Laura
Sandoval
Laboratory for Atmospheric and Space Physics (LASP)
Greg Lucas, LASP
Tori Marbois, LASP
Melissa Mantey, LASP
Evan Brooken, LASP
Steve Monk, LASP
Kristopher Larsen, LASP
Christina O. Lee, University of California, Berkeley
Eric R. Christian, NASA Goddard Space Flight Center
David J. McComas, Princeton University
Arik Posner, NASA Headquarters
Poster

The Interstellar Mapping and Acceleration Probe (IMAP) mission includes the Active Link for Real-Time (I-ALiRT) system to provide continuous real-time data products for use in space weather forecasting. IMAP I-ALiRT will broadcast real-time data 24/7 from the IMAP observatory via NASA's Deep Space Network (DSN) and international ground stations. The Laboratory for Atmospheric and Space Physics (LASP) will play a critical role in the I-ALiRT architecture, receiving telemetered I-ALiRT data from ground stations, implementing a low-latency processing pipeline in real time, and providing the data via the IMAP website and a publicly accessible API. To achieve this, I-ALiRT will leverage the Amazon Web Services (AWS) cloud resources for efficient data ingestion and processing. The resulting data products will be distributed through the IMAP Science Data Center, ensuring accessibility by forecasting centers and the broader scientific community. We will present our Cloud Architecture plans, highlighting how this cutting-edge technology enables the delivery of real-time space weather data products to the public and operational forecasting centers.

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