

How to obtain temperature information from the NCDC Website

You will be gathering the MMNT (monthly minimum temperature). You will also need MMXT (monthly maximum temp), TPCP (precipitation) and TSNW (snow) precipitation data.

NCDC Website—www.ncdc.noaa.gov

The NCDC site is available for free only on a computer with an .edu domain. You can access the site from any computer, but if the computer doesn't have an .edu domain, you will be prompted for payment.

Instructions:

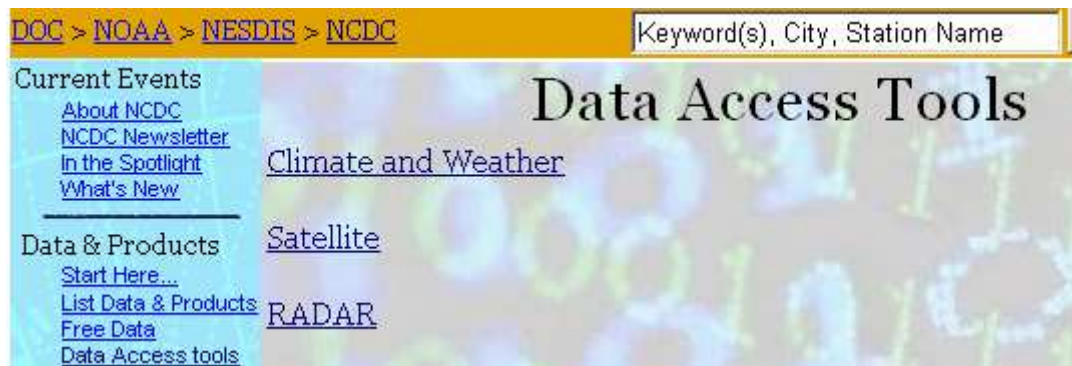
On the homepage www.ncdc.noaa.gov choose: Weather/Climate Events, Information...




On the Weather/ Climate Resources page, on the left bar select Data Access tools



At the Data Access Tools, select: climate and weather



From Climate and Weather page, select Global Surface Data

 **Climate & Weather**

[Map Interface to
Selected Online Data](#)

This GIS-based map interface provides access to US and global climate/weather data. The user selects the type of data required, and then uses a GIS interface to view the available stations, and select the stations of interest. This interface is gradually being upgraded to be more user-friendly and have additional features added.

[Select from Maps](#)

Over 2000 climate maps of the United States, including Alaska and Hawaii, are available in this system. These full color maps for climatic elements such as temperature, precipitation, snow, wind, pressure, etc., portray the climate of the U.S. The period of record of the data for most of the maps is 1961-1990. Most of the maps can be ordered in a high resolution Adobe PDF format, or as ESRI Shape Files.

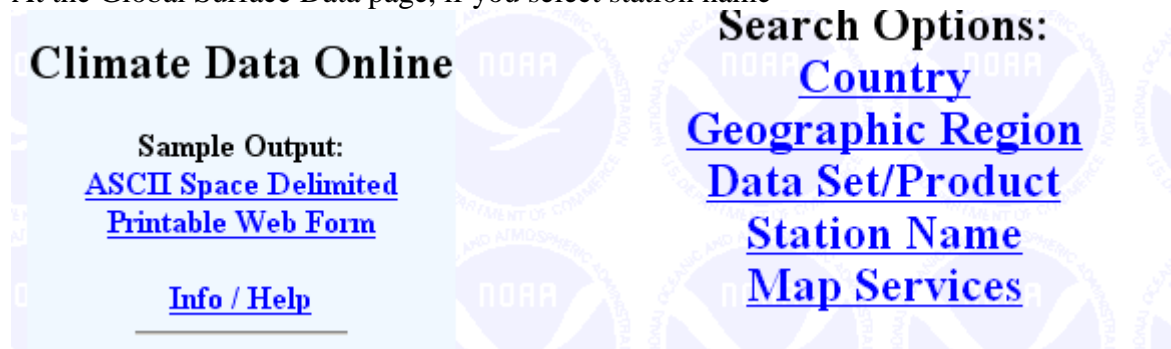
[Global Surface Data](#)

Climate Data Online provides access to US and global climate/weather data, via a web interface. It also provides a map interface (GIS-based) for the data. Users may select data by region, country, state, climate division, county, and station, for any desired time period. A variety of formats are offered.

The Global Surface Data URL as of 2-06-2007 is:

<http://hurricane.ncdc.noaa.gov/CDO/cdo>

At the Global Surface Data page, if you select station name



At station name search, type in the name of your town then click search for stations.

For this example, Fayetteville

FAYETTEVILLE/KELSO, TN UNITED STATES ISH ID: 72326399999	DS3505 - Surface Data, Hourly Global - 12/1988 to 11/1989
FAYETTEVILLE/SPRING, AR UNITED STATES ISH ID: 72343699999	DS3505 - Surface Data, Hourly Global - 02/2002 to 01/2006
FAYETTEVILLE, AR UNITED STATES COOP-WBAN ID: 032442-99999	Surface Data, Daily - 01/1892 to 12/1960 TD3220 - Surface Data, Monthly - 1937 to 1960 Surface Data, Annual Summary
FAYETTEVILLE, TN UNITED STATES COOP-WBAN ID: 403069-99999	Surface Data, Daily - 02/1952 to 03/1962 TD3220 - Surface Data, Monthly - 1952 to 1962 Surface Data, Annual Summary
FAYETTEVILLE 4 NE, OH UNITED STATES COOP-WBAN ID: 332727-99999	Surface Data, Daily - 09/1976 to 11/1999 TD3220 - Surface Data, Monthly - 1976 to 1999 Surface Data, Annual Summary
FAYETTEVILLE DRAKE FIELD, AR UNITED STATES COOP-WBAN ID: 032443-93993	Surface Data, Daily - 07/1949 to 01/1982 TD3220 - Surface Data, Monthly - 1949 to 1982 Surface Data, Annual Summary
FAYETTEVILLE EXP STN, AR UNITED STATES COOP-WBAN ID: 032444-99999	Surface Data, Daily - 05/1890 to 08/2003 TD3220 - Surface Data, Monthly - 1891 to 2003 Surface Data, Annual Summary
FAYETTEVILLE POPE AFB, NC UNITED STATES COOP-WBAN ID: 316891-13714	Surface Data, Daily - 09/1948 to 01/2003 TD3220 - Surface Data, Monthly - 1948 to 2003 Surface Data, Annual Summary
FAYETTEVILLE POPE AFB, NC UNITED STATES COOP-WBAN ID: 999999-13714	Surface Data, Daily - 11/1968 to 11/1968
FAYETTEVILLE PWC, NC UNITED STATES COOP-WBAN ID: 313017-99999	Surface Data, Daily - 11/1871 to 10/2005 TD3220 - Surface Data, Monthly - 1931 to 2005 Surface Data, Annual Summary
FAYETTEVILLE WATER PLANT, TN UNITED STATES COOP-WBAN ID: 403074-99999	Surface Data, Daily - 01/1935 to 10/2005 TD3220 - Surface Data, Monthly - 1926 to 2005 Surface Data, Annual Summary

Usually you will have several lines to choose from.

YOU WANT SURFACE DATA MONTHLY, click on the blue line for surface data monthly for the Fayetteville Exp Stn, AR.

Then instead of something useful, you SOMETIMES get this message. You don't get any help on what kind of problem there is with your dataset.


NNDC CLIMATE DATA ONLINE

A problem was encountered.

You must specify a valid dataset!
Hit your BACK button to try again

[Privacy Policy](#)

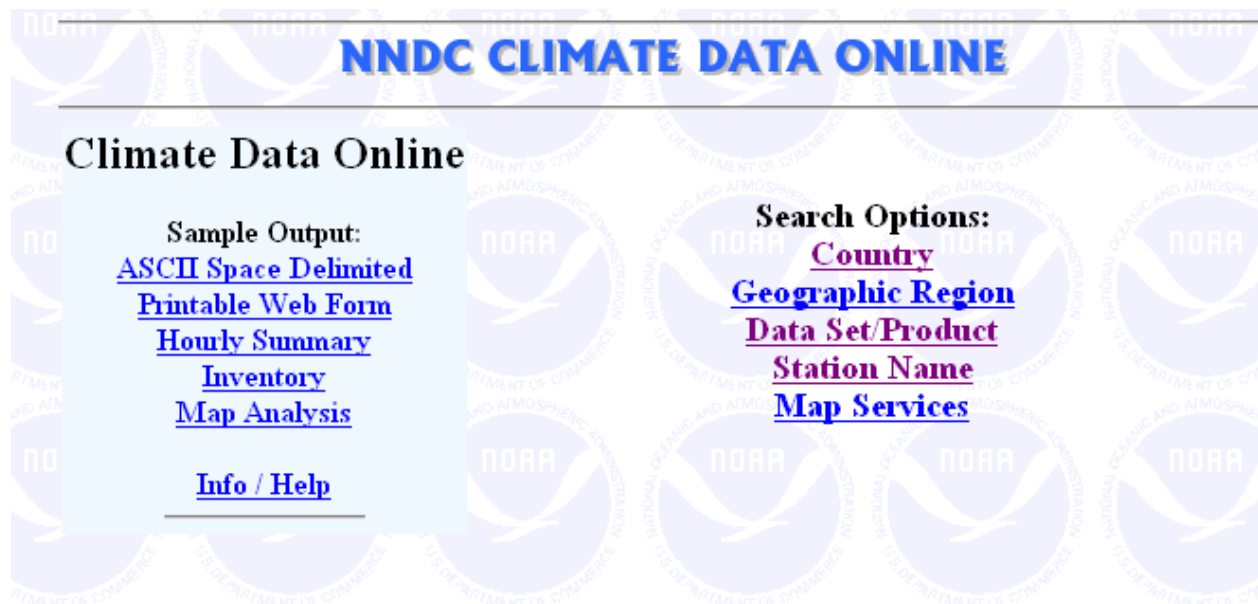
HOW ARE WE DOING?
A user survey



[Disclaimer](#)

It looks like SOME OF THE TIME the TD3220 surface data monthly data are causing problems. If this happens, instead of selecting station name, select country.

Select country



Select United States (or another country for your international city)
This example will follow a United States city example



When you select another country besides the United States, **look for datasets of DS3500 surface data monthly**. That dataset appears to be working as of January, 2007.

OK So back to getting the data from set TD3220 when it is working (which is most of the time)
 This is the data set you get when you select STATION NAME
 So I selected Fayetteville for station name, I want Fayetteville, AR (not NC...)

FAYETTEVILLE EXP STN , AR	Surface Data, Daily - 05/1890 to 11/2006
UNITED STATES	DS3220 - Surface Data, Monthly - 1891 to 2006
COOP-WBAN ID: 032444-99999	Surface Data, Annual Summary

So next I will select one of my data elements (MMNT), year, delimited no station name, and output with comma

Monthly data for 1 stations *(List appears below)*

Select Meteorological Element(s): (SEE NOTES BELOW) HTDD Monthly heating degree days - base 65 deg F. HXyz Highest maximum soil temp for the month (deg F) LNyZ Lowest minimum soil temp for the month (deg F) LOyz Lowest soil temp at observation time (deg F) LXyz Lowest maximum soil temp for the month (deg F) MMNP Monthly mean minimum temp of evap pan water (deg F) MMNT Monthly mean minimum temp (deg F) MMXP Monthly mean maximum temp of evap pan water (deg F) MMXT Monthly mean maximum temp (deg F) MNTM Monthly mean temp (deg F)	Date Range (Year): From 1986 To 2006 Through 12/2006 Select Output Format: Delimited - No Station Names Delimited - Station Names Select Output Format Delimiter: (only if Delimited format selected above) Comma Space
The *ALL* option will select all available data elements. Use the Shift or Control key with mouse click TO SELECT multiple elements. More notes below	

Hit continue

You get the screen with a “check” of your data, then put a check mark in the box and put in your email address:

DS3220 - Surface Data, Monthly - US & some Non-US Cooperative, Request Summary

Selected Stations - includes 1 stations *(See selected stations below)*

Selected Meteorological Element(s): ' MMNT '	Date Range (Year): 1986 to 2006 Selected Output Format: Comma Delimited, without station name Selected Output Media: FTP Total Data Rows Available: 18 - View Inventory Output File Size (bytes): 5080
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☒ **Inventory Review:** I have reviewed the [Inventory File](#) to see if the elements/dates desired are included *before* ordering. Some time periods or elements may be missing.

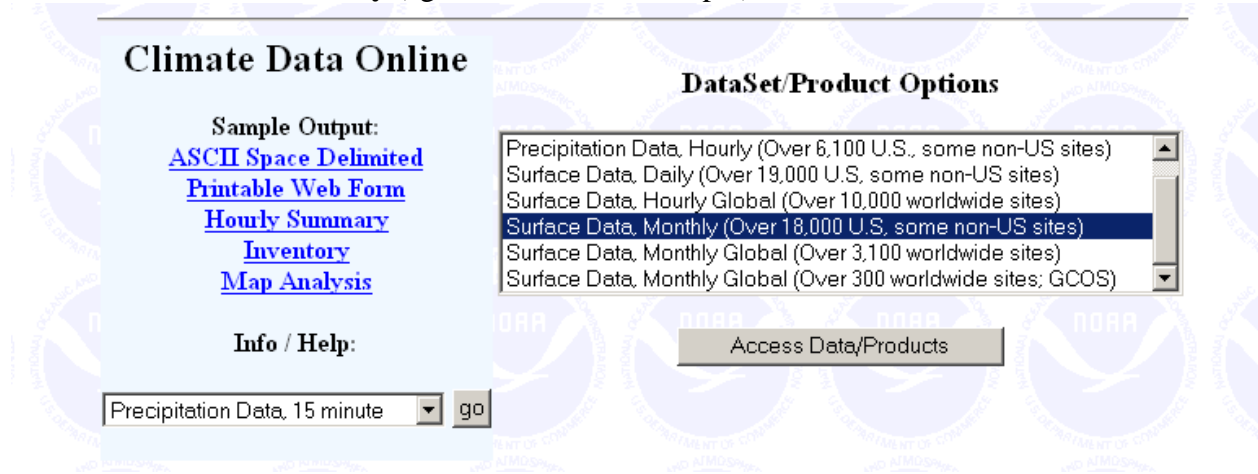
IMPORTANT! Please enter a **valid** email address below so we can notify you when your request has finished processing.

E-mail Address:

PAGES 4-5 show ONE way to get data, PAGES 6,7,8 show ANOTHER way. It is like saying 6 of one, a half-dozen of another....

If you selected COUNTRY Then you get this screen:

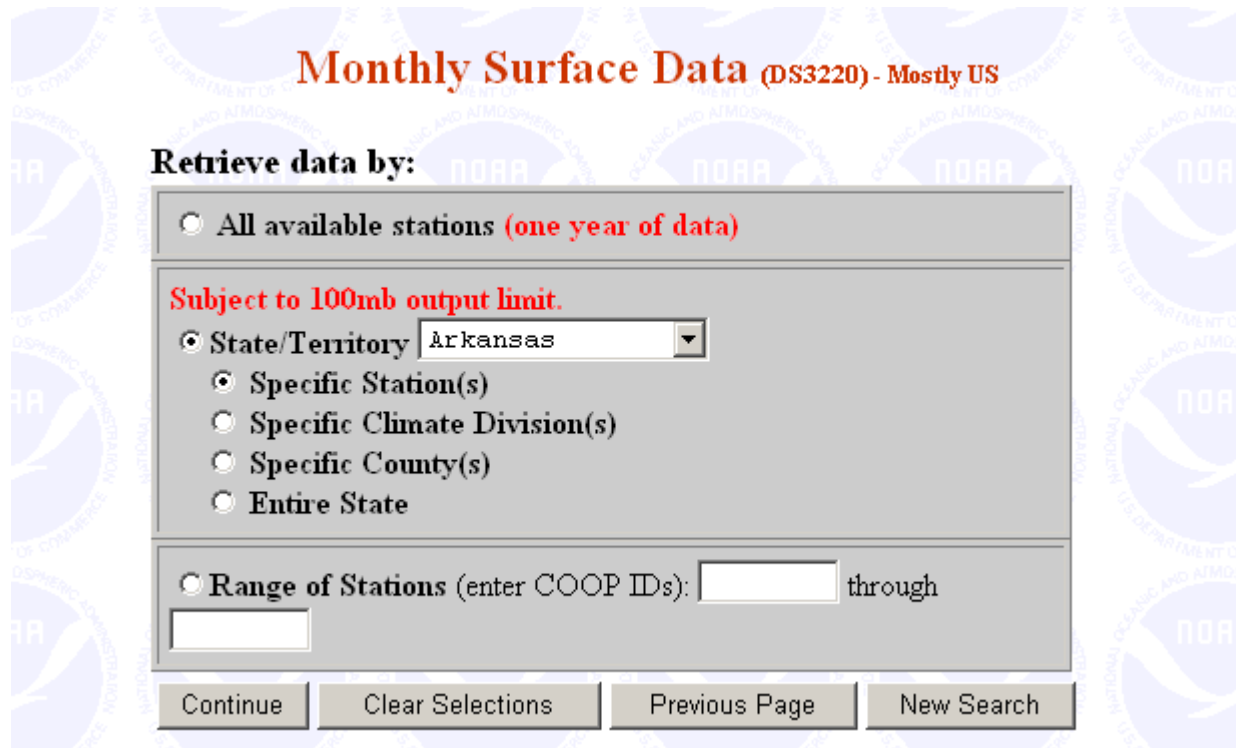
Select **surface data monthly** (again, for the US example)



The screenshot shows the "Climate Data Online" web interface. On the left, under "Sample Output:", there are links for "ASCII Space Delimited", "Printable Web Form", "Hourly Summary", "Inventory", and "Map Analysis". Below these is an "Info / Help:" section with a dropdown menu currently showing "Precipitation Data, 15 minute" and a "go" button. On the right, the "DataSet/Product Options" section contains a list of datasets: "Precipitation Data, Hourly (Over 6,100 U.S., some non-US sites)", "Surface Data, Daily (Over 19,000 U.S., some non-US sites)", "Surface Data, Hourly Global (Over 10,000 worldwide sites)", "Surface Data, Monthly (Over 18,000 U.S., some non-US sites)", "Surface Data, Monthly Global (Over 3,100 worldwide sites)", and "Surface Data, Monthly Global (Over 300 worldwide sites; GCOS)". The "Surface Data, Monthly" option is selected. Below the list is an "Access Data/Products" button.

Notice we are now in the DS3220 datasets, not TS3220....

Select your state, I selected Arkansas



The screenshot shows the "Monthly Surface Data (DS3220) - Mostly US" interface. The title is in red. Below it, the "Retrieve data by:" section has two main options: "All available stations (one year of data)" and "State/Territory". The "State/Territory" option is selected, and a dropdown menu shows "Arkansas". Below this, there are four sub-options: "Specific Station(s)", "Specific Climate Division(s)", "Specific County(s)", and "Entire State". The "Range of Stations (enter COOP IDs):" option is also visible, with two input fields and a "through" label. At the bottom, there are four buttons: "Continue", "Clear Selections", "Previous Page", and "New Search".

Now I want to select Fayetteville Exp Stn

Monthly Surface Data, Selected stations in Arkansas

Select Stations *(maximum OF 100)*

Station Name	CoopID	WBANID	Period of Record
Fayetteville.....	032442	-----	1937 - 1960
Fayetteville Drake Field.....	032443	(93993)	1949 - 1982
Fayetteville Exp Stn.....	032444	-----	1891 - 2003
Felsenthal L & D.....	032475	-----	1998 - 2005
Flippin.....	032528	(03918)	1951 - 1961
Fordyce.....	032540	-----	1936 - 2005
Foreman.....	032544	-----	1948 - 2005
Forester 4 Wnw.....	032556	-----	1941 - 1956
Formosa.....	032560	-----	1949 - 1949
Forrest City.....	032564	-----	1948 - 1979

[Sort by Coop ID](#)

Continue Clear Selections Previous Page New Search

Hit continue

The next screen looks more confusing than it really is. You will look for your variables, MMXT (monthly mean maximum temperature), and the precipitation variables. You will need to request one variable at a time.

On this page, you will be selecting four things:

You will Select Meteorological Element: (highlight in blue one variable)

Then select date range: make “from” at least 10 years back in time

Select Output Format: delimited, no station name

Select Output Format Delimiter: comma

Since you need a total of 4 data elements, you will be going back to this “select meteorological element” page 4 times, you will be a pro!

NORR NNDC CLIMATE DATA ONLINE NORR	
Monthly data for Arkansas / Selected stations - 1 stations (List appears below)	
Select Meteorological Element(s): (SEE NOTES BELOW) <div> HTDD Monthly heating degree days - base 65 deg F. Hxyz Highest maximum soil temp for the month (deg F) LNyz Lowest minimum soil temp for the month (deg F) LOyz Lowest soil temp at observation time (deg F) Lxyz Lowest maximum soil temp for the month (deg F) MMNP Monthly mean minimum temp of evap pan water (deg F) MMNT Monthly mean minimum temp (deg F) MMXP Monthly mean maximum temp of evap pan water (deg F) MMXT Monthly mean maximum temp (deg F) MNTM Monthly mean temp (deg F) </div>	Date Range (Year): From <input type="text" value="1993"/> To <input type="text" value="2003"/> Through 08/2005 Select Output Format: <div> Delimited - No Station Names Delimited - Station Names </div> Select Output Format Delimiter: <small>(only if Delimited format selected above)</small> <div> Comma Space </div> Output via FTP
<p>The *ALL* option will select all available data elements. Use the Shift or Control key with mouse click TO SELECT multiple elements. More notes below</p>	
<div> Continue Clear Selections Previous Page New Search </div>	

Check the inventory review and put in your email address.

NORR NNDC CLIMATE DATA ONLINE NORR	
DS3220 - Surface Data, Monthly - US & some Non-US Cooperative, Request Summary	
Arkansas / Selected Stations - includes 1 stations (See selected stations below)	
Selected Meteorological Element(s): ' MMXT '	Date Range (Year): 1993 to 2003 Selected Output Format: Comma Delimited, without station name Selected Output Media: FTP Total Data Rows Available: 11 - View Inventory Output File Size (bytes): 3302
<input checked="" type="checkbox"/> Inventory Review: I have reviewed the Inventory File to see if the elements/dates desired are included <i>before</i> ordering. Some time periods or elements may be missing.	
IMPORTANT! Please enter a valid email address below so we can notify you when your request has finished processing.	
E-mail Address: <input type="text" value="alevel@colostate.edu"/>	
<div>Submit Request</div>	

Then hit submit request.

Check page, you will then click on the line with the URL

NNDC CLIMATE DATA ONLINE

DS3220 - Surface Data, Monthly - US & some Non-US Cooperative, Request Verification

Your DS3220 - Surface Data, Monthly - US & some Non-US Cooperative request - CDO00840652 has been submitted for processing.

You will be notified by email at alevel@colostate.edu when processing has completed for your request.

NOTICE! Click on the following URL to access your files:
<http://www1.ncdc.noaa.gov/pub/orders/CDO959416763241.html>

This is the next screen:

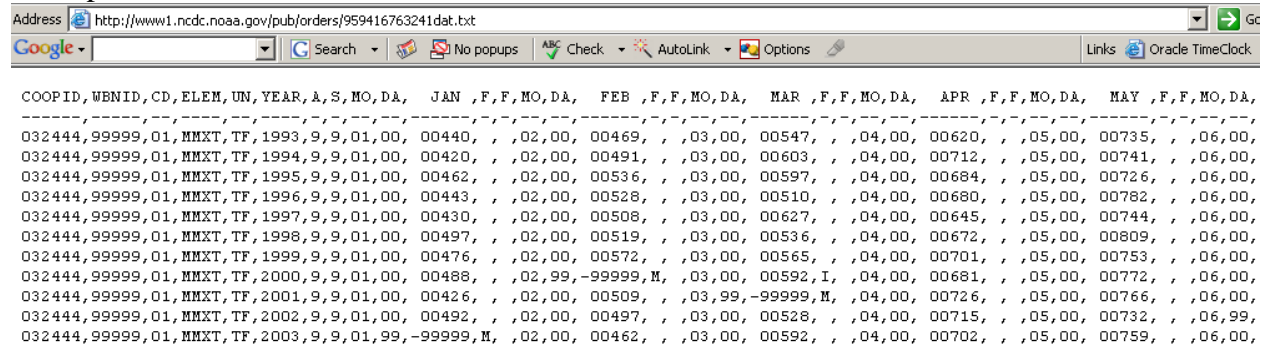
From the time you submitted your request it may be several minutes (to several hours for larger volumes) before your data, data inventory and station list files are available. **For this reason it is recommended that you bookmark this web page for future reference and access to your files.** You will also receive email notification when your data files are ready.

This web page and the data files / web forms listed below will be available for **7 days**, after which they will be deleted from NCDC's web server.

File Contents	Access URL	File Size Estimate (bytes)
DS3220 - Surface Data, Monthly - US & some Non-US Cooperative - Data File	http://www1.ncdc.noaa.gov/pub/orders/959416763241.dat.txt	3302
DS3220 - Surface Data, Monthly - US & some Non-US Cooperative - Inventory	http://www1.ncdc.noaa.gov/pub/orders/959416763241.inv.txt	903
Station List	http://www1.ncdc.noaa.gov/pub/orders/959416763241.stn.txt	503
DS3220 - Surface Data, Monthly - US & some Non-US Cooperative format documentation	http://cdo.ncdc.noaa.gov/cdo/3220doc.txt	Not available

You will want to look at the first and last links above. **The first URL is for your data. The last link is for the documentation, it tells you things like whether the temperature data is F or C, and whether the precipitation data is in cm or inches. You will need to know this for the graph labels.**

Example of the data in the first URL



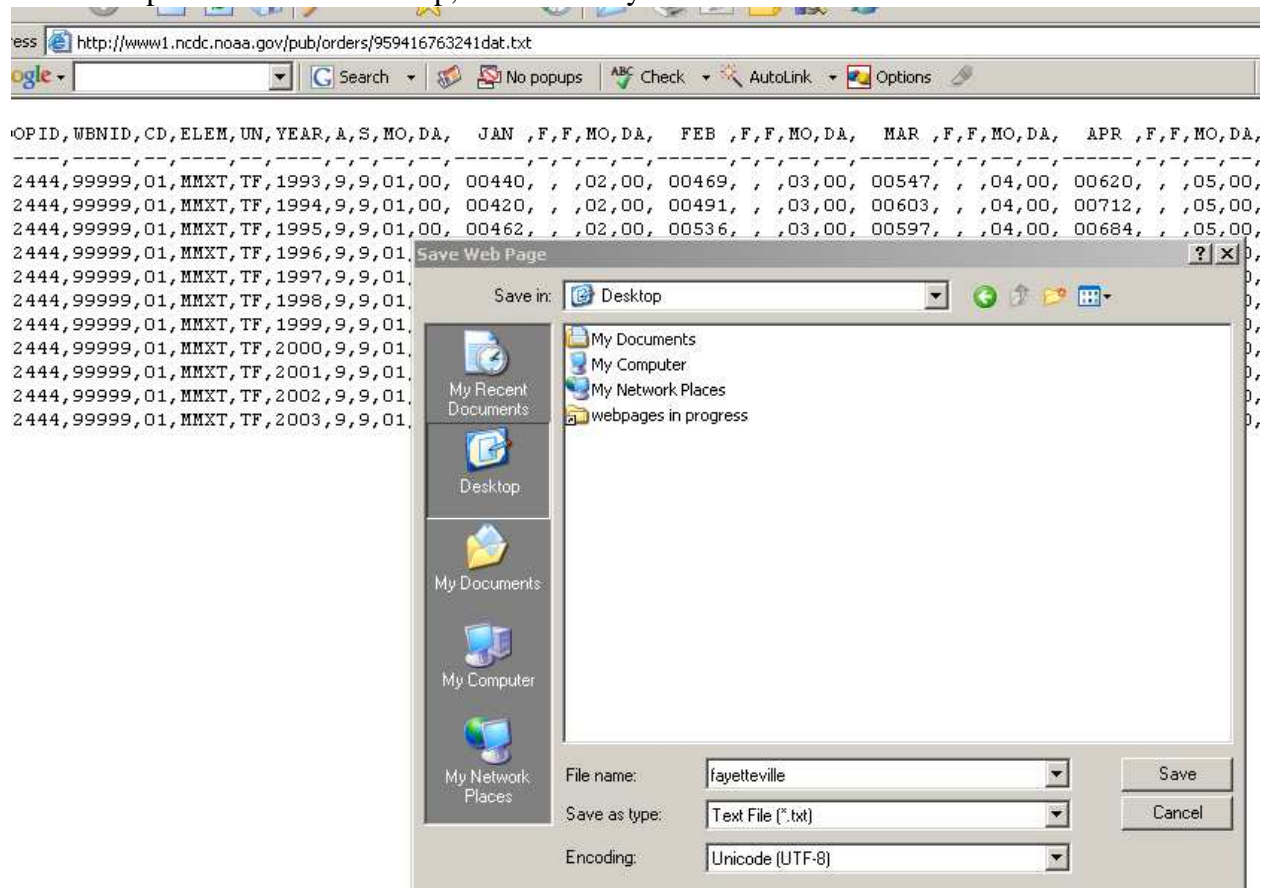
Address <http://www1.ncdc.noaa.gov/pub/orders/959416763241.dat.txt>

COOPID, WBNID, CD, ELEM, UN, YEAR, A, S, MO, DA, JAN, F, F, MO, DA, FEB, F, F, MO, DA, MAR, F, F, MO, DA, APR, F, F, MO, DA, MAY, F, F, MO, DA,

032444	99999	01	MMXT	TF	1993	9	9	01	00	00440		02	00	00469		03	00	00547		04	00	00620		05	00	00735		06	00
032444	99999	01	MMXT	TF	1994	9	9	01	00	00420		02	00	00491		03	00	00603		04	00	00712		05	00	00741		06	00
032444	99999	01	MMXT	TF	1995	9	9	01	00	00462		02	00	00536		03	00	00597		04	00	00684		05	00	00726		06	00
032444	99999	01	MMXT	TF	1996	9	9	01	00	00443		02	00	00528		03	00	00510		04	00	00680		05	00	00782		06	00
032444	99999	01	MMXT	TF	1997	9	9	01	00	00430		02	00	00508		03	00	00627		04	00	00645		05	00	00744		06	00
032444	99999	01	MMXT	TF	1998	9	9	01	00	00497		02	00	00519		03	00	00536		04	00	00672		05	00	00809		06	00
032444	99999	01	MMXT	TF	1999	9	9	01	00	00476		02	00	00572		03	00	00565		04	00	00701		05	00	00753		06	00
032444	99999	01	MMXT	TF	2000	9	9	01	00	00488		02	99	-99999	M	03	00	00592	I	04	00	00681		05	00	00772		06	00
032444	99999	01	MMXT	TF	2001	9	9	01	00	00426		02	00	00509		03	99	-99999	M	04	00	00726		05	00	00766		06	00
032444	99999	01	MMXT	TF	2002	9	9	01	00	00492		02	00	00497		03	00	00528		04	00	00715		05	00	00732		06	99
032444	99999	01	MMXT	TF	2003	9	9	01	99	-99999	M	02	00	00462		03	00	00592		04	00	00702		05	00	00759		06	00

Now you want to save the data to a file. Go up to the upper left on your computer where it says file, then select save as, you may want to change the save in location.

This example saves to the desktop, file name Fayetteville



Then click on “save”

You have now saved your NCDC file as a text or .txt file.

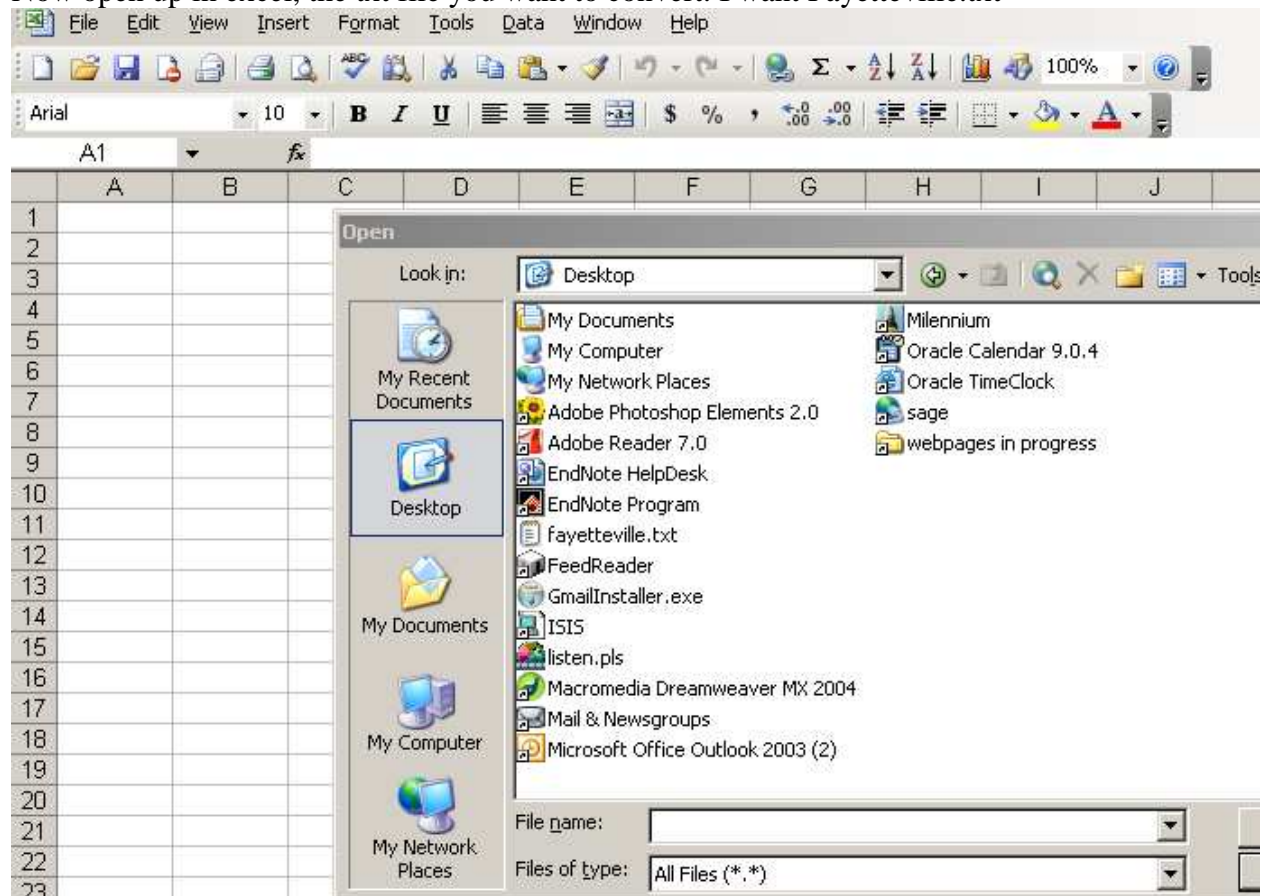
The next step is to import the file into Excel, so you can clean up the columns and have the data in something that will be helpful.

Open up the Excel program on your computer (start, program, excel)

You will need to go to the top left, file, open, and get to the folder or location where you save the file.

You will also need to change files of type from Microsoft excel files to all files.

Now open up in excel, the txt file you want to convert. I want Fayetteville.txt



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.

☐ F*i*xed width - Fields are aligned in columns with spaces between each field.

Start import at row: File origin:

Preview of file \\Shark\Reference\alevel\InstructionFY03-04\coopext\WaimeaMMNT.txt.

1	COOPID,WBNID,CD,ELEM,UN,YEAR,A,S,MO,DA,	JAN,F,F,MO,DA,	FEB,
2	-----	-----	-----
3	519603,99999,02,MMNT,TF,1983,9,9,01,99,-	99999,M,	02,99,-99999,
4	519603,99999,02,MMNT,TF,1984,9,9,01,00,	00644,I,	02,00,00628,
5	519603,99999,02,MMNT,TF,1985,9,9,01,00,	00603,	,02,00,00617,

Cancel < Back Next > Finish

Text Import Wizard - Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.

Delimiters

☐ Tab
 ☐ Semicolon
 ☒ Comma
 ☐ Space
 ☐ Other:

☐ Treat consecutive delimiters as one

Text qualifier:

Data preview

COOPID	WBNID	CD	ELEM	UN	YEAR	A	S	MO	DA	JAN	F
519603	99999	02	MMNT	TF	1983	9	9	01	99	99999	M
519603	99999	02	MMNT	TF	1984	9	9	01	00	00644	I
519603	99999	02	MMNT	TF	1985	9	9	01	00	00603	

Buttons: Cancel, < Back, Next >, Finish

Lastly just click on finish

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

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

Advanced...

Column data format:

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

Data preview:

General	General	General	General	General	General	General	General	General	General	General	General
COOPID	WBNID	CD	ELEM	UN	YEAR	A	S	MO	DA	JAN	F
519603	99999	02	MMNT	TF	1983	9	9	01	99	-99999	M
519603	99999	02	MMNT	TF	1984	9	9	01	00	00644	I
519603	99999	02	MMNT	TF	1985	9	9	01	00	00603	

Cancel < Back Next > Finish

OK,

I would then go up top left to file, save as and give it a file name and save as an excel file, not a text file.

Now you will want to clean up your data as needed. To do this you may have to compress columns or remove them, follow what your instructor tells you.

Remember, for the dates such as this:

JAN	f
-----	-
-99999	f
644	I
603	
588	

-99999 means an error and valid data was not collected for that month

644 is really 64.4 degrees F

588 is 58.8F

watch out, international temps may NOT be in F check your data guide.

OK, now go back to the NCDC site and get your other variables.

The NCDC site goes down off and on in early March. This has happened the past 2 years, so DON'T WAIT until the last minute to get your data from the site. If the site is down, you can't get your data. We don't have "extra copies" of data in the library. You must use the website.

Before:

```

ELEM,UN,YEAR,A,S,MO,DA,  JAN ,F,F,MO,DA,  FEB ,F,F,MO,DA,  MAR ,F,F,MO,DA,
-----
MMXT,TF,1978,9,9,01,99,-99999,M, ,02,99,-99999,M, ,03,99,-99999,M, ,04,99,-
MMXT,TF,1979,9,9,01,00, 00784, , ,02,00, 00757,I, ,03,00, 00790,I, ,04,00,
MMXT,TF,1980,9,9,01,00, 00800, , ,02,00, 00811, , ,03,99,-99999,M, ,04,00,
MMXT,TF,1981,9,9,01,99,-99999,M, ,02,00, 00832, , ,03,00, 00844, , ,04,00,
MMXT,TF,1982,9,9,01,99,-99999,M, ,02,99,-99999,M, ,03,99,-99999,M, ,04,99,-
MMXT,TF,1983,9,9,01,00, 00807, , ,02,00, 00801, , ,03,00, 00811, , ,04,00,
MMXT,TF,1984,9,9,01,00, 00819, , ,02,99,-99999,M, ,03,00, 00839, , ,04,00,
MMXT,TF,1985,9,9,01,00, 00823, , ,02,00, 00825, , ,03,00, 00824, , ,04,00,
MMXT,TF,1986,9,9,01,00, 00818, , ,02,00, 00803, , ,03,00, 00833, , ,04,00,
MMXT,TF,1987,9,9,01,99,-99999,M, ,02,00, 00790,I, ,03,00, 00819,I, ,04,00,
MMXT,TF,1988,9,9,01,99,-99999,M, ,02,00, 00831,I, ,03,00, 00830,I, ,04,99,-
MMXT,TF,1989,9,9,01,99,-99999,M, ,02,99,-99999,M, ,03,99,-99999,M, ,04,99,-
MMXT,TF,1990,9,9,01,99,-99999,M, ,02,00, 00788,I, ,03,00, 00793,I, ,04,99,-
MMXT,TF,1991,9,9,01,00, 00799,I, ,02,00, 00814,I, ,03,99,-99999,M, ,04,00,
MMXT,TF,1992,9,9,01,99,-99999,M, ,02,99,-99999,M, ,03,00, 00815,I, ,04,99,-
MMXT,TF,1993,9,9,01,99,-99999,M, ,02,99,-99999,M, ,03,99,-99999,M, ,04,99,-
MMXT,TF,1994,9,9,01,99,-99999,M, ,02,99,-99999,M, ,03,00, 00790,I, ,04,99,-

```

After:

A1	fx COOPID							
	D	E	F	K	P	U	Z	AE
1	ELEM	UN	YEAR	JAN	FEB	MAR	APR	MAY
2	----	--	----	-----	-----	-----	-----	-----
3	MMXT	TF	1978	-99999	-99999	-99999	-99999	-99999
4	MMXT	TF	1979	784	757	790	816	848
5	MMXT	TF	1980	800	811	-99999	849	855
6	MMXT	TF	1981	-99999	832	844	858	864
7	MMXT	TF	1982	-99999	-99999	-99999	-99999	848
8	MMXT	TF	1983	807	801	811	821	821
9	MMXT	TF	1984	819	-99999	839	847	866
10	MMXT	TF	1985	823	825	824	824	827
11	MMXT	TF	1986	818	803	833	839	851
12	MMXT	TF	1987	-99999	790	819	831	-99999
13	MMXT	TF	1988	-99999	831	830	-99999	-99999
14	MMXT	TF	1989	-99999	-99999	-99999	-99999	837
15	MMXT	TF	1990	-99999	788	793	-99999	833
16	MMXT	TF	1991	799	814	-99999	828	854
17	MMXT	TF	1992	-99999	-99999	815	-99999	-99999
18	MMXT	TF	1993	-99999	-99999	-99999	-99999	-99999
19	MMXT	TF	1994	-99999	-99999	790	-99999	850
20	MMXT	TF	1995	-99999	787	814	-99999	833
21	MMXT	TF	1996	804	774	793	839	841
22	MMXT	TF	1997	784	828	828	827	840
23	MMXT	TF	1998	791	797	818	815	826
24	MMXT	TF	1999	793	795	803	813	832
25	MMXT	TF	2000	788	801	816	814	846
26	MMXT	TF	2001	810	-99999	809	809	832
27	MMXT	TF	2002	784	774	773	804	820
28	MMXT	TF	2003	775	787	821	831	843

For an international city, use your handouts from before, when you get to the screen where you can select at station, put in your international city. In this example I am using Santiago, Chile. I type in Santiago, and get several listings.

Select the monthly for 6-1991 to 12-2002.

Station(s) found matching: **santiago**.

Click on the links provided below to access/download data for a particular station.

Station	Dataset - POR
SANTIAGO, PANAMA ISH ID: 78795099999	TD3505 - Surface Data, Hourly Global - 01/2003 to 08/2003
SANTIAGO DAM, CA UNITED STATES COOP ID: 047987	TD3240 - Precipitation Data, Hourly - US & some non-US - 07/1948 to 06/2001 TD3260 - Precipitation Data, 15 minute - US & some non-US - 01/1984 to 05/2001
SANTIAGO DE CUBA, CUBA ISH ID: 78264099999	TD3505 - Surface Data, Hourly Global - 01/2003 to 08/2003
SANTIAGO DEL ESTERO, ARGENTINA ISH ID: 87129099999	TD3505 - Surface Data, Hourly Global - 01/2003 to 08/2003
SANTIAGO DEL ESTERO, ARGENTINA WMO ID: 87129	TD3500 - Surface Data, Monthly Global - 01/1987 to 12/2002
SANTIAGO INTL ARPT, DOMINICAN REPUBLIC ISH ID: 78460099999	TD3505 - Surface Data, Hourly Global - 01/2003 to 08/2003
SANTIAGO PEAK, CA UNITED STATES COOP ID: 047993	TD3240 - Precipitation Data, Hourly - US & some non-US - 07/1971 to 09/2003 TD3260 - Precipitation Data, 15 minute - US & some non-US - 07/1971 to 09/2003
SANTIAGO QUINTA NORMAL, CHILE WMO ID: 85577	TD3500 - Surface Data, Monthly Global - 06/1991 to 12/2002

As of January, 2006 the TD3500 dataset is working online.

Then you get this screen, remember to change the dates in the Use date range:

Surface Data, Monthly Global (TD3500)
for selected stations - 1 stations.

Select Date Restrictions:

☒ Use Date Range <= OR =>
 ☐ Use Selected Dates *

	Year	Month		Year	Month
From	2001	12		2002	12
To	2002	12		2001	11
				2000	10
				1999	09
				1998	08
				1997	07
				1996	06
				1995	05

Select Output Format:

Delimited, without station name

Select Output Format Delimiter:
(only if Delimited format selected above)

Comma
Space

Output via: FTP

Continue
Clear Selections
Previous Page
New Search

Then you get all the usual screens asking you for your email, etc. etc.

Text data for international cities include several columns of various data. Use the file that acts as the “legend” to find out what they mean. This file is the 4th file on your page that has data files. In this example, it is the file with the name 3500doc.txt at the end.

This web page and the data files / web forms listed below will be available for **7 days**, after which they will be deleted from NCDC's web server.

File Contents	Access URL	File Size Estimate (bytes)
TD3500 - Surface Data, Monthly Global - Data File	http://www1.ncdc.noaa.gov/pub/orders/285159439696dat.txt	1437
TD3500 - Surface Data, Monthly Global - Inventory	http://www1.ncdc.noaa.gov/pub/orders/285159439696inv.txt	290
Station List	http://www1.ncdc.noaa.gov/pub/orders/285159439696stn.txt	549
TD3500 - Surface Data, Monthly Global format documentation	http://cdo.ncdc.noaa.gov/cdo/3500doc.txt	Not available


Your data file, the top file in this example includes several columns of data.

For example for international data:

MTMP=mean temperature in C to the 1/10 so 214 is 21.4C

TOTP=total precipitation in mm

Use your “legend” file to locate the description of the other variables.

Address		 http://www1.ncdc.noaa.gov/pub/orders/285159439696dat.txt													
D, WMOID	, YRMNTH, ND, MSTPR, MSEPR, I, MTMP, DTPAV, MVP, DVP, DP, TOTP, DPAVE, P, SDR, SPA, M														
1,85577	,200112,	, 9526,10109,	, 214,	,145,	, 0,	0,	,3,325,100,								
1,85577	,200201,	, 9536,10120,	, 214,	,142,	, 0,	-1,	,4,333,100,								
1,85577	,200202,	, 9532,10119,	, 204,	,150,	, 0,	0,	,4,288,105,								
1,85577	,200203,	, 9534,10125,	, 189,	,139,	, 1,	2,	,4,239, 95,								
1,85577	,200204,	, 9554,10157,	, 138,	,119,	, 3,	14,	,4,187, 95,								
1,85577	,200205,	, 9543,10151,	, 116,	,105,	,MM,	601,	,3,120, 90,								
1,85577	,200206,	, 9572,10191,	, 75,	, 87,	, 6,	248,	,5,124,120,								
1,85577	,200207,	, 9580,10197,	, 84,	, 87,	, 6,	92,	,4,152,130,								
1,85577	,200208,	, 9567,10179,	, 104,	,105,	,10,	74,	,5,123, 80,								
1,85577	,200209,	, 9573,10180,	, 126,	,109,	, 2,	28,	,4,157, 90,								
1,85577	,200210,	, 9552,10152,	, 148,	,113,	, 2,	4,	,2,203, 95,								
1,85577	,200211,	, 9551,10145,	, 172,	,117,	, 0,	-1,	,1,278,105,								
1,85577	,200212,	, 9544,10133,	, 196,	,129,	, 1,	1,	,4,315, 95,								

For this example I used just one year of data, you will need more than one year.

NOTICE: The international data combines ALL data elements and can be confusing. TAKE YOUR TIME as you look through the data. Make sure you print out the legend file (document) that tells you the field number, the data element, and the measurement used (i.e. is temperature in F or C for international data??)

Other Library Resources You May Need:

How to find INTERNATIONAL CITY DATA

Locate an international city using the TIMES ATLAS OF THE WORLD (Plate 3).

Copies of this atlas are located in the EIC, as well as in the Map/Atlas Collection on the First Floor, South.

Use the NCDC Website for precipitation data for your international city.

How to find SOIL SURVEY INFORMATION

You must use the print copies of the Soil Survey for your home county. These are located in the Documents collection (A57.38:) on the Fourth Floor, South Wing. Records for many of these soil surveys can be located in SAGE, but some older ones do not have records in SAGE.

Most of the surveys are shelved alphabetically by County at the above call number. Surveys that were published before the 1960's are under different call numbers, so check SAGE or the list of Published Soil Surveys located at the Information Desk, if you do not find your county. Not all counties in the United States have been surveyed so you may not find yours - just use one from a close-by county.

Some of the Colorado Soil Surveys are available on the Web. The Colorado surveys have been cataloged in the CSU Library Catalog (Sage). You may search SAGE by keyword and put in soil survey then search location: web.

OTHER CLASSES are using soil surveys and checking them out of the library. DON'T wait until the last minute. Usually we have one copy of a survey, other copies are available from Prospector but you have to plan on 3-4 working days of travel time.