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Operations and Services
Digital Services Specification, NWSPD 10-2
WEB BASED PRODUCTS SPECIFICATIONS

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Web Based Products Specifications

1.	Introduction. This procedural directive provides product specifications generated from the digital forecast database prepared by the National Weather Service (NWS). A description of specifications for the NDFD graphic forecast displays includes national and regional forecast mosaics. Specifications include instruction on interactive web-based services including national, regional, and local applications. Additionally, specifications include instruction on displaying information and making changes on the World Wide Web (WWW).

2.	Mission Connection. Web based services utilizing national, regional and local databases deliver NWS forecasts in an efficient and accessible form. These are designed to give our users a method to provide accurate weather forecast information in an environment of rapidly changing and evolving needs.

3.	Linkage to Official Web-Based Graphical Products. In the near future, The Catalog of NWS Product and Information Service Changes is expected to be online. It will replace the existing National Catalogue of New or Enhanced Products and the Changes to NWS Information Services. The Catalog of NWS Product and Information Service Changes will enhance and integrate the existing NWS automated capability and expand the capability to include NCEP products, services, and users, including user feedback functionality. The link for this information will be the following: http://products.weather.gov.

4.	Interactive Web-based Services:

4.1	National Web-based Services. National web-based services should meet national user requirements for digital services which are widespread (multi-regional or national) in scope or coverage. Services should be timely, accurate, and consistent (meteorologically, functionally, and aesthetically) with other NWS web-based digital services. The National Digital Forecast Database (NDFD) elements are accessed via file transfer. Links to the data, supporting information and software are available through: http://www.weather.gov/ndfd/technical.htm.

Specific point forecasts are available by way of each WFO web page or through a zip code/city search engine on numerous NWS web pages. Links to specific office configuration and forecast pages are available at: http://forecast.weather.gov/gfestatus.php.

4.2	Regional Web-based Services. Regional web-based services should meet user requirements for digital services covering multi-state, or multi-WFO geographic areas of responsibility. Services should be timely, accurate, and consistent (meteorologically, functionally, and aesthetically) with NWS national web-based digital services.

4.2.1	Multi-Format Forecast Information Web Page. This service is an interactive forecast information web page allowing users to access forecast information that is always current with higher resolution than is possible in traditional text forecast products (which may be averaged over time and space). Users can view forecast information retrieved directly from locally prepared forecast grids in a variety of formats, including icons, text, tabular and graphic.

Data fields include, surface temperature, dew point, wind speed and direction, weather, sky cover, and probability of precipitation.

4.2.2   Purpose. Advances in computer capabilities and web services technologies, as well as scientific advances in NWS software, have prompted the NWS to create user-based web services. Information dissemination via the WWW allows users to obtain higher resolution forecast information in a variety of formats on-demand.

4.2.3   Audience. The audience for the forecast information web page consists of all individuals, agencies, and businesses interested in detailed and accurate weather forecasts, including the general public and partners such as emergency management, other government agencies, universities, media, and private companies.

4.2.4   Availability and Timeliness. Data are routinely extracted from NWS Weather Forecast Office (WFO) digital databases, then processed and sent to NWS regional web servers. Updates to grid point forecasts are made as often as necessary and posted once an hour from the local office digital database. These updates are available shortly after the top of the hour.

4.2.5   Presentation Format. The web grid point forecasts are presented for display as HyperText Markup Language (HTML) in text, hourly meteogram, and digital/tabular format. The forecasts can be viewed using a web browser, and then selected on a map location or by entering specified latitude and longitude coordinates.

4.2.6   Spatial Resolution. Digital data are available at spatial resolutions of 6 kilometers (km) or finer.

4.2.7   Temporal Resolution. Temporal resolutions vary depending upon forecast type. Text forecasts are available out to 7 days; meteograms to 48 hours; digital/tabular forecasts to 120 hours.

4.3   Local Web-based Services. Local web-based services created by individual WFOs to include special support operations should be designed to meet local user requirements for digital weather information in multiple forms (e.g., text, graphics, and interactive services). Products and services should be timely, accurate, and consistent (meteorologically, functionally, and aesthetically) with NWS national and regional web-based products/services.