Product/Service Description Document
Experimental Expanded Point Forecast Matrix Webpage Product
WFO Charleston SC

Part I - Mission Connection

a. Product/Service Description - The National Weather Service's (NWS) Experimental Expanded Point Forecast Matrix provides point forecast information using the NDFD data base for 36 sites across the Charleston CWA. This experimental web page will be linked to from the main Charleston, SC National Weather Service web page.

b. Product Type – Experimental

c. Purpose - The purpose of this experimental web page is to provide customers and partners with a significant expansion of the number of Point Forecast Matrix (PFM) sites. The format of this Experimental Expanded Point Forecast Matrix will be the same as the operational PFM. This webpage will support NOAA's Mission Goals of Serving Society's Needs for Weather and Water Information.

d. Audience - The target audience for this experimental product is predominately the television media community. Although emergency managers, state officials, town managers, fire weather officials and the general public may benefit from this product.

e. Presentation Format – The site consists of 36 sites in the same format as the official PFM. Sites were chosen based on customer and partner input and taking into consideration the size and location of cities/towns/land marks. Note, all 20 county seats are included in this experimental product.

f. Feedback Method – We are always seeking feedback on NWS products and services to facilitate future improvements. Feedback concerning this experimental product will be solicited from the television media either during one-on-one or group meetings. In addition, a web survey can be used to obtain customer and partner feedback. The survey is available at the following link: http://www.weather.gov/survey/web-survey.php?code=cc-marine

   The feedback period will be from 5/1/07 to 11/1/08.

Part II – Technical Description

a. Format and Science Basis – The NDFD database will be used to generate the Experimental Expanded Point Forecast Matrix. A formatter will be used to extract weather forecast elements for each of the sites. The format of this product will be identical to that of the official Point Forecast Matrix and will include the forecast high and low temperatures, 12 hourly probability of precipitation and 12 hourly quantitative precipitation forecast for the next 7 days, the 3 hourly forecast of temperature, dew point temperature, relative humidity, wind direction, wind speed, clouds, weather and heat index (wind chill from October 1st through March 31st) and maximum heat index (minimum wind chill from October 1st through March

31st) for the first 3 days, and 6 hourly forecast of temperature, dew point, prevailing wind direction, wind characteristic, and average cloud cover for days 4 through 7. A product key is also included at the bottom of the product. Locations to be included in this experimental product are as follows:

- Charleston International Airport, SC
- Savannah International Airport, GA
- Charleston Waterfront, SC
- Beaufort Marine Corp Air Station, SC
- Walterboro, SC
- Metter, GA
- Isle of Palms, SC
- McClellanville, SC
- Ravenel, SC
- Kiawah Island, SC
- Hilton Head Island, SC
- Bluffton, SC
- Allendale, SC
- Hampton, SC
- Monks Corner, SC
- St. George, SC
- Edisto Beach, SC
- Ridgeland, SC
- Summerville, SC
- Downtown Savannah, GA
- Tybee Island, GA
- Claxton, GA
- Millen, GA
- Hinesville, GA
- Ludowici, GA
- Pembroke, GA
- Richmond Hill, GA
- Springfield, GA
- Townsend, GA
- Darien, GA
- Skidaway Island, GA
- Halfmoon Landing, GA
- Wilmington Island, GA
- Reidsville, GA
- Statesboro, GA
- Sylvania, GA

Locations may be added to or taken away from this experimental product based on feedback from customers and partners.

b. Availability - The NDFD database will be updated at least twice a day and more often as conditions warrant. The Experimental Expanded Point Forecast Matrix will also be updated at least twice a day and more often when needed. It is possible that this experimental

product may not be updated when the Charleston office is being backed up.

c. Additional Information –

1) National Weather Service Instruction (NWSI) 10-506, Digital Data Products/Services Specification provides detailed information on both experimental and operational elements in NDFD.
2) An example of the Experimental Expanded Point Forecast Matrix and product key follows:

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NZUS52 KCHS 031951
WRKCHS

WEB BASED POINT FORECAST MATRICES
NATIONAL WEATHER SERVICE CHARLESTON SC
351 PM EDT TUE APR 3 2007

SCZ050-040900-
CHARLESTON INTERNATIONAL AIRPORT-CHARLESTON SC
32.91N  80.03W
351 PM EDT TUE APR 3 2007

DATE                        WED 04/04/07            THU 04/05/07            FRI
UTC 3HRLY     19 22 01 04 07 10 13 16 19 22 01 04 07 10 13 16 19 22 01 04 07 10
EDT 3HRLY     15 18 21 00 03 06 09 12 15 18 21 00 03 06 09 12 15 18 21 00 03 06

MIN/MAX                     65          84          50          72          41
TEMP             81 73 70 67 65 70 81 84 79 65 59 54 51 56 68 72 68 55 49 45 42
DEWPT            65 65 64 64 64 64 64 63 59 54 50 46 44 41 35 31 31 34 35 36 36
RH               58 76 81 90 97 81 56 49 50 68 72 74 77 57 29 22 25 45 58 70 79
WIND DIR          S  S SW SW  W  W  W  W  W  W NW NW NW NW NW NW NW NW NW NW  N
WIND SPD         10 10  8  5  4  5 11 14 12 11 10 10 11 11 13 13 11 10  9  9  8
CLOUDS           B1 B1 B1 B1 B2 B2 B2 B2 SC SC FW FW FW FW FW FW FW FW FW FW SC
POP 12HR                    20          30          20           0           0
QPF 12HR                     0           0           0           0           0
SNOW 12HR                00-00       00-00       00-00
RAIN SHWRS        S  S  S  S  S  S  C  C  S
TSTMS             S  S  S  S  S  S  C  C  S
HEAT INDEX       83                83 85
MAX HEAT         83                83    85


DATE           04/06/07  SAT 04/07/07  SUN 04/08/07  MON 04/09/07  TUE 04/10/07
UTC 6HRLY     16 22 04   10 16 22 04   10 16 22 04   10 16 22 04   10 16 22
EDT 6HRLY     12 18 00   06 12 18 00   06 12 18 00   06 12 18 00   06 12 18

MAX/MIN          66      38    62      32    61      32    67      44    72
TEMP          62 62 45   39 58 58 40   33 56 57 39   33 61 64 50   44 67 68
DEWPT         32 34 34   34 30 29 30   31 28 30 31   31 33 36 39   39 40 41
PWIND DIR        N       W    NW       W    NW      NW     N       W    SW
WIND CHAR        GN      LT    GN      LT    GN      LT    LT      LT    LT
AVG CLOUDS    SC SC SC   SC SC SC SC   SC SC SC SC   FW FW FW FW   FW FW FW
POP 12HR          5       5     5      10    10      10    10      10     5

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PRODUCT KEY...

--- CLOUD COVER ---
CODE   PERCENTAGE            SKY COVER DAY/NIGHT
 CL    0 TO <=5 PERCENT      SUNNY/CLEAR
 FW    >5 TO <=25 PERCENT    SUNNY/MOSTLY CLEAR
 SC    >25 TO <=50 PERCENT   PARTLY CLOUDY
 B1    >50 TO <=69 PERCENT   MOSTLY CLOUDY
 B2    >69 TO <=87 PERCENT   MOSTLY CLOUDY
 OV    >87 TO 100 PERCENT    CLOUDY
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--- OBSTRUCTIONS TO VISIBILITY ---

CODE	TYPE
F	FOG
PF	PATCHY FOG
F+	DENSE FOG
PF+	PATCHY DENSE FOG
H	HAZE
BS	BLOWING SNOW
K	SMOKE
BD	BLOWING DUST
AF	VOLCANIC ASHFALL

--- WEATHER COVERAGE ---

CODE	QUALIFYING TERM
S	SLIGHT
C	CHANCE
L	LIKELY
O	OCCASIONAL
D	DEFINITE

--- EXTENDED WIND FORECAST CHARACTER ---

CODE	WIND CHARACTER	12-HR MAX SUSTAINED WIND SPEED
LT	LIGHT	< 8 MPH
GN	GENTLE	8-14 MPH
BZ	BREEZY	15-22 MPH
WY	WINDY	23-30 MPH
VW	VERY WINDY	31-39 MPH
SD	STRONG/DAMAGING	>=40 MPH

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