1 second solar radio data

1 second solar radio data

Solar-Geophysical Data Reports 54 Years of Space Weather Data. Solar ...

The .gov means it"s official. Federal government websites often end in .gov or .mil. Before sharing sensitive information, make sure you"re on a federal government site.

The site is secure. The https:// ensures that you are connecting to the official website and that any information you provide is encrypted and transmitted securely.

Please Note: Most products and services now have a complete historical record, however a few datasets continue to be recovered after the impacts of Hurricane Helene. We apologize for any inconvenience.

The United States Air Force Research Laboratory (AFRL) runs the Solar Electro-Optical Network (SEON), a real-time solar optical and radio observing and analysis network. The SEON comprises five locations operating a Solar Observing Optical Network (SOON) telescope, a Radio Solar Telescope Network (RSTN) telescope, or a combination of both. The network provides timely and accurate solar alerts and analyses to the Space Weather Operations Center (SpaceWOC), 2d Weather Squadron (2 WS), and the NOAA Space Weather Prediction Center (SWPC).

The RSTN telescopes gather standardized solar radio data in a computer assisted automatic mode. The RSTN system produces discrete frequency radio observations using Radio Interference Measuring Sets (RIMS) and wideband spectral radio observations using the Solar Radio Spectrograph (SRS). Operating nominally, the RSTN provides 24 hour, 7 days a week, 365 days a year coverage of the Sun, even during cloudy conditions. There are several observatories that operate RSTN telescopes positioned in the CONUS (Continental U.S.), Eastern and Western Pacific, and Europe.

Some of the RSTN data are similar to the data that can be found in the Solar Radio Datasets, which provide data from other ground-based stations. Data are updated monthly except where noted.

The Radio Interference Measuring Set (RIMS) 1 second data show total power output in SFU (10-22 W*m-2 *Hz-1)at 1 second time intervals for each monitored frequency. This value is the total raw power received by the RIMS. More details on the RSTN 1-sec data format.

The Solar Radio Spectrograph (SRS) differs from RIMS radiometers in instrumentation, theory of operation, and type of activity observed. The SRS detects spectral solar radio frequency emissions within the meter and decameter (tens of meters) region of the radio spectrum. These spectral data are then projected graphically for analysis. Analysts determine and report solar activity based on the spectral signature of the events. CME shock speed analysis occurs on the SRS in real time by RSTN Analysts and is often the first chronographic data

reported.

The IFLUX or "Noon Flux" is measured daily at the central meridian passage of the Sun for each observatory. This ensures a standardized process for the Noon Flux measurement. "IFLUX" and "Noon Flux" are interchangeable and refer to the same measurement. The Noon Flux measurement determines the quiet Sun (i.e., background) thermal radio output received by Earth at the associated frequencies. Like the one second data, the Noon Flux reports total raw power received by the sensors at each observatory during central meridian passage. These values can then be used as calibration references, or to track and monitor daily changes within the solar atmosphere.

SOON (Solar Observing Optical Network) is composed of several USAF (United States Air Force) telescopes for the study of solar activity in support of space weather specifications and forecasts. The data linked here consist of photographs of the solar continuum at 630.315 nm with sunspot information included on the image. Images are in PDF format.

Note:The prototype network was called OSPaN (Optical Solar Patrol Network) and was renamed to SOON or ISOON (Improved SOON).

Contact us for free full report

Web: https://www.kary.com.pl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346