Abstract Submitted
for the TSF16 Meeting of
The American Physical Society

The slowly varying corona from DEMs with the EVE data set SAM SCHONFELD, New Mexico State University, STEPHEN WHITE, RACHEL HOCK-MYSLIWIEC, Air Force Research Laboratory, JAMES MCATEER, New Mexico State University — We present a differential emission measure (DEM) analysis of the slowly varying corona during the first half of solar cycle 24. Using the Extreme ultraviolet Variability Experiment (EVE) and the CHIANTI atomic line database we identify strong isolated iron emission lines present in the non-flaring spectrum with peak emissions covering the coronal temperature range of 5.7 <log(T) <6.5. These lines are used to generate daily DEMs from EVE spectra to observe the long term variability of global coronal thermal properties. We discuss the choice of emission lines and the implications of this data set for the relationship between EUV and the $F_{10.7}$ radio flux.

Sam Schonfeld
New Mexico State University

Date submitted: 16 Sep 2016 Electronic form version 1.4