

Retrieval of Precipitation Data

Precipitation data are recorded and catalogued by the National Climatic Data Center (NCDC), a division of the National Oceanic and Atmospheric Administration (NOAA).

The process for retrieving the data is as follows:

Go to the following website:

<http://www.ncdc.noaa.gov/cdo-web/>

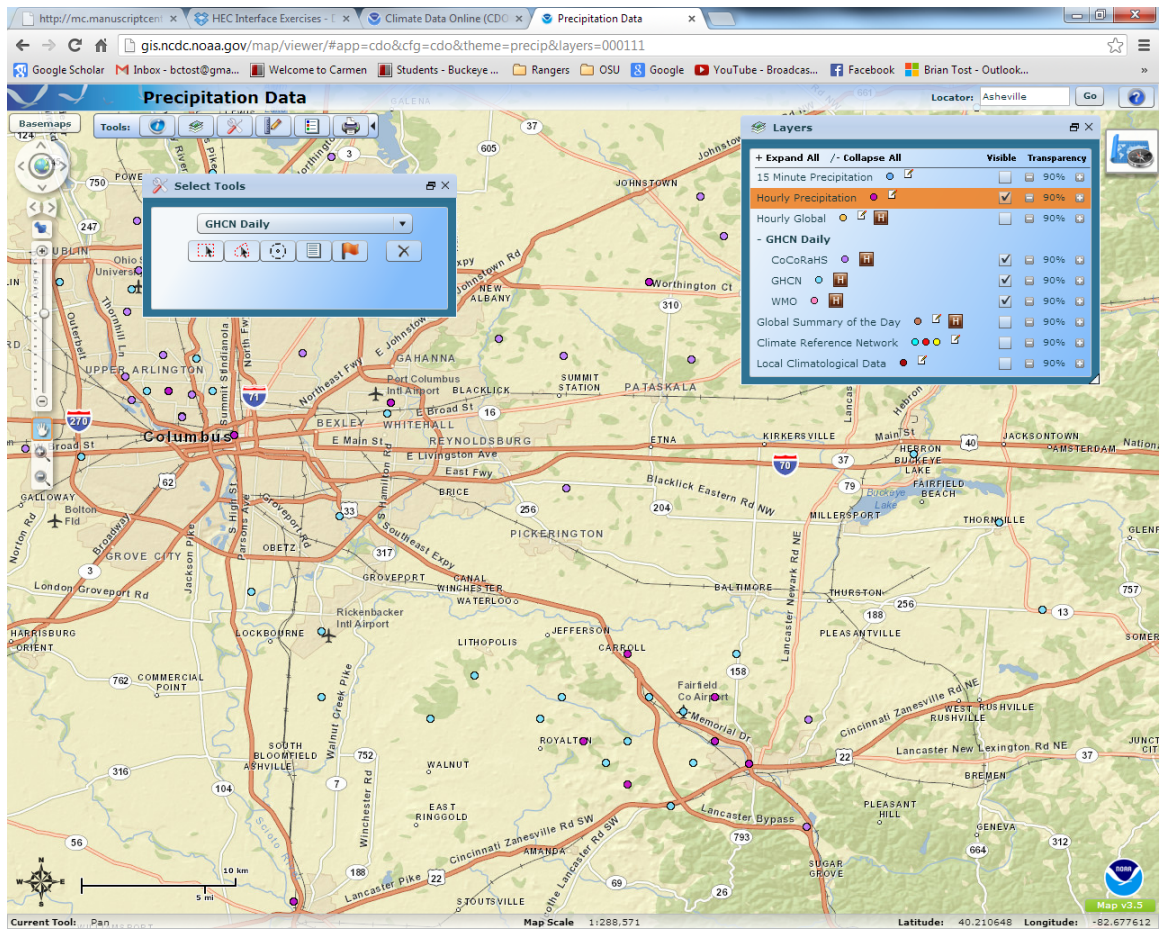
On the opening page, select the appropriate search engine. If you know your location's station name or zip code, select "Data Search". The user may also select to search by map.

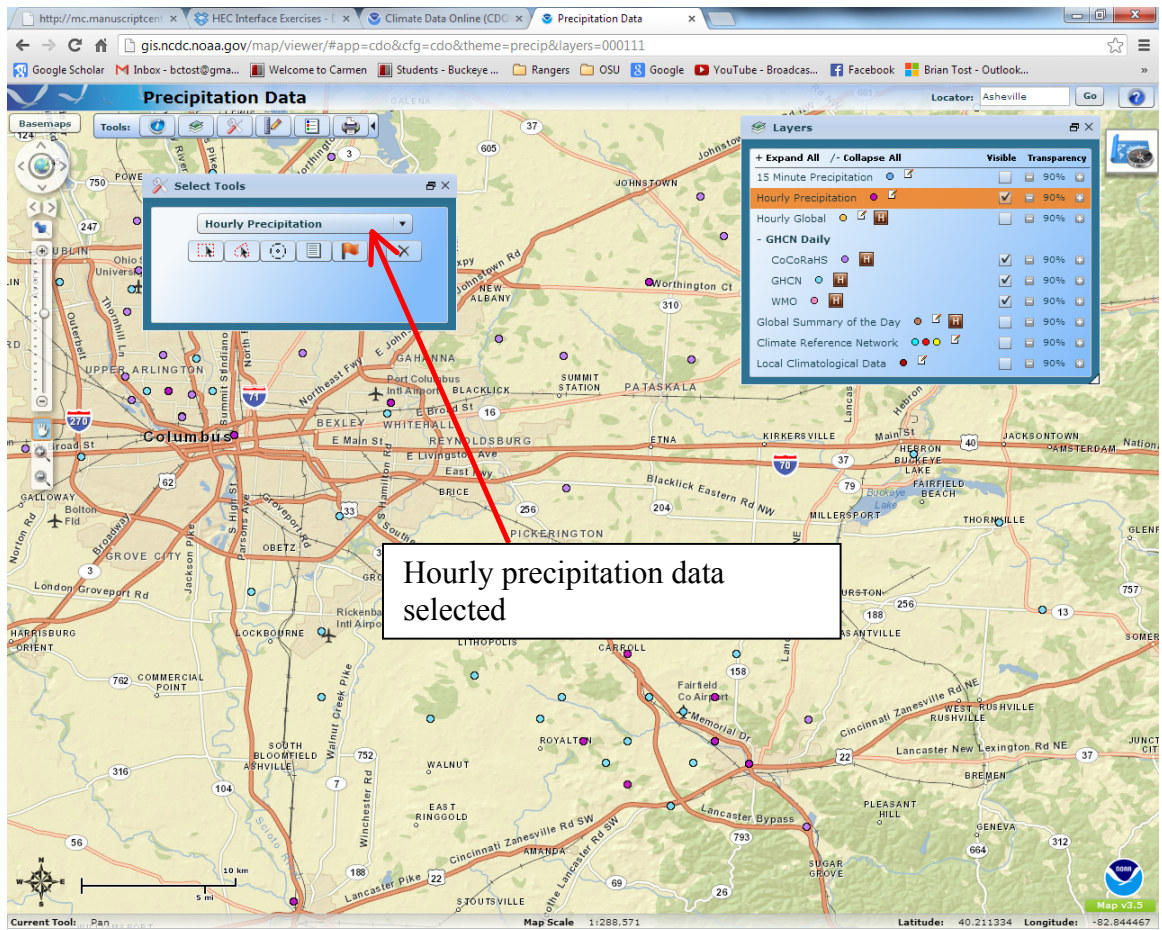
If using the "Data Search" option, enter the data related to the location (zip code, station name), the type of data that the user desires (e.g. hourly precipitation, annual summary, etc.). Then select "Search".

If using the "Map Search" option, select "Go to Map Application". On the following page, select "Precipitation". A world map showing data collection stations will be displayed. Zoom to your location using the mouse wheel.

There will be a pop-up window with "Select Tools" in the header, select the dashed line box and draw a box around the point of interest on the map by clicking and dragging.

NOTE: In order to select hourly precipitation data, the "Hourly Precipitation" layer must be selected on the layers pop-up window. Selecting this layer permits selection of hourly data by way of a drop-down menu in the "Select Tools" window.





When the user has completed drawing the box around your station of interest, release the left mouse button and a second pop-up window will appear with "Results" in the header. Select the station of interest. For this example, Port Columbus Airport will be used as the data source.

The screenshot displays the Climate Data Online (CDO) web application interface. The main map shows a region around Columbus, Ohio, with a red rectangle highlighting the area around Port Columbus Airport. A "Select Tools" pop-up window is visible, showing the "Hourly Precipitation" tool selected. A "Layers" panel on the right lists various data layers, including "Hourly Precipitation", "Hourly Global", "GHCN Daily", "CoCoRaHS", "GHCN", "WMO", "Global Summary of the Day", "Climate Reference Network", and "Local Climatological Data". The "Results" panel at the bottom shows a table with the following data:

Station	Station Id	Begin Date	End Date	State	Country	Latitude	Longitude	Elevation	
<input checked="" type="checkbox"/>	COLUMBUS PORT COLUMBUS	COOP:331786	1948/08/04	2012/07/27	Ohio	United States	39.991°	-82.880°	246.9 m.

The "Results" panel also includes a "Get Selected Data" button and a status bar indicating "1 record found".

Select the box corresponding to your station of interest and click "Get Selected Data". A new tab will open that reads "View/Edit your cart"

In the "Additional Options" field on the far right of the window, select the output date range and the output format. For this example, the date range of the data will be from January 1, 2012 to July 27, 2012 and "Hourly Precipitation Text" will be selected as the output format. Text output is selected because it separates necessary text from the data when the data file is compiled.

Selecting this option will separate text in data fields from numerical values. Once selections have been made, select "Continue".

In the next window, options related to the data included in the user's data request need to be specified. There are three boxes beneath the Flag and Station Detail options.

The screenshot shows the NOAA National Climatic Data Center website. The main heading is "Custom Output - Precipitation Hourly". Below this, there is a section titled "Flag & Station Detail Options" with three checkboxes: "Include data flags", "Station name", and "Geographic location", all of which are checked. Below this section is a "Select data types for custom output" section. It lists "Precipitation" as a selected category, and under it, "HPCP - Precipitation (100th of an inch)" is listed as the only available option. At the bottom of the main content area, there are two buttons: "BACK TO CART" and "CONTINUE TO REVIEW". On the right side, there is a "Help" sidebar with links for "Climate Data Online help", "Check order status", "Request assistance", "Need technical documentation or assistance with systems access?", "View data samples & documentation", "NCDC Web Services", and "CDO Web Services Documentation".

Select the Flag and Station Detail Options of the user's choice. For this example, all three options will be selected.

Beneath the Detail Options window, the data type must be selected. In this example, only hourly precipitation (HPCP) is available.

When all options have been selected, select "Continue to Review".

Another window will open that asks you to review your order. If everything is correct, the user enters their e-mail address and selects "Submit Order"

http://mc.manuscriptcentral.com/hec/hec-interface-exercises/Climate-Data-Online-CDOPrecipitation-DataData Order Confirmationwww1.ncdc.noaa.gov/p...Data Order Confirmation | Climate Data Online (CDO) | National Climatic Data Center (NCDC)

Google ScholarInbox - bctost@gmail.comWelcome to CarmenStudents - Buckeye...RangersOSUGoogleYouTube - Broadcas...FacebookBrian Tost - Outlook...

NOAA NATIONAL CLIMATIC DATA CENTER
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Home About NCDC Contact Help New to Climate Information? SEARCH

Home > Climate Data Online > Review Order Cart (Free Data) 0 Items

Review Order

Requested Data Review

Data Set:	Precipitation Hourly
Order Start Date:	2012-01-01
Order End Date:	2012-07-27
Output Format:	Hourly Precipitation Text
Data Types:	HPCP -
Stations/Locations:	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT, OH US (Station ID: COOP:331786)

Review and Submit Order

Review Order

Please review these selected items from your CDO request: data set, output type, output date ranges, data types (if applicable), and stations and locations.

If all looks good, enter a valid email address that CDO will use to send tracking and data download instructions for this order.

Then, click the "SUBMIT ORDER" button to finalize the order. By submitting this request, you agree with both the [disclaimer](#) and the [privacy policy](#).

Enter email address

Email Address
tost2@buckeyemail.osu.edu

Verify Email Address
tost2@buckeyemail.osu.edu

BACK TO SEARCH SUBMIT ORDER

Help

Have questions about the data? Need some assistance? Use the links below to quickly find the answers you need.

[Online help](#)
[Check request status](#)
[Request assistance](#)
[Contact Us](#)

Need technical documentation or system

161441.dat.txt Port Columbus Hourl...txt Show all downloads...

The final window opens to show that the request has been submitted.

The screenshot shows a web browser window with multiple tabs open, including 'Climate Data Online (CDO)', 'Precipitation Data', and 'Online Data Request Submitted'. The main content area displays the NOAA logo and the text 'NATIONAL CLIMATIC DATA CENTER NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'. Below this is a navigation bar with links to 'Home', 'About NCDC', 'Contact', 'Help', and 'New to Climate Information?'. A search bar is also present. The main heading is 'Request Submitted', followed by a green box with a checkmark icon and the text: 'Your request was successfully submitted. The requested data should be ready shortly.' Below this is a 'Print Receipt' button. The order details are listed in a table-like format: 'Order Number: 161441', 'Requested Format: Hourly Precipitation Text', 'Order Status: Check the status of order' (with a green button), 'Email Address: tost.2@buckeyemail.osu.edu', 'Date Submitted: 2013-6-4 15:59:9 EST', 'Period of Request' (Start Date: 1/1/2012, End Date: 7/27/2012), 'Requested Data' (Custom Options: Include data flags, Station name, Geographic location; Stations: COOP:331786 - COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT, OH US; Data Types: HPCP - Precipitation (100th of an inch)). To the right is a 'Help' sidebar with links for 'Online help', 'Check request status', 'Request assistance', 'Contact Us', 'Need technical documentation or system access?', 'View data samples & documentation', 'NCDC Web Services', and 'CDO Web Services Documentation'. At the bottom, a 'What next?' section explains that a confirmation email has been sent and provides instructions on how to track the order and access the data.

Request Submitted

Your request was successfully submitted.
The requested data should be ready shortly.

Print Receipt

Order Number: 161441
Requested Format: Hourly Precipitation Text
Order Status: [Check the status of order](#)
Email Address: tost.2@buckeyemail.osu.edu
Date Submitted: 2013-6-4 15:59:9 EST

Period of Request
Start Date: 1/1/2012
End Date: 7/27/2012

Requested Data
Custom Options: Include data flags, Station name, Geographic location
Stations: COOP:331786 - COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT, OH US
Data Types: HPCP - Precipitation (100th of an inch)

What next?
A confirmation email has been sent to your inbox with order details. The email contains important information about the order, including the order number. The order number is necessary for tracking the status of your order. When the process is complete, you will receive an email that will include a link to the requested data.

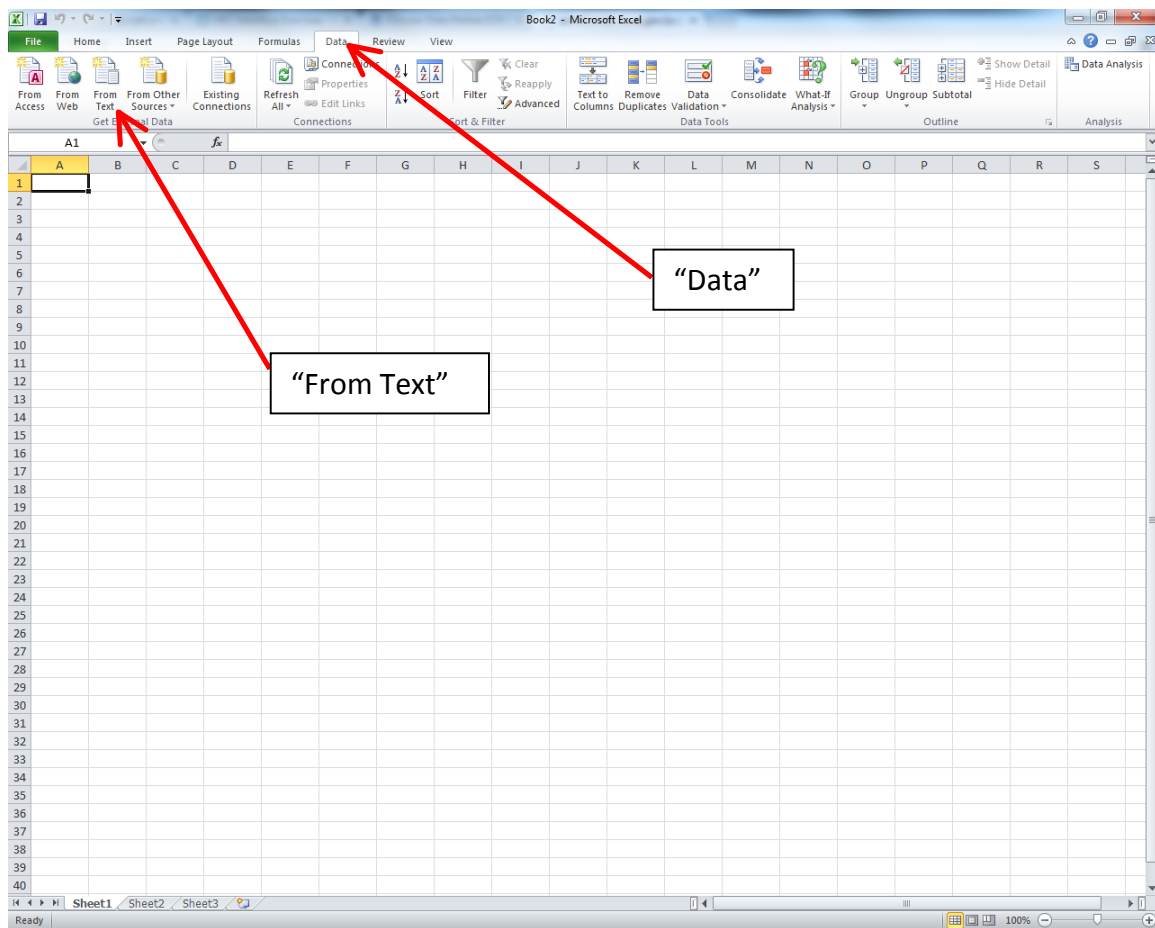
If the order was placed with the Department of Commerce Certification Option, a button labeled "Certify this order" will be found in the email once it has been processed as well as the [order status page](#). Use this button to continue to the NCDC Online Store and follow the

Help
Have questions about the data? Need some assistance? Use the links below to quickly find the answers you need.
[Online help](#)
[Check request status](#)
[Request assistance](#)
[Contact Us](#)
[Need technical documentation or system access?](#)
[View data samples & documentation](#)
[NCDC Web Services](#)
[CDO Web Services Documentation](#)

The selected data will be received in a link sent to the provided e-mail address. For this example, the link opens a data file summarizing the hourly precipitation data recorded at Port Columbus Airport between January 1, 2012 and July 27, 2012.

To import the data into a spreadsheet, such as Excel, right-click on the opened data file and select "Save as". Save the data as a text document (.txt file format).

Open a spreadsheet and go to the "Data" tab. Select "From Text" as the data source.



Select the text file that contains the saved data. Keep "Fixed Width" as the file type. Click "Next".

Text Import Wizard - Step 1 of 3

The Text Wizard has determined that your data is Fixed Width.
If this is correct, choose Next, or choose the data type that best describes your data.

Original data type

Choose the file type that best describes your data:

☐ Delimited - Characters such as commas or tabs separate each field.

☒ Fixed width - Fields are aligned in columns with spaces between each field.

Start import at row: File origin:

Preview of file \\feldspar\test.2\$\profile\desktop\Teaching Geosciences Documents\161441.dat.txt.

1	STATION	STATION_NAME	ELEV
2	-----		
3	COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246
4	COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246
5	COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246

Cancel < Back Next > Finish

Select the appropriate column breaks for the data.

Text Import Wizard - Step 2 of 3

This screen lets you set field widths (column breaks).
Lines with arrows signify a column break.

To CREATE a break line, click at the desired position.
To DELETE a break line, double click on the line.
To MOVE a break line, click and drag it.

Data preview

STATION	STATION	NAME							ELEVATION
COOP: 331786	COLUMBUS	PORT	COLUMBUS	INTERNATIONAL	AIRPORT	OH	US	246.9	
COOP: 331786	COLUMBUS	PORT	COLUMBUS	INTERNATIONAL	AIRPORT	OH	US	246.9	
COOP: 331786	COLUMBUS	PORT	COLUMBUS	INTERNATIONAL	AIRPORT	OH	US	246.9	

Cancel < Back Next > Finish

Change the Column Data format, if necessary.

Text Import Wizard - Step 3 of 3

This screen lets you select each column and set the Data Format.

Column data format

☒ General
☐ Text
☐ Date: MDY
☐ Do not import column (skip)

'General' converts numeric values to numbers, date values to dates, and all remaining values to text.

Advanced...

Data preview

General	General	General	General	General	General	General	General	General
STATION	STATION	NAME						ELEVATION
COOP:331786	COLUMBUS	PORT	COLUMBUS	INTERNATIONAL	AIRPORT	OH	US	246.9
COOP:331786	COLUMBUS	PORT	COLUMBUS	INTERNATIONAL	AIRPORT	OH	US	246.9
COOP:331786	COLUMBUS	PORT	COLUMBUS	INTERNATIONAL	AIRPORT	OH	US	246.9

Cancel < Back Next > Finish

When all selections are complete, select "Finish". Select the location for data import and select "OK". The data will be imported into the spreadsheet. Save the spreadsheet and the process is complete.

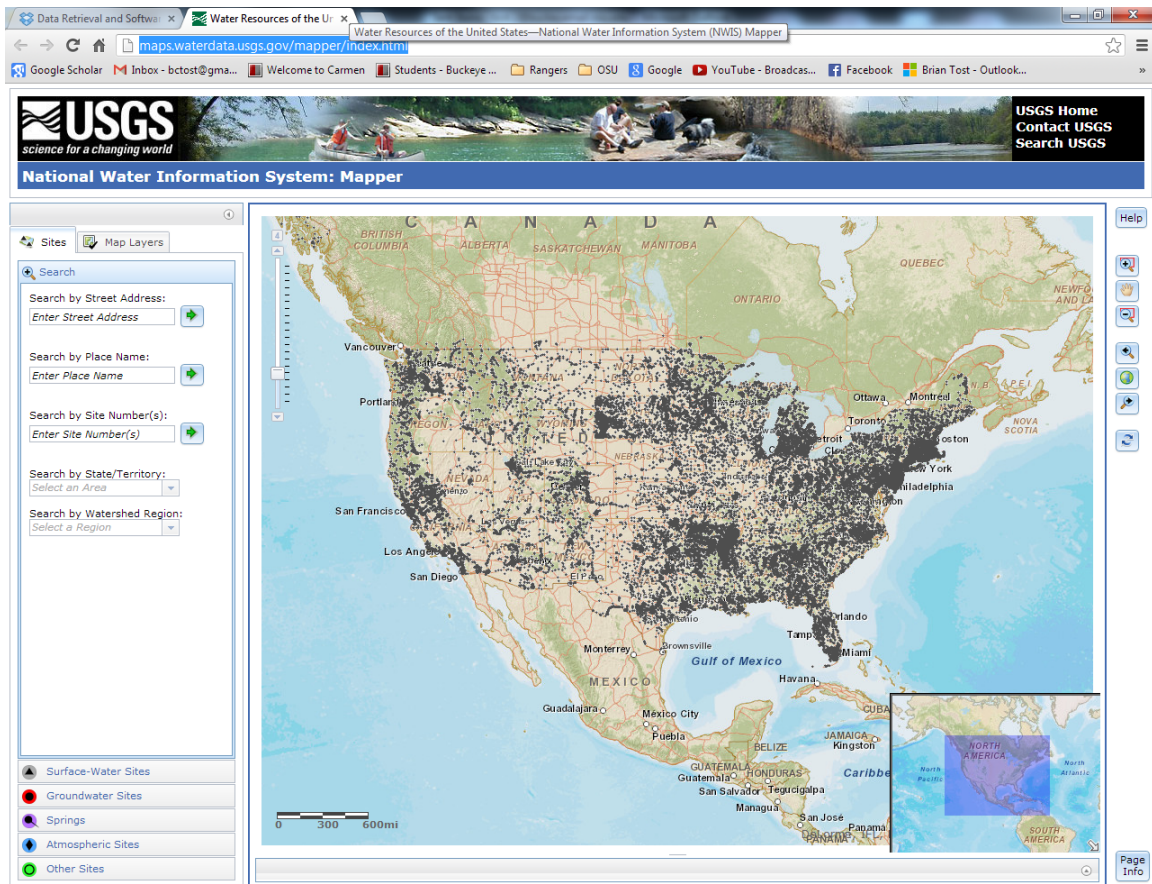
STATION	STATION_NAME	ELEVATION	LATITUDE	LONGITUDE	DATE	HPCP	Measurement Flag Quality Flag
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 1:00	0 g	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 6:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 12:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 13:00	2	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 15:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 16:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 17:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120101 22:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 3:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 4:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 5:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 6:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 7:00	1	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 8:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 9:00	1	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 10:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 11:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 12:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 13:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 14:00	1	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 15:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 16:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 17:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 18:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 19:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 20:00	1	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 21:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 22:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120102 23:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 0:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 1:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 2:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 3:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 4:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 5:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 12:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 13:00	0 T	
COOP:331786	COLUMBUS PORT COLUMBUS INTERNATIONAL AIRPORT OH US	246.9	39.99139	-82.88083	20120103 14:00	0 T	

Retrieval of Surface Water Discharge Data

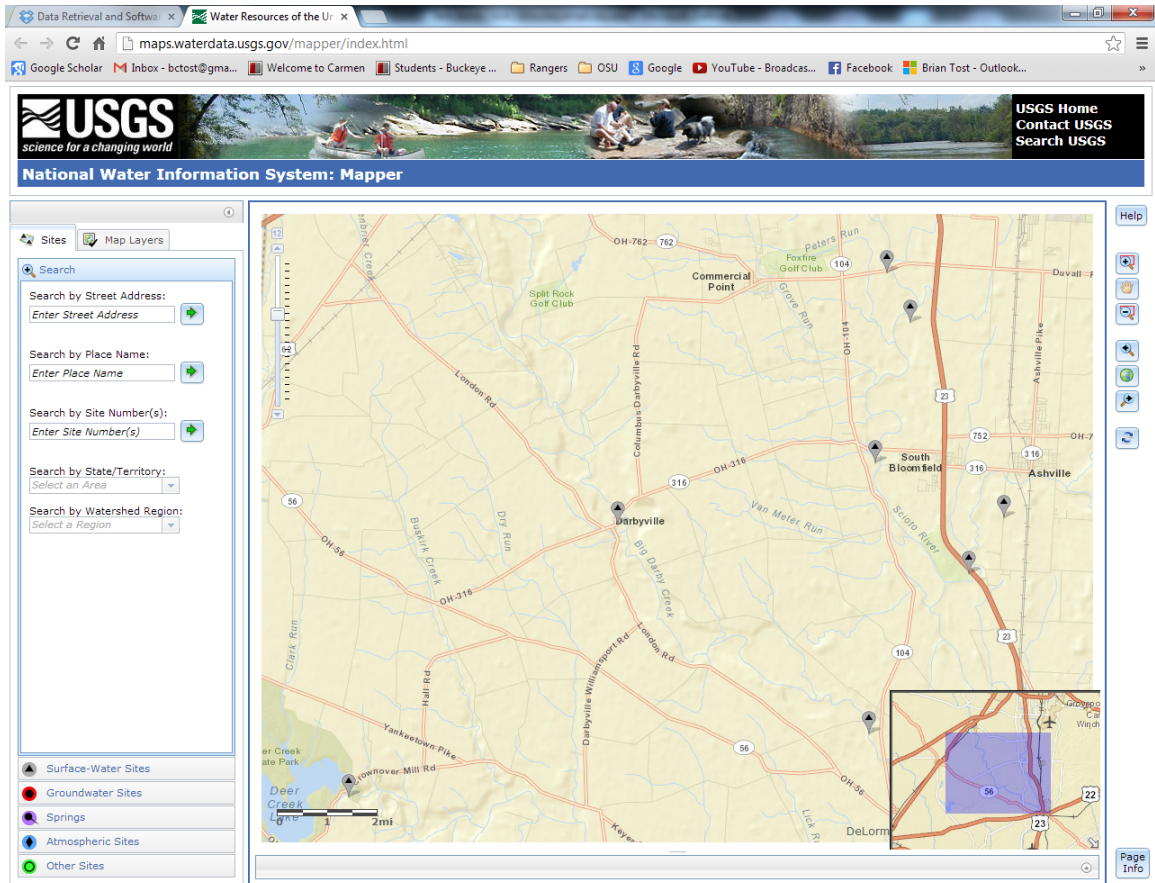
Surface water discharge data are available from the United States Geological Survey (USGS) from the following link:

<http://maps.waterdata.usgs.gov/mapper/index.html>

To retrieve data specific to a certain area, click on the link. A window opens that displays a map of the US showing the surface water discharge measuring stations.



The user may select their station-of-interest by street address, name, site number, or by zooming in on a station by using the mouse wheel. For this example, the discharge measuring station at Darbyville will be selected.



Left-click on the station. Information on the site will appear next to the icon showing the location of the station. Left-click on "Access Data".

Data Retrieval and Software | Water Resources of the United States—National Water Information System (NWIS) Mapper

maps.waterdata.usgs.gov/map

USGS science for a changing world

National Water Information System: Mapper

USGS Home Contact USGS Search USGS

Sites Map Layers

Search

Search by Street Address: Enter Street Address

Search by Place Name: Enter Place Name

Search by Site Number(s): Enter Site Number(s)

Search by State/Territory: Select an Area

Search by Watershed Region: Select a Region

Surface-Water Sites

Groundwater Sites

Springs

Atmospheric Sites

Other Sites

Site Information

Site Number: 03230500

Site Name: Big Darby Creek at Darbyville OH

Agency: USGS

[Access Data](#)

2mi

Page Info

A new tab will open in the internet browser showing data related to the station. Select the data-of-interest to the user. In this example, "Discharge, cubic feet per second" under the heading of "Daily Statistics" will be selected.

USGS 03230500 Big Darby Creek at Darbyville OH

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information Geographic Area: United States GO

News - updated May 28, 2013

USGS 03230500 Big Darby Creek at Darbyville OH

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Stream Site

DESCRIPTION:
Latitude 39°42'02", Longitude 83°06'37" NAD27
Pickaway County, Ohio, Hydrologic Unit 05060001
Drainage area: 534 square miles
Contributing drainage area: 534 square miles,
Datum of gage: 713.69 feet above NGVD29.

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations (availability statement)	2007-10-01	2013-06-04	
Daily Data			
Discharge, cubic feet per second	1921-10-01	2013-06-03	32388
Suspended sediment concentration, milligrams per liter	1992-11-12	1998-09-30	2149
Suspended sediment discharge, tons per day	1992-11-12	1998-09-30	2149
Daily Statistics			
Discharge, cubic feet per second	1921-10-01	2012-09-30	32142
Suspended sediment concentration, milligrams per liter	1992-11-12	1998-09-30	2149
Suspended sediment discharge, tons per day	1992-11-12	1998-09-30	2149
Monthly Statistics			
Discharge, cubic feet per second	1921-10	2012-09	
Suspended sediment concentration, milligrams per liter	1992-11	1998-09	
Suspended sediment discharge, tons per day	1992-11	1998-09	
Annual Statistics			
Discharge, cubic feet per second	1922	2012	
Suspended sediment concentration, milligrams per liter	1993	1998	
Suspended sediment discharge, tons per day	1993	1998	
Peak streamflow	1922-04-15	2011-02-07	80

Another tab in the internet browser will open, showing discharge parameters. Select the user's desired parameters. For this example, "Discharge, cubic feet per second" will be selected.

The screenshot shows the USGS Surface Water data interface in a web browser. The browser tabs include "Data Retrieval and Software", "Water Resources of the US", and "USGS Surface Water data". The address bar shows the URL: waterdata.usgs.gov/nwis/dvstat?referred_module=sw&search_site_no=03230500&format=sites_selection_links. The page header features the USGS logo and navigation links. The main content area is titled "USGS Surface-Water Daily Statistics for the Nation" and "USGS 03230500 Big Darby Creek at Darbyville OH". A "Time-series" dropdown menu is set to "Daily statistics". The "Site Selection" section prompts the user to select sites based on criteria. A table lists three parameters for the selected site: Discharge (00060), Suspended sediment concentration (80154), and Suspended sediment discharge (80155). The "Choose Output Format" section provides options for date range, table format, and file format. The "Retrieve USGS Surface-Water Daily Statistics for Selected Sites" section includes a "Date range" field, a "Table of" dropdown, and a "Tab-separated data" option. The "Submit" button is visible at the bottom.

USGS Surface-Water Daily Statistics for the Nation
USGS 03230500 Big Darby Creek at Darbyville OH

Available data for this site: Time-series: Daily statistics GO

Site Selection
Select sites which meet all of the following criteria: ---- or select [new criteria](#)

Check one or more boxes to select sites/parameters for further display--below

USGS 03230500 Big Darby Creek at Darbyville OH					
	Parameter Code	Parameter Name	Period of Approved Daily-Mean Data		
			From	To	Count
<input type="checkbox"/>	00060	Discharge, cubic feet per second	1921-10-01	2012-09-30	32142
<input type="checkbox"/>	80154	Suspended sediment concentration, milligrams per liter	1992-11-12	1998-09-30	2149
<input type="checkbox"/>	80155	Suspended sediment discharge, tons per day	1992-11-12	1998-09-30	2149

Choose Output Format

Retrieve USGS Surface-Water Daily Statistics for Selected Sites
Choose one of the following options for displaying data for the sites meeting the criteria above

☐ Date range for statistics calculation of all selected parameters -- From: (YYYY-MM-DD) To: (YYYY-MM-DD)
If blank, use entire period of record for each parameter.

☒ Table of Mean of daily mean value for each day

☐ Tab-separated data (YYYY-MM-DD) Save to file *

* Save compressed files with a .gz file extension.

Select the appropriate options for displaying data. In this example, the fields will be left blank so that the mean data from all time periods will be displayed. Click "Submit".

The next window will display the selected data. In this example, the daily discharge measured at the Darbyville station is displayed.

USGS Surface Water data for USA: USGS Surface-Water Daily Statistics

waterdata.usgs.gov/nwis/dvstat?referred_module=...61,00060,4,1921-10-01,2012-09-30&format=html

USGS Water Resources

Data Category: Surface Water Geographic Area: United States GO

News - updated May 28, 2013

USGS Surface-Water Daily Statistics for the Nation

The statistics generated from this site are based on approved daily-mean data and may not match those published by the USGS in official publications. The user is responsible for assessment and use of statistics from this site. For more details on why the statistics may not match, [click here](#).

USGS 03230500 Big Darby Creek at Darbyville OH

Available data for this site Time-series: Daily statistics GO

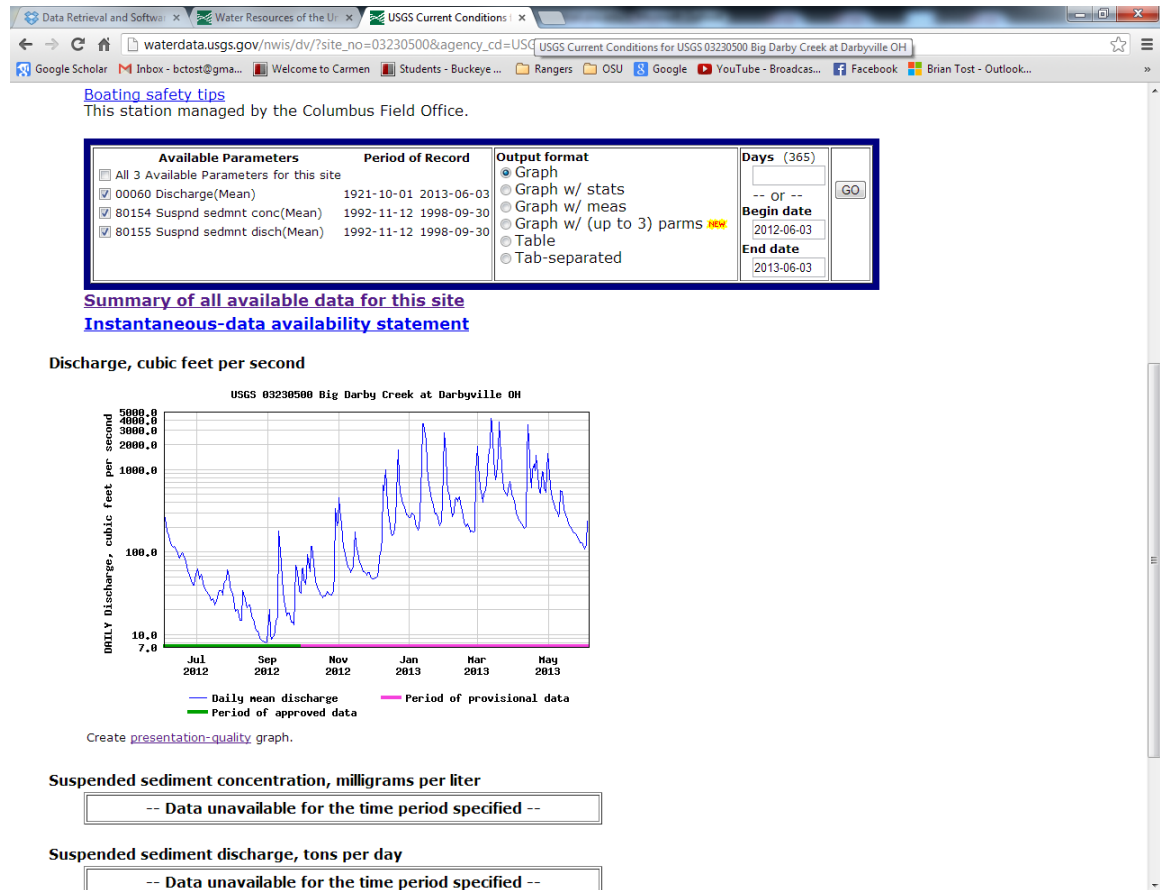
Pickaway County, Ohio
Hydrologic Unit Code 05060001
Latitude 39°42'02", Longitude 83°06'37" NAD27
Drainage area 534 square miles
Contributing drainage area 534 square miles
Gage datum 713.69 feet above NGVD29

Output formats
[HTML table of all data](#)
[Tab-separated data](#)
[Reselect output format](#)

00060, Discharge, cubic feet per second,

Day of month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	808	609	768	761	547	452	308	154	110	89	133	459
2	768	584	794	775	587	495	326	135	128	110	137	496
3	744	629	821	888	737	799	376	154	151	123	186	441
4	790	644	883	1,030	715	679	355	143	124	121	148	474
5	960	695	1,230	1,080	672	537	274	143	93	169	122	460
6	1,010	726	1,390	961	577	476	237	197	121	212	120	514
7	878	728	1,260	811	485	492	198	201	102	135	136	549
8	680	665	957	823	525	496	216	176	82	92	136	469
9	630	615	893	949	638	543	227	165	71	84	174	418
10	565	657	953	938	633	523	201	209	64	108	166	445
11	573	793	987	914	580	534	203	220	64	102	227	431
12	708	738	967	943	684	468	208	212	71	90	260	433
13	651	690	1,000	917	692	428	319	181	80	78	249	428
14	642	829	1,120	1,010	751	537	374	175	135	71	317	623
15	649	928	1,190	995	744	616	344	152	211	81	332	570

Other data in connection with time-series data are also available via the drop-down menu. For example, a hydrograph may be generated by selecting "Daily Data"



Accessing Topographic Maps

7.5 Minute Quadrangle topographic maps from the USGS are available at no cost from the following link:

[http://store.usgs.gov/b2c_usgs/usgs/maplocator/\(xcm=r3standardpitrex_prd&layout=61_61_48&uiarea=2&ctype=areaDetails&carearea=%24ROOT\)/.do](http://store.usgs.gov/b2c_usgs/usgs/maplocator/(xcm=r3standardpitrex_prd&layout=61_61_48&uiarea=2&ctype=areaDetails&carearea=%24ROOT)/.do)

To order a topographic map for a particular area, click on the link. A window opens showing a map of the US. Using the mouse wheel, zoom in on the area of interest. In this example, a topographic map containing the location of the BPRC will be downloaded.

The screenshot shows the USGS Map Locator & Downloader web application. The page has a green header with the USGS logo and navigation links. Below the header, there's a search bar with a dropdown menu for "Address or Place" and a "Go" button. To the right of the search bar, there are tabs for "Map", "Satellite", and "Topo". The main map area displays a topographic map of the United States with state boundaries and names. A search bar is overlaid on the map. To the right of the map, there are instructions for navigating and marking points. Below the map, there's a "TERRAGO toolbar" with a "DOWNLOAD NOW" button. At the bottom, there's a "Get Adobe Reader" button and a link to download Adobe Reader to view PDF files.

USGS
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The USGS Store
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Map Locator & Downloader
Don't see the Map Locator & Downloader? [Help](#)

Search: Address or Place [\[Search Help\]](#) or [Find a place on the map](#) [\[Navigation Help\]](#)

☐ NAVIGATE:
Double click to re-center, click and drag to pull the map around, zoom in and out.

☐ MARK POINTS:
Click on a place to add a marker.

NOTES:
Switch between Navigate and Mark Points at any time.
The following [map footprints](#) appear when you are in the Mark Points mode and zoomed in:
7.5 and 15 Minute

SELECT AND GET YOUR MAPS:
Click marker to see an information bubble showing maps available, then click on "order", "download", or add maps your download cart.

[View Download Cart](#)

[Clear Markers](#) [Reset Map](#)

[Show US Topo](#)

TERRAGO toolbar
Free plug-in for Adobe® Reader®
• ACCESS geospatial maps & imagery
• MEASURE distances & area
• CAPTURE field information
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store.usgs.gov/b2c_usgs/usgs/maplocator/

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<< Back To Store About: USGS Maps :: GeoPDF Maps :: Map Dates :: USGS Historical Topographic Maps (Status Map) :: US Topo Maps (Quickstart)

Map Locator & Downloader [DOI Disclaimer on Google Maps API](#)
Don't see the Map Locator & Downloader? [Help](#) | Having trouble? Call: 1-888-ASK-USGS (1-888-275-8747, Select Option 2) or Write: usgsstore@usgs.gov for help.

Search: Address or Place [\[Search Help\]](#) or Find a place on the map [\[Navigation Help\]](#)

☒ NAVIGATE:
Double click to re-center, click and drag to pull the map around, zoom in and out.

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[View Download Cart](#)

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On the far right of the window, a button titled "Mark Points" is un-checked. Once the user has located their area of interest, check the "Mark Points" button. Click on the area of interest on the map. A red marker will appear showing the location of interest.

store.usgs.gov/b2c_usgs/usgs/maplocator/(xcm=r3standardpitrex_prd&layout=6_1_61_48&uiarea=2&ctype=areaDetails&care=%24ROOT)/do

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Map Locator & Downloader

DOI Disclaimer on Google Maps API

Don't see the Map Locator & Downloader? Help | Having trouble? Call: 1-888-ASK-USGS (1-888-275-8747, Select Option 2) or Write: usgsstore@usgs.gov for help.

Search: Address or Place Go [Search Help] or Find a place on the map [Navigation Help]

Map Satellite Topo

NAVIGATE: Double click to re-center, click and drag to pull the map around, zoom in and out.

MARK POINTS: Click on a place to add a marker.

NOTES: Switch between Navigate and Mark Points at any time. The following map footprints appear when you are in the Mark Points mode and zoomed in: 7.5 and 15 Minute

SELECT AND GET YOUR MAPS: Click marker to see an information bubble showing maps available, then click on "order", "download", or add maps your download cart.

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Clear Markers Reset Map

Show US Topo

Google 200 m 500 ft

40-00 379N 83-02 220W
USNG 17T LE 2613 3044

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TERRAGO toolbar

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ACCESS geospatial maps & imagery
MEASURE distances & area
CAPTURE field information

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Left-click on the red marker to display the topographic maps that are available for that area. For this example, the most recent topographic map (2010) will be selected.

A column titled "Download" shows the memory size of each topographic map available for the location of interest. Each entry in this column is also a link to the map of interest. Select the map by selecting the memory size.

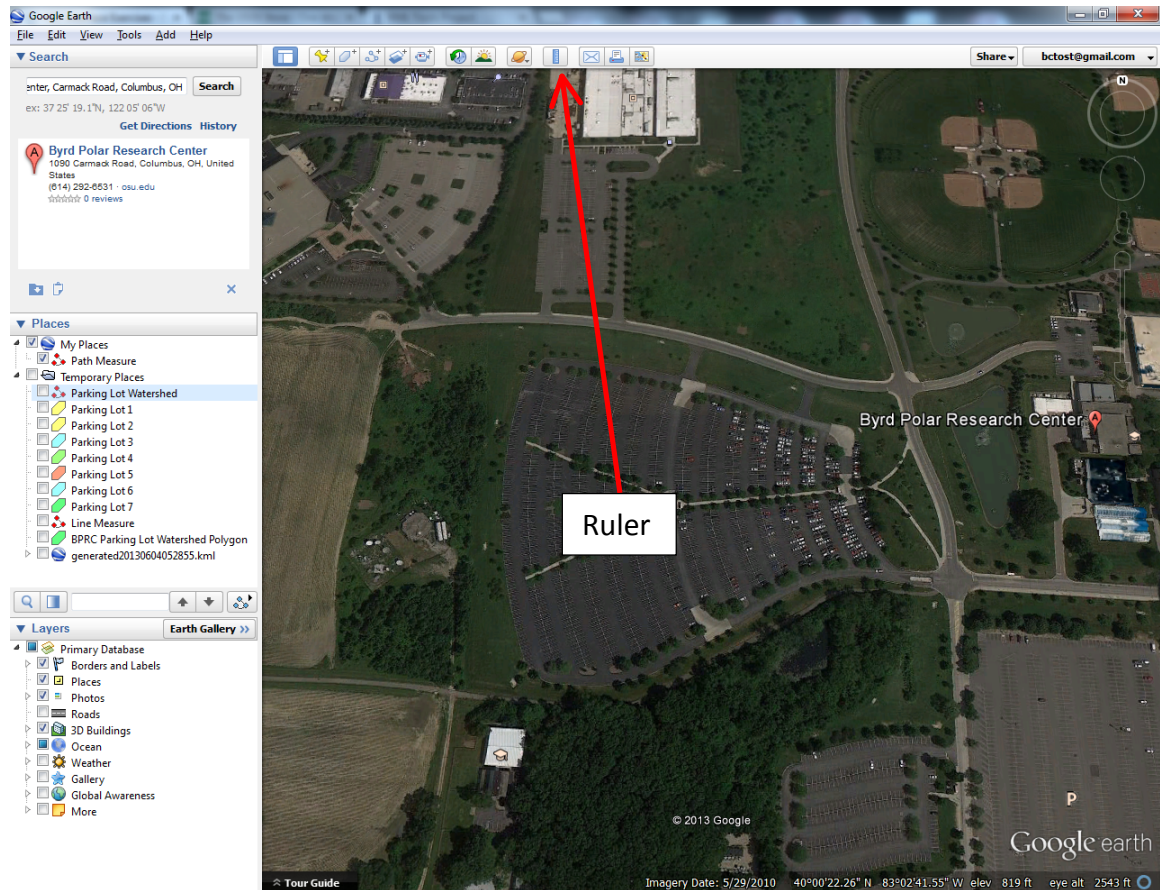
The screenshot shows the USGS Map Locator & Downloader web application. The main map displays Northwest Columbus, Ohio, with a list of available topographic maps. The list has columns for 'Size', 'Date', and 'View'. A red arrow points to the 'Download' column, which contains links to download the maps. The list includes maps for Northwest Columbus, Ohio, with various dates and sizes. A box labeled 'Download' is also present on the right side of the interface.

Map Name	Size	Date	View
Northwest Columbus, Ohio	7.5X7.5	2010	view 18.7MB
Northwest Columbus, Ohio	7.5X7.5	1995	view 16.9MB
Northwest Columbus, Ohio	7.5X7.5	1995	view 17.1MB
Northwest Columbus, Ohio	7.5X7.5	1965	view 11.6MB
Northwest Columbus, Ohio	7.5X7.5	1965	view 15.0MB
Northwest Columbus, Ohio	7.5X7.5	1965	view 9.9MB

A .zip file will automatically download onto the user's computer. Open the .zip folder and click on the map to open it.

Drawing Shapes and Overlaying Topographic Maps in Google Earth

The ability to draw shapes and lines in Google Earth is fundamental for delineation of watersheds, as well as other geographic features. The process for drawing lines and shapes in Google Earth is a straight-forward process. The user selects an area that they wish to delineate. For this example, the Byrd Polar Research Center will be selected.



For this example, the parking lot directly to the west of BPRC will be outlined using Google Earth's "Ruler" tool.

Select the "Ruler" tool. A pop-up window will appear.

Ruler

Line Path Pro

Measure the distance between two points on the ground

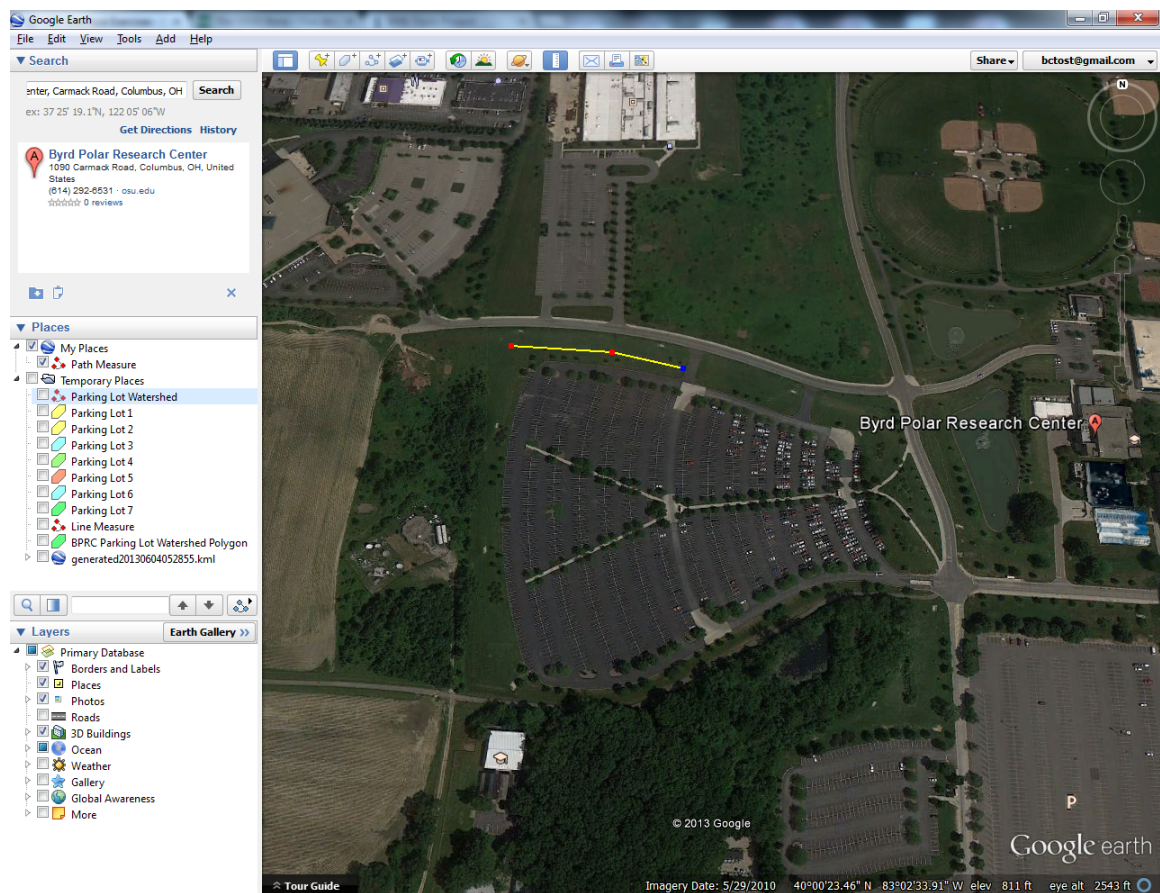
Map Length:	0.00	Feet
Ground Length:	0.00	
Heading:	0.00	degrees

☒ Mouse Navigation

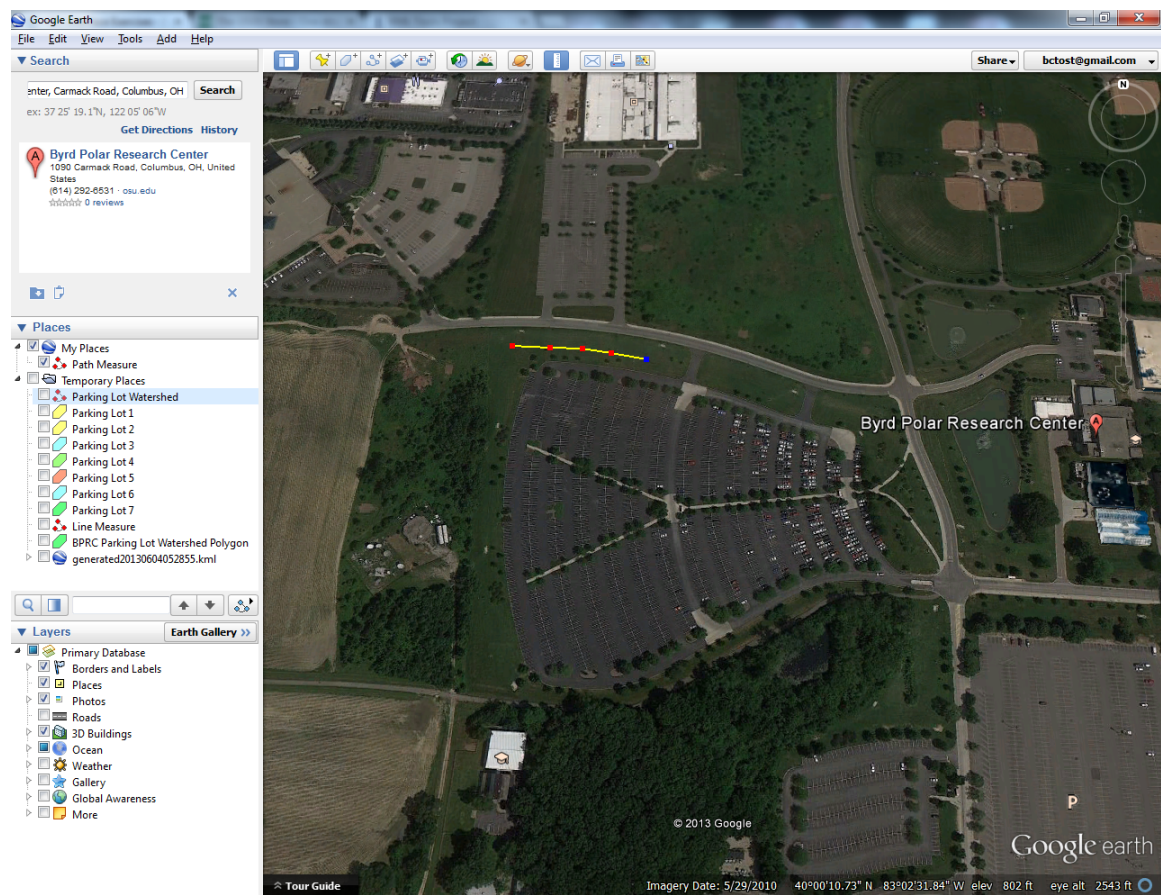
Save Clear

At this time, it will be necessary to determine whether the user would prefer a line or a path. Choosing "Line" will result in a line connecting two points, choosing "Path" will result in a continuous line connecting multiple points. This selection will depend on the user's goal. In this example, the goal is to outline the parking lot, which is irregularly-shaped. For this reason, path will be selected.

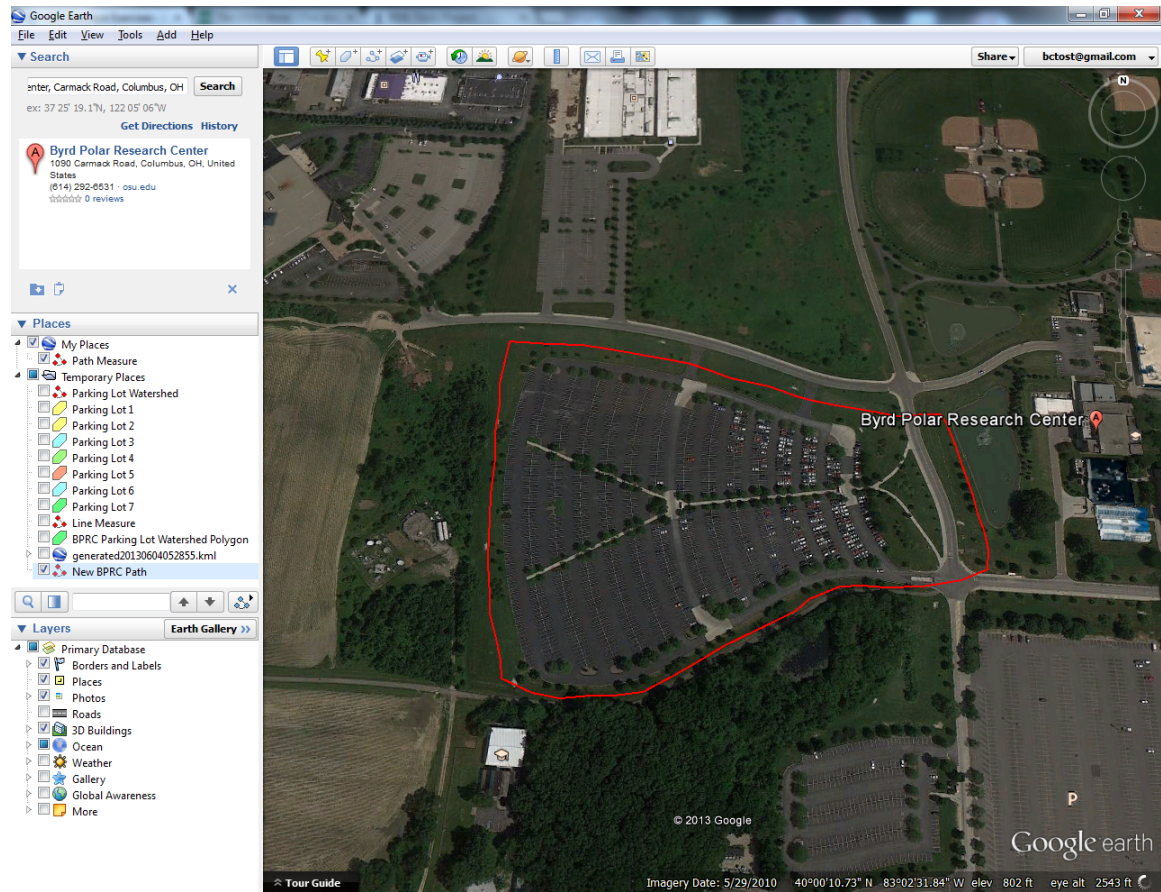
Place the cursor over the image at the point where the user would like to begin outlining the shape. The user then places points along the desired path by left-clicking. Google Earth draws line segments connecting the points.



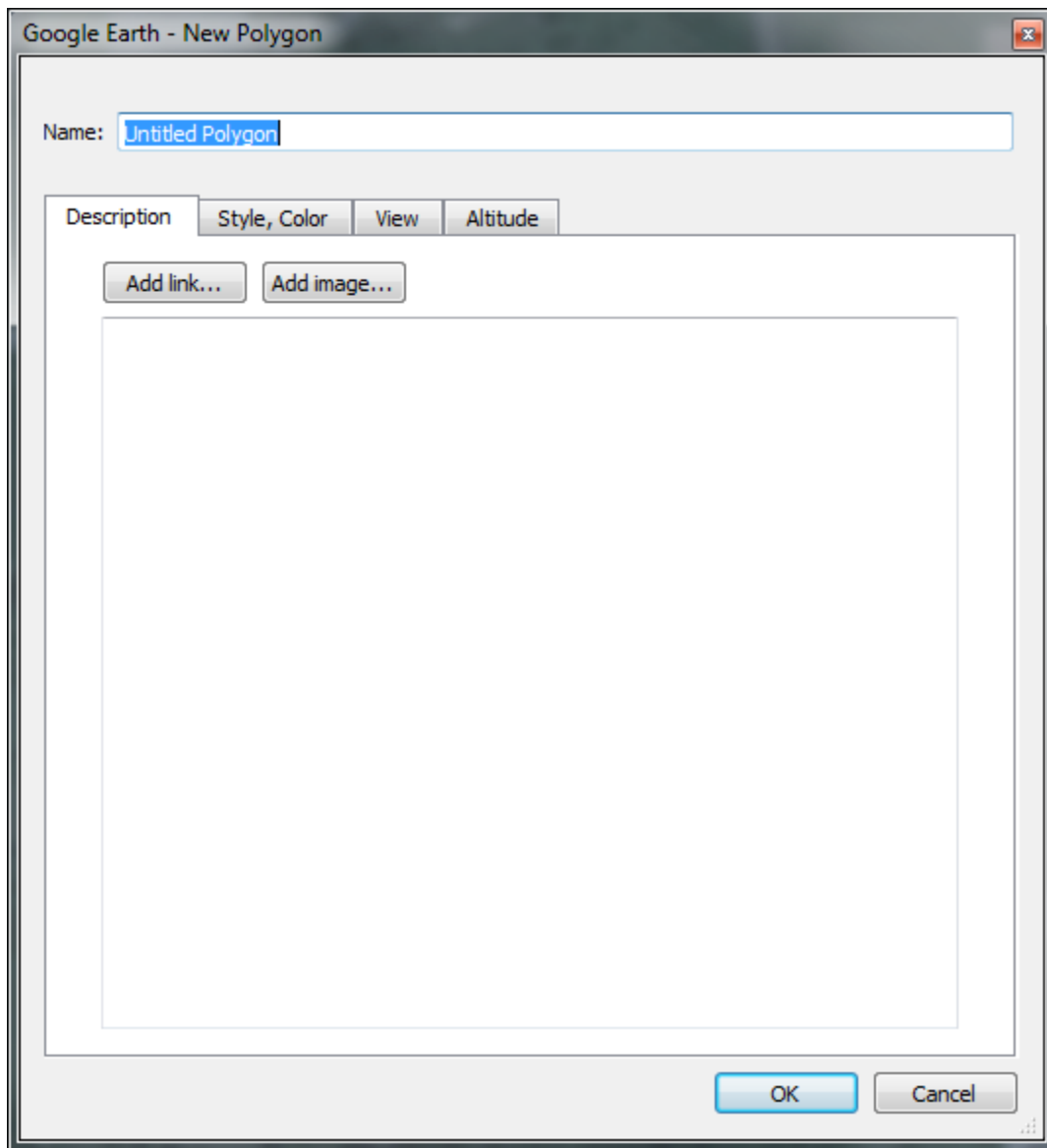
If the user believes that the accuracy of the desired shape has not been preserved, points can be moved by clicking and dragging an existing point and moving it. Points can be deleted by right-clicking.



Continue adding points until the shape is completed. When completed, be sure to save the new shape into the Google Earth browser.

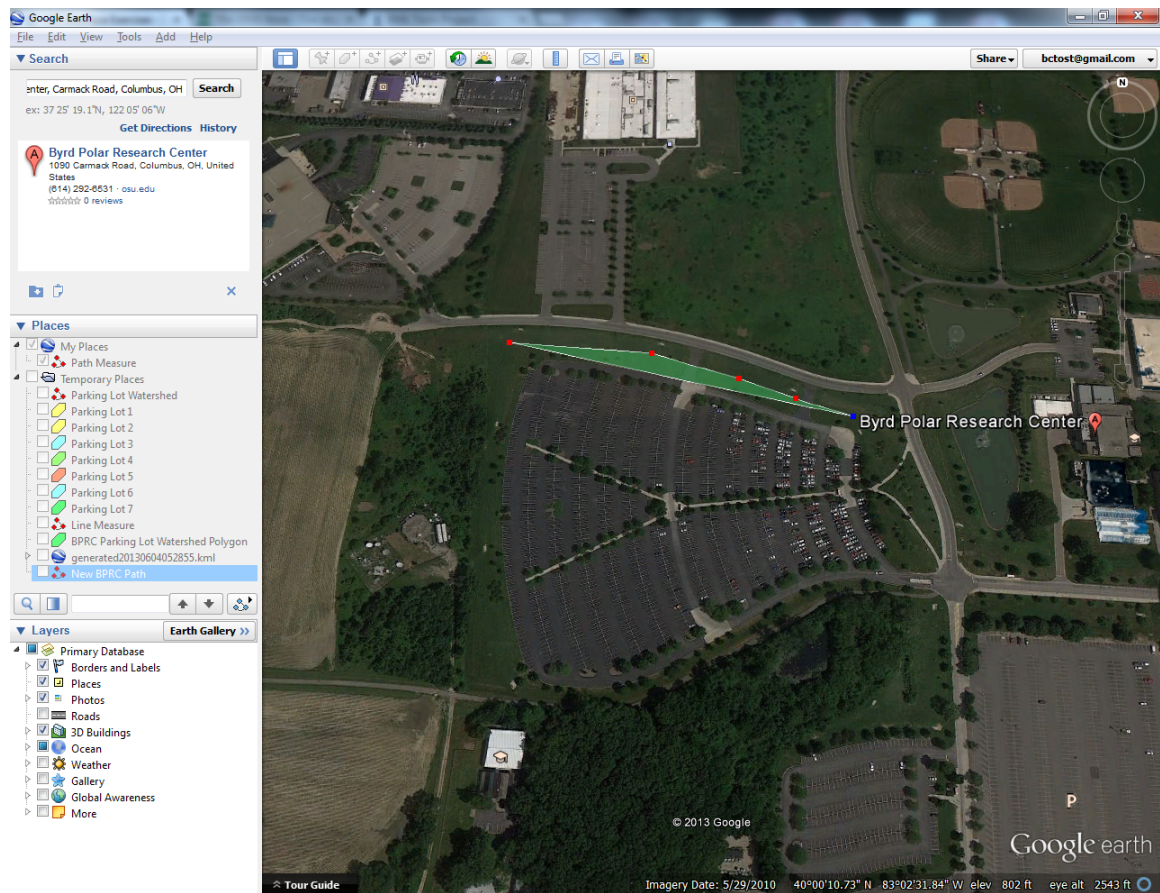


Shapes may also be drawn using the polygon tool. As in the previous example, the Byrd Polar Research Center will be used in this example. Select the polygon tool. A new pop-up window will appear.

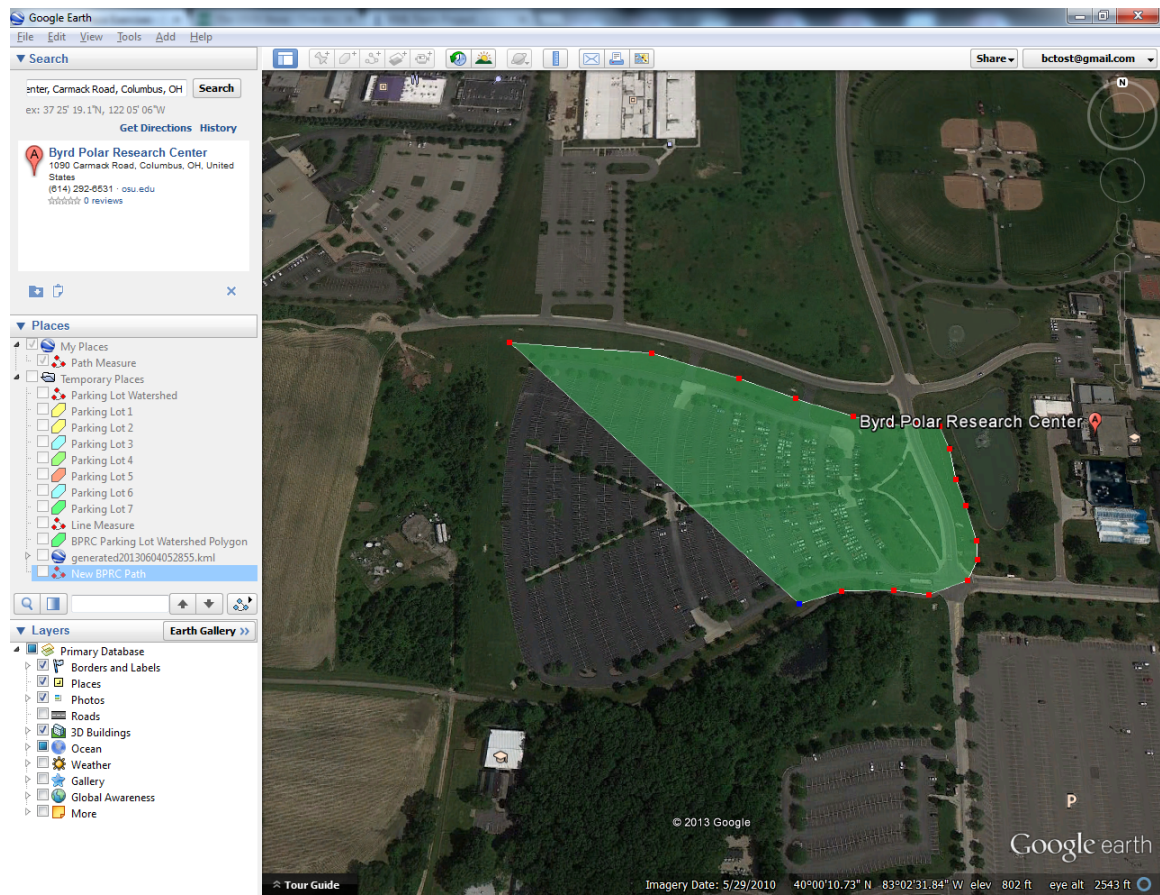


Begin making the polygon by clicking points on the image in Google Earth. The user may draw the polygon in two ways. Discrete points may be drawn on the image by left-clicking on the image or continuous points may be drawn by holding down the left mouse button and dragging points along the path. The method of using continuous points is difficult to control without practice.

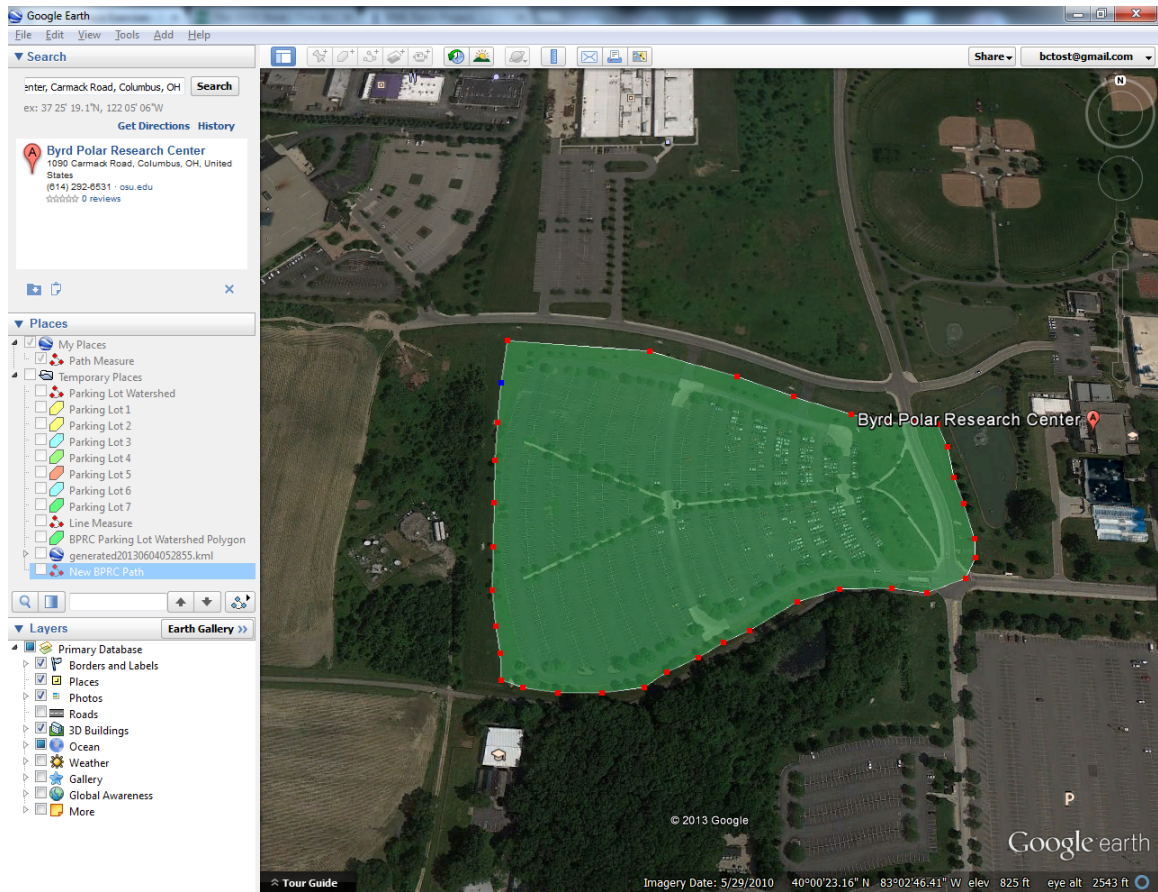
In either method, the polygon is drawn as a web that forms between points as they are drawn.



Continued



The user continues adding points until the polygon is completed. Care should be taken to ensure that the number of points preserves the shape of the desired polygon.



When completed, save the polygon into the Google Earth browser.