

**Project** 2017-03-03 A  
**Organization** Pendulum Surveying  
**Operator** Shawn Billings  
**Created** 03/03/2017 15:28:59



**Receiver Name** 9DT\_00310  
**Receiver S/N** 00310  
**Receiver ID** 1WUDU9XSOTKR14T1LGYHOEA9DT  
**J-Field Version** 2.0.5.750  
**GNSS FW Version** 3.6.9.170110

Coordinate System	NAD83(2011) / Texas North Central / NAVD 88		
Default name	NAD83(2011) / Texas North Central   NAVD 88		
Type	Grid System	Epoch	2010.0000
Geodetic Datum			
Semi-major axis	6378137.000m	Inverse flattening	1 / 298.257222101
Prime meridian	00°00'00"		
HTDP WGS84(ITRF2008) to NAD83(2011) / NAVD 88 / SPCS83 Texas North Central zone			
Area	31°44'24"N...34°34'48"N × 103°03'00"W...094°00'00"W		
Geoid			
Geoid model file	g2012au_south.bin		
Standard US State Plane 1983 Model			
Zone ID	TXNC	Semi-major axis	20925604.4742 ft
Flattening	0.003352811	Prime meridian	000°00'00.00000"E
Forward	on		



Base1	Code and Description		Northing	Easting	Ortho Height
@2010.0000	SET 60d NAIL WITH WASHER		6852468.6883 ft	3100059.2079 ft	331.6526 ft
Page	Page0	Code	_____	Tag	_____
WGS84 (ITRF2008) @2017.5000			32°24'42.07491"N	094°49'57.17436"W	240.9787 ft
Base			6852468.6883 ft	3100059.2079 ft	331.6526 ft
Local Time	03/03/2017 07:00:00		Time UTC	03/03/2017 12:00:00	
Antenna	JAVTRIUMPH_1MR NONE		Vertical Antenna Height		0.0000 ft
Epochs	4294967295	Satellites	10+8	Duration	4363.000 sec
Solution	Fixed / CORS	Confidence	_____	Consistency	_____
HRMS	0.0160 ft	VRMS	0.0113 ft	3DRMS	0.0196 ft
HDOP	0.8318	PDOP	0.8318	GDOP	0.8318
Adjustment Delta			-1.3128 ft	-1.4892 ft	7.6645 ft
95% Confidence Ellipse		σa:0.028 ft	σb:0.028 ft	θ:270°29'34"	σh:0.022 ft
Raw Files	Base1_153350.jpg				

Disconnect
Stop Base
1s 2ep 1s

Waiting ...

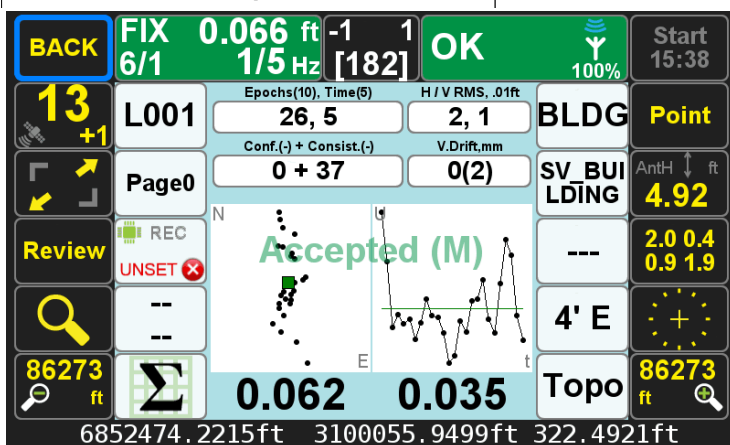
**UHF**  
 Base ID: 88  
 Ref. Frame: NAD83(2011)  
 Format: RTCM 3.0 Min  
 Period: 1 Sec  
 Frequency: 462.37500 MHz  
 Mod., Band.: DQPSK, 12.5 KHz  
 FEC, Scramb.: On, On  
 Out. Power: 1000/30 mW/dBm

Rover: Triumph-LS 9DT\_00310  
 Base: TRIUMPH\_1M 25095  
**[Auto] Base1 SET 60d NAIL WITH WA.**  
 N 6852470.0014ft      2D Delta: 0.32 ft  
 E 3100060.6973ft      Δ H: 4.48 ft  
 H 323.9881ft      Azimuth: ---  
 NAD83(2011) / Texas North Central / NAVD 88  
 Ant. Type: JAVTRIUMPH\_1MR NONE  
 Ant. Height: 0.0 ft      Vertical

From Base
To Base
Recall
DPOS
Done



<b>L001</b>	<b>Code and Description</b>		<b>Northing</b>	<b>Easting</b>	<b>Ortho Height</b>
@2010.0000	SV_BUILDING 4' E		6852472.9087 ft	3100054.4607 ft	330.1566 ft
<b>Page</b>	Page0	<b>Code</b>	SV_BUILDING	<b>Tag</b>	BLDG
<b>WGS84 (ITRF2008) @2017.5000</b>			32°24'42.11829"N	094°49'57.22799"W	239.4827 ft
<b>Base</b>			6852468.6885 ft	3100059.2081 ft	331.6526 ft
<b>Local Time</b>	03/03/2017 15:37:39		<b>Time UTC</b>	03/03/2017 20:37:39	
<b>Antenna</b>	JAVTRIUMPH_LSA NONE		<b>Vertical Antenna Height</b>		4.9213 ft
<b>Epochs</b>	26	<b>Satellites</b>	8+5	<b>Duration</b>	5.000 sec
<b>Solution</b>	Fixed / RTK	<b>Confidence</b>	—	<b>Consistency</b>	37.500
<b>HRMS</b>	0.0161 ft	<b>VRMS</b>	0.0080 ft	<b>3DRMS</b>	0.0180 ft
<b>HDOP</b>	0.7501	<b>PDOP</b>	1.7309	<b>GDOP</b>	2.0004
<b>Adjustment Delta</b>			-1.3128 ft	-1.4892 ft	7.6645 ft
<b>95% Confidence Ellipse</b>		σ <sub>a</sub> :0.030 ft	σ <sub>b</sub> :0.026 ft	θ:308°55'32"	σ <sub>h</sub> :0.016 ft





<b>L002</b>	<b>Code and Description</b>		<b>Northing</b>	<b>Easting</b>	<b>Ortho Height</b>
@2010.0000	SV_BUILDING 4' E		6852472.9524 ft	3100051.7256 ft	330.0140 ft
<b>Page</b>	<b>Page0</b>	<b>Code</b>	SV_BUILDING	<b>Tag</b>	BLDG
<b>WGS84 (ITRF2008) @2017.5000</b>			32°24'42.11967"N	094°49'57.25986"W	239.3401 ft
<b>Base</b>			6852468.6885 ft	3100059.2081 ft	331.6526 ft
<b>Local Time</b>	03/03/2017 15:39:07		<b>Time UTC</b>	03/03/2017 20:39:07	
<b>Antenna</b>	JAVTRIUMPH_LSA NONE		<b>Vertical Antenna Height</b>		4.9213 ft
<b>Epochs</b>	22	<b>Satellites</b>	9+5	<b>Duration</b>	5.000 sec
<b>Solution</b>	Fixed / RTK	<b>Confidence</b>	3.750	<b>Consistency</b>	16.500
<b>HRMS</b>	0.0317 ft	<b>VRMS</b>	0.0093 ft	<b>3DRMS</b>	0.0330 ft
<b>HDOP</b>	0.7191	<b>PDOP</b>	1.6234	<b>GDOP</b>	1.8600
<b>Adjustment Delta</b>			-1.3128 ft	-1.4892 ft	7.6645 ft
<b>95% Confidence Ellipse</b>		σa:0.058 ft	σb:0.051 ft	θ:304°35'3"	σh:0.018 ft

**BACK** **FIX** 0.052 ft -5 -3 **OK** **Stop** 15:39

**14** **L002** Epochs(10), Time(5) H/V RMS, .01ft BLDG Point

8, 1 2, 1

Conf.(-) + Consist.(-) V.Drift,mm

0 + 10 8(2)

SV\_BUI LDING AntH ↓ ft 4.92

Page0

Review REC UNSET

0.284ft 0.044ft

4' E APP 300 4

12.23 ft 0.042 0.033 Topo 12.23 ft

6852473.9487ft 3100056.0273ft 322.4478ft

Failed, jumps=4 eng=6.0

**BACK** **FIX** 0.049 ft -1 -4 **OK** **Stop** 15:39

**14** **L002** Epochs(10), Time(5) H/V RMS, .01ft BLDG Point

8, 1 2, 1

Conf.(-) + Consist.(-) V.Drift,mm

0 + 0 8(2)

SV\_BUI LDING AntH ↓ ft 4.92

Page0

Review REC UNSET

0.284ft 0.044ft

4' E APP 300 6

12.23 ft 0.042 0.033 Topo 12.23 ft

6852473.9487ft 3100056.0273ft 322.4478ft

Failed, jumps=4 eng=6.0

**BACK** **FIX** 0.049 ft -2 0 **OK** **Stop** 15:39

**14** **L002** Epochs(10), Time(5) H/V RMS, .01ft BLDG Point

8, 1 2, 1

Conf.(-) + Consist.(-) V.Drift,mm

0 + 0 8(2)

SV\_BUI LDING AntH ↓ ft 4.92

Page0

Review REC UNSET

0.284ft 0.044ft

4' E APP 300 7

12.23 ft 0.042 0.033 Topo 12.23 ft

6852473.9487ft 3100056.0273ft 322.4478ft

Failed, jumps=4 eng=6.0

**BACK** **FIX** 0.062 ft -5 0 **OK** **Start** 15:39

**14** **L002** Epochs(10), Time(5) H/V RMS, .01ft BLDG Point

22, 5 3, 1

Conf.(-) + Consist.(-) V.Drift,mm

3.75 + 16 -4(3)

SV\_BUI LDING AntH ↓ ft 4.92

Page0

Review REC UNSET

2.74ft 0.143ft

4' E APP 300

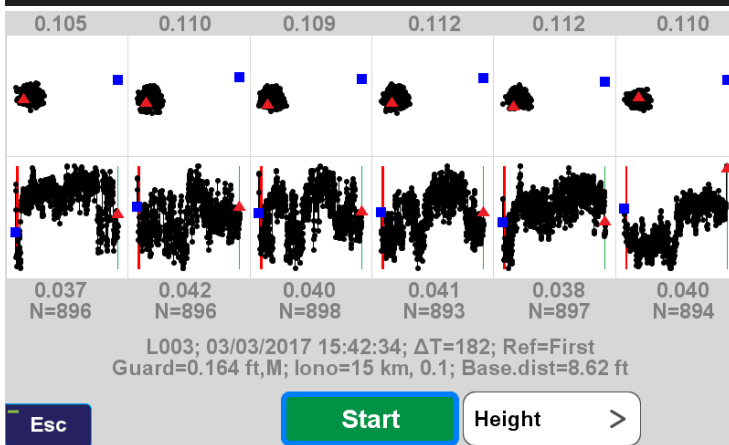
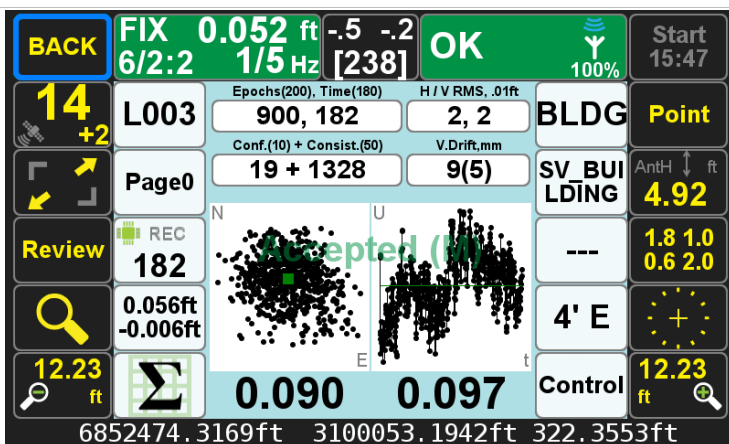
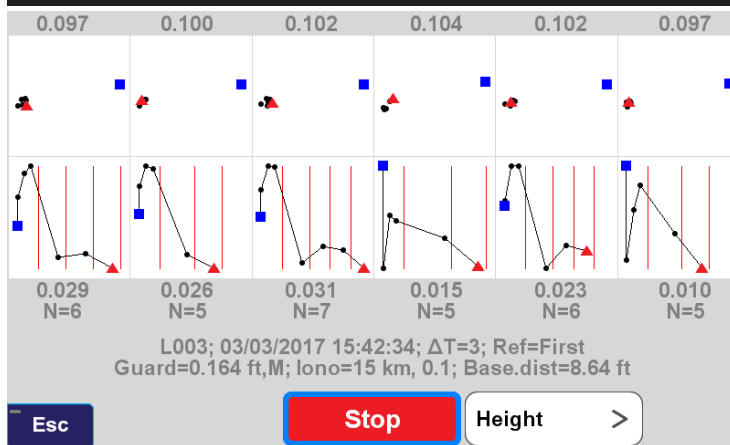
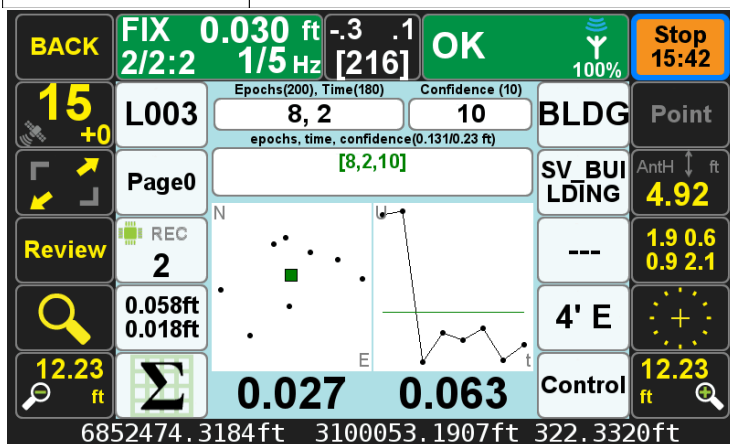
12.23 ft 0.129 0.030 Topo 12.23 ft

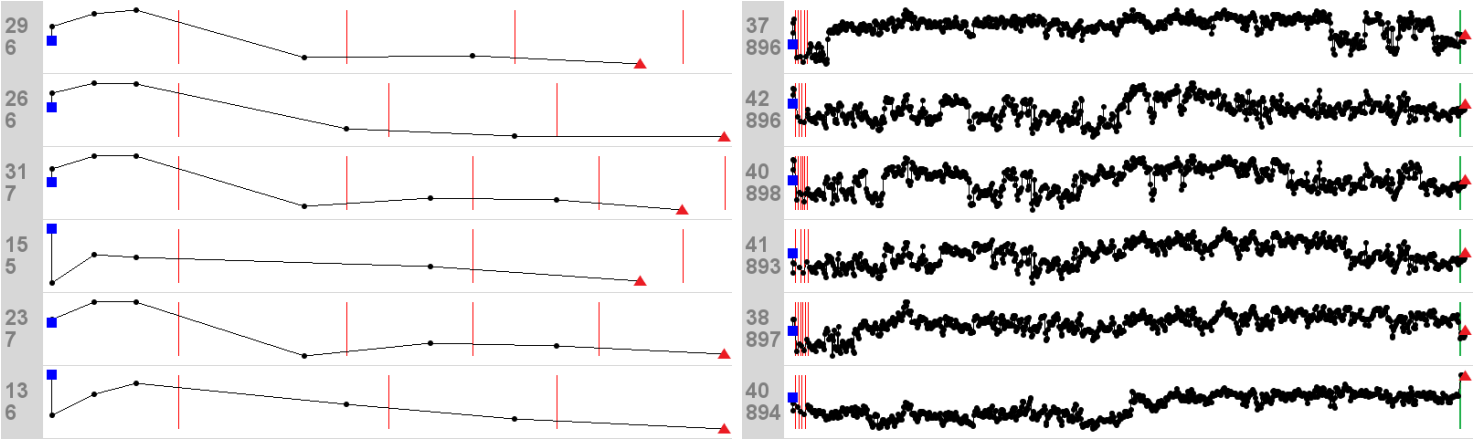
6852474.2652ft 3100053.2148ft 322.3496ft

Accepted (M)

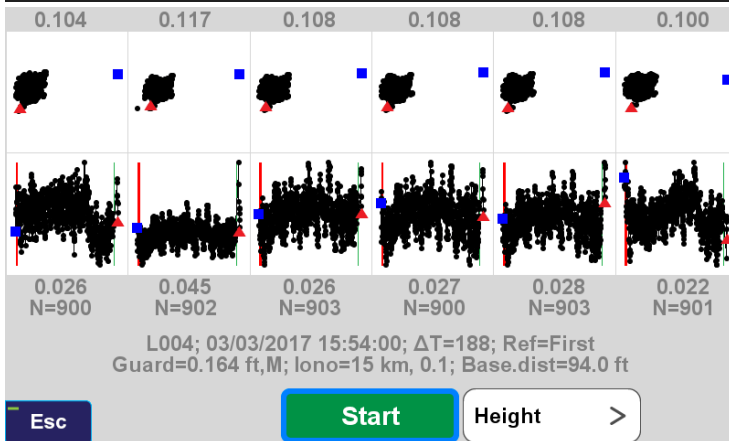
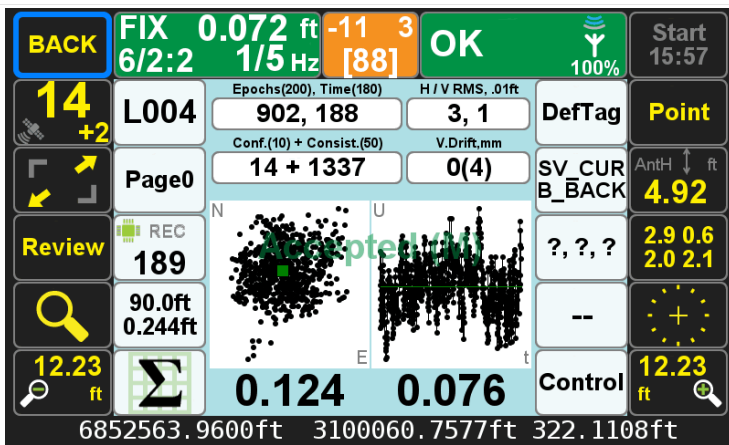
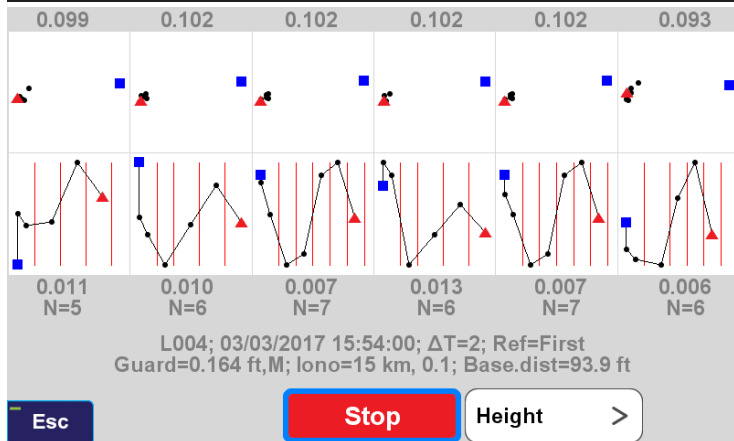
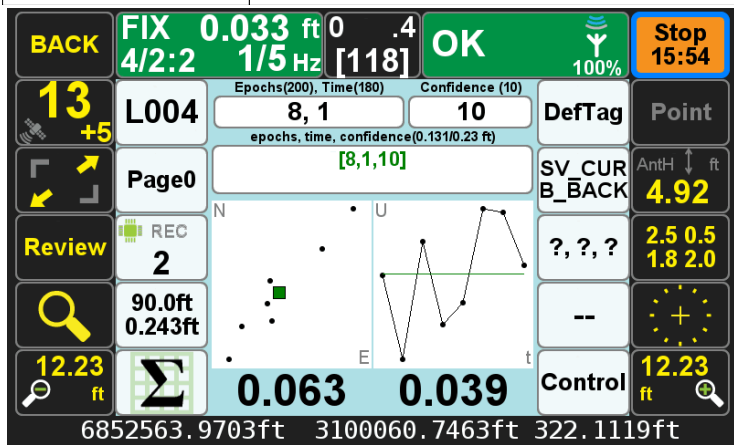


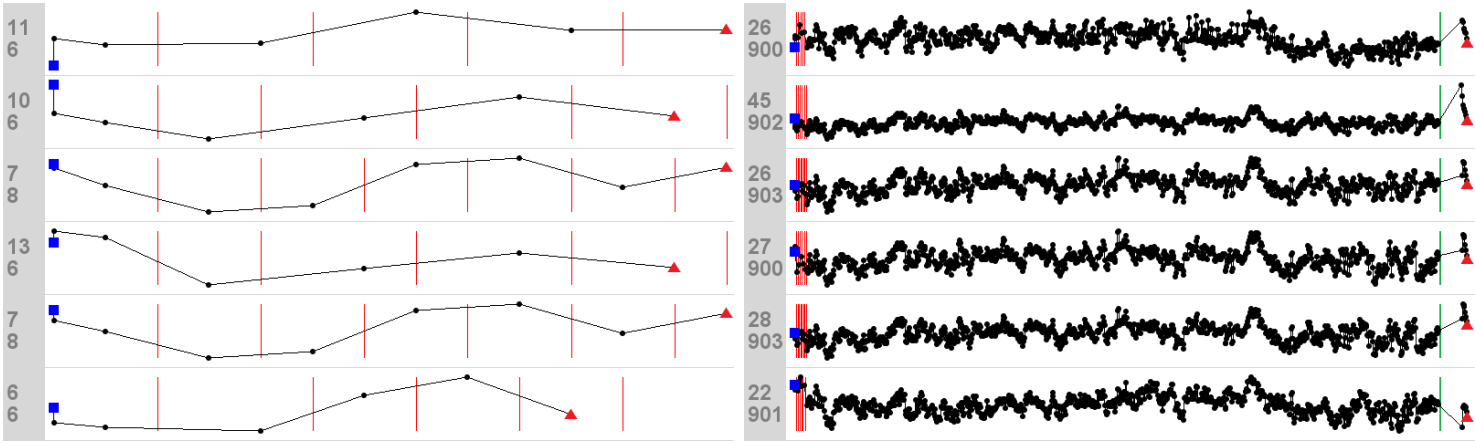
<b>L003</b>	<b>Code and Description</b>		<b>Northing</b>	<b>Easting</b>	<b>Ortho Height</b>
@2010.0000	SV_BUILDING 4' E		6852473.0041 ft	3100051.7050 ft	330.0197 ft
<b>Page</b>	Page0	<b>Code</b>	SV_BUILDING	<b>Tag</b>	BLDG
<b>WGS84 (ITRF2008) @2017.5000</b>			32°24'42.12019"N	094°49'57.26008"W	239.3458 ft
<b>Base</b>			6852468.6885 ft	3100059.2081 ft	331.6526 ft
<b>Local Time</b>	03/03/2017 15:45:36		<b>Time UTC</b>	03/03/2017 20:45:36	
<b>Antenna</b>	JAVTRIUMPH_LSA NONE		<b>Vertical Antenna Height</b>		4.9213 ft
<b>Epochs</b>	900	<b>Satellites</b>	9+6	<b>Duration</b>	182.200 sec
<b>Solution</b>	Fixed / RTK	<b>Confidence</b>	19.750	<b>Consistency</b>	1328.750
<b>HRMS</b>	0.0203 ft	<b>VRMS</b>	0.0191 ft	<b>3DRMS</b>	0.0279 ft
<b>HDOP</b>	0.7047	<b>PDOP</b>	1.5400	<b>GDOP</b>	1.7520
<b>Adjustment Delta</b>			-1.3128 ft	-1.4892 ft	7.6645 ft
<b>95% Confidence Ellipse</b>		σa:0.038 ft	σb:0.032 ft	θ:319°48'51"	σh:0.037 ft
<b>Raw Files</b>	L003_154234.jps				





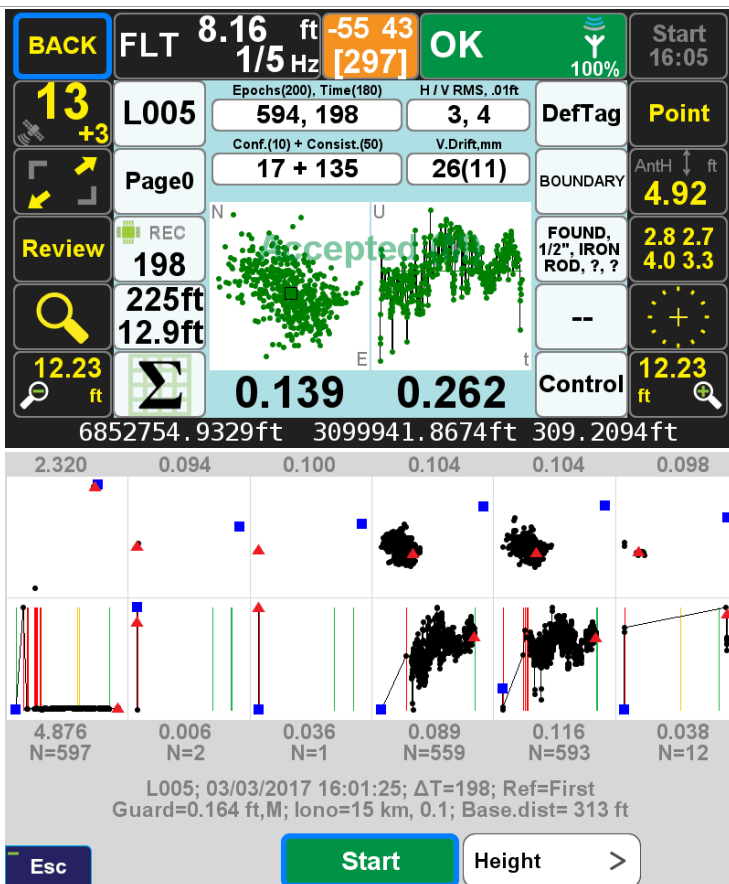
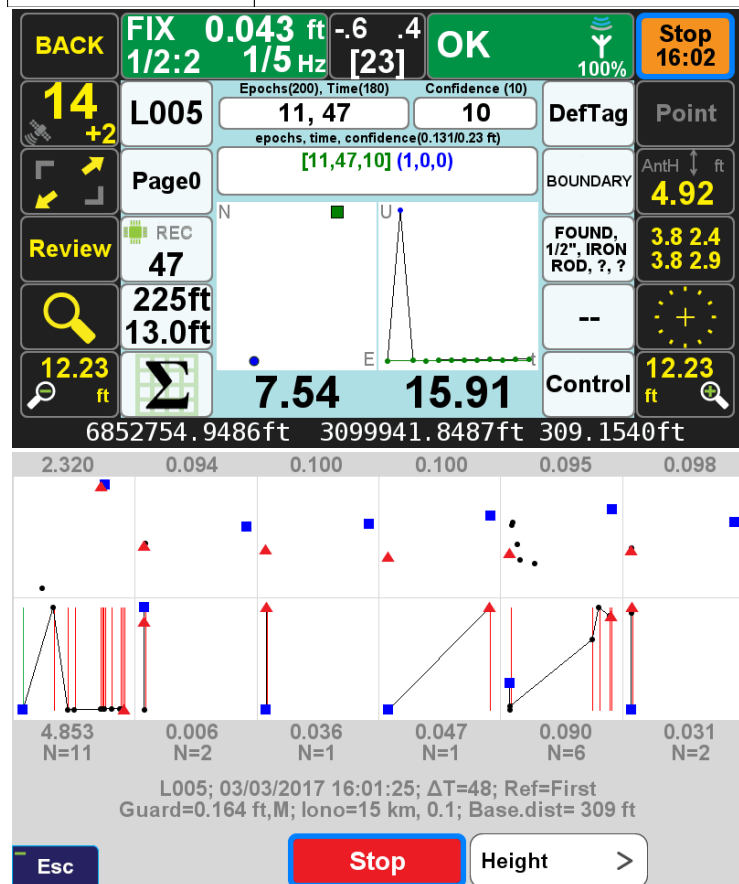
<b>L004</b>	<b>Code and Description</b>		<b>Northing</b>	<b>Easting</b>	<b>Ortho Height</b>
@2010.0000	SV_CURB_BACK		6852562.6471 ft	3100059.2685 ft	329.7753 ft
<b>Page</b>	Page0	<b>Code</b>	SV_CURB_BACK	<b>Tag</b>	DefTag
<b>HEIGHT</b>	—	<b>OFFSET TOP CURB</b>	—	<b>OFFSET PAN</b>	—
<b>WGS84 (ITRF2008) @2017.5000</b>			32°24'43.00410"N	094°49'57.13540"W	239.1011 ft
<b>Base</b>			6852468.6885 ft	3100059.2081 ft	331.6526 ft
<b>Local Time</b>	03/03/2017 15:57:09		<b>Time UTC</b>	03/03/2017 20:57:09	
<b>Antenna</b>	JAVTRIUMPH_LSA NONE		<b>Vertical Antenna Height</b>		4.9213 ft
<b>Epochs</b>	902	<b>Satellites</b>	7+6	<b>Duration</b>	188.400 sec
<b>Solution</b>	Fixed / RTK	<b>Confidence</b>	14.750	<b>Consistency</b>	1337.750
<b>HRMS</b>	0.0274 ft	<b>VRMS</b>	0.0130 ft	<b>3DRMS</b>	0.0303 ft
<b>HDOP</b>	0.7520	<b>PDOP</b>	1.7013	<b>GDOP</b>	1.9587
<b>Adjustment Delta</b>			-1.3128 ft	-1.4892 ft	7.6645 ft
<b>95% Confidence Ellipse</b>		σa:0.059 ft	ob:0.032 ft	θ:317°4'45"	σh:0.025 ft
<b>Raw Files</b>	L004_155359.jps				

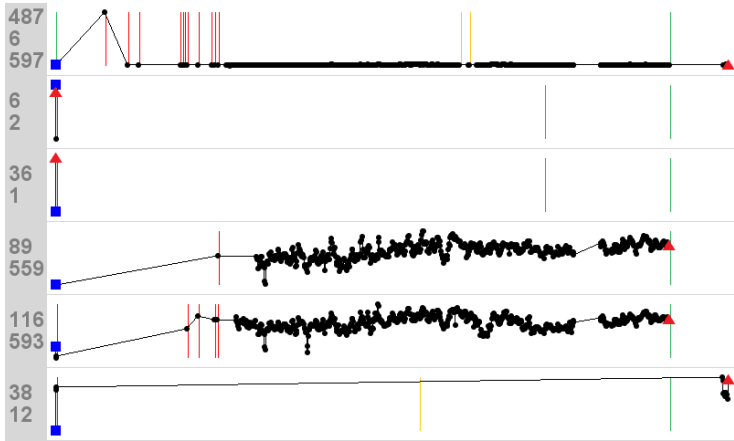
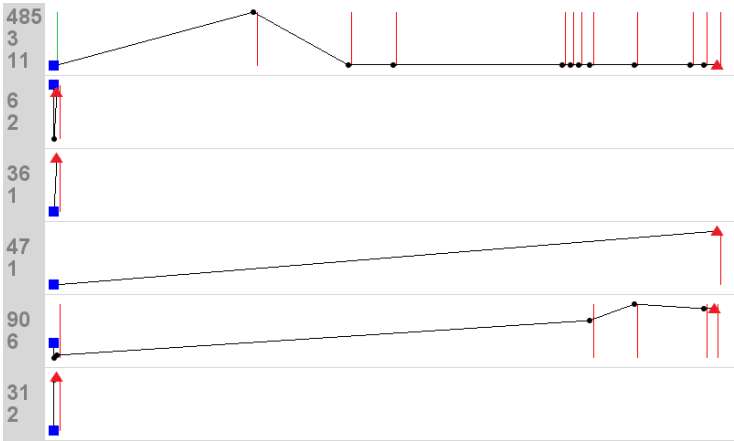




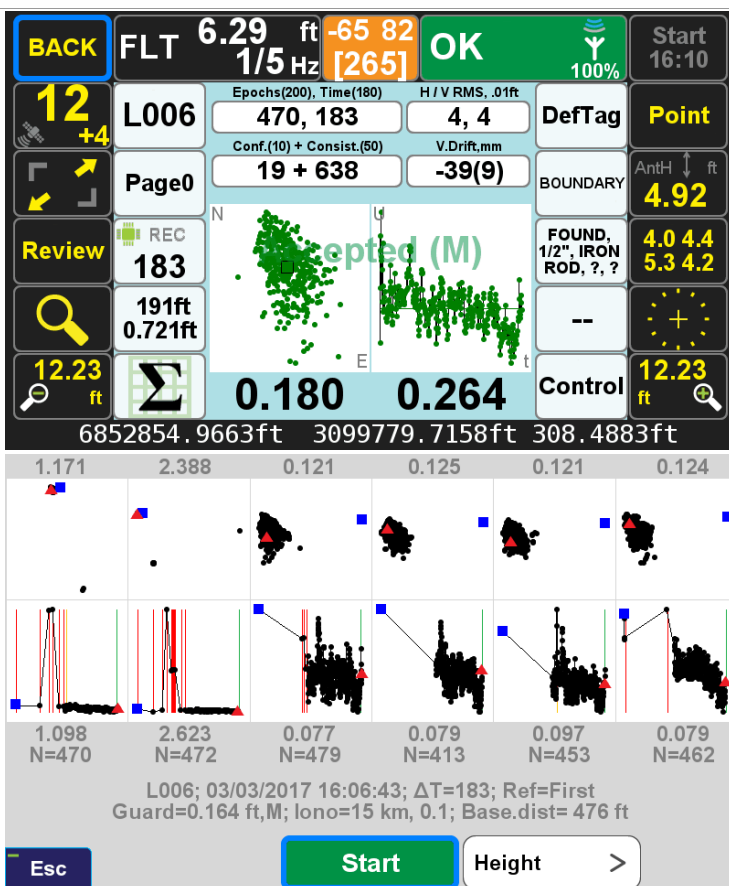
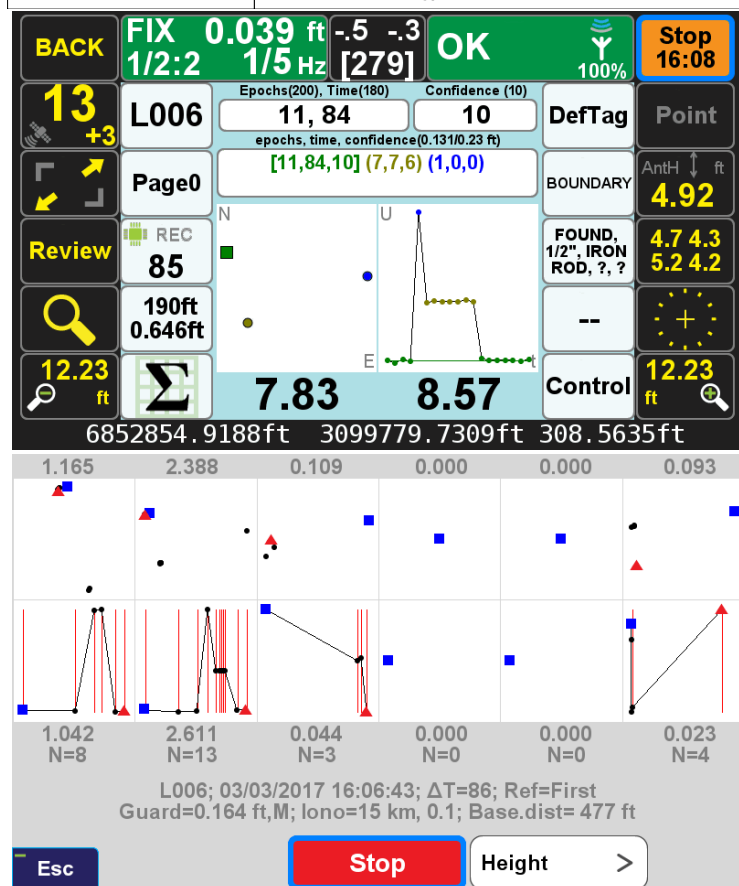


<b>L005</b>	<b>Code and Description</b>		<b>Northing</b>	<b>Easting</b>	<b>Ortho Height</b>
@2010.0000	BOUNDARY		6852753.6200 ft	3099940.3783 ft	316.8738 ft
<b>Page</b>	Page0	<b>Code</b>	BOUNDARY	<b>Tag</b>	DefTag
<b>FOUND/SET</b>	FOUND	<b>SIZE</b>	1/2"	<b>TYPE</b>	IRON ROD
<b>ID</b>	_____	<b>CONDITION</b>	_____		
<b>WGS84 (ITRF2008) @2017.5000</b>			32°24'44.93378"N	094°49'58.44372"W	226.1991 ft
<b>Base</b>			6852468.6885 ft	3100059.2081 ft	331.6526 ft
<b>Local Time</b>	03/03/2017 16:04:43		<b>Time UTC</b>	03/03/2017 21:04:43	
<b>Antenna</b>	JAVTRIUMPH_LSA NONE		<b>Vertical Antenna Height</b>		4.9213 ft
<b>Epochs</b>	594	<b>Satellites</b>	8+6	<b>Duration</b>	198.000 sec
<b>Solution</b>	Fixed / RTK	<b>Confidence</b>	17.250	<b>Consistency</b>	135.850
<b>HRMS</b>	0.0327 ft	<b>VRMS</b>	0.0398 ft	<b>3DRMS</b>	0.0515 ft
<b>HDOP</b>	0.7154	<b>PDOP</b>	1.5278	<b>GDOP</b>	1.7458
<b>Adjustment Delta</b>			-1.3129 ft	-1.4891 ft	7.6645 ft
<b>95% Confidence Ellipse</b>		σa:0.068 ft	σb:0.042 ft	θ:313°58'20"	σh:0.078 ft
<b>Raw Files</b>	L005_160125.jpg				

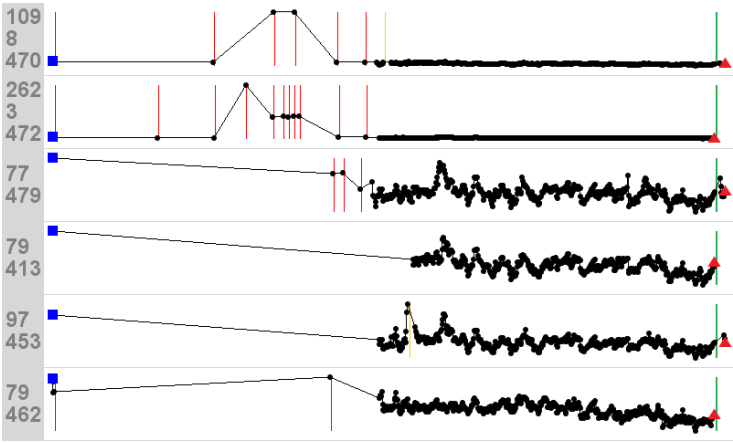




<b>L006</b>	<b>Code and Description</b>		<b>Northing</b>	<b>Easting</b>	<b>Ortho Height</b>
@2010.0000	BOUNDARY		6852853.6533 ft	3099778.2267 ft	316.1527 ft
<b>Page</b>	Page0	<b>Code</b>	BOUNDARY	<b>Tag</b>	DefTag
<b>FOUND/SET</b>	FOUND	<b>SIZE</b>	1/2"	<b>TYPE</b>	IRON ROD
<b>ID</b>	_____	<b>CONDITION</b>	_____		
<b>WGS84 (ITRF2008) @2017.5000</b>			32°24'45.97906"N	094°50'00.29344"W	225.4778 ft
<b>Base</b>			6852468.6885 ft	3100059.2081 ft	331.6526 ft
<b>Local Time</b>	03/03/2017 16:09:47		<b>Time UTC</b>	03/03/2017 21:09:47	
<b>Antenna</b>	JAVTRIUMPH_LSA NONE		<b>Vertical Antenna Height</b>		4.9213 ft
<b>Epochs</b>	470	<b>Satellites</b>	7+6	<b>Duration</b>	183.200 sec
<b>Solution</b>	Fixed / RTK	<b>Confidence</b>	19.750	<b>Consistency</b>	638.950
<b>HRMS</b>	0.0371 ft	<b>VRMS</b>	0.0358 ft	<b>3DRMS</b>	0.0515 ft
<b>HDOP</b>	0.7163	<b>PDOP</b>	1.4823	<b>GDOP</b>	1.6893
<b>Adjustment Delta</b>			-1.3129 ft	-1.4891 ft	7.6645 ft
<b>95% Confidence Ellipse</b>		σa:0.076 ft	ob:0.050 ft	θ:56°36'19"	oh:0.070 ft
<b>Raw Files</b>	L006_160643.jpg				

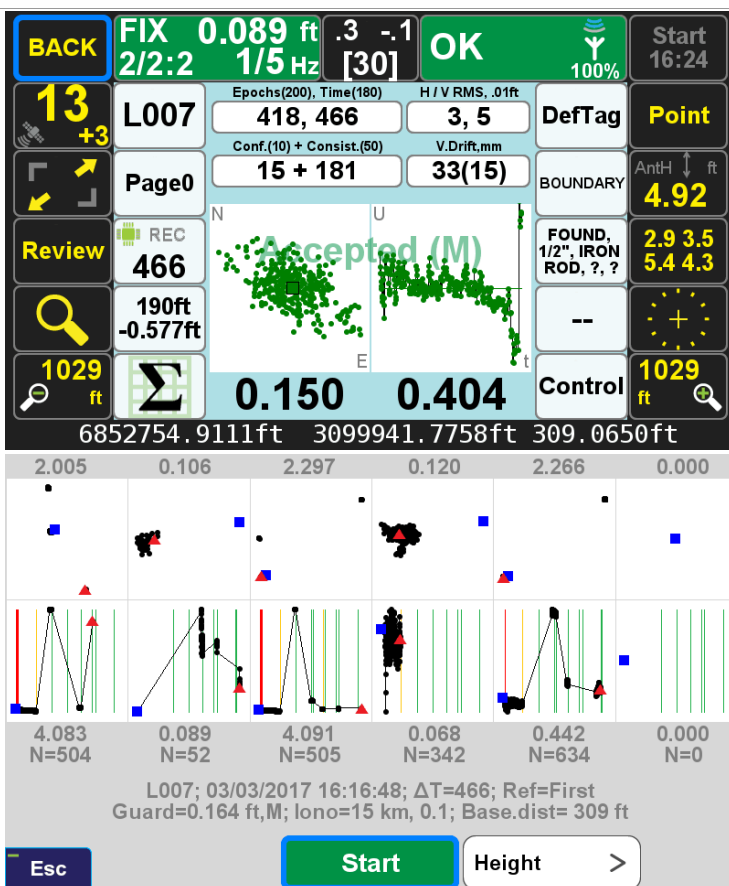


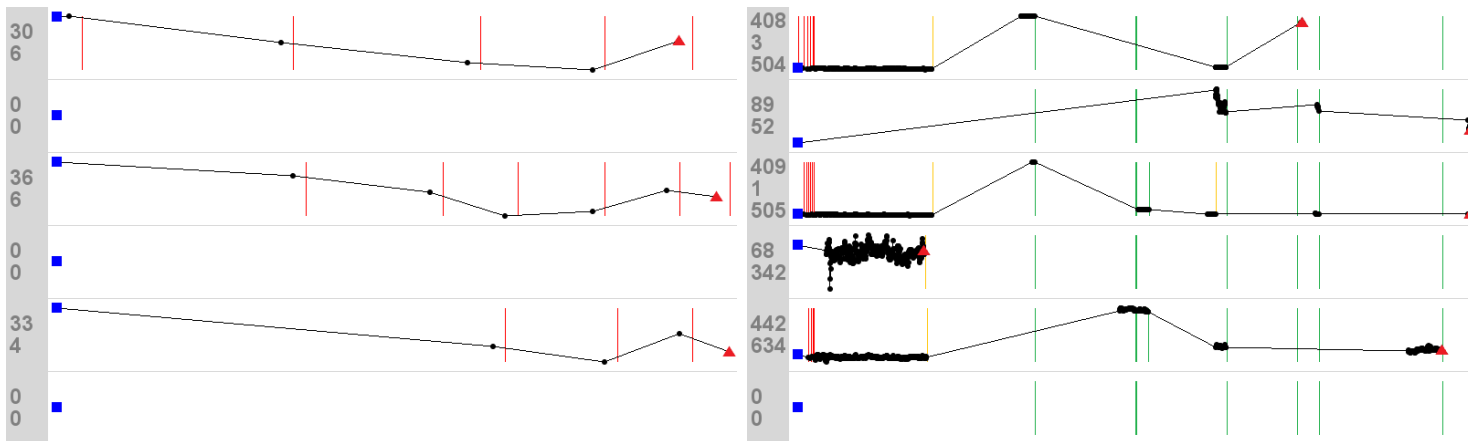






<b>L007</b>	<b>Code and Description</b>		<b>Northing</b>	<b>Easting</b>	<b>Ortho Height</b>
@2010.0000	BOUNDARY		6852753.5982 ft	3099940.2866 ft	316.7295 ft
<b>Page</b>	Page0	<b>Code</b>	BOUNDARY	<b>Tag</b>	DefTag
<b>FOUND/SET</b>	FOUND	<b>SIZE</b>	1/2"	<b>TYPE</b>	IRON ROD
<b>ID</b>	_____	<b>CONDITION</b>	_____		
<b>WGS84 (ITRF2008) @2017.5000</b>			32°24'44.93360"N	094°49'58.44480"W	226.0548 ft
<b>Base</b>			6852468.6885 ft	3100059.2081 ft	331.6526 ft
<b>Local Time</b>	03/03/2017 16:24:34		<b>Time UTC</b>	03/03/2017 21:24:34	
<b>Antenna</b>	JAVTRIUMPH_LSA NONE		<b>Vertical Antenna Height</b>		4.9213 ft
<b>Epochs</b>	418	<b>Satellites</b>	7+6	<b>Duration</b>	466.000 sec
<b>Solution</b>	Fixed / RTK	<b>Confidence</b>	15.000	<b>Consistency</b>	181.450
<b>HRMS</b>	0.0311 ft	<b>VRMS</b>	0.0525 ft	<b>3DRMS</b>	0.0610 ft
<b>HDOP</b>	0.7162	<b>PDOP</b>	1.4866	<b>GDOP</b>	1.6973
<b>Adjustment Delta</b>			-1.3129 ft	-1.4891 ft	7.6645 ft
<b>95% Confidence Ellipse</b>		σa:0.055 ft	σb:0.052 ft	θ:323°53'18"	σh:0.103 ft
<b>Raw Files</b>	L007_161648.jpg				





L008	Code and Description		Northing	Easting	Ortho Height
@2010.0000	BOUNDARY		6852639.7854 ft	3100037.9097 ft	325.1972 ft
Page	Page0	Code	BOUNDARY	Tag	DefTag
FOUND/SET	FOUND	SIZE	1/2"	TYPE	IRON ROD
ID	—	CONDITION	—		
WGS84 (ITRF2008) @2017.5000			32°24'43.77433"N	094°49'57.35300"W	234.5227 ft
Base			6852468.6885 ft	3100059.2081 ft	331.6526 ft
Local Time	03/03/2017 16:29:05		Time UTC	03/03/2017 21:29:05	
Antenna	JAVTRIUMPH_LSA NONE		Vertical Antenna Height		4.9213 ft
Epochs	151	Satellites	6+8	Duration	30.000 sec
Solution	Fixed / RTK	Confidence	—	Consistency	225.000
HRMS	0.0239 ft	VRMS	0.0139 ft	3DRMS	0.0276 ft
HDOP	0.7311	PDOP	1.6059	GDOP	1.8538
Adjustment Delta			-1.3129 ft	-1.4892 ft	7.6645 ft
95% Confidence Ellipse		σa:0.047 ft	σb:0.035 ft	θ:52°45'54"	σh:0.027 ft

