SERVICE RECORDS RETENTION SYSTEM



Basic meteorological and hydrological data, analyses, forecasts, and warnings are now distributed among National Weather Service (NWS) Offices over a new communications system. This system will replace existing teletype and facsimile equipment at NWS offices, and in some cases the circuits. Each NWS field office now has processors and displays suited to its requirements.

AFOS - The Automation of Field Operations and Services (AFOS) was developed to increase the productivity and effectiveness of NWS personnel and to increase the timeliness and quality of their warning and forecasting services. The major field implementation has been taking place since 1978.

SRRS - The Service Records Retention System was developed to store NWS meteorological and hydrological data, analyses, forecasts, and warnings for a five year period. Starting with June 1, 1983, all of these items are stored on one magnetic tape daily (0000-2359 GMT) by the System Monitoring and Coordination Center (SMCC), Washington, D.C. Copies of these magnetic tapes are then sent to the National Climatic Data Center (NCDC), Asheville, North Carolina for retention.

The NCDC can service requests for products from the SRRS approximately seven (7) days after the actual date of the data. There is a charge for this service which is based entirely on the computer time required to search the magnetic tape(s) and print the product(s). Since charges for NCDC services are subject to change, an insert is included that provides information on the current pricing structure. The daily magnetic tapes are also available for purchase at cost. Most requests for either of these services should be mailed to the National Climatic Data Center, NOAA/NESDIS, Federal Building, Asheville, North Carolina 28801-2696. You may wish to consult with the NCDC before ordering these products. A meteorologist is available for assistance from 8:00 A.M. to 5:00 P.M. Eastern Time on 704-259-0682.

All requests for certified products must be mailed to: National Weather Service, Aviation Services Branch (W/OM 13x3), Office of Meteorology, NOAA, 8060 13th Street, Silver Spring, MD 20910.

Two types of products are available to users at the present time: 1) graphic displays of meteorological analyses and forecast charts and 2) alphanumeric displays of narrative summaries and meteorological/hydrological observational data.

GRAPHICS

Northern Hemisphere, North America, and United States meteorological analyses and forecast charts are displayed on Polar Stereographic map backgrounds (exhibits 1, 2, and 3). Eastern Hemisphere, Western Hemisphere, and Pacific Hemisphere tropical strip analyses are displayed on Mercator map backgrounds (exhibits 4, 5, and 6). All of the backgrounds contain state and international political boundaries, coastlines, and lines of latitude and longitude.

Each meteorological parameter analyzed on a chart is stored as a separate product. For example, on the 300-millibar constant pressure chart, heights and isotachs (exhibits 7 and 8) are stored as separate products. This will allow users to request products separately or to overlay the products on the map background. There are two limitations in overlaying graphic products: 1) all products must have the same map background and 2) only three products can be displayed simultaneously. NCDC can also retrieve and provide map backgrounds only as a separate product.

Full size meteorological analyses and forecast charts are furnished on 8 $1/2 \times 11$ inch paper. Two additional options are available to users. Both of these options zoom the chart in on a specific area. The first option will display any small area of a specified chart (exhibit 9) on 8 $1/2 \times 11$ inch paper. The second option will display any "strip" of a specified chart, e.g., an ocean route from New York, New York to London, England (exhibit 10) on 11×11 up to 40 inch paper. The scales of the map backgrounds which can be displayed are as follows:

1) Northern Hemisphere Polar Stereographic and Eastern, Western, and Pacific Hemisphere Mercator:

Zoom Ratio	Map Scale
1:1	1:80 million
4:1	1:40 million
9:1	1:27 million
16:1	1:20 million
25:1	1:16 million

2) North America Polar Stereographic:

Zoom Ratio	Map Scale
1:1	1:40 million
4:1	1:20 million
9:1	1:13 million
16:1	1:10 million
25:1	1:8 million

Subsequent pages provide selected listings of analyzed and forecast charts. All charts are not necessarily on each daily SRRS magnetic tape, and some may be available that are not listed. The NWS does occasionally purge or add charts transmitted on the AFOS.

ALPHANUMERICS

ALPHANUMERIC - In a computer system, alphanumeric means the data sets consist of both letters and numbers. For example, a Surface Aviation Observation may appear as: INT SA 0745 E100 BKN 15 179/53/48/1303/009.

Duplicate, partial, or retransmitted alphanumeric products may appear on the daily SRRS during periods of dual computer operation or maintenance outages on the AFOS. Even though the latest time of transmission may satisfy a particular order, the user will receive all transmissions of the specified alphanumeric product.

Alphanumeric products available from the SRRS fall into three categories; local, national, and international. Subsequent pages contain listings of these products.

The following lists are only a general respresentation of what data are available. For a more detailed list, please contact the National Climatic Data Center.

Graphic Inventory

1. North American:

Surface Analysis/Forecasts
Weather Depiction
Radar Summary
24 Hr. Max/Min Temperature Chart
24 Hr. Precipitation Plot
Precipitable Water
24 Hr. Snowfall/Snow Cover
Constant Pressure Analysis/Forecasts
Lifted Index/K Index
1000-500mb Thickness
Freezing Level
Vertical Velocity
Vorticity Analysis/Forecasts
Isotach Analysis/Forecasts

2. Northern Hemisphere:

Surface Analysis
Constant Pressure Analysis/Forecasts
Isotach Analysis/Forecasts
Lifted Index
Surface-500mb Relative Humidity
1000-500mb Thickness

3. Miscellaneous Charts

Streamline Analysis/Forecasts Bering Sea Ice 12 Hourly Surface Isobars

Alphanumeric Inventory

- 1. Agricultural Forecasts/Observations/Advisories
- 2. Air Pollution Products
- 3. Aviation Products

Airmet
Area Forecasts (National/International)
Sigmet (National/International)
Terminal Forecasts (National/International)
Pirep

- 4. Fire Weather Products
- 5. Hydrologic Products
- 6. Observation Products:

Surface Observations (U.S./Canada/Mexico/Caribbean/Bahamas) Radiosonde Observations (U.S./Canada/Mexico/Caribbean/Bahamas) Weather Radar Data

- 7. Climatological Reports
- 8. Marine Products:

Coastal Warnings/Forecasts
Oceanographic Data
Great Lakes Warnings/Forecasts
Gale Warnings/Forecasts
Marine Observations
Small Craft Advisories
Tsunami Messages

9. Public Products:

Hurricane/Tropical Cyclone Advisor/Warnings Local/State/Zone Forecasts Recreational Reports Severe Weather Statement/Watch/Warning Tornado Warning

- 10. Narratives/Discussions/Coded Products
- 11. Guidance Forecasts
- 12. Tables/Summaries/Statistical Products
- 13. Satellite Products



















