

National Aeronautics and Space Administration



TECHNOLOGY SOLUTION

Environment

Space Weather Database Of Notifications, Knowledge, Information (DONKI)

Provides daily interpretations of space weather observations, analysis and models.

Currently there is no central database for space weather researchers and forecasters to ascertain observed space weather events. Instead, data is being recorded by scientists in a blog. However, this information is not easily searchable. This innovation is a database where weather events are entered and linkages, relationships, and cause-and-effects between various space weather events are recorded.

BENEFITS

- Web searchable database
- API for customization of delivered information



THE TECHNOLOGY

The Space Weather DONKI builds a catalog of past, present, ongoing, and expected Space Weather events. The catalog contains both forecaster logs and notifications. DONKI version 2.0 of has a comprehensive web-service API access for users to obtain space weather events stored in the database. The database consists of a backend and a web application. The database uses a framework that allows modularization of code and promotes code reuse.

DONKI is the first application to allow space weather scientists to store all space weather events in one centralized data center. The comprehensive database provides search capability to support scientists allowing them to look into linkages, relationships, and cause-and-effects between space weather activities.

APPLICATIONS

The technology has several potential applications:

■ Space Weather research

PUBLICATIONS

Patent No: 10769224

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More Information

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