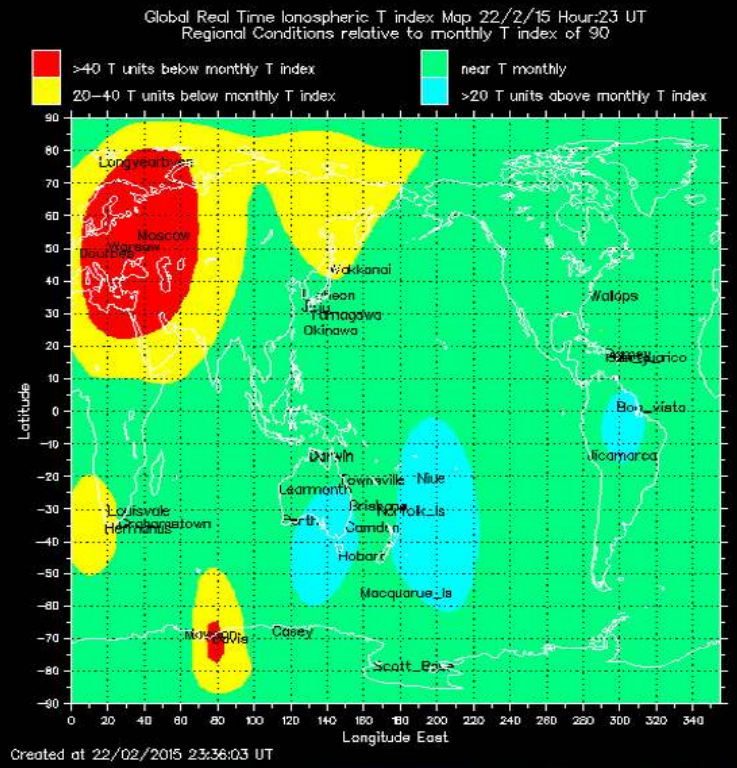
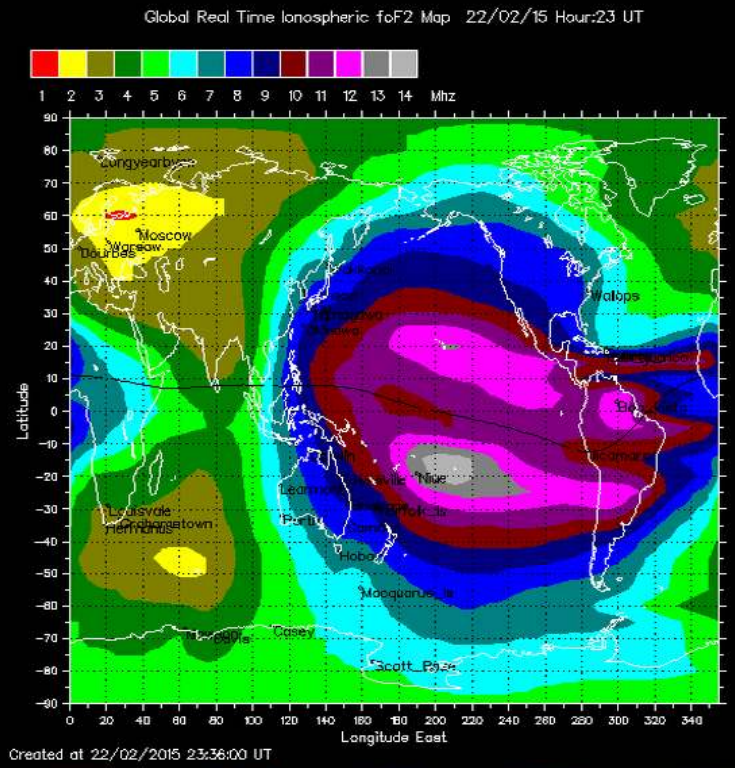
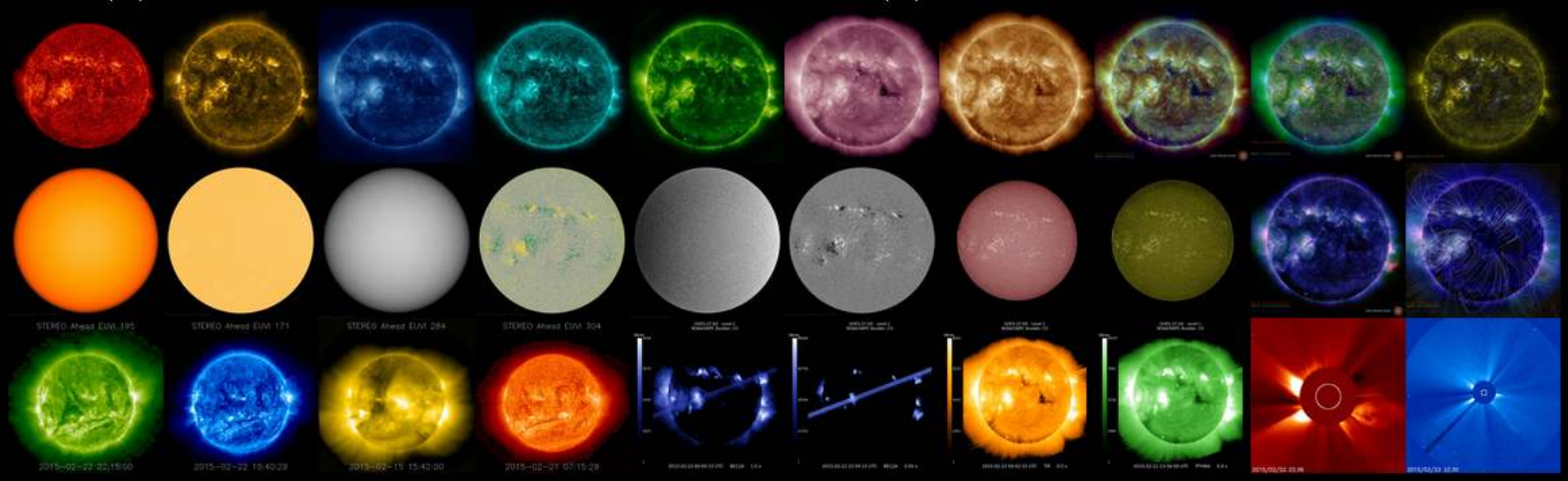
Mon, 23 Feb 2015 00:07:52 GMT Sun Feb 22 2015 17:07:52 GMT-0700 (US Mountain Standard Time)
Mon, 23 Feb 2015 00:07:45 GMT Sun Feb 22 2015 17:07:45 GMT-0700 (US Mountain Standard Time)







SPACE WEATHER PREDICTION CENTER
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Monday, February 23, 2015 00:08:29 UTC

HOME | ABOUT SPACE WEATHER | PRODUCTS AND DATA | DASHBOARDS | MEDIA AND RESOURCES | SUBSCRIBE | ANNUAL MEETING | FEEDBACK

Home > Products and Data > Models > D Region Absorption Predictions (D-RAP)

Search

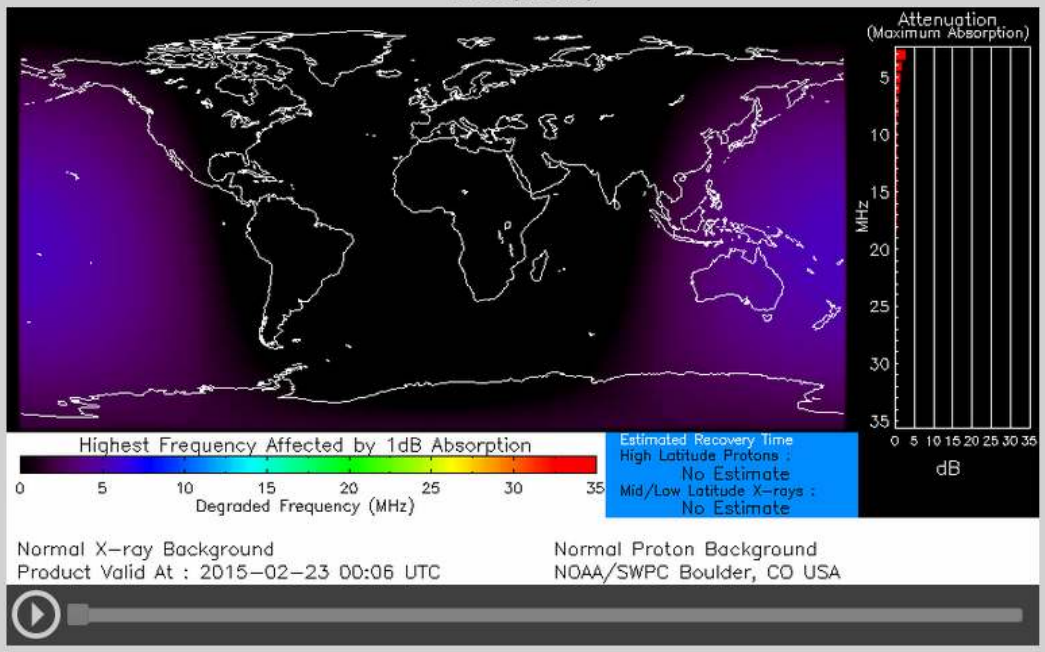
CURRENT SPACE WEATHER CONDITIONS on NOAA Scales

R S G

D REGION ABSORPTION PREDICTIONS (D-RAP)

Global (1 dB ABS) | Polar (10 dB ABS) | 5 MHz | 10 MHz | 15 MHz | 20 MHz | 25 MHz | 30 MHz

GLOBAL (1 DB ABS)



Usage | Impacts | Details | History | Data

The D-Region Absorption Product addresses the operational impact of the solar X-ray flux and SEP events on HF radio communication. Long-range communications using high frequency (HF) radio waves (3 - 30 MHz) depend on reflection of the signals in the ionosphere. Radio waves are typically reflected near the peak of the F2 layer (~300 km altitude), but along the path to the F2 peak and back the radio wave signal suffers attenuation due to absorption by the intervening ionosphere.

The D-Region Absorption Prediction model is used as guidance to understand the HF radio degradation and blackouts this can cause.

Mon, 23 Feb 2015 00:09:33 GMT Sun Feb 22 2015 17:09:33 GMT-0700 (US Mountain Standard Time)
Mon, 23 Feb 2015 00:09:25 GMT Sun Feb 22 2015 17:09:25 GMT-0700 (US Mountain Standard Time)