



# SPACE ENVIRONMENT DISCUSSION

VT: 08/12Z

## Space Weather Events/Impacts Summary

**Solar Activity:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

Flare Probabilities: M: 15% X: 01%

**Charged Particle Environment:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

**Geomagnetic:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

**HF Comm:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

**Satellite Operations/Health:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

**Space Object Tracking/Satellite Drag:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

**High Altitude Flight:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

**Radar Interference/False Returns:** Observed GREEN. Forecast GREEN 08 – 11 Feb.

## Potential Impacts to DoD Operations

**HF Comm** (when YELLOW or RED): temporary degraded or total loss of HF radio communications.

**UHF SATCOM** (when YELLOW or RED): temporary degraded or total loss of UHF radio communications.

**Satellite Operations/Health** (when YELLOW or RED): increased likelihood of spacecraft anomalies; degradation of spacecraft components due to radiation interference to communication satellite circuits.

**Space Object Tracking/Satellite Drag** (when YELLOW or RED): increased likelihood for space object tracking loss; increased drag on low earth orbiting spacecraft.

**High Altitude Flight** (when YELLOW or RED): increase in harmful radiation dosage to personnel in high altitude operations.

**Radar Interference/False Returns:** (when YELLOW or RED): increased interference or false returns to sunward and/or poleward looking radars.

This slide provides a generalized situation awareness of past and future space environment impacts to war-fighters and weapon systems. The severity of the impacts due to the space environment may be more or less than indicated by the color coded assessment in a particular area. The impact variability is dependent on a variety of factors including, but not limited to, system location, geometry, and operating frequency. Please contact the 2 WS Space Weather Forecaster at DSN 272-8087 or 272-4317 (Commercial 402-232-8087 or 402-232-4317) to arrange mission-specific support or to report conditions experienced by your system that may be related to space weather disturbances.