

**Graphical Forecast Table**  
**Product Description Document**  
**6/05/03**

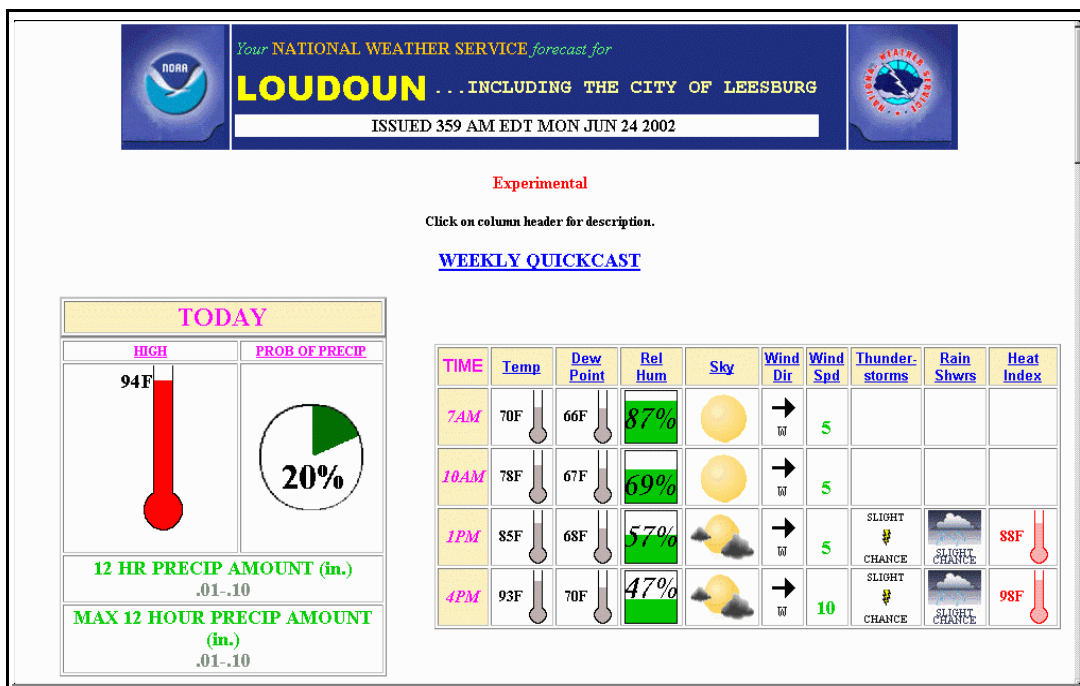
**Part I - Mission Connection**

- a. Description of Product - The National Weather Service's (NWS) Graphical Forecast Table provides a graphical representation of digital/tabular forecasts of maximum temperature, minimum temperature, probability of precipitation, 3- hourly temperatures, dewpoint temperatures, relative humidity, sky condition, wind direction and speed, obstruction to visibility, and precipitation type.
- b. Purpose - The Graphical Forecast Table is derived from forecast weather parameters found in the Area Forecast Matrix (AFM). The AFM is primarily intended for use by large volume users of NWS forecast information and for automated retrieval of forecast parameters. This format may be difficult for much of the general public to read and interpret. Therefore, in an effort to support NWS Strategic Plan and its goal to provide graphical weather products, the AFM has been reformatted into a graphical product that is easier to interpret and understand.
- c. Intended Audience -The target audience for this experimental graphical product is the general public. The product is available to anyone who has an Internet connection. Since this product is in the public domain, it can be acquired by intermediaries, repackaged, and re-transmitted in accord with standard NWS product use policies. Using advances in computer capabilities, as well as scientific advances to create customer-based products and services, the National Weather Service, through the Graphical Forecast Table, strives toward the following goals:
  - ▶ provide customers with forecast information that is easy to interpret and understand
  - ▶ provide timely and readily accessible forecast information
  - ▶ improve and standardize the graphical presentation format of public weather forecast information
- d. Presentation Method - The Graphical Forecast Table is a web based graphical product displayed as a series of tables composed of iconic images and alphanumeric weather forecast data.
- e. Feedback Mechanism - We are always seeking to improve our products based on user feedback. An OMB approved form may be used to submit comments about this new product. It is available on or within the web site containing the experimental product.

Technical comments for the Graphical Forecast Table product developer may be addressed to: National Weather Service  
 Attn: Tom Kriehn  
 533 Roberts Rd.  
 Newport, NC 28570 or e-mail comments to: [thomas.kriehn@noaa.gov](mailto:thomas.kriehn@noaa.gov)

## Part II - Technical Description

- a. Format & Science Basis - The Graphical Forecast Table is composed of forecast information in digital form and iconic images displaying forecast parameters for maximum temperature, minimum temperature, probability of precipitation, 3-hourly temperatures, dewpoint temperatures, relative humidity, sky condition, wind direction and speed, obstruction to visibility, and precipitation type. A sample portion of this product is shown in Figure 1.



**Figure 1.** Graphical Forecast Table.

Within the product, links above the parameter columns provide descriptions of the various weather parameters. A link is also available for a “Weekly Quickcast”; a seven day summarization of the forecast in a similar format. Internet links to a realtime Graphical Forecast Table and associated Weekly Quickcast are provided below.

**Graphical Forecast Table Realtime Product Example**

**Weekly Quickcast Realtime Product Example**

1	2	3	4	5	6	7	8															
1234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890																						
<u>Product Format</u>				<u>Description of Entry</u>																		
FOaaii cccc ddhhmm				<i>(WMO Heading)</i>																		
AFMxxx				<i>(AWIPS ID)</i>																		
AREA FORECAST MATRICES				<i>(MND - NWS Product Name)</i>																		
NATIONAL WEATHER SERVICE city state				<i>(Issuing Office)</i>																		
400 AM EST MON FEB 12 2001				<i>(Issuance Time/Date)</i>																		
stZ###-###>###-ddhhmm-				<i>(UGC Type: Zone) - (Exp. Time)</i>																		
county st-county st-county st				<i>(Included County/State)</i>																		
400 AM EST MON FEB 12 2001				<i>(Issuance Time/Date)</i>																		
...HIGH WIND WATCH TUE AFTERNOON...				<i>(Headline if applicable)</i>																		
DATE	MON 02/12/01						TUE 02/13/01						WED 02/14/01									
UTC 3HRLY	08	11	14	17	20	23	02	05	08	11	14	17	20	23	02	05	08	11	14	17	20	23
EST 3HRLY	03	06	09	12	15	18	21	00	03	06	09	12	15	18	21	00	03	06	09	12	15	18
MAX/MIN	51 36 38 39						55 56 60						45 49 50 52									
TEMP	33	39	45	46	45	43	41	39	41	45	49	50	49	49	50	48	46	47	47	49	47	
DEWPT	15	17	20	22	25	29	33	34	36	38	40	42	42	43	44	44	44	46	46	43	39	
RH	47	40	36	38	45	57	72	82	82	76	70	73	76	79	79	85	92	96	96	79	73	
WIND DIR	NW	NW	W	W	SW	SW	W	W	S	S	S	S	S	S	SW	SW	S	SE	SE	SE	SE	
WIND SPD	5	8	8	8	8	8	5	2	10	14	28	36	26	22	10	8	5	2	2	5	8	
WIND GUST							22 25 42 56 52 34 20															
CLOUDS	OV	OV	OV	OV	BK	BK	SC	BK	BK	BK	BK	BK	OV	OV	OV	OV	OV	OV	BK	BK	BK	
POP 12HR	10						10						20									
QPF 12HR	0						0						.25-.49									
MAX QPF	0						0						.25-.49									
SNOW 12HR	00-00						00-00						00-00									
RAIN							S C C						L L L L C									
OBVIS	K K												F F F F F									
WIND CHILL 6HR	30	30																				
MIN CHILL	24																					
HIGH WIND							A A															
DATE	THU 02/15/01					FRI 02/16/01					SAT 02/17/01					SUN 02/18/01						
UTC 6HRLY	05	11	17	23	05	11	17	23	05	11	17	23	05	11	17	23	05					
EST 6HRLY	00	06	12	18	00	06	12	18	00	06	12	18	00	06	12	18	00					
MAX/MIN	35 46					34 41					24 33					18 30						
TEMP	41	39	44	43	40	36	39	34	29	24	29	26	22	19	28	24						
DEWPT	38	36	36	38	37	34	34	32	26	22	21	18	16	16	20	21						
PWIND DIR	SE S					SW NW					N N					SE SE						
WIND CHAR	LT LT					LT LT					BZ WY					LT LT						
AVG CLOUDS	BK OV					BK BK					FW CL					FW SC						
POP 12HR	30 40					40 30					20 20					40 60						
RAIN	C															C L						
RAIN SHWRS						C																
\$\$																						

**Figure 2.** Area Forecast Matrices Product Prototype.

- b. Product Availability - The AFM is routinely issued within 30 minutes of the two mandatory forecast packages produced between 1:30 and 5:30 am/pm local time. However, updates may be issued at any time as conditions warrant. When the AFM is issued, a local application program runs automatically which reformats the AFM into hypertext markup language (HTML). The product is then transmitted automatically to the Internet server hosting the local NWS home page. When displayed with an Internet browser, graphical forecasts for up to seven days

in advance can be viewed. These products are compliant with the 1998 Amendment to Section 508 of the Rehabilitation Act.

c. Other Details -

- (1) The Graphical Forecast Table was created by Carin Goodall, WFO Newport/Morehead City, NC
- (2) Refer to NWSI 10-503, WFO Public Weather Forecast Products Specification for a technical description of the Area Forecast Matrices (AFM) product.