Jenny
Knuth
SWx TREC, LASP, University of Colorado, Boulder
Greg Lucas, CU Boulder, SWx TREC, LASP
Eelco Doornbos, KNMI
Thomas Berger, CU Boulder, SWx TREC, SWORD Center of Excellence
Poster
Space weather missions, data, and models are currently under-utilized. We have an abundance of tools and applications that require expert knowledge, training, webinars, local computing resources, and/or technical know-how just to attempt to use them. This poster will promote a frequently overlooked and historically undervalued approach to making the most of our space weather assets: user-centered web applications.

The poster will outline the current state of the art of modern web applications in space weather such as the SWx TREC Model Staging Platform (https://swx-trec.com) and the KNMI Space Weather Timeline Viewer (https://spaceweather.knmi.nl/viewer)

These applications have separable frontends and backends and illustrate concrete steps we can take as a community to increase data access and adoption such as unified APIs, established design systems, and usability testing.

Our investment in missions, data, and models can be enhanced when modern web architecture and user input are part of the process and budget from the beginning instead of an afterthought. A relatively small investment in web applications can lead to large dividends in space weather science and space weather communication.

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



Poster PDF
Knuth-Jenny.pdf
Meeting homepage
Space Weather Workshop 2025
Download to PDF