Space Weather Applications for Operations, Science, and Society Jenny Knuth, CU Boulder, SWx TREC, LASP · Greg Lucas, CU Boulder, SWx TREC, LASP · Eelco Doornbos, KNMI · Thomas Berger, CU Boulder, SWx TREC, SWORD Center of Excellence



Intuitive and inviting space weather applications—and ideally, a Space Weather Applications Program can advance space weather operations, science, and public understanding.

KNMI Space Weather Timeline Viewer https://spaceweather.knmi.nl/viewer



SORCE



to major gains in space weather science and communication.

Inf X-ray flux long X-ray flux short > 10 MeV > 50 MeV > 100 MeV 00:00 12:00 12:00 12:00 00:00 12:00 00:00 00:00 2024-09-18 | 2024-09-19 2024-09-20 | 2024-09 IMF Bt IMF GSM Bz IMF GSM By ENLIL Bt Solar wind speed ENLIL speed 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00

| 2024-09-19

2024-09-20

| 2024-09

2024-09-18

By leveraging modern, user-centered web applications, we can improve the accessibility of our data, the usability of our models, and the impact of our missions. A small investment in web application development can lead

Agile workflow and iteration



SWx TREC Model Staging Platform https://swx-trec.com



Real World Discovery Usability



Increased discovery and access



