

Please provide the following information, and submit to the NOAA DM Plan Repository. *Error! Bookmark not defined.*

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

- 1.1. Name of the Data, data collection Project, or data-producing Program: *Tiksi (SEARCH station program)*
- 1.2. Summary description of the data: *Tiksi station collects, transmits, and hosts the following instruments: upwelling and downwelling: shortwave and longwave radiation, fluxtower data: [profile measurements of temperature (aspirated, infrared, RTD), humidity, wind speed, wind direction, sonic anemometer fast-measurements, licor measurements, soil profiles, snow depth, ground heat flux, pressure, and soil thermocouples], flask aerosol measurements, surface ozone, cimel, aethalometer/black carbon. We also partner with the Finnish Meteorological Institute (FMI) to transmit and host the following aerosol and flux data: greenhouse gas concentration and flux, aps, cpc, dmeps-long, dmeps-short, map, nephelometer, so2, ground heat flux, and soil temperature profiles.*

The Tiksi Hydrometeorological Observatory is located in the Russian far East at 71.6 N, 128.9. The facility has been developed through a partnership between the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), the Russian Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet), and the Finnish Meteorological Institute. In the summer/fall of 2006 a new weather station laboratory facility was built which has additional laboratory and roof space intended to support instruments for research, climate studies and monitoring studies. A second facility was built in the summers of 2007-2008 1.5 km North West of the new Roshydromet weather station and is referred to as the "CAF" or Clean Air Facility. The site for the second facility was selected so that the surrounding terrain is horizontally homogeneous, undisturbed, and with a significant clean air sector. The facility includes a 20 m tower, roof space, air sampling stacks and boardwalks to maintain the pristine environment. The official opening of the Tiksi Facility was in August 2010. This facility supports the research needs of the International community, across disciplines including supporting Global Atmosphere Watch measurements as well as other climate observations.

- 1.3. Is this a one-time data collection, or an ongoing series of measurements: *Ongoing*
- 1.4. Actual or planned temporal coverage of the data: *Continuous measurements since 2010 – present/future*
- 1.5. Actual or planned geographic coverage of the data: *Tiksi, Russia (Arctic) data collection location*
- 1.6. Type(s) of data: *Digital numeric data files (ASCII files)*
- 1.7. Data collection method(s): *Direct observations and data collection via on-site data loggers and ftp*

1.8. If data are from a NOAA Observing System of Record,^{Error! Bookmark not defined.} indicate name of system: *PSD/POP: SEARCH*

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name: *Sara Morris*

2.2. Title: *Associate Scientist II / Arctic Data Manager*

2.3. Affiliation or facility: *CIRES/NOAA*

2.4. E-mail address: *sara.morris@noaa.gov*

2.5. Phone number: *303-497-4453*

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name(s): *Taneil Uttal*

3.2. Position Title(s): *Meteorologist*

3.3. Name of current Position holder: *PSD/POP Federal Program Manager*

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified: *PSD/POP SEARCH*

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"): *unknown*

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines¹ for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible (describe or provide URL of description):

- *ftp://ftp1.esrl.noaa.gov/psd3/arctic/tiksi/surface_properties/fluxtower/towermet/0_docs/Tiksi_Datagrams_FLUXTOWER_met.pdf*
- *ftp://ftp1.esrl.noaa.gov/psd3/arctic/tiksi/aerosol/aethalometer/0_docs/Tiksi_Datagrams_aethalometer.pdf*
- *ftp://ftp1.esrl.noaa.gov/psd3/arctic/tiksi/ozone/surface/0_docs/Tiksi_Datagrams_ozone.pdf*
- *ftp://ftp1.esrl.noaa.gov/psd3/arctic/tiksi/radiometric/broadband_radiation/downwelling/0_docs/Tiksi_Datagrams_downwelling_broadband_radiation.pdf*
- *ftp://ftp1.esrl.noaa.gov/psd3/arctic/tiksi/radiometric/broadband_radiation/upwelling/0_docs/Tiksi_Datagrams_upwelling_broadband_radiation.pdf*
- *ftp://ftp1.esrl.noaa.gov/psd3/arctic/tiksi/surface_properties/fluxtower/licor/0_docs/Tiksi_*

¹ http://www.cio.noaa.gov/services_programs/IQ_Guidelines_030414.html

Datagrams_FLUXTOWER_sonic_licor.pdf

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (*describe or provide URL of description*): *same documentation location as above (5.1)*

6. Data Documentation

The EDMC Data Documentation Procedural Directive² requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive? *Yes*

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting: *NOAA, OAR*

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known: *https://www.esrl.noaa.gov/psd/data/iso_metadata/*

6.4. Process for producing and maintaining metadata (*describe or provide URL of description*):
NOAA's ATRAC

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive³ contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive? *Yes*

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access: *NOAA PSD/POP*

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
<https://www.esrl.noaa.gov/psd/arctic/observatories/tiksi/>

7.3. Data access methods or services offered: *Direct download, web browser tool*

7.4. Approximate delay between data collection and dissemination: *1-10 days depending on automated processing techniques and data transfer services*

7.4.1. If delay is longer than latency of automated processing, indicate under what authority

² <https://www.nosc.noaa.gov/EDMC/PD.DD.php>

³ Data Access Directive currently in review; URL to be added.

data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval^{Error! Bookmark not defined.} describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location: *To Be Determined, Radiation submitted to BSRN, surface ozone submitted to NILU/EBAS (Specify NODC, NCDC, NGDC, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain: *Data archive location depends on measurement type and therefore several data archives will be used*

8.2. Data storage facility prior to being sent to an archive facility (if any): *NOAA/PSD-POP ingest server*

8.3. Approximate delay between data collection and submission to an archive facility: *one year*

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive? Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection: *PSD-POP data back-up ingest server process*

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.