

# Survey Report

Job name	3616-6-jez_avnia
Creation date	14 Aug 2025
Version	Trimble General Survey 3.21
Distance Units	Meters
Angle units	Gons
Pressure Units	mbar
Temperature Units	Celsius

Coordinate system (Job)

System	
Zone	
Datum	

Projection

Projection	Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	21°00'00.00000"E
False northing	0.000
False easting	7500000.000
Scale	0.99990000
South azimuth (grid)	No
Grid coords	Increase North-East
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722154

Local site

Type	Grid
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Datum transformation

Type	None
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## Collected Field Data

Projection

Projection	Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	21°00'00.00000"E
False northing	0.000
False easting	7500000.000
Scale	0.99990000
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722154

Local site

Type	Grid
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Datum transformation

Type	None
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Feature library

Library name	LIRIDON
Library File Name	LIRIDON.fxl
Attribute Support	No

Corrections

South azimuth (grid)	No
Grid coords	Increase North-East
Magnetic declination	0.0000
Distances	Grid
Neighborhood adjustment	Off

Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Survey event

Survey event	Rover started							
Note	VRS base: 42°21'42.17940", 21°00'07.38840", 1069.553m							

Initialization event: RTK initialized

GPS week	2379	Seconds	374760	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	374787	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	374858	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	374870	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	374871	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	374892	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	374896	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	374946	Initialization type	On the fly	Survey type	Real-time		
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Survey event

Survey event	End survey							
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Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Survey event

Survey event	Rover started							
Note	VRS base: 42°21'41.91720", 21°00'07.34760", 1059.005m							

Initialization event: RTK initialized

GPS week	2379	Seconds	375044	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375058	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375060	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

				Initialization					
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Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.199

Point	Auto0000	X	4407153.767	Y	1691874.775	Z	4276139.823	Code	
		Method	Network RTK	Type	Observed control point	Search class	Normal		
Antenna height	2.500	Type	Uncorrected	Hz Prec	0.032	Vt Prec	0.026		
QC 1		PDOP	2.0	GDOP	2.6	HDOP	1.2	VDOP	1.5
		Base data age	1	Satellites	9	Positions used	10		
QC 2		VCV xx (m²)	0.000421	VCV xy (m²)	0.000292	VCV xz (m²)	0.000034		
				VCV yy (m²)	0.000538	VCV yz (m²)	-0.000110		
						VCV zz (m²)	0.000693		

Warnings (Auto0000)	Poor precision
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375502	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375557	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375559	Initialization type	On the fly	Survey type	Real-time		
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Survey event

Survey event	End survey
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Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Survey event

Survey event	Rover started
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Note	VRS base: 42°21'41.91960", 21°00'07.29180", 1059.613m
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Initialization event: RTK initialized

GPS week	2379	Seconds	375703	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375717	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375753	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375754	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375755	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375761	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375819	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375820	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375828	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375829	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375840	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	375841	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	375860	Initialization type	On the fly	Survey type	Real-time		
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Survey event

Survey event	End survey
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Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Survey event

Survey event	Rover started
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Note	VRS base: 42°21'42.39420", 21°00'06.07440", 1067.214m
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Initialization event: RTK initialized

GPS week	2379	Seconds	375988	Initialization type	On the fly	Survey type	Real-time		
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GNSS receiver

Receiver type	R10
Serial number	5452489155
Firmware version	4.9
Antenna type	R10 Internal
Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.199

Point	Auto0001	X	4407202.261	Y	1691914.943	Z	4276102.283	Code	
		Method	Network RTK	Type	Observed control point	Search class	Normal		
Antenna height	2.500	Type	Uncorrected	Hz Prec	0.012	Vt Prec	0.018		
QC 1		PDOP	2.8	GDOP	4.0	HDOP	1.5	VDOP	2.4
		Base data age	1	Satellites	8	Positions used	10		
QC 2		VCV xx (m²)	0.000217	VCV xy (m²)	0.000093	VCV xz (m²)	0.000095		
				VCV yy (m²)	0.000098	VCV yz (m²)	0.000049		
						VCV zz (m²)	0.000146		

Warnings (Auto0001)	Poor precision
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Initialization event: RTK not initialized

GPS week	2379	Seconds	376105	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	376107	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	376110	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	376113	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	376115	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	376116	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	376117	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	376125	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2379	Seconds	376126	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2379	Seconds	376133	Initialization type	On the fly	Survey type	Real-time		
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Point	1023	X	4407196.921	Y	1691941.652	Z	4276085.236	Code	
Antenna height	2.500	Method	Network RTK	Type	Topo point	Search class	Normal		
QC 1		Type	Uncorrected	Hz Prec	0.023	Vt Prec	0.033		
		PDOP	2.6	GDOP	3.7	HDOP	1.2	VDOP	2.3
QC 2		Base data age	1	Satellites	9	Positions used	5		
		VCV xx (m²)	0.000666	VCV xy (m²)	0.000289	VCV xz (m²)	0.000313		
				VCV yy (m²)	0.000325	VCV yz (m²)	0.000202		
						VCV zz (m²)	0.000594		

Initialization event: RTK not initialized

GPS week	2379	Seconds	376292	Initialization type	On the fly	Survey type	Real-time		
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Survey event

Survey event	End survey
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Instrument

Instrument type	Trimble VX/S Series
EDM Refractive Index	274.1
EDM Carrier Wavelength	79.3
Horizontal circle mode	Set to azimuth
Horizontal Angle Precision	0.0009
Vertical Angle Precision	0.0009
EDM precision	3mm +2ppm
EDM constant	0mm
Backsight centering error	0.003

Instrument details

Model	S6 3 DR 300+								
Serial number	92721070								
Firmware version	R12.5.54								
Horizontal collimation	-0.0007								
Vertical collimation	0.0001								
Trunnion axis tilt correction	-0.0017								
Atmosphere									
Pressure	904.50mbar	Temperature	28.0°C	ppm	35.9				
Curvature correction	Yes	Refraction correction	Yes	Refraction const.	0.142				
Station setup									
Station	fs1	Instrument height	0.000	Station type	Resection (Standard)	Scale factor	1.00000000	Std Error	?
Orientation									
Station	fs1	Backsight point	Auto0000	F1 Orientation correction	0.0000	F2 Orientation correction	?	Orient. Std Err	0.0098
Point (B.S.)	Auto0000	HA	356.0149	VA	108.4092	SD	80.069	Code	
Std Errors		HA	0.0009	VA	0.0009	SD	0.003		
Target height	1.400	Prism constant	2.0mm						
Point (B.S.)	1023	HA	210.1802	VA	99.7240	SD	22.728	Code	
Std Errors		HA	0.0009	VA	0.0009	SD	0.003		
Target height	1.400	Prism constant	2.0mm						
Point	fs1	North	4691359.351	East	7500169.058	Elevation	1059.557	Code	
Resection	fs1	Std Error (N)	0.011	Std Error (E)	0.008	Std Error (EI)	0.017		
Residuals (Station)									
Point	Auto0000	ΔN	0.008	ΔE	-0.006	ΔElev	-0.046	Used for	Horizontal+Vertical
		ΔHA	0.0008	ΔVA	0.0352	ΔSD	0.016		
Point	1023	ΔN	-0.008	ΔE	0.002	ΔElev	0.007	Used for	Horizontal+Vertical
		ΔHA	-0.0084	ΔVA	-0.0183	ΔSD	0.008		
Point	1024	HA	364.8905	VA	104.0693	SD	6.752	Code	ParcRe 13220
Std Errors		HA	0.0009	VA	0.0009	SD	0.010		
Target height	1.400	Prism constant	2.0mm						
Stake out point (1024)		Design point: ParcRe 13220Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	0.014	Δ East	-0.006	ΔElev	-1057.726		
Point	1025	HA	175.7058	VA	99.7129	SD	8.561	Code	ParcRe 12328
Std Errors		HA	0.0009	VA	0.0009	SD	0.010		
Target height	1.400	Prism constant	2.0mm						
Stake out point (1025)		Design point: ParcRe 12328Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	-0.068	Δ East	-0.091	ΔElev	-1058.196		
Point	1026	HA	128.9579	VA	118.7521	SD	18.291	Code	ParcRe 12324
Std Errors		HA	0.0009	VA	0.0009	SD	0.010		
Target height	1.400	Prism constant	2.0mm						
Stake out point (1026)		Design point: ParcRe 12324Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	0.180	Δ East	0.134	ΔElev	-1052.847		
Point	1027	HA	128.7249	VA	118.9080	SD	18.070	Code	ParcRe 12323
Std Errors		HA	0.0009	VA	0.0009	SD	0.010		
Target height	1.400	Prism constant	2.0mm						
Stake out line (1027)		Line name: ParcRe 12323 Code:							
Method		To the line							
Station		-0.306							
Elevation		0.000							
Stakeout	Deltas: Grid	Δ North	0.046	Δ East	0.003	ΔElev	-1052.868		
Stakeout	Deltas: Linear	Δ Station	?	ΔOffset	-0.046	ΔElev	-1052.868	Grade to line	-2294719.62%
Point	1028	HA	59.9982	VA	129.7539	SD	18.903	Code	ParcRe 13317
Std Errors		HA	0.0009	VA	0.0009	SD	0.010		

Target height	1.400	Prism constant	2.0mm						
Stake out line (1028)		Line name: ParcRe 13317 Code:							
Method		To the line							
Station		-0.684							
Elevation		0.000							
Stakeout	Deltas: Grid	Δ North	0.010	Δ East	0.048	ΔElev	-1049.640		
Stakeout	Deltas: Linear	Δ Station	?	ΔOffset	-0.049	ΔElev	-1049.640	Grade to line	-2136931.67%

Reduced points

Point	Auto0000	North	4691420.516	East	7500118.484	Elevation	1047.565	Code	
Point	Auto0001	North	4691352.591	East	7500138.600	Elevation	1066.360	Code	
Point	1023	North	4691336.908	East	7500165.442	Elevation	1058.263	Code	
Point	fs1	North	4691359.351	East	7500169.058	Elevation	1059.557	Code	
Point	1024	North	4691365.091	East	7500165.527	Elevation	1057.726	Code	ParcRe 13220
Point	1025	North	4691351.406	East	7500172.247	Elevation	1058.196	Code	ParcRe 12328
Point	1026	North	4691351.662	East	7500184.780	Elevation	1052.847	Code	ParcRe 12324
Point	1027	North	4691351.818	East	7500184.606	Elevation	1052.868	Code	ParcRe 12323
Point	1028	North	4691369.270	East	7500182.709	Elevation	1049.640	Code	ParcRe 13317