Met Alert Tool (MAT)
Introduction

• What is MAT?
  – Met Alert Tool (MAT) monitors and alerts the user to weather conditions exceeding thresholds (for example, lightning within a set distance, or wind speed exceeding a maximum).

• How is MAT started?
  – MAT can be run on the display node.
  – MAT can be run from the 4DWX Web Start page.
The GUI

**Alert Types List** – The list of weather conditions that MAT can alert on.

**Parameter List** – Each alert type has a list of parameters that need to be set.

**Events List** – An event is triggered when the conditions of an active alert are met. This list contains a record of all of the events that have occurred since the current instance of MAT was started.

**Active Alerts List** – An instance of an alert type, with specific values for the parameters.
Weather Alerts

Currently MAT is configured to alert on many types of weather events:

- Wind
- Precipitation
- Lightning
- Temperature

**If there are additional types of alerts that you would like to have added to MAT, please let us know.**
Weather Alert Types

**Wind**
- Observed and Forecast High Wind Speed
- High Wind Gusts
- Wind Direction Shift

**Temperature**
- Observed and Forecast High & Low Temperature
- Wind Chill
- WBGT

**Lightning**
- Lightning Box
- Lightning Circle
- Lightning Distance

**Precipitation**
- 24-Hour Precipitation
- Total Precipitation
Adding an Active Alert

- Select the **High Wind Gusty** alert type from the alert types list.

- Set the parameters:
  - Select the **Site Code** `dp_g_s1` from the site code list.
  - Enter `10` for the **Threshold**.
  - Set the **Alert Severity Level** to **WARNING**.

- Choose **Add active alert** from the **Alerts** menu, or click on the icon on the toolbar.
Removing an Active Alert

- Select the active alert from the active alerts list.
- Choose **Remove active alert** from the **Alerts** menu, or click on the 🗑️ icon on the toolbar.
- Click **Yes** on the confirmation dialog to remove the alert.
Email Notifications

• Choose **User Preferences** from the **File** menu, or click the icon on the toolbar.
• Click on the **Email** tab on the user preferences dialog.
• Check **Enable email notifications**.
• Enter a valid email address into the text field, and then click on the **Add** button.
• Click **OK**.
The Event Log File

- To set up an event log file, choose **User Preferences** from the **File** menu, or click the 📋 icon on the toolbar.
- Click on the **Event File** tab.
- Check **Enable event logging**.
- Enter the complete path to the log file into the text field.
- Click **OK**.
Saving Active Alerts

- To save the active alerts to a file, choose **Save Alerts** from the **File** menu, or click on the 📝 icon on the toolbar.

- Enter a filename into the save dialog, and click **Save**.

- All of the alerts in the active alerts list will be saved to the file.
Loading Active Alerts

- To load active alerts from a file, choose **Load Alerts** from the **File** menu, or click on the 📜 icon on the toolbar.
- Find the file in the open dialog, and click **Open**.
- The alerts in the file will be added to the active alerts list.
More information

For more information, consult the online documentation:

http://www.4dwx.org/4dwx/documentation/online/mat/mat.html