

AIRBORNE POSITIONING REPORT

N.O.A.A

Rhode Island

Project No. T-0027

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NOAA COASTAL MAPPING PROGRAM AIRBORNE POSITIONING REPORT
PROJECT T-0027
WESTERLY TO LITTLE COMPTON

INTRODUCTION

To support Project T-0027 of the NOAA Coastal Mapping Program, Quantum Spatial tasked Richard Crouse and Associates with obtaining the tide-coordinated MLLW digital photography on August 18, 2014. Details of all acquisition missions that yielded imagery that met NOAA radiometric and tide window requirements and that was used for data collection are described in the table below. All of the photographic acquisition missions were accomplished using one Piper Navajo. One NOAA approved Z/I DMC aerial camera equipped with forward motion compensation and stabilized camera mount were used for the acquisition of aerial photography. A Quantum Spatial Company produced near vertical, metric quality, tide-coordinated, kinematic Global Positioning System (GPS) positioned, aerial photography exposed along QSI defined flight lines covering the T-0027 project area.

Exposure Date	Film	Flight #	Stage	Exposure #'s
8/18/2014	Digital	30004	MLLW	0073 - 0031
8/18/2014	Digital	30005	MLLW	0031 - 0069
8/18/2014	Digital	30003	MLLW	0030 - 0001
8/18/2014	Digital	30002	MLLW	0001 - 0014
8/18/2014	Digital	30001	MLLW	0008 - 0001
8/18/2014	Digital	30009	MLLW	0013 - 0001
8/18/2014	Digital	30007	MLLW	0001 - 0010
8/18/2014	Digital	30005	MLLW	0032 - 0001
8/18/2014	Digital	30004	MLLW	0001 - 0032
8/18/2014	Digital	30006	MLLW	0008 - 0001
8/18/2014	Digital	30008	MLLW	0001 - 0014

The following is a summary of the film types, filters, altitudes and negative scales produced for each type of aerial photographic mission:

Digital photography for the entire project area was acquired using a 120mm lens at 10,000 feet AMT, 1:30,000 negative scale on August 18, 2014. The MLLW aerial photography was acquired over one photo acquisition mission on August 18, 2014.

POSITIONING:

One aircraft, Piper Navajo N3520X, was used to acquire the aerial photography and collect ABGPS data. Each acquisition aircraft was equipped with either POSAV Applanix Model 510 IMU units (Serial Numbers SN#2214 and/or dual frequency Trimble BD960 (SN#5210K23390) to collect the ABGPS and IMU data. CORS stations were used for base stations on the project, with at least two of these CORS stations being used to process each POSAV dataset to achieve the final photo center locations: ACU6, CTGR, MEDX, MELI, MEOW, MEWA, NCBI, NPRI, PNB6, URIL (See CORS location map and station details below).

Color aerial photography MLLW acquisition began
August 18, 2014 (13:09 to 15:34 GMT)

The QSI flight line configuration of seventeen flight lines was used for each acquisition mission.

Airborne GPS processing.

The airborne GPS receivers were employed on these flights and collected time-tagged (dual frequency) satellite carrier phase data simultaneously with the ground station receivers. NGS CORS and several Cooperative CORS served as ground stations during flight. 24 Hours after flight, the raw GPS data from the base stations is downloaded from NGS ftp server including the rapid ephemeris file for that flight date.

From the POSPac MMS GNSS-Inertial Tools User Manual, revision 7:

"The Applanix SmartBase module allows the user to construct a network of permanent GNSS reference stations accessible through the Internet, and provide reference receiver coverage over large project areas without requiring dedicated base receivers. SmartBase includes an in-built database search tool that generates a recommended network, and then acquires the reference receiver data via the Internet.

POSPac MMS with IN-Fusion technology provides multiple processing modes to handle different combinations of rover and reference GNSS data that can occur in survey missions. In addition to the SmartBase processing mode, POSPac MMS provides Single Base Station differential and Precise Point Positioning (PPP) processing modes. POSPac MMS implements inertially aided PPP (IAPPP) that overcomes some of the convergence problems in GNSS-only PPP due to GNSS data outages.

POSPac MMS software tools identify and compensate for sensory and environmental errors, compute an optimally accurate blended navigation solution and provide the means to view the results in a variety of formats. The sophisticated design of the POSPac MMS main Graphical User Interface (GUI) displays different types of data including real-time and post-processed data. All data can be viewed and selected in many different ways including the 2D Plan View, 3D View, and Points Spreadsheet." (PUBS-MAN-001768, 2012)

The program then solves the remainder of the dataset and re-computes the ambiguities (example, loss of lock). This software computes the Forward and Backward solution and combine these two solutions to provide an optimal solution. The resulting values are accurate photo coordinates, in Easting, Northing and Height exported to UTM18 projection. All photo Heights are computed relative to the base station coordinates and GEOID12a is applied to arrive at NAVD88 values.

IMU processing.

On several occasions, we employed IMU (Inertial Measurement Unit) whenever the equipment is available. Applanix IMU is utilized to compute the Exterior Orientation of each image at the moment of exposure. The method is by integrating Inertial Navigation solution by processing IMU data and the simultaneously collected GPS data along with observables of locally positioned GPS base station (CORS) on the ground. It computes the carrier phase GPS solution and then blends it with inertial data. Applanix' POSPAC MMS Version 7.0 was used. The resulting values are accurate photo coordinates, in Easting, Northing and Height (UTM19 projection), and each photo's attitude (Omega, Phi and Kappa in degrees). All the Heights are in NAVD88.

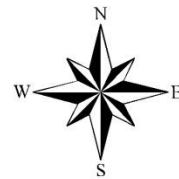
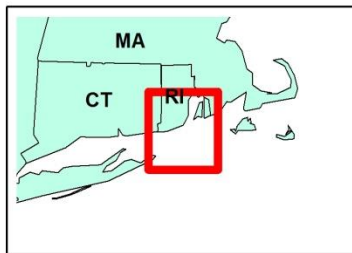
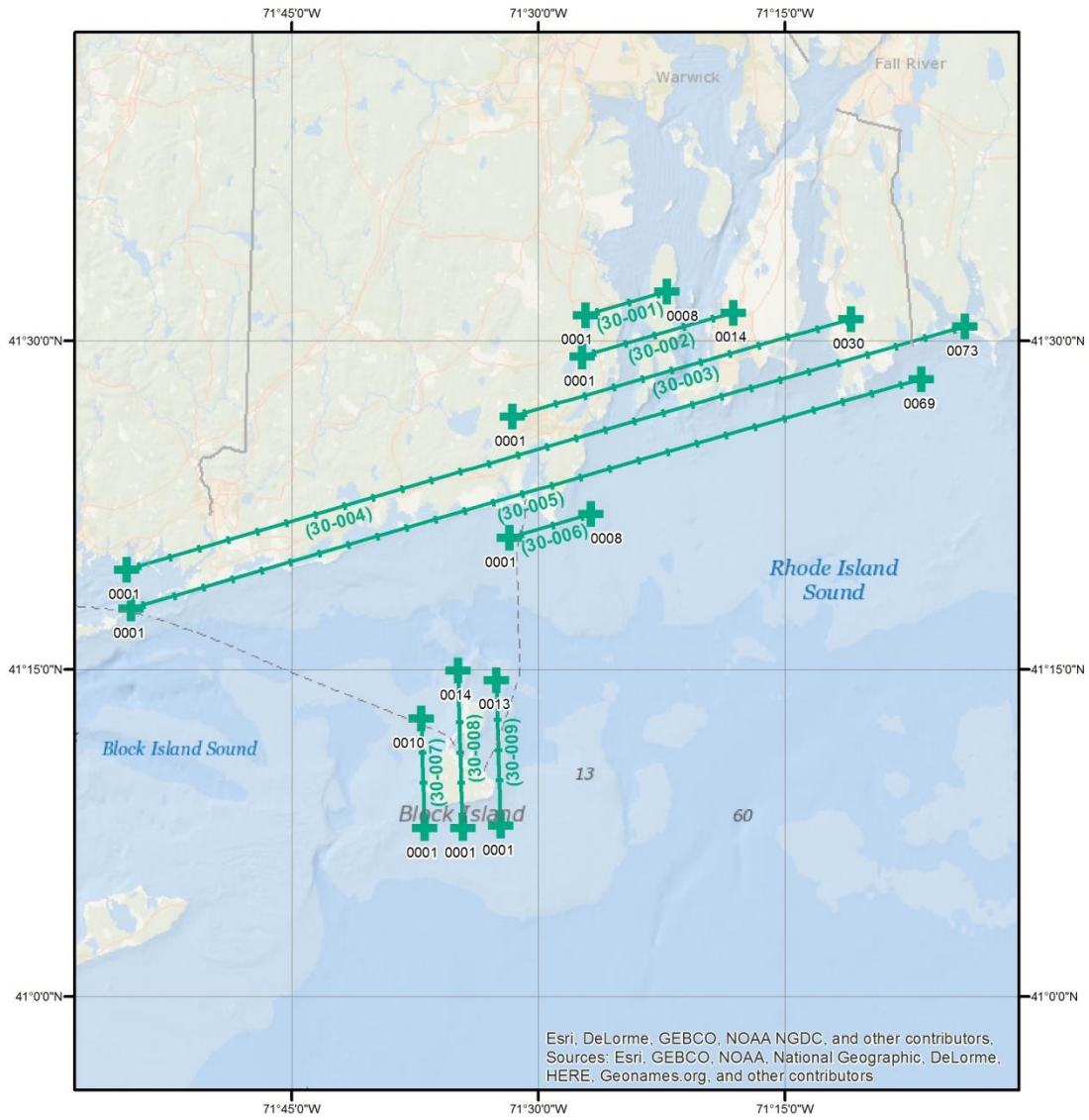
IMU data was not collected on every mission. IMU data is not a specified dataset required to be collected for this project and therefore the IMU data has not been incorporated into the aerial triangulation process.

FINAL RESULTS

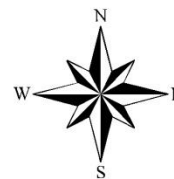
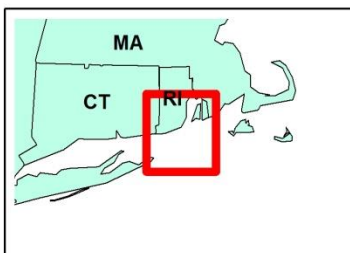
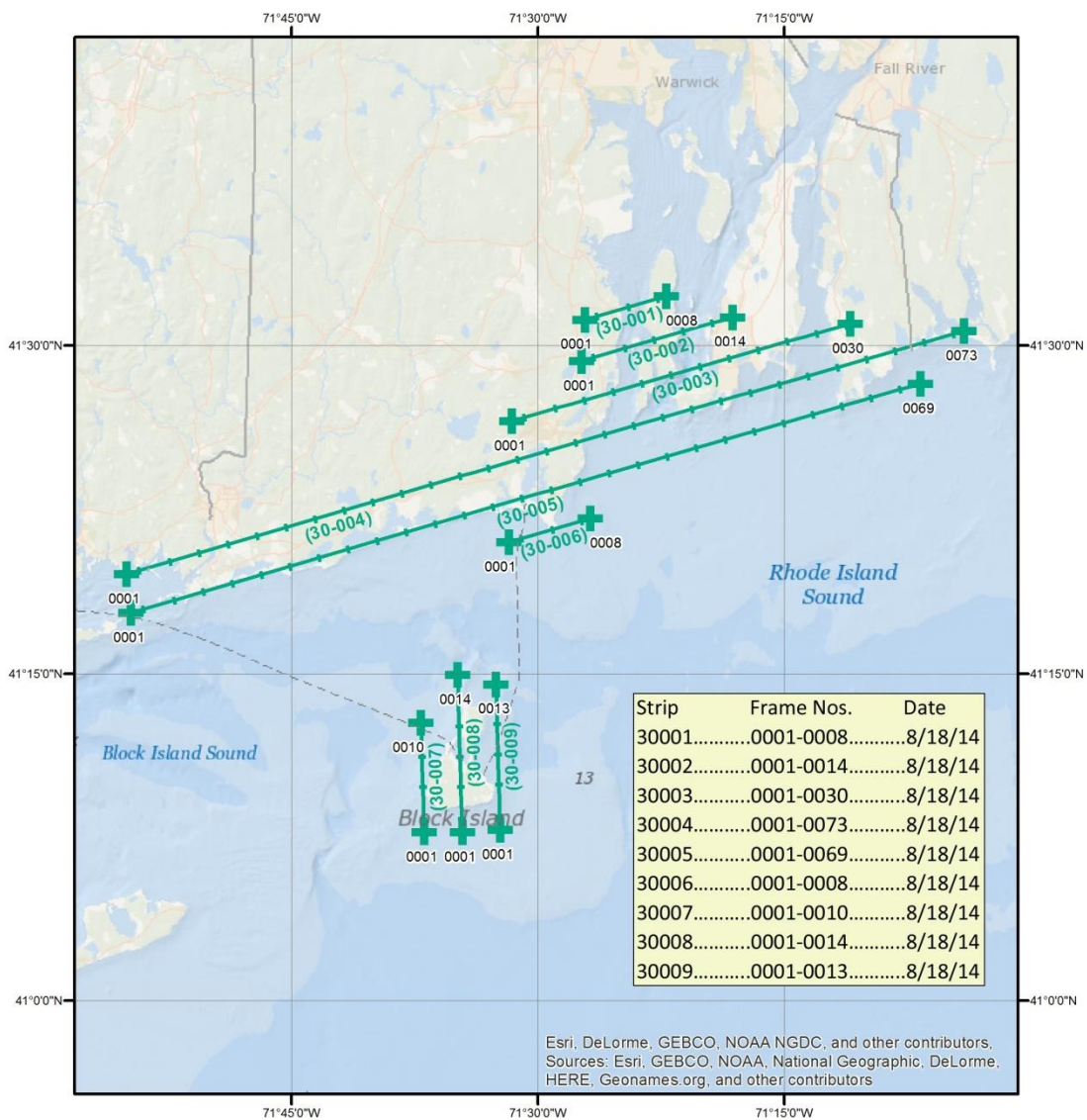
The final photo center locations were output into text files which were then imported into ZI Imaging's ISAT AT software for the point measurements and bundle adjustment phase.

End of Report

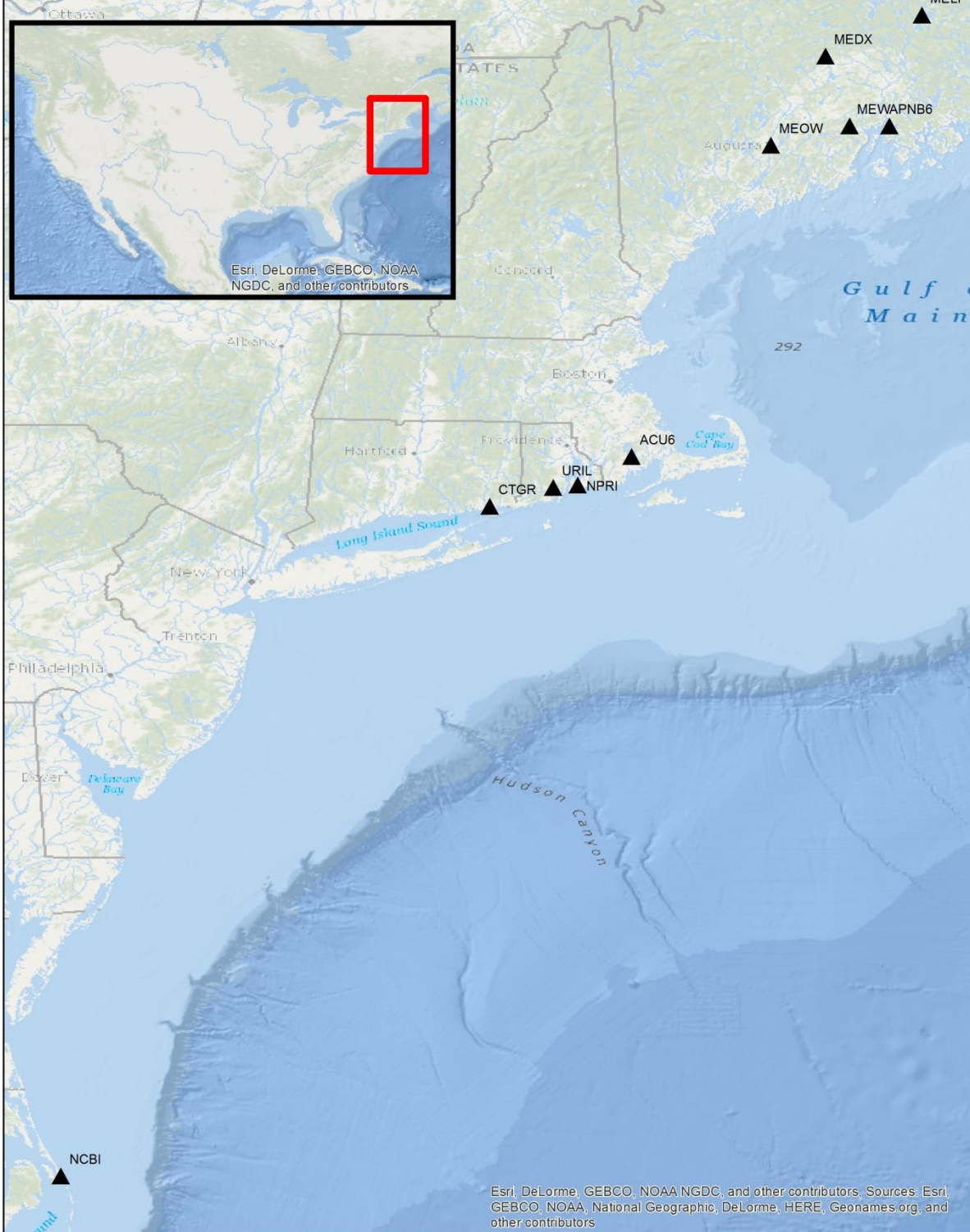
Flight Line Layout



Photography



CORS Station Location Map



CORS Station Data Sheets

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DI0884

DI0884 CORS - This is a GPS Continuously Operating Reference Station.

DI0884 DESIGNATION - ACUSHNET 6 CORS ARP

DI0884 CORS_ID - ACU6

DI0884 PID - DI0884

DI0884 STATE/COUNTY- MA/BRISTOL

DI0884 COUNTRY - US

DI0884 USGS QUAD -

DI0884

DI0884 *CURRENT SURVEY CONTROL

DI0884

DI0884* NAD 83(2011) POSITION- 41 44 35.67628(N) 070 53 11.72009(W)

ADJUSTED

DI0884* NAD 83(2011) ELLIP HT- 6.247 (meters) (08/??/11)

ADJUSTED

DI0884* NAD 83(2011) EPOCH - 2010.00

DI0884* NAVD 88 ORTHO HEIGHT - ** (meters) ** (feet)

DI0884

DI0884 NAD 83(2011) X - 1,560,587.208 (meters)

COMP

DI0884 NAD 83(2011) Y - -4,503,297.691 (meters)

COMP

DI0884 NAD 83(2011) Z - 4,224,372.189 (meters)

COMP

DI0884 GEOID HEIGHT - -28.97 (meters)

GEOID12A

DI0884

DI0884 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DI0884 Standards:

DI0884	FGDC (95% conf, cm)	Standard deviation (cm)			CorrNE
DI0884	Horiz Ellip	SD_N	SD_E	SD_h	

(unitless)

DI0884 -----

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DI0884	NETWORK	1.02	3.28	0.46	0.37	1.67
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0.04289038

DI0884 -----

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DI0884 [Click here for local accuracies and other accuracy information.](#)

DI0884

DI0884
 DI0884.The coordinates were established by GPS observations
 DI0884.and adjusted by the National Geodetic Survey in August 2011.
 DI0884
 DI0884.NAD 83(2011) refers to NAD 83 coordinates where the reference
 DI0884.frame has been affixed to the stable North American Tectonic
 Plate.
 DI0884
 DI0884.The coordinates are valid at the epoch date displayed above
 DI0884.which is a decimal equivalence of Year/Month/Day.
 DI0884
 DI0884.The PID for the CORS L1 Phase Center is DI0885.
 DI0884
 DI0884.The XYZ, and position/ellipsoidal ht. are equivalent.
 DI0884
 DI0884.The ellipsoidal height was determined by GPS observations
 DI0884.and is referenced to NAD 83.
 DI0884
 DI0884. The following values were computed from the NAD 83(2011)
 position.
 DI0884

DI0884;	North	East	Units	Scale	Factor	
Converg.						
DI0884;SPC MA M	- 832,735.119	251,024.730	MT	0.99999622		+0
24 43.4						
DI0884;SPC MA M	- 2,732,065.14	823,570.30	sFT	0.99999622		+0
24 43.4						
DI0884;UTM 19	- 4,622,989.342	343,127.411	MT	0.99990284		-1
15 22.8						
DI0884!	- Elev Factor	x	Scale Factor	=	Combined Factor	
DI0884!SPC MA M	- 0.99999902	x	0.99999622	=	0.99999524	
DI0884!UTM 19	- 0.99999902	x	0.99990284	=	0.99990186	

SUPERSEDED SURVEY CONTROL

DI0884 AD(2002.00) c	NAD 83(CORS)- 41 44 35.67626(N)	070 53 11.72051(W)
DI0884 GP(2002.00) c c	ELLIP H (08/??/07) 6.260 (m)	
DI0884 AD(2002.00) c	NAD 83(CORS)- 41 44 35.67685(N)	070 53 11.71892(W)
DI0884 GP(2002.00) c c	ELLIP H (08/??/06) 6.258 (m)	

DI0884
 DI0884.Superseded values are not recommended for survey control.
 DI0884
 DI0884.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 DI0884.See file dsdata.txt to determine how the superseded data were
 derived.
 DI0884
 DI0884_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCG4312722989(NAD 83)
 DI0884
 DI0884_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI0884

DI0884

STATION DESCRIPTION

DI0884

DI0884'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011

DI0884'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI0884'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES

ACCESSIBLE

DI0884'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI0884' <ftp://cors.ngs.noaa.gov/cors/README.txt>

DI0884' ftp://cors.ngs.noaa.gov/cors/coord/coord_08

DI0884' ftp://cors.ngs.noaa.gov/cors/station_log

DI0884' <http://geodesy.noaa.gov/CORS>

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DH5831

DH5831 CORS - This is a GPS Continuously Operating Reference Station.

DH5831 DESIGNATION - GROTON CORS ARP

DH5831 CORS_ID - CTGR

DH5831 PID - DH5831

DH5831 STATE/COUNTY- CT/NEW LONDON

DH5831 COUNTRY - US

DH5831 USGS QUAD - NEW LONDON (1984)

DH5831

DH5831 *CURRENT SURVEY CONTROL

DH5831

DH5831* NAD 83(2011) POSITION- 41 20 07.03552(N) 072 02 58.96932(W)
ADJUSTED

DH5831* NAD 83(2011) ELLIP HT- -18.342 (meters) (08/??/11)
ADJUSTED

DH5831* NAD 83(2011) EPOCH - 2010.00

DH5831* NAVD 88 ORTHO HEIGHT - ** (meters) ** (feet)

DH5831

DH5831 NAD 83(2011) X - 1,478,107.650 (meters)
COMP

DH5831 NAD 83(2011) Y - -4,562,614.124 (meters)
COMP

DH5831 NAD 83(2011) Z - 4,190,441.881 (meters)
COMP

DH5831 GEOID HEIGHT - -30.64 (meters)
GEOID12A

DH5831

DH5831. Formal positional accuracy estimates are not available for this CORS

DH5831. because its coordinates were determined in part using modeled DH5831. velocities. Approximate one-sigma accuracies for latitude, longitude,

DH5831. and ellipsoid height can be obtained from the short-term time series.

DH5831. Additional information regarding modeled velocities is available on

DH5831. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DH5831

DH5831. The coordinates were established by GPS observations
DH5831. and adjusted by the National Geodetic Survey in August 2011.

DH5831

DH5831. NAD 83(2011) refers to NAD 83 coordinates where the reference
DH5831. frame has been affixed to the stable North American Tectonic Plate.

DH5831

DH5831.The coordinates are valid at the epoch date displayed above
DH5831.which is a decimal equivalence of Year/Month/Day.

DH5831

DH5831.The PID for the CORS L1 Phase Center is D08497.

DH5831

DH5831.The XYZ, and position/ellipsoidal ht. are equivalent.

DH5831

DH5831.The ellipsoidal height was determined by GPS observations

DH5831.and is referenced to NAD 83.

DH5831

DH5831. The following values were computed from the NAD 83(2011)

position.

DH5831

DH5831;		North	East	Units	Scale	Factor
Converg.						
DH5831;SPC CT	-	208,383.576	363,418.464	MT	0.99998910	+0
27 51.6						
DH5831;SPC CT	-	683,671.78	1,192,315.41	sFT	0.99998910	+0
27 51.6						
DH5831;UTM 18	-	4,580,178.221	746,876.078	MT	1.00035014	+1
56 58.3						
DH5831;UTM 19	-	4,580,466.240	244,802.971	MT	1.00040157	-2
00 55.1						

DH5831

DH5831! - Elev Factor x Scale Factor = Combined Factor

DH5831!SPC CT - 1.00000288 x 0.99998910 = 0.99999198

DH5831!UTM 18 - 1.00000288 x 1.00035014 = 1.00035302

DH5831!UTM 19 - 1.00000288 x 1.00040157 = 1.00040445

DH5831

DH5831

SUPERSEDED SURVEY CONTROL

DH5831

DH5831 ELLIP H (06/27/12) -18.325 (m)

GP(2010.00)

DH5831 NAD 83(2011)- 41 20 07.03565(N) 072 02 58.96956(W)

AD(2010.00) c

DH5831 ELLIP H (02/10/07) -18.306 (m)

GP(2002.00)

DH5831 NAD 83(2007)- 41 20 07.03601(N) 072 02 58.97025(W)

AD(2002.00) c

DH5831 NAD 83(CORS)- 41 20 07.03566(N) 072 02 58.96958(W)

AD(2002.00) c

DH5831 ELLIP H (09/??/05) -18.346 (m)

GP(2002.00) c c

DH5831 ELLIP H (05/31/05) -18.321 (m) GP(

) 3 1

DH5831 NAD 83(1996)- 41 20 07.03602(N) 072 02 58.97044(W) AD(

) c

DH5831

DH5831.Superseded values are not recommended for survey control.

DH5831

DH5831.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DH5831.See file dsdata.txt to determine how the superseded data were derived.

DH5831

DH5831_U.S. NATIONAL GRID SPATIAL ADDRESS: 18TYL4687680178 (NAD 83)

DH5831

DH5831_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DH5831

DH5831

STATION DESCRIPTION

DH5831

DH5831'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011

DH5831'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DH5831'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES

ACCESSIBLE

DH5831'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DH5831' <ftp://cors.ngs.noaa.gov/cors/README.txt>

DH5831' ftp://cors.ngs.noaa.gov/cors/coord/coord_08

DH5831' ftp://cors.ngs.noaa.gov/cors/station_log

DH5831' <http://geodesy.noaa.gov/CORS>

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DN9932

DN9932 CORS - This is a GPS Continuously Operating Reference Station.

DN9932 DESIGNATION - DEXTER CORS ARP

DN9932 CORS_ID - MEDX

DN9932 PID - DN9932

DN9932 STATE/COUNTY- ME/PENOBSCOT

DN9932 COUNTRY - US

DN9932 USGS QUAD - DEXTER (1984)

DN9932

DN9932 *CURRENT SURVEY CONTROL

DN9932

DN9932* NAD 83(2011) POSITION- 45 01 34.90790(N) 069 17 49.08401(W)
ADJUSTED

DN9932* NAD 83(2011) ELLIP HT- 141.203 (meters) (08/??/12)
ADJUSTED

DN9932* NAD 83(2011) EPOCH - 2010.00

DN9932* NAVD 88 ORTHO HEIGHT - ** (meters) ** (feet)

DN9932

DN9932 NAD 83(2011) X - 1,596,381.096 (meters)
COMP

DN9932 NAD 83(2011) Y - -4,224,023.907 (meters)
COMP

DN9932 NAD 83(2011) Z - 4,489,519.511 (meters)
COMP

DN9932 GEOID HEIGHT - -25.10 (meters)
GEOID12A

DN9932

DN9932. Formal positional accuracy estimates are not available for this CORS

DN9932. because its coordinates were determined in part using modeled
DN9932. velocities. Approximate one-sigma accuracies for latitude,
longitude,

DN9932. and ellipsoid height can be obtained from the short-term time
series.

DN9932. Additional information regarding modeled velocities is available
on

DN9932. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DN9932

DN9932. The coordinates were established by GPS observations
DN9932. and adjusted by the National Geodetic Survey in August 2012.

DN9932

DN9932. NAD 83(2011) refers to NAD 83 coordinates where the reference
DN9932. frame has been affixed to the stable North American Tectonic
Plate.

DN9932

DN9932.The coordinates are valid at the epoch date displayed above
DN9932.which is a decimal equivalence of Year/Month/Day.

DN9932

DN9932.The PID for the CORS L1 Phase Center is DN9933.

DN9932

DN9932.The XYZ, and position/ellipsoidal ht. are equivalent.

DN9932

DN9932.The ellipsoidal height was determined by GPS observations

DN9932.and is referenced to NAD 83.

DN9932

DN9932. The following values were computed from the NAD 83(2011)
position.

DN9932

DN9932;		North	East	Units	Scale	Factor	
Converg.							
DN9932;SPC ME E	-	151,382.044	237,196.716	MT	0.99994848		-0
33 49.7							
DN9932;SPC ME E	-	496,659.26	778,202.89	sFT	0.99994848		-0
33 49.7							
DN9932;UTM 19	-	4,985,921.927	476,605.132	MT	0.99960673		-0
12 36.3							

DN9932

DN9932! - Elev Factor x Scale Factor = Combined Factor

DN9932!SPC ME E - 0.99997786 x 0.99994848 = 0.99992634

DN9932!UTM 19 - 0.99997786 x 0.99960673 = 0.99958460

DN9932

DN9932

SUPERSEDED SURVEY CONTROL

DN9932

DN9932.No superseded survey control is available for this station.

DN9932

DN9932_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDK7660585921(NAD 83)

DN9932

DN9932_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DN9932

DN9932

STATION DESCRIPTION

DN9932

DN9932'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012

DN9932'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DN9932'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES

ACCESSIBLE

DN9932'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DN9932' <ftp://cors.ngs.noaa.gov/cors/README.txt>

DN9932' ftp://cors.ngs.noaa.gov/cors/coord/coord_08

DN9932' ftp://cors.ngs.noaa.gov/cors/station_log

DN9932' <http://geodesy.noaa.gov/CORS>

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DN9936

DN9936 CORS - This is a GPS Continuously Operating Reference Station.

DN9936 DESIGNATION - LINCOLN CORS ARP

DN9936 CORS_ID - MELI

DN9936 PID - DN9936

DN9936 STATE/COUNTY- ME/PENOBSCOT

DN9936 COUNTRY - US

DN9936 USGS QUAD - LINCOLN WEST (1988)

DN9936

DN9936 *CURRENT SURVEY CONTROL

DN9936

DN9936* NAD 83(2011) POSITION- 45 21 49.15536(N) 068 30 26.61463(W)
ADJUSTED

DN9936* NAD 83(2011) ELLIP HT- 54.567 (meters) (08/??/12)
ADJUSTED

DN9936* NAD 83(2011) EPOCH - 2010.00

DN9936* NAVD 88 ORTHO HEIGHT - *(meters) *(feet)

DN9936

DN9936 NAD 83(2011) X - 1,644,670.827 (meters)
COMP

DN9936 NAD 83(2011) Y - -4,176,820.530 (meters)
COMP

DN9936 NAD 83(2011) Z - 4,515,873.960 (meters)
COMP

DN9936 GEOID HEIGHT - -24.40 (meters)
GEOID12A

DN9936

DN9936. Formal positional accuracy estimates are not available for this CORS

DN9936. because its coordinates were determined in part using modeled
DN9936. velocities. Approximate one-sigma accuracies for latitude,
longitude,

DN9936. and ellipsoid height can be obtained from the short-term time
series.

DN9936. Additional information regarding modeled velocities is available
on

DN9936. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DN9936

DN9936. The coordinates were established by GPS observations
DN9936. and adjusted by the National Geodetic Survey in August 2012.

DN9936

DN9936. NAD 83(2011) refers to NAD 83 coordinates where the reference
DN9936. frame has been affixed to the stable North American Tectonic
Plate.

DN9936

DN9936.The coordinates are valid at the epoch date displayed above
DN9936.which is a decimal equivalence of Year/Month/Day.
DN9936
DN9936.The PID for the CORS L1 Phase Center is DN9937.
DN9936
DN9936.The XYZ, and position/ellipsoidal ht. are equivalent.
DN9936
DN9936.The ellipsoidal height was determined by GPS observations
DN9936.and is referenced to NAD 83.
DN9936
DN9936. The following values were computed from the NAD 83(2011)
position.
DN9936
DN9936; North East Units Scale Factor
Converg.
DN9936;SPC ME E - 188,554.344 299,420.846 MT 0.99990000 -0
00 18.9
DN9936;SPC ME E - 618,615.38 982,349.89 sFT 0.99990000 -0
00 18.9
DN9936;UTM 19 - 5,023,467.083 538,578.586 MT 0.99961830 +0
21 01.9
DN9936
DN9936! - Elev Factor x Scale Factor = Combined Factor
DN9936!SPC ME E - 0.99999145 x 0.99990000 = 0.99989145
DN9936!UTM 19 - 0.99999145 x 0.99961830 = 0.99960975
DN9936
DN9936 SUPERSEDED SURVEY CONTROL
DN9936
DN9936.No superseded survey control is available for this station.
DN9936
DN9936_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TEL3857823467(NAD 83)
DN9936
DN9936_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DN9936
DN9936 STATION DESCRIPTION
DN9936
DN9936'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012
DN9936'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DN9936'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES
ACCESSIBLE
DN9936'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DN9936' ftp://cors.ngs.noaa.gov/cors/README.txt
DN9936' ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DN9936' ftp://cors.ngs.noaa.gov/cors/station_log
DN9936' http://geodesy.noaa.gov/CORS

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DN9940

DN9940 CORS - This is a GPS Continuously Operating Reference Station.

DN9940 DESIGNATION - AUGUSTA CORS ARP

DN9940 CORS_ID - MEOW

DN9940 PID - DN9940

DN9940 STATE/COUNTY- ME/KENNEBEC

DN9940 COUNTRY - US

DN9940 USGS QUAD - TOGUS POND (1982)

DN9940

DN9940 *CURRENT SURVEY CONTROL

DN9940

DN9940* NAD 83(2011) POSITION- 44 17 45.93624(N) 069 44 43.57001(W)
ADJUSTED

DN9940* NAD 83(2011) ELLIP HT- 37.313 (meters) (08/??/12)
ADJUSTED

DN9940* NAD 83(2011) EPOCH - 2010.00

DN9940* NAVD 88 ORTHO HEIGHT - ** (meters) ** (feet)

DN9940

DN9940 NAD 83(2011) X - 1,582,992.217 (meters)
COMP

DN9940 NAD 83(2011) Y - -4,289,835.833 (meters)
COMP

DN9940 NAD 83(2011) Z - 4,431,725.120 (meters)
COMP

DN9940 GEOID HEIGHT - -25.85 (meters)
GEOID12A

DN9940

DN9940. Formal positional accuracy estimates are not available for this CORS

DN9940. because its coordinates were determined in part using modeled
DN9940. velocities. Approximate one-sigma accuracies for latitude,
longitude,

DN9940. and ellipsoid height can be obtained from the short-term time
series.

DN9940. Additional information regarding modeled velocities is available
on

DN9940. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DN9940

DN9940. The coordinates were established by GPS observations
DN9940. and adjusted by the National Geodetic Survey in August 2012.

DN9940

DN9940. NAD 83(2011) refers to NAD 83 coordinates where the reference
DN9940. frame has been affixed to the stable North American Tectonic
Plate.

DN9940

DN9940.The coordinates are valid at the epoch date displayed above
DN9940.which is a decimal equivalence of Year/Month/Day.

DN9940

DN9940.The PID for the CORS L1 Phase Center is DN9941.

DN9940

DN9940.The XYZ, and position/ellipsoidal ht. are equivalent.

DN9940

DN9940.The ellipsoidal height was determined by GPS observations

DN9940.and is referenced to NAD 83.

DN9940

DN9940. The following values were computed from the NAD 83(2011)
position.

DN9940

DN9940; North East Units Scale Factor
Converg.
DN9940;SPC ME W - 162,599.009 933,615.714 MT 0.99998056 +0
17 39.0
DN9940;SPC ME W - 533,460.25 3,063,037.56 sFT 0.99998056 +0
17 39.0
DN9940;UTM 19 - 4,905,030.302 440,533.299 MT 0.99964349 -0
31 14.2

DN9940

DN9940! - Elev Factor x Scale Factor = Combined Factor
DN9940!SPC ME W - 0.99999415 x 0.99998056 = 0.99997471
DN9940!UTM 19 - 0.99999415 x 0.99964349 = 0.99963764

DN9940

DN9940

SUPERSEDED SURVEY CONTROL

DN9940

DN9940.No superseded survey control is available for this station.

DN9940

DN9940_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDK4053305030(NAD 83)

DN9940

DN9940_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DN9940

DN9940

STATION DESCRIPTION

DN9940

DN9940'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012

DN9940'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DN9940'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES

ACCESSIBLE

DN9940'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DN9940' ftp://cors.ngs.noaa.gov/cors/README.txt

DN9940' ftp://cors.ngs.noaa.gov/cors/coord/coord_08

DN9940' ftp://cors.ngs.noaa.gov/cors/station_log

DN9940' http://geodesy.noaa.gov/CORS

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DO2058

DO2058 CORS - This is a GPS Continuously Operating Reference Station.

DO2058 DESIGNATION - WALDO CORS ARP

DO2058 CORS_ID - MEWA

DO2058 PID - DO2058

DO2058 STATE/COUNTY- ME/WALDO

DO2058 COUNTRY - US

DO2058 USGS QUAD - BELFAST (1979)

DO2058

DO2058 *CURRENT SURVEY CONTROL

DO2058

DO2058* NAD 83(2011) POSITION- 44 27 15.19284(N) 069 05 49.48920(W)
ADJUSTED

DO2058* NAD 83(2011) ELLIP HT- 50.696 (meters) (11/??/12)
ADJUSTED

DO2058* NAD 83(2011) EPOCH - 2010.00

DO2058* NAVD 88 ORTHO HEIGHT - ** (meters) ** (feet)

DO2058

DO2058 NAD 83(2011) X - 1,627,052.453 (meters)
COMP

DO2058 NAD 83(2011) Y - -4,260,177.781 (meters)
COMP

DO2058 NAD 83(2011) Z - 4,444,293.880 (meters)
COMP

DO2058 GEOID HEIGHT - -25.21 (meters)
GEOID12A

DO2058

DO2058. Formal positional accuracy estimates are not available for this CORS

DO2058. because its coordinates were determined in part using modeled
DO2058. velocities. Approximate one-sigma accuracies for latitude,
longitude,

DO2058. and ellipsoid height can be obtained from the short-term time series.

DO2058. Additional information regarding modeled velocities is available on

DO2058. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO2058

DO2058. The coordinates were established by GPS observations
DO2058. and adjusted by the National Geodetic Survey in November 2012.
DO2058

DO2058. NAD 83(2011) refers to NAD 83 coordinates where the reference
DO2058. frame has been affixed to the stable North American Tectonic
Plate.

DO2058

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 3, 2015

DO2877

DO2877 HT_MOD - This is a Height Modernization Survey Station.

DO2877 CORS - This is a GPS Continuously Operating Reference Station.

DO2877 DESIGNATION - BODIE ISLAND CORS ARP

DO2877 CORS_ID - NCBI

DO2877 PID - DO2877

DO2877 STATE/COUNTY- NC/DARE

DO2877 COUNTRY - US

DO2877 USGS QUAD - OREGON INLET (1983)

DO2877

DO2877 *CURRENT SURVEY CONTROL

DO2877

DO2877* NAD 83(2011) POSITION- 35 50 44.35730(N) 075 33 48.94199(W)
ADJUSTED

DO2877* NAD 83(2011) ELLIP HT- -33.046 (meters) (01/??/13)
ADJUSTED

DO2877* NAD 83(2011) EPOCH - 2010.00

DO2877* NAVD 88 ORTHO HEIGHT - 5.94 (meters) 19.5 (feet) GPS
OBS

DO2877

DO2877 GEOID HEIGHT - -38.96 (meters)
GEOID12A

DO2877 NAD 83(2011) X - 1,290,408.921 (meters)
COMP

DO2877 NAD 83(2011) Y - -5,012,586.520 (meters)
COMP

DO2877 NAD 83(2011) Z - 3,714,303.745 (meters)
COMP

DO2877

DO2877. Formal positional accuracy estimates are not available for this
CORS

DO2877. because its coordinates were determined in part using modeled
DO2877. velocities. Approximate one-sigma accuracies for latitude,
longitude,

DO2877. and ellipsoid height can be obtained from the short-term time
series.

DO2877. Additional information regarding modeled velocities is available
on

DO2877. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO2877

DO2877. The coordinates were established by GPS observations

DO2877. and adjusted by the National Geodetic Survey in January 2013.

DO2877

DO2877. NAD 83(2011) refers to NAD 83 coordinates where the reference

DO2877.frame has been affixed to the stable North American Tectonic Plate.

DO2877

DO2877.The coordinates are valid at the epoch date displayed above DO2877.which is a decimal equivalence of Year/Month/Day.

DO2877

DO2877.The orthometric height was determined by GPS observations and a DO2877.high-resolution geoid model using precise GPS observation and DO2877.processing techniques.

DO2877

DO2877.The PID for the CORS L1 Phase Center is DO2878.

DO2877

DO2877.The XYZ, and position/ellipsoidal ht. are equivalent.

DO2877

DO2877.The ellipsoidal height was determined by GPS observations DO2877.and is referenced to NAD 83.

DO2877

DO2877. The following values were computed from the NAD 83(2011) position.

DO2877

DO2877;		North	East	Units	Scale	Factor
Converg.						
DO2877;SPC NC	-	237,848.248	919,957.886	MT	0.99992620	+1
59 00.2						
DO2877;SPC NC	-	780,340.46	3,018,228.50	sFT	0.99992620	+1
59 00.2						
DO2877;UTM 18	-	3,966,976.123	449,105.468	MT	0.99963192	-0
19 48.2						
DO2877!	-	Elev Factor	x	Scale Factor	=	Combined Factor
DO2877!SPC NC	-	1.00000519	x	0.99992620	=	0.99993139
DO2877!UTM 18	-	1.00000519	x	0.99963192	=	0.99963710

DO2877

DO2877 SUPERSEDED SURVEY CONTROL

DO2877

DO2877.No superseded survey control is available for this station.

DO2877

DO2877_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SVE4910566976(NAD 83)

DO2877

DO2877_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DO2877

DO2877 STATION DESCRIPTION

DO2877

DO2877'DESCRIBED BY NATIONAL GEODETIC SURVEY 2013

DO2877'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DO2877'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES

ACCESSIBLE

DO2877'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DO2877' ftp://cors.ngs.noaa.gov/cors/README.txt

DO2877' ftp://cors.ngs.noaa.gov/cors/coord/coord_08

DO2877' ftp://cors.ngs.noaa.gov/cors/station_log

DO2877' http://geodesy.noaa.gov/CORS

*** retrieval complete.

Elapsed Time = 00:00:01

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

AI3285

AI3285 HT_MOD - This is a Height Modernization Survey Station.

AI3285 CORS - This is a GPS Continuously Operating Reference Station.

AI3285 DESIGNATION - NAVAL STATION NEW CORS ARP

AI3285 CORS_ID - NPRI

AI3285 PID - AI3285

AI3285 STATE/COUNTY- RI/NEWPORT

AI3285 COUNTRY - US

AI3285 USGS QUAD - PRUDENCE ISLAND (1975)

AI3285

AI3285 *CURRENT SURVEY CONTROL

AI3285

AI3285* NAD 83(2011) POSITION- 41 30 35.41539(N) 071 19 39.12460(W)
ADJUSTED

AI3285* NAD 83(2011) ELLIP HT- -11.776 (meters) (08/??/11)
ADJUSTED

AI3285* NAD 83(2011) EPOCH - 2010.00

AI3285* NAVD 88 ORTHO HEIGHT - 18.19 (meters) 59.7 (feet) GPS
OBS

AI3285

AI3285 NAVD 88 orthometric height was determined with an earlier geoid model

AI3285 NAD 83(2011) X - 1,531,393.036 (meters)
COMP

AI3285 NAD 83(2011) Y - -4,531,475.481 (meters)
COMP

AI3285 NAD 83(2011) Z - 4,204,982.701 (meters)
COMP

AI3285 GEOID HEIGHT - -29.99 (meters)
GEOID12A

AI3285

AI3285. Formal positional accuracy estimates are not available for this CORS

AI3285. because its coordinates were determined in part using modeled AI3285. velocities. Approximate one-sigma accuracies for latitude, longitude,

AI3285. and ellipsoid height can be obtained from the short-term time series.

AI3285. Additional information regarding modeled velocities is available on

AI3285. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
AI3285

AI3285. The coordinates were established by GPS observations

AI3285. and adjusted by the National Geodetic Survey in August 2011.

AI3285

AI3285.NAD 83(2011) refers to NAD 83 coordinates where the reference AI3285.frame has been affixed to the stable North American Tectonic Plate.

AI3285

AI3285.The coordinates are valid at the epoch date displayed above AI3285.which is a decimal equivalence of Year/Month/Day.

AI3285

AI3285.The orthometric height was determined by GPS observations and a AI3285.high-resolution geoid model using precise GPS observation and AI3285.processing techniques.

AI3285

AI3285.The PID for the CORS L1 Phase Center is DP4286.

AI3285

AI3285.The XYZ, and position/ellipsoidal ht. are equivalent.

AI3285

AI3285.The ellipsoidal height was determined by GPS observations AI3285.and is referenced to NAD 83.

AI3285

AI3285. The following values were computed from the NAD 83(2011) position.

AI3285

AI3285;		North	East	Units	Scale	Factor
Converg.						
AI3285;SPC RI	-	47,381.479	114,397.932	MT	0.99999630	+0
06 51.5						
AI3285;SPC RI	-	155,450.74	375,320.55	sFT	0.99999630	+0
06 51.5						
AI3285;UTM 19	-	4,597,971.905	305,760.321	MT	1.00006433	-1
32 35.0						
AI3285!	-	Elev Factor	x	Scale Factor	=	Combined Factor
AI3285!SPC RI	-	1.00000185	x	0.99999630	=	0.99999815
AI3285!UTM 19	-	1.00000185	x	1.00006433	=	1.00006618

AI3285

SUPERSEDED SURVEY CONTROL

AI3285

AI3285 ELLIP H (06/27/12) -11.786 (m)
GP(2010.00)
AI3285 NAD 83(2011)- 41 30 35.41551(N) 071 19 39.12437(W)
AD(2010.00) c
AI3285 ELLIP H (02/10/07) -11.768 (m)
GP(2002.00)
AI3285 NAD 83(2007)- 41 30 35.41588(N) 071 19 39.12515(W)
AD(2002.00) c
AI3285 NAD 83(CORS)- 41 30 35.41588(N) 071 19 39.12515(W)
AD(2002.00) c
AI3285 ELLIP H (03/??/02) -11.768 (m)
GP(2002.00) c c
AI3285 NAD 83(CORS)- 41 30 35.41546(N) 071 19 39.12565(W)
AD(1997.00) c
AI3285 ELLIP H (01/??/00) -11.659 (m)
GP(1997.00) c c
AI3285 NAD 83(CORS)- 41 30 35.41546(N) 071 19 39.12565(W)
AD(1997.00) c

AI3285 ELLIP H (01/01/00) -11.769 (m)
GP(1997.00) c c
AI3285
AI3285.Superseded values are not recommended for survey control.
AI3285
AI3285.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AI3285.See file dsdata.txt to determine how the superseded data were
derived.
AI3285
AI3285_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCF0576097971(NAD 83)
AI3285
AI3285_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
AI3285
AI3285 STATION DESCRIPTION
AI3285
AI3285'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011
AI3285'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
AI3285'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES
ACCESSIBLE
AI3285'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AI3285' <ftp://cors.ngs.noaa.gov/cors/README.txt>
AI3285' ftp://cors.ngs.noaa.gov/cors/coord/coord_08
AI3285' ftp://cors.ngs.noaa.gov/cors/station_log
AI3285' <http://geodesy.noaa.gov/CORS>

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DK4436

DK4436 CORS - This is a GPS Continuously Operating Reference Station.

DK4436 DESIGNATION - PENOBSCOT 6 CORS ARP

DK4436 CORS_ID - PNB6

DK4436 PID - DK4436

DK4436 STATE/COUNTY- ME/HANCOCK

DK4436 COUNTRY - US

DK4436 USGS QUAD - CASTINE (1979)

DK4436

DK4436 *CURRENT SURVEY CONTROL

DK4436

DK4436* NAD 83(2011) POSITION- 44 27 07.24711(N) 068 46 19.95840(W)
ADJUSTED

DK4436* NAD 83(2011) ELLIP HT- 33.462 (meters) (08/??/11)
ADJUSTED

DK4436* NAD 83(2011) EPOCH - 2010.00

DK4436* NAVD 88 ORTHO HEIGHT - *(meters) *(feet)

DK4436

DK4436 NAD 83(2011) X - 1,651,239.308 (meters)
COMP

DK4436 NAD 83(2011) Y - -4,251,032.530 (meters)
COMP

DK4436 NAD 83(2011) Z - 4,444,106.736 (meters)
COMP

DK4436 GEOID HEIGHT - -24.98 (meters)
GEOID12A

DK4436

DK4436 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DK4436 Standards:

DK4436	FGDC (95% conf, cm)	Standard deviation (cm)			CorrNE
DK4436	Horiz Ellip	SD_N	SD_E	SD_h	

(unitless)

DK4436 -----

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DK4436	NETWORK	1.14	3.57	0.51	0.40	1.82	-
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0.00092490

DK4436 -----

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DK4436 Click here for local accuracies and other accuracy information.

DK4436

DK4436

DK4436.The coordinates were established by GPS observations

DK4436.and adjusted by the National Geodetic Survey in August 2011.

DK4436

DK4436.NAD 83(2011) refers to NAD 83 coordinates where the reference DK4436.frame has been affixed to the stable North American Tectonic Plate.

DK4436

DK4436.The coordinates are valid at the epoch date displayed above DK4436.which is a decimal equivalence of Year/Month/Day.

DK4436

DK4436.The PID for the CORS L1 Phase Center is DK4437.

DK4436

DK4436.The XYZ, and position/ellipsoidal ht. are equivalent.

DK4436

DK4436.The ellipsoidal height was determined by GPS observations DK4436.and is referenced to NAD 83.

DK4436

DK4436. The following values were computed from the NAD 83(2011) position.

DK4436

DK4436;		North	East	Units	Scale	Factor	
Converg.							
DK4436;SPC ME E	-	87,289.826	278,335.621	MT	0.99990577		-0
11 26.3							
DK4436;SPC ME E	-	286,383.37	913,172.78	sFT	0.99990577		-0
11 26.3							
DK4436;UTM 19	-	4,922,104.163	518,123.587	MT	0.99960404		+0
09 34.3							
DK4436							
DK4436!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DK4436!SPC ME E	-	0.99999475	x	0.99990577	=	0.99990052	
DK4436!UTM 19	-	0.99999475	x	0.99960404	=	0.99959880	

DK4436

DK4436 SUPERSEDED SURVEY CONTROL

DK4436

DK4436 NAD 83(CORS)- 44 27 07.24736(N) 068 46 19.95958(W)
AD(2002.00) c
DK4436 ELLIP H (06/??/08) 33.458 (m)
GP(2002.00) c c

DK4436

DK4436.Superseded values are not recommended for survey control.

DK4436

DK4436.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DK4436.See file dsdata.txt to determine how the superseded data were derived.

DK4436

DK4436 U.S. NATIONAL GRID SPATIAL ADDRESS: 19TEK1812322104(NAD 83)

DK4436

DK4436 MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DK4436

DK4436 STATION DESCRIPTION

DK4436

DK4436'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011

DK4436'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DK4436'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES

ACCESSIBLE

DK4436'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DK4436' <ftp://cors.ngs.noaa.gov/cors/README.txt>
DK4436' ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DK4436' ftp://cors.ngs.noaa.gov/cors/station_log
DK4436' <http://geodesy.noaa.gov/CORS>

*** retrieval complete.
Elapsed Time = 00:00:03

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.6

1 National Geodetic Survey, Retrieval Date = FEBRUARY 5, 2015

DE6262

DE6262 CORS - This is a GPS Continuously Operating Reference Station.

DE6262 DESIGNATION - U OF RI COOP CORS ARP

DE6262 CORS_ID - URIL

DE6262 PID - DE6262

DE6262 STATE/COUNTY- RI/WASHINGTON

DE6262 COUNTRY - US

DE6262 USGS QUAD - KINGSTON (1975)

DE6262

DE6262 *CURRENT SURVEY CONTROL

DE6262

DE6262* NAD 83(2011) POSITION- 41 29 20.15772(N) 071 31 39.77789(W)
ADJUSTED

DE6262* NAD 83(2011) ELLIP HT- 45.671 (meters) (08/??/11)
ADJUSTED

DE6262* NAD 83(2011) EPOCH - 2010.00

DE6262* NAVD 88 ORTHO HEIGHT - ** (meters) ** (feet)

DE6262

DE6262 NAD 83(2011) X - 1,516,052.617 (meters)
COMP

DE6262 NAD 83(2011) Y - -4,538,298.216 (meters)
COMP

DE6262 NAD 83(2011) Z - 4,203,281.839 (meters)
COMP

DE6262 GEOID HEIGHT - -30.24 (meters)
GEOID12A

DE6262

DE6262. Formal positional accuracy estimates are not available for this CORS

DE6262. because its coordinates were determined in part using modeled DE6262. velocities. Approximate one-sigma accuracies for latitude, longitude,

DE6262. and ellipsoid height can be obtained from the short-term time series.

DE6262. Additional information regarding modeled velocities is available on

DE6262. the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.

DE6262

DE6262. The coordinates were established by GPS observations

DE6262. and adjusted by the National Geodetic Survey in August 2011.

DE6262

DE6262. NAD 83(2011) refers to NAD 83 coordinates where the reference

DE6262. frame has been affixed to the stable North American Tectonic Plate.

DE6262

DE6262.The coordinates are valid at the epoch date displayed above
DE6262.which is a decimal equivalence of Year/Month/Day.

DE6262

DE6262.The PID for the CORS L1 Phase Center is DH8689.

DE6262

DE6262.The XYZ, and position/ellipsoidal ht. are equivalent.

DE6262

DE6262.The ellipsoidal height was determined by GPS observations

DE6262.and is referenced to NAD 83.

DE6262

DE6262. The following values were computed from the NAD 83(2011)

position.

DE6262

DE6262; North East Units Scale Factor

Converg.

DE6262;SPC RI - 45,045.729 97,685.434 MT 0.99999382 -0
01 06.1

DE6262;SPC RI - 147,787.53 320,489.63 sFT 0.99999382 -0
01 06.1

DE6262;UTM 19 - 4,596,120.209 288,985.405 MT 1.00014800 -1
40 30.6

DE6262

DE6262! - Elev Factor x Scale Factor = Combined Factor

DE6262!SPC RI - 0.99999284 x 0.99999382 = 0.99998666

DE6262!UTM 19 - 0.99999284 x 1.00014800 = 1.00014084

DE6262

DE6262 SUPERSEDED SURVEY CONTROL

DE6262

DE6262 NAD 83(CORS)- 41 29 20.15819(N) 071 31 39.77855(W)
AD(2002.00) c

DE6262 ELLIP H (02/??/02) 45.687 (m)

GP(2002.00) c c

DE6262

DE6262.Superseded values are not recommended for survey control.

DE6262

DE6262.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DE6262.See file dsdata.txt to determine how the superseded data were
derived.

DE6262

DE6262_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TBF8898596120(NAD 83)

DE6262

DE6262_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DE6262

DE6262 STATION DESCRIPTION

DE6262

DE6262'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011

DE6262'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DE6262'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES
ACCESSIBLE

DE6262'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DE6262' <ftp://cors.ngs.noaa.gov/cors/README.txt>

DE6262' ftp://cors.ngs.noaa.gov/cors/coord/coord_08

DE6262' ftp://cors.ngs.noaa.gov/cors/station_log

DE6262' <http://geodesy.noaa.gov/CORS>

*** retrieval complete.
Elapsed Time = 00:00:03