Mid-year Report for Year 2 of Proposal Entitled Web-ATCF, User Requirements, and Intensity Consensus Buck Sampson, PI December 9, 2008

The following is a list of accomplishments broken into the three sub-tasks. Also included is an estimate (in percent) of the work completed on each of the sub-tasks.

- Implement a web version of ATCF (80% complete). The web-ATCF has been demonstrated to and evaluated by NHC. There are some remaining issues, but none of which would affect the performance of the implementation planned for NHC. This implementation is intended as a display tool for the frontline coastal Weather Service offices, NWS regions and NWS headquarters. The implementation is expected to be completed early next year, with upgrades as needed through the season. The latest work has been on making the ATCF available through a web page.
- 2) Address NHC requirements (70% complete). Approximately 64 requirements from the FY 2007 and FY 2008 ATCF Development Requirements List were addressed, many of them were specific NHC requirements. The FY 2009 Development Meeting was held at JTWC and CPHC, and approximately 50 new requirements were levied. NRL will continue to work through the list.
- 3) Evaluate and improve intensity consensus (90% complete). Two new intensity consensus aids (ICON and IVCN) were developed for the 2008 season in collaboration with NHC staff. ICON is an average of four intensity aid forecasts (DSHP, LGEM, GHMI and HWFI) in which all need to be present for the aid to be generated. IVCN is a set of five intensity aid forecasts (DSHP, LGEM, GHMI, HWFI and GFNI) where only two of the five need be available to generate a forecast. ICON and IVCN have both performed well as indicated in the 2008 season-to-date statistics. Preliminary results for the combined Atlantic-Eastern Pacific 2008 season indicate that ICON and IVCN had lower mean intensity forecast errors than any of the member models. ICON mean forecast errors were a couple percent lower than those of IVCN, and IVCN availability was slightly higher (e.g., IVCN had 13 more forecasts at 72 h than ICON).