19g	GLONASS Broadcast Ephemeris
ls04121r.19o	GNSS SingleBase
ls04121r.19n	GPS Broadcast Ephemeris
ls04121r.19g	GLONASS Broadcast Ephemeris
ls04121q.19o	GNSS SingleBase
ls04121q.19n	GPS Broadcast Ephemeris
ls04121q.19g	GLONASS Broadcast Ephemeris
ls04121p.19o	GNSS SingleBase
ls04121p.19n	GPS Broadcast Ephemeris
ls04121p.19g	GLONASS Broadcast Ephemeris
ls04121o.19o	GNSS SingleBase
ls04121o.19n	GPS Broadcast Ephemeris
ls04121o.19g	GLONASS Broadcast Ephemeris
loyp121t.19o	GNSS SingleBase
loyp121t.19n	GPS Broadcast Ephemeris
loyp121t.19g	GLONASS Broadcast Ephemeris
loyp121s.19o	GNSS SingleBase
loyp121s.19n	GPS Broadcast Ephemeris
loyp121s.19g	GLONASS Broadcast Ephemeris
loyp121r.19o	GNSS SingleBase
loyp121r.19n	GPS Broadcast Ephemeris
loyp121r.19g	GLONASS Broadcast Ephemeris
loyp121q.19o	GNSS SingleBase
loyp121q.19n	GPS Broadcast Ephemeris
loyp121q.19g	GLONASS Broadcast Ephemeris
loyp121p.19o	GNSS SingleBase
loyp121p.19n	GPS Broadcast Ephemeris
loyp121p.19g	GLONASS Broadcast Ephemeris

File Name	File type
loyp121o.19o	GNSS SingleBase
loyp121o.19n	GPS Broadcast Ephemeris
loyp121o.19g	GLONASS Broadcast Ephemeris
loya121t.19o	GNSS SingleBase
loya121t.19n	GPS Broadcast Ephemeris
loya121t.19g	GLONASS Broadcast Ephemeris
loya121s.19o	GNSS SingleBase
loya121s.19n	GPS Broadcast Ephemeris
loya121s.19g	GLONASS Broadcast Ephemeris
loya121r.19o	GNSS SingleBase
loya121r.19n	GPS Broadcast Ephemeris
loya121r.19g	GLONASS Broadcast Ephemeris
loya121q.19o	GNSS SingleBase
loya121q.19n	GPS Broadcast Ephemeris
loya121q.19g	GLONASS Broadcast Ephemeris
loya121p.19o	GNSS SingleBase
loya121p.19n	GPS Broadcast Ephemeris
loya121p.19g	GLONASS Broadcast Ephemeris
ls04121s.19o	GNSS SingleBase
ls04121s.19n	GPS Broadcast Ephemeris
ls04121s.19g	GLONASS Broadcast Ephemeris
ls04121t.19o	GNSS SingleBase
ls04121t.19n	GPS Broadcast Ephemeris
ls04121t.19g	GLONASS Broadcast Ephemeris

## Output Files

Filename	File type
sbet_20190501.out	SBET Trajectory File

## Rover Data Summary

First raw data file	190501_152601_INS-GPS_1.raw		
Last raw data file	190501_152601_INS-GPS_1.raw		
Start GPS week	2051		
Start time	314761.887 (5/1/2019 3:26:01 PM)		
End time	322119.452 (5/1/2019 5:28:39 PM)		
Start of fine alignment	315142.141 (5/1/2019 3:32:22 PM)		
Available subsystems	Primary GNSS, Gimbal, IMU		
POS Event Input	Event 1 Input, Event 4 Input, Event 5 Input, Event 6 Input		
Correction data	None		
<b>IMU Installation Lever Arms &amp; Mounting Angles</b>			
Gimbal to IMU lever arm [m]	0.000	0.000	0.000
Gimbal to IMU mounting angles [deg]	0.000	0.000	0.000
Gimbal to Primary GNSS lever arm [m]	-0.039	-0.008	-0.729
Gimbal to Primary GNSS lever arm std dev [m]	-1.000		
Aircraft to Reference mounting angles [deg]	0.000	0.000	0.000

## Raw Data QC

### Raw IMU Import QC Summary

IMU data input file	imu_Mission 1.dat
IMU data check log file	imudt_20190501.log
IMU Records Processed	1471869
Termination Status	Normal
IMU Anomalies	0

## SmartBase Processing Summary

### Smart Select Options

Archive enabled	False
User database enabled	False
Include high-rate data sites	False
Target GNSS Selection	GNSS

### Basestation Selection

Date	ID	Dist	Data Type	Rate	Service	Database	Status
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### SmartBase Results

SmartBase status	
Primary station Id	
Primary station data rate [sec]	0.0
VRS/ASB generation rate [sec]	0.0
VRS/ASB timespan	
Number of reference stations	0
Primary station GPS measurement usage [%]	0.0
Average number of satellites per epoch	0.0
Max number of GPS stations used	0
Min number of GPS stations used	0
Total full data gap [sec]	0
Total individual satellite data gap [sec]	0
GPS precise vs. broadcast ephemeris used	0.0 % / 0.0 %
Termination Status	

## **SmartBase Quality Check**

## GNSS QC

### GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length [km]	0.55	49.83	
Number of GPS SV	6	11	9
Number of GLONASS SV	0	7	6
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	0	0
Total number of SV	7	17	15
PDOP	1.15	3.87	1.53
QC Solution Gaps	1.00	1.00	
Solution Type	Fixed	Float	No solution
Epoch (s)	7336.00	0.00	1.00
Percentage	99.99	0.00	0.01



## GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion SmartBase		
Stabilized mount	True		
Base station	ASB		
Processing start time	314762.000 (5/1/2019 3:26:02 PM)		
Processing end time	322119.000 (5/1/2019 5:28:39 PM)		
Initial attitude source	Real-Time VNAV/RNAV Attitude		
IMU Sensor Context	Processing with Onboard IMU		
Gimbal to IMU lever arm [m]	0.000	0.000	0.000
Gimbal to IMU mounting angles [deg]	0.000	0.000	0.000
Gimbal to Primary GNSS lever arm [m]	-0.039	-0.008	-0.729
Gimbal to Primary GNSS lever arm std dev [m]	0.030	0.030	0.030
Aircraft to Reference mounting angles [deg]	0.000	0.000	0.000