

## General Information

### Mission Information

Project name	13284-1909_20190324b
Processing date	2019-03-27 19:01:05
Mission date	2019-03-24 17:05:58
Mission duration	04:09:28.000
Processing mode	IN-Fusion SmartBase
GPS Station	ASB

### Rover Hardware Information

Product	POS AV 610 VER6 HW2.5-12
Serial number	S/N9865
IMU type	57
Receiver type	BD982
Antenna type	AV37

## Project File List

### Rover Data Files

File name	File type
190324_170539_INS-GPS_1.raw	POS Data

### Input Files

File Name	File type
Ephm0830.19g	GLONASS Broadcast Ephemeris
Ephm0830.19n	GPS Broadcast Ephemeris
loyu083m.19o	GNSS SingleBase
loyu083n.19o	GNSS SingleBase
loyu083o.19o	GNSS SingleBase
loyu083p.19o	GNSS SingleBase
loyu083q.19o	GNSS SingleBase
loyu083r.19o	GNSS SingleBase
loyu083s.19o	GNSS SingleBase
loyu083t.19o	GNSS SingleBase
loyu083u.19o	GNSS SingleBase
ncmt083m.19o	GNSS SingleBase
ncmt083n.19o	GNSS SingleBase
ncmt083o.19o	GNSS SingleBase
ncmt083p.19o	GNSS SingleBase
ncmt083q.19o	GNSS SingleBase
ncmt083r.19o	GNSS SingleBase
ncmt083s.19o	GNSS SingleBase
ncmt083t.19o	GNSS SingleBase
ncmt083u.19o	GNSS SingleBase
ncwk083m.19o	GNSS SingleBase
ncwk083n.19o	GNSS SingleBase
ncwk083o.19o	GNSS SingleBase
ncwk083p.19o	GNSS SingleBase
ncwk083q.19o	GNSS SingleBase
ncwk083r.19o	GNSS SingleBase
ncwk083s.19o	GNSS SingleBase
ncwk083t.19o	GNSS SingleBase
ncwk083u.19o	GNSS SingleBase
vaab083m.19o	GNSS SingleBase
vaab083n.19o	GNSS SingleBase
vaab083o.19o	GNSS SingleBase
vaab083p.19o	GNSS SingleBase
vaab083q.19o	GNSS SingleBase
vaab083r.19o	GNSS SingleBase
vaab083s.19o	GNSS SingleBase
vaab083t.19o	GNSS SingleBase
vaab083u.19o	GNSS SingleBase
varl083m.19o	GNSS SingleBase
varl083n.19o	GNSS SingleBase
varl083o.19o	GNSS SingleBase
varl083p.19o	GNSS SingleBase
varl083q.19o	GNSS SingleBase
varl083r.19o	GNSS SingleBase
varl083s.19o	GNSS SingleBase
varl083t.19o	GNSS SingleBase
varl083u.19o	GNSS SingleBase
vawe083m.19o	GNSS SingleBase
vawe083n.19o	GNSS SingleBase
vawe083o.19o	GNSS SingleBase
vawe083p.19o	GNSS SingleBase
vawe083q.19o	GNSS SingleBase
vawe083r.19o	GNSS SingleBase
vawe083r51.19o	GNSS SingleBase
vawe083r52.19o	GNSS SingleBase

File Name	File type
vawe083s.19o	GNSS SingleBase
vawe083t.19o	GNSS SingleBase
vawe083u.19o	GNSS SingleBase
vawy083m.19o	GNSS SingleBase
vawy083n.19o	GNSS SingleBase
vawy083o.19o	GNSS SingleBase
vawy083p.19o	GNSS SingleBase
vawy083q.19o	GNSS SingleBase
vawy083r.19o	GNSS SingleBase
vawy083s.19o	GNSS SingleBase
vawy083t.19o	GNSS SingleBase
vawy083u.19o	GNSS SingleBase
wvbf083m.19o	GNSS SingleBase
wvbf083n.19o	GNSS SingleBase
wvbf083o.19o	GNSS SingleBase
wvbf083p.19o	GNSS SingleBase
wvbf083q.19o	GNSS SingleBase
wvbf083r.19o	GNSS SingleBase
wvbf083s.19o	GNSS SingleBase
wvbf083t.19o	GNSS SingleBase
wvbf083u.19o	GNSS SingleBase
KYTL083A.19g	GLONASS Broadcast Ephemeris
WVSW083A.19n	GPS Broadcast Ephemeris
WVSW083A.19g	GLONASS Broadcast Ephemeris
WVSA083A.19o	GNSS SingleBase
WVSA083A.19n	GPS Broadcast Ephemeris
WVSA083A.19g	GLONASS Broadcast Ephemeris
WVOH083A.19o	GNSS SingleBase
WVOH083A.19n	GPS Broadcast Ephemeris
WVOH083A.19g	GLONASS Broadcast Ephemeris
WVLE083A.19o	GNSS SingleBase
WVLE083A.19n	GPS Broadcast Ephemeris
WVLE083A.19g	GLONASS Broadcast Ephemeris
WVLA083A.19o	GNSS SingleBase
WVLA083A.19n	GPS Broadcast Ephemeris
WVLA083A.19g	GLONASS Broadcast Ephemeris
WVAT083A.19o	GNSS SingleBase
WVAT083A.19n	GPS Broadcast Ephemeris
WVAT083A.19g	GLONASS Broadcast Ephemeris
KYTL083A.19o	GNSS SingleBase
KYTL083A.19n	GPS Broadcast Ephemeris
WVSW083A.19o	GNSS SingleBase
igr20461.sp3	GPS Precise Ephemeris
igr20462.sp3	GPS Precise Ephemeris
igu20463_00.sp3	GPS Precise Ephemeris
igu20463_06.sp3	GPS Precise Ephemeris
igu20463_12.sp3	GPS Precise Ephemeris

## Output Files

Filename	File type
sbet_20190324b.out	SBET Trajectory File

## Rover Data Summary

First raw data file	190324_170539_INS-GPS_1.raw		
Last raw data file	190324_170539_INS-GPS_1.raw		
Start GPS week	2046		
Start time	61539.154 (3/24/2019 5:05:39 PM)		
End time	76508.844 (3/24/2019 9:15:08 PM)		
Start of fine alignment	61869.044 (3/24/2019 5:11:09 PM)		
Available subsystems	Primary GNSS, Gimbal, IMU		
POS Event Input	Event 1 Input, Event 2 Input, Event 3 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]	0.000	0.000	0.000
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_20190324b.log
IMU Records Processed	2993240
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]	5.58	112.83	
Number of GPS SV	7	11	9
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	19	15
PDOP	1.06	2.57	1.53
QC Solution Gaps	1.00	1.00	
Solution Type	Fixed	Float	No solution
Epoch (s)	14181.00	721.00	28.00
Percentage	94.98	4.83	0.19



## GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion SmartBase		
Stabilized mount	True		
Base station	ASB		
Processing start time	61540.000 (3/24/2019 5:05:40 PM)		
Processing end time	76508.000 (3/24/2019 9:15:08 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]	-0.016	0.008	-0.680
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