

EXPERIMENTAL GRAPHICAL CONVECTIVE OUTLOOK FOR THE ALASKA FIR

Part I – Mission Connection

- a. Product Description – The Alaska Aviation Weather Unit (AAWU) issues area forecasts that include thunderstorm information for each zone. These forecasts contain information as to the timing and some detail in a text format. This new product would provide this information in a graphical format. It will be the convective guidance for 0-12 and 12-24-hour time periods.

Included are areas where convection will occur as isolated, scattered, or numerous. Severe convection potential would be outlined. Other details such as the thunderstorm bases and tops, timing of development, and some graphical reasoning indicated.

- b. Purpose - Information on AAWU product usage indicates graphical products are more in demand. A graphical product of convection would complete our information provided previously mainly in text form. Currently the graphics provided by the AAWU include only a general location of convection.
- c. Audience – Users of this product will be all of the aviation public from general aviation pilots (GA), military aircraft, commercial airlines, cargo aircraft, and international aircraft (airline and cargo). The product would provide guidance on travel, and traffic planning for these as well as the Federal Aviation Administration. The air traffic control center in Anchorage and those dealing with traffic flying into Alaska would also have more information for planning purposes.
- d. Presentation Format – The convective outlook will be available from the AAWU website available by May 15th, 2008. An example is attached.
- e. Feedback Method – The AAWU strives to provide information conducive to needs of our customers. Feedback is encouraged and should be sent to:

Alberta Vieira
Alaska Aviation Weather Unit
NWS NOAA US Dept. of Commerce
6930 Sand Lake Road
Anchorage, AK 99502-1845
(907) 266-5110

Comments may also be given in the Suggestion Box on the webpage at:
<http://aawu.arh.noaa.gov/> or e-mail: alberta.m.vieira@noaa.gov

Part II – Technical Description

- a. Format and Science Basis – The Automated Weather Information Processor System (AWIPS) will be used to draw the graphics, currently using NMAP graphical generation. It will be displayed on the internet in a GIF file.
<http://aawu.arh.noaa.gov/>

The GFS and NAM models' information will be used in the drawing of the graphic.

- b. Availability – The product will be produced at 3 pm LST locally or by 0000 UTC and reissued again at 3 am LST or 1200 UTC. Outlooks will encompass two 12-hour periods, 0000-1200 UTC, and 1200-0000 UTC.
- c. Additional information – The Convective Outlook was designed and produced by the AAWU's Convective Program Team. At this time NMAP graphical program will be used to draw the graphic from information provided by the GFS and NAM models. Information from the Fischer – Proton study will be incorporated into this product. Further study will be conducted to improve on this graphical product.