

GROUP 1

SITE 5 (K9)

UTM

Project File Data		Coordinate System	
Name:	C:\Users\PC15\Desktop\TEST.vce	Name:	Malaysia RSO Geocentric
Size:	40 KB	Datum:	GDM
Modified:	16/1/2020 9:03:04 PM (UTC:8)	Zone:	RsoGeocentric-(Peninsular)
Time zone:	Malay Peninsula Standard Time	Geoid:	Malaysia Geoid 2004
Reference number:		Vertical datum:	
Description:		Calibrated site:	
Comment 1:			
Comment 2:			
Comment 3:			

Network Adjustment Report**Adjustment Settings****Set-Up Errors****GNSS**

Error in Height of Antenna: 0.003 m

Centering Error: 0.000 m

Covariance Display**Horizontal:**

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Three-Dimensional

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Adjustment Statistics

Number of Iterations for Successful Adjustment: 2

Network Reference Factor: 1.00

Chi Square Test (95%): Passed

Precision Confidence Level: 95%

Degrees of Freedom: 10

Post Processed Vector Statistics

Reference Factor: 1.00

Redundancy Number: 10.00

A Priori Scalar: 0.97

Control Point Constraints

Point ID	Type	East σ (Meter)	North σ (Meter)	Height σ (Meter)	Elevation σ (Meter)
JHJY	Local	Fixed	Fixed	Fixed	
KUKP	Local	Fixed	Fixed	Fixed	
Fixed = 0.000001(Meter)					

Adjusted Grid Coordinates

Point ID	Easting (Meter)	Easting Error (Meter)	Northing (Meter)	Northing Error (Meter)	Elevation (Meter)	Elevation Error (Meter)	Constraint
CERA	627613.693	0.004	173587.841	0.004	135.278	0.024	
HELI	626723.141	0.004	172321.964	0.004	34.455	0.022	
JHJY	644467.154	?	169946.621	?	30.680	?	LLh
KDOJ	624840.248	0.004	174316.296	0.004	44.741	0.025	
KTDI	626395.992	0.004	173083.934	0.004	40.168	0.023	
KUKP	606279.373	?	147462.376	?	8.123	?	LLh
STAD	628840.272	0.004	171992.779	0.003	19.501	0.023	

Adjusted Geodetic Coordinates

Point ID	Latitude	Longitude	Height (Meter)	Height Error (Meter)	Constraint
CERA	N1°34'10.83453"	E103°38'42.14883"	143.113	0.024	
HELI	N1°33'29.60107"	E103°38'13.35453"	42.260	0.022	
JHJY	N1°32'12.51818"	E103°47'47.51143"	39.163	?	LLh
KDOJ	N1°34'34.50896"	E103°37'12.39932"	52.467	0.025	
KTDI	N1°33'54.40678"	E103°38'02.75705"	47.958	0.023	
KUKP	N1°19'59.79072"	E103°27'12.35599"	15.353	?	LLh
STAD	N1°33'18.91619"	E103°39'21.86123"	27.391	0.023	

Adjusted ECEF Coordinates

Point ID	X (Meter)	X Error (Meter)	Y (Meter)	Y Error (Meter)	Z (Meter)	Z Error (Meter)	3D Error (Meter)	Constraint
CERA	-1504114.453	0.007	6195948.261	0.024	173548.461	0.004	0.025	
HELI	-1503233.873	0.007	6196093.792	0.021	172279.664	0.004	0.022	
JHJY	-1520489.929	?	6191944.494	?	169912.804	?	?	LLh
KDOJ	-1501392.305	0.007	6196494.679	0.025	174272.878	0.004	0.026	
KTDI	-1502911.976	0.007	6196156.374	0.023	173041.456	0.004	0.024	
KUKP	-1483509.865	?	6201463.440	?	147413.259	?	?	LLh
STAD	-1505290.293	0.007	6195588.402	0.022	171951.189	0.004	0.023	

Error Ellipse Components

Point ID	Semi-major axis (Meter)	Semi-minor axis (Meter)	Azimuth
CERA	0.005	0.005	98°
HELI	0.005	0.004	97°
KDOJ	0.005	0.005	92°
KTDI	0.005	0.005	95°
STAD	0.005	0.004	101°

Adjusted GNSS Observations

Transformation Parameters

Azimuth Rotation: 0.042 sec (95%) 0.027 sec

Scale Factor: 1.00000001 (95%) 0.00000013

Observation ID		Observation	A-posteriori Error	Residual	Standardized Residual
CERA --> KDOJ (PV8)	Az.	284°41'17"	0.113 sec	-0.026 sec	-0.680
	ΔHt.	-90.646 m	0.014 m	-0.005 m	-0.922
	Ellip Dist.	2867.922 m	0.002 m	0.002 m	2.657
HELI --> KDOJ (PV7)	Az.	316°37'04"	0.126 sec	0.079 sec	1.879
	ΔHt.	10.207 m	0.014 m	0.005 m	0.945
	Ellip Dist.	2743.131 m	0.002 m	-0.001 m	-2.120
HELI --> STAD (PV26)	Az.	98°48'34"	0.158 sec	0.022 sec	0.396
	ΔHt.	-14.869 m	0.013 m	-0.004 m	-0.752
	Ellip Dist.	2142.874 m	0.002 m	-0.001 m	-1.953
CERA --> STAD (PV27)	Az.	142°24'43"	0.183 sec	-0.112 sec	-1.640
	ΔHt.	-115.722 m	0.014 m	0.003 m	0.438
	Ellip Dist.	2012.430 m	0.002 m	0.001 m	1.166
KTDI --> CERA (PV22)	Az.	67°29'27"	0.265 sec	-0.038 sec	-0.451
	ΔHt.	95.154 m	0.013 m	-0.005 m	-0.828
	Ellip Dist.	1318.033 m	0.002 m	-0.001 m	-0.962
HELI --> KUKP (PV5)	Az.	219°24'17"	0.023 sec	-0.009 sec	-0.683

	ΔHt.	-26.907 m	0.022 m	0.018 m	0.823
	Ellip Dist.	32190.056 m	0.004 m	-0.001 m	-0.275
HELI --> KUKP (PV19)	Az.	219°24'17"	0.023 sec	0.007 sec	0.694
	ΔHt.	-26.907 m	0.022 m	-0.005 m	-0.357
	Ellip Dist.	32190.056 m	0.004 m	0.001 m	0.555
HELI --> KTDI (PV12)	Az.	336°44'07"	0.522 sec	-0.179 sec	-0.666
	ΔHt.	5.699 m	0.010 m	-0.001 m	-0.560
	Ellip Dist.	829.349 m	0.002 m	0.001 m	0.601
STAD --> JHJY (PV29)	Az.	97°25'56"	0.055 sec	0.002 sec	0.551
	ΔHt.	11.772 m	0.023 m	-0.007 m	-0.551
	Ellip Dist.	15762.595 m	0.005 m	0.000 m	-0.463

Covariance Terms

From Point	To Point		Components	A-posteriori Error	Horiz. Precision (Ratio)	3D Precision (Ratio)
CERA	KDOJ	Az.	284°41'17"	0.115 sec	1 : 1638413	1 : 1574006
		ΔHt.	-90.646 m	0.014 m		
		ΔElev.	-90.537 m	0.014 m		
		Ellip Dist.	2867.922 m	0.002 m		
CERA	KTDI	Az.	247°29'28"	0.267 sec	1 : 715235	1 : 603184
		ΔHt.	-95.154 m	0.013 m		
		ΔElev.	-95.109 m	0.013 m		

		Ellip Dist.	1318.033 m	0.002 m		
CERA	STAD	Az.	142°24'43"	0.185 sec	1 : 1107365	1 : 1013226
		ΔHt.	-115.722 m	0.014 m		
		ΔElev.	-115.777 m	0.014 m		
		Ellip Dist.	2012.430 m	0.002 m		
HELI	KDOJ	Az.	316°37'04"	0.129 sec	1 : 1680872	1 : 1685795
		ΔHt.	10.207 m	0.014 m		
		ΔElev.	10.286 m	0.014 m		
		Ellip Dist.	2743.131 m	0.002 m		
HELI	KTDI	Az.	336°44'07"	0.522 sec	1 : 437199	1 : 439444
		ΔHt.	5.699 m	0.010 m		
		ΔElev.	5.713 m	0.010 m		
		Ellip Dist.	829.349 m	0.002 m		
HELI	STAD	Az.	98°48'34"	0.155 sec	1 : 1226084	1 : 1231098
		ΔHt.	-14.869 m	0.013 m		
		ΔElev.	-14.954 m	0.013 m		
		Ellip Dist.	2142.874 m	0.002 m		
JHJY	STAD	Az.	277°26'09"	0.045 sec	1 : 4252541	1 : 4251421
		ΔHt.	-11.772 m	0.023 m		
		ΔElev.	-11.179 m	0.023 m		
		Ellip Dist.	15762.595 m	0.004 m		
KUKP	HELI	Az.	39°24'00"	0.024 sec	1 : 8834799	1 : 8830331
		ΔHt.	26.907 m	0.022 m		
		ΔElev.	26.331 m	0.022 m		

		Ellip Dist.	32190.057 m	0.004 m	
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