

## **The Role of VIS-IR / SIM in Climate Science**

*Jerald Harder [jerry.harder@lasp.colorado.edu], Juan Fontenla, Erik Richard, and Peter Pilewskie, Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder.*

The SORCE SIM instrument measures the solar spectral irradiance from 200-2400 nm, a spectral region that accounts for about 96% of the TSI. The spectral information obtained from this instrument allows the study of the top-of-the-atmosphere spectral distribution and the wavelength dependence of solar variability. This knowledge is crucial in interpreting the highly spectrally dependent radiative processes in the troposphere and at the surface. Our presentation will emphasize the findings in the visible and infrared, and briefly discuss the role of these data in radiation and climate research.