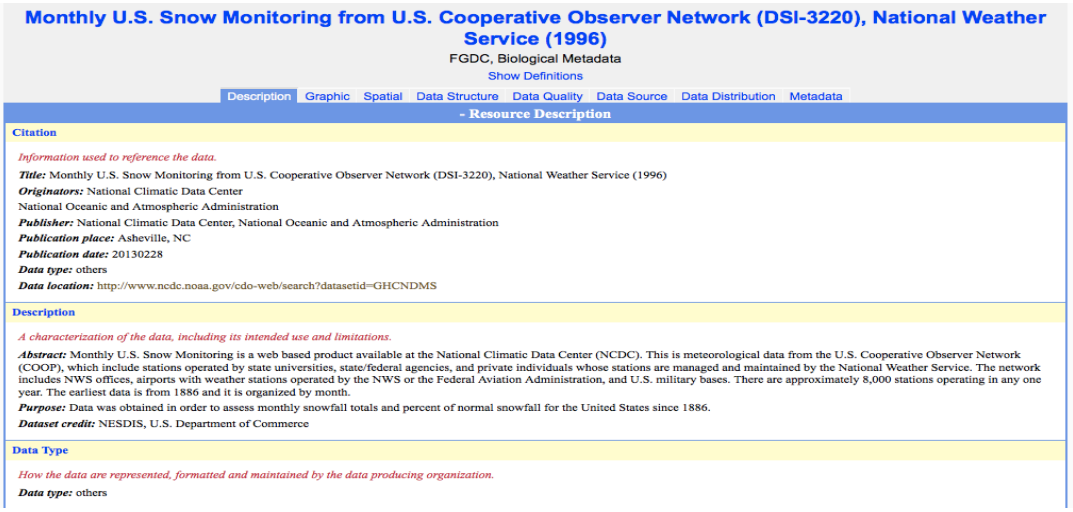
Jessica Neefe
Cartographic Metadata Record Assignment
November 25, 2013

XML code and links to metadata record:

http://mercury-ops2.ornl.gov/OME/neefe/Monthly_U_S_Snow_Monitoring_from_U_S_Cooperative_Observer_Network_DSI_3220_National_Weather_Service_1996_.xml


```
- <metadata>
  - <idinfo>
    - <citation>
      - <citeinfo>
          <origin>National Climatic Data Center</origin>
          <origin>National Oceanic and Atmospheric Administration</origin>
          <pubdate>20130228</pubdate>
        - <title>
            Monthly U.S. Snow Monitoring from U.S. Cooperative Observer Network (DSI-3220), National Weather Service (1996)
          </title>
          <geoform>others</geoform>
        - <pubinfo>
            <pubplace>Asheville, NC</pubplace>
          - <publish>
              National Climatic Data Center, National Oceanic and Atmospheric Administration
            </publish>
          </pubinfo>
        - <onlink>
            http://www.ncdc.noaa.gov/cdo-web/search?datasetid=GHCNDMS
          </onlink>
        </citeinfo>
      </citation>
    - <descript>
      - <abstract>
          Monthly U.S. Snow Monitoring is a web based product available at the National Climatic Data Center (NCDC). This is meteorological data from the U.S. Cooperative Observer Network (COOP), which include stations operated by state universities, state/federal agencies, and private individuals whose stations are managed and maintained by the National Weather Service. The network includes NWS offices, airports with weather stations operated by the NWS or the Federal Aviation Administration, and U.S. military bases. There are approximately 8,000 stations operating in any one year. The earliest data is from 1886 and it is organized by month.
        </abstract>
      - <purpose>
          Data was obtained in order to assess monthly snowfall totals and percent of normal snowfall for the United States since 1886.
```


http://mercury-ops2.ornl.gov/OME/viewStyle.htm?link=http://mercury-ops2.ornl.gov/OME/neefe/Monthly_U_S_Snow_Monitoring_from_U_S_Cooperative_Observer_Network_DSI_3220_National_Weather_Service_1996_.xml



**Monthly U.S. Snow Monitoring from U.S. Cooperative Observer Network (DSI-3220), National Weather Service (1996)**

FGDC, Biological Metadata

Show Definitions

Description | Graphic | Spatial | Data Structure | Data Quality | Data Source | Data Distribution | Metadata

**- Resource Description**

**Citation**

*Information used to reference the data.*

***Title:*** Monthly U.S. Snow Monitoring from U.S. Cooperative Observer Network (DSI-3220), National Weather Service (1996)
***Originators:*** National Climatic Data Center
National Oceanic and Atmospheric Administration
***Publisher:*** National Climatic Data Center, National Oceanic and Atmospheric Administration
***Publication place:*** Asheville, NC
***Publication date:*** 20130228
***Data type:*** others
***Data location:*** http://www.ncdc.noaa.gov/cdo-web/search?datasetid=GHCNDMS

**Description**

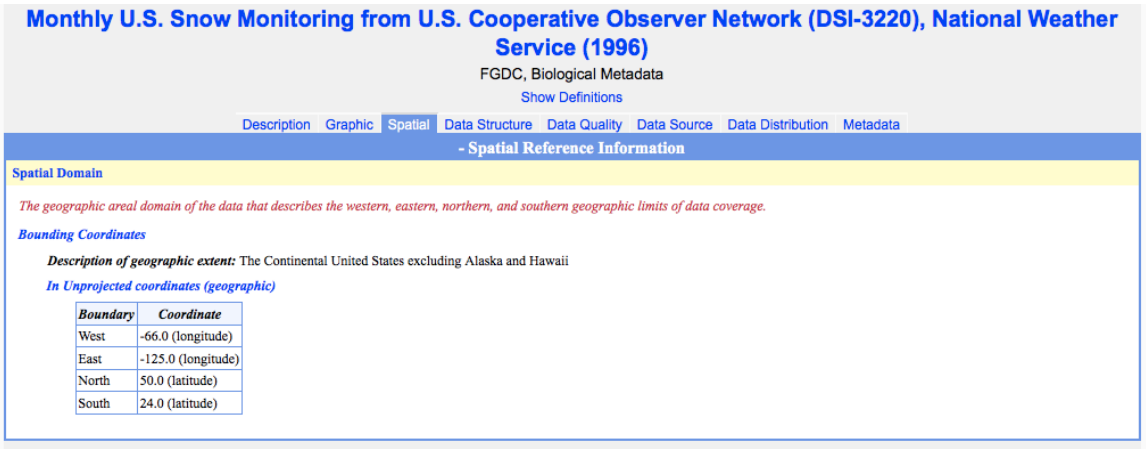
*A characterization of the data, including its intended use and limitations.*

***Abstract:*** Monthly U.S. Snow Monitoring is a web based product available at the National Climatic Data Center (NCDC). This is meteorological data from the U.S. Cooperative Observer Network (COOP), which include stations operated by state universities, state/federal agencies, and private individuals whose stations are managed and maintained by the National Weather Service. The network includes NWS offices, airports with weather stations operated by the NWS or the Federal Aviation Administration, and U.S. military bases. There are approximately 8,000 stations operating in any one year. The earliest data is from 1886 and it is organized by month.
***Purpose:*** Data was obtained in order to assess monthly snowfall totals and percent of normal snowfall for the United States since 1886.
***Dataset credit:*** NESDIS, U.S. Department of Commerce

**Data Type**

*How the data are represented, formatted and maintained by the data producing organization.*

***Data type:*** others



**Monthly U.S. Snow Monitoring from U.S. Cooperative Observer Network (DSI-3220), National Weather Service (1996)**

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**- Spatial Reference Information**

**Spatial Domain**

*The geographic areal domain of the data that describes the western, eastern, northern, and southern geographic limits of data coverage.*

***Bounding Coordinates***

***Description of geographic extent:*** The Continental United States excluding Alaska and Hawaii

***In Unprojected coordinates (geographic)***

| *Boundary* | *Coordinate* |
|---|---|
| West | -66.0 (longitude) |
| East | -125.0 (longitude) |
| North | 50.0 (latitude) |
| South | 24.0 (latitude) |

**Monthly U.S. Snow Monitoring from U.S. Cooperative Observer Network (DSI-3220), National Weather Service (1996)**

FGDC, Biological Metadata

Show Definitions

Description | Graphic | Spatial | Data Structure | Data Quality | Data Source | Data Distribution | Metadata

**- Metadata Reference**

**Metadata Date**

*Dates associated with creating, updating and reviewing the metadata.*

***Last updated:*** 20131125

**Metadata Point of Contact**

*Contact information for the individual or organization responsible for the metadata information.*

***Person:*** NOAA's National Climatic Data Center
***Organization:*** NOAAâ€™s National Climatic Data Center
***Phone:*** 828-271-4800
***Email:*** ncdc.orders@noaa.gov
***Address type:*** mailing and physical
***Address:*** 151 Patton Avenue
***City:*** Asheville
***State or Province:*** NC
***Postal code:*** 28801
***Country:*** United States

**Metadata Standards**

*Description of the metadata standard used to document the data and reference to any additional extended profiles to the standard used by the metadata producer.*

***Standard name:*** FDGC Content Standard for Digital Geospatial Metadata and Biological Data Profile
***Standard version:*** FDGC-STD-001-1998

I copied and pasted the XML as well:

<metadata><idinfo><citation><citeinfo><origin>National Climatic Data Center</origin><origin>National Oceanic and Atmospheric Administration</origin><pubdate>20130228</pubdate><title>Monthly U.S. Snow Monitoring from U.S. Cooperative Observer Network (DSI-3220), National Weather Service (1996)</title><geoform>others</geoform><pubinfo><pubplace>Asheville, NC</pubplace><publish>National Climatic Data Center, National Oceanic and Atmospheric Administration</publish></pubinfo><onlink>http://www.ncdc.noaa.gov/cdo-web/search?datasetid=GHCNDMS</onlink></citeinfo></citation><descript><abstract>Monthly U.S. Snow Monitoring is a web based product available at the National

Climatic Data Center (NCDC). This is meteorological data from the U.S. Cooperative Observer Network (COOP), which include stations operated by state universities, state/federal agencies, and private individuals whose stations are managed and maintained by the National Weather Service. The network includes NWS offices, airports with weather stations operated by the NWS or the Federal Aviation Administration, and U.S. military bases. There are approximately 8,000 stations operating in any one year. The earliest data is from 1886 and it is organized by month.</abstract><purpose>Data was obtained in order to assess monthly snowfall totals and percent of normal snowfall for the United States since 1886.</purpose></descript><timeperd><timeinfo><rngdates><begdate>19960101</begdate><enddate>19961231</enddate></rngdates></timeinfo><current>observed</current></timeperd><status><progress>complete</progress><update>annually</update></status><spdom><descgeog>The Continental United States excluding Alaska and Hawaii</descgeog><bounding><westbc>-66.0</westbc><eastbc>-125.0</eastbc><northbc>50.0</northbc><southbc>24.0</southbc></bounding></spdom><keywords><theme><themekt>ISO</themekt><themekey>Precipitation</themekey><themekey>Atmosphere</themekey><themekey>Station Height</themekey><themekey>Altitude</themekey><themekey>Earth Science</themekey><themekey>Snow</themekey></theme><place><placekt>ISO</placekt><placekey>United States of America</placekey><placekey>North America</placekey><placekey>Continent</placekey></place><stratum><stratkt>ISO</stratkt><stratkey>Vertical Location, Land Surface</stratkey></stratum></keywords><taxonomy><taxoncl><taxonrn>kingdom</taxonrn><taxoncl><taxonrn>Division</taxonrn><taxoncl><taxonrn>Phylum</taxonrn><taxoncl><taxonrn>Class</taxonrn><taxoncl><taxonrn>Subclass</taxonrn><taxoncl><taxonrn>Order</taxonrn><taxoncl><taxonrn>Family</taxonrn><taxoncl><taxonrn>Genus</taxonrn><taxoncl><taxonrn>Species</taxonrn></taxoncl></taxoncl></taxoncl></taxoncl></taxoncl></taxoncl></taxoncl></taxoncl></taxoncl></taxonomy><accconst>No access constraints are associated with this data.</accconst><useconst>No use constraints are associated with this data.</useconst><datacred>NESDIS, U.S. Department of Commerce</datacred><ptcontac><cntinfo><cntaddr><addrtype>mailing and physical</addrtype></cntaddr></cntinfo></ptcontac><browse><browsed>cgm, jpeg, gif,</browsed></browse><tool><toolcont><cntinfo><cntaddr><addrtype>mailing and physical</addrtype></cntaddr></cntinfo></toolcont></tool></idinfo><dataqual><attracc><attraccr>No formal attribute accuracy tests were conducted</attraccr></attracc><logic>Data set is considered complete for the information presented, as described in the abstract.Users are advised to read the rest of the metadata record carefully for addtional details.</logic><posacc><horizpa><horizpar>No formal positional accuracy tests were conducted</horizpar></horizpa></posacc><lineage><method><methtype>field</methtype></method></lineage></dataqual><spdoinfo><direct>vector</direct></

spdoinfo><eainfo><overview><eaover>This dataset includes the following attributes: COOP ID, WBAN ID, Station Name, State, Year, Latitude, Longitude, Station Elevation, Monthly Snowfall, Annual Snowfall, and Seasonal Snowfall. The COOP ID identifies what kind of station is being observed (station operated by university, state/federal agency, or NWS).</eaover><eadetcit>http://www1.ncdc.noaa.gov/pub/data/metadata/documents/C00704_3220doc.txt</eadetcit></overview><detailed><enttyp><enttypl>Spreadsheet containing monthly U.S. Snowfall for 2012</enttypl><enttypds>Producer defined</enttypds></enttyp><attr><attrlabl>COOP ID, WBAN ID, Station Name, State, Year, Latitude, Longitude, Station Elevation, Monthly Snowfall, Annual Snowfall, and Seasonal Snowfall.</attrlabl></attr></detailed></eainfo><distinfo><distrib><cntinfo><cntperp><cntper>User Engagement and Services Branch: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce</cntper></cntperp><cntaddr><addrtype>mailing and physical</addrtype><address>151 Patton Avenue</address><city>Asheville</city><state>U.S.</state><postal>NC</postal><country>28801</country></cntaddr><cntvoice>828-271-4800</cntvoice><cntemail>ncdc.orders@noaa.gov</cntemail></cntinfo></distrib><distliab>NCDC cannot assume liability for any damages caused by any errors or omissions in the data, nor as a result of the failure of the data to function on a particular system. NCDC makes no warranty, expressed or implied, nor does the fact of distribution constitute such a warranty. NCDC can only certify that the data it distributes are an authentic copy of the records that were accepted for inclusion in the NCDC archives.</distliab><stdorder><fees>none</fees></stdorder></distinfo><metainfo><metd>20131125</metd><metc><cntinfo><cntperp><cntper>NOAA's National Climatic Data Center</cntper><cntorg>NOAAâ▾←s National Climatic Data Center</cntorg></cntperp><cntaddr><addrtype>mailing and physical</addrtype><address>151 Patton Avenue</address><city>Asheville</city><state>NC</state><postal>28801</postal><country>United States</country></cntaddr><cntvoice>828-271-4800</cntvoice><cntemail>ncdc.orders@noaa.gov</cntemail></cntinfo></metc><metstdn>FDGC Content Standard for Digital Geospatial Metadata and Biological Data Profile</metstdn><metstdv>FDGC-STD-001-1998</metstdv></metainfo><mercury><mercury_status>draft</mercury_status></mercury></metadata>

**Summary:**

For this assignment I looked at 'Monthly U.S. Snow Monitoring from the U.S. Cooperative Observer Network.' This dataset is collected by the National Climatic Data Center that is operated under the National Oceanic and Atmospheric Administration. I chose this because I have always been interested in snowfall data (I grew up in northern PA and experienced tons of snow throughout my childhood years - it would snow from October to May most years). Since moving to Knoxville in 1997 it has hardly snowed at all and when it does snow an inch or two, you'd think it was a blizzard! I picked the year 1996 because I have distinct memories of a lot of snowfall in PA that year and was interested if the same was true for other parts of the United States. I titled this dataset "Monthly U.S. Snow Monitoring from U.S. Cooperative Observer Network, National Weather Service (1996)" because the data recorded is specific to snowfall in the U.S. and is tracked by the National Weather Service. I made sure to include the what, where, and when in the title.

When first creating this metadata record I looked at the available data for this topic. I found the data on the NCDC website and was able to extract the information I needed to create my own metadata record in OME. I referred to the Content Standard for Digital Geospatial Metadata Workbook and filled in as much as I could throughout the record. The 'Metadata Contact' refers to the office of NCDC which is located in Asheville, NC. Their address, phone number, and email was listed on the website for this data. For the Core Bibliographic Information I assigned the NCDC and NOAA as the originators of the dataset since they are the funding partners and the data is housed by the NCDC. The last update for this dataset was 2/28/2013. The data is updated annually and there is usually a 6-month lag for reporting. I also included a link to the online dataset and indicated that the data is presented in digital image with CSV, ASCII text, and ArcGIS. I included a brief summary (abstract) of the dataset explaining the web-based snow-monitoring product by the NCDC and NOAA. The abstract also includes an explanation of the types of weather stations being observed by the U.S. COOP and how far back the data has been collected on a monthly basis (1886).

I listed the time for this dataset between 1/1/1996 and 12/31/1996. The coordinates for this dataset are for the continental United States and do not include Alaska or Hawaii. The spatial coverage map runs from 50.0 N to 25.0 S and from -66.0 E to -125.0 W. This area includes the entire land area of the continental United States. It is important to correctly identify the spatial coordinates for this dataset so snowfall from other places are not included in the data.

According to the CSDGMW the standards provide four types of keywords: theme (subject), place (geographic location), stratum (vertical location), and temporal (time reference). The keywords I chose for this dataset are from the ISO Thesaurus and are instrumental in describing this record/dataset. The theme keywords I chose are: Earth Science, Atmosphere, Altitude, Station Height,

Precipitation, and Snow. All of these keywords directly relate to the type of data being represented in this record and signify the main idea of the dataset. Earth Science is a broader keyword that encompasses weather, precipitation, snow, etc. I chose keywords in a hierarchical manner – broader, then narrowing down to a more specific idea. I included altitude and station height because they are both important factors when monitoring snowfall and they affect the amount of snowfall for a given area. Since precipitation and snow are a product from the atmosphere I made sure to include all three. It is important for precipitation to be listed as a keyword in addition to snow because sometimes snow is recorded as precipitation (and not snow) depending on the data source in congruence with temperature for the weather system. For the place keywords I chose 'Continent' because the snow being monitored is for the continental United States (excluding Hawaii). Again I chose broader keywords and then narrowed it down to more specific keywords, 'North America' and 'United States.' I did not include U.S. states, counties, or cities because this dataset is for the entire continental U.S. and not individual locations like cities or counties. The stratum keywords I chose are 'Vertical Location' and 'Land Surface.' The snowfall monitors the land surface of the U.S. and it is important to include that within the keywords. I did not include temporal keywords because I didn't know how to characterize the dates of the dataset (1886-Present). That time period isn't really considered an era or anything so I was unsure how to identify a specific keyword that would make sense.

I chose to do an overview for the entity and attribute because the information in this dataset is pretty straightforward. I didn't feel there was a need to do a detailed description because I also included a link for the definitive reference source that defines the attributes and attribute values used in more detail. The primary attributes for this dataset are: COOP ID, WBAN ID, Station Name, State, Year, Latitude, Longitude, Station Elevation, Monthly Snowfall, Annual Snowfall, and Seasonal Snowfall. Each of these attributes contributes to the overall reporting data and has a specific meaning. Latitude is latitude; there are no underlying meanings in any of these individual attributes.

Lastly, the distribution information is basically the same as the metadata contact. I listed the User Engagement and Services Branch of the National Climatic Data Center as the distributor and included all contact information for this. The CSDGMW was very helpful in doing this assignment and I referred to it throughout my creation of this metadata record.