TO:       Subscribers:
- Family of Services
- NOAA Weather Wire Service
- Emergency Managers Weather Information Network
- NOAAPORT
Other NWS partners and NWS employees

FROM:     Cynthia Abelman
Chief, Aviation Services Branch

SUBJECT:  Implementation of Improved Space Weather Watch,
Warning and Alert Products Effective December 19, 2011

Effective Monday, December 19, 2011, at 1000 AM Mountain
Standard Time (MST), 1700 Coordinated Universal Time (UTC), the
NWS Space Weather Prediction Center (SWPC) in Boulder, Colorado,
will disseminate enhanced space weather watch, warning and alert
products. These products will have an additional section of
information appended. This new section will list potential
impacts at earth as well as expected geographical locations of
the impacts for various space weather events.

The following SWPC products will be affected by this change:

<table>
<thead>
<tr>
<th>AWIPS ID</th>
<th>WMO Header</th>
<th>Product Name</th>
<th>NOAA Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWXALTXMF</td>
<td>WOXX01 KWNP</td>
<td>ALERT: X-ray Flux exceeded M5</td>
<td>R2-R5</td>
</tr>
<tr>
<td>SWXSUMXM5</td>
<td>WOXX01 KWNP</td>
<td>SUMMARY: X-ray Event exceeded M5</td>
<td>R2</td>
</tr>
<tr>
<td>SWXSUMX01</td>
<td>WOXX01 KWNP</td>
<td>SUMMARY: X-ray Event exceeded X1</td>
<td>R3</td>
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<tr>
<td>SWXSUMX10</td>
<td>WOXX02 KWNP</td>
<td>SUMMARY: X-ray Event exceeded X10</td>
<td>R4</td>
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<tr>
<td>SWXSUMX20</td>
<td>WOXX02 KWNP</td>
<td>SUMMARY: X-ray Event exceeded X20</td>
<td>R5</td>
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<tr>
<td>SWXWATA20</td>
<td>WOXX02 KWNP</td>
<td>WATCH: Geomagnetic A-index 20</td>
<td>G1</td>
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<td>or greater predicted</td>
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<tr>
<td>SWXWATA30</td>
<td>WOXX02 KWNP</td>
<td>WATCH: Geomagnetic A-index 30</td>
<td>G2</td>
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<tr>
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<td>or greater predicted</td>
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</tr>
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<td>SWXWATA50</td>
<td>WOXX02 KWNP</td>
<td>WATCH: Geomagnetic A-index 50</td>
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<td>WOXX02 KWNP</td>
<td>WATCH: Geomagnetic A-index 100</td>
<td>G4-G5</td>
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<td>SWXWARK04</td>
<td>WOXX13 KWNP</td>
<td>WARNING: Geomagnetic K-index of 4 expected</td>
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<td>SWXWARK05</td>
<td>WOXX11 KWNP</td>
<td>WARNING: Geomagnetic K-index of 5 expected</td>
<td>G1</td>
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<td>SWXWARK06</td>
<td>WOXX12 KWNP</td>
<td>WARNING: Geomagnetic K-index of 6 expected</td>
<td>G2</td>
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<td>or greater predicted</td>
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<td>or greater predicted</td>
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</tr>
</tbody>
</table>
7 or greater expected
SWXALT04 WOXX13 KWNP ALERT: Geomagnetic K-index of 4
SWXALT05 WOXX11 KWNP ALERT: Geomagnetic K-index of 5 G1
SWXALT06 WOXX12 KWNP ALERT: Geomagnetic K-index of 6 G2
SWXALT07 WOXX14 KWNP ALERT: Geomagnetic K-index of 7 G3
SWXALT08 WOXX15 KWNP ALERT: Geomagnetic K-index of 8 G4
SWXALT09 WOXX16 KWNP ALERT: Geomagnetic K-index of 9 G5
SWXWARPX1 WOXX32 KWNP WARNING: Proton 10MeV Integral S1-S5
  Flux above 10pfu expected
SWXALT0X1 WOXX32 KWNP ALERT: Proton Event 10MeV S1
  Integral Flux exceeded 10pfu
SWXALT0X2 WOXX32 KWNP ALERT: Proton Event 10MeV S2
  Integral Flux exceeded 100pfu
SWXALT0X3 WOXX32 KWNP ALERT: Proton Event 10MeV S3
  Integral Flux exceeded 1000pfu
SWXALT0X4 WOXX32 KWNP ALERT: Proton Event 10MeV S4
  Integral Flux exceeded 10000pfu
SWXALT0X5 WOXX32 KWNP ALERT: Proton Event 10MeV S5
  Integral Flux exceeded 100000pfu
SWXWARPC0 WOXX31 KWNP WARNING: Proton 100MeV
  Integral Flux above 1pfu expected
SWXALT0C0 WOXX31 KWNP ALERT: Proton Event 100MeV
  Integral Flux exceeded 1pfu

For more information, please contact:

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National Service Change Notices are online at:

http://www.weather.gov/os/notif.htm

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