

## General Information

### Mission Information

Project name	13
Processing date	2019-03-01 00:15:43
Mission date	2019-02-27 12:32:58
Mission duration	03:36:46.000
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
190227_123259_INS-GPS_1.raw	POS Data

### Input Files

File Name	File type
Ephm0580.19g	GLONASS Broadcast Ephemeris
Ephm0580.19n	GPS Broadcast Ephemeris
WVCV058A.19g	GLONASS Broadcast Ephemeris
WVOH058A.19n	GPS Broadcast Ephemeris
WVOH058A.19g	GLONASS Broadcast Ephemeris
WVNR058A.19o	GNSS SingleBase
WVNR058A.19n	GPS Broadcast Ephemeris
WVNR058A.19g	GLONASS Broadcast Ephemeris
WVLE058A.19o	GNSS SingleBase
WVLE058A.19n	GPS Broadcast Ephemeris
WVLE058A.19g	GLONASS Broadcast Ephemeris
WVGB058A.19o	GNSS SingleBase
WVGB058A.19n	GPS Broadcast Ephemeris
WVGB058A.19g	GLONASS Broadcast Ephemeris
WVFR058A.19o	GNSS SingleBase
WVFR058A.19n	GPS Broadcast Ephemeris
WVFR058A.19g	GLONASS Broadcast Ephemeris
WVFL058A.19o	GNSS SingleBase
WVFL058A.19n	GPS Broadcast Ephemeris
WVFL058A.19g	GLONASS Broadcast Ephemeris
WVCV058A.19o	GNSS SingleBase
WVCV058A.19n	GPS Broadcast Ephemeris
WVOH058A.19o	GNSS SingleBase
Is080580.19o	GNSS SingleBase
igr20423.sp3	GPS Precise Ephemeris
igu20422_00.sp3	GPS Precise Ephemeris
igu20422_06.sp3	GPS Precise Ephemeris
igu20422_12.sp3	GPS Precise Ephemeris
igu20422_18.sp3	GPS Precise Ephemeris
igu20423_00.sp3	GPS Precise Ephemeris
igu20423_06.sp3	GPS Precise Ephemeris
igu20423_12.sp3	GPS Precise Ephemeris
igu20423_18.sp3	GPS Precise Ephemeris
igu20424_00.sp3	GPS Precise Ephemeris
igu20424_06.sp3	GPS Precise Ephemeris
igu20424_12.sp3	GPS Precise Ephemeris
igu20424_18.sp3	GPS Precise Ephemeris

### Output Files

Filename	File type
sbet_20190227.out	SBET Trajectory File

## Rover Data Summary

First raw data file	190227_123259_INS-GPS_1.raw		
Last raw data file	190227_123259_INS-GPS_1.raw		
Start GPS week	2042		
Start time	304377.084 (2/27/2019 12:32:39 PM)		
End time	317384.311 (2/27/2019 4:09:26 PM)		
Start of fine alignment	304754.667 (2/27/2019 12:38:56 PM)		
Available subsystems	Primary GNSS, Gimbal, IMU		
POS Event Input	Event 1 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_20190227.log
IMU Records Processed	2601907
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]	0.21	73.84	
Number of GPS SV	8	11	10
Number of GLONASS SV	0	8	6
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	0	0
Total number of SV	9	17	15
PDOP	1.12	1.75	1.34
QC Solution Gaps	1.00	1.00	
Solution Type	Fixed	Float	No solution
Epoch (s)	12968.00	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	304378.000 (2/27/2019 12:32:40 PM)		
Processing end time	317384.000 (2/27/2019 4:09:26 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]	0.648	-0.088	-0.751
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