

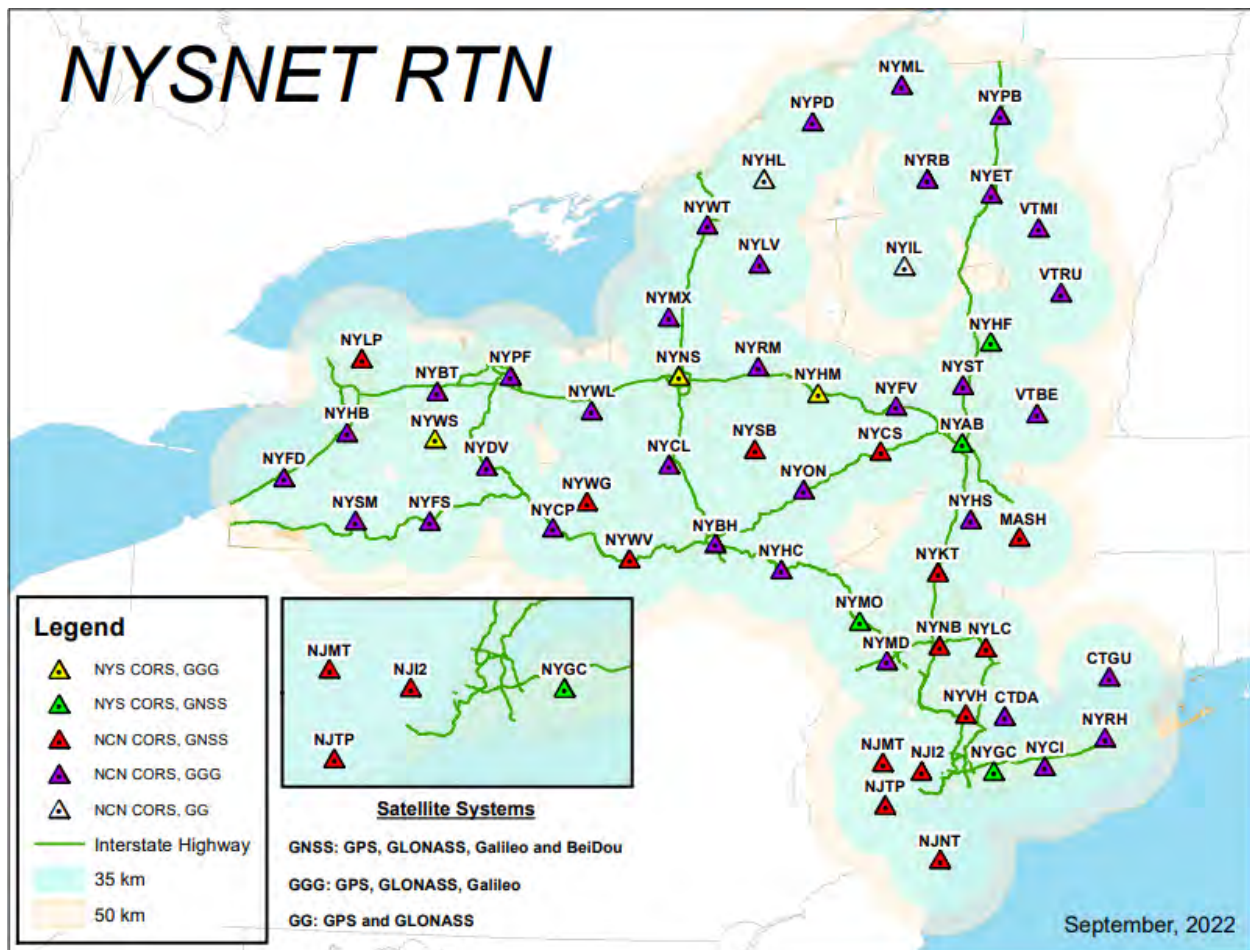
NewYorkCORS Rover 900Mhz with Internet VRS:

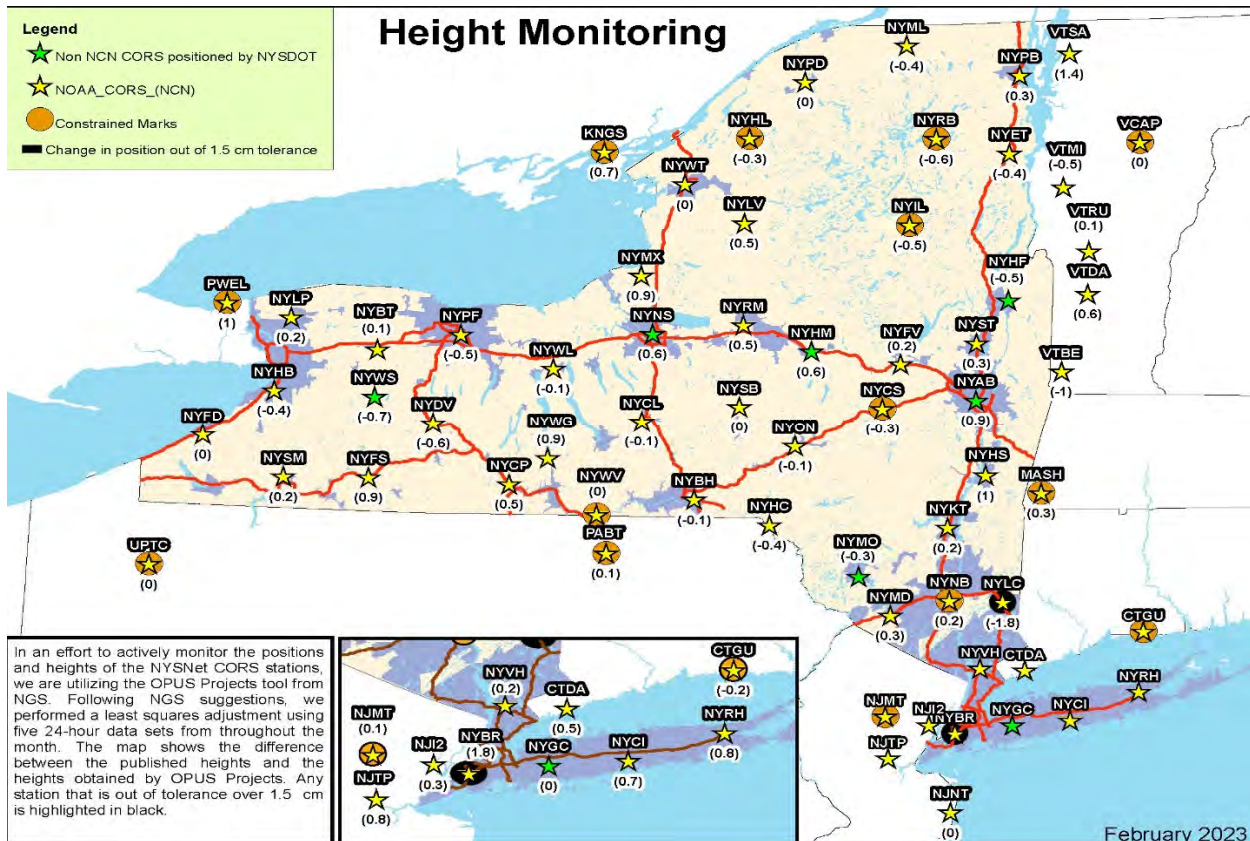
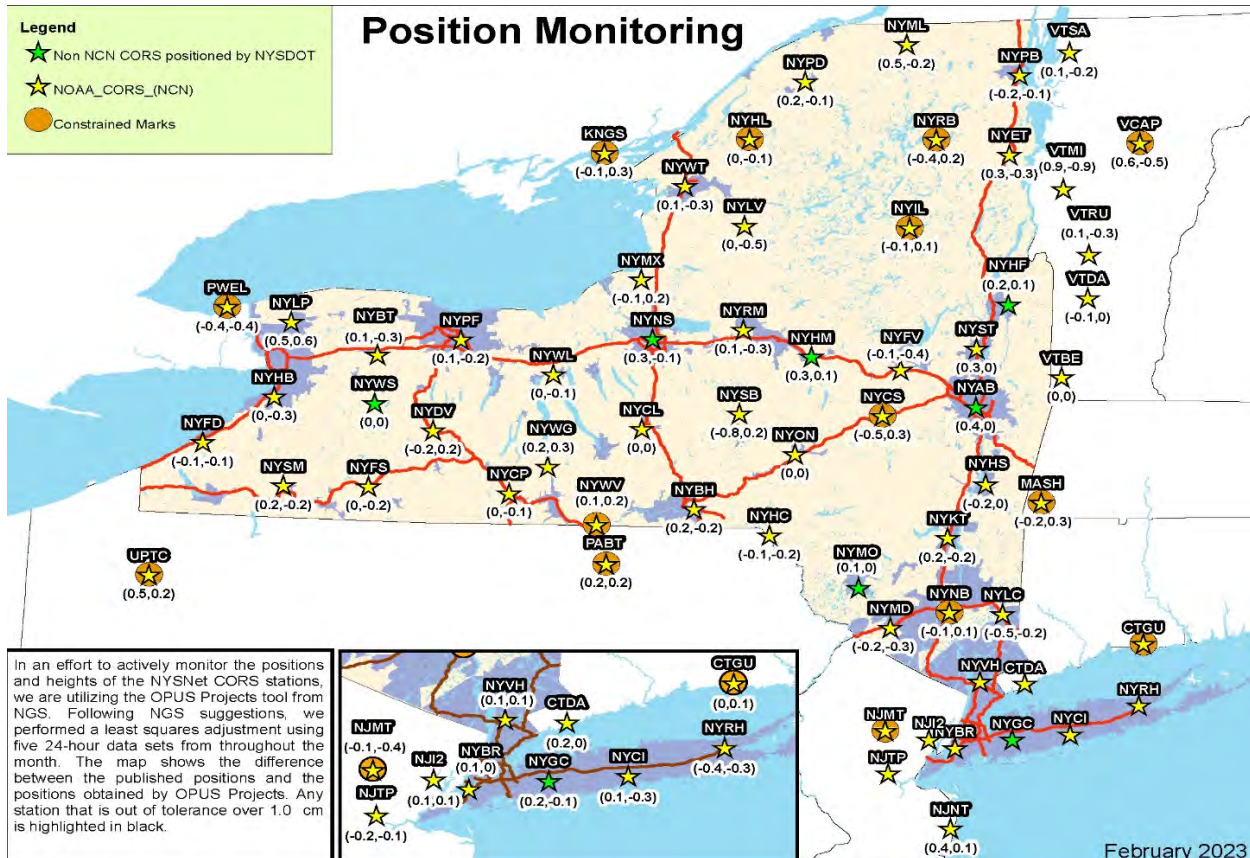
[Spider Business Center - Login \(ny.gov\)](#)

[Spatial Reference Network CORS/Real Time Network \(ny.gov\)](#)

<https://cors.dot.ny.gov/FAQ.htm#:~:text=Where do I find real time network connection, cannot use a URL%2C contact us at cors%40dot.ny.gov.>

You can connect to the RTN using a url: RTN.DOT.NY.GOV If your equipment cannot use a URL, contact us at cors@dot.ny.gov





Data Availability

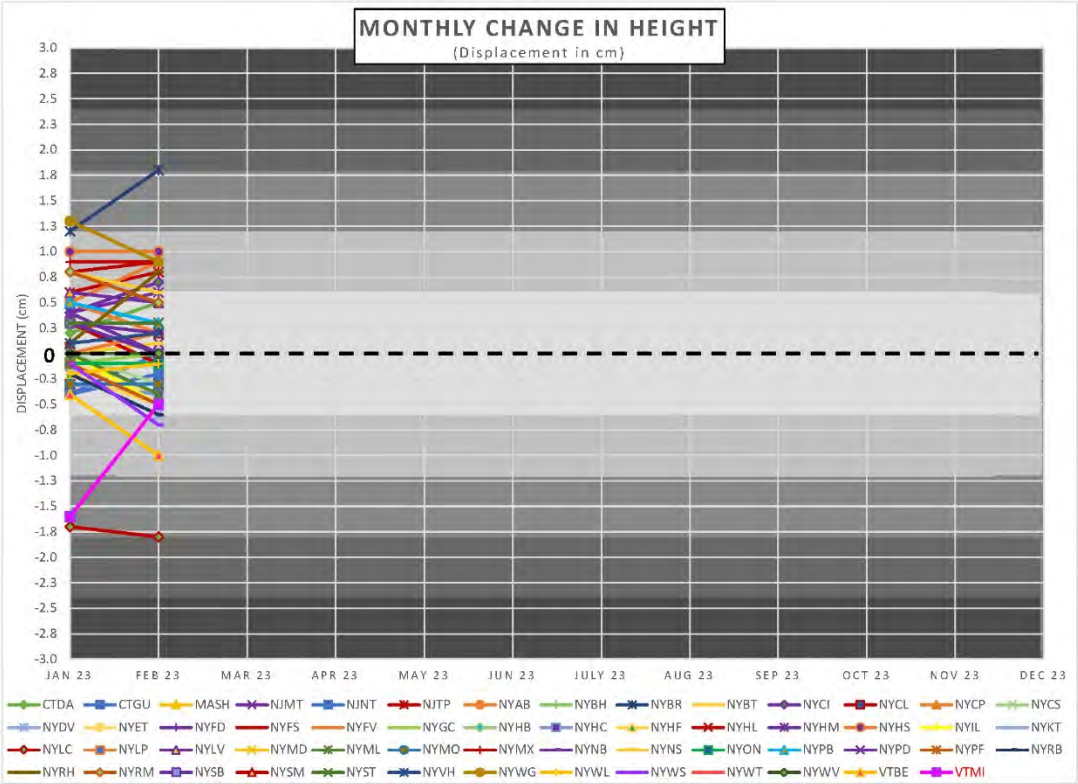
- 39 NYSDOT CORS (Continuously Operating Reference Stations) have been included in the NGS National CORS Network. Station information including coordinates, site logs, and static GPS data files are available through the [NGS website](#).
- 7 additional NYSDOT CORS are not NGS CORS and have been positioned by NYSDOT.
- 3 New York City Department of Design and Construction (NYCDDC) CORS are not NGS CORS and have also been positioned by NYSDOT.
- 11 CORS from adjoining states are NGS CORS. Station information including coordinates, site logs, and static GPS data files are available through the [NGS website](#).
- Static RINEX data for all 39 NYSDOT CORS and the 3 NYCDDC CORS are available through this website. For access to static data, you must [register](#) on this website.

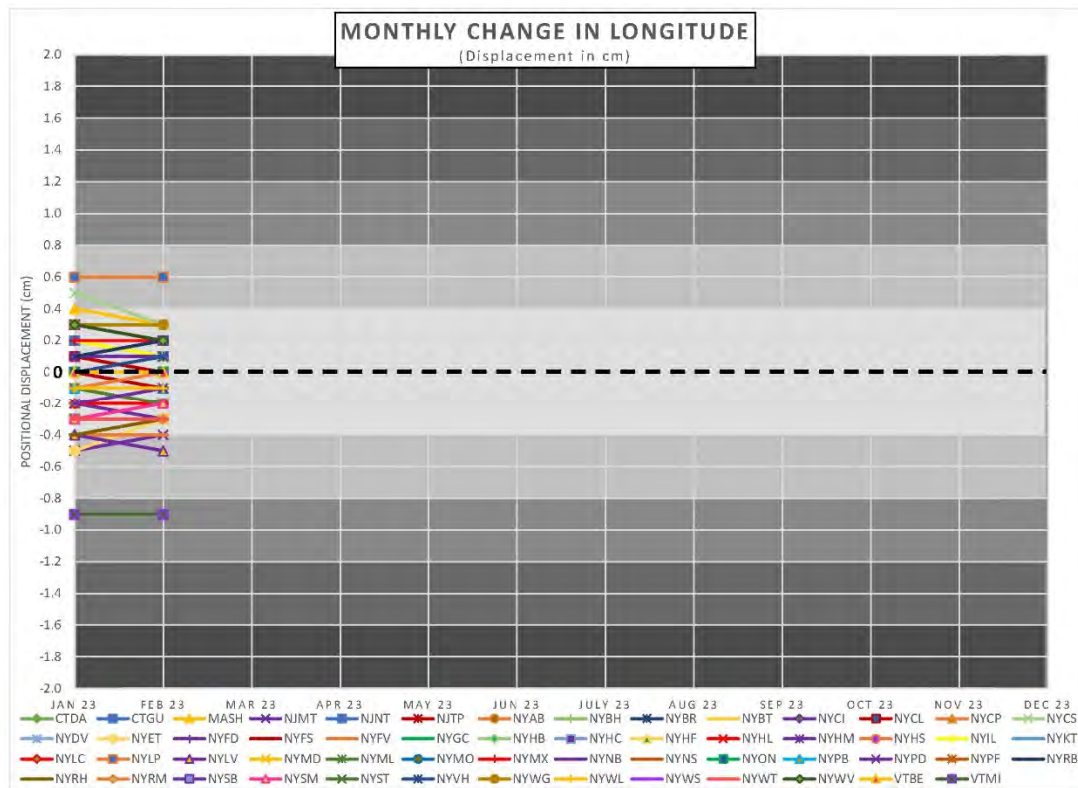
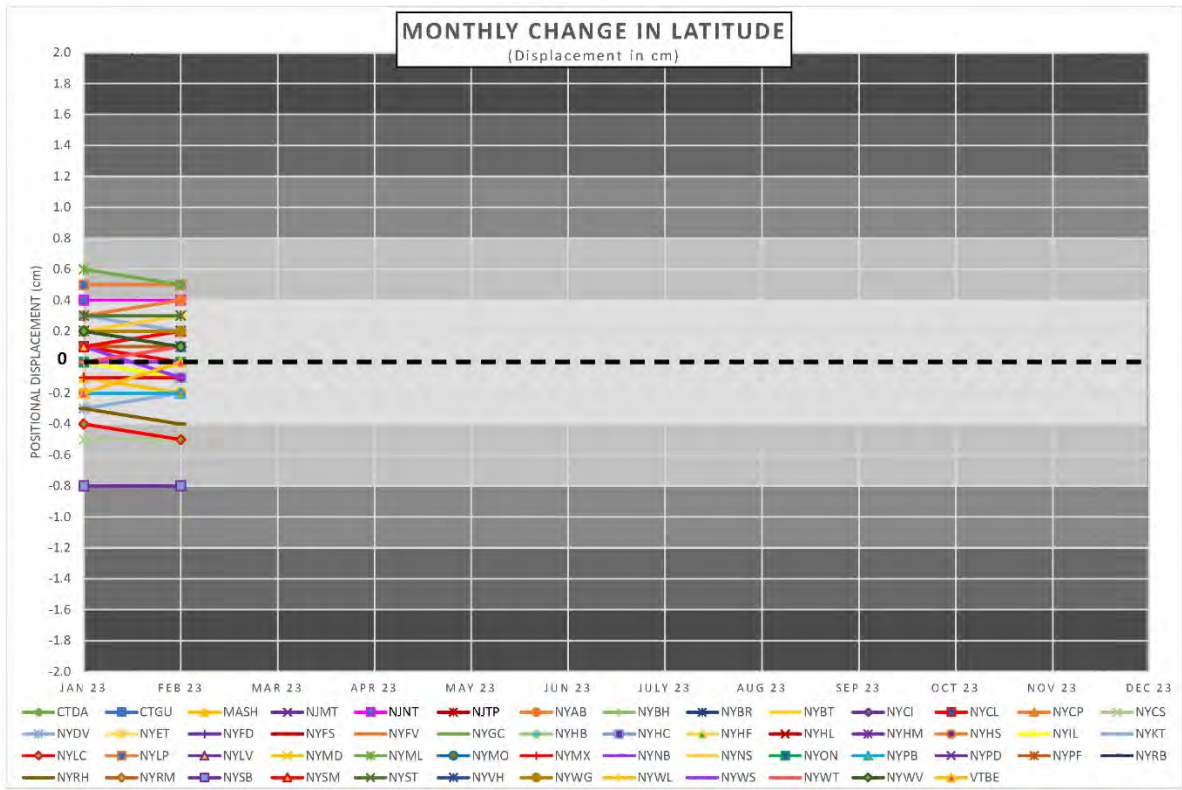
Data Reliability

NYSDOT static data is logged on the receiver at a 0.5 second rate and files are downloaded through the NYSDOT information technology (IT) network every ½ hour. This download is dependent upon NYSDOT IT network connectivity. If a CORS site loses connectivity the receiver will continue to store raw data. When network connectivity is restored, raw data files will be downloaded. If the network is down for more than 48 hours the CORS receiver's memory may fill up and data could be lost.

Site ID	Month	Latitude	Longitude	Ellipsoid (m)	Lat_Delta	Lon_Delta	Ht_Delta
CTDA	0223	41.06585	-73.5072	-13.265	0.2	0	0.5
CTGU	0223	41.28937	-72.6679	-18.121	0	0.1	-0.2
KNGS	0223	44.21868	-76.5173	49.958	-0.1	0.3	0.7
MASH	0223	42.14049	-73.3642	175.59	-0.2	0.3	0.3
NJI2	0223	40.74147	-74.1777	17.942	0.1	0.1	0.3
NJMT	0223	40.79649	-74.4831	101.127	-0.1	-0.4	0.1
NJNT	0223	40.20934	-74.0366	-15.518	0.4	0.1	0
NJTP	0223	40.54051	-74.4678	0.377	-0.2	-0.1	0.8
NYAB	0223	42.71358	-73.8163	90.081	0.4	0	0.9
NYBH	0223	42.10975	-75.8274	313.085	0.2	-0.2	-0.1
NYBR	0223	40.68865	-74.0013	-19.023	0.1	0	1.8
NYBT	0223	42.98832	-78.1223	262.24	0.1	-0.3	0.1
NYCI	0223	40.76062	-73.1977	-13.853	0.1	-0.3	0.7
NYCL	0223	42.58436	-76.2113	330.886	0	0	-0.1
NYCP	0223	42.1879	-77.1434	277.631	0	-0.1	0.5
NYCS	0223	42.66745	-74.4864	270.672	-0.5	0.3	-0.3
NYDV	0223	42.54891	-77.6979	188.584	-0.2	0.2	-0.6
NYET	0223	44.20968	-73.5405	174.25	0.3	-0.3	-0.4
NYFD	0223	42.42827	-79.3396	212.501	-0.1	-0.1	0
NYFS	0223	42.20466	-78.1439	442.568	0	-0.2	0.9
NYFV	0223	42.93917	-74.3533	104.674	-0.1	-0.4	0.2
NYGC	0223	40.73466	-73.6003	4.798	0.2	-0.1	0
NYHB	0223	42.71741	-78.8465	212.505	0	-0.3	-0.4
NYHC	0223	41.95833	-75.2927	260.709	-0.1	-0.2	-0.4
NYHF	0223	43.31767	-73.5687	64.592	0.2	0.1	-0.5
NYHL	0223	44.30876	-75.4494	117.574	0	-0.1	-0.3
NYHM	0223	43.01842	-74.9959	95.294	0.3	0.1	0.6
NYHS	0223	42.25232	-73.7575	22.075	-0.2	0	1
NYIL	0223	43.78268	-74.2777	501.879	-0.1	0.1	-0.5
NYKT	0223	41.93694	-74.0312	30.357	0.2	-0.2	0.2
NYLC	0223	41.48108	-73.6515	202.064	-0.5	-0.2	-1.8
NYLP	0223	43.16524	-78.7537	166.302	0.5	0.6	0.2
NYLV	0223	43.79646	-75.4854	241.566	0	-0.5	0.5
NYMD	0223	41.40681	-74.4428	128.231	-0.2	-0.3	0.3
NYML	0223	44.87094	-74.2882	195.222	0.5	-0.2	-0.4
NYMO	0223	41.646	-74.6623	400.169	0.1	0	-0.3
NYMX	0223	43.47011	-76.2319	91.153	-0.1	0.2	0.9
NYNB	0223	41.49522	-74.0255	23.18	-0.1	0.1	0.2
NYNS	0223	43.11882	-76.1416	98.598	0.3	-0.1	0.6
NYON	0223	42.44023	-75.1118	307.054	0	0	-0.1
NYPB	0223	44.68072	-73.454	30.155	-0.2	-0.1	0.3
NYPD	0223	44.65252	-75.0418	109.817	0.2	-0.1	0
NYPF	0223	43.09319	-77.5253	113.473	0.1	-0.2	-0.5
NYRB	0223	44.30387	-74.0784	466.845	-0.4	0.2	-0.6
NYRH	0223	40.92336	-72.714	-7.943	-0.4	-0.3	0.8

Site ID	Month	Latitude	Longitude	Ellipsoid (m)	Lat_Delta	Lon_Delta	Ht_Delta
NYRM	0223	43.17779	-75.4872	128.555	0.1	-0.3	0.5
NYSB	0223	42.67918	-75.5132	297.094	-0.8	0.2	0
NYSM	0223	42.19205	-78.7474	410.616	0.2	-0.2	0.2
NYST	0223	43.06159	-73.8042	69.628	0.3	0	0.3
NYVH	0223	41.08228	-73.8178	63.299	0.1	0.1	0.2
NYWG	0223	42.35105	-76.8759	283.555	0.2	0.3	0.9
NYWL	0223	42.89867	-76.852	109.958	0	-0.1	-0.1
NYWS	0223	42.70087	-78.1261	314.429	0	0	-0.7
NYWT	0223	44.02824	-75.9211	118.253	0.1	-0.3	0
NYWV	0223	42.01239	-76.5216	222.167	0.1	0.2	0
PABT	0223	41.77926	-76.4471	226.146	0.2	0.2	0.1
PWEL	0223	43.23672	-79.2197	44.986	-0.4	-0.4	1
UPTC	0223	41.62881	-79.6641	343.156	0.5	0.2	0
VCAP	0223	44.26197	-72.5824	160.56	0.6	-0.5	0
VTBE	0223	42.88251	-73.1999	183.873	0	0	-1
VTDA	0223	43.34995	-72.9952	193.978	-0.1	0	0.6
VTMI	0223	43.99862	-73.1526	96.028	0.9	-0.9	-0.5
VTRU	0223	43.60712	-72.9794	161.448	0.1	-0.3	0.1
VTSA	0223	44.80907	-73.0826	117.597	0.1	-0.2	1.4





Current Reference Station Coordinates (As of Dec 27th 2019) NAD83(2011) EPOCH 2010 MYCS2

As a result of the multi-year CORS solution 2 (MYCS2), the following stations and NAD83 (2011) EPOCH 2010.0 (MYCS2) positions will be used in NYSNet, beginning December 27, 2019 at noon. RINEX and RTCM Data should reflect these positions.

Positions for the sites below with the **Source** labeled 'NGS' are based on NGS published MYCS2 coordinates. Positions for the sites below with the Source labeled 'OPA' have not been published by NGS. OPA Positions were computed by processing monthly datasets of observations in an OPUS Projects network adjustment.

Users must take special note that CORS defined in NAD83(2011) use [absolute antenna calibrations](#). Absolute values should be used when processing data with CORS coordinates in NAD 83(2011) EPOCH 2010.0

GEOD18 could be used to estimate NAVD88 heights from these NAD83 ellipsoidal heights.

NGS IDs in **PINK** are capable of tracking GNSS (GPS, GLONASS, Galileo, Beidou), **GREEN** are GGG (GPS, GLONASS, Galileo) and **RED** are GPS and GLONASS only.

Site Name	NGS ID	RTCM ID	Latitude	Longitude	El. Height (m)	Antenna Type	Source
Albany	NYAB	49	42° 42' 48.87329" N	73° 48' 58.50156" W	90.072	LEIAR10 NONE	OPA
Batavia	NYBT	7	42° 59' 17.96047" N	78° 07' 20.37533" W	262.239	LEIAR10 NONE	NGS
Bennington	VTBE	69	42° 52' 57.02920" N	73° 11' 59.64831" W	183.883	ADVNULANTENNA	NGS
Binghamton	NYBH	12	42° 06' 35.09742" N	75° 49' 38.70320" W	313.086	LEIAR10 NONE	NGS
Brooklyn Pier	NYBR	66	40° 41' 19.14463" N	74° 00' 04.57875" W	-19.041	LEIAR10 NONE	NGS
Central Islip	NYCI	16	40° 45' 38.23688" N	73° 11' 51.78727" W	-13.860	LEIAR10 NONE	NGS
Cobleskill	NYCS	47	42° 40' 02.83647" N	74° 29' 10.94789" W	270.675	AR20 LEIM	NGS
Coopers Plains	NYCP	11	42° 11' 16.44500" N	77° 08' 36.32842" W	277.626	LEIAR10 NONE	NGS
Cortland	NYCL	31	42° 35' 03.70726" N	76° 12' 40.79269" W	330.887	LEIAR10 NONE	NGS
Danby	VTDA	52	43° 20' 59.81555" N	72° 59' 42.85117" W	193.972	ADVNULANTENNA	NGS
Dansville	NYDV	33	42° 32' 56.09346" N	77° 41' 52.59565" W	188.590	LEIAR20 LEIM	NGS
Darien	CTDA	50	41° 03' 57.06981" N	73° 30' 25.94223" W	-13.270	ADVNULANTENNA	NGS
Elizabethtown	NYET	28	44° 12' 34.85095" N	73° 32' 25.85252" W	174.254	LEIAR10 NONE	NGS
Fredonia NY	NYFD	17	42° 25' 41.78564" N	79° 20' 22.71934" W	212.501	LEIAR10 NONE	NGS
Friendship	NYFS	10	42° 12' 16.79293" N	78° 08' 37.93910" W	442.559	LEIAR10 NONE	NGS
Fultonville	NYFV	9	42° 56' 20.99831" N	74° 21' 12.01389" W	104.672	LEIAR10 NONE	NGS
Garden City	NYGC	60	40° 44' 04.76038" N	73° 36' 00.97478" W	4.798	LEIAR10 NONE	OPA
Guilford	CTGU	37	41° 17' 21.74225" N	72° 40' 04.44440" W	-18.119	ADVNULANTENNA	NGS
Hailesboro	NYHL	45	44° 18' 31.54762" N	75° 26' 57.68946" W	117.577	LEIAT504GG LEIS	NGS
Hamburg	NYHB	8	42° 43' 02.66324" N	78° 50' 47.27367" W	212.509	LEIAR20 LEIM	NGS
Hancock	NYHC	30	41° 57' 29.98193" N	75° 17' 33.87633" W	260.713	LEIAR10 NONE	NGS
Herkimer	NYHM	24	43° 01' 06.29922" N	74° 59' 45.08384" W	95.288	LEIAR10 NONE	OPA
Hudson	NYHS	22	42° 15' 08.35975" N	73° 45' 27.16058" W	22.065	LEIAR10 NONE	NGS
Hudson Falls	NYHF	1	43° 19' 03.62774" N	73° 34' 07.36957" W	64.597	LEIAR20 LEIM	OPA
Indian Lake	NYIL	46	43° 46' 57.63836" N	74° 16' 39.86199" W	501.884	LEIAT504GG LEIS	NGS
Kingston NY	NYKT	71	41° 56' 12.97178" N	74° 01' 52.21841" W	30.355	LEIAR10 NONE	NGS
Lake Carmel	NYLC	20	41° 28' 51.87633" N	73° 39' 05.36904" W	202.082	LEIAR10 NONE	NGS
Lockport	NYLP	35	43° 09' 54.85467" N	78° 45' 13.35743" W	166.300	LEIAR20 LEIM	NGS
Lowville	NYLV	26	43° 47' 47.24339" N	75° 29' 07.55478" W	241.561	LEIAR10 NONE	NGS
Malone	NYML	27	44° 52' 15.38491" N	74° 17' 17.34335" W	195.226	LEIAR10 NONE	NGS
Mexico NY	NYMX	29	43° 28' 12.37914" N	76° 13' 54.88628" W	91.144	LEIAR10 NONE	NGS
Middlebury	VTMI	70	43° 59' 55.02531" N	73° 09' 09.38026" W	96.033	ADVNULANTENNA	NGS
Middletown	NYMD	21	41° 24' 24.52222" N	74° 26' 34.07802" W	128.228	LEIAR10 NONE	NGS
Monticello	NYMO	42	41° 38' 45.60382" N	74° 39' 44.18109" W	400.172	LEIAR20 LEIM	OPA
Morristown	NYMT	77	40° 47' 47.35033" N	74° 28' 59.33925" W	101.126	LEIAR10 NONE	NGS
NJ12	NJ12	79	40° 44' 29.30554" N	74° 10' 39.72604" W	17.939	LEIAR10 NONE	NGS
Neptune Township	NJNT	73	40° 12' 33.62002" N	74° 02' 11.58981" W	-15.518	LEIAR10 NONE	NGS
Newburgh	NYNB	14	41° 29' 42.80590" N	74° 01' 31.97326" W	23.178	LEIAR10 NONE	NGS
North Syracuse	NYNS	5	43° 07' 07.74867" N	76° 08' 29.77295" W	98.592	LEIAR10 NONE	OPA
Oneonta	NYON	13	42° 26' 24.81507" N	75° 06' 42.50832" W	307.055	LEIAR10 NONE	NGS
Piscataway	NJTP	41	40° 32' 25.84185" N	74° 28' 04.13513" W	0.369	LEIAX1202GG NONE	NGS
Pittsford	NYPF	32	43° 05' 35.48476" N	77° 31' 31.11257" W	113.478	LEIAR10 NONE	NGS
Plattsburg	NYPB	2	44° 40' 50.58257" N	73° 27' 14.30536" W	30.152	LEIAR10 NONE	NGS
Potsdam	NYPD	3	44° 39' 09.05929" N	75° 02' 30.50512" W	109.817	LEIAR10 NONE	NGS
Ray Brook	NYRB	40	44° 18' 13.92282" N	74° 04' 42.07527" W	466.851	LEIAR20 LEIM	NGS
Riverhead	NYRH	19	40° 55' 24.08885" N	72° 42' 50.56089" W	-7.951	LEIAR10 NONE	NGS
Rome	NYRM	25	43° 10' 40.02871" N	75° 29' 13.88235" W	128.550	LEIAR10 NONE	NGS
Rutland	VTRU	38	43° 36' 25.63962" N	72° 58' 45.90379" W	161.447	ADVNULANTENNA	NGS
Salamanca	NYSM	34	42° 11' 31.38162" N	78° 44' 50.46542" W	410.614	LEIAR10 NONE	NGS
Saratoga	NYST	23	43° 03' 41.73558" N	73° 48' 15.01017" W	69.625	LEIAR10 NONE	NGS
Sheffield	MASH	15	42° 08' 25.75402" N	73° 21' 51.06354" W	175.587	ADVNULANTENNA	NGS
Sherburne	NYSB	36	42° 40' 45.03231" N	75° 30' 47.47782" W	297.094	LEIAR10 NONE	NGS
Valhalla	NYVH	0	41° 04' 56.22099" N	73° 49' 04.12573" W	63.297	LEIAR10 NONE	NGS
Warsaw	NYWS	39	42° 42' 03.12649" N	78° 07' 33.89526" W	314.436	LEIAR20 LEIM	OPA
Waterloo	NYWL	6	42° 53' 55.22725" N	76° 51' 07.30237" W	109.959	LEIAR10 NONE	NGS
Watertown	NYWT	4	44° 01' 41.65812" N	75° 55' 15.94881" W	118.253	LEIAR10 NONE	NGS
Watkins Glen	NYWG	43	42° 21' 03.79603" N	76° 52' 33.30070" W	283.546	LEIAR10 NONE	NGS
Waverly	NYWV	44	42° 00' 44.60018" N	76° 31' 17.66891" W	222.167	LEIAR20 LEIM	NGS

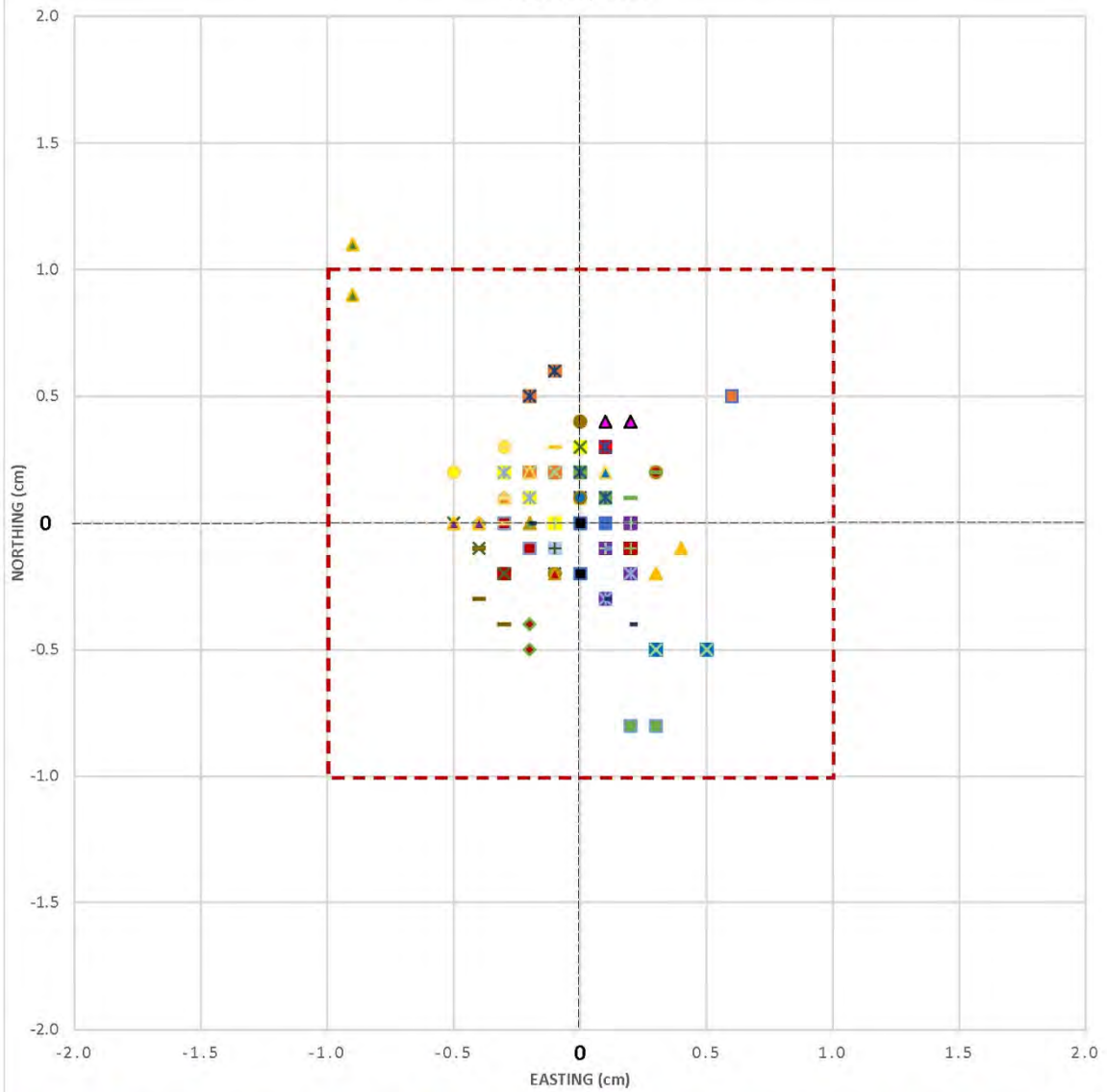
1/12/23: Updated to show the units for Ellipsoid Height (meters)

MASH, NJNT, NJTP, NYBR, NYLP, NYNB, NYSB, NYWG and VTDA were updated 12/29/22.

See NGS for superseded coordinates.

MONTHLY CHANGE IN POSITION (Displacement in cm)

Feburary 2023



- | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CTDA | CTGU | MASH | NJMT | NJTP | NYAB | NYBH | NYBR | NYBT | NYCI | NYCL | NYCP | NYCS | NYDV |
| NYET | NYFD | NYFS | NYFV | NYHB | NYHC | NYHF | NYHL | NYHM | NYHS | NYIL | NYGC | NYKT | NYLC |
| NYLP | NYLV | NYMD | NYML | NYMO | NYMX | NYNB | NYNS | NYON | NYPB | NYPD | NYPF | NYRB | NYRH |
| NYRM | NYSB | NYSM | NYST | NYVH | NYWG | NYWL | NYWS | NYWT | NYWV | VTBE | VTMI | NJNT | |

NYSNet Real Time Network – Mount Point Descriptions

Mount Points in **Blue** include GPS only (G)

Mount points in **Red** are utilizing GPS and GLONASS (GG)

Mount points in **Green** are utilizing GPS with L5, GLONASS and Galileo (GGG)

Mount Points in **Pink** include GPS with L5, GLONASS, Galileo and BeiDou (GNSS)

Preferred GNSS RTCM Mount Points

near_msm*

Single Base RTK corrections for the nearest reference station, based on NMEA position sent in from Rover. Provides RTCM MSM (Multi Signal Messages) which can include signals from GPS, GLONASS and Galileo Satellite Systems. The accuracy of using a single reference station can be affected by atmospheric differences at the reference station location and the rover location. User should refer to their rover specifications for accuracy limitations of single baseline RTK. Usually, using survey grade rover's cm positioning can only be maintained when rover is <10k from a single reference station.

net_msm_imax*

Network RTK (NRTK) from a network cell (group) of reference stations, based on NMEA position sent in from Rover. Provides RTCM MSM (Multi Signal Messages) which include differential corrections for the nearest reference station that have been individualized for the rover position. The NYSNet software will interpolate correction differences for the rover position, apply them to differential corrections for the nearest reference station, and send these individualized network RTK corrections to the rover. NRTK models the correction differences within the network cell to reduce the ppm error caused by atmospheric differences, possibly extending the RTK rover range from the reference station.

net_msm_vrs*

Network RTK created by virtually relocating a real reference station to an arbitrary point near the rover user. The purpose of this virtual reference station (VRS) is to reduce the baseline distance between the rover and the reference station to efficiently remove spatially correlated errors. The product sends interpolated corrections (ionospheric and geometric) to the rover and applies them to the raw data. These corrections are generated from an automatic or fixed cell according to the rover position previously sent.

* A user may be able to get **GNSS** depending on what station(s) they're connecting too.

Older Mount Points:

NearSite_RTCMv3

Single Base RTK corrections for the nearest reference station, based on NMEA position sent in from Rover. Provides RTCM version 3, extended messages to include GPS and GLONASS (**GG**). The accuracy of using a single reference station can be affected by atmospheric differences at the reference station location and the rover location. User should refer to their rover specifications for accuracy limitations of single baseline RTK. Usually, cm positioning can only be maintained when rover is <10k from a single reference station.

NearSite_CMV

Similar to NearSite_RTCMv3 above, except in Trimble CMV format and GPS (G) only.

NearSite_CMV+

Similar to NearSite_RTCMv3 above, except in Trimble CMV+ format. GPS and GLONASS only (GG).

NetCell_MAX_RTCMv3

Network RTK (NRTK) from a network cell (group) of reference stations, based on NMEA position sent in from Rover. Provides RTCM version 3, message types 1015 and 1016 which include differential corrections for the nearest reference station, and correction differences for a network of reference stations.

With a rover that can use RTCM version 3 it can understand message types 1015 and 1016. It can then use these messages to determine an interpolated correction difference at the rover location and apply it to the differential corrections for the nearest reference station, thus determining a network RTK position for the rover. Network RTK models the correction differences within the network cell and may reduce the error caused by atmospheric differences, possibly extending the RTK rover range from the reference station. Uses GPS (G) only.

NetCell_iMAX_RTCMv3

Network RTK (NRTK) from a network cell (group) of reference stations, based on NMEA position sent in from Rover. Provides RTCM version 3, which include differential corrections for the nearest reference station that have been individualized for the rover position.

For a rover that cannot make use of RTCM message types 1004, 1015, and 1016, this product provides a network RTK position. The NYSNet software will interpolate correction differences for the rover position, apply them to differential corrections for the nearest reference station, and send these individualized network RTK corrections to the rover. Network RTK models the correction differences within the network cell and may reduce the error caused by atmospheric differences, possibly extending the RTK rover range from the reference station. Uses GPS (G) only.

NetCell_iMAX_CMV

Similar to NetCell_iMAX above, except in Trimble CMV format. GPS (G) only

NetCell_iMAX_CMV+

Similar to NetCell_iMAX above, except in Trimble CMV+ format. GPS (G) only.

GG_CMV+iMAX

Similar to NetCell_iMAX above, except in Trimble CMV+ format and utilizing GPS and GLONASS

GG_RTCM3_MAX

Similar to NetCell_MAX above, but GPS and GLONASS.

GG_RTCM3_iMAX

Similar to NetCell_iMAX above, but GPS and GLONASS.

NetCell_iMAX_CMR

Similar to NetCell_iMAX above, except in Trimble CMR format. GPS (G) only

NetCell_iMAX_CMRP

Similar to NetCell_iMAX above, except in Trimble CMR+ format. GPS (G) only

GG_CMRP_iMAX

Similar to NetCell_iMAX above, except in Trimble CMR+ format and utilizing GPS and GLONASS corrections.

GG_RTCM3_MAX

Similar to NetCell_MAX above, but GPS and GLONASS.

GG_RTCM3_iMAX

Similar to NetCell_iMAX above, but GPS and GLONASS.

GIS Mount Points:**NYAB_GIS_RTCM12**

Differential corrections for a single reference station, NYAB. Provides RTCM version 2, type 1 and 2 messages to allow sub meter positioning. GPS (G) only.

NearSite_GIS_RTCM12

Differential corrections for the nearest reference station, based on NMEA position sent in from Rover. Provides RTCM version 2, type 1 and 2 messages to allow sub meter positioning. GPS (G) only

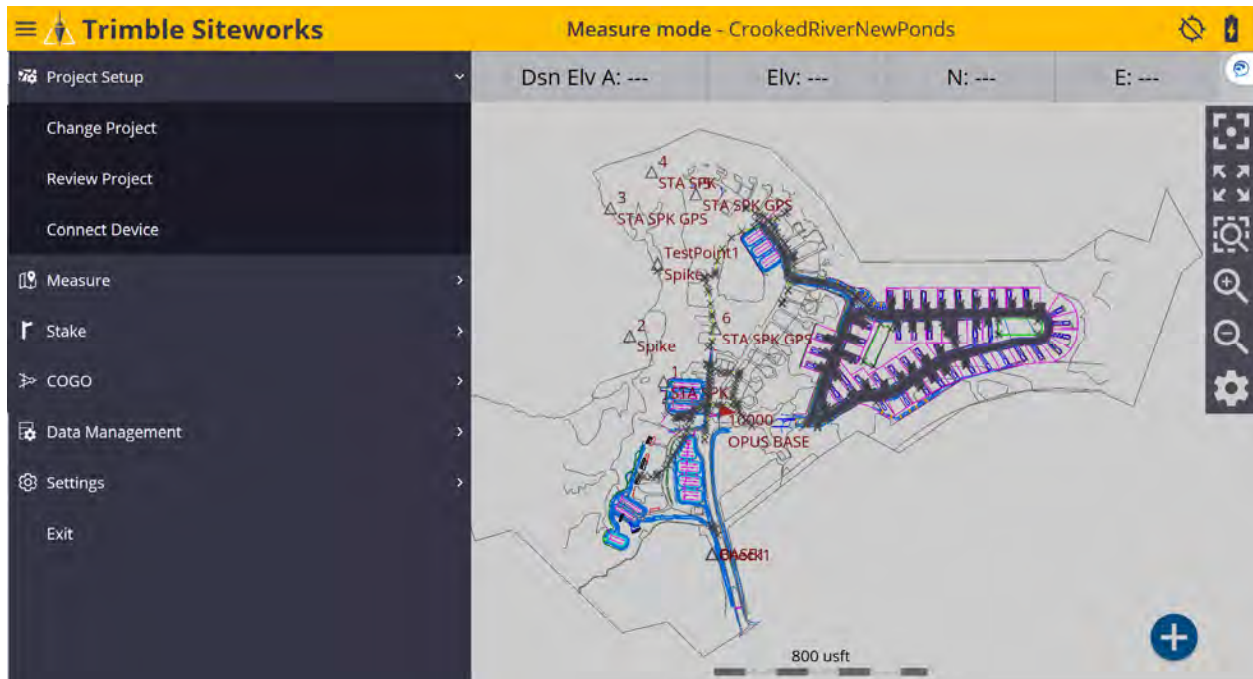
Single Site Mount Points:**(R_ NYAB, etc.)**

Differential corrections for single reference stations. Provides RTCM version 3, MSM (Multi Signal Messages) which has the potential* to receive signals from GPS, GLONASS, Galileo and BeiDou Satellite Systems (GNSS)

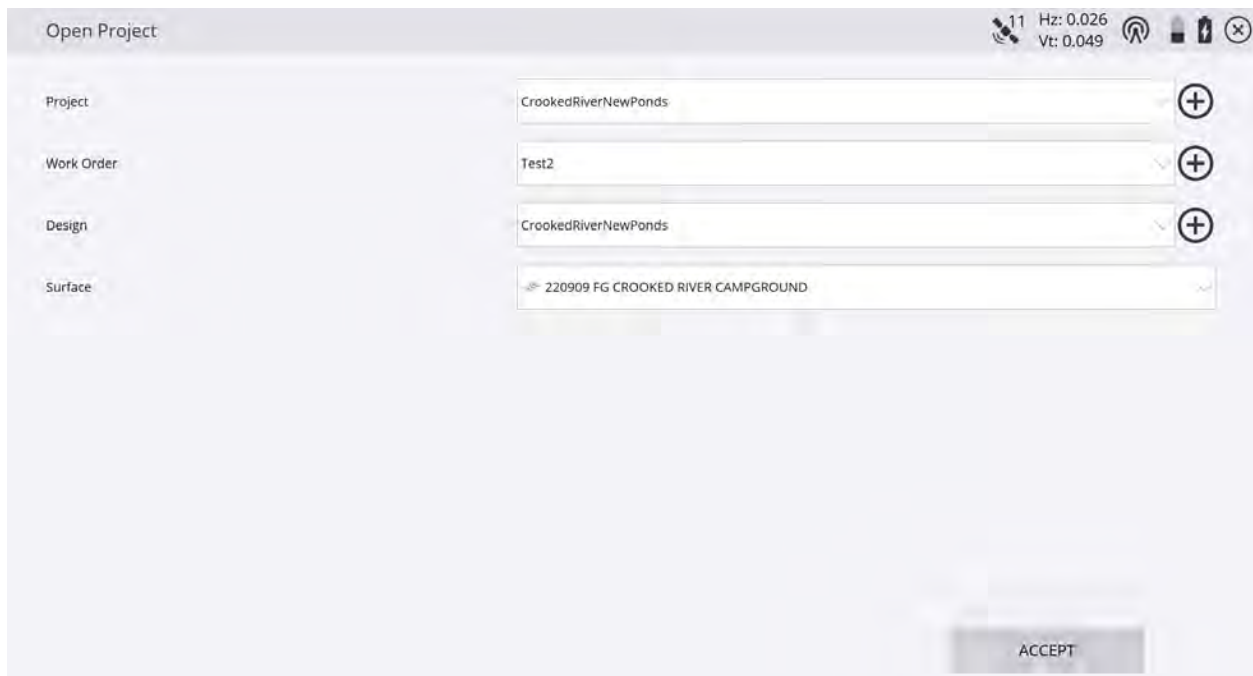
These products can be used by rovers to connect to a particular reference station, or can be used to share data with other Real Time Networks. The mount point is the four-letter code for each site. Only NYSDOT sites are available. When used by RTNetworks, operators should be aware data is has been reduced to the ARP of the reference station antenna using the NGS absolute antenna calibration file.

* The satellite signals depends on the receiver at the base station. For example, R_NYAB can receive GNSS but R_NYBH can only receive GGG.

*On the Siteworks upper left main screen tap the **3-Bar Hamburger Icon** and select **Project Setup>Change Project**.



*Tap the + (*plus sign*) to the right of the **Project** window to create a new project.



*Name your new project in the **Project** window, select the preferred project unit settings from the drop-down lists in each window, tap **NEXT**.

New Project

Project: NewYorkCORS

Distances: US Survey Feet

Angles: Degrees

Coordinate order: P, N, E, Z, D

Grid coordinate: North and East

Azimuth: North

Stationing: 0+00.000

NEXT

*On the **Project Creation Options** screen, check the box next to **Select coordinate system** to use a coordinate system, tap **COORDINATE SYSTEM**.

Project Creation Options

☐ Select project map

☐ Select calibration file

☐ Select control point file

Style guide

File name (.CSV)

☐ Select FXL file

☒ Select coordinate system

Coordinate system: United States/State Plane 1983

Zone: Connecticut 0600

COORDINATE SYSTEM

FINISH

*On the **Select Coordinate System** screen, select the desired Coordinate System, Geoid and Zone, tap **ACCEPT**.

Select Coordinate System

Coordinate system: United States/NAD83

Zone: New York East 3101

Geoid file: GEOID18 (Conus) [g18us.ggf]

ACCEPT

*Once back to the **Project Creation Options** screen, tap **FINISH**.

Project Creation Options

☐ Select control point file

Style guide: Siteworks Default

File name (.CSV): Tap to select file

☐ Select FXL file: Siteworks Default.fxl

☒ Select coordinate system

COORDINATE SYSTEM

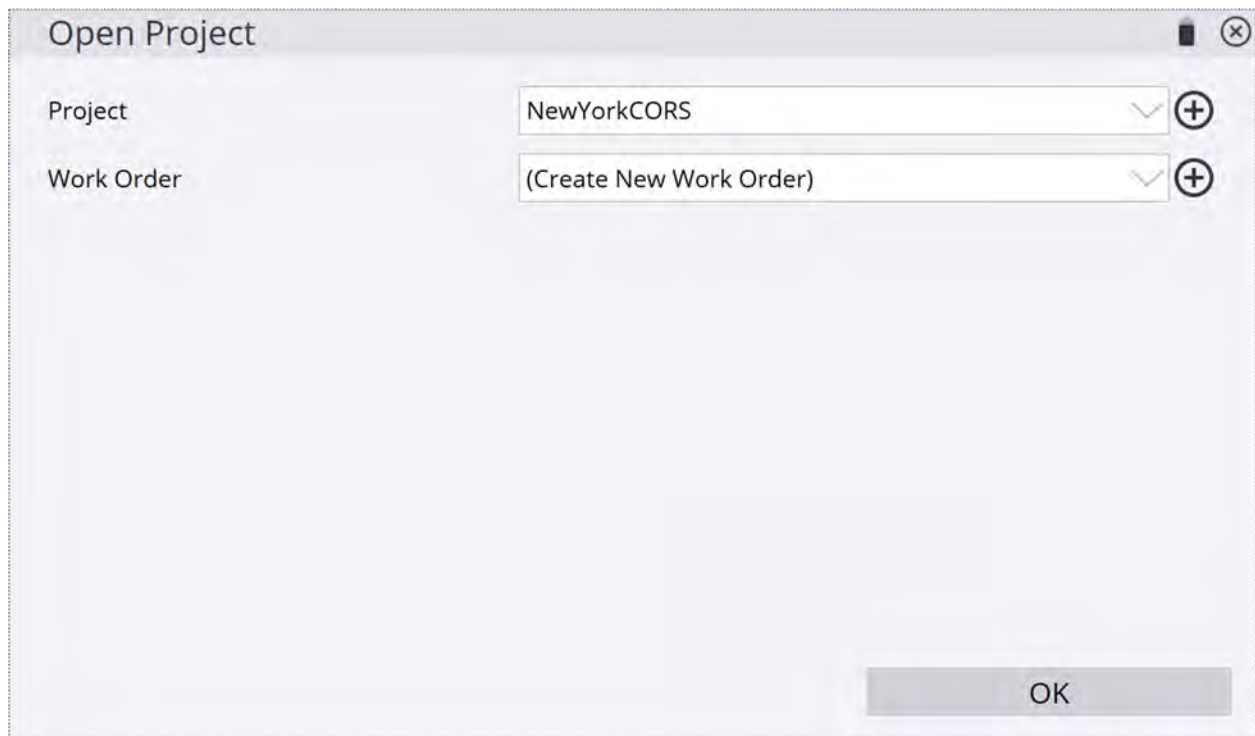
Coordinate system: United States/NAD83

Zone: New York East 3101

Geoid: GEOID18 (Conus)

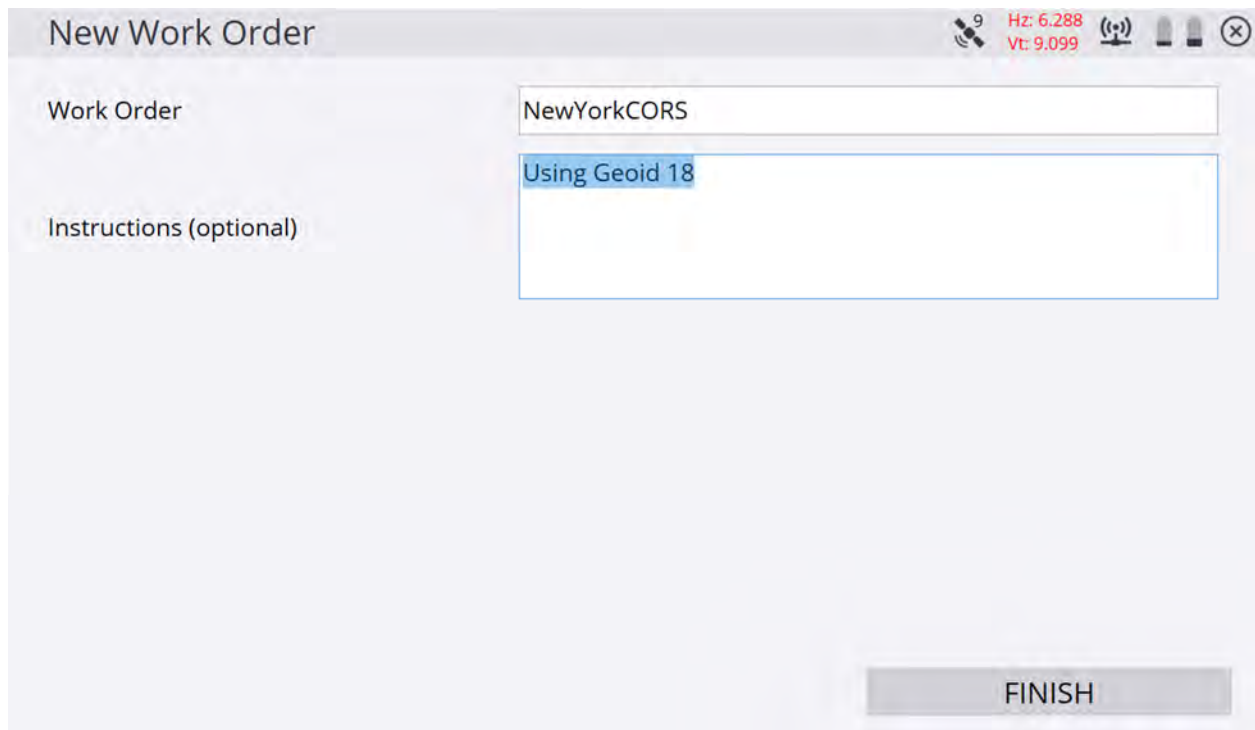
FINISH

*Once back to the **Open Project** screen, tap the + (*plus sign*) and create a new **Work Order**.



The screenshot shows a dialog box titled "Open Project". It has two input fields: "Project" with the value "NewYorkCORS" and "Work Order" with the value "(Create New Work Order)". Both fields have a dropdown arrow and a plus sign icon to their right. At the bottom right, there is an "OK" button.

*After naming the **Work Order**, create **Instructions** in the **Instructions (optional)** window to reference the work order, tap **FINISH**.



The screenshot shows a dialog box titled "New Work Order". It has two input fields: "Work Order" with the value "NewYorkCORS" and "Instructions (optional)" with the value "Using Geoid 18". Both fields have a dropdown arrow and a plus sign icon to their right. At the bottom right, there is a "FINISH" button. The top right corner of the dialog box shows status icons and text: "Hz: 6.288", "Vt: 9.099", and a battery icon.

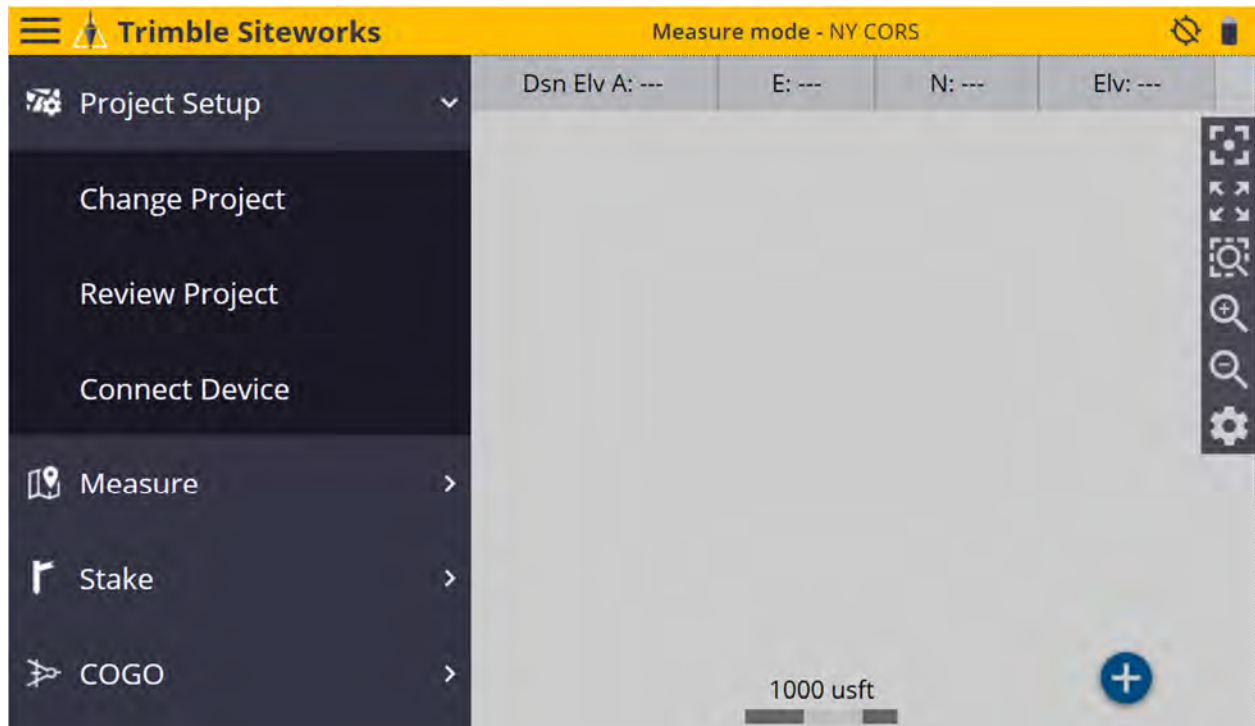
*Tap + (*plus sign*) to create a new **Design** or use (No design needed). For this demonstration we are not using a design, tap **ACCEPT**.

The screenshot shows the 'Open Project' dialog box. It has a title bar with 'Open Project' and status icons. The dialog contains four rows, each with a label on the left and a dropdown menu on the right. The 'Project' and 'Work Order' dropdowns are set to 'NewYorkCORS'. The 'Instructions' dropdown is set to 'Using Geoid 18'. The 'Design' dropdown is set to '(No design needed)'. Each dropdown has a plus sign icon to its right. At the bottom right of the dialog is a large 'ACCEPT' button.

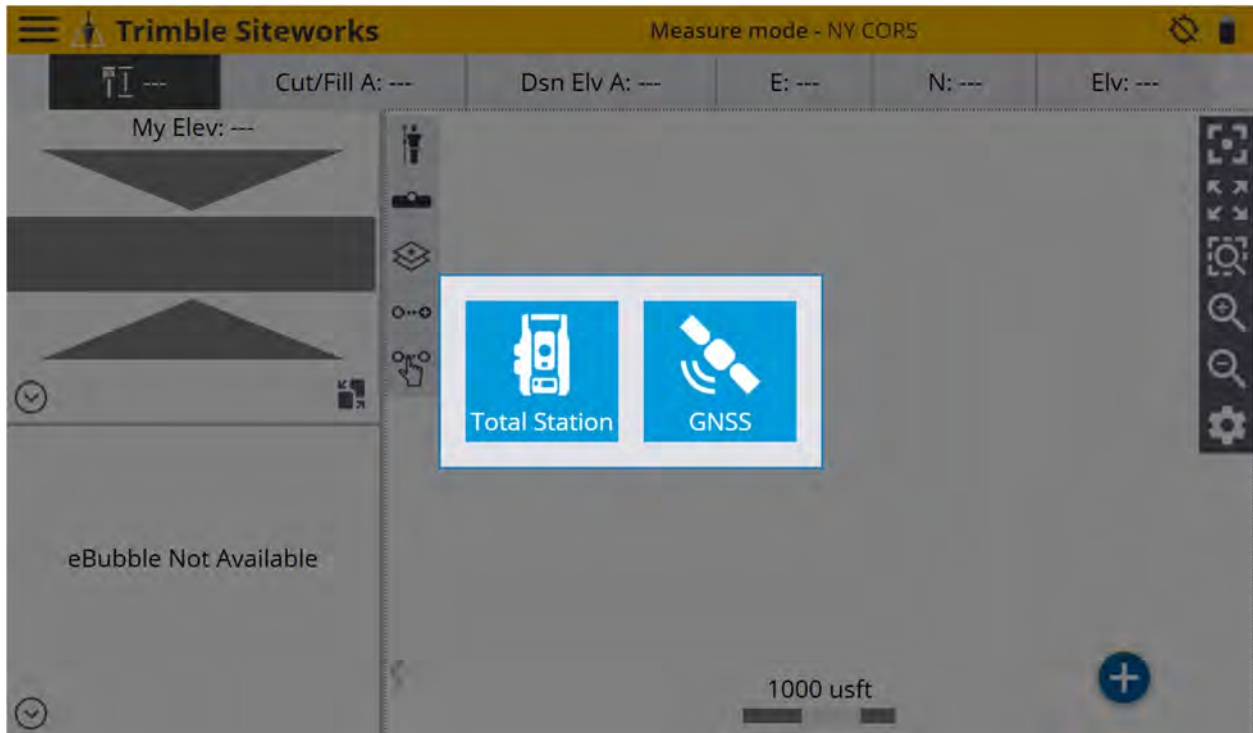
Field	Value
Project	NewYorkCORS
Work Order	NewYorkCORS
Instructions	Using Geoid 18
Design	(No design needed)

ACCEPT

*From the Siteworks upper left main screen tap the **3-Bar Hamburger Icon** and select **Connect Device**.



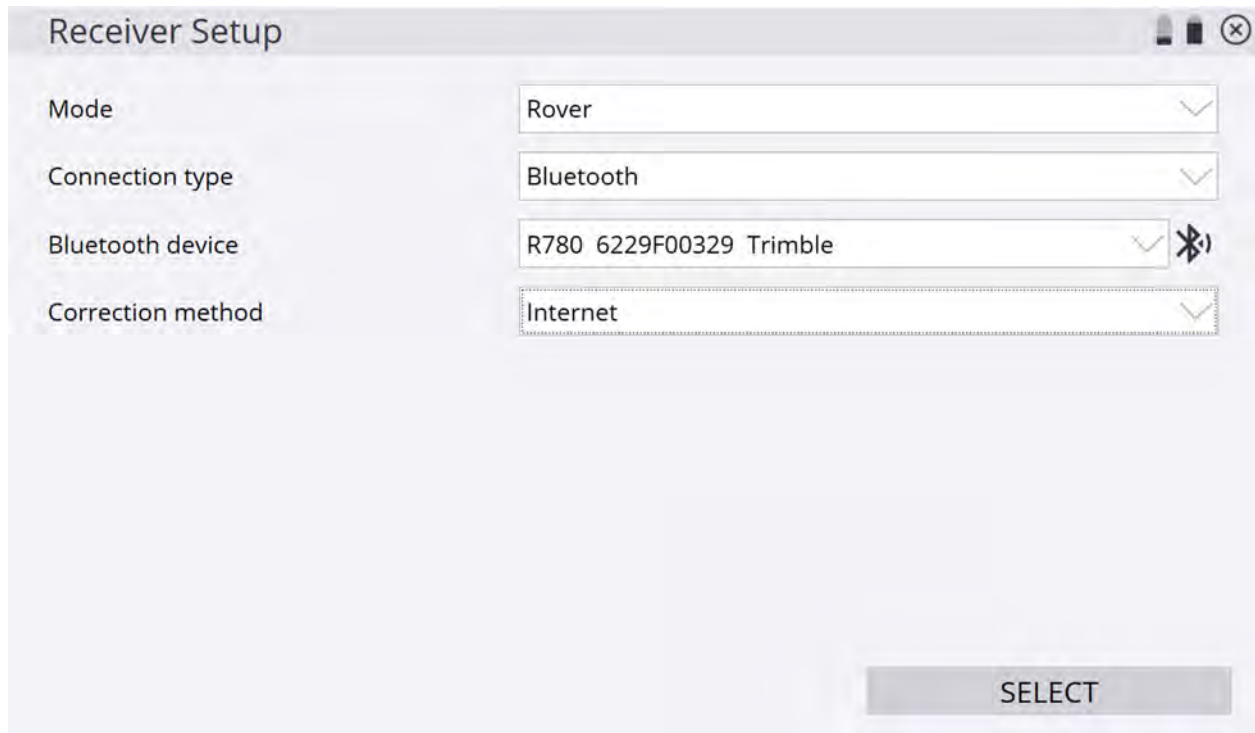
*In **Connect Device** tap on the blue **GNSS Icon** to enter **Receiver Setup** screen.



*Next, select **Rover** from the drop-down list in the **Mode** window, then select **Bluetooth** from the drop-down list in the **Connection type** window.

The image shows the 'Receiver Setup' window in the application. The window has a title bar with the text 'Receiver Setup' and a close button (X) on the right. Inside the window, there are two drop-down menus. The first menu is labeled 'Mode' and has 'Rover' selected. The second menu is labeled 'Connection type' and has 'Bluetooth' selected. At the bottom right of the window, there is a large button labeled 'SELECT'.

*Next, select the Rover from the drop-down list in the **Bluetooth device** window.

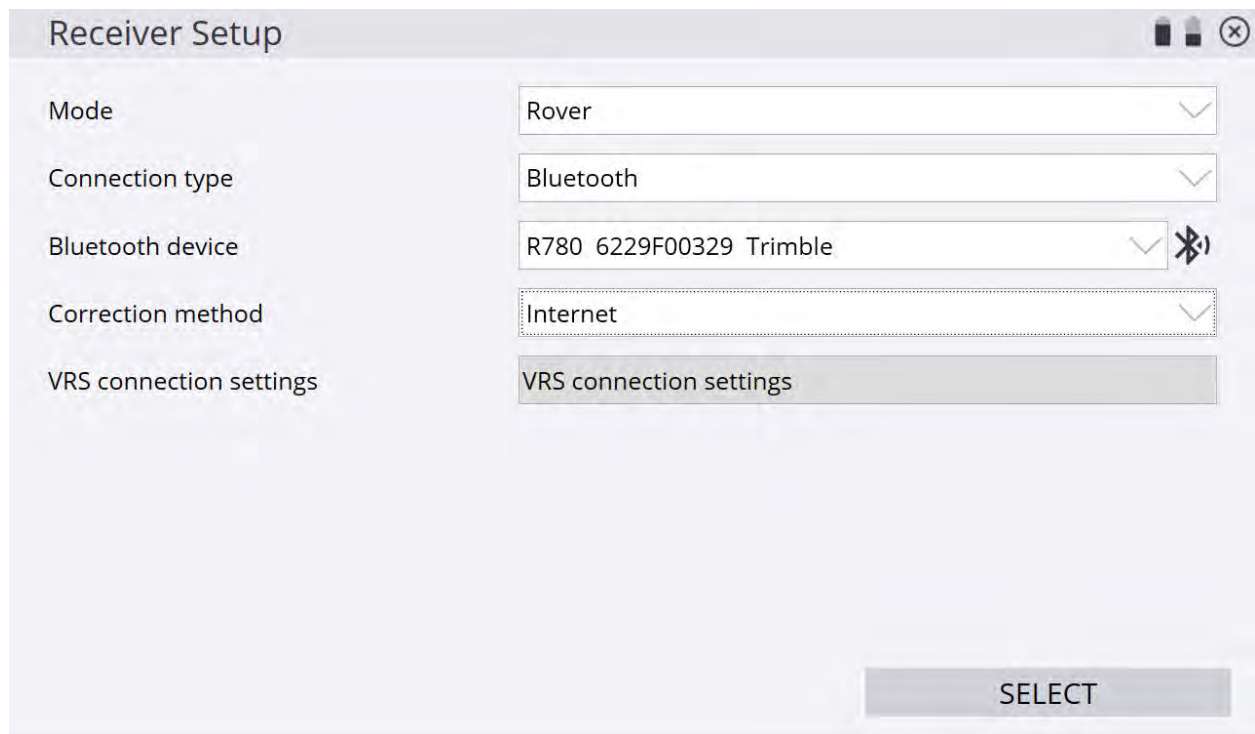


The image shows a 'Receiver Setup' window with a title bar containing a close button. The window has four rows of settings, each with a label on the left and a dropdown menu on the right. The settings are: 'Mode' set to 'Rover', 'Connection type' set to 'Bluetooth', 'Bluetooth device' set to 'R780 6229F00329 Trimble' (with a Bluetooth icon to the right), and 'Correction method' set to 'Internet'. A 'SELECT' button is located at the bottom right of the window.

Label	Value
Mode	Rover
Connection type	Bluetooth
Bluetooth device	R780 6229F00329 Trimble
Correction method	Internet

SELECT

*Next, select **Internet** from the drop-down list in the **Correction method** window and tap **VRS connection settings** in the **VRS connection settings** window.

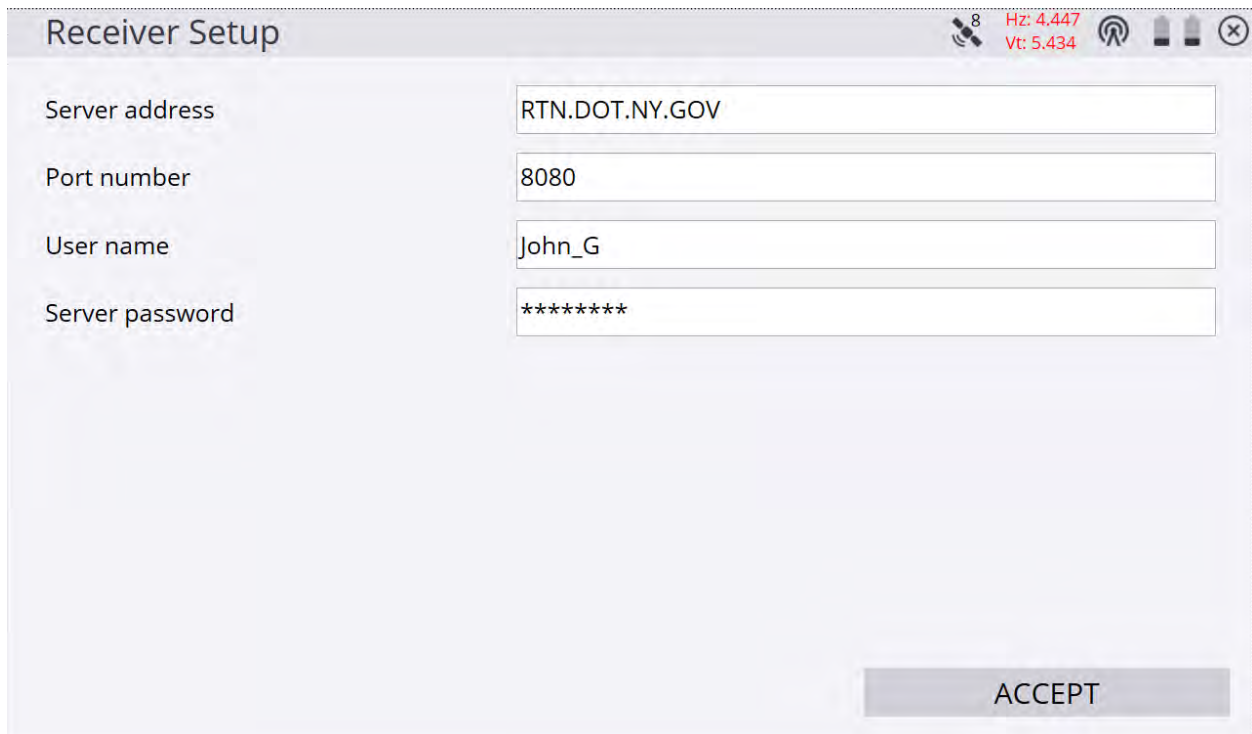


The image shows a 'Receiver Setup' window, similar to the one above, but with an additional row. The settings are: 'Mode' set to 'Rover', 'Connection type' set to 'Bluetooth', 'Bluetooth device' set to 'R780 6229F00329 Trimble' (with a Bluetooth icon to the right), 'Correction method' set to 'Internet', and 'VRS connection settings' set to 'VRS connection settings'. A 'SELECT' button is located at the bottom right of the window.

Label	Value
Mode	Rover
Connection type	Bluetooth
Bluetooth device	R780 6229F00329 Trimble
Correction method	Internet
VRS connection settings	VRS connection settings

SELECT

*On the **Receiver Setup Server** screen, input the **IP Server address**, **Port number**, **User name** and **Server password** into their corresponding windows.

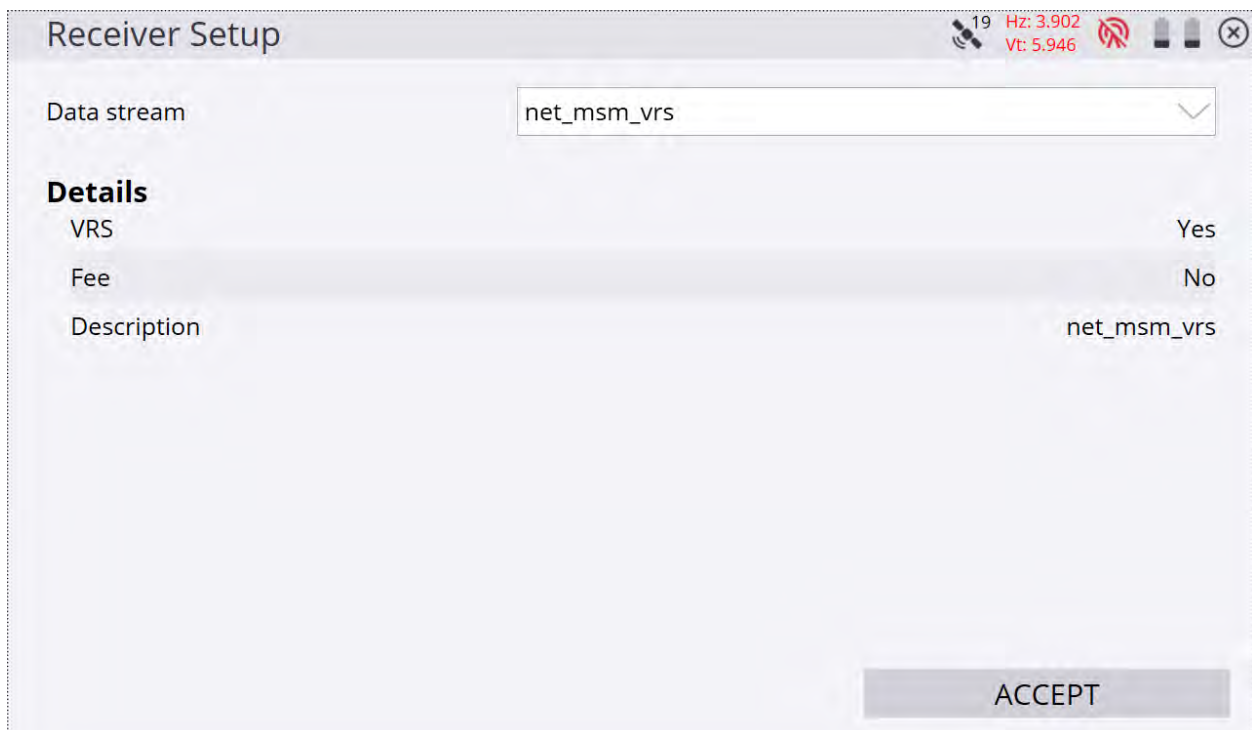


The screenshot shows the 'Receiver Setup' window. The title bar includes a signal strength icon with the number 8, frequency information (Hz: 4.447, Vt: 5.434), and standard window controls. The main area contains four input fields: 'Server address' with the text 'RTN.DOT.NY.GOV', 'Port number' with '8080', 'User name' with 'John_G', and 'Server password' with masked characters '*****'. An 'ACCEPT' button is located at the bottom right.

Server address	RTN.DOT.NY.GOV
Port number	8080
User name	John_G
Server password	*****

ACCEPT

*On the **Receiver Setup** screen select the desired **Data stream** for the VRS connection from the drop-down list in the **Data stream** window, tap **ACCEPT**.



The screenshot shows the 'Receiver Setup' window with the 'Data stream' dropdown menu open, displaying 'net_msm_vrs'. Below this is a 'Details' section with a table. The title bar shows a signal strength icon with the number 19, frequency information (Hz: 3.902, Vt: 5.946), and standard window controls. An 'ACCEPT' button is at the bottom right.

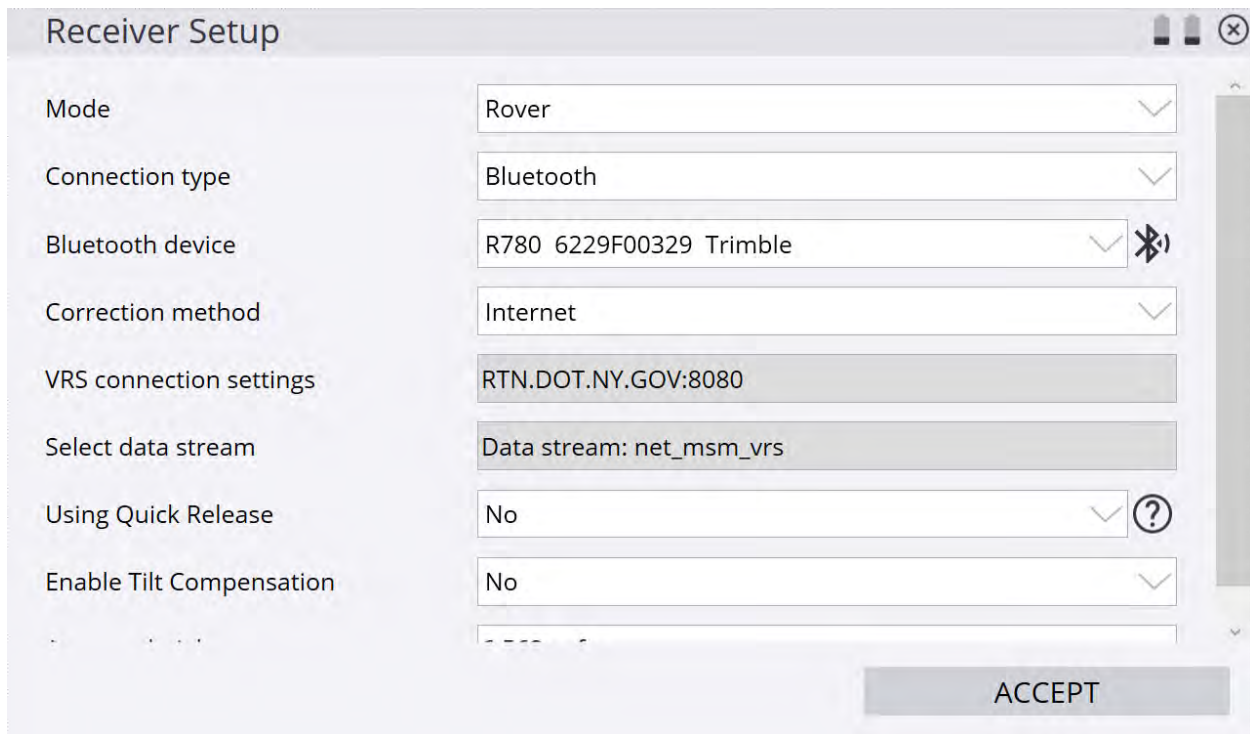
Data stream	net_msm_vrs
-------------	-------------

Details

VRS	Yes
Fee	No
Description	net_msm_vrs

ACCEPT

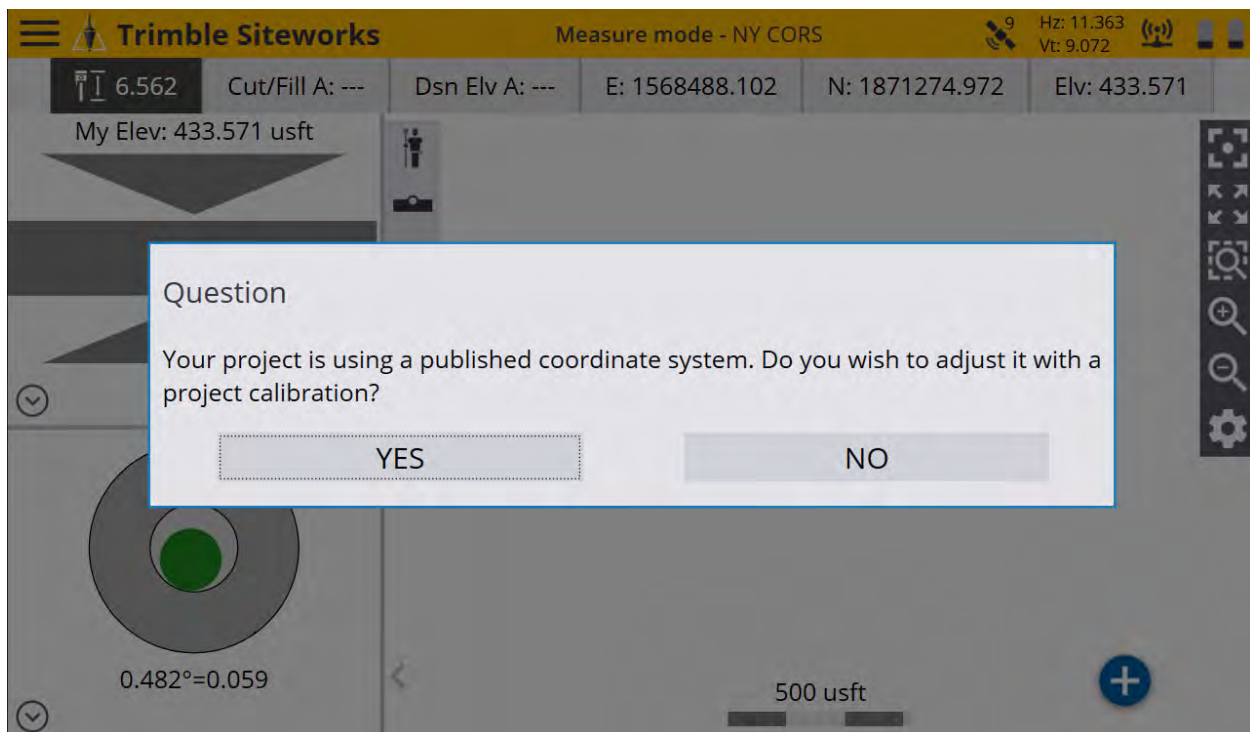
*On the **Receiver Setup** screen select the additional settings for the VRS connection from the drop-down lists in their windows, tap **ACCEPT**.

The image shows the 'Receiver Setup' screen of a mobile application. It features a list of settings on the left and corresponding input fields on the right. The settings include Mode (Rover), Connection type (Bluetooth), Bluetooth device (R780 6229F00329 Trimble), Correction method (Internet), VRS connection settings (RTN.DOT.NY.GOV:8080), Select data stream (Data stream: net_msm_vrs), Using Quick Release (No), and Enable Tilt Compensation (No). Each input field has a dropdown arrow. At the bottom right, there is a large 'ACCEPT' button.

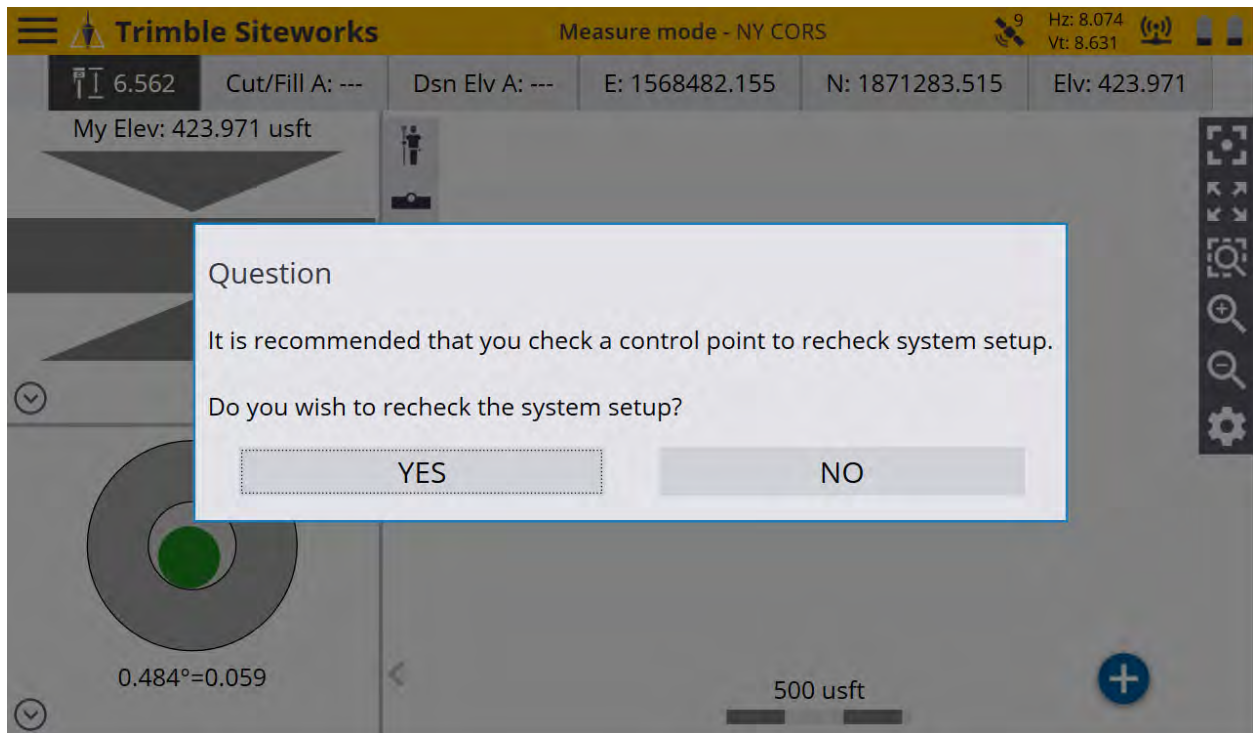
Setting	Value
Mode	Rover
Connection type	Bluetooth
Bluetooth device	R780 6229F00329 Trimble
Correction method	Internet
VRS connection settings	RTN.DOT.NY.GOV:8080
Select data stream	Data stream: net_msm_vrs
Using Quick Release	No
Enable Tilt Compensation	No

ACCEPT

*Siteworks asks if you want to adjust your project with a calibration, tap **NO**.

The image shows the Trimble Siteworks app interface. At the top, there is a header bar with the app name 'Trimble Siteworks' and 'Measure mode - NY CORS'. Below the header, there is a status bar showing various measurements: '6.562', 'Cut/Fill A: ---', 'Dsn Elev A: ---', 'E: 1568488.102', 'N: 1871274.972', and 'Elev: 433.571'. A central dialog box titled 'Question' asks: 'Your project is using a published coordinate system. Do you wish to adjust it with a project calibration?'. The dialog has two buttons: 'YES' and 'NO'. The background shows a map with a green circle and a scale bar indicating '500 usft'.

*Siteworks asks if you want to recheck the system setup, tap **NO**.



*Once back to the main Siteworks screen you may start working.

