

<u>Table of Contents:</u>	<u>Page</u>
1. Introduction.....	3
1.1 Climate Data Sources.....	3
1.2 Climate Data Types.....	3
1.3 Climate Data Assurance Categories	3
1.4 Climate Data Status	4
2. Public Availability of Climate Data from Weather Forecast Offices (WFO)	4
2.1 Preliminary versus Final Data	4
2.2 NCDC Publications.....	4
2.3 Astronomical Data	4
2.4 Database Use.....	4
2.5 Internet Climate Data Provision	5
2.5.1 NWS Climate Page	5
2.5.2 WFO Climate Page	6
3. Referral of Requests	8

1. Introduction. This instruction describes how Weather Forecast Offices (WFO) should respond to requests for climate data for surface in-situ sites. Data definitions are as follows:

1.1 Climate Data Sources. Climate data sources are sites that have undergone both NWS and [National Climatic Data Center \(NCDC\)](#) data quality control (QC) and have some portion of their observations archived by NCDC. They include:

- a. [Automated Surface Observing System \(ASOS\)](#) observing sites
 - i. Local Climatological Data (LCD) sites (Definition):
Observing locations for which the [NCDC](#) publishes a QCd monthly summary that includes daily temperature extremes, degree days, precipitation and winds (as available). LCDs also include the hourly precipitation and abbreviated 3-hourly weather observations. A list of LCD sites is found in [NWS Instruction 10-1004 \(Climate Records\)](#).
 - ii. non-LCD sites (Definition):
All ASOS sites not included in “i” above.
- b. [NWS Cooperative Observer Program \(COOP\)](#) observing sites (Definition):
NCDC published data sites whose data collection are supervised by the NWS and meet the definition of a COOP found in [NWS Manual 10-1315 \(Cooperative Station Observations\)](#). A list of currently active COOP sites is available at <ftp://ftp.ncdc.noaa.gov/pub/data/inventories/COOP-ACT.TXT>

Policy for data other than climate source data (described above) is covered in [NWS Instruction 10-1312 \(Complementary Data Sources and Networks\)](#), which describes policy for the NWS process for the acquisition, use, and transmission of such “complementary” data sets.

1.2. Climate Data Types. See [NWS Instruction 10-1004 \(Climate Records\)](#) for a list of climate data elements for each type.

- a. Observational data (daily and monthly).
- b. Long term means, extremes, and other statistics (including normals).

1.3 Climate Data Assurance Categories

- a. Preliminary – data before final NCDC QC.
- b. Final – Data that has been through final NCDC QC procedures. NCDC has several QC steps. Data is final only after the final QC step is completed.

1.4. Climate Data Status.

- a. Certified (authenticated for legal use; e.g. litigation, etc.) – Certification is performed by NCDC. NCDC may certify final or preliminary data at their discretion. NCDC certification only attests that exact duplicates of climatic records on file at NCDC have been provided to those that request such data.
- b. Non-Certified (any data not authenticated by NCDC for legal use)

2. Public Availability of Climate Data from Weather Forecast Offices (WFO). WFOs may receive and respond to data requests from multiple sources (e.g. NWS Internet web sites [section 2.5], e-mail, facsimile, telephone, hard copy [by mail or user visit], etc.). Unless referral is warranted according to Section 3, WFO data availability is subject to the following conditions:

2.1 Preliminary versus Final Climate Data. WFOs will indicate their climate data are “preliminary” with the following disclaimer, which will be provided prominently with climate information supplied by direct contact from WFOs to users (i.e., at the top of any NWS web page; with hard copy, facsimile, or e-mail given to users; or stated orally on the telephone or in person to users)

“These data are preliminary and have not undergone final QC by NCDC. Therefore, these data are subject to revision. Final and certified climate data can be accessed at the [National Climatic Data Center \(NCDC\) - www.ncdc.noaa.gov](http://www.ncdc.noaa.gov).”

2.2 NCDC publications. WFO will **not** provide NCDC data publications or products for which NCDC charges a fee for cost recovery. WFOs will refer inquiries for these publications to NCDC. NCDC indicates which publications/products are free and which have a charge at the following web page: <http://www.ncdc.noaa.gov/oa/mpp/freedata.html>

2.3 Astronomical Data. WFOs will indicate their climate data are “preliminary” with the following disclaimer, which will be provided prominently with climate information supplied by direct contact from WFOs to users (i.e., at the top of any NWS web page; with hard copy, facsimile, or e-mail given to users; or stated orally on the telephone or in person to users)

“The U.S. Naval Observatory (USNO) computes astronomical data. Therefore, the NWS does not record, certify, or authenticate astronomical data. Computed times of sunrise, sunset, moonrise, moonset; and twilight, moon phases and other astronomical data are available from USNO's Astronomical Applications Department (<http://aa.usno.navy.mil>). See <http://aa.usno.navy.mil/faq/docs/lawyers.php> for information on using these data for legal purposes.”

2.4 Database use. [The Regional Climate Centers \(RCC\)](#)'s [Applied Climate information System \(ACIS\)](#) provides data to NWS through an interface, called xmACIS, to satisfy NWS needs for supplying climate information to the public. WFOs should use xmACIS in lieu of

datasets from other systems when responding to data user requests. The xmACIS is automatically updated and synchronized between NCDC and the RCCs with the most recent data available (including near real-time preliminary data and archived final data). Therefore, xmACIS includes the most complete and up-to-date-data available to all of NOAA. The xmACIS is nationally maintained and has replaced locally developed, uncoordinated, and inconsistent datasets.

Use of datasets from other systems perpetuates the inconsistencies of the past. WFOs should work with [NCDC](#) and the [RCCs](#) to ensure the xmACIS database is the best, most up-to-date, consistent dataset available. WFO should correct historical data errors found in xmACIS through [Datzilla](#) submissions.

2.5 Internet Climate Data Provision – <http://www.weather.gov/climate> WFOs will provide data by using the standard NWS web climate page formats:

2.5.1 NWS Climate home page. Users may access any WFO’s climate web pages using links on the map at the NWS national climate home page (Figure 1) or alternatively at [any selected WFO’s home page](#) by clicking on the “climate/local” link found in the menu on the left-hand side of the WFO’s home page.

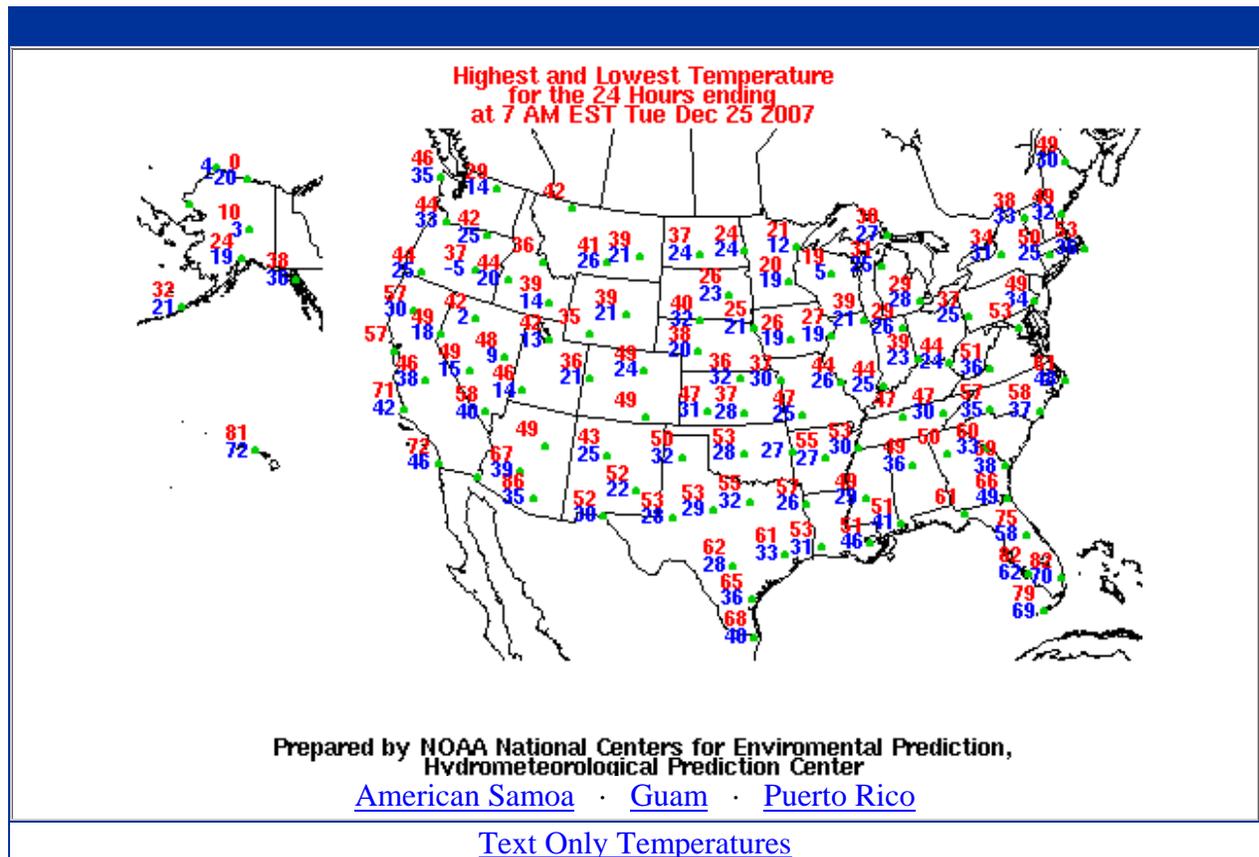


Figure 1: NWS national climate home page. (<http://weather.gov/climate>).

2.5.2 WFO climate web page. Figure 2 shows an example of a nationally standardized WFO climate web page. Data will be contained under the following tabs: “Observed Weather” (Figure 2 showing the selection of the “Observed Weather” tab), “NOWdata” (Figure 3), and Local Data/Records. The Astronomical Data tab will link to the USNO. The other tabs provide general information or climate predictions.

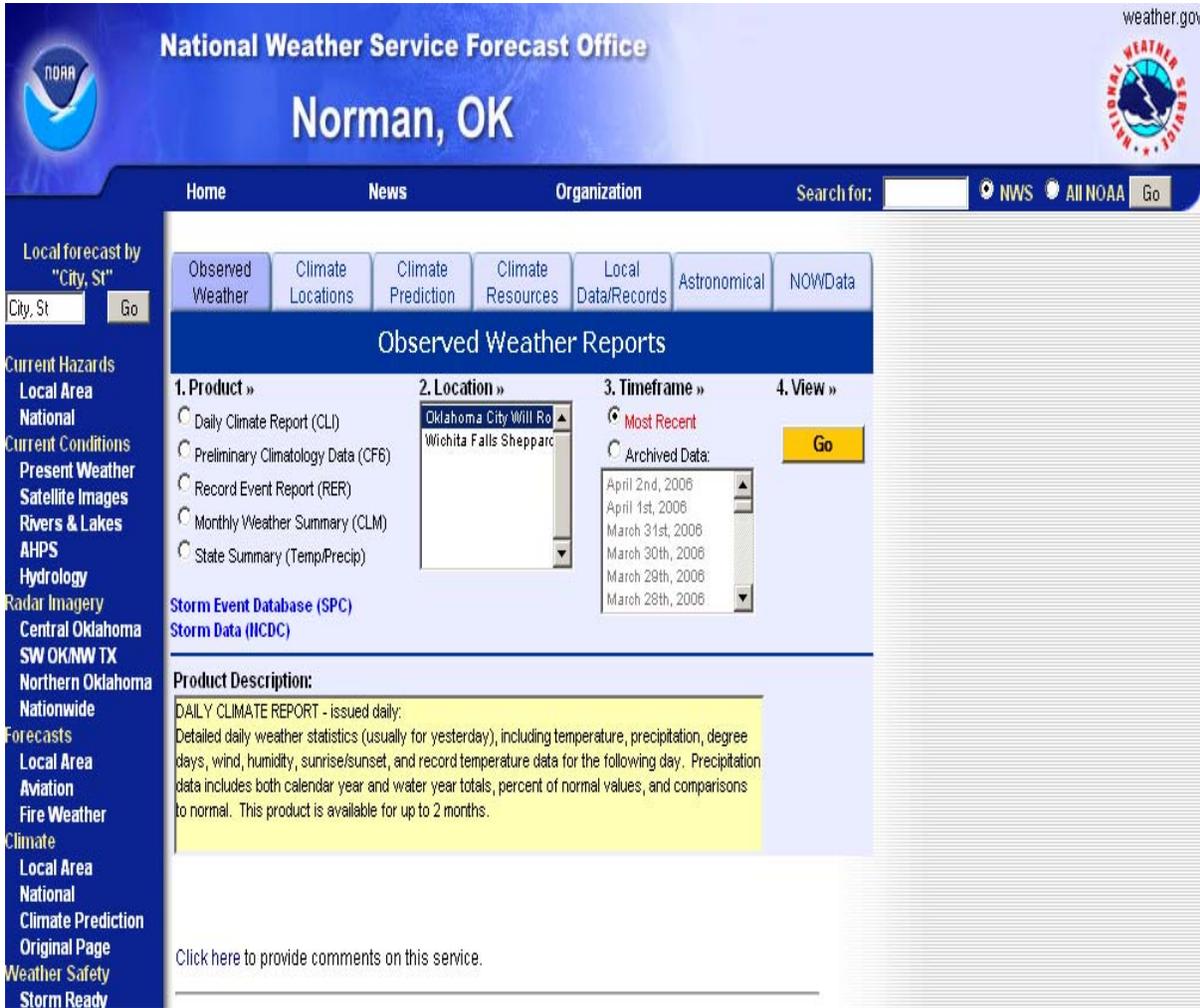


Figure 2. Example of a WFO climate web page with the “Observed Weather” tab selected. This tab provides ASOS preliminary data.

As a minimum, WFOs will post under the “Observed Weather” tab the top four products listed (CLI, CF6, RER, CLM - under the column labeled “Product”) for all ASOS LCD locations in their area of responsibility. See [NWS Instruction 10-1004 \(Climate Records\)](#) for details on these products. WFOs may add additional locations for these products. The Regional Climate

Services Program Managers (RCSPMs) will, through consensus, determine the amount of archiving for any product. WFOs may select any other information under “local/data records.”

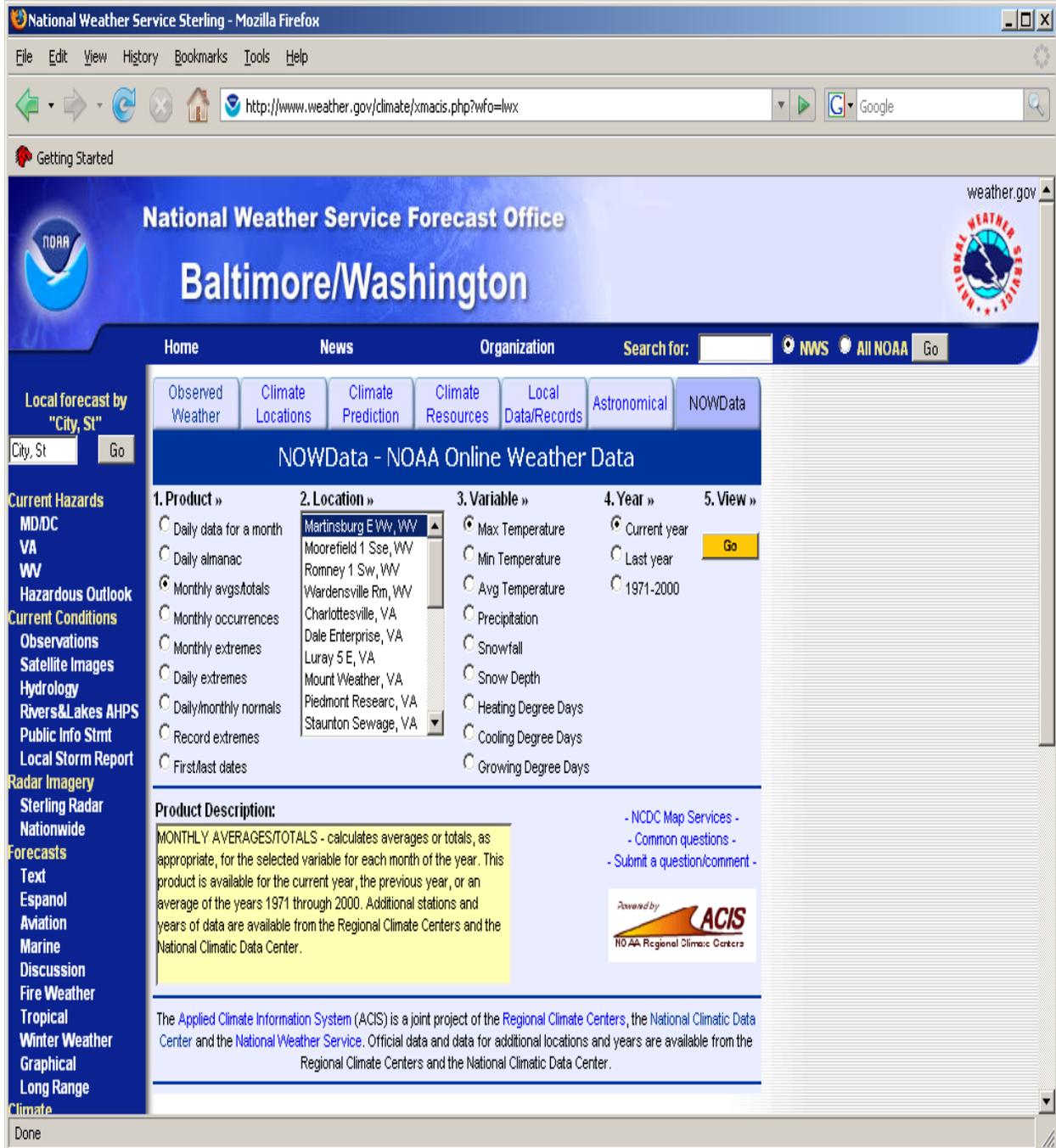


Figure 3: Example of a WFO web page with the “NOWdata” tab selected. This tab provides ASOS preliminary data and COOP preliminary data.

WFOs select the locations for the NOWdata products. The amount of archiving for any NOWdata product is determined by consensus of the RCSPMs in coordination with the [RCCs](#), who provide NOWdata through xmACIS. WFOs are encouraged to include all COOPs that have 30-year climate averages computed and/or are sending data daily via phone or the web.

3. Referral of Requests.

a. WFOs will refer data requests to NCDC for the following situations:

- Any request requiring [certification](#) of data.
- Any request related to a requirement to fulfill a law, mandate, or ordinance for a federal, state, or local government.
- Any requirement for data to be used in litigation. The WFO will notify [NOAA General Counsel](#) if the observer or any NWS employee is subpoenaed.
- Any request for copies of original (“raw”) observation forms
- Any international climate requests.

b. For requests other than item “a,” WFOs should refer requests for the following situations to [NCDC](#), [RCC](#), [State Climatologists](#), or the [NWS web link listing commercial weather vendors serving the U.S.](#)(*), as appropriate:

- The request requires data in a format different from what is available to the WFO.
- The request requires a WFO to expend more time and effort than is available to answer.
- The data requested requires a response outside the scope of a WFO’s expertise.
- When data needed are historical or documentary in nature and preliminary WFO data is insufficient.

(*) WFO will **not** recommend a specific commercial vendor to a user.

In many cases, [NCDC](#) or the [RCCs](#) may be best able to handle larger scale analysis at the multi-state, regional, or national levels (e.g. for drought or other widespread trends).