

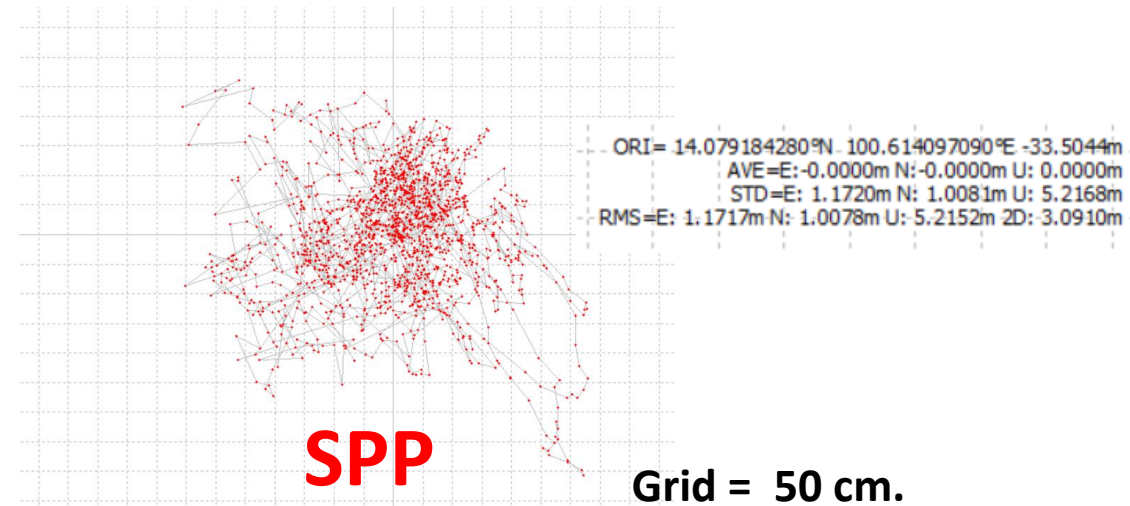
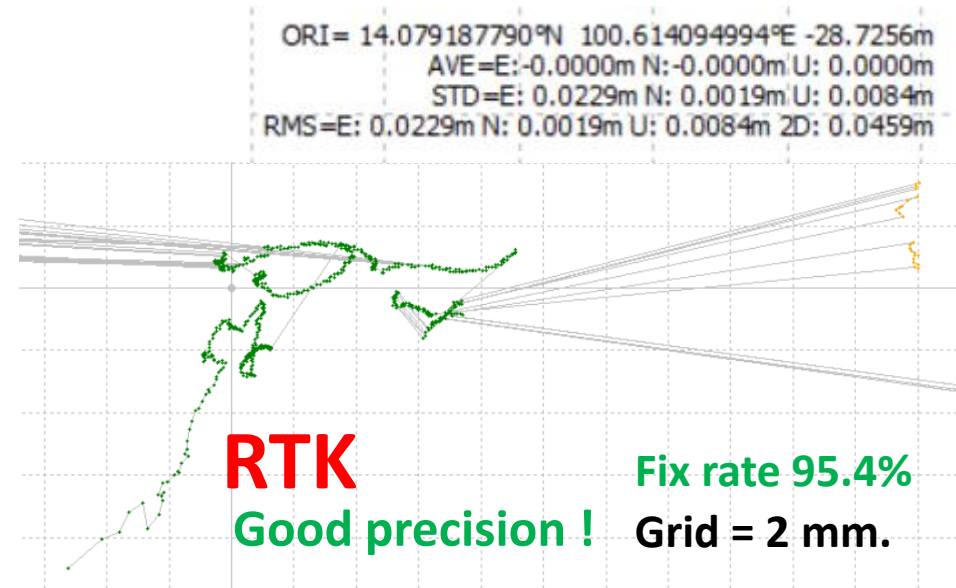
# GNSS Training Presentation



## GNSS Training, Team No: 11

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# Day 3 Data Logging with M8T



# Set base coordinates as origin (Zero baseline)

ITRF2014 at Epoch 2019.80		
Coordinate	Value	$\sigma$
X	-3958757.045 m	0.005 m
Y	3328944.101 m	0.004 m
Z	3719537.389 m	0.004 m
Latitude	35° 54' 10.94635" N	0.002 m
Longitude	139° 56' 21.50211" E	0.003 m
El. Height	93.463 m	0.006 m

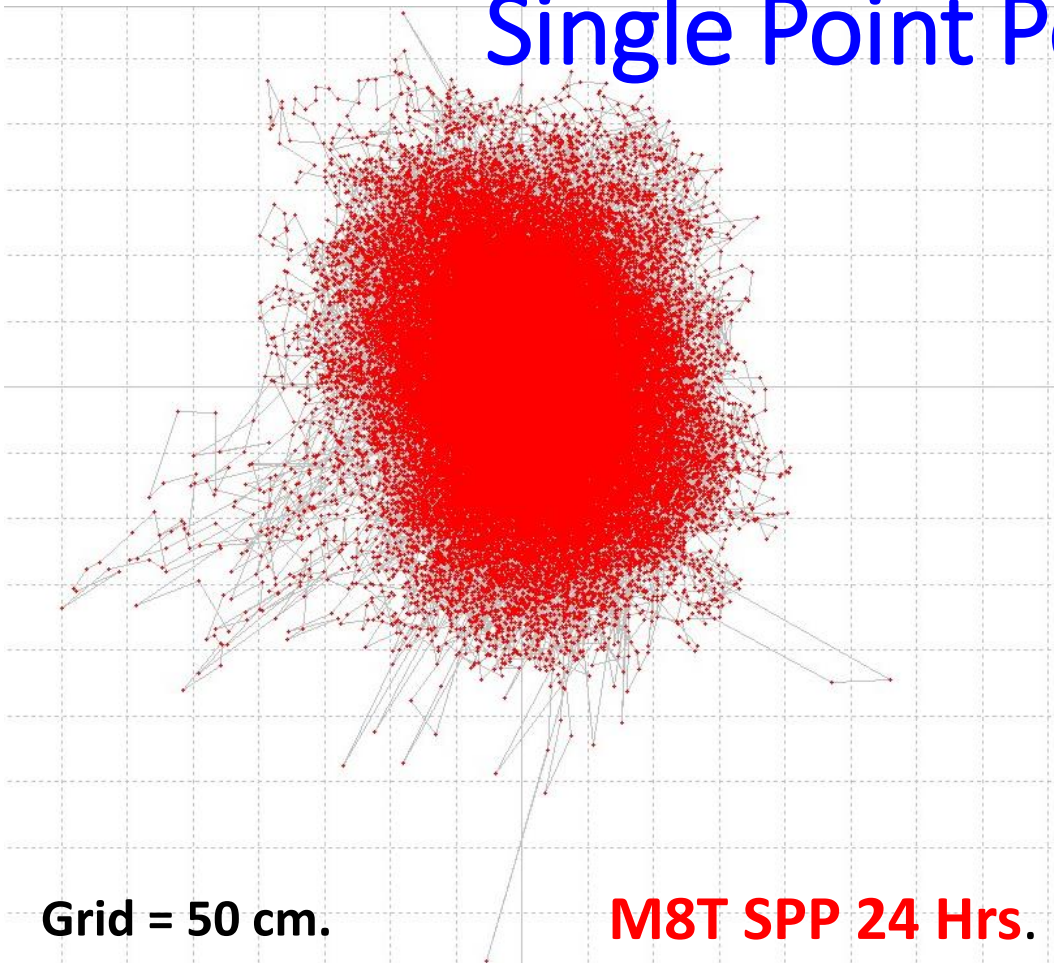


Convert from DMS to Decimal Degree

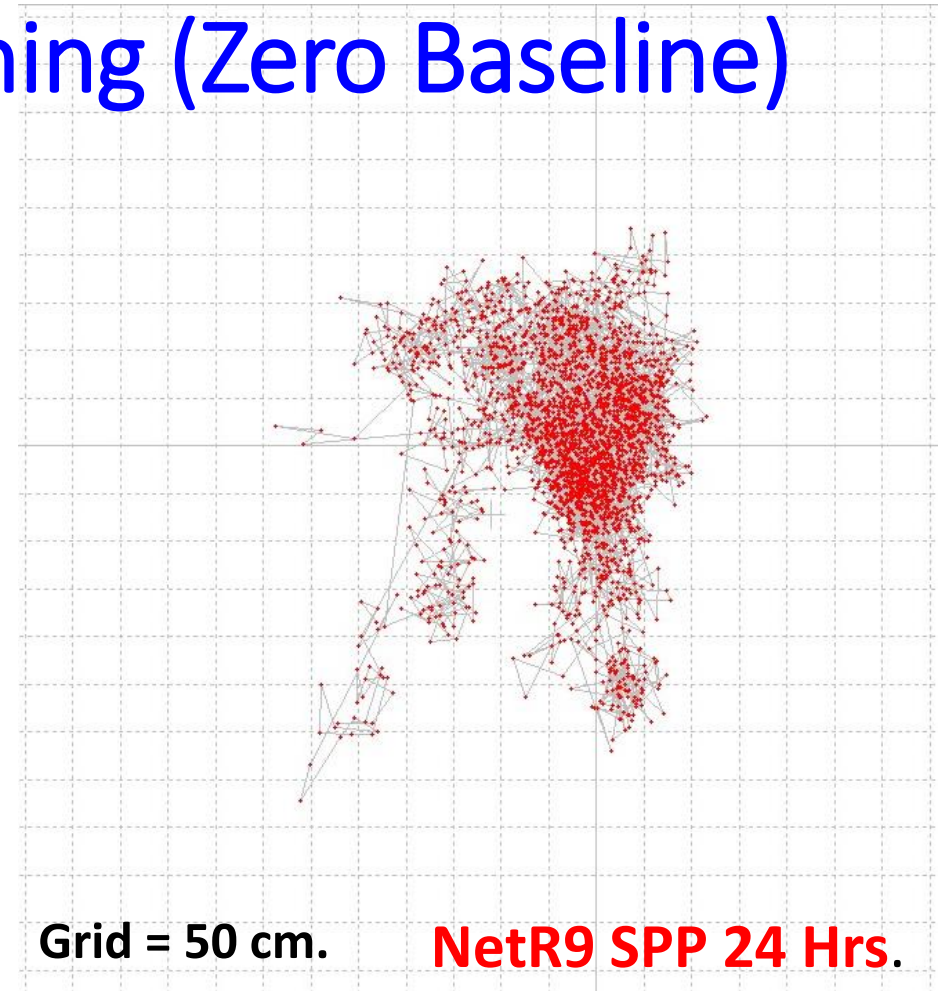
Options

Time Format	h:m:s GPST	Error Bar/Circle	OFF	Mark Color 1 (1-6)	
Lat/Lon Format	ddd.ddddd	Direction Arrow	OFF	Mark Color 2 (1-6)	
Show Statistics	ON	Graph Label	ON	Line Color	
Cycle-Slip	OFF	Grid/Grid Label	Grid	Text Color	
Parity Unknown	OFF	Compass	ON	Grid Color	
Ephemeris	OFF	Scale	ON	Background Color	
Elevation Mask (°)	0	Auto Fit	ON	Plot Style	Mark/Line
Elev Mask Pattern	OFF	Y-Range (+/-)	5	Mark Size	2
Hide Low Satellite	OFF	RT Buffer Size	10800	Font	Tahoma 8pt
Max NSAT/DBP	30	<input type="checkbox"/> Time Sync Port	10071	Animation Interval	10
Max Multipath	10	Coordinate Origin	Lat/Lon/Hg	Update Cycle (ms)	100
Receiver Position	Single Solu	Lat/Lon/Hgt 35.903040650 139.939306140 93.4630 ...			
Satellite System		QC Cmd teqc +qc +sym +l -rep -plot			
<input checked="" type="checkbox"/> GPS <input checked="" type="checkbox"/> GLO <input checked="" type="checkbox"/> GAL <input checked="" type="checkbox"/> QZS <input checked="" type="checkbox"/> SBS <input checked="" type="checkbox"/> BDS <input checked="" type="checkbox"/> IRN		RINEX Opt			
Excluded Sats (+Sn: Included)		TLE Data			
		TLE Sat No			
		API Key for GMView			

# Single Point Positioning (Zero Baseline)

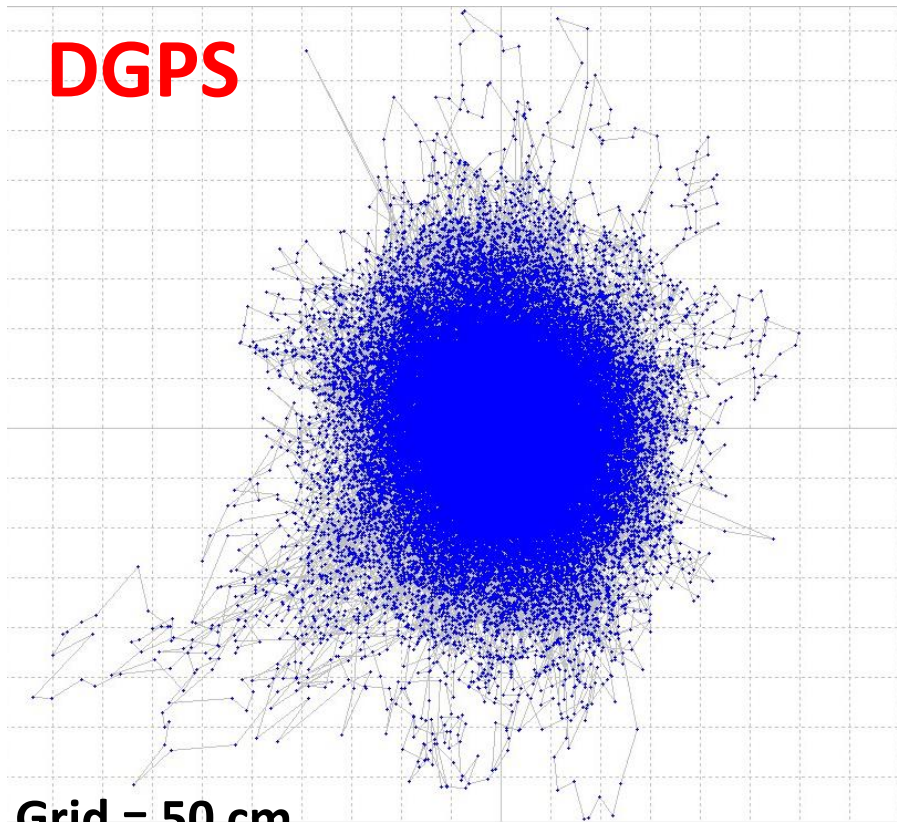


ORI= 35.903040650°N 139.939306140°E 93.4630m  
AVE=E: 0.0402m N: 0.0250m U: -1.4628m  
STD=E: 0.5310m N: 0.6833m U: 1.8696m  
RMS=E: 0.5325m N: 0.6838m U: 2.3738m 2D: 1.7333m



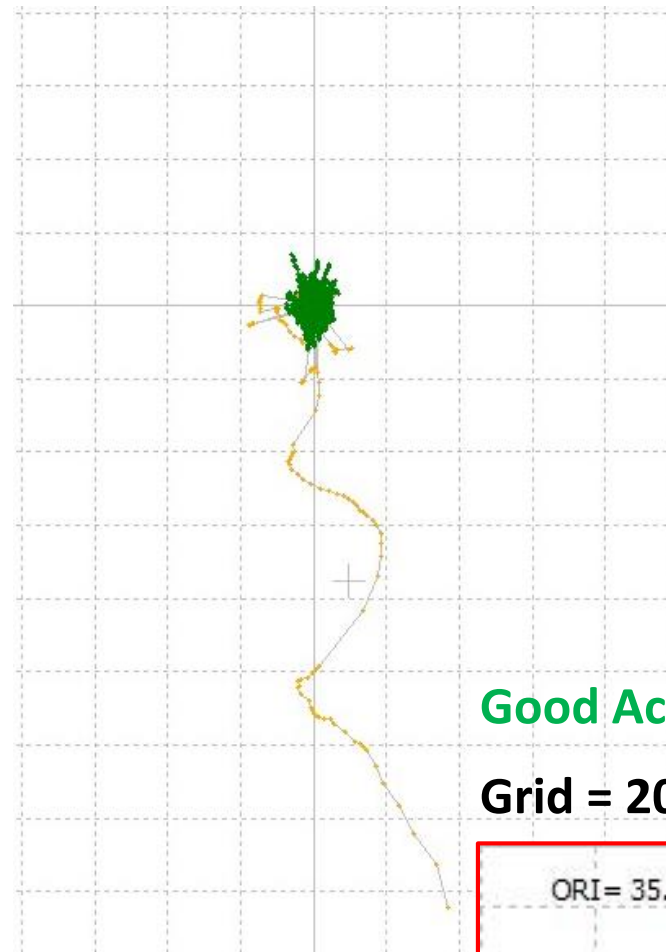
ORI= 35.903040650°N 139.939306140°E 93.4630m  
AVE=E: -0.2544m N: 0.0731m U: -1.5486m  
STD=E: 0.6878m N: 0.9796m U: 1.8415m  
RMS=E: 0.7333m N: 0.9821m U: 2.4058m 2D: 2.4513m

# DGPS and RTK (Zero baseline)



**Grid = 50 cm.**

ORI = 35.903040650°N 139.939306140°E 93.4630m  
AVE = E: 0.0076m N: -0.0367m U: 0.1058m  
STD = E: 0.6226m N: 0.7291m U: 1.7203m  
RMS = E: 0.6226m N: 0.7300m U: 1.7236m 2D: 1.9189m

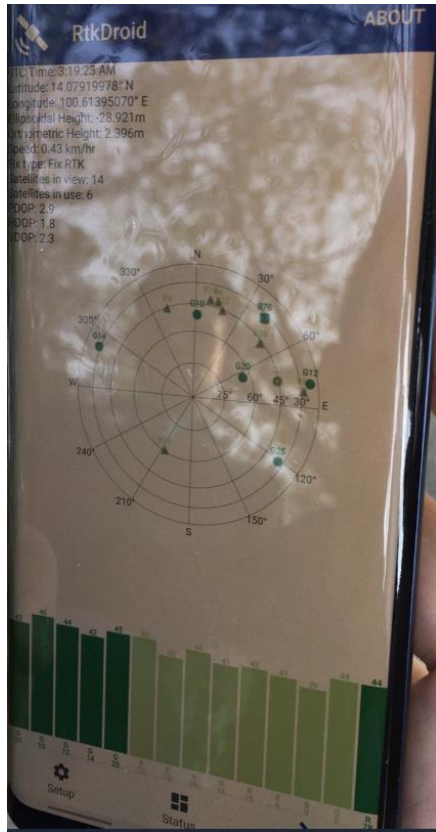
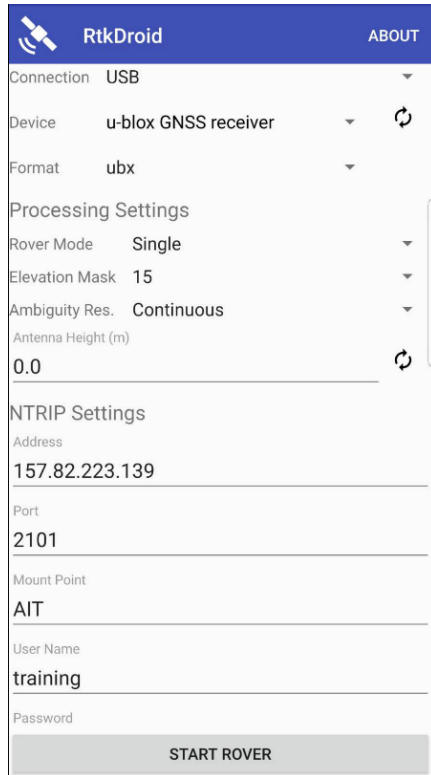


**Good Accuracy !**

**Grid = 20 cm.**

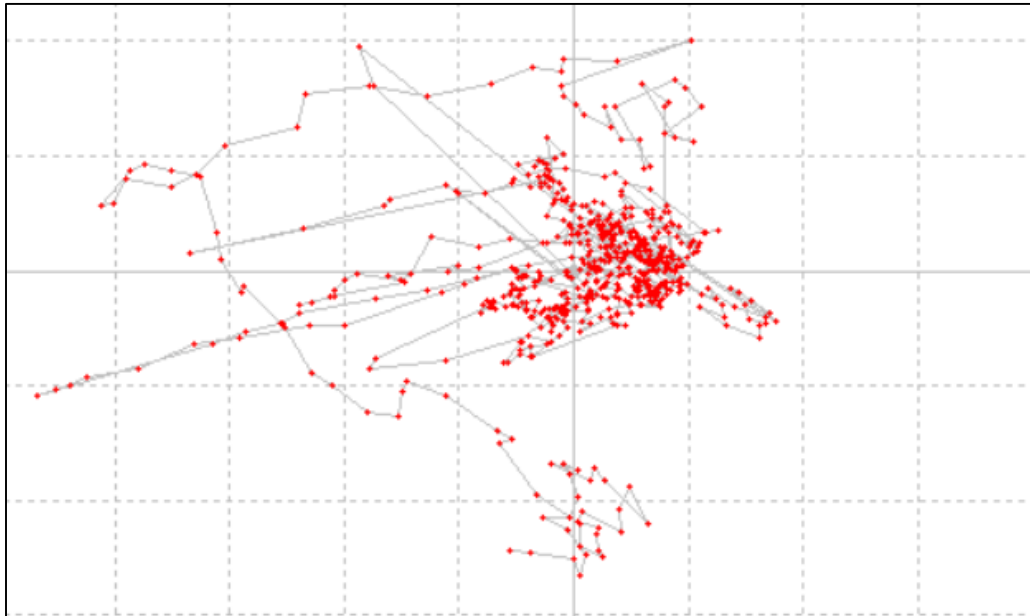
ORI = 35.903040646°N 139.939306147°E 93.4611m  
AVE = E: 0.0000m N: -0.0000m U: 0.0000m  
STD = E: 0.0114m N: 0.0276m U: 0.0332m  
RMS = E: 0.0114m N: 0.0276m U: 0.0332m 2D: 0.0598m

# Day 5 Data Logging with RtkDroid



# Day 5 Data Logging with RtkDroid

## Post processed result with RTKPost



**Grid = 50 cm.**

ORI= 14.078739876°N 100.614213474°E -30.0817m  
 AVE=E: 0.0000m N: 0.0000m U:-0.0000m  
 STD=E: 0.5073m N: 0.3475m U: 2.4132m  
 RMS=E: 0.5069m N: 0.3472m U: 2.4113m 2D: 1.2288m

