

Dear Unidata GEMPAK/N-AWIPS users:

At the recent meetings of the Unidata Users Committee and Policy Committee, discussions were held on how the Unidata Program Center (UPC) should proceed with support for N-AWIPS/GEMPAK and evaluation of AWIPS II (see background information below). The UPC is keenly aware that changes envisioned will have a significant impact on our community and that many of you have concerns. Be assured that we are fully committed to supporting university GEMPAK users for as long as feasible, even as we work with our users in providing a smooth and orderly migration to other long term solutions. The UPC is most interested in your thoughts on this matter and invites community input. Please send your comments, concerns, or suggestions to [nawipsmigration@unidata.ucar.edu](mailto:nawipsmigration@unidata.ucar.edu). To facilitate discussion on this topic, the UPC has also set up an online forum at <http://www.unidata.ucar.edu/forums/forum.jspa?forumID=21>.

After extensive discussion and careful consideration, the following resolutions were developed by the two committees:

*User Committee:*

The Users Committee strongly endorses Unidata's position on future support of GEMPAK and the transition to AWIPS-II:

- a.) Unidata will stand behind the latest release of GEMPAK at least until the point when alternative packages with the same functionality are available to the community.
- b.) Unidata will continue to monitor and stay involved with the AWIPS-II efforts in NOAA/NWS, in expectation that this package will be made available to the University community when viable.

*Policy Committee:*

The Unidata Policy Committee recommends that the UPC move forward on two fronts.

- 1) maintain support for the current GEMPAK release during the development of AWIPS-II, while continuing a dialogue with NWS/NCEP to ensure a relatively seamless transition to AWIPS-II
- 2) incorporate GEMPAK functionalities into IDV as informed by the user community. The Users Committee should survey the user community to find out what specific functionalities are desirable.

In addition, the Unidata Policy Committee recommends that Unidata use whatever influence it has to ensure that the AWIPS-II software is developed and made available under an open source arrangement that will facilitate Unidata distribution, enhancement and support of AWIPS-II for the Unidata community.

## ***Background Information***

The Unidata Program Center (UPC) makes the National Centers AWIPS package (N-AWIPS, of which GEMPAK is a primary component), currently developed at the National Centers for Environmental Prediction (NCEP), available to the university community. The UPC provides additional features (e.g. GARP, Level II radar support, decoders for special datastreams) in the Unidata release of this software. GEMPAK/N-AWIPS is the most widely used analysis and visualization package that Unidata supports.

As some of you know, the National Weather Service (NWS) is in the process of developing the next generation of its AWIPS software (AWIPS II) to provide a comprehensive package in support of its forecasting and public service operations. This new software will be developed in Java, allowing it to run on more platforms than the current AWIPS software. Many of the underlying technologies in AWIPS II will be based on open source projects and the plan is to make AWIPS II software also open source. Currently, the NWS National Centers and NWS field forecast offices use different tools to support their mission, with the National Centers using N-AWIPS, and NWS forecast offices use AWIPS, which is fundamentally different and not compatible with N-AWIPS. The new AWIPS II architecture will allow the NWS to reduce development time, expand data access and provide better integration and collaboration between the NWS field offices, river forecast centers and National Centers. Raytheon has been selected as the primary contractor for the AWIPS II development.

NCEP has announced plans to migrate the current N-AWIPS functionality into the AWIPS II environment. While NCEP will work closely with Raytheon contractors, NCEP is charged with migrating N-AWIPS functionality into the AWIPS-II architecture and completing the deployment of this system by 2011. The following presentations provide an overview of the rationale and plan for this work:

N-AWIPS Evolution:

[http://www.unidata.ucar.edu/Presentations/AWIPS/AE\\_Overview\\_NCEP\\_v2-1.pdf](http://www.unidata.ucar.edu/Presentations/AWIPS/AE_Overview_NCEP_v2-1.pdf)

Integrating N-AWIPS into the new NWS Service Oriented Architecture:

<http://www.unidata.ucar.edu/Presentations/AWIPS/AMS%202008%20Briefing%206A-3%20final.pdf>

The current NCEP plan calls for a moratorium on the development of the existing N-AWIPS software beginning this fall, with the last NCEP release of N-AWIPS in August 2008. After that, only emergency maintenance (bug fixes, table/map updates as necessary) will occur. The UPC will incorporate our local changes to that release and make it available as we have with past releases.

Unidata has relied heavily on and leveraged the efforts of several developers at NCEP to advance GEMPAK, along with local enhancements by UPC to meet the needs of its users. NCEP developers address data stream changes, add new programs and features to

the N-AWIPS GUI programs, and provide bug fixes to the core library. As computer technology (new versions of OS and supporting libraries) and datastreams change, the moratorium on N-AWIPS development at NCEP will make it increasingly difficult for the UPC to maintain the GEMPAK/N-AWIPS package in the long run.

There is strong interest within the NWS and NCEP to maintain a close working relationship with Unidata during and after the AWIPS II migration. The UPC is actively involved in discussions and is working closely with NCEP and Raytheon to ensure that the needs of the Unidata university community are incorporated into the AWIPS II migration strategy. UPC staff are participating in the monthly N-AWIPS Migration Teleconferences and have been invited to attend the AWIPS II architecture training sessions. The UPC has also been provided access to the pre-releases of the AWIPS II software through a non-disclosure agreement and is actively evaluating the software.

Unidata is aware of the benefits to the university/research community of keeping pace with the highly leveraged NWS display software. Therefore, we are carefully monitoring the development of the AWIPS II software and evaluating it for use by the Unidata community. A final decision on the deployment of and support for AWIPS II software in universities depends on the anticipated open-source licensing of the AWIPS II software to our community and on technical/resource considerations.

Meanwhile, the UPC is developing a plan to provide continued support for GEMPAK/N-AWIPS to the university community. We are moving ahead with a search to fill the currently vacant GEMPAK developer/support position. We continue to prioritize IDV development in order to migrate some of the GEMPAK functionalities into that application. A brief summary of the strengths and weaknesses of the three visualization/analysis packages in question is available at: <http://www.unidata.ucar.edu/committees/polcom/2008spring/packagescomps.html>

Again, the UPC is most interested in your input on this matter. Please send your comments, concerns, or suggestions to [nawipsmigration@unidata.ucar.edu](mailto:nawipsmigration@unidata.ucar.edu), or directly contact any of the individuals listed below. Also, please share this message with other interested users in your institution that might not be subscribed to the gembud mailing list.

Sincerely,

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