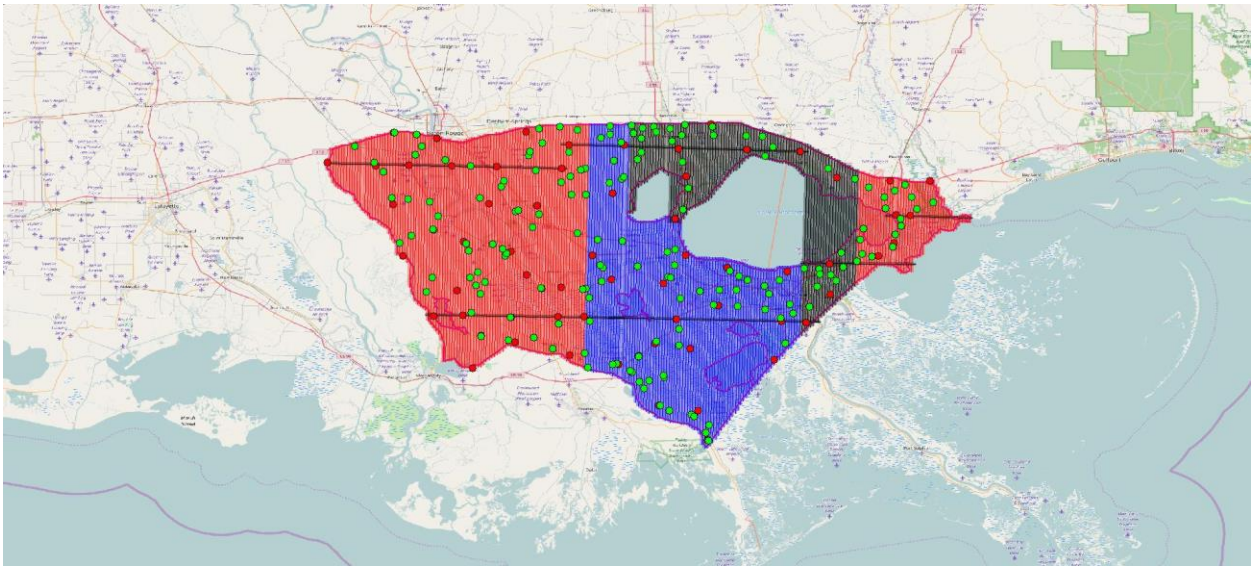
REPORT OF SURVEY

UPPER DELTA PLAIN, LA

USGS LIDAR



Performed by:

TerraSurv

For:

Fugro EarthData, Inc.

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INTRODUCTION

Terrasurv, Inc of Pittsburgh, PA was tasked by Fugro Earthdata with performing a control survey in support of LiDAR data collection covering southern Louisiana, south of Interstate 12. The project consisted of two parts: ground control (GCP, 62 points) and quality control (VVA/NVA, 175 points). The map below in figure 1 shows the layout of the ground control and quality control stations and the flight lines.

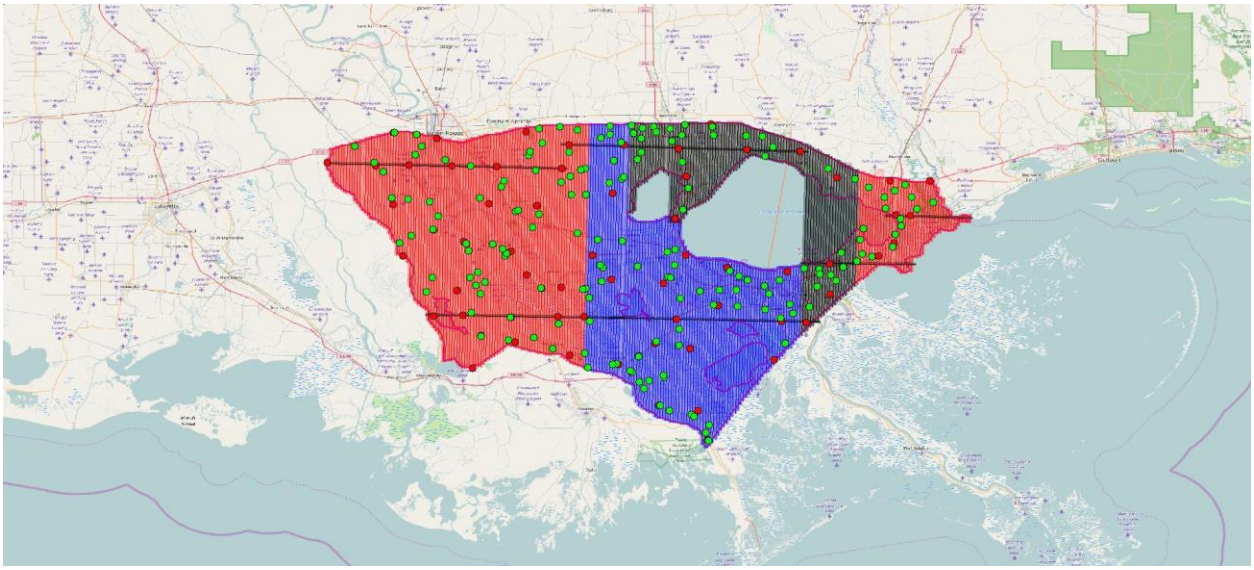

Figure 1 – Flight Lines and Lidar ground control (red) with QC points (green)

The green circles show the locations of the 175 QC points, and the red circles are the locations of the 62 GCP stations.

CONTROL

The National Spatial Reference System (NSRS) was used to provide control for the network. A Virtual Reference System (VRS) was used to survey each of the Lidar control points. GULFNet is a network of Continuously Operating Reference Stations (CORS) network operated by the Louisiana Spatial Reference Center which is tightly aligned with the CORS of the National Spatial Reference System (NSRS). Figure 2 shows the locations of the CORS comprising the GulfNet (red cross in white circle) that were used in this project. Using this methodology and VRS network was crucial to being able to obtain accurate heights due to known subsidence issues with the passive (i.e. ground monumented stations) National Spatial Reference System

(NSRS) marks in the area. Many of the GULFNet stations are also part of the National CORS Network. The horizontal datum was the North American Datum of 1983 – NAD83 (2011), epoch 2010.0. The vertical datum was the North American Vertical Datum of 1988 (NAVD88), realized with GEOID12B. The National Geodetic Survey has the following statement on their GEOID12B page:

> **Differences between GEOID12A and GEOID12B**
>
> The following information is taken from NOAA NGS (https://www.ngs.noaa.gov/GEOID/GEOID12B/):
>
> When using the geoid models, please be advised that GEOID12B should supersede previous models GEOID12 and GEOID12A. GEOID12B is identical to GEOID12A everywhere, except in Puerto Rico and Virgin island region. For more detail, please read **Technical details**.
>
> A new hybrid geoid model has been computed for the Puerto Rico/U.S. Virgin Islands region based on a corrected set of heights. Although the only change to GEOID12A occur in the Puerto Rico/U.S. Virgin Islands region, NGS released an entirely new set of hybrid geoid model grids under the name "GEOID12B." In all areas other than the Puerto Rico/U.S. Virgin Islands region, GEOID12B is identical to GEOID12A.
>
> No new data from Puerto Rico/Virgin Islands were included in the computation of GEOID12B. Observations are currently being collected on approximately 10 new bench marks by our remote sensing team which will be included in the next hybrid geoid model.

The most recent officially released hybrid geoid model, GEOID12B, was used for this project.

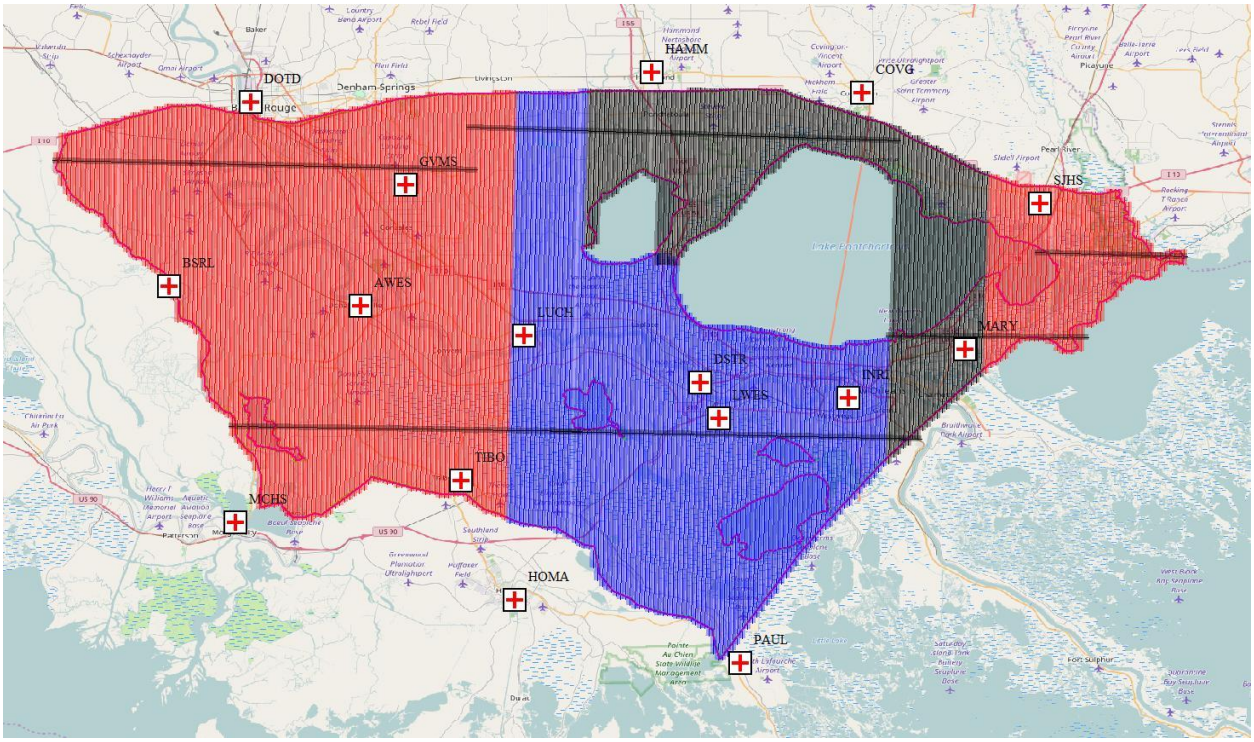

Figure 2 - Continuously Operating Reference Stations (CORS) used

STATIONS

There were a total of 63 GCP stations, 62 as called for in the control layout and one additional station established due to access issues. 175 QC points were requested, consisting of 100 NVA (bare ground, low grass, low brush, etc) and 75 VVA (high brush, forest, woods). There were actually a total of 101 NVA and 78 VVA points surveyed. Table 1 lists the stations established in this survey, including traverse stations that were set to enable survey of points in dense woods, as well as the CORS used.

Table 1 - Station List

Station Name	GPSID	USGS Quad	Description
AWES	AWES	DONALDSONVILLE	CORS
BSRL	BSRL	BAYOU SORREL	CORS
COVG	COVG	COVINGTON	CORS
DOTD	DOTD	BATON ROUGE WEST	CORS
DSTR	DSTR	HAHNVILLE	CORS
GCP01	17002AA	COW BAYOU	center of dirt road on east side of levee, west side of river
GCP02	17002AB	ADDIS	Bare ground on west side of SR77 at center of field entrance. Note: slightly south of plotted cross tie flight line, see GCP02A for alternate if needed
GCP02A	17002CY	GROSSE TETE SW	grass/edge of pavement on west side of SR 77. Note: this is an alternate point for GCP02, which may be outside of the cross tie coverage
GCP03	17002AC	BAYOU SORREL	bare ground on south side of Intracoastal Road at center of entrance to shipyard
GCP04	17002AD	PIGEON	mowed grass on north side of Bayou Pigeon Road, west side of parking lot
GCP05	17002AE	ADDIS	mowed grass on west side of parking lot for church on south side of Myhand Street
GCP06	17002AF	PIERRE PART	mowed grass in vacant lot on south side of Bayou Tranquille Street and north side of canal
GCP07	17002AG	BATON ROUGE WEST	mowed grass on west side of church parking lot and north side of Education Street
GCP08	17002AH	WHITE CASTLE	bare ground in road crossing tracks on west side of SR1 opposite Eureka Road to the east
GCP09	17002AI	PLAQUEMINE	center of mowed grass area in NW quadrant of intersection of Amanda Drive and Leake Avenue
GCP10	17002AJ	NAPOLEONVILLE	bare ground in middle of gravel road SR 402 (St Vincent Road)
GCP11	17002AK	BELLE ROSE	bare gound on south side of Myles Road at north edge of gravel field loading pad
GCP12	17002AL	NAPOLEONVILLE	bare ground on NW side of SR401 Canal Road at field entrance
GCP13	17002AM	AMELIA	bare ground on north side of SR 663 near SW corner of field
GCP14	17002AN	CARVILLE	sparse ground on SW side of SR 30 near NW corner of vacant lot and NE corner of fenced area
GCP15	17002AO	PRAIRIEVILLE	mowed grass on NE side of US 61, NW side of entrance to storage business
GCP16	17002AP	DONALDSONVILLE	bare ground in industrial area on north side of SR 70, west of RR tracks
GCP17	17002AQ	MADEWOOD	sparse grass in area between fields at east side of pond, south side of trees, north side of canal
GCP18	17002AR	LABADIEVILLE	bare ground on south side of SR 645 just east of dwellings
GCP19	17002AS	DENHAM SPRINGS	mowed grass in median of cul-de-sac at west end of Caddo Drive
GCP20	17002AT	DONALDSONVILL	bare ground on NE side of SR3127 in middle of access road

Station Name	GPSID	USGS Quad	Description
		E	to well
GCP21	17002AU	SORRENTO	mowed grass in traingle formed by N-S SR 431, E-W SR 429, and bank parking lot
GCP22	17002AV	LAGAN	mowed grass in park on east side of parking lot, south of ball fields, NW side of SR 20
GCP23	17002AW	FRENCH SETTLEMENT	mowed grass in SE corner of yard for #17445 Pleasant Hill Drive
GCP24	17002AX	LAGAN	center of dirt road (Chopin Road) about 0.9 miles north of SR 3127
GCP25	17002AY	WALKER	bare ground/sparse grass on west side of S Satsuma Road on east side of vacant lot
GCP26	17002AZ	THIBODAUX	bare ground on NW side of Throughbred Park Drive at gated drive
GCP27	17002BA	MOUNT AIRY NW	bare ground on crossover in median of I-10
GCP28	17002BB	LUTCHER	bare ground at north end of road to transfer station, east side of road
GCP29	17002BC	LOWER VACHERIE	mowed grass on west side of SR 307 just south of dirt drive to the west, near NE corner of field
GCP30	17002BD	WHITEHALL	bare ground in gravel parking area in SE quadrant of intersection of Black Lake Club Road and Hanna Road
GCP31	17002BE	LOWER VACHERIE	bare ground on north side of SR 3127
GCP32	17002BF	LOCKPORT	mowed grass on west side of Levis Lane in vacant lot
GCP33	17002BG	SPRINGFIELD	bare ground on west side of Church Of God Road, north of SR 1037
GCP34	17002BH	RESERVE	bare ground on crossover in median of I-10
GCP35	17002BI	BAYOU BOEUF	bare ground on SE side of US90 at gated road to the SE along canal
GCP36	17002BJ	LAROSE	mowed grass between driveways on west side of SR 1
GCP37	17002BK	HAHNVILLE	bare ground on west side of access road to substation north of SR 3127
GCP38	17002BL	RUDDOCK	bare ground in center of dirt drive on east side of Old US 51
GCP39	17002BM	PONCHATOULA	asphalt shoulder of I-55 NB on ramp, opposite dirt road to the east
GCP40	17002BN	DES ALLEMANDS	grass on NW side of Barber Road
GCP41	17002BO	MANCHAC	grass on east side of Old US51 and north side of entrance to Port Manchac Distribution Center, west of RR tracks
GCP42	17002BP	LAPLACE	center of dirt road on SE side of canal, south of I-10
GCP43	17002BQ	CUT OFF	bare ground on west side of SR657 just south of gate
GCP44	17002BR	PONCHATOULA NE	sparse grass on east side of Merchant Court
GCP45	17002BS	GOLDEN MEADOW	bare ground in middle of field entrance road on east side of SR 3235
GCP46	17002BT	LULING	bare ground on sand sand road on south side of service road on south side of US 90 near levee road entrance. See also GCP46A
GCP46A	17002CZ	DES ALLEMANDS	bare ground on west edge of SR 306 near north end in bayou
GCP47	17002BU	LA BRANCHE	pavement in middle of cul-de-sac in W Grandlake Boulevard where road turns from N-S to E-W
GCP48	17002BV	MADISONVILLE	mowed grass on west side of Grand Rue Port Louis Road and south side of gated entrance drive to Madisonville on the Lake
GCP49	17002BW	BERTRANDVILLE	mowed grass field on north side of Bayou Estate Blvd and west side of Ames Blvd
GCP50	17002BX	BARATARIA	mowed grass in vacant lot on north side of Madeline Lane
GCP51	17002BY	SPANISH FORT	mowed grass in vacant lot on east side of Dove Street
GCP52	17002BZ	COVINGTON	pavement in center of intersection of Oak Island Drive and Cascade Court
GCP53	17002CA	BERTRANDVILLE	mowed grass on north side of Harvey Blvd and west side of Wall Blvd
GCP54	17002CB	LITTLE WOODS	mowed grass on south side of I-10 EB exit ramp to Bullard Avenue
GCP55	17002CC	CHALMETTE	grass in vacant block on north side of E Solidell Street between Buffon Street and Tournefort Street

Station Name	GPSID	USGS Quad	Description
GCP56	17002CD	LACOMBE	sparse grass and sand parking area on north side of US 190 and west side of 8th Street
GCP57	17002CE	CHEF MENTEUR	bare ground in gravel parking lot on east side of Burton Road at north end
GCP58	17002CF	SLIDELL	bare ground in gravel parking lot for Gas and Supply on west side of US 11 opposite intersection with North Blvd
GCP59	17002CG	CHEF MENTEUR	bare ground in parking pad at raised utility boxes on east side of US 90
GCP60	17002CH	RIGOLETS	bare ground on gravel drive apron on east side of US 90 at #52720
GCP61	17002CI	HAASWOOD	grass on north shoulder of I-10 just west of Pearl River overpass
GCP62	17002CJ	NORTH SHORE	sand/grass area on north side of Salt Bayou Road and west side of SR 433
GVMS	GVMS	PRAIRIEVILLE	CORS
HAMM	HAMM	HAMMOND	CORS
HOMA	HOMA	HOUMA	CORS
INRI	INRI	NEW ORLEANS EAST	CORS
LUCH	LUCH	LUTCHER	CORS
LWES	LWES	LULING	CORS
MARY	MARY	LITTLE WOODS	CORS
MCHS	MCHS	MORGAN CITY	CORS
NVA001	17002DA	NEW ORLEANS WEST	sparse grass on east side of a canal and south of Amanda Street
NVA002	17002DB	NEW ORLEANS WEST	vacant grass lot on the north side of US61
NVA003	17002DC	NEW ORLEANS EAST	grass median of I10 and I610 interchange on the south die of I610 E exit to Canal Ave
NVA004	17002DD	SPANISH FORT	grass area between a set of RR tracks and Leon C Simon Drive
NVA005	17002DE	LITTLE WOODS	grass area on the south side of the exit from I10 to Crowder Blvd
NVA006	17002DF	LITTLE WOODS	grass median in Almonaster Ave
NVA007	17002DH	NEW ORLEANS EAST	grass in park on east side of Delery Street and north side of Law Street
NVA008	17002DI	NEW ORLEANS EAST	grass in vacant lot on north side of Tchoupitoulas Street and west side of Pleasant Street
NVA009	17002HA	INDIAN BEACH	mowed grass on east side of off ramp from Airport Road to Veterans Memorial Boulevard
NVA010	17002DK	BERTRANDVILLE	center of grass median along Lafitte Larose Hwy
NVA011	17002DM	NEW ORLEANS EAST	concrete parking lot on the north side of Lapalco Blvd and east side of Ames Blvd
NVA012	17002DN	NEW ORLEANS WEST	grass field on the side of parking lot and east of Segnette Blvd
NVA013	17002HC	LULING	mowed grass on west side of I-310 just south of bridge and power line crossing
NVA014	17002DP	LULING	grass in vacant lot on SW corner of intersection of Kerner Ave and River Road
NVA015	17002DQ	NEW ORLEANS WEST	gravel area on south side of oil tank facility and on north side of levee
NVA016	17002DR	LITTLE WOODS	asphalt/sparse grass in vacant lot on south side of US 90 opposite Werner Drive
NVA017	17002DS	LITTLE WOODS	grass area on south side of US 90 and in front of King Hung Shrine
NVA018	17002DT	LITTLE WOODS	center of gravel parking for boat ramp at Sauvage Wildlife Reserve
NVA019	17002DU	CHEF MENTEUR	gravel parking for boat access to Bayou Sauvage National Wildlife Refuge on west side of US 11
NVA020	17002HE	BAYOU BOEUF	bare ground on NW side of US 90 opposite X-over
NVA021	17002HF	BAYOU BOEUF	bare ground at intersection of SR 182 and off ramp from US 90 on north side of SR 182 and east side of off ramp
NVA022	17002HH	LOCKPORT	mowed grass in cemetary on north side of SR 308, point is near SW corner of cemetary, just east of field edge
NVA023	17002DY	CHEF MENTEUR	concrete area from an old gas station at the split of US

Station Name	GPSID	USGS Quad	Description
			90 and US 11
NVA024	17002EB	NORTH SHORE	gravel drive on west side of US 90
NVA025	17002EC	RIGOLETS	gravel shoulder on east side of US 90 just north of Ft Pike Fire Department
NVA026	17002EE	RIGOLETS	gravel shoulder on NW side of intersection of US 90 and Apple Pie Ridge Road
NVA027	17002EF	RIGOLETS	gravel parking area on SE side of US 90 and south of Middle River at boat ramp
NVA028	17002EG	HAASWOOD	grass island on east side of Cross Gates Blvd at Shell Gas Station
NVA029	17002EH	HAASWOOD	grass area on west side of US 190 and north of entrance drive to Tammany Mobile Home Park
NVA030	17002EI	SLIDELL	gravel/sparse grass area on north side of Panera Bread and south side of US 190 Business
NVA031	17002EJ	SLIDELL	grass on SE side of US 11 and south of Westchester Blvd
NVA032	17002EN	MADISONVILLE	gravel in vacant lot on south side of SR 22
NVA033	17002EO	MADISONVILLE	gravel parking area for boat launch at end of SR 1077 (Main Street)
NVA034	17002ER	PONCHATOULA	sparse grass and sand area on north side of Dr John Lambert Drive
NVA035	17002ET	PONCHATOULA	grass in lot on south side of drive and west side of US 51 Business
NVA036	17002EU	MANCHAC	gravel pull off on west side of Old US 51
NVA037	17002EV	MANCHAC	gravel parking area for road side park on west side of US 51
NVA038	17002EW	RUDDOCK	grass on east shoulder of Old US 51 and on north side of dirt drive to storage tank site
NVA039	17002EY	FROST	gravel/sparse grass on north side of Oliver Wheat Road just east of intersection with S Frost Road
NVA040	17002EZ	WALKER	gravel pull off at vacant lot between SR 42 and S Satsuma Road
NVA041	17002FA	WALKER	grass on south side of Lee Ann Court and north edge of pond
NVA042	17002FE	FROST	GRASS= center of traffic island at the entrance ramp to I12E off SR441
NVA043	17002FG	SPRINGFIELD	grass field on north side of parking for American Legion east of SR 43
NVA044	17002FL	SPRINGFIELD	gravel parking area on west side of SR 22 and south of Tiboe Place
NVA045	17002FO	WHITEHALL	concrete parking lot for church on north side of SR 444
NVA046	17002FP	FRENCH SETTLEMENT	east side of grass island at cul du sac for Plantation Trace Drive
NVA047	17002FQ	FRENCH SETTLEMENT	gravel area on north side of concrete parking lot for church and west of cemetery
NVA048	17002FR	FRENCH SETTLEMENT	concrete parking in front of First Baptist Church on north side of Advants Road east of SR 22
NVA049	17002FV	FRENCH SETTLEMENT	grass on south side of John Ealy Road and north side of church and west side of SR 933
NVA050	17002FW	DENHAM SPRINGS	gravel pull off on north side of Fontenot Road and southwest side of 4H Club Road
NVA051	17002HJ	LOCKPORT	bare ground/old asphalt on west side of SR 308
NVA052	17002HL	LAROSE	bare ground on SW side of SR 657 (E Main Street) just east of 90° bend to the north
NVA053	17002HM	CUT OFF	bare ground on west side of SR 3235 at gated field road
NVA054	17002HO	SAVOIE	mowed grass on south side of SR 1, east side of parking lot for meat market
NVA055	17002HP	KRAEMER	bare ground on north side of Bushgrove Road
NVA056	17002HQ	LABADIEVILLE	mowed grass on north side of parking area in NW quadrant of intersection of SR 1 and bridge across canal
NVA057	17002HR	LABADIEVILLE	bare ground on east side of SR 398 in middle of field road
NVA058	17002HT	THIBODAUX	bare ground in center of field road on east side of SR 20
NVA059	17002HU	KRAEMER	bare ground in parking area for business on north side of SR 307
NVA060	17002HV	LOWER VACHERIE	bare ground on south side of SR 20

Station Name	GPSID	USGS Quad	Description
NVA061	17002HW	LOWER VACHERIE	bare ground in middle of field road on north side of SR 3127
NVA062	17002HZ	LAGAN	bare ground in middle of field road on north side of SR 3127
NVA063	17002IA	DONALDSONVILLE	asphalt island between SR 3127 left turn lane and right turn lane at east side of SR 70
NVA064	17002IC	DONALDSONVILLE	bare ground in middle of field access on NE side of SR3089
NVA065	17002ID	BELLE ROSE	mowed grass in church yard on north side of SR 1
NVA066	17002IF	BELLE ROSE	bare ground in field access on north side of SR 943
NVA067	17002IG	BELLE ROSE	mowed grass on east side of church parking lot on north side of SR 1003
NVA068	17002IH	NAPOLEONVILLE	bare ground in dirt field road on east side of SR 403
NVA069	17002II	NAPOLEONVILLE	bare ground on south side of Glenwood Road
NVA070	17002IJ	NAPOLEONVILLE	bare ground on south side of SR 401 in field access road
NVA071	17002IL	BELLE ROSE	bare ground in middle of well access road on north side of SR 70
NVA072	17002IM	LONE STAR	bare ground in middle of dirt drive to lot in NE quadrant of intersection of SR 70 and Lee Drive
NVA073	17002IN	PIERRE PART	mowed grass on east side of SR 70 at field entrance
NVA074	17002IO	PIGEON	mowed grass on SE side of SR 75 on north side of library parking lot
NVA075	17002IP	BAYOU SORREL	bare ground in middle of gated drive on north side of SR 404
NVA076	17002IQ	WHITE CASTLE	bare ground in SE quadrant of intersection of SR 994 and Ridge Road
NVA077	17002IT	WHITE CASTLE	bare ground in center of access to pump station on east side of SR 1
NVA078	17002IU	BAYOU SORREL	bare ground in NE quadrant of intersection of SR 75 and Milly Plantation Road
NVA079	17002IV	ADDIS	mowed grass on west side of Intracoastal Road
NVA080	17002IX	LOBDELL	bare ground in middle of gated field access road on south side of frontage road on south side of I-10
NVA081	17002JA	BATON ROUGE WEST	gravel on west side of I-10 Frontage Road and west side of S Lobdell Highway
NVA082	17002JC	BATON ROUGE WEST	mowed grass between SR 1 NB lanes and service road on SE side of road
NVA083	17002JE	SAINT GABRIEL	mowed grass in park on south side of SR 42, south side of parking lot, in between ball fields
NVA084	17002JG	PRAIRIEVILLE	bare ground in large vacant lot on west side of SR 73
NVA085	17002JI	GONZALES	bare ground on south side of SR 30 in middle of drive to sewer lift station
NVA086	17002JJ	SORRENTO	concrete parking lot for cancer center on NE side of US 61
NVA087	17002JL	LUTCHER	concrete island on off ramp from I-10EB between left turn lane for SR 641 NB and right turn lane for SR 641 SB
NVA088	17002JN	LUTCHER	bare ground in center of road on top of levee on north side of SR 18 opposite Woodville Road to the south
NVA089	17002JP	RESERVE	bare ground in field access on west side of SR 640
NVA090	17002JT	DES ALLEMANDS	bare ground on east side of SR 306 to gated field road on south side of canal
NVA091	17002JU	LAPLACE	grass island on off ramp from I-10 WB, between right turn lane to US 51 NB and left turn lane to US 51 SB
NVA092	17002JX	LAPLACE	bare ground on NE side of US 61
NVA093	17002KA	LAPLACE	bare ground on north side of SR 628 on east side of entrance to park parking area
NVA094	17002KE	GHEENS	gravel road to park pavillion on west side of SR 654
NVA095	17002KK	LAROSE	bare ground on north side of SR 1 at boat dock
NVA096	17002KN	GRASSY LAKE	gravel road circle at south end of SR 1012
NVA097	17002KQ	ADDIS	bare ground in middle of drive to radio tower on west side of SR 77
NVA098	17002KR	GROSSE TETE	bare ground in loading area on north side of fields, south side of Cedar Street
NVA099	17002FC	WALKER	grass field on west side of S Satsuma Road and north side of Spring Ranch Road

Station Name	GPSID	USGS Quad	Description
NVA100	17002FI	SPRINGFIELD	sparse weeds on west side of Pumpkin Center Road and north of NOLA Pizza
NVA101	17002FJ	SPRINGFIELD	grass and weeds in a vacant lot on west side of September Rain Drive
PAUL	PAUL	GOLDEN MEADOW	CORS
SJHS	SJHS	SLIDELL	CORS
TIBO	TIBO	THIBODAUX	CORS
TRAVERSE	17002SC	PONCHATOULA	Traverse station for woods VVA point
TRAVERSE	17002SD	PONCHATOULA NE	Traverse station for woods VVA point
TRAVERSE	17002SE	MADISONVILLE	Traverse station for woods VVA point
TRAVERSE	17002SF	FROST	Traverse station for woods VVA point
TRAVERSE	17002SG	KILLIAN	Traverse station for woods VVA point
TRAVERSE	17002SH	DENHAM SPRINGS	Traverse station for woods VVA point
TRAVERSE	17002SI	CARVILLE	Traverse station for woods VVA point
TRAVERSE	17002SJ	GONZALES	Traverse station for woods VVA point
TRAVERSE	17002SK	WHITEHALL	Traverse station for woods VVA point
TRAVERSE	17002XC	PONCHATOULA	Traverse station for woods VVA point
TRAVERSE	17002XD	PONCHATOULA NE	Traverse station for woods VVA point
TRAVERSE	17002XE	MADISONVILLE	Traverse station for woods VVA point
TRAVERSE	17002XF	FROST	Traverse station for woods VVA point
TRAVERSE	17002XG	KILLIAN	Traverse station for woods VVA point
TRAVERSE	17002XH	DENHAM SPRINGS	Traverse station for woods VVA point
TRAVERSE	17002XI	CARVILLE	Traverse station for woods VVA point
TRAVERSE	17002XJ	GONZALES	Traverse station for woods VVA point
TRAVERSE	17002XK	WHITEHALL	Traverse station for woods VVA point
VRS_0315	VRS_0315	NEW ORLEANS WEST	VIRTUAL CORS
VVA001	17002DG	CHALMETTE	BRUSH:area on the west side of LA 47 opposite Eddie Pinto's Marina
VVA002	17002DL	NEW ORLEANS EAST	uncut vacant lot on the northeast side of Peters Road
VVA003	17002DZ	CHEF MENTEUR	BRUSH: on south side of US 90
VVA004	17002EA	CHEF MENTEUR	BRUSH: on east side of US 90 in a vacant lot
VVA005	17002ED	RIGOLETS	BRUSH: on southwest side of a small pump station on the south side of Old Spanish Trail
VVA006	17002EK	SLIDELL	vacant area on the southeast side of SR 433
VVA007	17002EL	LACOMBE	vacant lot on the north side of US 190
VVA008	17002EM	LACOMBE	WOODS: pines on west side of Ordogne Ruppert Road opposite a tower site
VVA009	17002EP	MADISONVILLE	BRUSH: brushy area on north side of Raiford Oaks Blvd
VVA010	17002EQ	PONCHATOULA NE	large brushy vacant lot on the north side of SR22 opposite SR445
VVA011	17002ES	PONCHATOULA	BRUSH: brushy lot on north side of SR 22
VVA012	17002EX	SPRINGFIELD	BRUSH: brushy area on south side of Church of God Road
VVA013	17002FB	WALKER	low brush on west side of Walker South Road and north of drive to medical center
VVA014	17002FD	FROST	field on the south side of SR 42
VVA015	17002FF	SPRINGFIELD	uncut field on SE side of Strawberry Lane east of SR 43
VVA016	17002FH	SPRINGFIELD	brush on NW side of SR 22 on SE side of stream
VVA017	17002FK	PONCHATOULA	field on NE corner of Happywoods Road and Hoffman Road
VVA018	17002FM	KILLIAN	west shoulder of SR 22
VVA019	17002FN	WHITEHALL	low brush area on west side of SR 22
VVA020	17002FS	KILLIAN	tall grass on south shoulder of SR 22 just north of Amite River Bridge
VVA021	17002FT	WHITEHALL	uncut field on north side of SR 22 just east of Bear Island Road

Station Name	GPSID	USGS Quad	Description
VVA022	17002FU	WHITEHALL	weeds at western end of gravel lot on west side of SR 22 and south of Live Oak Street
VVA023	17002HB	LA BRANCHE	unmowed vacant lot on south side of W Esplenade Avenue across from hospital
VVA024	17002HD	DES ALLEMANDS	tall vegetation on NW side of US 90
VVA025	17002HG	BAYOU BOEUF	unmowed vacant lot on south/east side of SR 182 just west of intersection with US 90
VVA026	17002HI	LOCKPORT	BRUSH: weeds/briars/tall brush on SW side of SR 308
VVA027	17002HK	LAROSE	high weeds in vacant lot in NE quadrant of intersection of SR 308 and Le Village Drive
VVA028	17002HN	LOCKPORT	high weeds in vacant lot on north side of SR 1, south bank of canal
VVA029	17002HS	MADEWOOD	WOODS between fields at east end of Valance Road
VVA030	17002HX	LOWER VACHERIE	high grass on south side of SR 3127
VVA031	17002IB	DONALDSONVILLE	high weeds on east side of SR 70 just SW of entrance to plant
VVA032	17002IK	NAPOLEONVILLE	high grass/weeds on south side of SR 401 on east side of field road
VVA033	17002IR	WHITE CASTLE	high grass on south side of SR 994 at 90° bend to the north from Ourso Road to Catherine Road
VVA034	17002IS	WHITE CASTLE	high grass in median of SR 1just north of Eureka Road cross-over
VVA035	17002IY	LOBDELL	unmowed grass on south side of south frontage road of I-10
VVA036	17002IZ	BATON ROUGE WEST	unmowed grass in median of S Lobdell Highway
VVA037	17002JB	BATON ROUGE WEST	high weeds in vacant lot on east side of Vaughn Drive
VVA038	17002JD	PLAQUEMINE	unmowed gas pipepline right-of-way
VVA039	17002JF	PRAIRIEVILLE	high brush in vacant lot on east side of SR 73, south side of RR
VVA040	17002JH	GONZALES	weeds and low brush in vacant lot on east side of S Darla Avenue
VVA041	17002JK	MOUNT AIRY NW	high grass in median of I-10 on west side of cross-over
VVA042	17002JM	LUTCHER	high grass between SR 3213 abd off ramp from SR 3213 southbound
VVA043	17002JO	LOWER VACHERIE	high grass and weeds on south side of SR 3127
VVA044	17002JQ	RESERVE	top of planted row of crops on west side of SR 640
VVA045	17002JR	HAHNVILLE	unmowed grass in median of SR 3127
VVA046	17002JS	DES ALLEMANDS	high weeds and brush in vacant lot on NE side of 90° curve of SR 306
VVA047	17002JV	LAPLACE	weeds in NE quadrant of intersection of off ramp from I-10 WB and US 51
VVA048	17002JW	RESERVE	high grass in median of I-10 on west side of cross-over
VVA049	17002JY	LAPLACE	weeds and low brush on SE side of US 51 opposite Bamboo Road to the NW
VVA050	17002JZ	LAPLACE	unmowed brush on south side of levee on north side of Mississippi River, east side of road to water intake
VVA051	17002KB	LULING	overgrown vacant lot on west side of Almedia Road
VVA052	17002KC	LULING	brush and marsh area on south side of US 90 and west side of parking lot for club
VVA053	17002KD	LOCKPORT	uncut field at NW end of Ford Drive
VVA054	17002KF	GHEENS	high grass in vacant lot on west side of SR 654
VVA055	17002KG	LOCKPORT	high grass on north side of SR 654
VVA056	17002KH	LAROSE	high grass and weeds on east side of SR 308
VVA057	17002KI	CUT OFF	high grass and weeds at SW corner of field, north side of E 35th Street
VVA058	17002KJ	GOLDEN MEADOW	high grass and weeds on east side of SR 3235
VVA059	17002KL	SAVOIE	unmowed grass on east side of Grandmaw Lane
VVA060	17002KM	THIBODAUX	high grass in vacant lot on south side of Plantation Road between Ridgefield Avenue and Canal Blvd
VVA061	17002KO	GRASSY LAKE	overgrwon field at south end of SR 1012

Station Name	GPSID	USGS Quad	Description
VVA062	17002KP	NAPOLEONVILLE	high grass and weeds on south side of SR 1, west side of field road south
VVA063	17002IE	BELLE ROSE	BRUSH: high brush and briars on east side of road under power lines
VVA064	17002DJ	NEW ORLEANS EAST	uncut grass area between north side of Homes Blvd and canal
VVA065	17002DO	NEW ORLEANS WEST	high grass area on north side of US 90 just west of dirt drive to dump site
VVA066	17002DV	NORTH SHORE	unmowed grass on SE side of exit 261 from I-10 EB
VVA067	17002DW	NORTH SHORE	north shoulder of I-10 WB on ramp from US 11
VVA068	17002DX	LITTLE WOODS	uncut grass in center of median island at exit 248 I-10
VVA069	17002HY	LAGAN	high grass and weeds on south side of SR 3127
VVA070	17002WC	PONCHATOULA	woods on west side of westerly I-55 service road/south side of entrance to factory building
VVA071	17002WD	PONCHATOULA NE	woods on south side of Eagle Drive and west side of S Falcon Drive
VVA072	17002WE	MADISONVILLE	woods on south side of Post Oak Drive and west side of Turnpike Road
VVA073	17002WF	FROST	woods on west side of SR 441
VVA074	17002WG	KILLIAN	woods on SE side of vacant lot on SE side of SR 22
VVA075	17002WH	DENHAM SPRINGS	woods on NE side of SR 16 just south of Rolling Acres Drive to the west
VVA076	17002WI	CARVILLE	woods on west side of SR 3115
VVA077	17002WJ	GONZALES	woods on NE side of Panama Road
VVA078	17002WK	WHITEHALL	woods on west side of Old Frost Road

METHODOLOGY

The field survey was done by using the GULFNet Virtual Reference Station Network. In the VRS method, a GPS receiver (Trimble R8 GNSS and R10 dual frequency receivers were used) equipped with a data connection is used as a rover to occupy each survey point. Data is received via the cellular network for a "virtual" reference station nearby. The data is processed in real time to compute a position and elevation for the unknown station. The rover is positioned from the nearest physical CORS point and the vector data is stored in a data collector as a vector from this position, along with statistical data for the solution. Each point was surveyed two times in succession, separated by a new initialization. Table 2 summarizes the VRS data, precisions in meters):

Table 2 - VRS Occupation Summary

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
BSRL	17002AA	02/22/2017 00:21:32	00:23:31	0.007	0.014	15	1.6
BSRL	17002AA	02/22/2017 00:24:20	00:26:19	0.006	0.013	14	1.7
DOTD	17002AB	02/21/2017 23:42:23	23:44:22	0.008	0.014	11	2.1
DOTD	17002AB	02/21/2017 23:44:46	23:46:52	0.015	0.025	11	2.0
DOTD	17002AB	02/21/2017 23:47:18	23:49:17	0.015	0.028	8	2.1
BSRL	17002AC	02/21/2017 23:10:11	23:12:10	0.007	0.013	15	1.3
BSRL	17002AC	02/21/2017 23:12:23	23:14:22	0.005	0.010	13	1.9
BSRL	17002AD	02/21/2017 21:00:34	21:02:33	0.007	0.012	15	1.5
BSRL	17002AD	02/21/2017 21:02:46	21:04:45	0.006	0.009	15	1.5
DOTD	17002AE	02/22/2017 14:17:09	14:19:08	0.005	0.010	16	1.4
DOTD	17002AE	02/22/2017 14:19:23	14:21:22	0.005	0.010	16	1.4
MCHS	17002AF	02/21/2017 20:32:01	20:34:00	0.005	0.009	15	1.4
MCHS	17002AF	02/21/2017 20:34:12	20:36:11	0.006	0.009	14	1.5
DOTD	17002AG	02/22/2017 15:02:39	15:04:38	0.003	0.005	13	1.8
DOTD	17002AG	02/22/2017 15:04:50	15:06:49	0.005	0.010	14	1.5
BSRL	17002AH	02/21/2017 22:14:44	22:16:43	0.008	0.018	13	1.8

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
BSRL	17002AH	02/21/2017 22:17:01	22:19:00	0.005	0.013	14	1.8
DOTD	17002AI	02/22/2017 15:39:15	15:42:58	0.004	0.008	13	1.4
DOTD	17002AI	02/22/2017 15:43:14	15:45:13	0.006	0.011	12	1.6
AWES	17002AJ	02/21/2017 18:11:19	18:13:30	0.012	0.022	9	3.4
AWES	17002AJ	02/21/2017 18:13:50	18:15:49	0.007	0.014	15	1.3
BSRL	17002AK	02/21/2017 17:01:50	17:03:49	0.007	0.010	14	1.4
BSRL	17002AK	02/21/2017 17:04:03	17:06:02	0.013	0.019	14	1.4
MCHS	17002AL	02/21/2017 19:06:28	19:08:27	0.007	0.013	13	1.6
MCHS	17002AL	02/21/2017 19:09:09	19:11:08	0.006	0.012	13	1.5
MCHS	17002AM	02/20/2017 22:37:08	22:39:07	0.005	0.010	16	1.5
MCHS	17002AM	02/20/2017 22:39:24	22:41:23	0.005	0.012	16	1.5
GVMS	17002AN	02/22/2017 16:54:41	16:56:40	0.008	0.012	14	1.5
GVMS	17002AN	02/22/2017 16:56:59	16:58:58	0.006	0.009	14	1.6
GVMS	17002AO	02/22/2017 16:16:15	16:18:14	0.004	0.006	15	1.3
GVMS	17002AO	02/22/2017 16:18:30	16:20:29	0.005	0.008	14	1.3
AWES	17002AP	02/21/2017 16:13:51	16:15:50	0.004	0.006	15	1.5
AWES	17002AP	02/21/2017 16:17:21	16:19:20	0.004	0.006	15	1.4
AWES	17002AQ	02/20/2017 23:13:29	23:15:28	0.013	0.022	8	1.8
AWES	17002AQ	02/20/2017 23:15:43	23:17:42	0.013	0.023	8	1.8
AWES	17002AQ	02/20/2017 23:18:29	23:20:28	0.010	0.019	15	1.5
MCHS	17002AR	02/20/2017 22:12:15	22:14:14	0.006	0.013	15	1.5
MCHS	17002AR	02/20/2017 22:14:27	22:16:26	0.009	0.022	16	1.4
GVMS	17002AS	02/22/2017 23:30:28	23:33:36	0.003	0.005	13	1.2
GVMS	17002AS	02/22/2017 23:34:10	23:37:16	0.003	0.005	13	1.3
AWES	17002AT	02/21/2017 15:38:40	15:40:39	0.008	0.015	14	1.4
AWES	17002AT	02/21/2017 15:40:54	15:42:53	0.008	0.014	15	1.2
GVMS	17002AU	02/22/2017 17:36:39	17:38:38	0.005	0.008	14	1.6
GVMS	17002AU	02/22/2017 17:38:56	17:40:55	0.006	0.010	15	1.5
LUCH	17002AV	02/21/2017 13:31:59	13:33:58	0.006	0.010	14	1.7
LUCH	17002AV	02/21/2017 13:34:18	13:36:17	0.006	0.011	14	1.7
HAMM	17002AW	02/22/2017 22:24:39	22:27:49	0.011	0.020	10	1.7
HAMM	17002AW	02/22/2017 22:28:27	22:31:32	0.012	0.022	10	1.5
~~**HAMM**~~	~~17002AW~~	~~02/22/2017 22:32:02~~	~~22:34:10~~	~~0.014~~	~~0.026~~	~~10~~	~~1.8~~
~~**HAMM**~~	~~17002AW~~	~~02/22/2017 22:34:47~~	~~22:38:08~~	~~0.011~~	~~0.020~~	~~10~~	~~1.8~~
HAMM	17002AW	02/22/2017 22:39:30	22:44:41	0.016	0.027	10	22.1
HAMM	17002AW	02/22/2017 22:46:02	22:50:41	0.009	0.015	11	3.7
LUCH	17002AX	02/21/2017 15:06:57	15:08:56	0.009	0.019	15	1.6
LUCH	17002AX	02/21/2017 15:09:43	15:11:42	0.006	0.012	13	1.7
HAMM	17002AY	02/22/2017 21:50:47	21:53:51	0.005	0.008	13	1.5
HAMM	17002AY	02/22/2017 21:56:18	21:59:29	0.005	0.010	12	1.8
HOMA	17002AZ	02/20/2017 21:22:36	21:24:35	0.007	0.012	13	1.6
HOMA	17002AZ	02/20/2017 21:24:49	21:26:48	0.005	0.009	13	1.6
LUCH	17002BA	02/22/2017 18:05:21	18:07:20	0.005	0.009	16	1.3
LUCH	17002BA	02/22/2017 18:07:31	18:09:30	0.004	0.007	16	1.3
LUCH	17002BB	02/22/2017 18:35:31	18:37:30	0.005	0.011	14	1.7
LUCH	17002BB	02/22/2017 18:37:38	18:39:37	0.003	0.006	14	1.6
LUCH	17002BC	02/21/2017 14:05:30	14:07:29	0.009	0.018	16	1.4
LUCH	17002BC	02/21/2017 14:07:43	14:09:42	0.006	0.011	16	1.4
LUCH	17002BD	02/23/2017 21:10:10	21:13:13	0.005	0.016	9	4.5
LUCH	17002BD	02/23/2017 21:16:49	21:19:57	0.005	0.014	10	2.2
LUCH	17002BE	02/22/2017 19:29:56	19:31:55	0.007	0.011	13	1.7
LUCH	17002BE	02/22/2017 19:32:13	19:34:12	0.005	0.009	13	1.7
HOMA	17002BF	02/20/2017 20:34:49	20:36:48	0.006	0.009	15	1.4
HOMA	17002BF	02/20/2017 20:37:03	20:39:02	0.006	0.009	15	1.4
HAMM	17002BG	02/22/2017 20:41:15	20:44:23	0.004	0.006	14	1.4
HAMM	17002BG	02/22/2017 20:45:41	20:49:07	0.003	0.005	12	1.5
LUCH	17002BH	02/22/2017 22:03:47	22:05:46	0.007	0.017	13	2.3
LUCH	17002BH	02/22/2017 22:05:59	22:07:58	0.005	0.012	13	2.3
LWES	17002BI	02/20/2017 17:16:00	17:17:59	0.013	0.019	9	1.9
HOMA	17002BJ	02/20/2017 18:37:10	18:39:09	0.008	0.017	11	1.4
DSTR	17002BK	02/22/2017 20:04:13	20:06:12	0.004	0.007	13	1.6
DSTR	17002BK	02/22/2017 20:06:29	20:08:28	0.004	0.006	13	1.6
DSTR	17002BL	02/22/2017 19:33:19	19:38:53	0.004	0.007	12	2.1
DSTR	17002BL	02/22/2017 19:39:19	19:42:30	0.005	0.008	13	1.6
HAMM	17002BM	02/22/2017 18:23:35	18:26:39	0.003	0.005	16	1.2

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
HAMM	17002BM	02/22/2017 18:29:04	18:32:10	0.003	0.005	16	1.1
LWES	17002BN	02/20/2017 16:41:11	16:43:10	0.009	0.014	10	1.7
LWES	17002BN	02/20/2017 16:43:26	16:45:25	0.007	0.010	9	2.0
HAMM	17002BO	02/22/2017 18:57:43	19:00:48	0.004	0.008	13	1.5
HAMM	17002BO	02/22/2017 19:01:29	19:04:36	0.004	0.008	13	1.8
DSTR	17002BP	02/22/2017 22:43:50	22:45:49	0.013	0.028	13	1.6
DSTR	17002BP	02/22/2017 22:46:02	22:48:01	0.006	0.013	13	1.6
PAUL	17002BQ	02/20/2017 19:13:58	19:15:57	0.005	0.010	13	1.6
PAUL	17002BQ	02/20/2017 19:16:19	19:18:18	0.005	0.009	13	1.6
COVG	17002BR	02/22/2017 17:05:06	17:09:01	0.004	0.006	13	1.5
COVG	17002BR	02/22/2017 17:09:40	17:13:30	0.005	0.007	14	1.4
PAUL	17002BS	02/20/2017 19:49:40	19:51:39	0.004	0.006	12	1.7
PAUL	17002BS	02/20/2017 19:51:54	19:53:53	0.005	0.007	13	1.6
INRI	17002BT	02/21/2017 14:36:15	14:39:19	0.004	0.008	15	1.5
INRI	17002BT	02/21/2017 14:41:00	14:46:05	0.004	0.008	14	1.5
DSTR	17002BU	02/20/2017 15:45:46	15:47:50	0.005	0.009	12	1.7
DSTR	17002BU	02/20/2017 15:48:04	15:50:03	0.007	0.012	17	1.1
COVG	17002BV	02/22/2017 15:52:04	15:55:12	0.004	0.006	13	1.3
COVG	17002BV	02/22/2017 15:56:09	15:59:14	0.004	0.006	13	1.4
INRI	17002BW	02/21/2017 13:26:53	13:30:00	0.003	0.005	14	0.9
INRI	17002BW	02/21/2017 13:33:08	13:36:16	0.003	0.005	15	1.0
INRI	17002BX	02/20/2017 23:41:53	23:47:06	0.003	0.005	14	1.7
INRI	17002BX	02/20/2017 23:47:41	23:51:12	0.003	0.006	16	1.5
INRI	17002BY	02/20/2017 19:14:31	19:18:05	0.003	0.005	12	1.2
INRI	17002BY	02/20/2017 19:18:35	19:21:42	0.003	0.006	13	1.2
COVG	17002BZ	02/22/2017 14:41:36	14:46:33	0.003	0.006	14	1.4
COVG	17002BZ	02/22/2017 14:46:57	14:50:04	0.003	0.007	14	1.5
INRI	17002CA	02/20/2017 23:00:08	23:03:18	0.007	0.010	12	1.6
INRI	17002CA	02/20/2017 23:04:29	23:07:35	0.006	0.010	12	1.5
INRI	17002CB	02/20/2017 20:08:01	20:11:02	0.004	0.006	12	1.4
INRI	17002CB	02/20/2017 20:11:32	20:14:41	0.004	0.006	13	1.5
INRI	17002CC	02/20/2017 20:53:11	20:56:19	0.004	0.006	14	1.3
INRI	17002CC	02/20/2017 20:57:22	21:01:47	0.003	0.005	14	1.5
SJHS	17002CD	02/22/2017 13:49:14	13:52:24	0.003	0.005	14	1.3
SJHS	17002CD	02/22/2017 13:52:48	13:55:53	0.003	0.006	14	1.5
MARY	17002CE	02/21/2017 19:17:34	19:20:41	0.003	0.005	13	1.1
MARY	17002CE	02/21/2017 19:22:27	19:25:47	0.003	0.006	13	1.3
MARY	17002CF	02/21/2017 23:42:42	23:45:47	0.005	0.008	13	1.7
MARY	17002CF	02/21/2017 23:46:52	23:49:58	0.005	0.008	12	1.5
MARY	17002CG	02/21/2017 19:49:27	19:52:44	0.004	0.006	14	1.2
MARY	17002CG	02/21/2017 19:53:09	19:56:17	0.004	0.006	14	1.4
MARY	17002CH	02/21/2017 20:59:22	21:02:31	0.004	0.007	14	1.4
MARY	17002CH	02/21/2017 21:03:04	21:07:10	0.004	0.007	14	1.7
MARY	17002CI	02/21/2017 21:48:01	21:51:06	0.005	0.009	14	1.5
MARY	17002CI	02/21/2017 21:51:44	21:54:59	0.005	0.009	15	1.4
MARY	17002CJ	02/21/2017 20:41:35	20:45:54	0.004	0.006	15	1.7
MARY	17002CJ	02/21/2017 20:46:18	20:49:24	0.004	0.007	17	1.4
MARY	17002CJ	02/21/2017 20:49:54	20:53:03	0.004	0.007	16	1.3
DOTD	17002CY	02/21/2017 23:53:26	23:55:25	0.007	0.012	13	1.8
DOTD	17002CY	02/21/2017 23:55:41	23:57:40	0.009	0.018	14	1.6
LWES	17002CZ	02/22/2017 20:40:17	20:42:16	0.007	0.011	17	1.2
LWES	17002CZ	02/22/2017 20:42:30	20:44:29	0.006	0.009	16	1.3
VRS_0315	17002DA	02/20/2017 18:09:46	18:12:52	0.002	0.004	7	0.7
VRS_0315	17002DA	02/20/2017 18:17:27	18:20:31	0.002	0.004	7	0.8
VRS_0315	17002DB	02/20/2017 18:35:22	18:38:25	0.010	0.015	7	1.8
INRI	17002DB	02/20/2017 18:43:05	18:46:10	0.005	0.009	9	1.6
INRI	17002DC	02/20/2017 18:57:03	19:00:11	0.004	0.009	8	1.8
INRI	17002DC	02/20/2017 19:00:34	19:03:39	0.004	0.009	8	1.9
INRI	17002DD	02/20/2017 19:31:42	19:34:49	0.003	0.006	13	1.5
INRI	17002DD	02/20/2017 19:39:14	19:42:26	0.003	0.006	12	1.4
INRI	17002DD	02/20/2017 19:43:05	19:46:09	0.003	0.005	12	1.4
INRI	17002DE	02/20/2017 19:54:11	19:57:21	0.003	0.005	11	1.3
INRI	17002DE	02/20/2017 19:57:43	20:01:10	0.003	0.005	11	1.4
INRI	17002DF	02/20/2017 20:24:47	20:27:53	0.004	0.006	14	1.4
INRI	17002DF	02/20/2017 20:28:28	20:31:34	0.004	0.006	14	1.4

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
INRI	17002DG	02/20/2017 20:38:09	20:41:20	0.004	0.006	15	1.5
INRI	17002DG	02/20/2017 20:43:01	20:45:20	0.004	0.007	16	1.3
INRI	17002DH	02/20/2017 21:15:20	21:18:21	0.003	0.005	14	1.2
INRI	17002DH	02/20/2017 21:19:16	21:22:18	0.003	0.005	14	1.3
INRI	17002DI	02/20/2017 22:00:24	22:03:37	0.002	0.004	16	1.0
INRI	17002DI	02/20/2017 22:04:33	22:07:43	0.003	0.005	16	1.1
INRI	17002DJ	02/20/2017 22:31:43	22:34:49	0.003	0.007	15	1.3
INRI	17002DJ	02/20/2017 22:35:23	22:38:31	0.003	0.007	15	2.1
INRI	17002DJ	02/20/2017 22:39:00	22:42:09	0.003	0.006	15	5.6
INRI	17002DK	02/21/2017 00:04:41	00:07:47	0.003	0.006	16	1.4
INRI	17002DK	02/21/2017 00:08:21	00:11:27	0.003	0.006	15	1.4
INRI	17002DL	02/21/2017 12:54:03	12:57:16	0.004	0.006	16	1.0
INRI	17002DL	02/21/2017 12:57:39	13:00:47	0.003	0.005	15	1.0
INRI	17002DM	02/21/2017 13:12:04	13:15:16	0.003	0.005	16	0.9
INRI	17002DM	02/21/2017 13:15:44	13:20:03	0.003	0.005	14	1.0
INRI	17002DN	02/21/2017 13:53:46	13:56:50	0.003	0.005	15	1.0
INRI	17002DN	02/21/2017 13:59:06	14:02:11	0.003	0.005	16	1.1
INRI	17002DO	02/21/2017 14:22:50	14:25:52	0.003	0.006	14	1.4
INRI	17002DO	02/21/2017 14:26:16	14:29:22	0.003	0.007	15	1.4
INRI	17002DP	02/21/2017 15:02:12	15:05:25	0.005	0.007	12	1.7
INRI	17002DP	02/21/2017 15:06:40	15:10:05	0.005	0.007	12	1.8
INRI	17002DQ	02/21/2017 15:35:26	15:38:38	0.003	0.005	12	1.2
INRI	17002DQ	02/21/2017 15:39:47	15:43:00	0.003	0.005	11	1.2
MARY	17002DR	02/21/2017 16:15:04	16:18:16	0.004	0.006	12	1.3
MARY	17002DR	02/21/2017 16:19:58	16:23:11	0.004	0.006	13	1.3
MARY	17002DS	02/21/2017 16:36:54	16:39:58	0.002	0.004	11	0.9
MARY	17002DS	02/21/2017 16:40:30	16:43:39	0.002	0.003	10	0.9
MARY	17002DT	02/21/2017 16:51:20	16:54:33	0.003	0.006	11	1.2
MARY	17002DT	02/21/2017 16:59:52	17:03:05	0.005	0.008	10	1.3
MARY	17002DU	02/21/2017 17:12:23	17:15:32	0.003	0.004	14	1.0
MARY	17002DU	02/21/2017 17:17:26	17:20:39	0.003	0.004	14	1.0
SJHS	17002DV	02/21/2017 17:36:34	17:39:42	0.004	0.005	13	1.0
SJHS	17002DV	02/21/2017 17:43:47	17:46:55	0.004	0.006	15	1.0
MARY	17002DW	02/21/2017 18:08:54	18:12:01	0.003	0.005	14	1.2
MARY	17002DW	02/21/2017 18:12:33	18:15:36	0.003	0.005	15	1.3
MARY	17002DX	02/21/2017 18:24:40	18:27:47	0.003	0.005	15	1.0
MARY	17002DX	02/21/2017 18:29:06	18:32:13	0.003	0.005	15	1.1
MARY	17002DY	02/21/2017 18:47:17	18:50:36	0.003	0.006	13	1.1
MARY	17002DY	02/21/2017 18:50:59	18:54:29	0.003	0.006	13	1.2
MARY	17002DZ	02/21/2017 19:01:42	19:04:59	0.003	0.005	12	1.0
MARY	17002DZ	02/21/2017 19:07:03	19:10:18	0.003	0.006	13	1.3
MARY	17002EA	02/21/2017 19:33:47	19:37:07	0.003	0.005	13	1.2
MARY	17002EA	02/21/2017 19:39:24	19:41:26	0.004	0.006	13	1.4
MARY	17002EB	02/21/2017 20:01:58	20:05:10	0.004	0.006	14	1.4
MARY	17002EB	02/21/2017 20:05:48	20:08:59	0.004	0.006	14	1.4
MARY	17002EC	02/21/2017 20:14:05	20:17:13	0.004	0.006	14	1.5
MARY	17002EC	02/21/2017 20:17:39	20:20:57	0.004	0.006	15	1.3
MARY	17002ED	02/21/2017 20:27:31	20:30:38	0.004	0.006	15	1.4
MARY	17002ED	02/21/2017 20:33:23	20:36:07	0.005	0.007	15	1.4
MARY	17002EE	02/21/2017 21:12:11	21:15:24	0.005	0.008	15	1.5
MARY	17002EE	02/21/2017 21:15:54	21:19:02	0.005	0.008	16	1.5
MARY	17002EF	02/21/2017 21:25:54	21:29:06	0.005	0.008	14	1.6
MARY	17002EF	02/21/2017 21:29:54	21:33:01	0.005	0.008	14	1.5
MARY	17002EG	02/21/2017 22:14:03	22:17:09	0.007	0.013	13	1.8
MARY	17002EG	02/21/2017 22:19:05	22:22:14	0.007	0.012	14	1.5
MARY	17002EG	02/21/2017 22:22:40	22:25:56	0.006	0.011	14	1.4
MARY	17002EH	02/21/2017 22:53:25	22:56:37	0.009	0.014	12	1.5
MARY	17002EH	02/21/2017 22:57:06	23:00:15	0.009	0.014	11	1.5
MARY	17002EI	02/21/2017 23:13:07	23:16:41	0.004	0.007	14	1.3
MARY	17002EI	02/21/2017 23:17:08	23:20:14	0.005	0.008	14	1.3
MARY	17002EJ	02/22/2017 00:04:08	00:07:19	0.004	0.007	12	1.5
MARY	17002EJ	02/22/2017 00:08:34	00:11:40	0.004	0.007	11	2.7
SJHS	17002EK	02/22/2017 13:12:21	13:15:33	0.003	0.009	10	1.8
SJHS	17002EK	02/22/2017 13:19:21	13:22:23	0.004	0.014	11	1.9
SJHS	17002EL	02/22/2017 13:33:03	13:36:14	0.003	0.005	13	1.0

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
SJHS	17002EL	02/22/2017 13:37:11	13:40:19	0.003	0.005	14	1.1
SJHS	17002EM	02/22/2017 14:09:40	14:12:54	0.003	0.006	13	1.7
SJHS	17002EM	02/22/2017 14:13:55	14:16:23	0.005	0.010	13	1.8
COVG	17002EN	02/22/2017 15:07:30	15:10:41	0.003	0.005	12	1.1
COVG	17002EN	02/22/2017 15:12:17	15:15:31	0.003	0.005	13	1.3
COVG	17002EN	02/22/2017 15:15:56	15:19:10	0.003	0.005	12	1.3
COVG	17002EO	02/22/2017 15:27:34	15:30:48	0.003	0.005	14	1.1
COVG	17002EO	02/22/2017 15:32:51	15:35:54	0.003	0.005	15	1.2
COVG	17002EP	02/22/2017 16:17:27	16:20:36	0.004	0.006	10	1.7
COVG	17002EP	02/22/2017 16:22:32	16:25:42	0.004	0.006	12	2.6
COVG	17002EQ	02/22/2017 16:47:44	16:50:58	0.005	0.008	11	1.5
COVG	17002EQ	02/22/2017 16:52:55	16:56:06	0.005	0.008	10	1.5
HAMM	17002ER	02/22/2017 17:28:15	17:31:24	0.004	0.006	14	1.0
HAMM	17002ER	02/22/2017 17:32:20	17:35:29	0.004	0.006	14	1.0
HAMM	17002ES	02/22/2017 17:45:07	17:48:12	0.003	0.005	15	0.8
HAMM	17002ES	02/22/2017 17:50:34	17:52:35	0.004	0.007	15	1.0
HAMM	17002ET	02/22/2017 18:04:58	18:08:19	0.003	0.005	15	0.9
HAMM	17002ET	02/22/2017 18:09:18	18:12:26	0.003	0.006	14	1.1
HAMM	17002EU	02/22/2017 18:39:34	18:42:44	0.003	0.007	13	1.6
HAMM	17002EU	02/22/2017 18:43:14	18:46:23	0.003	0.007	13	1.5
HAMM	17002EU	02/22/2017 18:46:53	18:50:01	0.003	0.007	13	1.5
HAMM	17002EV	02/22/2017 19:12:32	19:15:43	0.004	0.008	13	1.8
HAMM	17002EV	02/22/2017 19:16:47	19:19:54	0.005	0.008	13	1.7
DSTR	17002EW	02/22/2017 19:47:48	19:51:10	0.005	0.008	12	1.8
DSTR	17002EW	02/22/2017 19:51:47	19:55:02	0.005	0.008	12	1.8
HAMM	17002EX	02/22/2017 20:54:16	20:58:15	0.004	0.010	11	2.5
HAMM	17002EX	02/22/2017 20:58:44	21:02:58	0.004	0.011	11	2.6
HAMM	17002EY	02/22/2017 21:20:29	21:23:35	0.005	0.014	11	2.2
HAMM	17002EY	02/22/2017 21:24:34	21:27:38	0.005	0.014	11	2.3
HAMM	17002EZ	02/22/2017 22:04:12	22:07:18	0.005	0.009	13	1.6
HAMM	17002EZ	02/22/2017 22:08:32	22:11:45	0.008	0.015	12	1.7
GVMS	17002FA	02/22/2017 23:11:15	23:14:27	0.004	0.009	10	2.1
GVMS	17002FA	02/22/2017 23:15:19	23:18:36	0.004	0.009	9	2.1
GVMS	17002FB	02/23/2017 14:53:24	14:56:26	0.007	0.010	11	1.7
GVMS	17002FB	02/23/2017 15:00:22	15:02:49	0.006	0.010	13	1.5
GVMS	17002FC	02/23/2017 15:11:24	15:14:38	0.005	0.008	11	1.8
GVMS	17002FC	02/23/2017 15:15:59	15:19:09	0.006	0.008	11	1.6
GVMS	17002FD	02/23/2017 15:35:16	15:38:25	0.004	0.007	15	1.4
GVMS	17002FD	02/23/2017 15:39:49	15:42:24	0.005	0.008	14	1.5
GVMS	17002FE	02/23/2017 15:49:40	15:53:26	0.004	0.007	14	1.5
GVMS	17002FE	02/23/2017 15:53:53	15:56:57	0.005	0.008	16	1.9
GVMS	17002FF	02/23/2017 16:03:22	16:06:32	0.005	0.008	16	1.3
GVMS	17002FF	02/23/2017 16:09:19	16:12:30	0.005	0.008	16	1.3
GVMS	17002FG	02/23/2017 16:19:11	16:22:16	0.005	0.008	16	1.2
GVMS	17002FG	02/23/2017 16:24:14	16:27:25	0.005	0.007	15	1.4
GVMS	17002FH	02/23/2017 16:33:56	16:37:08	0.005	0.008	13	1.5
GVMS	17002FH	02/23/2017 16:37:44	16:40:56	0.005	0.007	15	1.2
GVMS	17002FI	02/23/2017 16:47:12	16:50:29	0.005	0.007	15	1.4
GVMS	17002FI	02/23/2017 16:53:02	16:55:32	0.006	0.008	15	1.4
~~GVMS~~	~~17002FJ~~	~~02/23/2017 17:09:26~~	~~17:12:40~~	~~0.005~~	~~0.008~~	~~13~~	~~1.5~~
GVMS	17002FJ	02/23/2017 17:17:02	17:20:18	0.005	0.007	13	1.5
GVMS	17002FJ	02/23/2017 17:21:47	17:25:06	0.005	0.008	13	1.5
GVMS	17002FJ	02/23/2017 17:31:49	17:34:59	0.005	0.008	13	2.5
HAMM	17002FJ	02/23/2017 17:37:21	17:40:23	0.004	0.006	15	1.0
HAMM	17002FJ	02/23/2017 17:41:35	17:44:44	0.004	0.006	15	1.0
HAMM	17002FJ	02/23/2017 17:45:41	17:48:48	0.004	0.006	14	1.0
HAMM	17002FK	02/23/2017 17:58:00	18:01:10	0.005	0.007	9	1.3
HAMM	17002FK	02/23/2017 18:01:40	18:04:50	0.004	0.006	10	1.4
HAMM	17002FK	02/23/2017 18:05:54	18:09:09	0.004	0.006	9	1.5
HAMM	17002FL	02/23/2017 18:44:50	18:47:57	0.005	0.008	8	1.9
HAMM	17002FL	02/23/2017 18:48:27	18:51:32	0.005	0.008	8	1.9
HAMM	17002FM	02/23/2017 18:57:14	19:00:28	0.006	0.009	8	2.3
HAMM	17002FM	02/23/2017 19:01:26	19:04:37	0.005	0.008	8	2.3
HAMM	17002FN	02/23/2017 19:14:14	19:18:06	0.004	0.007	11	2.1
HAMM	17002FN	02/23/2017 19:18:31	19:21:38	0.005	0.008	12	1.5

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
GVMS	17002FO	02/23/2017 19:35:42	19:38:53	0.004	0.006	12	1.4
GVMS	17002FO	02/23/2017 19:39:19	19:42:32	0.004	0.006	11	1.6
GVMS	17002FP	02/23/2017 19:53:01	19:56:05	0.004	0.006	12	1.4
GVMS	17002FP	02/23/2017 19:56:28	19:59:39	0.003	0.005	11	1.4
GVMS	17002FQ	02/23/2017 20:26:30	20:29:34	0.003	0.006	15	1.2
GVMS	17002FQ	02/23/2017 20:30:13	20:33:18	0.003	0.006	16	1.2
GVMS	17002FR	02/23/2017 20:40:58	20:44:01	0.004	0.010	12	1.6
GVMS	17002FR	02/23/2017 20:45:11	20:48:17	0.004	0.010	11	1.6
HAMM	17002FS	02/23/2017 21:34:21	21:37:28	0.005	0.012	11	2.1
HAMM	17002FS	02/23/2017 21:38:33	21:41:38	0.005	0.012	11	2.0
GVMS	17002FT	02/23/2017 21:48:10	21:51:53	0.005	0.011	11	1.6
GVMS	17002FT	02/23/2017 21:52:20	21:55:25	0.005	0.011	11	1.9
GVMS	17002FU	02/23/2017 22:10:26	22:14:15	0.005	0.013	11	1.8
GVMS	17002FU	02/23/2017 22:14:47	22:17:52	0.007	0.013	11	1.8
GVMS	17002FV	02/23/2017 22:41:54	22:45:36	0.004	0.008	12	1.5
GVMS	17002FV	02/23/2017 22:45:59	22:49:10	0.004	0.009	11	1.5
GVMS	17002FW	02/23/2017 23:09:23	23:12:28	0.005	0.010	11	1.7
GVMS	17002FW	02/23/2017 23:12:57	23:16:04	0.005	0.010	11	1.7
DSTR	17002HA	02/20/2017 15:25:03	15:27:02	0.005	0.009	16	1.4
DSTR	17002HA	02/20/2017 15:27:22	15:29:21	0.005	0.009	16	1.4
DSTR	17002HA	02/20/2017 15:30:30	15:32:29	0.006	0.011	16	1.3
DSTR	17002HB	02/20/2017 15:56:27	15:58:26	0.010	0.017	16	1.2
DSTR	17002HB	02/20/2017 15:59:45	16:01:44	0.009	0.015	15	1.2
DSTR	17002HC	02/20/2017 16:18:44	16:20:43	0.005	0.010	12	2.1
LWES	17002HD	02/20/2017 16:56:56	16:58:55	0.009	0.014	10	1.7
LWES	17002HD	02/20/2017 17:00:01	17:02:00	0.011	0.015	10	1.7
LWES	17002HE	02/20/2017 17:04:14	17:06:13	0.008	0.011	10	1.8
LWES	17002HE	02/20/2017 17:06:29	17:08:28	0.013	0.019	10	1.8
LWES	17002HE	02/20/2017 17:08:56	17:10:55	0.009	0.013	10	1.8
HOMA	17002HF	02/20/2017 17:27:43	17:29:42	0.009	0.013	10	1.7
HOMA	17002HF	02/20/2017 17:29:54	17:31:53	0.007	0.010	10	1.7
HOMA	17002HG	02/20/2017 17:34:01	17:36:00	0.009	0.014	9	2.0
HOMA	17002HG	02/20/2017 17:36:15	17:38:14	0.006	0.010	9	2.0
HOMA	17002HH	02/20/2017 17:46:43	17:48:42	0.006	0.010	10	1.9
HOMA	17002HH	02/20/2017 17:48:55	17:50:54	0.006	0.010	10	1.9
HOMA	17002HI	02/20/2017 17:59:24	18:01:23	0.006	0.010	10	1.9
HOMA	17002HI	02/20/2017 18:01:48	18:03:47	0.006	0.010	10	1.9
HOMA	17002HJ	02/20/2017 18:22:36	18:24:35	0.008	0.016	9	1.8
HOMA	17002HJ	02/20/2017 18:24:49	18:26:48	0.006	0.013	10	1.7
PAUL	17002HK	02/20/2017 18:53:04	18:55:03	0.007	0.015	9	1.9
PAUL	17002HK	02/20/2017 18:56:40	18:58:39	0.005	0.011	13	1.6
PAUL	17002HK	02/20/2017 18:58:56	19:00:55	0.005	0.012	12	1.9
PAUL	17002HL	02/20/2017 19:23:37	19:25:36	0.005	0.009	13	1.6
PAUL	17002HL	02/20/2017 19:25:57	19:27:56	0.006	0.010	13	1.6
PAUL	17002HM	02/20/2017 19:40:13	19:42:12	0.005	0.009	13	1.6
PAUL	17002HM	02/20/2017 19:42:24	19:44:23	0.004	0.006	13	1.6
HOMA	17002HN	02/20/2017 20:42:08	20:44:07	0.009	0.015	16	1.3
HOMA	17002HN	02/20/2017 20:44:19	20:46:18	0.007	0.011	16	1.3
HOMA	17002HN	02/20/2017 20:46:42	20:48:41	0.005	0.009	8	1.7
HOMA	17002HO	02/20/2017 20:52:56	20:54:55	0.005	0.009	14	1.4
HOMA	17002HO	02/20/2017 20:55:10	20:57:09	0.006	0.010	14	1.5
HOMA	17002HP	02/20/2017 21:09:36	21:11:35	0.006	0.010	13	1.6
HOMA	17002HP	02/20/2017 21:11:52	21:13:51	0.006	0.009	13	1.6
HOMA	17002HQ	02/20/2017 21:52:04	21:54:07	0.017	0.034	15	1.5
HOMA	17002HQ	02/20/2017 21:56:39	21:58:42	0.019	0.031	15	1.5
HOMA	17002HQ	02/20/2017 21:59:43	22:01:42	0.014	0.033	15	1.4
MCHS	17002HR	02/20/2017 22:54:36	22:56:35	0.006	0.012	15	1.4
MCHS	17002HR	02/20/2017 22:56:59	22:58:58	0.006	0.013	16	1.4
AWES	17002HS	02/20/2017 23:23:23	23:25:22	0.012	0.027	13	2.0
AWES	17002HS	02/20/2017 23:25:41	23:27:40	0.010	0.028	13	2.0
LUCH	17002HT	02/21/2017 13:20:28	13:22:27	0.006	0.009	14	1.6
LUCH	17002HT	02/21/2017 13:22:44	13:24:43	0.007	0.011	15	1.5
LUCH	17002HU	02/21/2017 13:56:15	13:58:14	0.006	0.010	16	1.4
LUCH	17002HU	02/21/2017 13:58:33	14:00:32	0.009	0.016	16	1.4
LUCH	17002HV	02/21/2017 14:28:25	14:30:24	0.005	0.011	14	1.7

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
LUCH	17002HV	02/21/2017 14:31:22	14:33:21	0.005	0.012	14	1.8
LUCH	17002HW	02/21/2017 14:40:04	14:42:03	0.004	0.010	15	1.6
LUCH	17002HW	02/21/2017 14:42:25	14:44:24	0.005	0.012	15	1.6
LUCH	17002HX	02/21/2017 14:52:08	14:54:07	0.005	0.010	12	2.0
LUCH	17002HX	02/21/2017 14:55:19	14:57:18	0.005	0.011	15	1.5
LUCH	17002HY	02/21/2017 15:21:21	15:23:20	0.006	0.012	15	1.5
LUCH	17002HY	02/21/2017 15:23:42	15:25:41	0.008	0.015	15	1.4
LUCH	17002HZ	02/21/2017 15:27:35	15:29:34	0.007	0.013	15	1.5
LUCH	17002HZ	02/21/2017 15:29:47	15:31:46	0.007	0.013	14	1.4
AWES	17002IA	02/21/2017 15:56:09	15:58:08	0.003	0.005	15	1.2
AWES	17002IA	02/21/2017 15:58:27	16:00:26	0.004	0.007	14	1.4
AWES	17002IB	02/21/2017 16:03:51	16:05:50	0.003	0.006	14	1.5
AWES	17002IB	02/21/2017 16:06:06	16:08:05	0.003	0.005	14	1.5
GVMS	17002IC	02/21/2017 16:26:49	16:28:48	0.006	0.010	16	1.3
GVMS	17002IC	02/21/2017 16:29:00	16:30:59	0.007	0.010	16	1.3
GVMS	17002ID	02/21/2017 16:38:16	16:40:16	0.007	0.012	13	1.5
GVMS	17002ID	02/21/2017 16:40:28	16:42:27	0.010	0.016	13	1.5
BSRL	17002IE	02/21/2017 16:53:11	16:55:10	0.010	0.015	13	1.5
BSRL	17002IE	02/21/2017 16:55:22	16:57:21	0.010	0.016	14	1.4
BSRL	17002IF	02/21/2017 17:13:09	17:15:08	0.006	0.009	14	1.4
BSRL	17002IF	02/21/2017 17:15:28	17:17:27	0.008	0.012	15	1.4
BSRL	17002IG	02/21/2017 17:35:29	17:37:28	0.007	0.013	13	1.7
BSRL	17002IG	02/21/2017 17:37:40	17:39:39	0.007	0.011	13	1.7
AWES	17002IH	02/21/2017 17:48:59	17:50:58	0.007	0.010	12	1.8
AWES	17002IH	02/21/2017 17:51:14	17:53:13	0.010	0.015	14	1.6
AWES	17002IH	02/21/2017 17:53:50	17:55:49	0.011	0.018	13	1.8
AWES	17002II	02/21/2017 18:28:47	18:30:46	0.007	0.013	15	1.3
AWES	17002II	02/21/2017 18:31:11	18:33:10	0.007	0.014	16	1.2
AWES	17002II	02/21/2017 18:33:30	18:35:29	0.008	0.017	15	1.4
MCHS	17002IJ	02/21/2017 18:49:40	18:51:39	0.006	0.013	13	1.7
MCHS	17002IJ	02/21/2017 18:52:05	18:54:04	0.008	0.016	13	1.7
MCHS	17002IK	02/21/2017 18:54:51	18:56:50	0.024	0.035	13	1.7
MCHS	17002IK	02/21/2017 18:57:03	18:59:02	0.010	0.012	13	1.7
AWES	17002IL	02/21/2017 19:36:31	19:38:30	0.008	0.013	13	1.6
AWES	17002IL	02/21/2017 19:38:48	19:40:47	0.007	0.012	13	1.6
BSRL	17002IM	02/21/2017 19:56:58	19:58:57	0.009	0.015	13	1.6
BSRL	17002IM	02/21/2017 19:59:07	20:01:06	0.005	0.009	14	1.4
BSRL	17002IM	02/21/2017 20:01:23	20:03:22	0.005	0.009	13	1.7
BSRL	17002IM	02/21/2017 20:04:01	20:06:01	0.008	0.014	6	3.1
BSRL	17002IN	02/21/2017 20:15:09	20:17:08	0.007	0.011	8	2.5
BSRL	17002IN	02/21/2017 20:17:24	20:19:24	0.011	0.018	9	1.6
BSRL	17002IO	02/21/2017 21:24:11	21:26:10	0.004	0.007	15	1.5
BSRL	17002IO	02/21/2017 21:26:30	21:28:29	0.003	0.006	13	1.7
BSRL	17002IP	02/21/2017 21:36:43	21:38:42	0.005	0.007	13	1.7
BSRL	17002IP	02/21/2017 21:38:54	21:40:53	0.004	0.006	14	1.6
BSRL	17002IQ	02/21/2017 21:50:26	21:52:25	0.007	0.013	14	1.6
BSRL	17002IQ	02/21/2017 21:52:36	21:54:35	0.007	0.012	15	1.4
BSRL	17002IR	02/21/2017 21:57:33	21:59:32	0.005	0.010	15	1.4
BSRL	17002IR	02/21/2017 22:00:06	22:02:05	0.004	0.008	15	1.4
BSRL	17002IS	02/21/2017 22:20:59	22:22:58	0.011	0.025	11	2.2
BSRL	17002IS	02/21/2017 22:23:12	22:25:11	0.007	0.016	15	1.5
BSRL	17002IT	02/21/2017 22:33:30	22:35:29	0.005	0.011	15	1.5
BSRL	17002IT	02/21/2017 22:35:40	22:37:39	0.008	0.017	15	1.5
BSRL	17002IU	02/21/2017 22:51:33	22:53:32	0.006	0.012	16	1.3
BSRL	17002IU	02/21/2017 22:53:44	22:55:43	0.006	0.012	15	1.3
BSRL	17002IV	02/21/2017 23:19:27	23:21:26	0.004	0.008	13	1.9
BSRL	17002IV	02/21/2017 23:21:40	23:23:39	0.006	0.011	13	1.9
DOTD	17002IX	02/22/2017 13:21:31	13:23:30	0.006	0.008	8	2.1
DOTD	17002IX	02/22/2017 13:23:44	13:25:43	0.005	0.007	8	2.1
DOTD	17002IY	02/22/2017 13:27:37	13:29:36	0.005	0.008	7	2.5
DOTD	17002IY	02/22/2017 13:29:55	13:31:54	0.008	0.013	8	2.0
DOTD	17002IZ	02/22/2017 13:42:34	13:44:33	0.003	0.005	16	1.4
DOTD	17002IZ	02/22/2017 13:44:46	13:46:45	0.003	0.005	16	1.4
DOTD	17002JA	02/22/2017 13:49:03	13:51:02	0.003	0.005	16	1.4
DOTD	17002JA	02/22/2017 13:51:15	13:53:14	0.003	0.005	16	1.4

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
DOTD	17002JB	02/22/2017 14:32:38	14:34:37	0.004	0.009	16	1.5
DOTD	17002JB	02/22/2017 14:35:01	14:37:00	0.004	0.009	16	1.4
DOTD	17002JC	02/22/2017 14:43:07	14:45:06	0.003	0.007	15	1.5
DOTD	17002JC	02/22/2017 14:45:19	14:48:31	0.003	0.007	15	1.5
DOTD	17002JD	02/22/2017 15:26:58	15:28:57	0.006	0.012	11	3.0
DOTD	17002JD	02/22/2017 15:29:12	15:31:11	0.006	0.011	12	2.1
DOTD	17002JE	02/22/2017 15:59:43	16:01:42	0.006	0.010	14	1.3
DOTD	17002JE	02/22/2017 16:02:09	16:04:08	0.006	0.010	15	1.3
GVMS	17002JF	02/22/2017 16:30:54	16:32:53	0.003	0.005	16	1.3
GVMS	17002JF	02/22/2017 16:33:37	16:35:36	0.003	0.005	15	1.4
GVMS	17002JG	02/22/2017 16:39:53	16:41:52	0.006	0.009	15	1.4
GVMS	17002JG	02/22/2017 16:42:04	16:44:03	0.005	0.007	16	1.2
GVMS	17002JH	02/22/2017 17:14:10	17:16:09	0.010	0.014	15	1.5
GVMS	17002JH	02/22/2017 17:16:22	17:18:21	0.007	0.010	15	1.5
GVMS	17002JI	02/22/2017 17:22:23	17:24:22	0.005	0.008	14	1.6
GVMS	17002JI	02/22/2017 17:24:33	17:26:32	0.006	0.009	14	1.6
GVMS	17002JJ	02/22/2017 17:49:40	17:51:39	0.009	0.015	15	1.5
GVMS	17002JJ	02/22/2017 17:51:52	17:53:51	0.011	0.020	15	1.5
LUCH	17002JK	02/22/2017 18:10:11	18:12:10	0.004	0.008	16	1.3
LUCH	17002JK	02/22/2017 18:12:20	18:14:19	0.006	0.012	16	1.3
LUCH	17002JL	02/22/2017 18:21:07	18:23:06	0.006	0.011	15	1.4
LUCH	17002JL	02/22/2017 18:23:22	18:25:21	0.005	0.010	14	1.5
LUCH	17002JM	02/22/2017 18:56:28	18:58:27	0.004	0.007	13	1.8
LUCH	17002JM	02/22/2017 18:58:47	19:00:46	0.004	0.007	14	1.5
LUCH	17002JN	02/22/2017 19:04:04	19:06:03	0.003	0.006	13	1.8
LUCH	17002JN	02/22/2017 19:06:11	19:08:10	0.003	0.005	13	1.8
LUCH	17002JO	02/22/2017 19:19:32	19:21:31	0.005	0.009	11	3.8
LUCH	17002JO	02/22/2017 19:21:57	19:23:56	0.010	0.019	11	3.8
LUCH	17002JP	02/22/2017 19:44:21	19:46:20	0.006	0.010	12	1.8
LUCH	17002JP	02/22/2017 19:46:33	19:48:32	0.008	0.013	12	1.8
LUCH	17002JQ	02/22/2017 19:50:18	19:52:17	0.005	0.008	12	1.9
LUCH	17002JQ	02/22/2017 19:52:31	19:54:30	0.006	0.009	13	1.5
DSTR	17002JR	02/22/2017 20:16:22	20:18:21	0.005	0.008	14	1.4
DSTR	17002JR	02/22/2017 20:18:33	20:20:32	0.004	0.006	14	1.4
LWES	17002JS	02/22/2017 20:53:10	20:55:09	0.006	0.009	15	1.4
LWES	17002JS	02/22/2017 20:55:30	20:57:29	0.006	0.010	15	1.4
LWES	17002JT	02/22/2017 21:03:31	21:05:30	0.006	0.009	13	1.6
LWES	17002JT	02/22/2017 21:05:54	21:07:53	0.011	0.018	13	1.6
DSTR	17002JU	02/22/2017 21:40:03	21:42:02	0.005	0.008	14	1.6
DSTR	17002JU	02/22/2017 21:42:16	21:44:15	0.006	0.011	14	1.7
DSTR	17002JV	02/22/2017 21:45:55	21:47:54	0.009	0.017	14	1.5
DSTR	17002JV	02/22/2017 21:48:03	21:50:02	0.005	0.009	15	1.4
LUCH	17002JW	02/22/2017 22:09:09	22:11:08	0.005	0.013	12	2.4
LUCH	17002JW	02/22/2017 22:11:27	22:13:26	0.006	0.015	13	2.3
DSTR	17002JX	02/22/2017 23:02:17	23:04:16	0.005	0.009	16	1.3
DSTR	17002JX	02/22/2017 23:04:37	23:06:36	0.005	0.010	15	1.4
DSTR	17002JY	02/22/2017 23:19:03	23:21:02	0.005	0.010	13	2.0
DSTR	17002JY	02/22/2017 23:21:49	23:23:48	0.005	0.009	13	2.0
DSTR	17002JZ	02/23/2017 14:09:50	14:11:49	0.003	0.007	17	1.3
DSTR	17002JZ	02/23/2017 14:11:59	14:13:58	0.004	0.008	17	1.3
DSTR	17002KA	02/23/2017 14:16:49	14:18:48	0.005	0.011	16	1.4
DSTR	17002KA	02/23/2017 14:19:03	14:21:02	0.005	0.011	16	1.4
LWES	17002KB	02/23/2017 14:53:36	14:55:35	0.004	0.007	14	1.7
LWES	17002KB	02/23/2017 14:55:59	14:57:58	0.004	0.007	16	1.4
LWES	17002KC	02/23/2017 15:24:12	15:26:11	0.004	0.007	13	1.7
LWES	17002KC	02/23/2017 15:26:37	15:28:36	0.004	0.007	15	1.4
HOMA	17002KD	02/23/2017 16:13:09	16:15:08	0.005	0.009	16	1.3
HOMA	17002KD	02/23/2017 16:15:22	16:17:21	0.005	0.009	16	1.3
HOMA	17002KE	02/23/2017 16:36:13	16:38:12	0.006	0.009	17	1.1
HOMA	17002KE	02/23/2017 16:38:47	16:40:46	0.006	0.009	16	1.2
HOMA	17002KF	02/23/2017 16:44:14	16:46:13	0.006	0.009	15	1.4
HOMA	17002KF	02/23/2017 16:46:23	16:48:37	0.006	0.009	15	1.4
HOMA	17002KG	02/23/2017 16:56:35	16:58:34	0.007	0.011	15	1.4
HOMA	17002KG	02/23/2017 16:58:50	17:00:49	0.006	0.009	15	1.5
HOMA	17002KH	02/23/2017 17:14:36	17:16:35	0.006	0.009	15	1.4

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
HOMA	17002KH	02/23/2017 17:17:43	17:19:42	0.008	0.012	15	1.4
PAUL	17002KI	02/23/2017 17:53:04	17:55:03	0.004	0.007	14	1.6
PAUL	17002KI	02/23/2017 17:55:23	17:57:22	0.004	0.006	14	1.6
PAUL	17002KJ	02/23/2017 18:13:15	18:15:14	0.003	0.006	14	1.3
PAUL	17002KJ	02/23/2017 18:15:27	18:17:26	0.003	0.005	14	1.3
PAUL	17002KK	02/23/2017 18:36:11	18:38:10	0.006	0.011	13	1.5
PAUL	17002KK	02/23/2017 18:39:07	18:41:06	0.006	0.011	12	1.8
TIBO	17002KL	02/23/2017 19:21:56	19:23:55	0.006	0.010	12	1.7
TIBO	17002KL	02/23/2017 19:24:08	19:26:07	0.005	0.009	13	1.5
TIBO	17002KM	02/23/2017 19:52:32	19:54:31	0.003	0.006	13	1.5
TIBO	17002KM	02/23/2017 19:54:54	19:56:53	0.003	0.004	13	1.5
MCHS	17002KN	02/23/2017 20:41:07	20:43:06	0.006	0.009	14	1.7
MCHS	17002KN	02/23/2017 20:43:21	20:45:20	0.006	0.010	16	1.3
MCHS	17002KO	02/23/2017 20:47:08	20:49:07	0.006	0.009	14	1.4
MCHS	17002KO	02/23/2017 20:49:20	20:51:19	0.008	0.013	14	1.4
AWES	17002KP	02/23/2017 21:20:48	21:22:47	0.005	0.009	14	1.6
AWES	17002KP	02/23/2017 21:23:20	21:25:19	0.008	0.013	14	1.5
DOTD	17002KQ	02/23/2017 22:16:29	22:18:29	0.009	0.024	6	5.9
DOTD	17002KQ	02/23/2017 22:18:42	22:20:41	0.007	0.019	12	2.7
DOTD	17002KR	02/23/2017 22:37:53	22:39:52	0.006	0.011	16	1.3
DOTD	17002KR	02/23/2017 22:40:00	22:41:59	0.006	0.011	16	1.3
SJHS	17002SA	03/21/2017 17:46:47	17:49:55	0.004	0.007	12	1.4
SJHS	17002SA	03/21/2017 17:14:08	17:17:14	0.004	0.008	13	1.7
SJHS	17002SA	03/21/2017 17:46:47	17:49:55	0.004	0.007	12	1.4
SJHS	17002SA	03/21/2017 17:14:08	17:17:14	0.004	0.008	13	1.7
COVG	17002SB	03/21/2017 18:31:19	18:34:23	0.004	0.006	14	1.6
COVG	17002SB	03/21/2017 18:52:32	18:55:37	0.005	0.007	13	1.3
COVG	17002SB	03/21/2017 18:56:16	18:57:36	0.005	0.008	13	1.4
COVG	17002SB	03/21/2017 18:31:19	18:34:23	0.004	0.006	14	1.6
COVG	17002SB	03/21/2017 18:52:32	18:55:37	0.005	0.007	13	1.3
COVG	17002SB	03/21/2017 18:56:16	18:57:36	0.005	0.008	13	1.4
HAMM	17002SC	03/21/2017 19:30:06	19:33:12	0.004	0.006	13	1.5
HAMM	17002SC	03/21/2017 19:50:14	19:53:20	0.004	0.008	14	1.4
HAMM	17002SC	03/21/2017 20:00:24	20:03:32	0.004	0.007	14	1.4
HAMM	17002SC	03/21/2017 19:30:06	19:33:12	0.004	0.006	13	1.5
HAMM	17002SC	03/21/2017 19:50:14	19:53:20	0.004	0.008	14	1.4
HAMM	17002SC	03/21/2017 20:00:24	20:03:32	0.004	0.007	14	1.4
HAMM	17002SD	03/21/2017 20:32:07	20:35:14	0.008	0.015	13	2.1
HAMM	17002SD	03/21/2017 20:32:07	20:35:14	0.008	0.015	13	2.1
COVG	17002SE	03/21/2017 21:08:15	21:11:22	0.004	0.008	12	1.3
COVG	17002SE	03/21/2017 21:08:15	21:11:22	0.004	0.008	12	1.3
HAMM	17002SF	03/21/2017 21:59:17	22:02:31	0.005	0.011	12	2.0
HAMM	17002SF	03/21/2017 21:59:17	22:02:31	0.005	0.011	12	2.0
HAMM	17002SG	03/21/2017 23:05:47	23:08:52	0.007	0.011	13	1.7
HAMM	17002SG	03/21/2017 23:26:32	23:29:41	0.006	0.009	15	1.4
HAMM	17002SG	03/21/2017 23:05:47	23:08:52	0.007	0.011	13	1.7
HAMM	17002SG	03/21/2017 23:26:32	23:29:41	0.006	0.009	15	1.4
GVMS	17002SH	03/22/2017 13:24:57	13:28:02	0.004	0.008	12	2.2
GVMS	17002SI	03/22/2017 14:31:15	14:34:27	0.006	0.011	10	2.8
AWES	17002SJ	03/22/2017 15:14:37	15:17:43	0.005	0.006	13	1.4
GVMS	17002SK	03/22/2017 17:27:00	17:30:04	0.007	0.011	13	1.7
SJHS	17002XA	03/21/2017 17:42:29	17:45:36	0.004	0.007	13	1.3
SJHS	17002XA	03/21/2017 17:19:10	17:22:13	0.004	0.007	13	1.4
SJHS	17002XA	03/21/2017 17:42:29	17:45:36	0.004	0.007	13	1.3
SJHS	17002XA	03/21/2017 17:19:10	17:22:13	0.004	0.007	13	1.4
COVG	17002XB	03/21/2017 18:36:20	18:39:22	0.004	0.006	15	1.4
COVG	17002XB	03/21/2017 18:49:43	18:51:43	0.004	0.006	15	1.4
COVG	17002XB	03/21/2017 18:36:20	18:39:22	0.004	0.006	15	1.4
COVG	17002XB	03/21/2017 18:49:43	18:51:43	0.004	0.006	15	1.4
HAMM	17002XC	03/21/2017 19:45:27	19:48:32	0.003	0.006	14	1.4
HAMM	17002XC	03/21/2017 20:07:33	20:10:42	0.004	0.008	10	1.7
HAMM	17002XC	03/21/2017 19:45:27	19:48:32	0.003	0.006	14	1.4
HAMM	17002XC	03/21/2017 20:07:33	20:10:42	0.004	0.008	10	1.7
HAMM	17002XD	03/21/2017 20:36:24	20:39:36	0.004	0.010	14	1.9
HAMM	17002XD	03/21/2017 20:36:24	20:39:36	0.004	0.010	14	1.9

GPS BASE	GPSID	UTC Start	UTC End	Horz Prec	Vert Prec	# of SV's	PDOP
COVG	17002XE	03/21/2017 21:14:13	21:17:24	0.003	0.006	14	1.3
COVG	17002XE	03/21/2017 21:14:13	21:17:24	0.003	0.006	14	1.3
HAMM	17002XF	03/21/2017 22:05:09	22:08:16	0.006	0.010	15	1.5
HAMM	17002XF	03/21/2017 22:05:09	22:08:16	0.006	0.010	15	1.5
HAMM	17002XG	03/21/2017 23:11:44	23:14:45	0.007	0.011	13	1.6
HAMM	17002XG	03/21/2017 23:21:41	23:24:42	0.006	0.009	14	1.5
HAMM	17002XG	03/21/2017 23:11:44	23:14:45	0.007	0.011	13	1.6
HAMM	17002XG	03/21/2017 23:21:41	23:24:42	0.006	0.009	14	1.5
GVMS	17002XH	03/22/2017 13:29:52	13:33:03	0.005	0.013	10	2.5
GVMS	17002XI	03/22/2017 14:37:44	14:40:54	0.005	0.007	11	1.6
AWES	17002XJ	03/22/2017 15:19:33	15:22:40	0.005	0.008	13	2.1
GVMS	17002XK	03/22/2017 17:31:33	17:34:36	0.006	0.010	13	1.7

Three occupations were rejected, denoted in the table above by ~~strikethrough~~.

PROCESSING

The VRS/RTK data collected and stored as vectors was downloaded to a PC and input to a database. The VRS/RTK vectors were repeated, as described above. The repeat occupations were done immediately after the initial observations, with a re-initialization in between. The Earth Centered Earth Fixed (ECEF) vector differences were rotated into a local horizon system for analysis (all values in meters):

Table 3 - Repeat Baseline Analysis

From	To	Delta N	Delta E	Horiz	Delta U	Length
BSRL	17002AA	0.004	-0.002	0.005	0.006	31461
DOTD	17002AB	0.017	-0.013	0.021	-0.035	22368
DOTD	17002AB	-0.007	0.012	0.014	0.018	22368
DOTD	17002AB	-0.024	0.024	0.034	0.053	22368
BSRL	17002AC	-0.007	-0.005	0.009	-0.012	10654
BSRL	17002AD	0.002	-0.001	0.002	0.003	7934
DOTD	17002AE	-0.004	0.004	0.006	-0.009	14862
MCHS	17002AF	0.009	-0.007	0.012	-0.001	18479
DOTD	17002AG	0.000	0.002	0.002	-0.002	2938
BSRL	17002AH	-0.004	0.001	0.004	0.005	15430
DOTD	17002AI	0.005	0.004	0.006	0.004	13045
AWES	17002AJ	-0.005	-0.006	0.008	0.021	20245
BSRL	17002AK	0.003	0.002	0.003	0.013	21709
MCHS	17002AL	0.002	0.002	0.003	-0.002	21235
MCHS	17002AM	0.002	0.002	0.002	-0.020	12946
GVMS	17002AN	-0.006	0.001	0.006	-0.007	14538
GVMS	17002AO	0.004	-0.002	0.005	-0.006	9537
AWES	17002AP	-0.001	0.000	0.001	-0.009	3527
AWES	17002AQ	-0.006	-0.006	0.008	-0.012	24642
AWES	17002AQ	0.023	-0.021	0.031	0.047	24642
AWES	17002AQ	0.028	-0.014	0.032	0.059	24642
MCHS	17002AR	-0.014	-0.006	0.015	0.007	27348
GVMS	17002AS	-0.003	-0.001	0.003	-0.007	15356
AWES	17002AT	0.004	0.005	0.006	-0.005	12588
GVMS	17002AU	-0.006	-0.001	0.006	0.002	10432
LUCH	17002AV	0.000	-0.006	0.006	-0.009	21301
HAMM	17002AW	0.010	0.005	0.012	-0.071	36763
HAMM	17002AW	0.001	0.009	0.009	-0.054	36763
HAMM	17002AW	0.013	-0.001	0.013	-0.043	36763
HAMM	17002AW	0.004	0.003	0.005	-0.025	36763
HAMM	17002AW	-0.009	0.004	0.010	0.017	36763

From	To	Delta N	Delta E	Horiz	Delta U	Length
HAMM	17002AW	0.002	-0.006	0.007	0.028	36763
LUCH	17002AX	-0.002	0.002	0.003	-0.008	12819
HAMM	17002AY	-0.006	-0.007	0.009	-0.008	31168
HOMA	17002AZ	-0.002	-0.002	0.002	-0.002	20958
LUCH	17002BA	-0.002	0.002	0.003	0.003	11386
LUCH	17002BB	-0.003	0.001	0.003	-0.020	2837
LUCH	17002BC	-0.001	-0.004	0.004	0.019	18484
LUCH	17002BD	-0.013	-0.016	0.021	0.016	24653
LUCH	17002BE	-0.008	0.000	0.008	0.003	7551
HOMA	17002BF	-0.005	0.015	0.016	0.020	19315
HAMM	17002BG	0.007	-0.013	0.015	0.001	16721
LUCH	17002BH	0.005	0.005	0.007	0.010	11550
DSTR	17002BK	-0.003	-0.001	0.003	0.000	9396
DSTR	17002BL	-0.007	-0.002	0.007	-0.017	25089
HAMM	17002BM	0.008	-0.001	0.008	0.000	12922
LWES	17002BN	-0.005	0.001	0.005	-0.007	8889
HAMM	17002BO	-0.005	0.005	0.007	0.003	22738
DSTR	17002BP	-0.004	-0.006	0.007	0.011	12206
PAUL	17002BQ	0.002	0.004	0.004	-0.005	14627
COVG	17002BR	0.003	0.001	0.003	0.017	22476
PAUL	17002BS	-0.007	-0.001	0.007	-0.001	4393
INRI	17002BT	-0.001	0.011	0.011	-0.002	18386
DSTR	17002BU	-0.004	-0.002	0.004	0.003	12485
COVG	17002BV	0.010	0.005	0.011	0.002	14504
INRI	17002BW	0.002	-0.003	0.003	-0.007	7831
INRI	17002BX	0.005	0.004	0.006	0.000	21018
INRI	17002BY	0.007	-0.002	0.007	0.003	9617
COVG	17002BZ	-0.005	0.001	0.006	0.013	10188
INRI	17002CA	-0.009	-0.003	0.010	0.007	11660
INRI	17002CB	0.006	0.006	0.008	0.026	19398
INRI	17002CC	-0.008	0.011	0.014	0.024	15495
SJHS	17002CD	-0.001	0.004	0.005	0.004	15670
MARY	17002CE	0.007	0.002	0.007	0.007	11203
MARY	17002CF	0.009	-0.011	0.014	0.015	33629
MARY	17002CG	0.001	-0.001	0.001	-0.003	17409
MARY	17002CH	-0.009	0.003	0.009	0.008	27171
MARY	17002CI	-0.001	-0.003	0.003	-0.018	39861
MARY	17002CJ	0.006	0.001	0.006	-0.029	24552
MARY	17002CJ	0.006	-0.003	0.007	0.000	24552
MARY	17002CJ	0.000	-0.004	0.004	0.028	24552
DOTD	17002CY	-0.013	0.006	0.014	0.004	22047
LWES	17002CZ	0.003	-0.001	0.003	-0.004	13943
VRS_0315	17002DA	0.003	0.006	0.007	0.013	23
INRI	17002DC	0.003	-0.007	0.008	0.008	6451
INRI	17002DD	-0.010	0.004	0.011	-0.025	12821
INRI	17002DD	-0.012	0.002	0.012	-0.022	12821
INRI	17002DD	0.002	0.001	0.002	-0.004	12821
INRI	17002DE	0.003	0.009	0.010	0.009	15814
INRI	17002DF	-0.001	0.003	0.004	-0.008	17489
INRI	17002DG	-0.003	0.003	0.004	-0.009	18069
INRI	17002DH	0.003	0.004	0.005	0.001	12088
INRI	17002DI	0.004	0.004	0.006	0.019	3866
INRI	17002DJ	0.008	0.008	0.011	-0.005	9583
INRI	17002DJ	0.010	0.010	0.014	0.046	9583
INRI	17002DJ	0.003	0.002	0.003	0.051	9583

From	To	Delta N	Delta E	Horiz	Delta U	Length
INRI	17002DK	-0.001	0.011	0.011	0.010	15463
INRI	17002DL	-0.001	-0.003	0.003	0.010	6625
INRI	17002DM	-0.005	-0.001	0.005	0.013	6756
INRI	17002DN	-0.002	-0.006	0.006	0.017	5612
INRI	17002DO	-0.002	-0.006	0.006	-0.014	12638
INRI	17002DP	0.001	-0.009	0.010	0.022	13137
INRI	17002DQ	0.005	0.004	0.007	-0.010	3373
MARY	17002DR	0.003	-0.002	0.004	-0.008	7786
MARY	17002DS	0.002	-0.001	0.003	0.007	1334
MARY	17002DT	0.006	-0.002	0.007	0.013	4889
MARY	17002DU	-0.002	-0.001	0.002	-0.012	11519
SJHS	17002DV	-0.004	0.001	0.004	0.016	7039
MARY	17002DW	0.001	-0.003	0.003	-0.008	15450
MARY	17002DX	0.009	0.000	0.009	0.007	6281
MARY	17002DY	-0.005	0.001	0.005	-0.009	7596
MARY	17002DZ	-0.008	0.005	0.009	-0.005	9387
MARY	17002EA	0.003	0.004	0.005	0.006	16376
MARY	17002EB	-0.002	-0.001	0.002	0.007	19521
MARY	17002EC	-0.003	0.002	0.004	0.007	22701
MARY	17002ED	-0.007	-0.001	0.007	-0.009	24363
MARY	17002EE	-0.002	0.007	0.007	0.004	30047
MARY	17002EF	0.001	0.002	0.002	-0.004	35317
MARY	17002EG	0.002	-0.001	0.002	-0.008	34414
MARY	17002EG	0.001	0.010	0.010	0.028	34414
MARY	17002EG	-0.001	0.011	0.011	0.036	34414
MARY	17002EH	0.000	-0.002	0.002	0.005	32167
MARY	17002EI	0.000	0.008	0.008	0.010	31233
MARY	17002EJ	-0.010	-0.005	0.011	0.003	27876
SJHS	17002EK	0.002	-0.003	0.004	0.026	5750
SJHS	17002EL	-0.002	-0.002	0.003	-0.008	10299
SJHS	17002EM	-0.005	-0.003	0.006	0.020	19057
COVG	17002EN	-0.004	0.000	0.005	-0.042	8573
COVG	17002EN	0.000	0.001	0.001	-0.036	8573
COVG	17002EN	-0.004	-0.001	0.004	-0.006	8573
COVG	17002EO	0.000	-0.004	0.004	-0.003	12533
COVG	17002EP	0.005	0.003	0.006	0.013	12570
COVG	17002EQ	-0.002	0.004	0.004	0.010	22069
HAMM	17002ER	-0.004	0.003	0.005	-0.005	6799
HAMM	17002ES	-0.008	-0.009	0.012	0.017	8942
HAMM	17002ET	0.005	-0.002	0.005	-0.018	5507
HAMM	17002EU	-0.004	0.000	0.004	-0.031	17664
HAMM	17002EU	-0.005	-0.005	0.007	-0.018	17664
HAMM	17002EU	-0.001	-0.005	0.005	0.013	17664
HAMM	17002EV	-0.006	-0.005	0.008	-0.010	26768
DSTR	17002EW	0.012	0.000	0.012	0.001	27786
HAMM	17002EX	-0.009	-0.002	0.009	0.017	17053
HAMM	17002EY	-0.001	0.001	0.001	0.003	27304
HAMM	17002EZ	0.005	0.010	0.011	-0.016	32015
GVMS	17002FA	-0.005	0.006	0.008	-0.001	12434
GVMS	17002FB	0.001	0.003	0.003	-0.010	16967
GVMS	17002FC	0.005	0.002	0.005	-0.016	19931
GVMS	17002FD	-0.008	-0.005	0.009	0.013	26140
GVMS	17002FE	-0.003	0.003	0.004	0.005	30563
GVMS	17002FF	0.002	0.002	0.002	0.010	36016
GVMS	17002FG	0.003	-0.008	0.008	0.001	35435

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GVMS	17002FH	0.003	-0.017	0.017	-0.011	36804
GVMS	17002FI	-0.002	0.002	0.003	-0.016	38575
GVMS	17002FJ	-0.003	-0.007	0.007	-0.011	41791
HAMM	17002FJ	0.001	0.008	0.008	-0.010	6125
GVMS	17002FJ	0.003	0.003	0.005	-0.004	41791
HAMM	17002FJ	0.006	-0.001	0.006	0.001	6125
GVMS	17002FJ	0.006	0.010	0.012	0.007	41791
HAMM	17002FJ	0.005	-0.008	0.009	0.011	6125
HAMM	17002FK	0.002	0.008	0.008	-0.010	7342
HAMM	17002FK	0.017	0.010	0.020	0.022	7342
HAMM	17002FK	0.015	0.002	0.015	0.032	7342
HAMM	17002FL	-0.004	0.001	0.005	-0.002	15560
HAMM	17002FM	0.004	-0.001	0.004	0.013	18184
HAMM	17002FN	0.002	0.001	0.002	0.026	22824
GVMS	17002FO	-0.007	-0.003	0.007	0.017	17940
GVMS	17002FP	-0.003	-0.002	0.003	-0.007	13189
GVMS	17002FQ	0.000	0.001	0.001	0.003	10720
GVMS	17002FR	-0.013	0.001	0.013	-0.008	14820
HAMM	17002FS	0.002	0.000	0.002	0.002	26356
GVMS	17002FT	-0.001	0.000	0.001	-0.001	24910
GVMS	17002FU	0.005	0.004	0.006	-0.010	18892
GVMS	17002FV	-0.002	-0.001	0.002	-0.010	3597
GVMS	17002FW	-0.001	0.002	0.003	-0.006	7245
DSTR	17002HA	-0.004	-0.004	0.005	0.004	14182
DSTR	17002HA	-0.001	0.005	0.005	0.006	14182
DSTR	17002HA	-0.005	0.001	0.005	0.010	14182
DSTR	17002HB	0.003	-0.003	0.004	0.021	12473
LWES	17002HD	0.000	0.007	0.007	0.007	17923
LWES	17002HE	-0.006	-0.005	0.008	-0.028	18118
LWES	17002HE	-0.003	0.004	0.006	0.002	18118
LWES	17002HE	0.003	0.009	0.010	0.030	18118
HOMA	17002HF	-0.010	0.020	0.022	0.005	25011
HOMA	17002HG	-0.012	-0.005	0.013	-0.003	24957
HOMA	17002HH	0.003	-0.002	0.003	-0.002	19640
HOMA	17002HI	0.006	0.005	0.008	-0.006	19610
HOMA	17002HJ	-0.005	0.004	0.006	0.023	18932
PAUL	17002HK	-0.008	-0.004	0.009	-0.034	14480
PAUL	17002HK	-0.012	-0.004	0.013	-0.030	14480
PAUL	17002HK	-0.005	-0.001	0.005	0.003	14480
PAUL	17002HL	0.003	-0.004	0.005	-0.017	13461
PAUL	17002HM	0.002	0.006	0.006	0.008	6838
HOMA	17002HN	-0.007	-0.006	0.009	-0.036	19241
HOMA	17002HN	0.000	0.018	0.018	0.001	19241
HOMA	17002HN	0.007	0.024	0.025	0.037	19241
HOMA	17002HO	-0.018	-0.006	0.019	-0.016	18542
HOMA	17002HP	-0.002	-0.013	0.013	-0.020	20885
HOMA	17002HQ	-0.012	-0.007	0.014	-0.032	30988
HOMA	17002HQ	0.016	0.016	0.023	0.004	30988
HOMA	17002HQ	0.028	0.024	0.037	0.036	30988
MCHS	17002HR	-0.002	-0.002	0.002	-0.021	25759
AWES	17002HS	0.010	0.017	0.020	0.022	24649
LUCH	17002HT	-0.011	-0.001	0.011	-0.019	23249
LUCH	17002HU	-0.007	0.003	0.007	0.016	19851
LUCH	17002HV	-0.002	0.000	0.002	-0.004	12020
LUCH	17002HW	-0.002	0.003	0.003	-0.005	8922

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LUCH	17002HX	-0.003	-0.003	0.004	-0.003	9470
LUCH	17002HY	-0.002	0.005	0.005	-0.005	17824
LUCH	17002HZ	-0.007	0.004	0.008	0.010	17925
AWES	17002IA	0.003	0.001	0.003	-0.004	3713
AWES	17002IB	-0.004	-0.002	0.004	-0.023	3044
GVMS	17002IC	0.003	0.002	0.004	0.010	25721
GVMS	17002ID	-0.003	0.005	0.006	-0.011	25256
BSRL	17002IE	0.001	0.021	0.021	0.010	22652
BSRL	17002IF	-0.001	-0.015	0.015	-0.009	23867
BSRL	17002IG	0.009	0.005	0.010	-0.021	28967
AWES	17002IH	-0.007	-0.005	0.008	-0.002	15504
AWES	17002IH	0.009	-0.009	0.013	0.028	15504
AWES	17002IH	0.016	-0.004	0.017	0.029	15504
AWES	17002II	0.007	0.002	0.008	-0.025	17544
AWES	17002II	0.009	-0.002	0.009	-0.017	17544
AWES	17002II	0.001	-0.005	0.005	0.007	17544
MCHS	17002IJ	0.005	0.002	0.005	0.007	23179
MCHS	17002IK	0.005	0.004	0.007	-0.018	23184
AWES	17002IL	0.011	0.002	0.011	0.003	14198
BSRL	17002IM	0.000	-0.013	0.013	-0.076	19018
BSRL	17002IM	0.017	-0.005	0.018	-0.075	19018
BSRL	17002IM	-0.001	-0.006	0.006	-0.051	19018
BSRL	17002IM	-0.019	-0.014	0.024	-0.051	19018
BSRL	17002IM	0.019	0.001	0.019	-0.024	19018
BSRL	17002IM	-0.018	-0.008	0.019	0.000	19018
BSRL	17002IN	-0.005	0.002	0.005	-0.008	22236
BSRL	17002IO	-0.001	-0.001	0.001	0.004	3719
BSRL	17002IP	-0.006	0.005	0.008	0.011	5994
BSRL	17002IQ	0.001	0.001	0.002	0.000	12745
BSRL	17002IR	0.009	-0.003	0.010	0.024	12528
BSRL	17002IS	-0.005	-0.001	0.005	-0.007	15455
BSRL	17002IT	0.005	0.003	0.006	-0.004	16277
BSRL	17002IU	-0.002	0.002	0.003	0.006	13345
BSRL	17002IV	0.002	0.003	0.003	-0.001	12892
DOTD	17002IX	-0.002	0.001	0.003	-0.006	13109
DOTD	17002IY	-0.005	0.001	0.005	-0.006	13051
DOTD	17002IZ	0.002	-0.003	0.004	0.000	6549
DOTD	17002JA	-0.005	-0.003	0.006	0.006	6572
DOTD	17002JB	0.003	0.002	0.003	-0.009	10768
DOTD	17002JC	0.006	-0.001	0.006	-0.003	7371
DOTD	17002JD	0.000	-0.003	0.003	0.000	10507
DOTD	17002JE	0.007	0.000	0.007	0.004	15747
GVMS	17002JF	0.002	0.003	0.003	0.010	6859
GVMS	17002JG	0.005	0.004	0.006	0.004	8168
GVMS	17002JH	0.000	0.000	0.000	0.003	12456
GVMS	17002JI	0.001	-0.005	0.006	0.006	11744
GVMS	17002JJ	0.000	-0.001	0.001	0.004	13529
LUCH	17002JK	-0.004	0.002	0.005	-0.003	11394
LUCH	17002JL	-0.005	-0.003	0.006	0.004	8261
LUCH	17002JM	0.003	0.004	0.005	0.010	2992
LUCH	17002JN	0.006	-0.001	0.006	0.013	2092
LUCH	17002JO	0.009	-0.002	0.009	0.017	6687
LUCH	17002JP	0.013	-0.003	0.013	-0.017	13079
LUCH	17002JQ	0.011	0.000	0.011	-0.007	13081
DSTR	17002JR	-0.002	0.006	0.006	-0.001	5042

From	To	Delta N	Delta E	Horiz	Delta U	Length
LWES	17002JS	0.005	0.007	0.008	-0.002	14267
LWES	17002JT	0.002	0.005	0.006	-0.009	10004
DSTR	17002JU	-0.011	-0.007	0.013	0.014	14928
DSTR	17002JV	0.007	-0.005	0.009	0.006	14956
LUCH	17002JW	-0.005	0.000	0.005	-0.012	11541
DSTR	17002JX	0.001	-0.003	0.003	0.007	10336
DSTR	17002JY	-0.002	-0.001	0.002	0.006	15204
DSTR	17002JZ	0.001	0.001	0.002	0.005	8952
DSTR	17002KA	0.000	0.001	0.001	-0.001	8255
LWES	17002KB	-0.007	0.002	0.007	0.000	8336
LWES	17002KC	-0.004	0.000	0.004	0.008	3150
HOMA	17002KD	-0.007	-0.001	0.007	0.002	18880
HOMA	17002KE	-0.003	0.000	0.003	-0.001	26041
HOMA	17002KF	0.000	0.001	0.001	0.004	26342
HOMA	17002KG	-0.003	0.004	0.005	0.009	21596
HOMA	17002KH	-0.007	0.002	0.008	-0.010	21764
PAUL	17002KI	-0.003	-0.003	0.004	-0.003	8844
PAUL	17002KJ	0.005	-0.003	0.005	-0.001	4196
PAUL	17002KK	-0.001	0.001	0.001	-0.006	19719
TIBO	17002KL	-0.001	-0.006	0.006	-0.014	11661
TIBO	17002KM	-0.003	0.007	0.007	0.009	1877
MCHS	17002KN	-0.006	0.001	0.006	0.008	19317
MCHS	17002KO	0.003	-0.007	0.008	-0.021	19327
AWES	17002KP	-0.002	0.006	0.006	0.021	13202
DOTD	17002KQ	-0.005	-0.002	0.006	0.022	21695
DOTD	17002KR	0.011	-0.001	0.011	-0.005	25377
SJHS	17002SA	0.003	0.005	0.006	-0.003	2606
SJHS	17002SA	0.003	0.005	0.006	-0.003	2606
SJHS	17002SA	0.003	0.005	0.006	-0.003	2606
SJHS	17002SA	0.000	0.000	0.000	0.000	2606
SJHS	17002SA	0.000	0.000	0.000	0.000	2606
SJHS	17002SA	-0.003	-0.005	0.006	0.003	2606
COVG	17002SB	-0.003	0.027	0.027	-0.028	9547
COVG	17002SB	-0.003	0.027	0.027	-0.028	9547
COVG	17002SB	-0.003	0.027	0.027	-0.028	9547
COVG	17002SB	-0.013	0.025	0.028	-0.017	9547
COVG	17002SB	-0.013	0.025	0.028	-0.017	9547
COVG	17002SB	-0.013	0.025	0.028	-0.017	9547
COVG	17002SB	0.010	0.002	0.010	-0.011	9547
COVG	17002SB	0.000	0.000	0.000	0.000	9547
COVG	17002SB	0.000	0.000	0.000	0.000	9547
COVG	17002SB	0.000	0.000	0.000	0.000	9547
COVG	17002SB	-0.010	-0.002	0.010	0.011	9547
COVG	17002SB	-0.010	-0.002	0.010	0.011	9547
COVG	17002SB	-0.010	-0.002	0.010	0.011	9547
COVG	17002SB	0.013	-0.025	0.028	0.017	9547
COVG	17002SB	0.003	-0.027	0.027	0.028	9547
HAMM	17002SC	-0.012	-0.009	0.015	-0.006	9858
HAMM	17002SC	0.002	-0.009	0.009	-0.005	9858
HAMM	17002SC	-0.014	0.000	0.014	-0.001	9858
HAMM	17002SC	-0.014	0.000	0.014	-0.001	9858
HAMM	17002SC	-0.014	0.000	0.014	-0.001	9858
HAMM	17002SC	0.000	0.000	0.000	0.000	9858
HAMM	17002SC	0.000	0.000	0.000	0.000	9858
HAMM	17002SC	0.000	0.000	0.000	0.000	9858

From	To	Delta N	Delta E	Horiz	Delta U	Length
HAMM	17002SC	0.014	0.000	0.014	0.001	9858
HAMM	17002SC	-0.002	0.009	0.009	0.005	9858
HAMM	17002SC	-0.002	0.009	0.009	0.005	9858
HAMM	17002SC	-0.002	0.009	0.009	0.005	9858
HAMM	17002SC	0.012	0.009	0.015	0.006	9858
HAMM	17002SC	0.012	0.009	0.015	0.006	9858
HAMM	17002SC	0.012	0.009	0.015	0.006	9858
HAMM	17002SD	0.000	0.000	0.000	0.000	14392
COVG	17002SE	0.000	0.000	0.000	0.000	8135
HAMM	17002SF	0.000	0.000	0.000	0.000	18408
HAMM	17002SG	-0.004	0.010	0.011	-0.002	25467
HAMM	17002SG	-0.004	0.010	0.011	-0.002	25467
HAMM	17002SG	-0.004	0.010	0.011	-0.002	25467
HAMM	17002SG	0.000	0.000	0.000	0.000	25467
HAMM	17002SG	0.000	0.000	0.000	0.000	25467
HAMM	17002SG	0.004	-0.010	0.011	0.002	25467
SJHS	17002XA	0.004	0.002	0.004	-0.013	2585
SJHS	17002XA	0.004	0.002	0.004	-0.013	2585
SJHS	17002XA	0.004	0.002	0.004	-0.013	2585
SJHS	17002XA	0.000	0.000	0.000	0.000	2585
SJHS	17002XA	0.000	0.000	0.000	0.000	2585
SJHS	17002XA	-0.004	-0.002	0.004	0.013	2585
COVG	17002XB	0.013	-0.001	0.013	-0.009	9570
COVG	17002XB	0.013	-0.001	0.013	-0.009	9570
COVG	17002XB	0.013	-0.001	0.013	-0.009	9570
COVG	17002XB	0.000	0.000	0.000	0.000	9570
COVG	17002XB	0.000	0.000	0.000	0.000	9570
COVG	17002XB	-0.013	0.001	0.013	0.009	9570
HAMM	17002XC	0.005	0.011	0.013	-0.016	9885
HAMM	17002XC	0.000	0.000	0.000	0.000	9885
HAMM	17002XC	0.000	0.000	0.000	0.000	9885
HAMM	17002XC	-0.005	-0.011	0.013	0.016	9885
HAMM	17002XC	-0.005	-0.011	0.013	0.016	9885
HAMM	17002XC	-0.005	-0.011	0.013	0.016	9885
HAMM	17002XD	0.000	0.000	0.000	0.000	14442
COVG	17002XE	0.000	0.000	0.000	0.000	8189
HAMM	17002XF	0.000	0.000	0.000	0.000	18396
HAMM	17002XG	0.008	0.010	0.013	-0.002	25515
HAMM	17002XG	0.000	0.000	0.000	0.000	25515
HAMM	17002XG	0.000	0.000	0.000	0.000	25515
HAMM	17002XG	-0.008	-0.010	0.013	0.002	25515
HAMM	17002XG	-0.008	-0.010	0.013	0.002	25515
HAMM	17002XG	-0.008	-0.010	0.013	0.002	25515

LEAST SQUARES ADJUSTMENTS

Geolab was used to adjust the GPS vectors. No scaling of the apriori GPS statistics was done. Station errors (centering, HI and HT) of 0.005 m were input. The GEOID12B model was used.

The adjustment constrained the VRS CORS in all three dimensions (NAD83 (2011) epoch 2010.0 latitude, longitude, and ellipsoidal height). The adjustment had an estimated variance

factor of 0.47. This adjustment provided the horizontal positions, ellipsoidal heights, and GPS derived orthometric heights for all of the stations in the network.

Table 4 lists the station confidence regions (error ellipses) at the 95% level (in meters):

Table 4 - 95% Confidence Regions (meters)

Station Name	Semi-Major Axis	Azimuth	Semi-Minor Axis	Vertical
17002AA	0.011	46	0.010	0.014
17002AB	0.011	98	0.010	0.016
17002AC	0.010	91	0.010	0.013
17002AD	0.010	42	0.010	0.012
17002AE	0.009	157	0.009	0.012
17002AF	0.010	133	0.009	0.011
17002AG	0.009	177	0.009	0.009
17002AH	0.010	24	0.010	0.016
17002AI	0.010	13	0.009	0.011
17002AJ	0.012	40	0.011	0.018
17002AK	0.012	47	0.011	0.014
17002AL	0.011	9	0.010	0.014
17002AM	0.010	27	0.009	0.013
17002AN	0.011	42	0.010	0.012
17002AO	0.009	31	0.009	0.009
17002AP	0.009	33	0.009	0.009
17002AQ	0.011	96	0.010	0.017
17002AR	0.011	26	0.010	0.017
17002AS	0.009	71	0.009	0.009
17002AT	0.011	178	0.010	0.015
17002AU	0.010	55	0.009	0.011
17002AV	0.010	179	0.010	0.012
17002AW	0.009	11	0.007	0.015
17002AX	0.011	162	0.010	0.016
17002AY	0.010	30	0.010	0.013
17002AZ	0.010	79	0.010	0.012
17002BA	0.009	52	0.009	0.010
17002BB	0.009	26	0.009	0.010
17002BC	0.011	159	0.010	0.014
17002BD	0.010	53	0.010	0.020
17002BE	0.010	7	0.009	0.012
17002BF	0.010	133	0.009	0.011
17002BG	0.009	123	0.009	0.009
17002BH	0.010	21	0.009	0.015
17002BI	0.021	44	0.018	0.027
17002BJ	0.016	33	0.015	0.025
17002BK	0.009	153	0.009	0.009
17002BL	0.010	4	0.009	0.011
17002BM	0.009	37	0.009	0.009
17002BN	0.011	37	0.010	0.013
17002BO	0.010	14	0.009	0.012
17002BP	0.012	175	0.011	0.018
17002BQ	0.010	15	0.009	0.011
17002BR	0.010	46	0.009	0.010
17002BS	0.009	170	0.009	0.009
17002BT	0.010	154	0.009	0.012
17002BU	0.010	21	0.009	0.012
17002BV	0.009	24	0.009	0.010
17002BW	0.009	179	0.009	0.009
17002BX	0.009	76	0.009	0.009
17002BY	0.009	12	0.009	0.009
17002BZ	0.009	171	0.009	0.010
17002CA	0.011	178	0.009	0.015
17002CB	0.010	152	0.009	0.010
17002CC	0.009	124	0.009	0.009
17002CD	0.009	166	0.009	0.010
17002CE	0.009	5	0.009	0.009

Station Name	Semi-Major Axis	Azimuth	Semi-Minor Axis	Vertical
17002CF	0.010	85	0.010	0.012
17002CG	0.009	170	0.009	0.010
17002CH	0.009	98	0.009	0.010
17002CI	0.010	37	0.010	0.013
17002CJ	0.008	128	0.008	0.009
17002CY	0.011	65	0.010	0.015
17002CZ	0.010	123	0.010	0.011
17002DA	0.009	60	0.009	0.008
17002DB	0.011	46	0.010	0.013
17002DC	0.010	41	0.009	0.012
17002DD	0.008	180	0.007	0.008
17002DE	0.009	164	0.009	0.009
17002DF	0.010	140	0.009	0.010
17002DG	0.010	132	0.009	0.010
17002DH	0.009	83	0.009	0.009
17002DI	0.009	30	0.009	0.009
17002DJ	0.007	24	0.007	0.008
17002DK	0.009	69	0.009	0.010
17002DL	0.009	8	0.009	0.009
17002DM	0.009	7	0.009	0.009
17002DN	0.009	165	0.009	0.009
17002DO	0.009	156	0.009	0.010
17002DP	0.010	141	0.009	0.011
17002DQ	0.009	126	0.009	0.009
17002DR	0.009	138	0.009	0.009
17002DS	0.009	163	0.009	0.008
17002DT	0.009	151	0.009	0.010
17002DU	0.009	54	0.009	0.008
17002DV	0.009	54	0.009	0.009
17002DW	0.009	50	0.009	0.009
17002DX	0.009	38	0.009	0.009
17002DY	0.009	6	0.009	0.009
17002DZ	0.009	5	0.009	0.009
17002EA	0.009	1	0.009	0.010
17002EB	0.009	156	0.009	0.010
17002EC	0.010	145	0.009	0.010
17002ED	0.010	133	0.009	0.011
17002EE	0.010	57	0.010	0.011
17002EF	0.010	55	0.010	0.012
17002EG	0.009	25	0.008	0.014
17002EH	0.012	177	0.010	0.020
17002EI	0.010	98	0.010	0.012
17002EJ	0.010	75	0.010	0.011
17002EK	0.009	165	0.009	0.014
17002EL	0.009	167	0.009	0.009
17002EM	0.009	162	0.009	0.010
17002EN	0.007	4	0.007	0.007
17002EO	0.009	12	0.009	0.009
17002EP	0.010	136	0.009	0.010
17002EQ	0.010	163	0.010	0.012
17002ER	0.009	54	0.009	0.009
17002ES	0.009	53	0.009	0.009
17002ET	0.009	51	0.009	0.009
17002EU	0.008	19	0.007	0.009
17002EV	0.010	11	0.009	0.012
17002EW	0.010	169	0.009	0.012
17002EX	0.009	108	0.009	0.014
17002EY	0.010	58	0.010	0.019
17002EZ	0.011	23	0.010	0.015
17002FA	0.010	161	0.009	0.013
17002FB	0.013	149	0.010	0.014
17002FC	0.011	145	0.010	0.012
17002FD	0.010	17	0.009	0.012
17002FE	0.010	30	0.009	0.012
17002FF	0.010	37	0.010	0.012

Station Name	Semi-Major Axis	Azimuth	Semi-Minor Axis	Vertical
17002FG	0.010	36	0.010	0.011
17002FH	0.010	51	0.010	0.012
17002FI	0.011	47	0.010	0.012
17002FJ	0.006	48	0.005	0.006
17002FK	0.007	43	0.007	0.007
17002FL	0.010	24	0.009	0.011
17002FM	0.011	21	0.010	0.012
17002FN	0.010	8	0.009	0.011
17002FO	0.009	176	0.009	0.010
17002FP	0.009	154	0.009	0.010
17002FQ	0.009	134	0.009	0.009
17002FR	0.009	113	0.009	0.014
17002FS	0.011	44	0.009	0.016
17002FT	0.011	40	0.009	0.015
17002FU	0.010	29	0.009	0.018
17002FV	0.009	1	0.009	0.011
17002FW	0.010	152	0.009	0.012
17002HA	0.008	9	0.008	0.009
17002HB	0.012	29	0.011	0.017
17002HC	0.013	60	0.013	0.017
17002HD	0.013	43	0.011	0.015
17002HE	0.010	45	0.009	0.012
17002HF	0.011	47	0.010	0.013
17002HG	0.011	48	0.010	0.013
17002HH	0.010	49	0.009	0.011
17002HI	0.010	48	0.009	0.012
17002HJ	0.010	44	0.010	0.015
17002HK	0.008	20	0.008	0.011
17002HL	0.010	8	0.009	0.011
17002HM	0.010	177	0.009	0.010
17002HN	0.009	129	0.008	0.010
17002HO	0.010	122	0.009	0.011
17002HP	0.010	119	0.010	0.011
17002HQ	0.016	25	0.008	0.025
17002HR	0.010	38	0.010	0.014
17002HS	0.013	85	0.011	0.026
17002HT	0.010	2	0.010	0.012
17002HU	0.011	163	0.010	0.013
17002HV	0.010	153	0.009	0.013
17002HW	0.010	153	0.009	0.012
17002HX	0.009	159	0.009	0.012
17002HY	0.011	169	0.010	0.014
17002HZ	0.011	168	0.010	0.014
17002IA	0.009	22	0.009	0.009
17002IB	0.009	30	0.009	0.009
17002IC	0.010	38	0.010	0.012
17002ID	0.012	40	0.010	0.015
17002IE	0.013	49	0.011	0.016
17002IF	0.011	47	0.010	0.012
17002IG	0.010	80	0.010	0.013
17002IH	0.009	43	0.009	0.012
17002II	0.009	28	0.008	0.013
17002IJ	0.011	11	0.010	0.015
17002IK	0.015	133	0.013	0.016
17002IL	0.011	1	0.010	0.014
17002IM	0.007	159	0.007	0.009
17002IN	0.012	144	0.011	0.015
17002IO	0.009	45	0.009	0.009
17002IP	0.009	39	0.009	0.009
17002IQ	0.011	32	0.010	0.014
17002IR	0.010	29	0.009	0.011
17002IS	0.012	28	0.011	0.019
17002IT	0.010	38	0.010	0.015
17002IU	0.010	77	0.010	0.013
17002IV	0.010	86	0.009	0.011

Station Name	Semi-Major Axis	Azimuth	Semi-Minor Axis	Vertical
17002IX	0.010	179	0.009	0.010
17002IY	0.011	169	0.010	0.012
17002IZ	0.009	160	0.009	0.008
17002JA	0.009	159	0.009	0.008
17002JB	0.009	161	0.009	0.011
17002JC	0.009	168	0.009	0.010
17002JD	0.010	12	0.009	0.013
17002JE	0.010	26	0.009	0.011
17002JF	0.009	36	0.009	0.008
17002JG	0.010	39	0.009	0.010
17002JH	0.011	48	0.011	0.013
17002JI	0.010	51	0.009	0.010
17002JJ	0.012	53	0.011	0.018
17002JK	0.010	50	0.009	0.011
17002JL	0.010	43	0.009	0.012
17002JM	0.009	13	0.009	0.010
17002JN	0.009	14	0.009	0.008
17002JO	0.011	5	0.009	0.014
17002JP	0.011	177	0.010	0.013
17002JQ	0.010	171	0.009	0.011
17002JR	0.009	141	0.009	0.009
17002JS	0.010	116	0.009	0.011
17002JT	0.011	103	0.010	0.014
17002JU	0.010	50	0.009	0.011
17002JV	0.010	41	0.010	0.013
17002JW	0.010	18	0.009	0.015
17002JX	0.009	66	0.009	0.011
17002JY	0.010	75	0.009	0.011
17002JZ	0.009	159	0.009	0.010
17002KA	0.010	159	0.009	0.012
17002KB	0.009	169	0.009	0.010
17002KC	0.009	2	0.009	0.009
17002KD	0.010	41	0.009	0.011
17002KE	0.010	49	0.009	0.011
17002KF	0.010	50	0.009	0.011
17002KG	0.010	53	0.010	0.011
17002KH	0.011	54	0.010	0.012
17002KI	0.009	47	0.009	0.009
17002KJ	0.009	39	0.009	0.009
17002KK	0.010	20	0.009	0.013
17002KL	0.010	178	0.009	0.011
17002KM	0.009	156	0.009	0.008
17002KN	0.010	92	0.010	0.011
17002KO	0.010	70	0.010	0.012
17002KP	0.010	61	0.010	0.012
17002KQ	0.012	20	0.009	0.021
17002KR	0.010	30	0.010	0.012
17002SC	0.005	32	0.004	0.006
17002SD	0.010	3	0.007	0.014
17002SE	0.009	2	0.007	0.009
17002SF	0.010	86	0.007	0.012
17002SG	0.007	130	0.006	0.008
17002SH	0.013	14	0.010	0.014
17002SI	0.014	105	0.011	0.015
17002SJ	0.014	43	0.010	0.012
17002SK	0.014	58	0.011	0.015
17002WC	0.012	113	0.007	0.020
17002WD	0.015	154	0.009	0.024
17002WE	0.012	51	0.008	0.021
17002WF	0.019	119	0.009	0.023
17002WG	0.012	6	0.008	0.021
17002WH	0.021	83	0.011	0.024
17002WI	0.021	169	0.012	0.024
17002WJ	0.020	173	0.011	0.023
17002WK	0.047	111	0.012	0.024

Station Name	Semi-Major Axis	Azimuth	Semi-Minor Axis	Vertical
17002XC	0.007	31	0.005	0.007
17002XD	0.010	1	0.007	0.012
17002XE	0.009	2	0.007	0.009
17002XF	0.010	89	0.007	0.011
17002XG	0.007	131	0.006	0.009
17002XH	0.014	14	0.010	0.016
17002XI	0.014	105	0.010	0.014
17002XJ	0.014	43	0.010	0.012
17002XK	0.014	58	0.011	0.015

SUMMARY

A LiDAR ground control network consisting of 63 ground control points (GCP) and 179 QC check points was established in southern Louisiana. The estimated accuracy of the control network is ±0.03 m with respect to the NAD83 (2011) epoch 2010.0 reference frame and the NAVD88 vertical datum.

Adjusted Coordinates – NAD83 (2011) epoch 2010.0

Table 5 - Adjusted Coordinates - NAD83 (2011) Latitude/Longitude/Ellipsoidal Height

Station Name	GPSID	USGS Quad	Latitude	Longitude	Ellip H
AWES	AWES	DONALDSONVILLE	30°06'00.96248" N	90°58'58.63439" W	-8.952
BSRL	BSRL	BAYOU SORREL	30°08'01.36304" N	91°19'21.36174" W	-22.434
COVG	COVG	COVINGTON	30°28'33.26971" N	90°05'43.92269" W	-4.563
DOTD	DOTD	BATON ROUGE WEST	30°27'33.67457" N	91°10'39.74038" W	17.162
DSTR	DSTR	HAHNVILLE	29°57'52.39569" N	90°22'56.00655" W	-18.579
GCP01	17002AA	COW BAYOU	30°21'31.76161" N	91°31'17.98057" W	-21.370
GCP02	17002AB	ADDIS	30°20'51.49641" N	91°22'17.54460" W	-22.855
GCP02A	17002CY	GROSSE TETE SW	30°21'29.53915" N	91°22'30.93214" W	-21.972
GCP03	17002AC	BAYOU SORREL	30°13'46.91732" N	91°19'01.52492" W	-24.825
GCP04	17002AD	PIGEON	30°04'08.94507" N	91°17'13.46462" W	-24.941
GCP05	17002AE	ADDIS	30°21'01.56214" N	91°16'04.36093" W	-22.425
GCP06	17002AF	PIERRE PART	29°53'00.95161" N	91°11'32.16817" W	-24.758
GCP07	17002AG	BATON ROUGE WEST	30°25'58.69028" N	91°10'50.09512" W	-11.091
GCP08	17002AH	WHITE CASTLE	30°11'29.69651" N	91°10'36.92860" W	-21.613
GCP09	17002AI	PLAQUEMINE	30°20'52.05369" N	91°08'04.25475" W	-20.599
GCP10	17002AJ	NAPOLEONVILLE	29°57'39.33668" N	91°07'07.10570" W	-25.295
GCP11	17002AK	BELLE ROSE	30°06'46.89797" N	91°05'54.90514" W	-24.128
GCP12	17002AL	NAPOLEONVILLE	29°53'07.95169" N	91°05'57.42805" W	-24.315
GCP13	17002AM	AMELIA	29°43'17.81727" N	91°04'13.66579" W	-24.111
GCP14	17002AN	CARVILLE	30°13'48.57209" N	91°01'09.95146" W	-20.450
GCP15	17002AO	PRAIRIEVILLE	30°20'47.66733" N	90°59'44.12111" W	-21.532
GCP16	17002AP	DONALDSONVILLE	30°05'01.94798" N	90°57'05.75299" W	-22.432
GCP17	17002AQ	MADEWOOD	29°52'47.43414" N	90°56'59.67902" W	-23.671
GCP18	17002AR	LABADIEVILLE	29°48'10.53370" N	90°56'20.42544" W	-23.215
GCP19	17002AS	DENHAM SPRINGS	30°27'10.44642" N	90°54'18.16928" W	-16.360
GCP20	17002AT	DONALDSONVILLE	30°00'41.02201" N	90°54'06.08608" W	-24.191
GCP21	17002AU	SORRENTO	30°13'29.89321" N	90°52'11.44584" W	-24.877
GCP22	17002AV	LAGAN	29°52'51.01770" N	90°48'19.17346" W	-24.972
GCP23	17002AW	FRENCH SETTLEMENT	30°20'22.34011" N	90°47'37.35471" W	-22.104
GCP24	17002AX	LAGAN	29°58'16.65578" N	90°47'39.93426" W	-24.425
GCP25	17002AY	WALKER	30°24'49.64165" N	90°46'16.52535" W	-22.530
GCP26	17002AZ	THIBODAUX	29°45'40.97386" N	90°46'05.90347" W	-23.732
GCP27	17002BA	MOUNT AIRY NW	30°08'20.86222" N	90°44'40.36932" W	-24.658
GCP28	17002BB	LUTCHER	30°04'18.40544" N	90°41'53.21787" W	-24.206
GCP29	17002BC	LOWER VACHERIE	29°52'54.37947" N	90°43'23.45648" W	-25.129
GCP30	17002BD	WHITEHALL	30°15'47.04631" N	90°38'07.10977" W	-24.881
GCP31	17002BE	LOWER VACHERIE	29°59'50.06772" N	90°38'21.97637" W	-24.645
GCP32	17002BF	LOCKPORT	29°43'58.67100" N	90°37'02.38194" W	-22.643
GCP33	17002BG	SPRINGFIELD	30°24'49.46731" N	90°35'55.12495" W	-23.360
GCP34	17002BH	RESERVE	30°06'59.30985" N	90°36'17.05564" W	-24.611
GCP35	17002BI	BAYOU BOEUF	29°47'54.40851" N	90°30'16.60292" W	-24.608
GCP36	17002BJ	LAROSE	29°36'19.42648" N	90°29'33.38183" W	-23.200
GCP37	17002BK	HAHNVILLE	29°59'00.42142" N	90°28'37.65163" W	-24.620
GCP38	17002BL	RUDDOCK	30°11'06.08974" N	90°26'27.71759" W	-25.810
GCP39	17002BM	PONCHATOULA	30°24'03.67357" N	90°25'49.91814" W	-25.015
GCP40	17002BN	DES ALLEMANDS	29°52'25.03923" N	90°26'10.17468" W	-26.100
GCP41	17002BO	MANCHAC	30°18'53.70388" N	90°24'23.40746" W	-25.816
GCP42	17002BP	LAPLACE	30°04'19.41277" N	90°24'34.56036" W	-25.575
GCP43	17002BQ	CUT OFF	29°35'21.24539" N	90°22'10.90675" W	-24.552
GCP44	17002BR	PONCHATOULA NE	30°28'41.81389" N	90°19'46.51904" W	-17.890
GCP45	17002BS	GOLDEN MEADOW	29°29'54.70000" N	90°20'21.02138" W	-25.606
GCP46	17002BT	LULING	29°54'58.02920" N	90°18'27.87446" W	-25.181
GCP46A	17002CZ	DES ALLEMANDS	29°46'51.68577" N	90°23'41.98181" W	-24.403

Station Name	GPSID	USGS Quad	Latitude	Longitude	Ellip H
GCP47	17002BU	LA BRANCHE	30°01'54.81468" N	90°16'42.60197" W	-28.224
GCP48	17002BV	MADISONVILLE	30°23'57.85867" N	90°13'04.88948" W	-24.955
GCP49	17002BW	BERTRANDVILLE	29°51'59.97139" N	90°06'40.92214" W	-25.515
GCP50	17002BX	BARATARIA	29°44'52.21793" N	90°08'01.15221" W	-24.752
GCP51	17002BY	SPANISH FORT	30°01'14.31033" N	90°05'32.58022" W	-26.497
GCP52	17002BZ	COVINGTON	30°23'31.34637" N	90°03'07.81717" W	-21.114
GCP53	17002CA	BERTRANDVILLE	29°51'44.00338" N	90°02'02.16964" W	-27.317
GCP54	17002CB	LITTLE WOODS	30°02'43.46655" N	89°57'39.75335" W	-28.876
GCP55	17002CC	CHALMETTE	29°56'55.95140" N	89°57'32.13061" W	-26.196
GCP56	17002CD	LACOMBE	30°18'43.76604" N	89°56'19.29849" W	-22.415
GCP57	17002CE	CHEF MENTEUR	30°04'11.09990" N	89°48'36.08804" W	-25.622
GCP58	17002CF	SLIDELL	30°18'05.01064" N	89°46'27.72871" W	-22.723
GCP59	17002CG	CHEF MENTEUR	30°06'31.01684" N	89°45'41.99213" W	-25.743
GCP60	17002CH	RIGOLETS	30°11'37.29535" N	89°42'38.56341" W	-24.461
GCP61	17002CI	HAASWOOD	30°18'05.02914" N	89°39'04.06663" W	-23.500
GCP62	17002CJ	NORTH SHORE	30°11'48.03489" N	89°45'17.86200" W	-25.744
GVMS	GVMS	PRAIRIEVILLE	30°18'51.79676" N	90°54'13.02953" W	-15.202
HAMM	HAMM	HAMMOND	30°30'47.05150" N	90°28'03.42840" W	7.264
HOMA	HOMA	HOUMA	29°34'44.67646" N	90°42'39.26457" W	-13.931
INRI	INRI	NEW ORLEANS EAST	29°56'13.21144" N	90°07'07.83712" W	-9.178
LUCH	LUCH	LUTCHER	30°02'47.41984" N	90°41'36.60721" W	-14.912
LWES	LWES	LULING	29°54'01.29535" N	90°20'57.83368" W	-15.710
MARY	MARY	LITTLE WOODS	30°01'22.70955" N	89°54'46.80193" W	-22.897
MCHS	MCHS	MORGAN CITY	29°43'01.98785" N	91°12'14.98892" W	-14.732
NVA001	17002DA	NEW ORLEANS WEST	29°59'35.87142" N	90°13'02.03387" W	-28.135
NVA002	17002DB	NEW ORLEANS WEST	29°58'31.07286" N	90°09'50.42348" W	-24.578
NVA003	17002DC	NEW ORLEANS EAST	29°59'42.66646" N	90°07'03.01678" W	-27.913
NVA004	17002DD	SPANISH FORT	30°01'48.53849" N	90°02'24.30715" W	-25.170
NVA005	17002DE	LITTLE WOODS	30°01'44.85797" N	89°59'37.37849" W	-28.579
NVA006	17002DF	LITTLE WOODS	30°00'38.47119" N	89°57'31.00955" W	-25.526
NVA007	17002DH	NEW ORLEANS EAST	29°58'25.43790" N	90°00'03.36642" W	-27.622
NVA008	17002DI	NEW ORLEANS EAST	29°55'07.63285" N	90°05'04.91238" W	-23.231
NVA009	17002HA	INDIAN BEACH	30°00'20.75114" N	90°14'35.13866" W	-27.945
NVA010	17002DK	BERTRANDVILLE	29°47'54.96574" N	90°05'55.79626" W	-25.302
NVA011	17002DM	NEW ORLEANS EAST	29°52'34.66570" N	90°06'45.52019" W	-25.644
NVA012	17002DN	NEW ORLEANS WEST	29°54'12.69618" N	90°09'44.76714" W	-27.170
NVA013	17002HC	LULING	29°57'34.12748" N	90°21'51.30791" W	-25.032
NVA014	17002DP	LULING	29°57'53.02033" N	90°15'04.14957" W	-22.492
NVA015	17002DQ	NEW ORLEANS WEST	29°57'07.44133" N	90°08'57.13603" W	-20.693
NVA016	17002DR	LITTLE WOODS	30°00'47.23006" N	89°59'34.49965" W	-25.840
NVA017	17002DS	LITTLE WOODS	30°02'01.39174" N	89°55'09.19367" W	-26.125
NVA018	17002DT	LITTLE WOODS	30°03'12.52203" N	89°52'35.02706" W	-25.932
NVA019	17002DU	CHEF MENTEUR	30°07'07.68071" N	89°52'00.46666" W	-26.164
NVA020	17002HE	BAYOU BOEUF	29°48'12.13697" N	90°30'01.16842" W	-24.814
NVA021	17002HF	BAYOU BOEUF	29°45'31.91791" N	90°33'17.28943" W	-23.554
NVA022	17002HH	LOCKPORT	29°42'33.96845" N	90°34'24.70045" W	-22.918
NVA023	17002DY	CHEF MENTEUR	30°04'29.84231" N	89°51'42.05923" W	-25.440
NVA024	17002EB	NORTH SHORE	30°08'10.68731" N	89°45'28.88867" W	-24.414
NVA025	17002EC	RIGOLETS	30°09'42.78950" N	89°44'23.90557" W	-25.158
NVA026	17002EE	RIGOLETS	30°12'49.33052" N	89°41'29.26043" W	-24.305
NVA027	17002EF	RIGOLETS	30°14'06.25483" N	89°38'22.27625" W	-25.721
NVA028	17002EG	HAASWOOD	30°17'18.79746" N	89°43'40.87232" W	-23.562
NVA029	17002EH	HAASWOOD	30°15'02.81168" N	89°42'22.39340" W	-24.644
NVA030	17002EI	SLIDELL	30°16'15.29855" N	89°45'32.50995" W	-23.438
NVA031	17002EJ	SLIDELL	30°15'03.67199" N	89°47'27.91393" W	-25.708
NVA032	17002EN	MADISONVILLE	30°24'27.68183" N	90°08'15.20397" W	-24.278

Station Name	GPSID	USGS Quad	Latitude	Longitude	Ellip H
NVA033	17002EO	MADISONVILLE	30°22'42.73444" N	90°09'42.52410" W	-26.090
NVA034	17002ER	PONCHATOULA	30°28'34.04958" N	90°24'39.93246" W	-17.986
NVA035	17002ET	PONCHATOULA	30°27'50.90704" N	90°27'27.77051" W	-18.778
NVA036	17002EU	MANCHAC	30°21'34.67568" N	90°25'04.98480" W	-25.903
NVA037	17002EV	MANCHAC	30°16'43.66298" N	90°24'00.55362" W	-25.815
NVA038	17002EW	RUDDOCK	30°12'48.03725" N	90°25'02.30964" W	-25.168
NVA039	17002EY	FROST	30°27'31.21468" N	90°44'41.91870" W	-17.345
NVA040	17002EZ	WALKER	30°23'28.94138" N	90°46'11.67669" W	-20.226
NVA041	17002FA	WALKER	30°25'04.40923" N	90°51'13.59915" W	-20.684
NVA042	17002FE	FROST	30°28'19.22813" N	90°38'33.69470" W	-16.380
NVA043	17002FG	SPRINGFIELD	30°26'59.56672" N	90°34'10.93366" W	-19.135
NVA044	17002FL	SPRINGFIELD	30°23'25.61510" N	90°32'47.21507" W	-23.618
NVA045	17002FO	WHITEHALL	30°20'20.46855" N	90°43'09.27454" W	-22.046
NVA046	17002FP	FRENCH SETTLEMENT	30°18'59.18327" N	90°45'59.43560" W	-24.916
NVA047	17002FQ	FRENCH SETTLEMENT	30°17'48.38982" N	90°47'38.54808" W	-23.440
NVA048	17002FR	FRENCH SETTLEMENT	30°15'34.05108" N	90°45'47.44590" W	-24.802
NVA049	17002FV	FRENCH SETTLEMENT	30°20'01.19043" N	90°52'24.72666" W	-22.764
NVA050	17002FW	DENHAM SPRINGS	30°22'46.07423" N	90°53'47.95239" W	-21.614
NVA051	17002HJ	LOCKPORT	29°39'33.51803" N	90°32'18.05159" W	-22.071
NVA052	17002HL	LAROSE	29°34'18.44024" N	90°22'56.29233" W	-23.099
NVA053	17002HM	CUT OFF	29°31'14.41804" N	90°20'48.95650" W	-25.135
NVA054	17002HO	SAVOIE	29°43'57.55605" N	90°38'05.98262" W	-22.521
NVA055	17002HP	KRAEMER	29°46'02.09580" N	90°43'18.55825" W	-24.488
NVA056	17002HQ	LABADIEVILLE	29°48'57.81172" N	90°52'50.73015" W	-21.804
NVA057	17002HR	LABADIEVILLE	29°48'29.22170" N	90°57'32.54474" W	-23.057
NVA058	17002HT	THIBODAUX	29°51'33.40035" N	90°48'07.30243" W	-24.510
NVA059	17002HU	KRAEMER	29°52'04.11898" N	90°42'25.07177" W	-25.241
NVA060	17002HV	LOWER VACHERIE	29°56'19.97736" N	90°42'31.44606" W	-24.203
NVA061	17002HW	LOWER VACHERIE	29°58'07.90234" N	90°43'04.23113" W	-22.993
NVA062	17002HZ	LAGAN	29°58'08.96083" N	90°51'23.99380" W	-24.389
NVA063	17002IA	DONALDSONVILLE	30°04'08.65469" N	90°58'08.11377" W	-23.812
NVA064	17002IC	DONALDSONVILLE	30°05'28.51981" N	90°58'36.61842" W	-21.546
NVA065	17002ID	BELLE ROSE	30°06'17.60228" N	91°00'24.13388" W	-21.397
NVA066	17002IF	BELLE ROSE	30°05'07.82594" N	91°04'52.51382" W	-24.057
NVA067	17002IG	BELLE ROSE	30°01'06.69459" N	91°03'10.48986" W	-21.967
NVA068	17002IH	NAPOLEONVILLE	29°58'40.12415" N	91°03'38.21005" W	-22.538
NVA069	17002II	NAPOLEONVILLE	29°57'05.34629" N	91°02'41.89430" W	-21.810
NVA070	17002IJ	NAPOLEONVILLE	29°53'34.36390" N	91°04'26.70303" W	-23.816
NVA071	17002IL	BELLE ROSE	30°00'10.47852" N	91°04'43.03417" W	-22.744
NVA072	17002IM	LONE STAR	30°00'09.58110" N	91°11'43.09361" W	-24.809
NVA073	17002IN	PIERRE PART	29°57'26.53697" N	91°12'45.72686" W	-24.798
NVA074	17002IO	PIGEON	30°06'34.58909" N	91°17'44.73577" W	-25.276
NVA075	17002IP	BAYOU SORREL	30°07'57.31389" N	91°15'37.46081" W	-25.779
NVA076	17002IQ	WHITE CASTLE	30°08'58.50894" N	91°11'29.71702" W	-23.487
NVA077	17002IT	WHITE CASTLE	30°14'15.29965" N	91°12'11.31571" W	-23.769
NVA078	17002IU	BAYOU SORREL	30°14'41.81061" N	91°16'10.63936" W	-23.277
NVA079	17002IV	ADDIS	30°15'00.02002" N	91°19'17.32440" W	-23.958
NVA080	17002IX	LOBDELL	30°27'02.57958" N	91°18'49.80724" W	-22.675
NVA081	17002JA	BATON ROUGE WEST	30°26'42.45414" N	91°14'38.86676" W	-22.685
NVA082	17002JC	BATON ROUGE WEST	30°24'33.04487" N	91°13'40.97031" W	-21.355
NVA083	17002JE	SAINT GABRIEL	30°20'51.87837" N	91°04'34.83874" W	-23.797
NVA084	17002JG	PRAIRIEVILLE	30°17'01.93330" N	90°58'51.25247" W	-21.915
NVA085	17002JI	GONZALES	30°12'38.43741" N	90°55'42.67652" W	-24.529
NVA086	17002JJ	SORRENTO	30°11'51.43129" N	90°51'45.84425" W	-25.821
NVA087	17002JL	LUTCHER	30°07'13.40449" N	90°40'56.37005" W	-25.189
NVA088	17002JN	LUTCHER	30°02'28.72067" N	90°40'21.51754" W	-16.430

Station Name	GPSID	USGS Quad	Latitude	Longitude	Ellip H
NVA089	17002JP	RESERVE	30°02'10.43611" N	90°33'30.27972" W	-23.648
NVA090	17002JT	DES ALLEMANDS	29°50'34.91141" N	90°25'45.75446" W	-27.140
NVA091	17002JU	LAPLACE	30°05'21.43128" N	90°26'25.97428" W	-25.089
NVA092	17002JX	LAPLACE	30°02'30.22623" N	90°26'32.40244" W	-24.583
NVA093	17002KA	LAPLACE	30°00'07.38679" N	90°27'22.04886" W	-22.100
NVA094	17002KE	GHEENS	29°41'32.83419" N	90°28'31.36285" W	-24.065
NVA095	17002KK	LAROSE	29°35'22.05971" N	90°27'32.22283" W	-24.025
NVA096	17002KN	GRASSY LAKE	29°49'17.40710" N	91°02'38.88374" W	-25.056
NVA097	17002KQ	ADDIS	30°19'44.90365" N	91°20'46.40712" W	-24.054
NVA098	17002KR	GROSSE TETE	30°24'32.88426" N	91°26'07.58912" W	-23.041
NVA099	17002FC	WALKER	30°28'11.64652" N	90°47'58.41084" W	-17.685
NVA100	17002FI	SPRINGFIELD	30°27'58.98683" N	90°32'33.20992" W	-18.984
NVA101	17002FJ	SPRINGFIELD	30°28'11.84390" N	90°30'27.06174" W	-18.630
PAUL	PAUL	GOLDEN MEADOW	29°28'04.28579" N	90°18'37.73539" W	-12.809
SJHS	SJHS	SLIDELL	30°16'49.45657" N	89°46'47.85818" W	-12.935
TIBO	TIBO	THIBODAUX	29°47'26.04594" N	90°48'16.47280" W	2.895
TRAVERSE	17002SC	PONCHATOULA	30°25'30.73046" N	90°27'06.76341" W	-22.140
TRAVERSE	17002SD	PONCHATOULA NE	30°28'12.31856" N	90°19'34.20838" W	-18.458
TRAVERSE	17002SE	MADISONVILLE	30°26'23.53457" N	90°10'09.55053" W	-19.580
TRAVERSE	17002SF	FROST	30°26'44.29547" N	90°38'34.11371" W	-19.324
TRAVERSE	17002SG	KILLIAN	30°18'50.97861" N	90°36'00.76198" W	-21.591
TRAVERSE	17002SH	DENHAM SPRINGS	30°23'33.08823" N	90°53'30.44796" W	-15.253
TRAVERSE	17002SI	CARVILLE	30°14'55.74009" N	91°02'52.11890" W	-21.686
TRAVERSE	17002SJ	GONZALES	30°09'25.30983" N	90°53'00.03077" W	-23.046
TRAVERSE	17002SK	WHITEHALL	30°20'13.02531" N	90°43'58.95232" W	-20.537
TRAVERSE	17002XC	PONCHATOULA	30°25'30.01318" N	90°27'05.39620" W	-23.374
TRAVERSE	17002XD	PONCHATOULA NE	30°28'12.35081" N	90°19'32.20406" W	-20.013
TRAVERSE	17002XE	MADISONVILLE	30°26'23.60739" N	90°10'11.93043" W	-21.106
TRAVERSE	17002XF	FROST	30°26'45.16968" N	90°38'34.08083" W	-20.940
TRAVERSE	17002XG	KILLIAN	30°18'49.69251" N	90°36'01.79912" W	-23.030
TRAVERSE	17002XH	DENHAM SPRINGS	30°23'32.83803" N	90°53'29.23673" W	-16.316
TRAVERSE	17002XI	CARVILLE	30°14'56.87673" N	91°02'51.66277" W	-23.249
TRAVERSE	17002XJ	GONZALES	30°09'25.99510" N	90°53'00.91841" W	-24.664
TRAVERSE	17002XK	WHITEHALL	30°20'13.73453" N	90°43'59.29565" W	-22.091
VRS_0315	VRS_0315	NEW ORLEANS WEST	29°59'36.60899" N	90°13'02.24220" W	-27.100
VVA001	17002DG	CHALMETTE	29°59'30.72127" N	89°56'33.23455" W	-25.833
VVA002	17002DL	NEW ORLEANS EAST	29°53'28.00576" N	90°04'29.62915" W	-25.622
VVA003	17002DZ	CHEF MENTEUR	30°04'00.73812" N	89°49'47.16793" W	-25.924
VVA004	17002EA	CHEF MENTEUR	30°05'49.74801" N	89°45'58.09221" W	-25.780
VVA005	17002ED	RIGOLETS	30°11'02.81493" N	89°44'28.01699" W	-25.689
VVA006	17002EK	SLIDELL	30°16'54.03648" N	89°50'22.93936" W	-24.234
VVA007	17002EL	LACOMBE	30°18'28.31554" N	89°52'56.02703" W	-21.786
VVA008	17002EM	LACOMBE	30°20'24.95403" N	89°57'56.49123" W	-21.055
VVA009	17002EP	MADISONVILLE	30°26'27.25556" N	90°13'12.08031" W	-21.237
VVA010	17002EQ	PONCHATOULA NE	30°26'37.46152" N	90°19'20.29084" W	-20.579
VVA011	17002ES	PONCHATOULA	30°26'37.53104" N	90°25'11.98515" W	-20.130
VVA012	17002EX	SPRINGFIELD	30°25'15.58868" N	90°36'35.56206" W	-21.715
VVA013	17002FB	WALKER	30°27'47.86928" N	90°51'46.13150" W	-17.784
VVA014	17002FD	FROST	30°26'09.37178" N	90°40'14.12945" W	-22.037
VVA015	17002FF	SPRINGFIELD	30°28'27.12610" N	90°34'38.36560" W	-16.740
VVA016	17002FH	SPRINGFIELD	30°25'58.32612" N	90°32'45.40199" W	-23.014
VVA017	17002FK	PONCHATOULA	30°27'09.81368" N	90°29'56.85915" W	-20.356
VVA018	17002FM	KILLIAN	30°22'07.98533" N	90°33'28.37580" W	-22.802
VVA019	17002FN	WHITEHALL	30°21'48.69440" N	90°37'51.31714" W	-21.689
VVA020	17002FS	KILLIAN	30°18'30.66195" N	90°36'26.69544" W	-25.321
VVA021	17002FT	WHITEHALL	30°17'42.07120" N	90°38'44.22410" W	-23.065

Station Name	GPSID	USGS Quad	Latitude	Longitude	Ellip H
VVA022	17002FU	WHITEHALL	30°15'35.09348" N	90°43'03.43040" W	-25.680
VVA023	17002HB	LA BRANCHE	30°01'22.30051" N	90°16'18.01128" W	-28.566
VVA024	17002HD	DES ALLEMANDS	29°48'17.39992" N	90°29'56.56627" W	-25.272
VVA025	17002HG	BAYOU BOEUF	29°45'30.46199" N	90°33'18.38536" W	-24.172
VVA026	17002HI	LOCKPORT	29°42'50.19747" N	90°34'47.41063" W	-22.879
VVA027	17002HK	LAROSE	29°34'39.90800" N	90°23'28.43033" W	-24.233
VVA028	17002HN	LOCKPORT	29°44'04.94399" N	90°37'22.43220" W	-22.140
VVA029	17002HS	MADEWOOD	29°52'46.49289" N	90°57'06.03883" W	-23.743
VVA030	17002HX	LOWER VACHERIE	29°57'58.68414" N	90°43'38.27578" W	-24.228
VVA031	17002IB	DONALDSONVILLE	30°04'41.30774" N	90°57'51.33430" W	-24.070
VVA032	17002IK	NAPOLEONVILLE	29°53'34.44468" N	91°04'26.50796" W	-23.893
VVA033	17002IR	WHITE CASTLE	30°09'04.18738" N	91°11'38.85947" W	-24.226
VVA034	17002IS	WHITE CASTLE	30°11'30.73092" N	91°10'36.42823" W	-22.176
VVA035	17002IY	LOBDELL	30°27'02.61224" N	91°18'47.62663" W	-23.238
VVA036	17002IZ	BATON ROUGE WEST	30°26'40.83254" N	91°14'37.52000" W	-23.048
VVA037	17002JB	BATON ROUGE WEST	30°22'58.89634" N	91°14'49.26206" W	-20.645
VVA038	17002JD	PLAQUEMINE	30°21'59.65954" N	91°09'19.35378" W	-22.525
VVA039	17002JF	PRAIRIEVILLE	30°18'02.83058" N	90°58'23.44867" W	-19.790
VVA040	17002JH	GONZALES	30°12'20.90666" N	90°56'12.86514" W	-24.061
VVA041	17002JK	MOUNT AIRY NW	30°08'21.02935" N	90°44'40.65624" W	-24.925
VVA042	17002JM	LUTCHER	30°01'59.81965" N	90°39'59.25069" W	-22.670
VVA043	17002JO	LOWER VACHERIE	29°59'23.64550" N	90°40'10.28420" W	-25.242
VVA044	17002JQ	RESERVE	30°02'09.60565" N	90°33'30.26878" W	-24.042
VVA045	17002JR	HAHNVILLE	29°56'18.36233" N	90°25'29.96081" W	-24.789
VVA046	17002JS	DES ALLEMANDS	29°47'30.26217" N	90°25'42.97009" W	-27.260
VVA047	17002JV	LAPLACE	30°05'22.69128" N	90°26'25.24537" W	-25.915
VVA048	17002JW	RESERVE	30°06'59.28541" N	90°36'17.44328" W	-24.762
VVA049	17002JY	LAPLACE	30°04'52.24023" N	90°27'54.62888" W	-24.986
VVA050	17002JZ	LAPLACE	30°00'12.93913" N	90°27'48.32554" W	-18.892
VVA051	17002KB	LULING	29°57'52.58571" N	90°18'16.28321" W	-23.848
VVA052	17002KC	LULING	29°55'00.07935" N	90°19'21.71711" W	-25.815
VVA053	17002KD	LOCKPORT	29°40'43.32258" N	90°33'10.01672" W	-24.839
VVA054	17002KF	GHEENS	29°41'59.67235" N	90°28'35.97967" W	-24.475
VVA055	17002KG	LOCKPORT	29°40'59.47942" N	90°31'20.70224" W	-24.513
VVA056	17002KH	LAROSE	29°36'25.22183" N	90°29'18.71562" W	-24.611
VVA057	17002KI	CUT OFF	29°32'40.96287" N	90°20'05.99668" W	-24.428
VVA058	17002KJ	GOLDEN MEADOW	29°29'48.27916" N	90°20'18.39509" W	-25.997
VVA059	17002KL	SAVOIE	29°43'25.50086" N	90°42'41.26237" W	-24.501
VVA060	17002KM	THIBODAUX	29°46'51.56201" N	90°49'14.08208" W	-22.021
VVA061	17002KO	GRASSY LAKE	29°49'16.79833" N	91°02'37.87681" W	-24.990
VVA062	17002KP	NAPOLEONVILLE	29°59'18.96899" N	91°01'49.92171" W	-20.941
VVA063	17002IE	BELLE ROSE	30°06'23.97741" N	91°05'22.63437" W	-24.623
VVA064	17002DJ	NEW ORLEANS EAST	29°54'40.50113" N	90°01'26.77137" W	-27.883
VVA065	17002DO	NEW ORLEANS WEST	29°54'46.24859" N	90°14'48.30525" W	-26.048
VVA066	17002DV	NORTH SHORE	30°13'02.18427" N	89°47'15.90050" W	-24.728
VVA067	17002DW	NORTH SHORE	30°09'12.52345" N	89°51'24.22984" W	-23.700
VVA068	17002DX	LITTLE WOODS	30°04'42.73171" N	89°55'32.79168" W	-25.580
VVA069	17002HY	LAGAN	29°58'06.27889" N	90°51'17.96277" W	-24.647
VVA070	17002WC	PONCHATOULA	30°25'29.08481" N	90°27'06.89619" W	-23.643
VVA071	17002WD	PONCHATOULA NE	30°28'11.56030" N	90°19'34.70930" W	-20.321
VVA072	17002WE	MADISONVILLE	30°26'22.51289" N	90°10'09.84383" W	-21.375
VVA073	17002WF	FROST	30°26'43.83114" N	90°38'34.72779" W	-21.058
VVA074	17002WG	KILLIAN	30°18'50.18723" N	90°35'59.69342" W	-23.071
VVA075	17002WH	DENHAM SPRINGS	30°23'33.96023" N	90°53'29.98942" W	-16.593
VVA076	17002WI	CARVILLE	30°14'56.10209" N	91°02'53.09184" W	-24.098
VVA077	17002WJ	GONZALES	30°09'25.78741" N	90°52'59.48219" W	-25.107

Station Name	GPSID	USGS Quad	Latitude	Longitude	Ellip H
VVA078	17002WK	WHITEHALL	30°20'11.68462" N	90°43'59.84954" W	-22.080

NAD83 (2011) UTM Zone 15 and 16 Coordinates - meters
NAVD88 Orthometric Heights (GEOID12B) – meters

Table 6 - NAD83 (2011) UTM Zone 15/16 and NAVD88 GPS Derived Orthometric Heights

Station Name	UTM15 N	UTM15 E	UTM16 N	UTM16 E	NAVD88 H
AWES	3331612.101	694363.655	3336594.915	116085.338	17.669
BSRL	3334789.439	661575.511	3341499.417	83457.916	4.398
COVG	3375108.191	778841.155	3375595.987	202807.027	22.284
DOTD	3371097.972	674955.436	3377110.869	98764.578	44.268
DSTR	3317741.265	752612.468	3319673.280	173580.788	7.492
GCP01	3359473.397	642074.378	3367228.464	65251.472	5.907
GCP02	3358431.487	656521.263	3365419.398	79651.385	4.336
GCP02A	3359597.609	656146.995	3366605.931	79338.803	5.227
GCP03	3345436.007	661949.214	3352130.762	84393.662	2.198
GCP04	3327684.747	665105.473	3334205.955	86615.286	1.712
GCP05	3358889.093	666481.583	3365348.891	89639.983	4.699
GCP06	3307259.538	674569.286	3313277.554	95011.122	1.308
GCP07	3368168.981	674726.315	3374193.480	98379.652	16.012
GCP08	3341419.020	675507.427	3347396.424	97744.050	5.270
GCP09	3358799.772	679306.621	3364579.462	102463.365	6.444
GCP10	3315944.582	681540.285	3321599.646	102438.359	0.998
GCP11	3332835.216	683195.749	3338405.849	104981.265	2.571
GCP12	3307619.917	683546.586	3313168.603	104009.223	1.723
GCP13	3289497.237	686634.692	3294882.271	106152.601	1.421
GCP14	3345948.255	690597.819	3351129.414	113075.323	6.418
GCP15	3358892.688	692664.889	3363964.244	115827.285	5.441
GCP16	3329848.820	697418.356	3334671.050	119047.136	4.135
GCP17	3307236.145	697985.553	3312030.035	118428.867	2.273
GCP18	3298729.375	699191.474	3303460.785	119190.665	2.482
GCP19	3370836.628	701151.538	3375456.394	124947.035	10.647
GCP20	3321902.055	702376.734	3326464.656	123587.603	2.162
GCP21	3345633.263	705006.900	3350053.495	127466.370	1.918
GCP22	3307604.343	711949.954	3311668.457	132410.392	0.945
GCP23	3358473.284	712089.337	3362515.642	135226.048	4.774
GCP24	3317651.290	712810.207	3321667.746	133796.083	1.779
GCP25	3366746.597	714086.234	3370680.286	137661.017	4.402
GCP26	3294431.681	715782.621	3298299.473	135555.021	1.817
GCP27	3336349.841	717257.165	3340126.767	139223.717	1.928
GCP28	3328973.261	721881.365	3332509.847	143458.121	2.219
GCP29	3307862.197	719882.977	3311511.756	140354.442	0.777
GCP30	3350302.833	727497.118	3353533.459	150195.090	1.845
GCP31	3320825.664	727709.503	3324060.095	148856.013	1.577
GCP32	3291573.562	730449.916	3294679.370	150067.849	2.848
GCP33	3367080.660	730671.449	3370133.839	154256.136	3.510
GCP34	3334113.174	730780.873	3337179.388	152623.533	1.867
GCP35	3299063.205	741198.134	3301605.291	161199.668	1.046
GCP36	3277687.304	742823.322	3280159.030	161713.539	1.987
GCP37	3319630.713	743405.430	3322043.379	164479.858	1.528
GCP38	3342055.507	746388.146	3344294.670	168638.566	0.714
GCP39	3366025.309	746857.375	3368220.475	170374.674	1.771
GCP40	3307542.573	747631.122	3309743.167	168070.289	-0.249
GCP41	3356531.788	749385.401	3358600.929	172397.731	0.862
GCP42	3329599.789	749700.036	3331674.674	171292.534	0.745
GCP43	3276159.540	754771.123	3278013.888	173573.399	0.520
GCP44	3374816.258	756356.387	3376499.243	180331.984	8.940
GCP45	3266171.030	757959.181	3267869.045	176242.599	-0.784
GCP46	3312537.843	759928.478	3314091.840	180618.109	0.751

Station Name	UTM15 N	UTM15 E	UTM16 N	UTM16 E	NAVD88 H
GCP46A	3297366.236	751840.748	3299355.357	171746.109	1.189
GCP47	3325440.359	762447.959	3326849.981	183810.647	-2.027
GCP48	3366329.237	767285.717	3367440.823	190799.460	1.739
GCP49	3307514.852	779033.654	3308076.645	199440.477	0.268
GCP50	3294286.670	777207.853	3294959.248	196927.969	0.692
GCP51	3324634.629	780435.381	3325102.113	201735.689	-0.363
GCP52	3365916.305	783248.521	3366182.257	206720.885	5.607
GCP53	3307213.588	786529.328	3307384.763	206910.985	-1.555
GCP54	3327710.154	793035.884	3327512.922	214480.567	-2.681
GCP55	3317011.475	793524.472	3316803.926	214408.221	-0.217
GCP56	3357347.547	794396.648	3357035.519	217399.791	4.252
GCP57	3330806.555	807530.047	3329844.276	229114.912	0.671
GCP58	3356591.913	810241.277	3355443.756	233179.231	4.024
GCP59	3335247.959	812072.404	3334039.778	233882.832	0.655
GCP60	3344823.732	816712.900	3343354.767	239018.839	2.127
GCP61	3356936.176	822100.985	3355160.873	245035.893	3.376
GCP62	3345032.183	812440.558	3343787.843	234764.973	0.827
GVMS	3355484.767	701572.932	3360084.776	124553.891	11.704
HAMM	3378367.744	743014.731	3380757.212	167190.830	34.205
HOMA	3274332.328	721733.956	3277897.627	140461.093	11.197
INRI	3315296.333	778115.459	3315896.699	198929.781	16.777
LUCH	3326180.528	722382.765	3329691.953	143812.631	11.454
LWES	3310697.030	755945.661	3312460.817	176542.737	10.188
MARY	3325346.800	797737.790	3324906.539	219051.708	3.260
MCHS	3288801.352	673707.787	3294858.761	93186.580	10.836
NVA001	3321303.340	768462.780	3322401.992	189602.433	-2.032
NVA002	3319433.627	773649.083	3320262.787	194685.084	1.472
NVA003	3321750.697	778082.518	3322344.998	199234.620	-1.828
NVA004	3325818.274	785454.414	3326021.155	206810.324	0.983
NVA005	3325821.587	789931.277	3325789.784	211281.310	-2.424
NVA006	3323866.283	793372.568	3323656.900	214615.298	0.596
NVA007	3319660.911	789395.670	3319665.639	210423.778	-1.586
NVA008	3313359.835	781464.267	3313787.547	202173.270	2.678
NVA009	3322625.178	765933.492	3323854.940	187145.064	-1.810
NVA010	3299999.349	780435.263	3300497.217	200448.713	0.284
NVA011	3308580.310	778883.381	3309148.658	199345.978	0.163
NVA012	3311479.683	773997.607	3312299.707	194617.309	-1.289
NVA013	3317218.426	754360.281	3319059.406	175299.741	1.021
NVA014	3318056.692	765265.031	3319326.170	186238.051	3.550
NVA015	3316893.310	775142.011	3317647.281	196043.364	5.302
NVA016	3324048.592	790055.088	3324012.754	211312.035	0.282
NVA017	3326522.130	797105.501	3326113.257	218481.962	0.054
NVA018	3328825.254	801177.564	3328199.374	222668.612	0.302
NVA019	3336094.312	801904.892	3335418.937	223776.429	0.214
NVA020	3299618.122	741600.829	3302138.861	161631.006	0.853
NVA021	3294571.408	736438.364	3297364.097	156208.998	2.000
NVA022	3289053.583	734742.334	3291937.603	154227.029	2.520
NVA023	3331245.872	802531.507	3330545.187	224147.442	0.845
NVA024	3338328.298	812336.076	3337100.987	234307.921	2.041
NVA025	3341215.182	813994.884	3339895.642	236115.684	1.354
NVA026	3347096.648	818502.971	3345529.305	240925.413	2.335
NVA027	3349613.173	823435.860	3347781.193	245981.811	1.011
NVA028	3355296.000	814742.561	3353912.333	237604.243	3.199
NVA029	3351167.455	816962.215	3349673.993	239602.043	2.059
NVA030	3353254.223	811813.834	3352028.747	234572.833	3.264
NVA031	3350960.107	808790.396	3349898.078	231433.484	0.941

Station Name	UTM15 N	UTM15 E	UTM16 N	UTM16 E	NAVD88 H
NVA032	3367440.752	774996.787	3368142.185	198560.494	2.434
NVA033	3364149.578	772746.673	3364974.228	196138.637	0.580
NVA034	3374394.803	748534.963	3376493.906	172495.255	8.879
NVA035	3372964.392	744087.750	3375301.027	167975.664	8.092
NVA036	3361463.899	748161.561	3363593.698	171436.005	0.832
NVA037	3352540.884	750087.786	3354576.262	172888.515	0.816
NVA038	3345246.722	748601.964	3347366.617	171018.854	1.384
NVA039	3371772.081	716511.959	3375575.028	140352.801	9.611
NVA040	3364264.113	714264.614	3368189.215	137707.588	6.688
NVA041	3367048.014	706149.084	3371403.039	129742.238	6.285
NVA042	3373451.193	726304.411	3376732.767	150229.962	10.560
NVA043	3371146.550	733366.272	3374054.148	157165.210	7.762
NVA044	3364606.002	735742.938	3367391.672	159193.172	3.210
NVA045	3358557.348	719250.770	3362220.337	142389.309	4.798
NVA046	3355963.836	714755.111	3359865.867	137758.049	1.928
NVA047	3353732.104	712149.644	3357772.755	135035.340	3.399
NVA048	3349653.513	715199.860	3353534.229	137868.892	1.982
NVA049	3357675.380	704426.199	3362123.882	127522.643	4.147
NVA050	3362711.010	702109.010	3367281.374	125472.833	5.345
NVA051	3283568.967	738265.115	3286273.257	157463.039	3.253
NVA052	3274197.833	753593.210	3276114.722	172294.955	1.938
NVA053	3268608.739	757150.584	3270346.410	175560.531	-0.252
NVA054	3291504.089	728741.398	3294698.771	148356.545	2.967
NVA055	3295169.930	720265.592	3298804.102	140074.979	1.078
NVA056	3300287.199	704795.623	3304726.217	124875.493	3.919
NVA057	3299270.292	697244.693	3304103.190	117272.177	2.663
NVA058	3305220.520	712314.172	3309266.212	132650.005	1.336
NVA059	3306345.722	721480.513	3309912.408	141872.171	0.617
NVA060	3314220.715	721152.291	3317801.502	141955.754	1.875
NVA061	3317526.434	720206.926	3321155.443	141183.832	3.178
NVA062	3317300.419	706807.943	3321631.434	127776.835	1.826
NVA063	3328178.104	695777.687	3333086.688	117318.728	2.726
NVA064	3330623.615	694970.769	3335574.525	116640.431	5.051
NVA065	3332084.246	692065.697	3337187.968	113812.257	5.246
NVA066	3329812.818	684917.091	3335292.516	106543.762	2.575
NVA067	3322434.793	687775.247	3327763.640	109014.494	4.475
NVA068	3317909.443	687108.918	3323272.872	108110.713	3.783
NVA069	3315016.979	688668.202	3320298.459	109518.540	4.420
NVA070	3308473.621	685967.048	3313895.857	106474.655	2.235
NVA071	3320662.074	685324.681	3326119.362	106470.667	3.663
NVA072	3320451.354	674068.625	3326499.259	95201.388	1.633
NVA073	3315405.319	672468.518	3321535.692	93336.180	1.511
NVA074	3332156.213	664201.194	3338726.776	85945.971	1.484
NVA075	3334754.497	667569.220	3341148.614	89452.119	1.020
NVA076	3336741.677	674169.406	3342788.542	96159.006	3.320
NVA077	3346477.584	672902.450	3352593.787	95405.612	3.203
NVA078	3347194.602	666492.128	3353649.881	89031.263	3.741
NVA079	3347680.432	661493.602	3354400.205	84056.519	3.101
NVA080	3369937.656	661898.215	3376644.856	85641.861	4.509
NVA081	3369419.940	668601.685	3375770.397	92320.037	4.458
NVA082	3365459.626	670208.605	3371723.564	93716.897	5.770
NVA083	3358887.838	684899.023	3364371.049	108061.048	3.214
NVA084	3351967.179	694200.461	3356957.747	116996.055	4.997
NVA085	3343944.586	699387.578	3348661.736	121758.790	2.273
NVA086	3342614.296	705748.411	3346996.004	128048.395	0.932
NVA087	3334392.795	723294.532	3337852.734	145155.636	1.330

Station Name	UTM15 N	UTM15 E	UTM16 N	UTM16 E	NAVD88 H
NVA088	3325645.477	724406.098	3329050.918	145806.991	9.914
NVA089	3325312.099	735435.826	3328138.846	156813.386	2.644
NVA090	3304165.812	748362.331	3306330.829	168624.734	-1.375
NVA091	3331442.449	746673.000	3333674.888	168364.705	1.276
NVA092	3326166.209	746618.842	3328405.561	168033.533	1.687
NVA093	3321737.746	745386.440	3324045.076	166569.825	4.086
NVA094	3287374.534	744281.735	3289764.121	163673.292	1.319
NVA095	3275991.772	746122.412	3278293.850	164922.609	1.105
NVA096	3300611.166	688994.077	3305874.482	109091.284	0.740
NVA097	3356416.460	658984.767	3363272.817	82009.162	3.109
NVA098	3365160.953	650284.407	3372483.466	73768.630	4.216
NVA099	3372913.746	711245.916	3376996.268	135149.344	9.299
NVA100	3373032.851	735933.854	3375802.779	159831.353	7.923
NVA101	3373502.556	739290.374	3376093.751	163210.504	8.270
PAUL	3262834.817	760820.311	3264388.191	178929.143	11.912
SJHS	3354249.150	809769.251	3353129.908	232584.272	13.771
TIBO	3297599.601	712213.267	3301652.448	132151.609	28.530
TRAVERSE	3368659.999	744745.533	3370965.096	168404.324	4.682
TRAVERSE	3373915.616	756706.299	3375580.874	180633.694	8.359
TRAVERSE	3370932.240	771854.729	3371796.183	195607.432	7.173
TRAVERSE	3370527.515	726354.237	3373808.003	150124.375	7.589
TRAVERSE	3356037.792	730754.863	3359092.997	153754.289	5.177
TRAVERSE	3364167.360	702549.377	3368714.092	125990.387	11.713
TRAVERSE	3347969.140	687830.687	3353296.558	110414.906	5.220
TRAVERSE	3338077.955	703847.738	3342560.737	125908.906	3.648
TRAVERSE	3358301.532	717928.466	3362034.661	141053.995	6.311
TRAVERSE	3368638.732	744782.521	3370941.882	168440.154	3.449
TRAVERSE	3373917.875	756759.747	3375580.290	180687.210	6.803
TRAVERSE	3370932.892	771791.158	3371800.208	195543.971	5.647
TRAVERSE	3370554.453	726354.553	3373834.909	150126.122	5.974
TRAVERSE	3355997.604	730727.993	3359054.254	153725.308	3.738
TRAVERSE	3364160.258	702581.853	3368705.268	126022.479	10.649
TRAVERSE	3348004.347	687842.279	3353331.153	110428.360	3.657
TRAVERSE	3338098.614	703823.595	3342582.665	125885.855	2.030
TRAVERSE	3358323.188	717918.859	3362056.817	141045.539	4.757
VRS_0315	3321325.921	768456.643	3322424.869	189597.485	-0.996
VVA001	3321820.710	794977.092	3321530.244	216110.382	0.250
VVA002	3310315.416	782489.102	3310693.423	203037.816	0.217
VVA003	3330434.354	805634.465	3329572.136	227202.883	0.355
VVA004	3333964.440	811677.220	3332779.202	233420.913	0.591
VVA005	3343677.268	813814.272	3342362.943	236064.961	0.864
VVA006	3354228.620	804014.937	3353413.256	226838.403	2.439
VVA007	3357019.605	799842.357	3356420.241	222819.887	4.904
VVA008	3360394.623	791715.704	3360219.910	214883.916	5.638
VVA009	3370925.911	766980.599	3372048.588	190738.541	5.513
VVA010	3371002.947	757146.851	3372647.624	180919.104	6.199
VVA011	3370786.752	747761.913	3372929.974	171531.162	6.696
VVA012	3367862.212	729575.157	3370973.125	153201.966	5.166
VVA013	3372064.935	705185.719	3376469.956	129045.695	9.218
VVA014	3369396.720	723707.838	3372818.366	147419.265	4.876
VVA015	3373827.282	732576.521	3376775.166	156518.428	10.187
VVA016	3369309.914	735689.314	3372095.319	159389.197	3.858
VVA017	3371610.053	740138.365	3374157.557	163957.314	6.519
VVA018	3362191.584	734695.613	3365034.347	158018.527	4.007
VVA019	3361448.399	727686.723	3364663.056	150974.391	5.143
VVA020	3355397.513	730075.173	3358489.048	153041.110	1.444

Station Name	UTM15 N	UTM15 E	UTM16 N	UTM16 E	NAVD88 H
VVA021	3353824.330	726431.573	3357109.458	149316.260	3.701
VVA022	3349772.789	719583.572	3353421.813	142257.241	1.082
VVA023	3324454.694	763130.812	3325829.492	184441.135	-2.389
VVA024	3299782.872	741720.909	3302297.245	161759.590	0.399
VVA025	3294525.952	736409.869	3297320.150	156178.154	1.381
VVA026	3289540.516	734121.392	3292456.532	153631.731	2.570
VVA027	3274839.436	752713.196	3276801.333	171448.835	0.824
VVA028	3291755.616	729907.102	3294889.560	149534.769	3.354
VVA029	3307204.123	697815.424	3312006.906	118257.072	2.202
VVA030	3317224.454	719299.814	3320901.090	140261.242	1.940
VVA031	3329191.490	696209.148	3334077.341	117803.441	2.489
VVA032	3308476.196	685972.240	3313898.161	106479.982	2.159
VVA033	3336912.630	673922.009	3342972.579	95920.558	2.585
VVA034	3341451.082	675520.301	3347427.815	97758.618	4.708
VVA035	3369939.530	661956.367	3376643.636	85700.135	3.946
VVA036	3369370.570	668638.388	3375719.062	92354.125	4.093
VVA037	3362532.504	668431.016	3368890.010	91783.355	6.482
VVA038	3360848.509	677267.295	3366736.688	100532.363	4.540
VVA039	3353855.498	694909.982	3358808.407	117805.455	7.134
VVA040	3343390.134	698590.030	3348149.440	120932.067	2.737
VVA041	3336354.836	717249.385	3340132.170	139216.202	1.662
VVA042	3324767.681	725020.804	3328141.258	146375.347	3.653
VVA043	3319952.600	724823.072	3323338.734	145925.181	0.971
VVA044	3325286.532	735436.665	3328113.251	156812.883	2.249
VVA045	3314751.960	748549.294	3316899.016	169364.493	1.231
VVA046	3298481.217	748564.061	3300640.066	168530.049	-1.633
VVA047	3331481.689	746691.651	3333713.118	168385.403	0.450
VVA048	3334112.204	730770.511	3337178.963	152613.126	1.716
VVA049	3330490.544	744318.757	3332847.401	165962.229	1.372
VVA050	3321893.108	744678.339	3324237.436	165870.391	7.300
VVA051	3317920.951	760113.135	3319460.201	181084.136	2.203
VVA052	3312567.198	758482.492	3314196.741	179175.003	0.121
VVA053	3285688.807	736822.054	3288466.730	156130.829	0.529
VVA054	3288198.276	744139.561	3290594.679	163573.992	0.927
VVA055	3286248.918	739750.822	3288874.474	159086.911	0.862
VVA056	3277874.308	743214.118	3280325.672	162113.762	0.578
VVA057	3271300.374	758246.508	3272979.117	176794.557	0.508
VVA058	3265974.920	758034.458	3267669.219	176307.693	-1.180
VVA059	3290367.987	721363.123	3293946.786	140922.283	0.956
VVA060	3296508.465	710686.122	3300641.129	130567.970	3.587
VVA061	3300592.882	689021.428	3305854.770	109117.684	0.805
VVA062	3319154.934	689991.017	3324367.327	111058.317	5.399
VVA063	3332143.934	684071.382	3337668.390	105820.615	2.060
VVA064	3312674.374	787338.819	3312796.073	208004.432	-1.996
VVA065	3312314.748	765827.969	3313560.669	186500.143	-0.133
VVA066	3347226.739	809217.448	3346148.467	231662.967	1.867
VVA067	3339966.641	802769.255	3339239.728	224843.030	2.756
VVA068	3331474.790	796339.361	3331098.758	217976.753	0.692
VVA069	3317220.864	706971.173	3321543.342	127935.865	1.566
VVA070	3368609.238	744743.132	3370914.503	168399.230	3.179
VVA071	3373891.946	756693.488	3375557.907	180619.637	6.495
VVA072	3370900.576	771847.689	3371764.929	195598.721	5.378
VVA073	3370512.875	726338.151	3373794.224	150107.519	5.856
VVA074	3356014.026	730783.928	3359067.707	153782.080	3.697
VVA075	3364194.438	702561.117	3368740.542	126003.561	10.373
VVA076	3347979.840	687804.487	3353308.643	110389.271	2.808

Station Name	UTM15 N	UTM15 E	UTM16 N	UTM16 E	NAVD88 H
VVA077	3338092.933	703862.144	3342574.953	125924.098	1.587
VVA078	3358259.768	717905.327	3361994.139	141028.653	4.767

NAD83 (2011) Louisiana South Zone State Plane Coordinates
NAVD88 Orthometric Height (GEOID12B)
Units: meters & US Survey FT

Table 7 - NAD83 (2011) Louisiana South Zone Coordinates and NAVD88 GPS Derived Orthometric Heights

Station Name	SPC N Meters	SPC E Meters	NAVD88 H Meters	SPC N US FT	SPC E US FT	NAVD88 H US FT
AWES	177432.189	1033770.252	17.669	582125.439	3391627.902	57.969
BSRL	181087.821	1001034.108	4.398	594118.960	3284226.068	14.429
COVG	219662.523	1118849.609	22.284	720676.127	3670759.093	73.110
DOTD	217195.623	1014945.660	44.268	712582.639	3329867.554	145.236
DSTR	162718.434	1091793.740	7.492	533852.064	3581993.296	24.580
GCP01	206056.050	981895.666	5.907	676035.559	3221436.030	19.380
GCP02	204801.927	996326.687	4.336	671920.990	3268781.806	14.226
GCP02A	205973.476	995969.584	5.227	675764.645	3267610.209	17.149
GCP03	191727.869	1001563.509	2.198	629027.183	3285962.944	7.211
GCP04	173932.388	1004460.013	1.712	570643.177	3295465.892	5.617
GCP05	205113.059	1006292.880	4.699	672941.761	3301479.223	15.417
GCP06	153372.380	1013625.648	1.308	503189.217	3325536.815	4.291
GCP07	214270.394	1014673.333	16.012	702985.452	3328974.094	52.533
GCP08	187512.836	1015061.184	5.270	615198.363	3330246.568	17.290
GCP09	204835.058	1019114.897	6.444	672029.685	3343546.125	21.142
GCP10	161954.805	1020721.480	0.998	531346.723	3348817.055	3.274
GCP11	178818.113	1022622.653	2.571	586672.427	3355054.486	8.435
GCP12	153602.610	1022606.619	1.723	503944.562	3355001.881	5.653
GCP13	135438.849	1025432.289	1.421	444352.290	3364272.433	4.662
GCP14	191820.096	1030215.098	6.418	629329.765	3379964.032	21.056
GCP15	204731.264	1032471.976	5.441	671689.154	3387368.476	17.851
GCP16	175624.766	1036798.442	4.135	576195.585	3401562.890	13.566
GCP17	153009.760	1037036.759	2.273	501999.521	3402344.767	7.457
GCP18	144487.776	1038119.345	2.482	474040.311	3405896.552	8.143
GCP19	216547.074	1041132.947	10.647	710454.860	3415783.678	34.931
GCP20	167607.910	1041639.655	2.162	549893.618	3417446.101	7.093
GCP21	191293.793	1044615.854	1.918	627603.054	3427210.516	6.293
GCP22	153175.638	1051002.366	0.945	502543.740	3448163.594	3.100
GCP23	204025.697	1051884.983	4.774	669374.307	3451059.315	15.663
GCP24	163206.741	1052008.058	1.779	535454.117	3451463.104	5.837
GCP25	212266.856	1054003.417	4.402	696412.177	3458009.544	14.442
GCP26	139952.071	1054643.484	1.817	459159.420	3460109.497	5.961
GCP27	181833.905	1056726.091	1.928	596566.736	3466942.183	6.325
GCP28	174392.520	1061240.780	2.219	572152.793	3481754.125	7.280
GCP29	153318.550	1058936.327	0.777	503012.608	3474193.600	2.549
GCP30	195631.286	1067166.793	1.845	641833.643	3501196.388	6.053
GCP31	166163.300	1066947.862	1.577	545154.095	3500478.112	5.174
GCP32	136883.927	1069264.028	2.848	449093.350	3508077.066	9.344
GCP33	212355.327	1070587.469	3.510	696702.435	3512419.054	11.516
GCP34	179400.327	1070211.701	1.867	588582.573	3511186.221	6.125
GCP35	144215.407	1080115.182	1.046	473146.714	3543677.892	3.432
GCP36	122826.567	1081432.799	1.987	402973.497	3548000.775	6.519
GCP37	164740.654	1082619.117	1.528	540486.629	3551892.887	5.013
GCP38	187110.240	1085927.806	0.714	613877.512	3562748.142	2.343
GCP39	211060.663	1086750.274	1.771	692454.857	3565446.522	5.810
GCP40	152597.550	1086667.317	-0.249	500647.129	3565174.355	-0.817
GCP41	201534.718	1089136.542	0.862	661201.820	3573275.473	2.828
GCP42	174612.747	1089055.612	0.745	572875.320	3573009.954	2.444
GCP43	121129.028	1093352.632	0.520	397404.151	3587107.760	1.706
GCP44	219705.810	1096374.762	8.940	720818.143	3597022.865	29.331

Station Name	SPC N Meters	SPC E Meters	NAVD88 H Meters	SPC N US FT	SPC E US FT	NAVD88 H US FT
GCP45	111100.690	1096396.779	-0.784	364502.848	3597095.100	-2.572
GCP46	157411.941	1099029.951	0.751	516442.344	3605734.098	2.464
GCP46A	142365.991	1090727.800	1.189	467079.089	3578496.125	3.901
GCP47	170269.832	1101735.355	-2.027	558626.940	3614610.077	-6.650
GCP48	211061.430	1107171.363	1.739	692457.374	3632444.714	5.705
GCP49	152115.882	1118049.581	0.268	499066.857	3668134.334	0.879
GCP50	138923.608	1116034.563	0.692	455785.205	3661523.397	2.270
GCP51	169202.587	1119698.635	-0.363	555125.486	3673544.603	-1.191
GCP52	210411.748	1123116.929	5.607	690325.875	3684759.457	18.396
GCP53	151706.564	1125535.189	-1.555	497723.952	3692693.367	-5.102
GCP54	172091.987	1132333.957	-2.681	564605.128	3714998.991	-8.796
GCP55	161395.196	1132666.473	-0.217	529510.737	3716089.920	-0.712
GCP56	201684.468	1134129.123	4.252	661693.127	3720888.630	13.950
GCP57	174974.011	1146860.388	0.671	574060.566	3762657.791	2.201
GCP58	200694.903	1149948.348	4.024	658446.528	3772788.872	13.202
GCP59	179344.683	1151463.341	0.655	588400.015	3777759.310	2.149
GCP60	188842.762	1156239.819	2.127	619561.628	3793430.138	6.978
GCP61	200863.115	1161801.258	3.376	658998.403	3811676.294	11.076
GCP62	189113.902	1151974.807	0.827	620451.194	3779437.347	2.713
GVMS	201192.999	1041327.646	11.704	660080.698	3416422.451	38.399
HAMM	223454.100	1083092.883	34.205	733115.659	3553447.233	112.221
HOMA	119774.363	1060304.289	11.197	392959.722	3478681.655	36.735
INRI	159904.938	1117244.705	16.777	524621.449	3665493.668	55.043
LUCH	171593.560	1061701.257	11.454	562969.871	3483264.873	37.579
LWES	155629.921	1095022.855	10.188	510595.832	3592587.482	33.425
MARY	169662.105	1136997.378	3.260	556633.089	3730298.899	10.696
MCHS	134929.348	1012497.513	10.836	442680.701	3321835.589	35.551
NVA001	166047.932	1107686.039	-2.032	544775.589	3634133.278	-6.667
NVA002	164104.100	1112841.599	1.472	538398.202	3651047.812	4.829
NVA003	166355.046	1117305.537	-1.828	545783.180	3665693.248	-5.997
NVA004	170312.192	1124731.060	0.983	558765.917	3690055.152	3.225
NVA005	170250.254	1129204.384	-2.424	558562.708	3704731.384	-7.953
NVA006	168246.440	1132614.336	0.596	551988.529	3715918.868	1.955
NVA007	164102.394	1128579.559	-1.586	538392.605	3702681.436	-5.203
NVA008	157921.338	1120562.949	2.678	518113.588	3676380.276	8.786
NVA009	167405.695	1105177.654	-1.810	549230.185	3625903.686	-5.938
NVA010	144585.720	1119341.759	0.284	474361.651	3672373.754	0.932
NVA011	153182.728	1117914.818	0.163	502567.001	3667692.197	0.535
NVA012	156150.699	1113074.506	-1.289	512304.418	3651811.941	-4.229
NVA013	162170.511	1093532.960	1.021	532054.419	3587699.387	3.350
NVA014	162849.898	1104443.205	3.550	534283.375	3623494.083	11.647
NVA015	161543.900	1114296.577	5.302	529998.613	3655821.352	17.395
NVA016	168476.905	1129302.264	0.282	552744.645	3705052.512	0.925
NVA017	170845.627	1136382.772	0.054	560516.026	3728282.476	0.177
NVA018	173087.311	1140484.832	0.302	567870.620	3741740.654	0.991
NVA019	180339.179	1141317.805	0.214	591662.791	3744473.500	0.702
NVA020	144764.245	1080525.679	0.853	474947.360	3545024.666	2.799
NVA021	139794.300	1075292.968	2.000	458641.800	3527857.014	6.562
NVA022	134303.352	1073518.372	2.520	440626.915	3522034.857	8.268
NVA023	175485.965	1141872.906	0.845	575740.203	3746294.691	2.772
NVA024	182418.134	1151771.906	2.041	598483.494	3778771.662	6.696
NVA025	185277.810	1153471.459	1.354	607865.616	3784347.611	4.442
NVA026	191086.988	1158061.546	2.335	626924.559	3799406.923	7.661
NVA027	193528.110	1163026.399	1.011	634933.476	3815695.777	3.317
NVA028	199333.606	1154426.055	3.199	653980.340	3787479.481	10.495

Station Name	SPC N Meters	SPC E Meters	NAVD88 H Meters	SPC N US FT	SPC E US FT	NAVD88 H US FT
NVA029	195176.378	1156582.432	2.059	640341.167	3794554.196	6.755
NVA030	197337.161	1151469.999	3.264	647430.337	3777781.154	10.709
NVA031	195089.922	1148415.569	0.941	640057.518	3767760.081	3.087
NVA032	212057.690	1114893.797	2.434	695725.938	3657780.733	7.986
NVA033	208802.180	1112596.368	0.580	685045.151	3650243.250	1.903
NVA034	219400.962	1088551.265	8.879	719817.990	3571355.275	29.131
NVA035	218037.383	1084085.009	8.092	715344.312	3556702.234	26.549
NVA036	206482.303	1087986.243	0.832	677434.022	3569501.532	2.730
NVA037	197535.604	1089779.675	0.816	648081.394	3575385.482	2.677
NVA038	190267.250	1088187.307	1.384	624235.137	3570161.189	4.541
NVA039	217254.783	1056502.755	9.611	712776.733	3466209.455	31.532
NVA040	209782.542	1054145.038	6.688	688261.556	3458474.177	21.942
NVA041	212685.552	1046073.123	6.285	697785.848	3431991.570	20.620
NVA042	218788.066	1066316.620	10.560	717807.180	3498407.109	34.646
NVA043	216379.563	1073341.430	7.762	709905.283	3521454.340	25.466
NVA044	209806.648	1075620.136	3.210	688340.643	3528930.398	10.531
NVA045	204004.113	1059045.225	4.798	669303.494	3474550.875	15.741
NVA046	201477.781	1054512.893	1.928	661015.020	3459681.049	6.325
NVA047	199285.158	1051875.420	3.399	653821.391	3451027.942	11.152
NVA048	195163.059	1054864.619	1.982	640297.471	3460835.003	6.503
NVA049	203340.987	1044212.391	4.147	667127.887	3425886.819	13.606
NVA050	208409.410	1041970.092	5.345	683756.539	3418530.211	17.536
NVA051	128770.682	1076960.885	3.253	422475.146	3533329.169	10.673
NVA052	119185.187	1092147.392	1.938	391026.736	3583153.567	6.358
NVA053	113548.528	1095623.261	-0.252	372533.794	3594557.315	-0.827
NVA054	136839.052	1067555.224	2.967	448946.123	3502470.763	9.734
NVA055	140625.469	1059135.494	1.078	461368.725	3474847.035	3.537
NVA056	145964.232	1043744.444	3.919	478884.317	3424351.563	12.858
NVA057	145056.669	1036180.878	2.663	475906.754	3399536.765	8.737
NVA058	150787.334	1051331.964	1.336	494708.113	3449244.951	4.383
NVA059	151779.527	1060511.314	0.617	497963.332	3479360.870	2.024
NVA060	159656.267	1060297.321	1.875	523805.603	3478658.794	6.152
NVA061	162974.456	1059400.315	3.178	534692.029	3475715.866	10.426
NVA062	162943.200	1046002.634	1.826	534589.480	3431760.308	5.991
NVA063	173978.413	1035133.822	2.726	570794.177	3396101.546	8.944
NVA064	176435.084	1034362.786	5.051	578854.105	3393571.908	16.571
NVA065	177937.774	1031479.740	5.246	583784.180	3384113.113	17.211
NVA066	175771.184	1024299.537	2.575	576675.960	3360556.063	8.448
NVA067	168353.044	1027049.571	4.475	552338.277	3369578.469	14.682
NVA068	163838.352	1026317.558	3.783	537526.328	3367176.855	12.411
NVA069	160923.857	1027834.481	4.420	527964.353	3372153.627	14.501
NVA070	154421.069	1025038.972	2.235	506629.789	3362982.026	7.333
NVA071	166616.359	1024573.722	3.663	546640.504	3361455.618	12.018
NVA072	166569.436	1013316.611	1.633	546486.557	3324522.913	5.358
NVA073	161547.421	1011643.386	1.511	530010.162	3319033.341	4.957
NVA074	178416.536	1003621.064	1.484	585354.919	3292713.442	4.869
NVA075	180965.332	1007026.632	1.020	593717.095	3303886.541	3.346
NVA076	182855.787	1013654.945	3.320	599919.362	3325632.930	10.892
NVA077	192608.808	1012530.700	3.203	631917.398	3321944.473	10.509
NVA078	193419.706	1006131.712	3.741	634577.817	3300950.459	12.274
NVA079	193978.755	1001140.829	3.101	636411.966	3284576.202	10.174
NVA080	216228.120	1001872.647	4.509	709408.423	3286977.177	14.793
NVA081	215611.571	1008567.880	4.458	707385.628	3308943.120	14.626
NVA082	211627.994	1010116.226	5.770	694316.178	3314022.986	18.930
NVA083	204840.782	1024707.625	3.214	672048.467	3361894.932	10.545

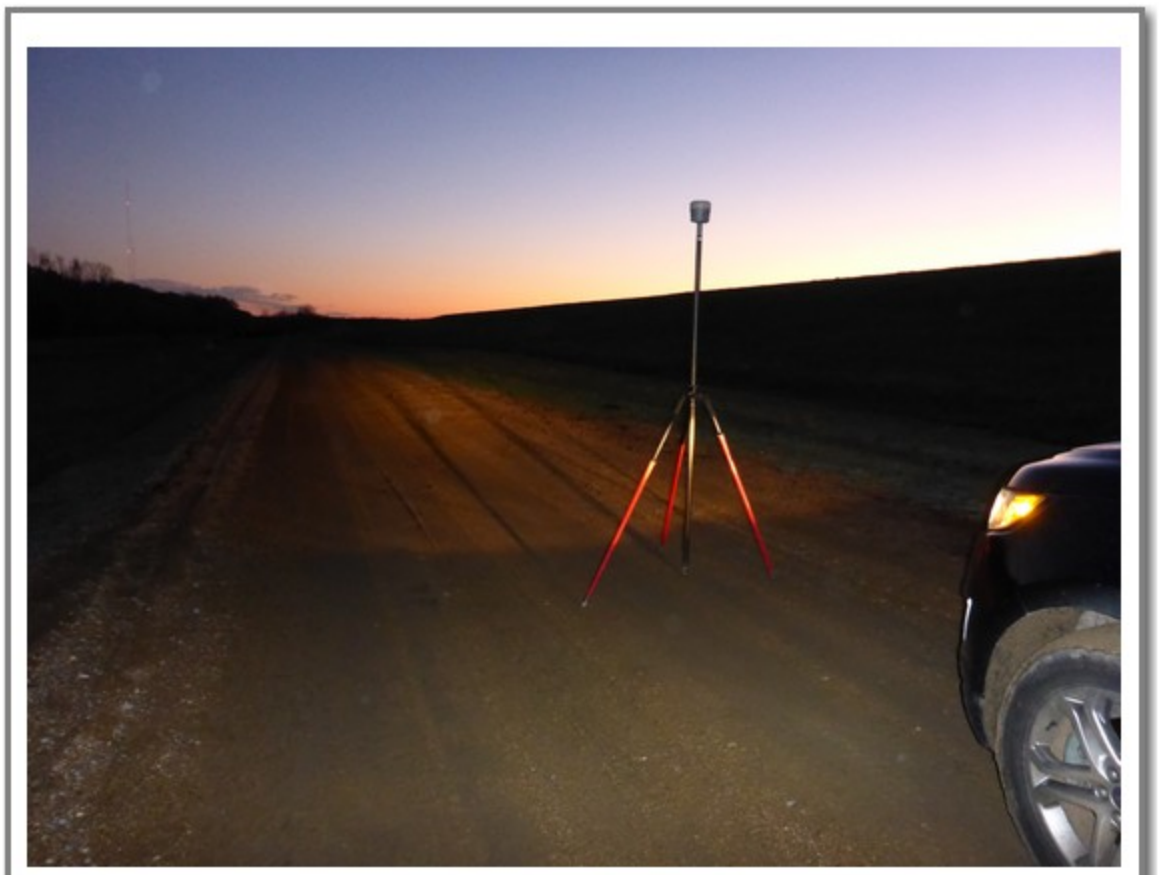
Station Name	SPC N Meters	SPC E Meters	NAVD88 H Meters	SPC N US FT	SPC E US FT	NAVD88 H US FT
NVA084	197784.746	1033905.291	4.997	648898.788	3392070.942	16.394
NVA085	189688.013	1038973.331	2.273	622334.755	3408698.336	7.457
NVA086	188264.843	1045312.868	0.932	617665.572	3429497.302	3.058
NVA087	179789.295	1062732.555	1.330	589858.711	3486648.390	4.364
NVA088	171029.231	1063715.991	9.914	561118.403	3489874.879	32.526
NVA089	170535.267	1074736.089	2.644	559497.789	3526029.985	8.675
NVA090	149212.026	1087349.330	-1.375	489539.789	3567411.927	-4.511
NVA091	176498.618	1086057.120	1.276	579062.550	3563172.400	4.186
NVA092	171225.968	1085925.995	1.687	561763.864	3562742.201	5.535
NVA093	166817.786	1084629.747	4.086	547301.354	3558489.429	13.405
NVA094	132488.176	1083029.175	1.319	434671.622	3553238.218	4.327
NVA095	121084.753	1084706.063	1.105	397258.893	3558739.808	3.625
NVA096	146516.448	1027951.564	0.740	480696.045	3372537.757	2.428
NVA097	202750.848	998760.405	3.109	665191.742	3276766.429	10.200
NVA098	211622.772	990189.116	4.216	694299.046	3248645.457	13.832
NVA099	218474.132	1051255.295	9.299	716777.214	3448993.414	30.508
NVA100	218226.937	1075935.901	7.923	715966.210	3529966.369	25.994
NVA101	218646.574	1079297.895	8.270	717342.968	3540996.511	27.132
PAUL	107725.777	1099208.973	11.912	353430.321	3606321.437	39.081
SJHS	198361.366	1149442.100	13.771	650790.581	3771127.955	45.180
TIBO	143170.387	1051120.998	28.530	469718.176	3448552.809	93.602
TRAVERSE	213725.339	1084678.561	4.682	701197.217	3558649.580	15.361
TRAVERSE	218800.466	1096711.073	8.359	717847.862	3598126.245	27.424
TRAVERSE	215593.522	1111805.788	7.173	707326.413	3647649.489	23.533
TRAVERSE	215864.772	1066323.060	7.589	708216.338	3498428.238	24.898
TRAVERSE	201315.866	1070507.651	5.177	660483.803	3512157.186	16.985
TRAVERSE	209858.872	1042431.840	11.713	688511.981	3420045.129	38.428
TRAVERSE	193881.145	1027478.210	5.220	636091.722	3370984.760	17.126
TRAVERSE	183757.676	1043346.312	3.648	602878.308	3423045.358	11.968
TRAVERSE	203767.892	1057719.617	6.311	668528.492	3470201.778	20.705
TRAVERSE	213703.533	1084715.215	3.449	701125.676	3558769.834	11.316
TRAVERSE	218801.929	1096764.524	6.803	717852.662	3598301.610	22.320
TRAVERSE	215595.119	1111742.269	5.647	707331.654	3647441.094	18.527
TRAVERSE	215891.696	1066323.775	5.974	708304.673	3498430.584	19.600
TRAVERSE	201276.088	1070480.198	3.738	660353.298	3512067.115	12.264
TRAVERSE	209851.292	1042464.203	10.649	688487.114	3420151.305	34.938
TRAVERSE	193916.174	1027490.316	3.657	636206.646	3371024.479	11.998
TRAVERSE	183778.682	1043322.478	2.030	602947.227	3422967.163	6.660
TRAVERSE	203789.682	1057710.333	4.757	668599.981	3470171.318	15.607
VRS_0315	166070.586	1107680.234	-0.996	544849.914	3634114.235	-3.268
VVA001	166179.251	1134187.731	0.250	545206.426	3721080.914	0.820
VVA002	154864.391	1121542.932	0.217	508084.256	3679595.435	0.712
VVA003	174629.854	1144961.149	0.355	572931.445	3756426.703	1.165
VVA004	178068.208	1151049.751	0.591	584212.111	3776402.392	1.939
VVA005	187740.107	1153327.226	0.864	615944.002	3783874.407	2.835
VVA006	198425.959	1143692.853	2.439	651002.500	3752265.634	8.002
VVA007	201276.186	1139565.304	4.904	660353.621	3738723.833	16.089
VVA008	204768.740	1131495.536	5.638	671812.107	3712248.269	18.497
VVA009	215659.703	1106934.737	5.513	707543.542	3631668.382	18.087
VVA010	215882.899	1097108.059	6.199	708275.810	3599428.689	20.338
VVA011	215806.250	1087724.987	6.696	708024.337	3568644.395	21.968
VVA012	213152.795	1069503.204	5.166	699318.796	3508861.760	16.949
VVA013	217715.341	1045184.256	9.218	714287.749	3429075.347	30.243
VVA014	214773.627	1063660.905	4.876	704636.473	3489694.153	15.997
VVA015	219070.887	1072591.804	10.187	718735.070	3518994.944	33.422

Station Name	SPC N Meters	SPC E Meters	NAVD88 H Meters	SPC N US FT	SPC E US FT	NAVD88 H US FT
VVA016	214509.266	1075636.223	3.858	703769.152	3528983.176	12.657
VVA017	216742.350	1080117.387	6.519	711095.526	3543685.128	21.388
VVA018	207408.796	1074537.559	4.007	680473.692	3525378.643	13.146
VVA019	206769.520	1067520.647	5.143	678376.334	3502357.322	16.873
VVA020	200685.878	1069818.807	1.444	658416.917	3509897.204	4.738
VVA021	199167.039	1066153.524	3.701	653433.860	3497872.019	12.142
VVA022	195217.842	1059248.528	1.082	640477.202	3475217.878	3.550
VVA023	169274.842	1102403.416	-2.389	555362.543	3616801.873	-7.838
VVA024	144927.182	1080648.076	0.399	475481.931	3545426.229	1.309
VVA025	139749.275	1075263.832	1.381	458494.079	3527761.421	4.531
VVA026	134798.988	1072904.699	2.570	442253.012	3520021.500	8.432
VVA027	119838.989	1091276.999	0.824	393171.750	3580297.953	2.703
VVA028	137073.710	1068724.061	3.354	449715.996	3506305.522	11.004
VVA029	152980.210	1036866.210	2.202	501902.572	3401785.224	7.224
VVA030	162685.768	1058489.156	1.940	533744.891	3472726.505	6.365
VVA031	174985.248	1035579.955	2.489	574097.433	3397565.237	8.166
VVA032	154423.568	1025044.199	2.159	506637.988	3362999.177	7.083
VVA033	183030.331	1013410.084	2.585	600492.012	3324829.585	8.481
VVA034	187544.705	1015074.525	4.708	615302.920	3330290.336	15.446
VVA035	216229.136	1001930.823	3.946	709411.755	3287168.042	12.946
VVA036	215561.665	1008603.851	4.093	707221.895	3309061.134	13.428
VVA037	208727.389	1008295.718	6.482	684799.774	3308050.200	21.266
VVA038	206913.499	1017106.050	4.540	678848.706	3336955.431	14.895
VVA039	199662.186	1034642.408	7.134	655058.354	3394489.300	23.405
VVA040	189145.400	1038167.865	2.737	620554.533	3406055.736	8.980
VVA041	181839.011	1056718.386	1.662	596583.490	3466916.904	5.453
VVA042	170142.832	1064317.658	3.653	558210.276	3491848.850	11.985
VVA043	165332.577	1064049.923	0.971	542428.629	3490970.454	3.186
VVA044	170509.700	1074736.555	2.249	559413.906	3526031.514	7.379
VVA045	159789.765	1087689.424	1.231	524243.588	3568527.719	4.039
VVA046	143527.560	1087468.953	-1.633	470890.004	3567804.389	-5.358
VVA047	176537.565	1086076.334	0.450	579190.328	3563235.439	1.476
VVA048	179399.508	1070201.329	1.716	588579.887	3511152.194	5.630
VVA049	175581.598	1083690.205	1.372	576053.958	3555406.947	4.501
VVA050	166983.370	1083924.276	7.300	547844.606	3556174.894	23.950
VVA051	162789.071	1099292.589	2.203	534083.811	3606595.768	7.228
VVA052	157462.231	1097585.268	0.121	516607.337	3600994.333	0.397
VVA053	130910.240	1075548.868	0.529	429494.677	3528696.578	1.736
VVA054	133313.546	1082898.890	0.927	437379.526	3552810.773	3.041
VVA055	131428.090	1078484.315	0.862	431193.659	3538327.291	2.828
VVA056	123007.898	1081826.079	0.578	403568.410	3549291.060	1.896
VVA057	116223.065	1096756.848	0.508	381308.507	3598276.427	1.667
VVA058	110903.621	1096469.231	-1.180	363856.297	3597332.801	-3.871
VVA059	135809.502	1060163.499	0.956	445568.342	3478219.745	3.136
VVA060	142101.631	1049578.609	3.587	466211.767	3443492.486	11.768
VVA061	146497.772	1027978.645	0.805	480634.774	3372626.606	2.641
VVA062	165041.670	1029217.135	5.399	541474.211	3376689.883	17.713
VVA063	178114.180	1023488.020	2.060	584362.939	3357893.614	6.759
VVA064	157151.316	1126423.015	-1.996	515587.275	3695606.175	-6.549
VVA065	157103.514	1104922.490	-0.133	515430.445	3625066.536	-0.436
VVA066	191353.811	1148787.141	1.867	627799.960	3768979.146	6.125
VVA067	184195.322	1142238.174	2.756	604314.153	3747493.074	9.042
VVA068	175805.180	1135689.593	0.692	576787.495	3726008.272	2.270
VVA069	162861.297	1046164.657	1.566	534320.773	3432291.880	5.138
VVA070	213674.639	1084675.408	3.179	701030.878	3558639.234	10.430

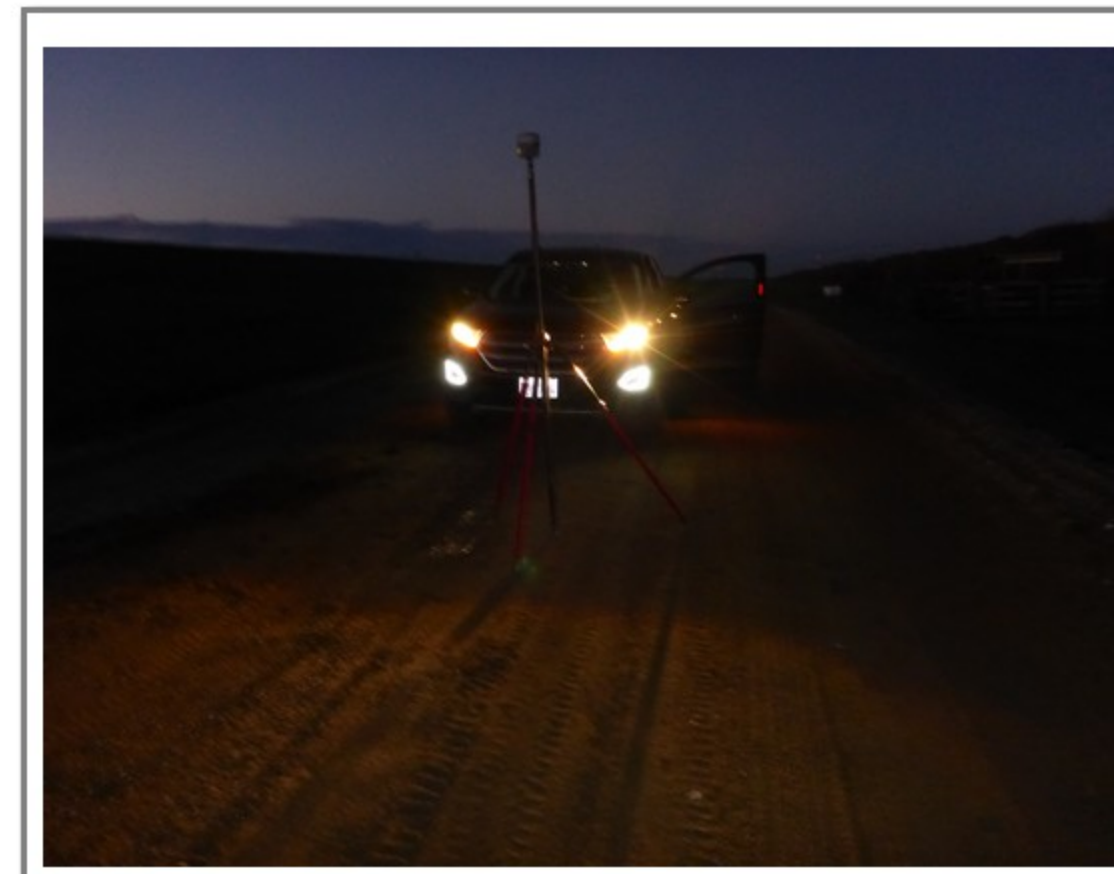
Station Name	SPC N Meters	SPC E Meters	NAVD88 H Meters	SPC N US FT	SPC E US FT	NAVD88 H US FT
VVA071	218777.000	1096697.917	6.495	717770.874	3598083.084	21.309
VVA072	215561.983	1111798.282	5.378	707222.940	3647624.864	17.644
VVA073	215850.375	1066306.762	5.856	708169.105	3498374.769	19.213
VVA074	201291.681	1070536.354	3.697	660404.456	3512251.353	12.129
VVA075	209885.770	1042443.977	10.373	688600.230	3420084.948	34.032
VVA076	193892.226	1027452.173	2.808	636128.079	3370899.336	9.213
VVA077	183772.438	1043360.933	1.587	602926.742	3423093.326	5.207
VVA078	203726.484	1057695.870	4.767	668392.640	3470123.866	15.640

Upper Delta Plain, LA QL2 Lidar

GCP Pictures



GCP01-1



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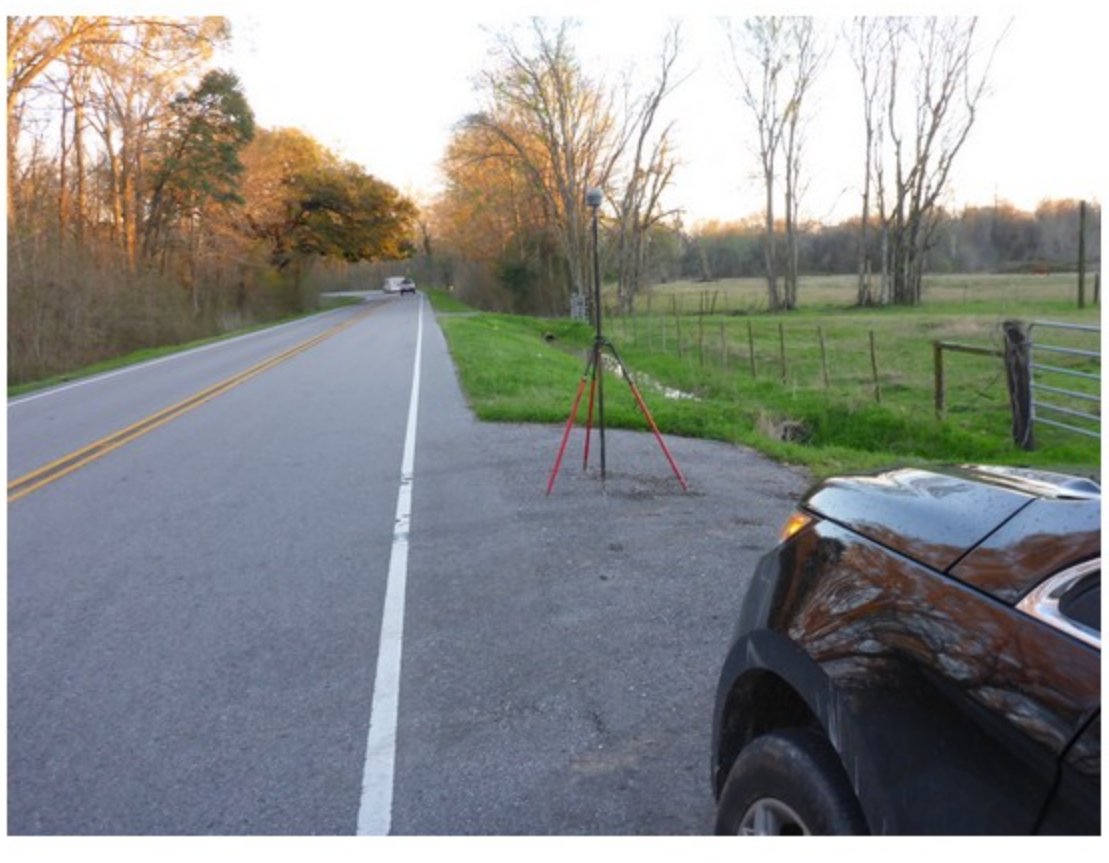

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GCP03-1

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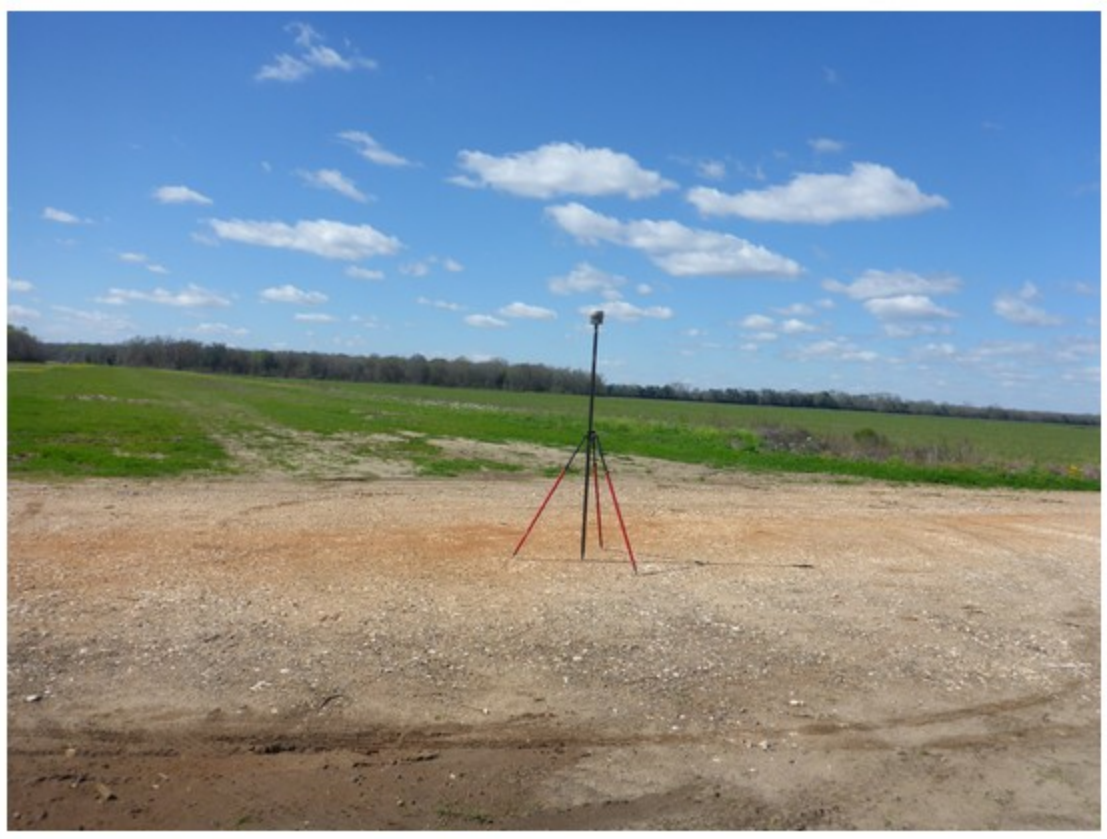

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Upper Delta Plain, LA QL2 Lidar

Checkpoint Pictures

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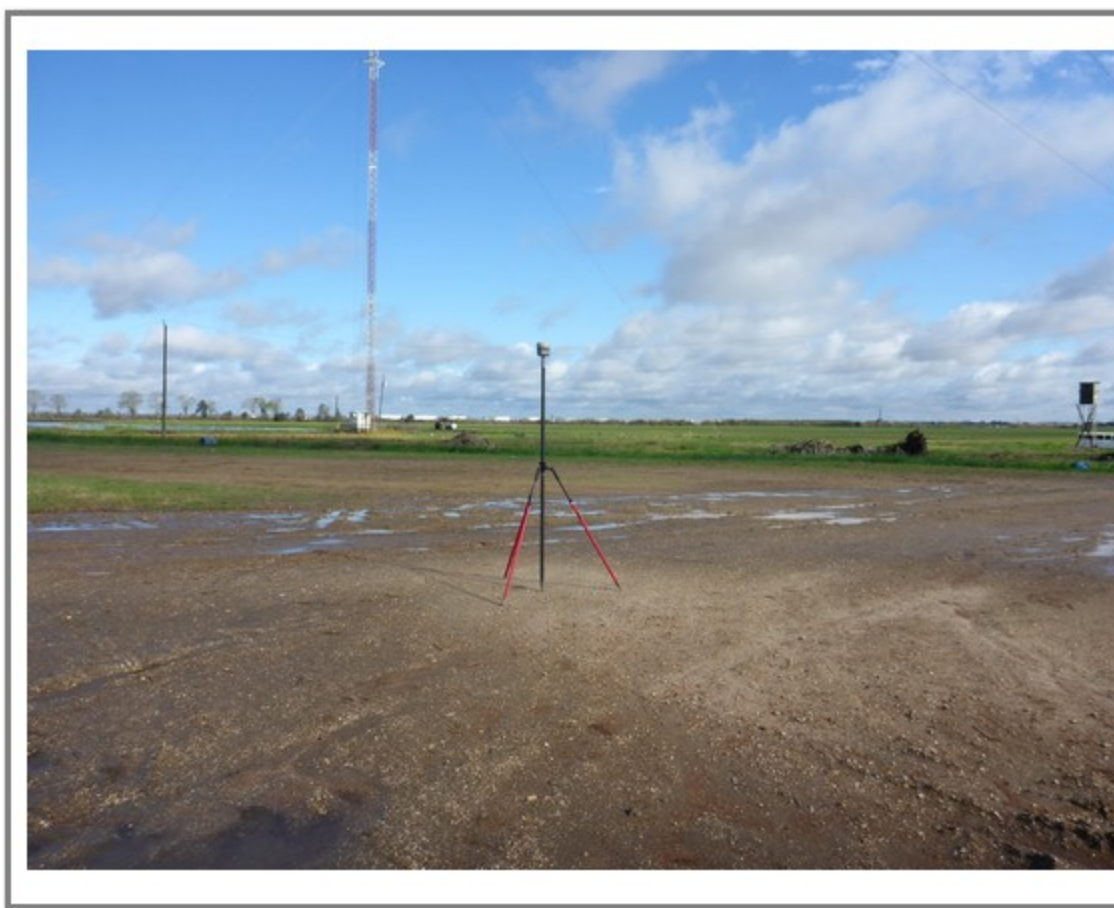

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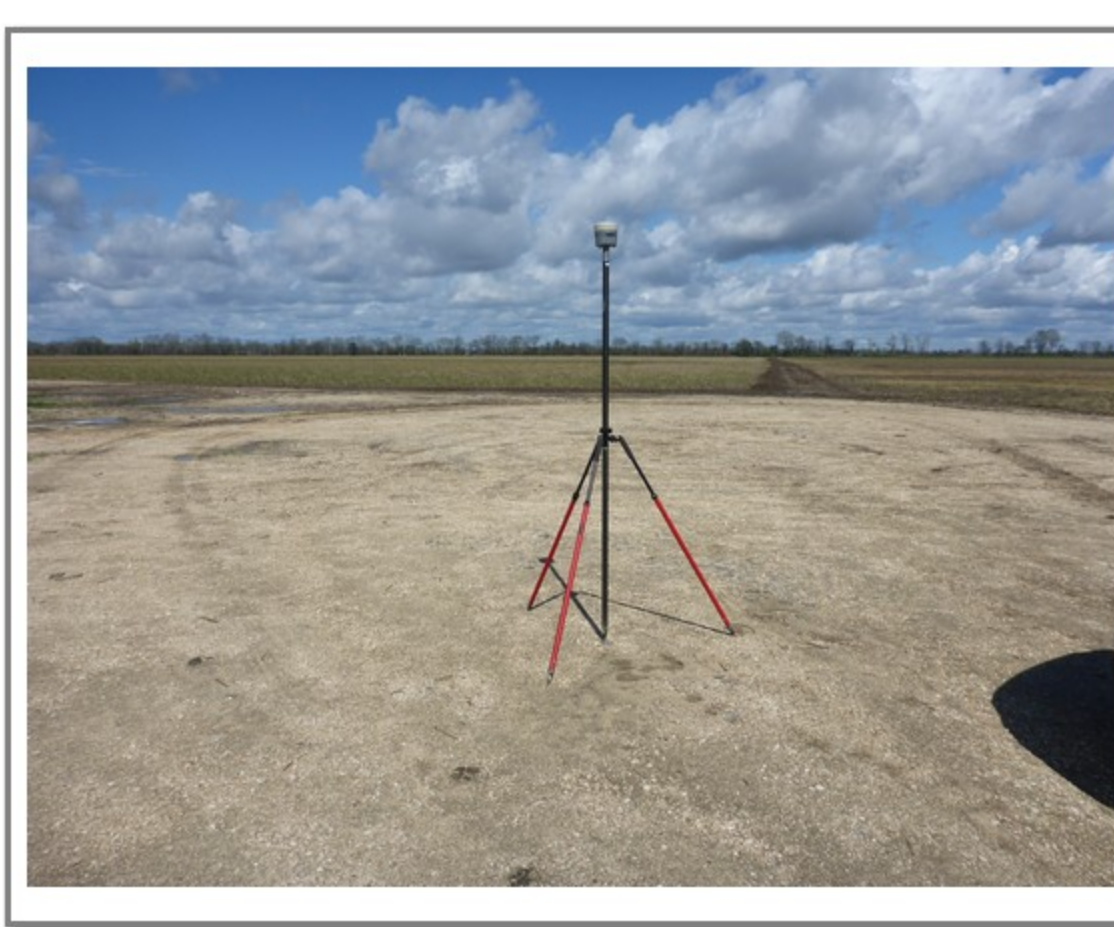

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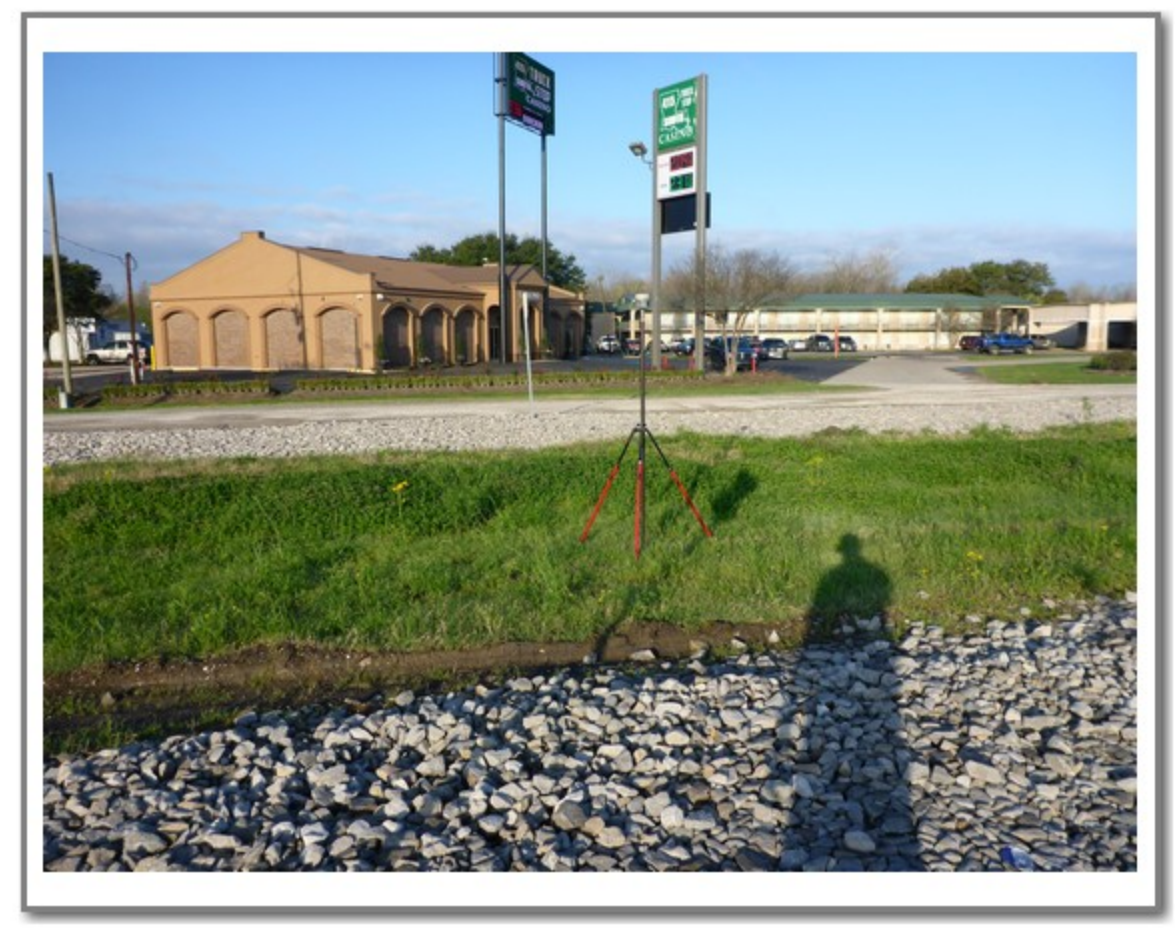

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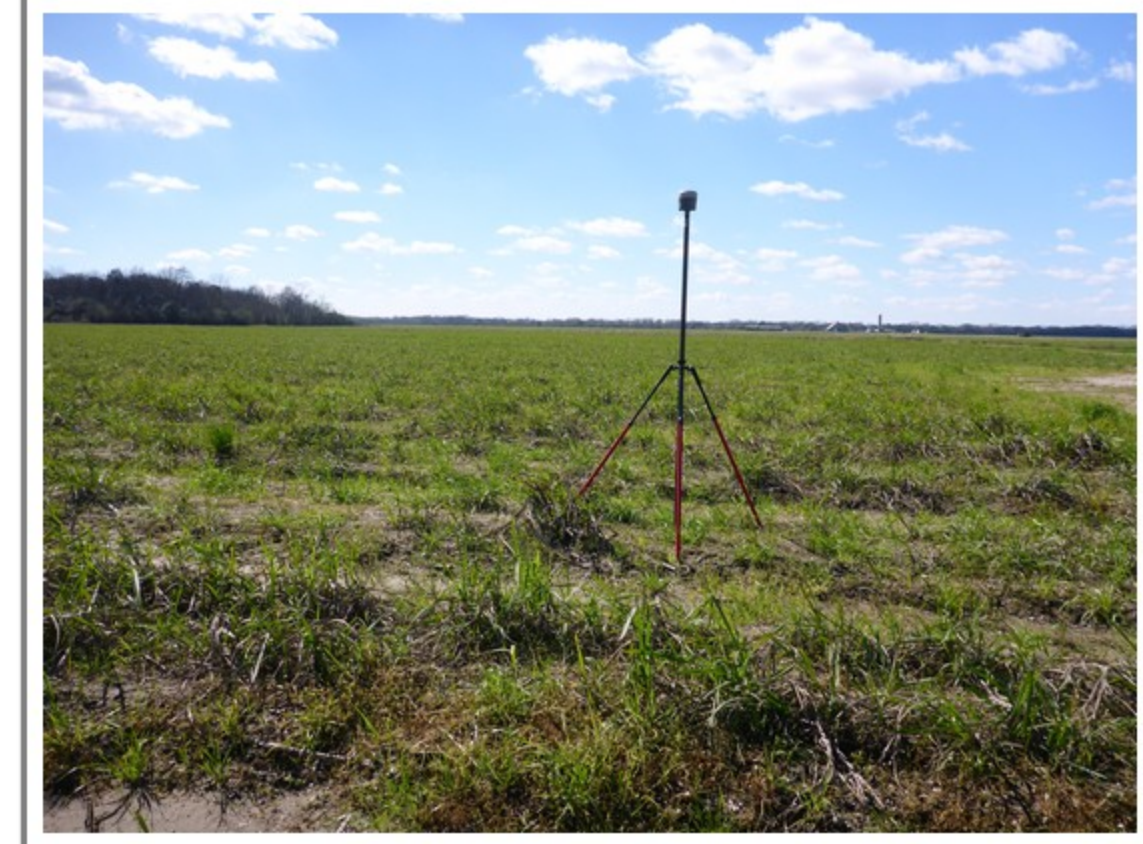

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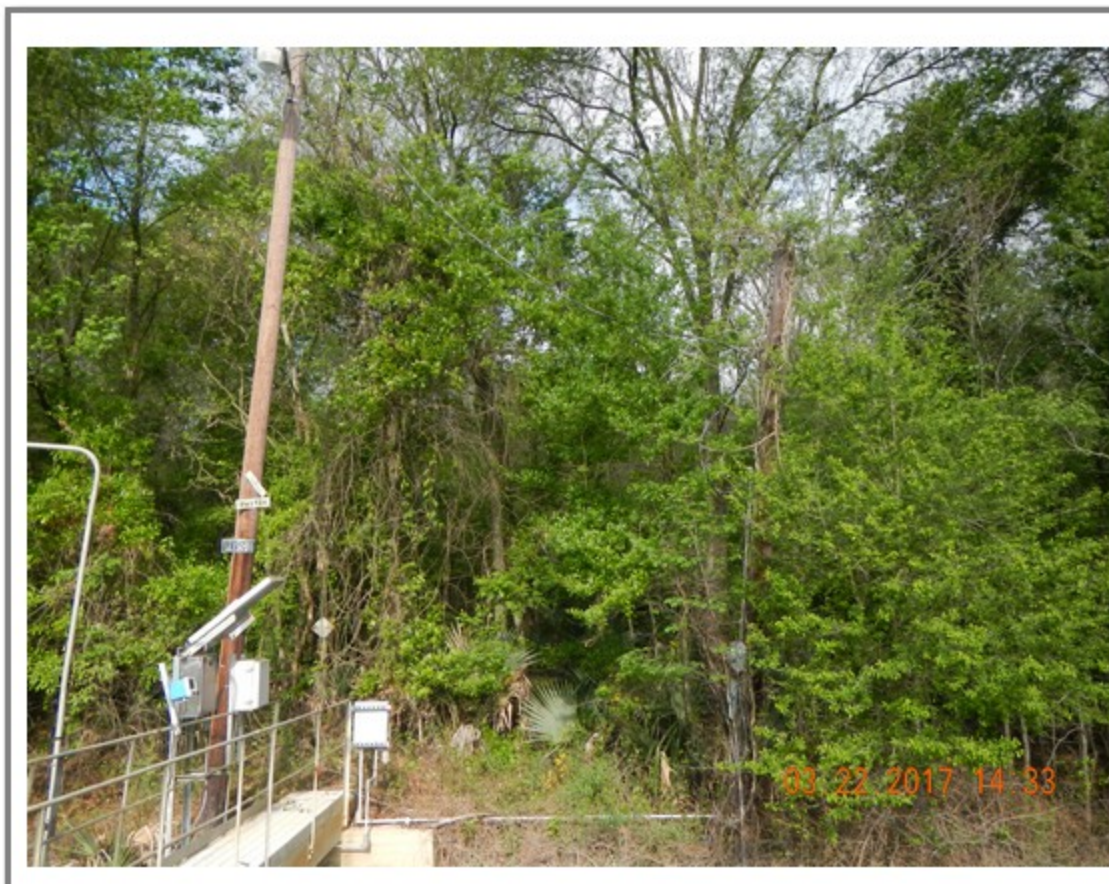

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