A Collegiate Space Weather Competition

Thomas Zurbuchen, University of Michigan for the Committee

Goals

- Introduce students to space weather forecasting.
- Create visibility and excitement for space weather.
- Determine the performance of present space weather forecasting technologies.

Current Status

- Initial committee assembled
 - Includes Universities, NOAA, NASA, and NSF
 - Led by Thomas Zurbuchen, University of Michigan for definition phase
 - Competition will be run by independent party
- White paper written
 - Preparation Phase
 - Competition Phase
 - Analysis/Reward Phase
 - Currently developing metrics
- Anticipated first run-date: March-April 2009.

Preparation Phase

- Define metrics
 - Ideally: Done by CEDAR, GEM and SHINE
- Provide better explanatory tools for CCMC
 - Vodcasts of key tools: providing modern online lessons on models and their use
 - Blogs about lessons learnt: providing interactive communities of users and their experiences with the models
- Develop web-interfaces for submission and dry-run

Competition Phase

- Include as many university groups as possible/feasible
- Predict key quantities in four areas
 - Sun
 - Heliosphere
 - Magnetosphere
 - Ionosphere/Thermosphere
- Exact predictions to be determined

Award/Analysis Phase

- Winners teams in each area
- Overall winner for combination of all predictions

- Awards considered
 - Monetary
 - Meeting participation
 - Internships at NOAA

Preliminary composition

Thomas Zurbuchen	U of MI
Michael Hesse	CCMC, NASA
Richard Behnke	NSF
Tom Bogdan	NOAA
Eric Christian	NASA
Greg Ginet	AF
Therese Moretto Jorgensen	NSF
Howard Singer	NOAA
David Webb	BU, AF
NOAA Forecaster (TBD)	NOAA

Now is time for inputs

- Voice your interest to Thomas
 Zurbuchen (thomasz@umich.edu) or the
 speaker
- Need University participants who help define and set up the competition.
- Need community-agreed metrics and prediction targets, perhaps coordinated by CEDAR, GEM, and SHINE