

AFPS Quarterly Report

FY93 Q1: October - December 1992

1. Introduction

The AWIPS Forecast Preparation System (AFPS) is being developed by the Enhanced Forecaster Tools (EFT) Branch of the Forecast Systems Laboratory (FSL) Modernization Division and some of the staff of the Techniques Development Laboratory (TDL).

As in previous reports, only FSL work is reported herein. Information on TDL's work is included in the TDL Quarterly Report. Except as noted, the use of "we" below refers to FSL staff.

2. Accomplishments

The highlight of the quarter's work was the completion of the high-level design of our Level 0 prototype. In addition, we

- Began low-level design and implementation of the Level 0 prototype using C++. The Level 0 prototype will include a prototype user interface and limited graphical editing tools. The more important aspects of the development are not visible to a user: evaluating the system architecture and becoming fluent in our development environment.
- Investigated XGL graphics and the OI user interface library.
- Prepared a demonstration gridded-data editor, including contour editing, area changes, copy/move, and other techniques. It will be presented at the 9th IIPS Conference in Anaheim.
- Prepared an XGL graphics demonstration program.
- Worked on revising the AFPS development plan.
- Developed detailed requirements for the graphical forecast editor tools. These will be the basis of our Level 1 prototype.
- Defined a list of products supported by AFPS, the parameters that comprise the products, and the weather elements required to create those products. This working document is the AFPS Data Requirements and Concepts and is available upon request.
- Installed a Sun Microsystems SparcStation II Workstation at TDL for use with AFPS.

3. Presentations/Visitors/Travel

- We presented a briefing on AFPS at an OSD Program Review in Silver Spring on 6 October.

- Carven Scott (NWS ARH), Kraig Gilkey (WSFO FAI), and Carl Dierking (WSFO JNU) visited in October. They presented the graphics/image work they have done for ARONET (Alaska Regional Office Network), and we discussed graphics concepts and AFPS issues.
- Bob Saffle of ADDL visited. We discussed AFPS/AWIPS issues.
- We entertained two sets of APO visitors, giving them an overview of our work.
- Mark Mathewson visited Alaska Region Headquarters and WSFO ANC for two days in November. He briefed staff there on AFPS plans, discussed unique-to-Alaska forecast issues and the marine program, and got hands-on demonstrations of ARONET.

4. Plans for the next quarter

- A final version of the AFPS development plan will be completed and distributed to members of the AFPS Forecaster Working Group (AFWG), the ARTT Working Group on Deferred Capabilities (AWDC), NWS management, and other interested parties. This is a revision of last year's (4/92) draft plan.
- The AFWG, comprising representatives of each NWS Region, NWS management, and AFPS developers, will meet for the first time in late February, in Boulder. The AFWG is intended to provide operations-based hydrometeorological expertise to the AFPS developers.
- The pre-prototype demonstration system will be exhibited at the 9th IIPS conference in Anaheim in January, and at the NWS Managers' meeting in Boulder in March.
- We will complete the Level 0 prototype and begin design of a Level 1 prototype. The Level 1 system will include a full suite of graphical forecast editors, and is scheduled to be completed in late 1993.
- Database contents and initialization techniques will be coordinated with TDL.