



Fugro EarthData's Accuracy Assessment Form (QC Master)

Project Name/Number: E12_0088_00_MiddlePearl_StrongRiverBasin_MS Date: 06/13/13 Jonathan Helta

Coordinate System: State Plane Units: (US Survey Feet)	Horizontal Datum: NAD83(2011)	UTM Zone or SPC State name: Hessopp-West	QC Points Source: Client supplied	For Elevation purposes use ONLY: RMSE Vertical Accuracy Value	Enter Value in GSD 0.60 (US Survey Feet)
Product type: DSM	GSD: 3.2 ft	Vertical Datum: NAVD83/Geoid12a	User Defined	Supported Height RMSE According to Map Scale= 8.33 (US Survey Feet)	

Block ID:	Point ID	Block/Model/ Sheet ID	Ortho/stereo/DEM measured by Fugro EarthData			QA/QC Points as surveyed in the Field			Residual error = Measured coordinates - surveyed coordinates			Normalized error = Residuals - bias			Comments
			Mississippi/ West Easting (E) (US Survey Feet)	WS84(G1150) Northing (N) (US Survey Feet)	NAVD83/Geoid12a Elevation (R) (US Survey Feet)	Mississippi/ West Easting (E) (US Survey Feet)	to Rico/Virgin Islands-H Northing (N) (US Survey Feet)	NAVD83/Geoid12a Elevation (R) (US Survey Feet)	AE (Easting) (US Survey Feet)	AN (Northing) (US Survey Feet)	AM (Elevation) (US Survey Feet)	AE (Easting) (US Survey Feet)	AN (Northing) (US Survey Feet)	AM (Elevation) (US Survey Feet)	
FC-1			2458859.367	1106823.814	342.891	2458859.367	1106823.814	342.859	0.000	0.000	0.032	0.000	0.000	0.031	
FC-2			2426373.496	1080539.849	457.776	2426373.496	1080539.849	457.804	0.000	0.000	-0.028	0.000	0.000	-0.029	
FC-3			2378918.571	1040916.255	283.514	2378918.571	1040916.255	283.547	0.000	0.000	-0.033	0.000	0.000	-0.034	
FC-4			2424507.803	1038783.287	329.448	2424507.803	1038783.287	329.496	0.000	0.000	-0.048	0.000	0.000	-0.049	
FC-5			2477428.698	1045328.367	417.091	2477428.698	1045328.367	417.029	0.000	0.000	0.062	0.000	0.000	0.061	
FC-6			2359286.570	991613.318	392.205	2359286.570	991613.318	392.157	0.000	0.000	0.048	0.000	0.000	0.047	
FC-7			2416264.619	989351.997	393.152	2416264.619	989351.997	393.157	0.000	0.000	-0.005	0.000	0.000	-0.006	
FC-8			2466353.414	995211.470	451.530	2466353.414	995211.470	451.532	0.000	0.000	-0.052	0.000	0.000	-0.053	
FC-9			2392943.141	1013792.863	360.312	2392943.141	1013792.863	360.445	0.000	0.000	-0.133	0.000	0.000	-0.134	
FC-10			2451943.458	1018431.310	387.234	2451943.458	1018431.310	387.234	0.000	0.000	0.000	0.000	0.000	-0.001	
FC-11			2335330.059	925747.596	295.708	2335330.059	925747.596	295.708	0.000	0.000	0.000	0.000	0.000	-0.001	
FC-12			2427781.839	909953.712	331.366	2427781.839	909953.712	331.323	0.000	0.000	0.043	0.000	0.000	0.042	
FC-13			2400139.988	931529.961	397.045	2400139.988	931529.961	397.044	0.000	0.000	0.001	0.000	0.000	0.000	
FC-14			2348889.999	957561.719	325.465	2348889.999	957561.719	325.382	0.000	0.000	0.083	0.000	0.000	0.082	
FC-15			2445238.595	935448.400	381.002	2445238.595	935448.400	381.310	0.000	0.000	-0.308	0.000	0.000	-0.309	
FC-16			2424109.095	959586.378	371.167	2424109.095	959586.378	371.181	0.000	0.000	-0.014	0.000	0.000	-0.015	
FC-17			2452051.757	1063949.285	390.937	2452051.757	1063949.285	391.057	0.000	0.000	-0.120	0.000	0.000	-0.121	
FC-18			2402250.777	1062681.794	324.716	2402250.777	1062681.794	324.310	0.000	0.000	-0.194	0.000	0.000	-0.195	
FC-19			2478711.341	908840.530	521.257	2478711.341	908840.530	520.366	0.000	0.000	0.291	0.000	0.000	0.290	
FC-20			2481106.105	880380.872	492.439	2481106.105	880380.872	492.252	0.000	0.000	0.187	0.000	0.000	0.186	
FC-21			2447323.355	971390.327	420.296	2447323.355	971390.327	420.492	0.000	0.000	-0.196	0.000	0.000	-0.197	
FC-22			2393354.256	883024.462	378.178	2393354.256	883024.462	378.142	0.000	0.000	0.036	0.000	0.000	0.035	
FC-23			2474430.991	1080345.001	338.681	2474430.991	1080345.001	338.807	0.000	0.000	-0.126	0.000	0.000	-0.127	
FC-24			2437274.447	879500.148	348.005	2437274.447	879500.148	349.012	0.000	0.000	-0.007	0.000	0.000	-0.008	
FC-25			2433620.352	1115544.783	300.729	2433620.352	1115544.783	300.667	0.000	0.000	0.062	0.000	0.000	0.061	
FC-26			2355893.757	1022064.690	273.106	2355893.757	1022064.690	273.106	0.000	0.000	0.000	0.000	0.000	-0.001	
FC-27			2329130.390	970846.024	252.660	2329130.390	970846.024	252.624	0.000	0.000	0.036	0.000	0.000	0.035	
FC-28			2482994.712	960737.266	378.406	2482994.712	960737.266	378.366	0.000	0.000	0.420	0.000	0.000	0.419	

LEGENDS: Orange Point ID -> Δ > 2"RMSE RED AE,AN,AM -> Δ > 95% of NSSDA

Accuracy Computations (before bias removal): GSD = 3.2 ft (US Survey Feet) Supported Mapping Scale: 1" = 1000' / 1:12,000 Supported Height RMSE according to map scale = 25.00

ASPRS				
Horizontal RMSE (E) =	0.00	Passed :)	Max. Allowable RMSE in E =	10.00 (US Survey Feet)
Horizontal RMSE (N) =	0.00	Passed :)	Max. Allowable RMSE in N =	10.00 (US Survey Feet)
Circular RMSE =	0.00	Passed :)	Max. Allowable circular RMSE =	14.14 (US Survey Feet)
Vertical RMSE =	0.14	Passed :)	Max. Allowable RMSE in Height =	0.60 (US Survey Feet)

NSSDA				
Horizontal tested at 95% = (1.73*RMSE)	0.00	Passed :)	Max. Allowable Horizontal Error at 95% =	24.47 (US Survey Feet)
Vertical tested at 95% = (1.96*RMSE)	0.27	Passed :)	Max. Allowable Vertical Error at 95% =	1.18 (US Survey Feet)

National Maps Accuracy (NMAS)				
Horizontal Accuracy at 90% =	0.00	Passed :)	Max. Allowable Horizontal Error at 90% =	33.33 (US Survey Feet)
Vertical Accuracy at 90% =	0.23	Passed :)	Max. Allowable Vertical Error at 90% =	1.01 (US Survey Feet)

Normalized Accuracy Computations (after bias removal):

ASPRS				
Horizontal RMSE (E) =	0.00	Passed :)	Max. Allowable RMSE in E =	10.00 (US Survey Feet)
Horizontal RMSE (N) =	0.00	Passed :)	Max. Allowable RMSE in N =	10.00 (US Survey Feet)
Circular RMSE =	0.00	Passed :)	Max. Allowable circular RMSE =	14.14 (US Survey Feet)
Vertical RMSE =	0.14	Passed :)	Max. Allowable RMSE in Height =	0.60 (US Survey Feet)

NSSDA				
Horizontal tested at 95% = (1.73*RMSE)	0.00	Passed :)	Max. Allowable Horizontal Error at 95% =	24.47 (US Survey Feet)
Vertical tested at 95% = (1.96*RMSE)	0.27	Passed :)	Max. Allowable Vertical Error at 95% =	1.18 (US Survey Feet)

National Maps Accuracy (NMAS)				
Horizontal Accuracy at 90% =	0.00	Passed :)	Max. Allowable Horizontal Error at 90% =	33.33 (US Survey Feet)
Vertical Accuracy at 90% =	0.23	Passed :)	Max. Allowable Vertical Error at 90% =	1.01 (US Survey Feet)

Number of check points:	28	28	28	28
Sum of Residuals:	0.00	0.00	0.54	0.00
Mean (Bias):	0.00	0.00	0.00	0.00
SDDEV:	0.00	0.00	0.14	0.00
RMSE:	0.00	0.00	0.14	0.00
Units: (US Survey Feet)				

<<<< Normalized RMSE after bias

Bias Treatment Summary

To remove the vertical bias's effect from the elevation, **Lower** the vector/DEM data by **0.001** (US Survey Feet)

To remove the horizontal bias's effect from planimetric E, **No Bias** the vector EASTING the value **0.000** (US Survey Feet)

To remove the horizontal bias's effect from planimetric N, **No Bias** the vector NORTHING the value **0.000** (US Survey Feet)