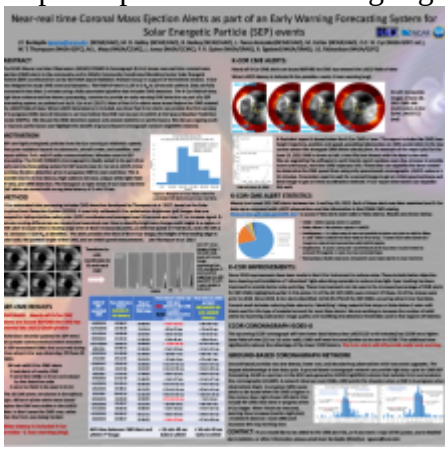
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Poster
The NCAR Mauna Loa Solar Observatory (MLSO) COSMO K-Coronagraph (K-Cor) issues near-real-time coronal mass ejection (CME) alerts to the community and to NASA's Community Coordinated Modeling Center Solar Energetic Particle (SEP) scoreboard for use by the NASA Space Radiation Analysis Group in support of the Artemis mission. K-Cor was designed to study CME onset and dynamics. It's field-of-view is 1.05 to 3 Rsun at 15-second cadence. Data are fully processed in less than 2 minutes using a fully automated pipeline that includes CME detection. The K-Cor field-of-view, high time cadence and low latency processing, combine to provide an early warning CME detection as part of a SEP forecasting system, as pointed out by St. Cyr et al. (2017). Most of the K-Cor alerts were issued before the CME entered the LASCO field-of-view. When LASCO data latency is included, we show that K-Cor alerts can provide the first warning of in-progress CMEs tens of minutes to an hour before the CME can be seen in LASCO at the Space Weather Prediction Center (SWPC). We discuss the CME detection system and present statistics on performance. We discuss ongoing work to improve performance and highlight the benefit of a ground-based coronagraph network (ngGONG mission).

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