

Using DSWorld

What is DSWorld

- **Description:**
- DSWorld was originally designed to display datasheet information in a "world view", hence its name.
- Since its inception, it has been greatly enhanced to the point of being a major interface with NGS and the NGS Integrated Database (IDB).
- It provides Land Surveyors, GIS professionals and the general public with important up-to-date geodetic control information at the click of a button.

What DSWorld Can do

- DSWorld allows users
 - To submit recoveries
 - Correct informational fields (state, county, etc.)
 - View locations of mark
 - Download datasheets
 - Rename and submit photographs
 - So much more – almost overwhelming!
 - We will focus on the use of DSWorld in mark maintenance and recovery.

Download and Install

The screenshot shows the NOAA NGS website navigation bar with the following links: NGS Home, About NGS, Data & Imagery, **Tools**, Surveys, and Science & Education. The **Tools** link is circled in red and labeled with a large red number '1'. Below the navigation bar, the 'Tools' dropdown menu is open, showing a list of software categories. The 'Download PC Software' option is circled in red and labeled with a large red number '2'. To the left of the dropdown menu, there is a 'Most Popular' section with links to Antenna Calibration, Contact Us, CORS, FAQs, Geodetic Advisors, Geodetic Tool Kit, LOCUS, NAD 83(2011) epoch 2010.00, NGS Data Explorer, OPUS, and Publications. The 'Notices' section on the right includes a link to 'Save the data The National Summit A 06.30.2016' and a link to 'the 2017 Geospatial g, Maryland'.

The screenshot shows the 'Download Free Geodetic Software Developed by NGS' page. The page has a navigation bar with links: NGS Home, About NGS, Data & Imagery, Tools, Surveys, Science & Education, and a search bar. Below the navigation bar, there is a list of software categories and their corresponding download links. The categories are: ADJUST & UTILITIES, CALIBRAT, CARIB97, COMPG, COMPVECS, CORPSCON, CR8BB, CR8SER, DCAR97, DEFLEC99, DMEX97, DSWIN, DSFILES, DSUPDATE, ENHANCEMENTS, G99SSS, GEOID, Gethvst, GPPCGP, HTDP, INTERORB, INV/FWD3D, LOOP, LVL_DH, MEXICO97, MTEN4, NA2VBBK, NADCON, PCVOBS, PROMPTER, SPC83, TOLADD, Translev, USNG, USGG2003, USGG2009, UTM, VDatum, VERTCON, WinDesc, and XYZWIN. The 'Download PC Software' link is circled in red and labeled with a large red number '3'.

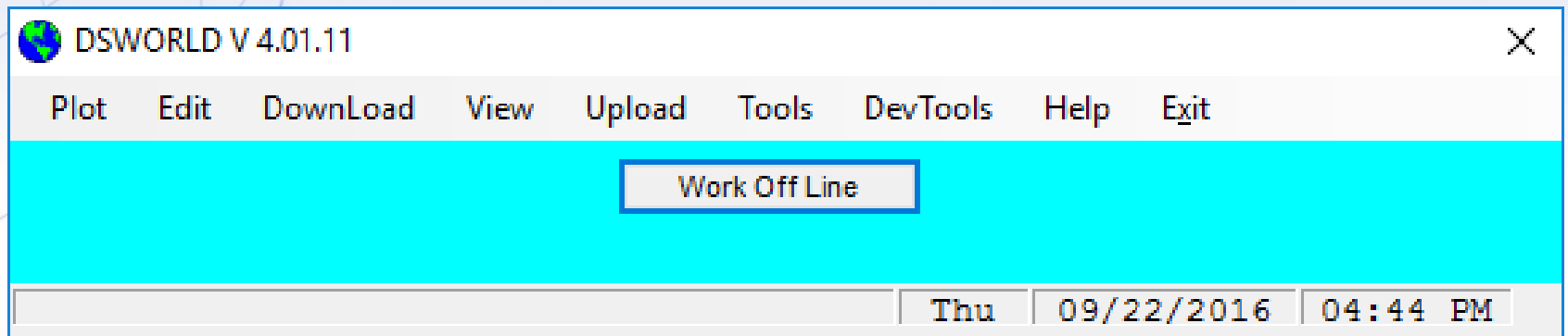
The screenshot shows the 'User-Contributed Software' section. It includes a link to 'User-Contributed Software is also available to perform related functions.' and a link to 'Descriptions of Free Geodetic Software Developed by NGS'. The 'Descriptions of Free Geodetic Software Developed by NGS' link is circled in red and labeled with a large red number '4'. Below this link, there is a description of the 'ADJUST AND UTILITIES' program, which is used to perform least squares adjustment on horizontal, vertical angle, and/or GPS observations. Data checking programs are included. The 'CALIBRAT (Version 1.0)' program is also described, which is used to determine the scale and constant corrections for electronic distance measuring instruments by making measurements over previously determined base lines. The formulas used in the program are found in NOAA Technical Memorandum NOS NGS-10, 'Use of Calibration Base Lines.'

The screenshot shows the 'User-Contributed Software Available for Download' section. It includes a link to 'DSWORLD (Version 4.01) Note: This is a 64 bit program' and a link to 'Geoid99 Interpolation'. The 'DSWORLD (Version 4.01) Note: This is a 64 bit program' link is circled in red and labeled with a large red number '4'. Below this link, there is a description of the 'Geoid99 Interpolation' program, which is used to interpolate GEOID99 on small computers. The 'User-Contributed Software Available by Hyperlink' section includes a link to 'OPUS Accumulator', which is used to summarize multiple OPUS solution emails in a spreadsheet format.

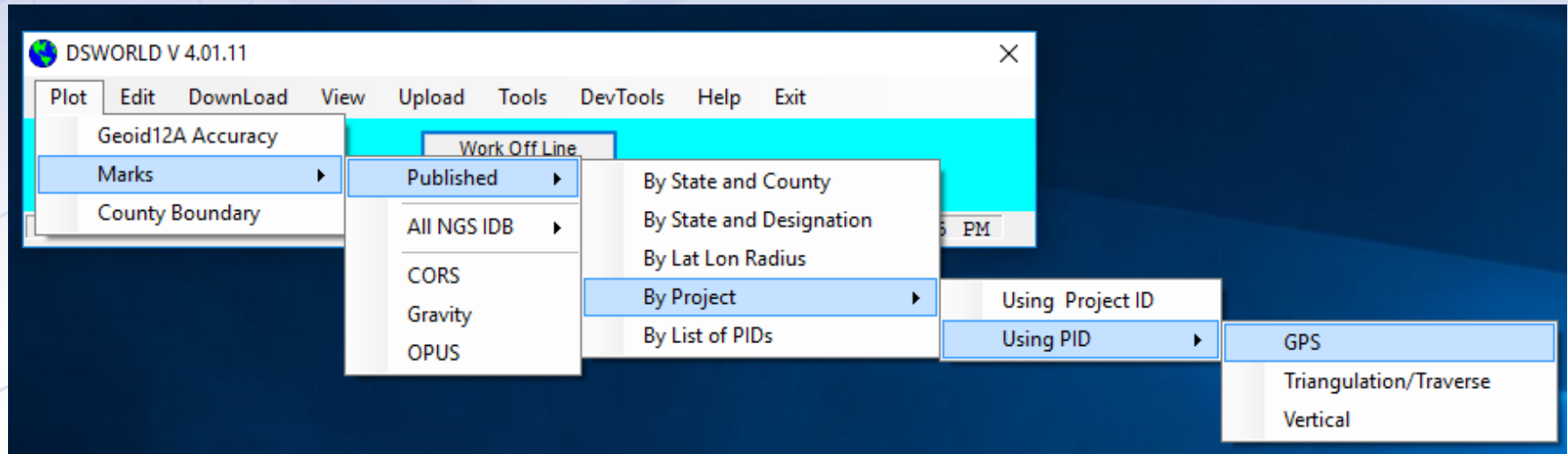
You also need to
install Google Earth

Would you like to contribute your software to the NGS website?
If you have developed software you would like to share with the public, you can contact NGS, and we may be able to add it to other software available on this Web page. Should we be unable to support the source code and/or

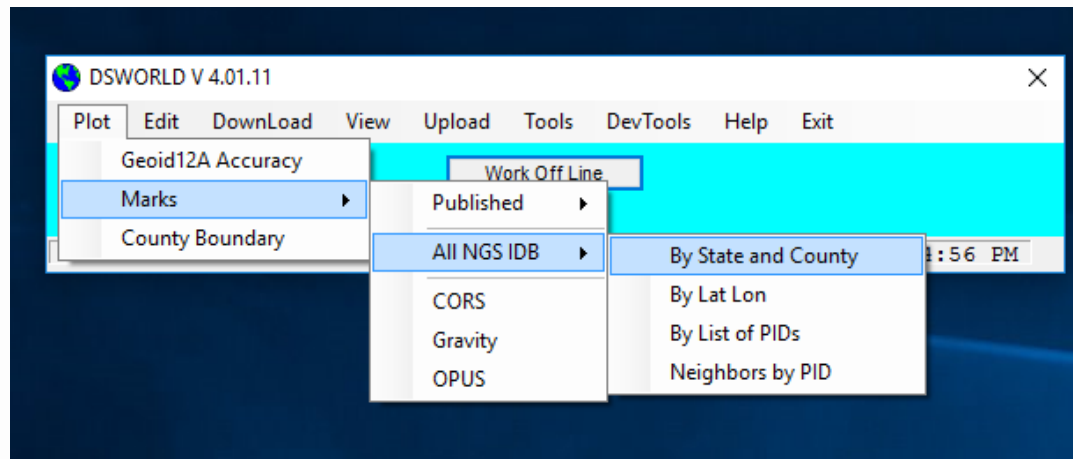
Interface



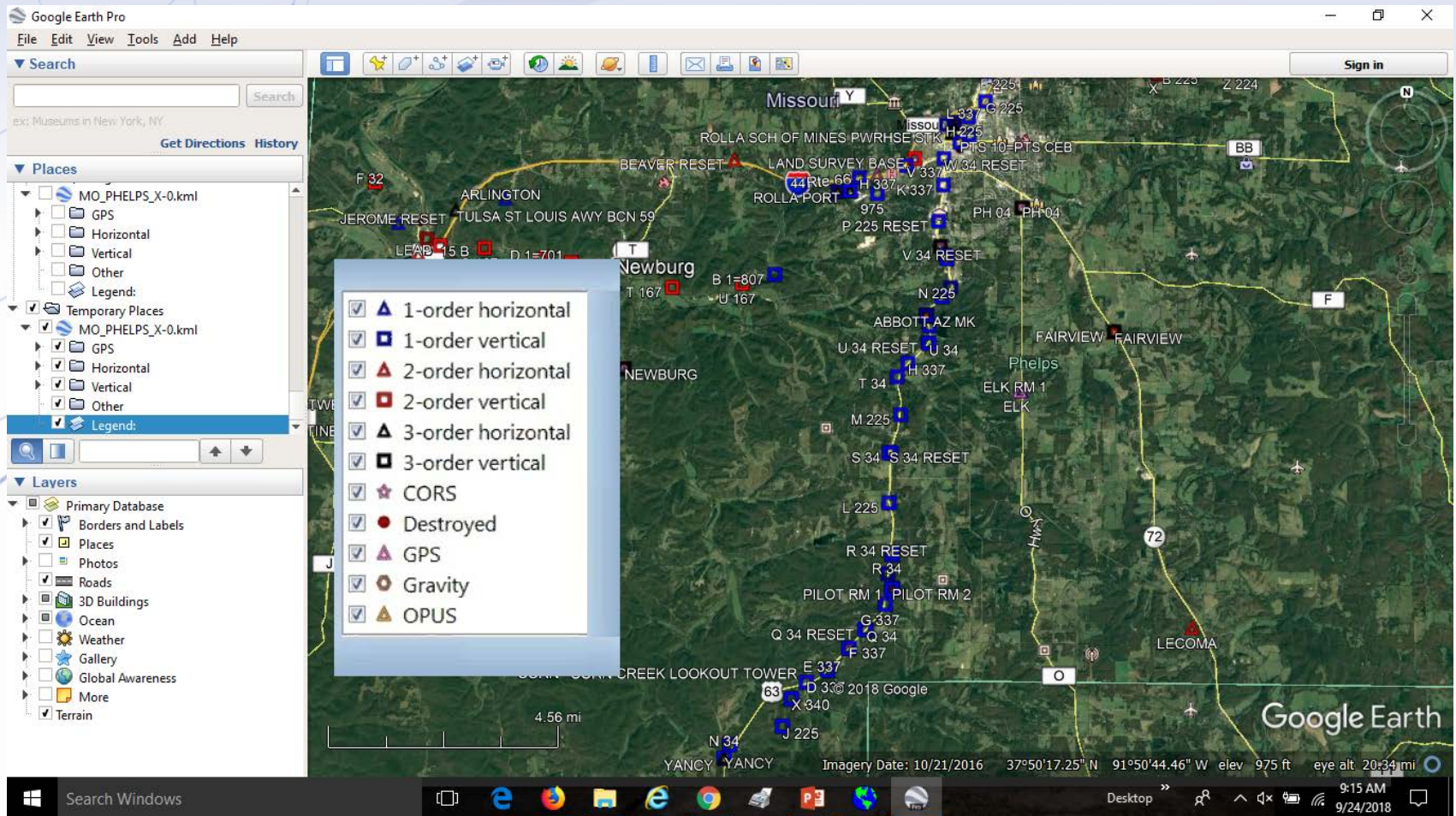
PLOT



OR:



Phelps County



Bench Mark-L 225

The screenshot displays the Google Earth Pro interface. The main map area shows a satellite view of a rural landscape with fields and roads. A yellow line, likely a road or path, runs through the center. A blue pin labeled 'L 225' is placed on this line. A white popup window is open over the pin, displaying the following information:

L 225
PID - HC0606
Lat: 375032.04
Lon: 0914755.02
Vert Order: 1
Stability: C
Cond: G

NGS IDB:
[DATASHEET](#)
[LEVELING PROJECTS](#)
[MARK DATA](#)
[DESCRIPTION](#)
[PHOTOS](#)

[NEIGHBORS](#)

GEOCACHE:
[RECOVERY](#)

Directions: [To here](#) - [From here](#)

The left sidebar shows the 'Places' panel with a tree view. The 'MO_PHELPS_X-0.kml' file is expanded, showing a hierarchy of folders: GPS, Horizontal, Vertical, and Other. The 'Vertical' folder is selected. The 'Layers' panel is also visible, showing various map layers like 'Primary Database', 'Borders and Labels', 'Places', 'Photos', 'Roads', '3D Buildings', 'Ocean', 'Weather', 'Gallery', 'Global Awareness', 'More', and 'Terrain'. The bottom status bar shows the image date as 10/21/2016, coordinates as 37°50'21.32" N 91°49'00.26" W, elevation as 1048 ft, and eye altitude as 31542 ft. The system taskbar at the bottom shows the Windows Start button, search bar, and several open applications.

NGS Datasheet-L 225

See file [dsdata.pdf](#) for more information about the datasheet.

```

PROGRAM = datasheet95, VERSION = 8.12.5
1      National Geodetic Survey,      Retrieval Date = SEPTEMBER 24, 2018
HC0606 *****
HC0606 DESIGNATION - L 225
HC0606 PID - HC0606
HC0606 STATE/COUNTY- MO/PHELPS
HC0606 COUNTRY - US
HC0606 USGS QUAD - YANCY MILLS (1982)
HC0606
HC0606 *CURRENT SURVEY CONTROL
HC0606
HC0606 NAD 83(1986) POSITION- 37 50 32.04 (N) 091 47 55.02 (W) HD_HELD1
HC0606 NAVD 88 ORTHO HEIGHT - 333.264 (meters) 1093.38 (feet) ADJUSTED
HC0606
HC0606 GEOID HEIGHT - -30.583 (meters) GEOID12B
HC0606 DYNAMIC HEIGHT - 333.015 (meters) 1092.57 (feet) COMP
HC0606 MODELED GRAVITY - 979,872.7 (mgal) NAVD 88
HC0606
HC0606 VERT ORDER - FIRST CLASS II
HC0606
HC0606 The horizontal coordinates were determined by differentially corrected
HC0606 hand held GPS observations or other comparable positioning techniques
HC0606 and have an estimated accuracy of +/- 3 meters.
HC0606
HC0606 The orthometric height was determined by differential leveling and
HC0606 adjusted by the NATIONAL GEODETIC SURVEY
HC0606 in June 1991.
HC0606
HC0606 Significant digits in the geoid height do not necessarily reflect accuracy.
HC0606 GEOID12B height accuracy estimate available here.
HC0606
HC0606 The dynamic height is computed by dividing the NAVD 88
HC0606 geopotential number by the normal gravity value computed on the
HC0606 Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
HC0606 degrees latitude (g = 980.6199 gals.).
HC0606
HC0606 The modeled gravity was interpolated from observed gravity values.
HC0606
HC0606; North East Units Estimated Accuracy
HC0606; SPC MO C - 223,153.9 561,732.2 MT (+/- 3 meters HH1 GPS)
HC0606
HC0606 U.S. NATIONAL GRID SPATIAL ADDRESS: 153XB0570588990(NAD 83)
HC0606
HC0606 SUPERSEDED SURVEY CONTROL
HC0606
HC0606 NGVD 29 (??/??/92) 333.202 (m) 1093.18 (f) ADJ UNCH 1 2
HC0606
HC0606 Superseded values are not recommended for survey control.
HC0606
HC0606 NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
HC0606 See file dsdata.pdf to determine how the superseded data were derived.
HC0606
HC0606 MARKER: DB = BENCH MARK DISK
HC0606 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
HC0606 STAMPING: L 225 1949
HC0606 MARK LOGO: CGS
HC0606 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
HC0606 STABILITY: SURFACE MOTION
HC0606 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
HC0606 SATELLITE: SATELLITE OBSERVATIONS - June 02, 2016
HC0606
HC0606 HISTORY - Date Condition Report By
HC0606 HISTORY - 1949 MONUMENTED CGS
HC0606 HISTORY - 19890718 GOOD NGS
HC0606 HISTORY - 20160602 GOOD DOASLS

```

Bench Mark-L 225

The screenshot displays the Google Earth Pro interface. The main map area shows a rural landscape with a road and a bench mark labeled 'L 225'. A popup window for 'L 225' is open, providing the following information:

- PID - HC0606
- Lat: 375032.04
- Lon: 0914755.02
- Vert Order: 1
- Stability: C
- Cond: G
- NGS IDB: [DATASHEET](#), [LEVELING PROJECTS](#), [MARK DATA](#), [DESCRIPTION](#), [PHOTOS](#)
- [NEIGHBORS](#)
- GEOCACHE: [RECOVERY](#) (indicated by a blue arrow)
- Directions: [To here](#) - [From here](#)

The left sidebar shows the 'Places' and 'Layers' panels. The 'Places' panel lists 'MO_PHELPS_X-0.kml' with sub-items for GPS, Horizontal, Vertical, and Other. The 'Layers' panel shows various map layers like 'Primary Database', 'Borders and Labels', 'Places', 'Photos', 'Roads', '3D Buildings', 'Ocean', 'Weather', 'Gallery', 'Global Awareness', 'More', and 'Terrain'. The bottom status bar shows the 'Imagery Date: 10/21/2016', coordinates '37°50'21.32" N 91°49'00.26" W', elevation 'elev 1048 ft', and eye altitude 'eye alt 31542 ft'. The system clock at the bottom right indicates '9:17 AM 9/24/2018'.

GEOCACHES

Nearest

- [Benchmarks](#)
- [Geocaches](#)

😊 05/11/2005

[redacted] found 😊 HC0606

[Visit Log](#)

Found this one in good condition as described.

[Photos:] [L 225.JPG](#)

😊 11/01/2003

[redacted] found 😊 HC0606

[Visit Log](#)

N 37° 50.534 W 091° 47.917

Alt 1096'

[Photos:] [L 225](#)**Documented History (by the NGS)**

01/01/1949 by CGS (MONUMENTED)

DESCRIBED BY COAST AND GEODETIC SURVEY 1949 7.7 MI S FROM ROLLA. ABOUT 7.7 MILES SOUTH ALONG U.S. HIGHWAY 63 FROM THE JUNCTION OF U.S. HIGHWAY 66 IN WEST ROLLA, AT THE T JUNCTION OF A GRAVEL ROAD LEADING WEST, 92 FEET NORTHWEST OF A FENCE CORNER, 75 FEET SOUTH OF THE CENTER LINE OF THE GRAVEL ROAD, 72.5 FEET SOUTHWEST OF THE CENTER LINE OF THE HIGHWAY, 68 FEET SOUTHEAST OF A FENCE CORNER, 30 FEET NORTHWEST OF A TELEPHONE POLE, 1.5 FEET NORTHEAST OF THE R/W FENCE, 2 FEET SOUTHEAST OF A WHITE WOODEN WITNESS POST, ABOUT 3 FEET ABOVE THE LEVEL OF THE HIGHWAY AND SET IN THE TOP OF A CONCRETE POST PROJECTING 4 INCHES.

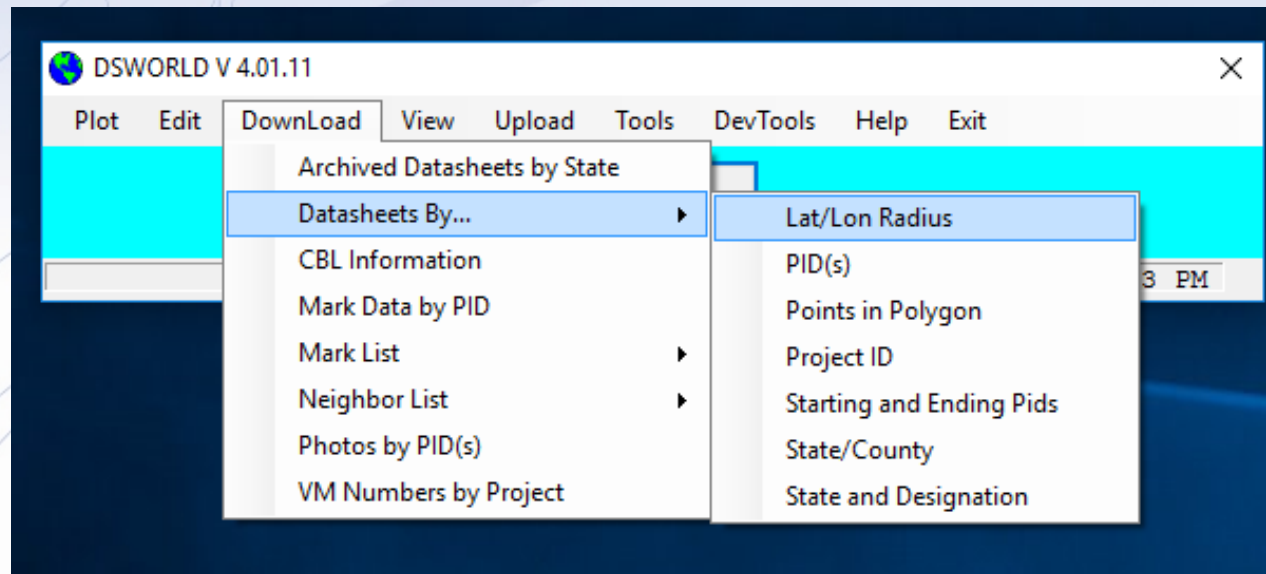
07/18/1989 by NGS (GOOD)

RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989 RECOVERED IN GOOD CONDITION. A NEW DESCRIPTION FOLLOWS. 15.1 KM (9.4 MI) SOUTHERLY ALONG U.S. HIGHWAY 63 FROM ITS JUNCTION WITH INTERSTATE HIGHWAY 44 IN ROLLA, 22.9 M (75.1 FT) SOUTH OF THE CENTER OF COUNTY ROAD 233, 22.1 M (72.5 FT) SOUTHWEST OF THE CENTERLINE OF THE HIGHWAY, 0.9 M (3.0 FT) ABOVE THE LEVEL OF THE HIGHWAY, 0.2 M (0.7 FT) NORTHEAST OF A WITNESS POST, AND IN A CONCRETE MONUMENT THAT PROJECTS 0.03 M (0.1 FT) ABOVE THE GROUND SURFACE.

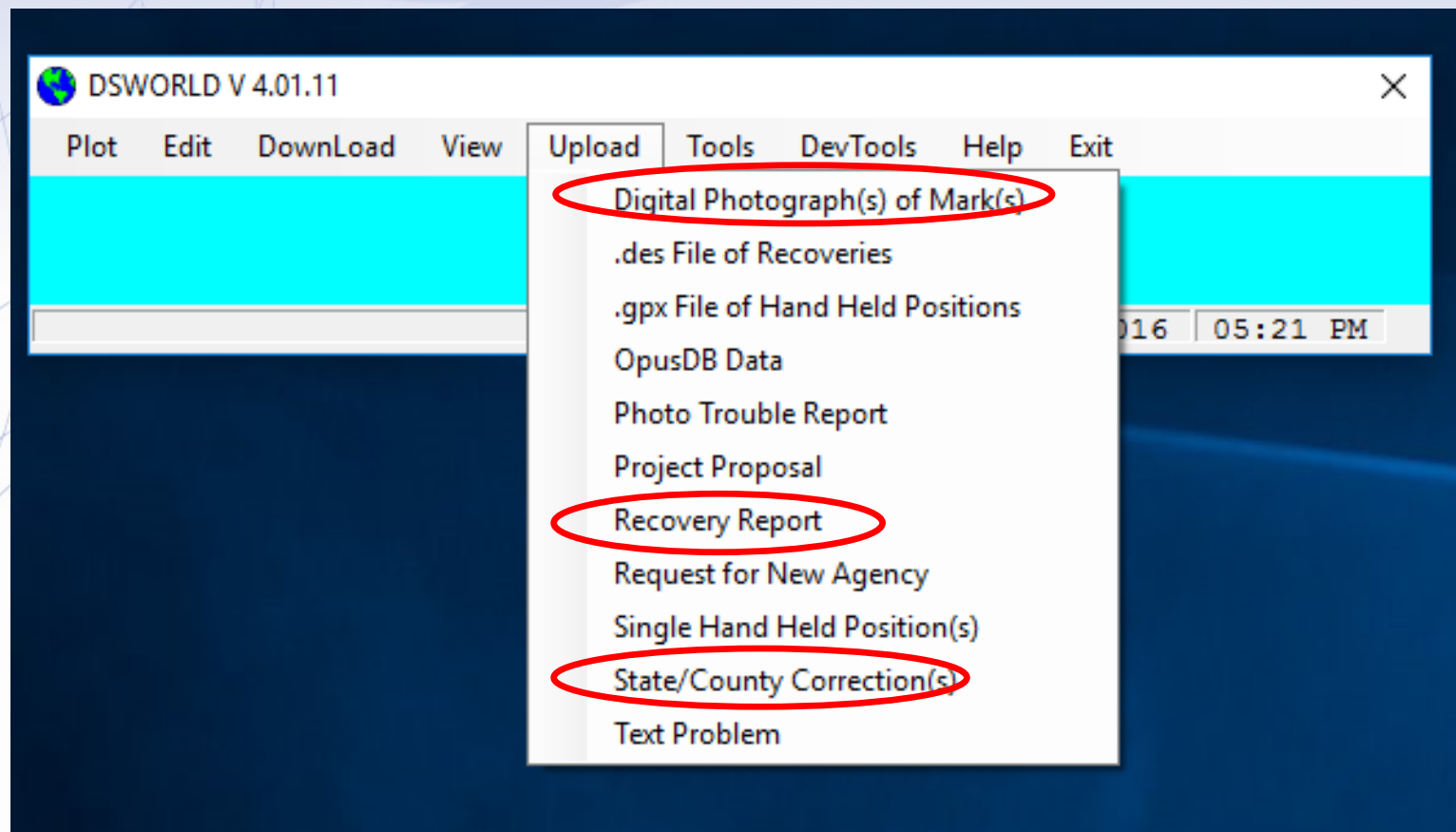
Near by BM's

Icon	PID	Dist	Designation	State	Type	Found	Last Log	d/I
	HC0606	0mi	L 225	MO	bench mark disk	05/11/2005		<input type="checkbox"/>
	HC0609	1mi N	S 34 RESET	MO	survey disk	05/04/2004		<input type="checkbox"/>
	HC0608	1mi N	S 34 RESET	MO	bench mark disk			<input type="checkbox"/>
	HC0607	1mi N	S 34	MO	bench mark disk			<input type="checkbox"/>
	HC0604	1mi S	R 34	MO	bench mark disk			<input type="checkbox"/>
	HC0605	1.1mi S	R 34 RESET	MO	bench mark disk	05/04/2004		<input type="checkbox"/>
	HC0603	1.4mi S	PILOT AZ MK	MO	azimuth mark disk	05/11/2005		<input type="checkbox"/>
	HC0600	1.7mi S	PILOT	MO	triangulation station disk			<input type="checkbox"/>
	HC0601	1.7mi S	PILOT RM 1	MO	reference mark disk			<input type="checkbox"/>
	HC0602	1.7mi S	PILOT RM 2	MO	reference mark disk			<input type="checkbox"/>
	HC0610	1.8mi N	M 225	MO	bench mark disk	05/11/2005		<input type="checkbox"/>
	HC1107	2.1mi S	G 337	MO	metal rod	05/11/2005		<input type="checkbox"/>
	HC0612	2.5mi N	T 34 RESET	MO	bench mark disk	05/04/2004		<input type="checkbox"/>
	HC0611	2.6mi N	T 34	MO	bench mark disk			<input type="checkbox"/>
	HC0613	2.6mi N	GAGING STATION	MO	survey disk	05/04/2004		<input type="checkbox"/>
	HC0598	2.6mi S	Q 34	MO	bench mark disk			<input type="checkbox"/>
	HC0599	2.6mi S	Q 34 RESET	MO	bench mark disk			<input type="checkbox"/>
	HC1108	2.9mi N	H 337	MO	metal rod	05/11/2005		<input type="checkbox"/>

DOWNLOAD



UPLOAD



UPLOAD – Recovery Report

Description Entry Form

PID: MK0848 Design: R 290 Lat: 410054 N
GPS: N Alias: App: Lon: 0961832 W
Country: US State: NE County: CASS
Recovery Information
Rec. Agcy: Date Rcvd: C.O.P.: Cond:
Name: email:
Surface Marker
Cat: D Type: DB Mag: Stability: C FVProj/Rec.:
Setting: 7
Logo: A CGS Stamping: R 290 1950
Text Save Clear Close

Dynamic and
Context-Specific
Entries

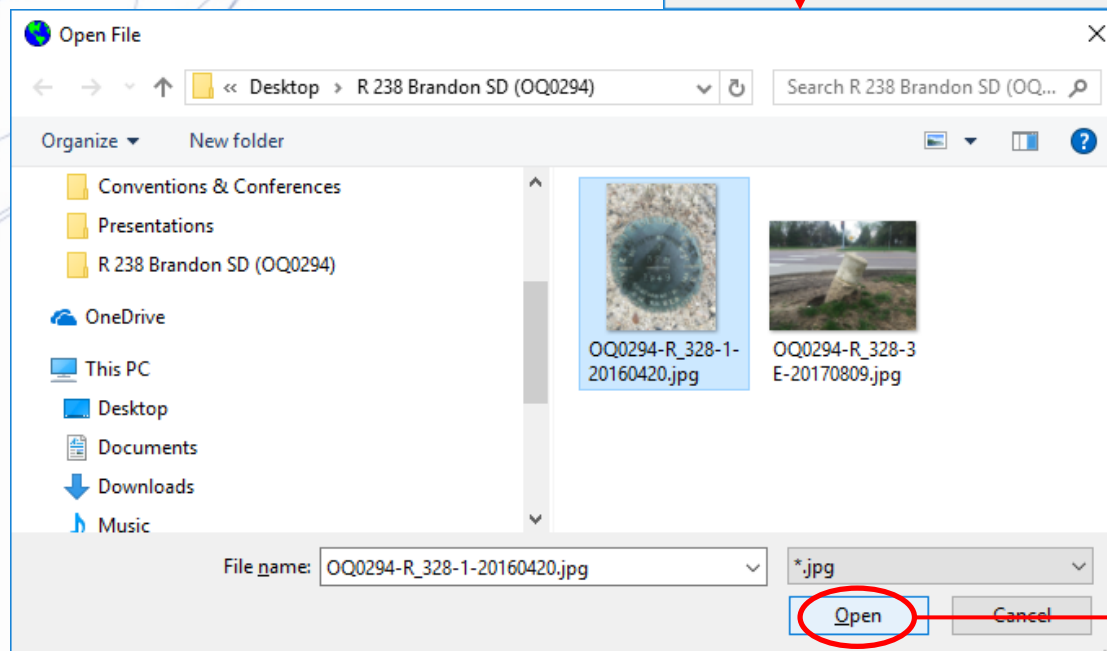
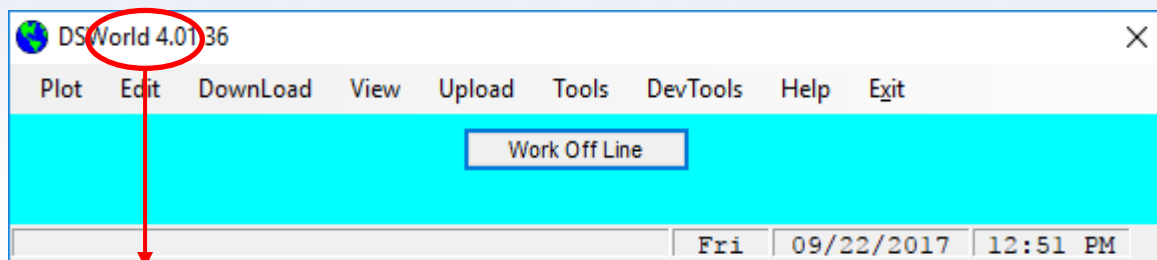
New Descriptive Text

Edit Insert Template Options Close Help
Historical Descriptive Text New Descriptive Text
Clear Format Spelling Close

TEXT Box has
many "helper" tools

PHOTOS

- *Edit* photos – name, resize, etc.



SAVE

- When finished editing, click SAVE
 - You will get a confirmation message
 - The uploaded data will be inserted in the NGSIDB within 20 days. Maybe sooner.
-
- NGS **wants** users to use DSWorld – rather than the on-line recovery tool.

NGS DATA EXPLORER

The screenshot shows the NOAA National Geodetic Survey website. A blue arrow points from the left margin to the 'Quick Links' section, specifically to the 'NGS Data Explorer' link. Another blue arrow points from the right margin to the 'Looking for Bench Marks?' section. The website layout includes a header with the NOAA logo and the tagline 'Positioning America for the Future'. Below the header is a navigation bar with links: NGS Home, About NGS, Data & Imagery, Tools, Surveys, Science & Education, and a search bar. The main content area is divided into several sections: 'Quick Links' on the left, a central grid of featured topics, and a right sidebar with additional news and updates. The featured topics include GNSS & GPS Data, Remote Sensing, Land Surveying, Geodesy, Training & Education, and Datums & Transformations. The sidebar includes sections for 'Looking for Bench Marks?', 'Emergency Response', 'Notices', 'In the News', and 'Previous News Stories'. At the bottom, there is a footer with contact information and a copyright notice.

National Geodetic Survey
Positioning America for the Future

[NGS Home](#) [About NGS](#) [Data & Imagery](#) [Tools](#) [Surveys](#) [Science & Education](#) [Search](#)

Quick Links

- [OPUS](#)
- [CORS](#)
- [Survey Mark Datasheets](#)
- [NGS Data Explorer](#)
- [OPUS Projects](#)
- [Geodetic Tool Kit](#)
- [State Plane Coordinates](#)
- [Antenna Calibration](#)
- [UFCORS](#)
- [GEOID](#)
- [GPS on Bench Marks](#)
- [Geodetic Advisors](#)
- [Storm Imagery](#)
- [Publications](#)
- [2017 Geospatial Summit](#)
- [FAQs](#)
- [Contact Us](#)

Subscribe for email notifications

**Coming in 2022:
New Datums!**
[Learn more...](#)

NOAA's National Geodetic Survey (NGS) provides the framework for all positioning activities in the Nation. The foundational elements of latitude, longitude, elevation, shoreline information impact a wide range of important activities.

Learn more about:

- [Data and tools we provide](#)
- [Activities in your area](#)
- [Applications of geodesy](#)

GNSS & GPS Data
Get coordinate information and the tools you need to work independently. [Learn More](#)

Remote Sensing
Download data and critical information into nautical charts. [Learn More](#)

Land Surveying
View guidelines and get tools to support land surveys. [Learn More](#)

Geodesy
NGS works closely with the global researchers advancing geodetic science. [Learn More](#)

Training & Education
Classes and educational resources on scientific topics relating to geodesy. [Learn More](#)

Datums & Transformations
NGS defines datums to help align data and tools to transform coordinates. [Learn More](#)

Looking for Bench Marks?

Emergency Response
Post Event Aerial Imagery:
[Hurricane Florence](#)
[Tropical Storm Gordon](#)
[Previous Storm Imagery](#)

Notices
[GPS on Bench Marks Deadline Extended](#)

Critical Updates:
[Windesc, Transdev and DSWorld](#)

In the News
09/14/2018 - Webinar Prepares Stakeholders for NSRS Modernization
09/06/2018 - CORS Sites Upgraded in the Great Lakes Region
08/31/2018 - Improving the International Terrestrial Reference Frame
[Previous News Stories](#)

Website Owner: National Geodetic Survey / Last modified by NGS webmaster Jun 12 2017

[NOS Home](#) • [NGS Employees](#) • [Privacy Policy](#) • [Disclaimer](#) • [USA.gov](#) • [Ready.gov](#) • [Site Map](#) • [Contact Webmaster](#)

NGS DATA EXPLORER

[NGS Home](#)
[About NGS](#)
[Data & Imagery](#)
[Tools](#)
[Surveys](#)
[Science & Education](#)


[Search](#)


Finding Survey Marks and Datasheets

NGS provides Information about survey marks (including bench marks) in text **datasheets** or in GIS **shapefiles**. Note some survey markers installed by other organizations may not be available through NGS. To learn more about survey marks, visit our **Frequently Asked Questions (FAQs)**. Visit here for **updates to the Datasheet format**.


For information about the attributes on a datasheet please take a look at the **dsdata.pdf**.


Select a data format:


 **Datasheets** can be viewed in word processors or as text files. [View an example datasheet online](#).

 **Shapefiles** can be used in GIS software.

Select a retrieval method:

 **Interactive Map:**
Zoom to your location of interest and search for geodetic control: Use [NGS Data Explorer](#) or [DS World](#).

 **Archived Control:**
Download data for an entire state at once (generated once a month). Read more about **archived datasheets** and **archived shapefiles**. Archived control by state is recommended for large downloads (>20).

 **Search By:**
Submit queries based on location (e.g. county) or mark information (e.g. station name).

Mark Recovery


You may find or "recover" a survey mark and review information about it online. Sometimes, you may want to update the information about a mark you find by reporting its current condition or submitting a photograph. This can be very helpful if you find physical evidence that the mark is destroyed. [Learn more about submitting a recovery note online](#).

Tidal Bench Marks

Tidal bench mark also refers to a stable object containing a marked point of known elevation with respect to a datum. Some tidal bench marks have known elevations referenced to both geodetic datums (e.g. North American Vertical Datum of 1988 or NAVD 88) and tidal datums (e.g. Mean Sea Level or MSL). [You can retrieve this tidal elevation information online](#).



Retrieval Options

Interactive Map



[Click to browse map for survey control](#)



















In the menus below click the icons for different formats.

 for text Datasheets or  for GIS Shapefiles.

Archived Control

Monthly Archives by State:

[Search By](#)

Station Name(s)		
PIDs - Permanent Identifiers		
County		
Radial Search		
Rectangular Search		
USGS Quad(s)		
Project Identifier(s)		
Load Date(s)		
CORS Site ID(s)		

For NGS Internal use only

5 Mile Radius Search

National Geodetic Survey Data Explorer
National Geodetic Survey

NGS Home About NGS Data & Imagery Tools Surveys Science & Education Search

View Map View List

Help
Map Layers

Horizontal

☒ ★ CORS
☒ ▲ GPS Sites
☒ △ Classical Horizontal

Vertical

☒ ● Vertical Control
☒ ○ Approximate Heights

Find Marks Clear Marks

Location radius 5 Miles
Mark Center Clear X

Go To Location

PID : JD0211

Name : U 30
Elev Source : ADJUSTED
Elev Order : 2
Pos Source : SCALED
Pos Order : None
Ortho Ht : 212.281
Ellip Ht : None

Datasheet

Show/Hide Legend

Map Satellite

PID : JD0214

Name : V 30
Elev Source : ADJUSTED
Elev Order : 2
Pos Source : SCALED
Pos Order : None
Ortho Ht : 271.480
Ellip Ht : None

Datasheet


Control Types

★ CORS
▲ GPS Site
△ Classic Horizontal
● Vertical Control
○ Approx Height
▲ GPS and Vertical Control
▲ GPS and Approx Height
▲ Classic Horiz and Vert Control
▲ Classic Horiz and Approx Ht

38° 7' 26" N , 92° 45' 24" W

Website Owner: National Geodetic Survey / Last modified by ngs.infocenter Tuesday, 08-Aug-2017 09:05:06 EST

Bench Mark- V 30

 **National Geodetic Survey Data Explorer**
National Geodetic Survey

NGS Home | About NGS | Data & Imagery | Tools | Surveys | Science & Education | Search

View Map | View List

Map | Satellite

Help
Map Layers

Horizontal

- ☒ ★ CORS
- ☒ ▲ GPS Sites
- ☒ △ Classical Horizontal

Vertical

- ☒ ● Vertical Control
- ☒ ○ Approximate Heights

Find Marks | Clear Marks

Location radius: 5 Miles
Mark Center | Clear X

Go To Location

PID : JD0214

Name : V 30
Elev Source : ADJUSTED
Elev Order : 2
Pos Source : SCALED
Pos Order : None
Ortho Ht : 271.480
Ellip Ht : None

Datasheet

Control Types

- ★ CORS
- ▲ GPS Site
- △ Classic Horizontal
- Vertical Control
- Approx Height
- ⬤ GPS and Vertical Control
- ⬤ GPS and Approx Height
- ⬤ Classic Horiz and Vert Control
- ⬤ Classic Horiz and Approx Ht

Map Data

Map data ©2018 Google | Terms of Use | Report a map error
Web site Owner: National Geodetic Survey / Last modified by ngs.info center Tuesday, 08-Aug-2017 09:08:06 EST

NGS Home • NGS Employees • Privacy Policy • Disclaimer • USA.gov • Ready.gov • Site Map • Contact Webmaster

View List

View Map

View List

Help

Map Layers

Horizontal

- ☒ ★ CORS
☒ ▲ GPS Sites
☒ △ Classical Horizontal

Vertical

- ☒ ● Vertical Control
☒ ○ Approximate Heights

Find Marks

Clear Marks

Location radius Miles

Mark Center

Clear X

Go To Location

Site Info

Mouse over plotted marks
to view information here.

JD0206	851.9	Vertical Control	ADJUSTED	2	SCALED	None	259.769	None
JD0207	T 30	Vertical Control	ADJUSTED	2	SCALED	None	249.932	None
JD0208	T 30 RESET	Vertical Control	RESET	3	SCALED	None	253.70	None
JD0209	TTS 161 B	Vertical Control	ADJUSTED	2	HD_HELD2	None	241.713	None
JD0210	696.1	Vertical Control	ADJUSTED	2	SCALED	None	212.254	None
JD0211	U 30	Vertical Control	ADJUSTED	2	SCALED	None	212.281	None
JD0212	TT 160 B	Vertical Control	ADJUSTED	2	HD_HELD2	None	273.375	None
JD0213	TTS 160 B RESET	Approximate Height	VERTCON	None	HD_HELD2	None	272.83	None
JD0214	V 30	Vertical Control	ADJUSTED	2	SCALED	None	271.480	None
JD0215	898.7	Vertical Control	ADJUSTED	2	SCALED	None	273.996	None
JD0216	836.7	Vertical Control	ADJUSTED	2	SCALED	None	255.103	None
JD0217	W 30	Vertical Control	ADJUSTED	2	SCALED	None	254.975	None
JD0220	X 30	Vertical Control	ADJUSTED	2	SCALED	None	238.883	None
JD0221	X 30 RESET	Approximate Height	VERTCON	None	SCALED	None	239.52	None
JD0222	25 J	Vertical Control	ADJUSTED	2	HD_HELD1	None	205.425	None
JD2565	BAGNELL MAN UNION ELEC TANK	Classic Horizontal	None	None	ADJUSTED	3	None	None
JD2566	RIVER VIEW	Classic Horizontal	SCALED	None	ADJUSTED	3	277.	None
JD2567	KAISER	Classic Horizontal	SCALED	None	ADJUSTED	1	308.	None
JD2790	LINPORT	GPS and Approximate Height	VERTCON	None	ADJUSTED	3	264.9	233.2484
JD2791	LINPORT AZ MK	GPS and Approximate Height	VERTCON	None	NO CHECK	3	261.	229.3264
JD2799	RIVER VIEW AZ MK 3	Classic Horizontal and Vertical Control	RESET	3	NO CHECK	3	272.86	None

Satellite View

View Map

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Help

Map Layers

Horizontal

☒ CORS

☒ GPS Sites

☒ Classical Horizontal

Vertical

☒ Vertical Control

☐ Approximate Heights

Find Marks

Clear Marks

Location radius

5 Miles

Mark Center

Clear X

Go To Location

PID : JD0214

Name : V 30

Elev Source : ADJUSTED

Elev Order : 2

Pos Source : SCALED

Pos Order : None

Ortho Ht : 271.480

Ellip Ht : None

Datasheet

Show/Hide Legend

Map Satellite

PID : JD0214

Name : V 30

Elev Source : ADJUSTED

Elev Order : 2

Pos Source : SCALED

Pos Order : None

Ortho Ht : 271.480

Ellip Ht : None

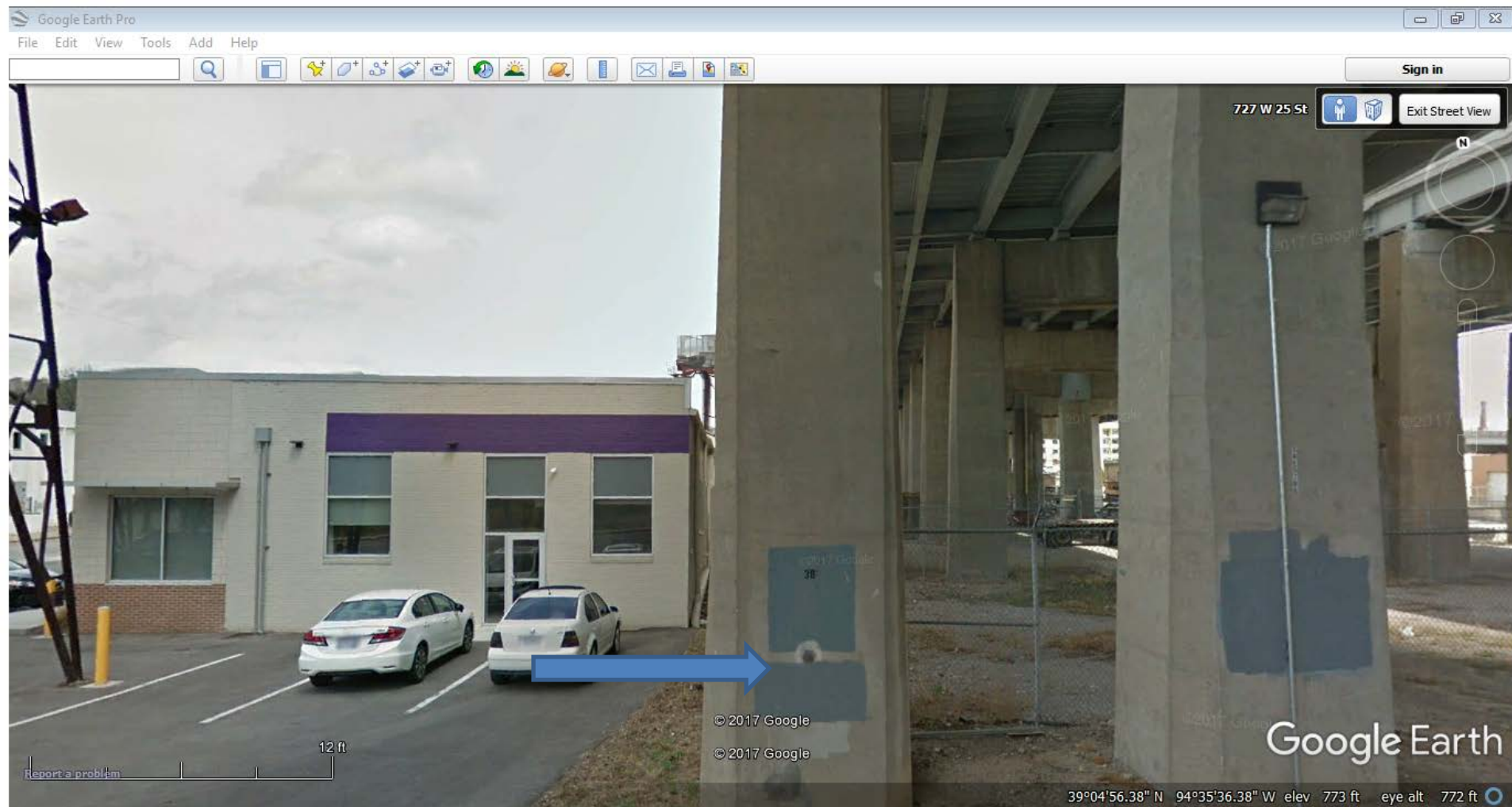
Datasheet

33° 9' 9" N, 92° 36' 58" W

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☒ ▲ GPS Sites
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Vertical

- ☒ ● Vertical Control
☒ ○ Approximate Heights

Find Marks

Clear Marks

Location radius Miles

Mark Center

Go To Location

PID : HC1106

Name : F 337
Elev Source : ADJUSTED
Elev Order : 1
Pos Source : ADJUSTED
Pos Order : None
Ortho Ht : 328.754
Ellip Ht : 298.174

Datasheet

Show/Hide Legend

Map Satellite

PID : HC1106

Name : F 337
Elev Source : ADJUSTED
Elev Order : 1
Pos Source : ADJUSTED
Pos Order : None
Ortho Ht : 328.754
Ellip Ht : 298.174

Datasheet

Control Types

★ CORS

▲ GPS Site

△ Classic Horizontal

● Vertical Control

○ Approx Height

△ GPS and Vertical Control

▲ GPS and Approx Height

▲ Classic Horz and Vert Control

△ Classic Horz and Approx Ht

37° 47' 55" N, 91° 49' 3" W

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Horizontal

- ☒ ★ CORS
☒ ▲ GPS Sites
☒ △ Classical Horizontal

Vertical

- ☒ ● Vertical Control
☒ ○ Approximate Heights

[Find Marks](#)[Clear Marks](#)Location radius Miles[Mark Center](#)[Go To Location](#)

PID : HC1106

Name : F 337
Elev Source : ADJUSTED
Elev Order : 1
Pos Source : ADJUSTED
Pos Order : None
Ortho Ht : 328.754
Ellip Ht : 298.174

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The NSRS of Tomorrow (2022)

Primary elements:

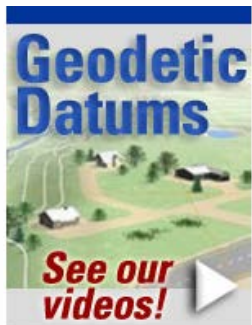
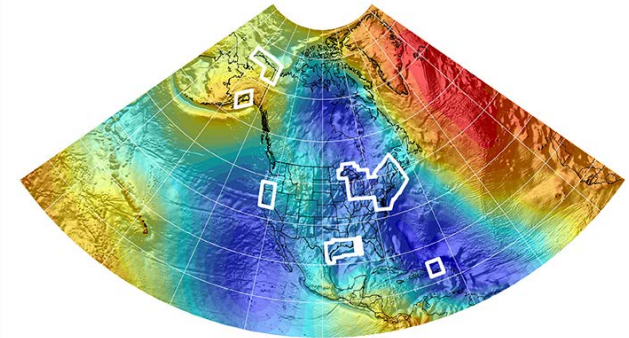
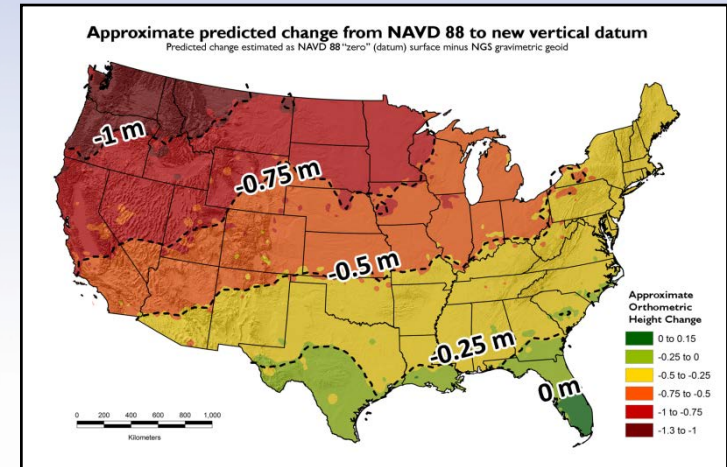
- The geometric North American Terrestrial Reference Frame of 2022 (**NATRF2022**)
plus the Caribbean, Pacific, and Mariana plates
- The North American-Pacific Geopotential Datum of 2022 (**NAPGD2022**)

New reference system is:

- Geocentric and defined by relationships to a global/international ideal frame;
- Time-dependent; and
- Primarily accessed via GPS technology and a newly refined semi-dynamic geoid model

New Datums Are Coming in 2022!

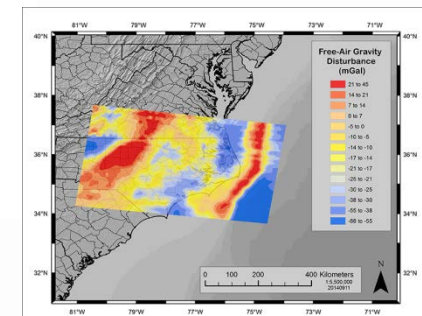
- NOAA's National Geodetic Survey will release new geometric (horizontal) and geopotential (vertical) datums in 2022
- The realization of the new datums will be through GPS/GNSS receivers and will replace the current datums:
NAD 83(geometric) and NAVD 88 (geopotential)
- Target: 2-centimeter accuracy relative to sea level (orthometric heights) using GPS/GNSS and a geoid (gravity) model from NGS' GRAV-D project.
- NGS will provide the tools to transform between the new and old datums.




MORE INFO:

New Datums Webpage and Videos:

www.ngs.noaa.gov/datums/newdatums/index.shtml





National Geodetic Survey


Positioning America for the Future


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NOAA's National Geodetic Survey (NGS) provides the framework for all positioning activities in the Nation. The foundational elements of latitude, longitude, elevation, shoreline information impact a wide range of important activities.

Learn more about:

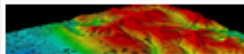
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GNSS & GPS Data

Get coordinate information and the tools you need to work independently.


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Remote Sensing

Download data and critical information into nautical charts.

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Land Surveying

View guidelines and get tools to support land surveyors.


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Geodesy

NGS works closely with the global researchers advancing geodetic science.

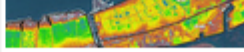
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Training & Education

Classes and educational resources on scientific topics relating to geodesy.

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Datums & Transformations

NGS defines datums to help align data and tools to transform coordinates.

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Looking for Bench Marks?

Notices

Beta Release:
NADCON 5

Beta Release: CORS & OPUS Share Maps

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In the News

06/08/2017 - New Tool for Easy, Consistent Coordinate Transformations

06/01/2017 - NGS Participates in the International Federation of Surveyors Conference in Helsinki, Finland

05/25/2017 - New Water Levels Training Course for NOAA Sentinel Sites

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