SUBMISSION AGREEMENT
BETWEEN
THE SPACE WEATHER PREDICATION CENTER
AND
THE NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
FOR NEUTRAL LINE FULL SUN DRAWINGS

2013-01-11

Introduction

This document represents the agreement that the Space Weather Predication Center (NOAA/NWS/SWPC) (the "Provider") and the National Centers for Environmental Information (NCEI) (the "Archive") have reached for submitting the Provider's data, Neutral Line Full Sun Drawings, to the Archive for long-term preservation. It represents a joint effort between the Provider and the Archive to accurately document the agreement and the expectations between the two groups.

In order to ensure that the quality and integrity of the archived data is not compromised, the Provider and the Archive agree to maintain this agreement with accurate and up-to-date information through the life of the data submission.

Add comments as needed

Contacts

Persons included in all communications regarding the data submission.

Provider Contacts

Point of Contact, Forecast Supervisor
Robert Rutledge
NOAA/NWS/SWPC
Forecaster
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Forecaster on Duty
Daily Forecaster
Forecaster of the Day
303.497.3131.
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Archive Contacts

Data Acquisition, Data Technician
Karen Horan
NGDC>STP
Solar Data Technician
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Data Manager
William Denig
Chief
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Data Overview

Synoptic Analysis Drawings, also known as Neutral line (NL) drawings, are drawn each day by Space Weather Prediction Center (SWPC) forecasters. They ensure the forecasters have a comprehensive view of all relevant solar features. They show features such as neutral lines, coronal hole boundaries, active regions, plage, filaments and prominences. Also included is specific information about the coronal hole polarity, active region numbers, flare

probabilities for each region and the proton event probabilities for each region. The National Geophysical Data Center maintains an archive of these drawings since June 2, 1972 to the present and makes them available online as pdfs. In the past, paper drawings were given to NGDC monthly for scanning, archiving and placing on the web. More recently, the Forecast Office creates a scanned image for NASA, AFWA and and NGDC. In the future, once SWPC becomes part of the Advanced Weather Interactive Processing System (AWIPS), the production of the creation of paper drawings will cease.

Applicable and Reference Documents

Documents applicable to or referenced from this agreement.

1. NAO 212-15

Submission Scope

Active Submission Period

2013-02-04 - 2020-05-07

Data Types

Below is a summary of the data sizing and submission schedule by data type group. Enter information on at least one data type.

Data Type Name	Data Sizing	Submission Schedule
Image	42MB per image per day	daily

Reviews and Testing

Daily NL drawings are emailed to Karen.E.Horan@noaa.gov as .jpg files. They are 'saved as' and then opened in Adobe, renamed and saved as .pdfs and put online. The original .jpg files will be saved for archiving.

Providing System

Identification of the system providing the data to NCEI.

System Name:	Identification of the system supplying the data to the Archive.
System Owner:	NOAA/NWS/SWPC
Physical Location:	Boulder, CO
Additional Information:	Add comments as needed on applicable data types, etc.

Transfer Interface

Describe the transfer protocol, interface, data availability, data priority, nominal bandwidth, etc.

Submission File Inventory

Information on each submitted file type from the Provider. Information on multiple file types can be added below.

File Type Name: Boulder Neutral Line Full Sun Drawing
File Name Pattern:
<obsv>_<type>_<fd>_<yyyymmdd>_<time>.<extension>
File Name Field Definitions:
Observatory code (4 letter abbreviation)
Image type code (5 letter abbreviation)
Misc. Info code (2 letter abbreviation)*
YearMonthDay
Time
jpg
*We're using fd meaning Full Disk scanned from drawing, all these drawings will be fd
Example File Name:
boul_neutl_fd_yyyymmdd_time.jpg
File Format: jpg
File Compression: gzip
File Size Average: 42MB
File Count (Rate): 1 drawing per day
Data Volume (Rate): 42 MB per day
Submission Schedule: Daily email from SWPC and one ingest session to NGDC archive early each month.
Additional Information: NGDC will gzip the files before putting in the archive.
Descriptive Information Attributes:
None: date/time fields are usually used as descriptive attributes for this file.

Submission Manifest

A submission manifest file with a 32-character MD5 checksum value is required for each submitted file in order to ensure the integrity of the submitted data.

File Content Specification:
No manifest provided.

File Transmission:
Not Applicable.

File Name Pattern:
Not Applicable.

File Name Definitions:
Not Applicable.

Example File Name:
Not Applicable.

Archive Ingest

Ingest processing steps at the Archive and communication with the Provider.

Receipt Verification:
Solar Data Technician will notify provider of any missing data.

Error Reconciliation:
Archive will notify the Provider via email to reconcile any errors.

Receipt Confirmation:
To be determined.

Quality Assurance:
Each drawing will be checked visually by the Data Technician. For each file that has been gzipped for the Archive, NGDC will perform a data integrity check of the internal checksum contained within the gzipped file as part of the archive workflow process. This test will uncover any file corruption at the point at which the file was gzipped.

Archive File Packaging:
Files are stored in their native format and gzipped. For example: boul_neutl_fd_yyyymmdd_time.jpg.gz.

Archive Storage
Archive attributes of each archived file type.

Archive File Type Name: <obsv>_<type>_<fd>_<yyyymmdd>_<time>.<extension>.gz

Archive File Attributes/IDs:

Attribute/ID Type	Value
Archive File ID	<obsv>_<type>_<fd>_<yyyymmdd>_<time>.<extension>

Archive Updates
To be determined.

Retention Schedule
The data will be retained in the Archive for long-term preservation in accordance with the NARA Schedule description in the NOAA Records Disposition Handbook, Chapter 1406 for the NOAA National Data Centers.

(Notional) Disposition: Unknown/TBD

Constraints

No constraints apply or will apply to the archived data.

User Community
This is an Historical Solar Record. Users of the data are scientists, forecasters, and the general public.

User Documentation and Metadata
Solar Imagery - Boulder Neutral Line Drawings (metadata record).

Representation Information Items

TBD

None

Preservation Descriptive Information Items

Preservation Descriptive Information items contain context, provenance, and/or quality information for the data.

Item	Description
Solar Imagery - Boulder Neutral Line Drawings (metadata record): http://www.ngdc.noaa.gov/geoportal/catalog/search/resource/details.page?uuid=%7B1E395BFC-833D-4DCF-BF80-2B6433EB6255%7D.	Collection level metadata record created by the Archive.

Access and Dissemination

The Archive will provide access services for the data and supporting information to the designated user community.

Full Sun Drawings can be obtain from the Archive through this interface:
http://www.ngdc.noaa.gov/nndc/struts/results?op_0=eq&v_0=Boulder&t=102827&s=18&d=8&d=160&d=9

Additional Terms

End date of Archive Submission is notional.