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
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<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Thomas Zurbuchen</td>
<td>U of MI</td>
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<td>Michael Hesse</td>
<td>CCMC, NASA</td>
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<td>Richard Behnke</td>
<td>NSF</td>
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<td>Tom Bogdan</td>
<td>NOAA</td>
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<td>Eric Christian</td>
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<td>Greg Ginet</td>
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<td>Therese Moretto Jorgensen</td>
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<td>Howard Singer</td>
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<td>David Webb</td>
<td>BU, AF</td>
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<td>NOAA Forecaster (TBD)</td>
<td>NOAA</td>
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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