Service Change Notice 21-23 Updated
National Weather Service Headquarters Silver Spring MD
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From:     Michelle Mainelli
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Subject:  Updated: Modification of Common Alerting Protocol
          Parameters for Severe Thunderstorm Warnings on or around July 28, 2021

Updated to confirm implementation date on or around July 28, 2021, when the Common Alerting Protocol (CAP) message parameters “hailSize” and “windGust” will change in alignment with the implementation of new Impact-Based Warning (IBW) “thunderstorm damage threat” tags in NWS Severe Thunderstorm Warnings (SVR) and SVR updates, through the Severe Weather Statement (SVS). In addition, three new parameters will become available.

The current windGust tag appears in CAP messages as:

<parameter>
    <valueName>windGust</valueName>
    <value>xx MPH</value>
</parameter>

Where xx is the anticipated wind gust potential of the storm.

This will change to:

<parameter>
    <valueName>maxWindGust</valueName>
    <value>xxx MPH</value>
</parameter>

Where xxx is the anticipated maximum wind gust potential of the storm.
The current hailSize parameter appears as:

```xml
<parameter>
  <valueName>hailSize</valueName>
  <value>[Up to] x.xx</value>
</parameter>
```

Where Up to is optional and x.xx represents the expected hail size in inches.

This will change to:

```xml
<parameter>
  <valueName>maxHailSize</valueName>
  <value>x.xx</value>
</parameter>
```

Where Up to will no longer appear, and x.xx represents the expected maximum hail size in inches of the storm.

A new optional parameter will appear when the thunderstorm damage threat is considerable or destructive:

```xml
<parameter>
  <valueName>thunderstormDamageThreat</valueName>
  <value>threat value</value>
</parameter>
```

Where threat value will either be CONSIDERABLE or DESTRUCTIVE if this parameter is present.

Two new mandatory parameters will also appear:

```xml
<parameter>
  <valueName>hailThreat</valueName>
  <value>hail threat value</value>
</parameter>
```

Where hail threat value is either “RADAR INDICATED” or “OBSERVED”

```xml
<parameter>
  <valueName>windThreat</valueName>
  <value>wind threat value</value>
</parameter>
```

Where wind threat value is either RADAR INDICATED or OBSERVED.
Specifications of the new Impact-Based Warning (IBW) categories for the Severe Thunderstorm Warning (SVR) and other text product formatting changes are contained in the document linked below: https://nws.weather.gov/products/PDD/PDD_Opl_SevereThunderstormWarningCategories_2021.pdf

A separate Service Change Notice will be sent out for those specific changes.

For questions regarding NWS CAP implementation or policy, please contact:

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National Service Change Notices are online at:

https://www.weather.gov/notification/

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