

**SESSION C7/M5:**  
**CONNECTIONS TO GEOSPACE**

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HMI/AIA Science Teams Meeting  
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# OVERVIEW

Our interests in this session are to hear about what data SDO can provide to the user community for improved modeling and forecasting of geomagnetic events.

- What data would the user community like to get from SDO?
- What observing programs, data products, cadence, resolution, etc., are needed?
- What models and capabilities are essential to use this data in an effective way?

# SCHEDULE

10:30-10:35: Introduction

10:35-10:45: Janet Kozyra, Magnetosphere/Ionosphere

10:45-10:50: Discussion

10:50-11:00: Pete Riley, Corona/Inner Heliosphere/Solar Wind

11:00-11:05: Discussion

11:05-11:15: Doug Biesecker, SEC Perspective

11:15-11:20: Discussion

11:20-11:30: Markus Aschwanden, Coronal Heating/Emission

11:30-12:00: Discussion

# EXAMPLES

- **Most obvious uses:**
  - HMI: far-side imaging: advance notice of new active regions
  - HMI: magnetic field measurements can drive the models
  - HMI: vector magnetic field measurements can help us to estimate energization of coronal fields
  - AIA: possible precursors to eruption may show up in EUV
  - EVE: Absorption of EUV in the Earth's atmosphere
- **Less obvious uses:**
  - HMI: Models can be run in advance to predict consequences (e.g., assume several possible magnetic orientations of new active regions identified by far-side imaging, and run the model many times)
  - HMI: Magnetic flux changes can help to predict eruptions
  - AIA: In combination with models, EUV emission can be used to constrain coronal heating (this affects the properties of the solar wind)