4dwx Range Web Pages
2006 Forecasters Conference
Portals – the next generation

• Configurable
  – Add portlets to page layout
  – Edit properties of each portlet

• Customizable
  – Public and private pages
  – Each user can have individualized account
Portal Example - Public

**Army Test-Range Portal**

**Range Forecast**

From: kimberly.putykevich@us.army.mil
Date: Wed Jul 19 18:21:38 GMT 2006

Forecast Prepared by MDTC Meteorology Division. (Kimberly Putkevich)

**WEATHER SYNOPSIS FOR: WEDNESDAY 19 JULY 2006**

Moisture in the region is producing partly cloudy skies, rain showers and thunderstorms for today. Drier air will return as a ridge sets up northwesterly flow over the area for the weekend.

********** WEATHER FORECAST FOR: WEDNESDAY 19 JULY 2006 **********

**HIGH TEMPERATURE FOR TODAY : 99 F**

Partly cloudy with scattered showers and thunderstorms during the afternoon into the evening. Southerly winds at 10 to 15 ...

**Weather Warnings**

**MAP**

**TIMELINE**

**TEXT**

Display SAMS locations on map

No weather warning is valid at this time
Portal Example - User

Welcome, Arnaud
My Account, Sign Out
Context and Layout, Look and Feel

Army Test-Range Portal

Current Obs

- Site: dp_g51
- Date and Time (GMT): 2006-07-21 12:15:00
- Pressure: 0.027.3 kPa
- Temperature: 32.9°C
- Dew Point: 19.2°C
- Relative Humidity: 30.39%
- Wind Speed: 1.6 m/s
- Wind Direction S.D: 9
- Wet Bulb Globe Temp: 25.0°C

Calendar

Day - Week - Month - Year - Events - Tasks

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Friday, July 21, 2006

There are no events on this day.

Almanac

- Date: 2006-07-21
- Sunrise/Sunset: 06:20 / 20:56 M
- Moonrise/Moonset: 02:37 / 18:47
- Moon Illumination (%): 12%
- Civil Twilight: Dawn/Dusk: 05:49 / 21:17

Range Forecast

From kimberly.mutkevich@us.army.mil
Date: Wed Jul 19 18:21:38 GMT 2006

Forecast Prepared by WDTC Meteorology Division, {kimberly.mutkevich}

Weathersympson for: Wednesday 19 July 2006
Moisture in the region is producing partly cloudy skies, rain showers and thunderstorms for today. Drier air will return as a ridge sets up northwesterly flow over the area for the weekend.

******** Weather Forecast for: Wednesday 19 July 2006 ********

High Temperature for Today: 99°F
Portals – Proposed Tabs

- **Current Tabs – application-centered**
  - Home, Login/Logout
  - Model, Local and National
  - Documentation, Tools and Custom

- **New Tabs – task-centered**
  - Current Conditions
  - Range and Mission Forecast
  - Mission Support and Met Analysis
  - Administrative
Tab – Current Conditions

• Current readings at Met Stations
  – Columns and tables
  – Almanac Data

• Real-time images
  – MRRD or Nowcast Images
  – Satellite and Radar from external websites

• Alerts
  – WBGT
  – Lightning
Tab – Range Forecast

• Current Conditions, and …
  – JViz

• Model Images
  – RT-FDDA (MM5 and WRF)
  – Models from external websites

• Forms
  – Forecast
  – Warnings
Tab – Mission Forecast

• Range Forecast, and …
  – JViz

• DSS Tools
  – SCIPUFF
  – Virtual Soundings, NAPS, Lewis

• Climatology
  – GCAT/MetVault
  – CPCS
Tab – Mission Support

• Current Conditions
• Range Forecast
• Mission Forecast
• Special
Tab – Met Analysis

• Archive
  – Model Data
  – Observations

• MetVault

• Climatologies
Tab – Administrative

- User Accounts
- Monitoring
- Documentation
- Training
Met Stations Portlets

• Select site, time and field
  – Column format – two variables fixed
  – Tabular format – one variable fixed

• Configure fields, sites, times

• Configure units

• Configure time zone
Met Stations – Column

CURRENT OBSERVATIONS

Show for all: variables
Station: SAMGt
at Time: 17:16Z 5/19/2006

- Temperature: 15.9 °C
- Dewpoint: 12.4 °C
- Wind Speed: 34 Kmph
- Wind Direction: NNE

Default "Show for all" selection: variables

Variables to show and preferred units:

- Temperature: °C and no other
- Dewpoint: °C and no other
- Wind Speed: knots and no other
- Wind Direction: cardinal points and no other
Met Stations Portlets

• Derived Fields
  – Wet Bulb Globe Temperature, Wind Chill
  – Accumulated Precip
  – Other (Refractive Index, Wet/Dry Bulb)

• Climatology
  – Averages and extremes for each field
  – Temperature (yesterday hi, overnight low)
  – Precip (Normal/total month/year)
Almanac Portlet

- Sunrise / Sunset
- Moonrise / moonset
  - Illumination (or phases, age in days)
- Civil/Nautical/Astronomical Twilight
- Tides (time/height for high and low)
Almanac Mockup

### UTC
- **Sun (Actual)**: 12:19, 02:56
- **Civil**: 11:48, 03:27
- **Nautical**: 11:09, 04:07
- **Astronomical**: 10:24, 04:51
- **Moon**: 08:37, 01:00

- **Waning Crescent @ 17.6%**

### Temperature (°C)
- **Low**: 10.4, 1988, 2003
- **High**: 39.9, 2003, 2003

### Pressure (mb)
- **Low**: 853.9, 1988, 1990
- **High**: 872.9, 1990, 1990

- **Record**: 1988, 1990
- **Normal**: 864.8, 869.6
Alerts Portlet

- **WBGT**
  - Configure thresholds, colors
  - Link to information sheet

- **Lightning**
  - Map-based

- **Other MAT-like alerts**
Forms

• Forecast Creation Tool
  – Data from database (yesterday hi/lo)
  – Data from almanac (sun/moon rise/set, begin/end twilight)

• Climatology Request Form
Other Portlets

- Model data viewing
- DSS Tools
- Webstart Apps
- Range Calendar Tool
- RoboHelp