

Title: Integration of an Objective, Automated TC Center-fixing Algorithm Based on Multispectral Satellite Imagery into NHC/TAFB Operations

Principal Investigators: Anthony Wimmers, Christopher Velden (UW/CIMSS)

Work plan update, Year 2

Year 1 revisions:

- Complete the validation of ARCHER with comparisons to SAB and TAFB center-fixes (as previously planned).
- Develop new real-time ARCHER forecasting support website (modeled on existing MIMIC/ARCHER website features) for readiness during the 2014 Atlantic hurricane season.
- Develop scripts to include newer satellite inputs: AMSR2, GCOM, and new datastreams for Windsat and ASCAT.
- Reschedule the ARCHER journal article preparation until Year 2, to allow time for setup of ARCHER website.

***Deliverables:** Functioning ARCHER forecasting support website, formatted online realtime position and confidence data for the NHC viewing environment.*

Year 2:

September 1, 2014 – First quarter

- Continue improvements, additions and troubleshooting to the experimental real-time ARCHER forecasting support website.

December 1, 2014 – Second quarter

- If appropriate, revise the ARCHER algorithm to incorporate opportunities for improvement that emerged during the hurricane season. Include feedback on real-time algorithm performance from NHC/JHT partners.
- Begin preparing the ARCHER journal article.

March 1, 2015 – Third quarter

- Present results at the 2015 IHC.
- Submit ARCHER journal article for publication.
- Continue improvements to ARCHER forecasting support website.

June 1, 2015 – Fourth quarter

- Complete final ARCHER journal article revisions.
- Continue improvements to ARCHER forecasting support website.

Deliverables: Optimized ARCHER forecasting support website, formatted online data, presentation at 2015 IHC, ARCHER journal article.