



Avoid Communication Outages

Forecasts and alerts for instantaneous, globally accurate links at any frequency

Determine exactly which communications links are available now – and which will be available over the next critical hours:

- Is a **solar flare** occurring that will affect communications?
- Which HF, VHF, UHF, and SHF communication links can you use during a **geomagnetic storm** and how can you ensure uninterrupted messaging?
- Is interference a result of scintillation or **jamming**?
- Where precisely do you need to **point an antenna** in existing space weather conditions to maintain the strongest Milstar or Iridium communications link?
- How long can you **maintain a given link path** and where do you deploy assets?

Whether links are across land, sea, air, or space, and whether there are disturbed ionosphere conditions or not, it will be possible to have an instantaneous, globally accurate, assessment of the “**green, yellow, red**” state of a given communications link – *at any frequency* – or of the common operational picture for situational awareness. A new decision-making tool for specifying the communications environment is being developed by Space Environment Technologies (SET). In a complex, interoperable frequency and limited bandwidth environment for tactical mission planning, this decision-making tool will maximize signal strength, provide forecast alerts for marginal links (figure 1), indicate optimal nearby link paths, and automatically update new frequencies. You can:

- plan communication links up to 24-hours in advance to avoid potential space weather outages;
- recommend “go or no-go” decisions hours before a critical event;
- identify jamming; and
- verify link paths with green-yellow-red or signal-strength indicators.

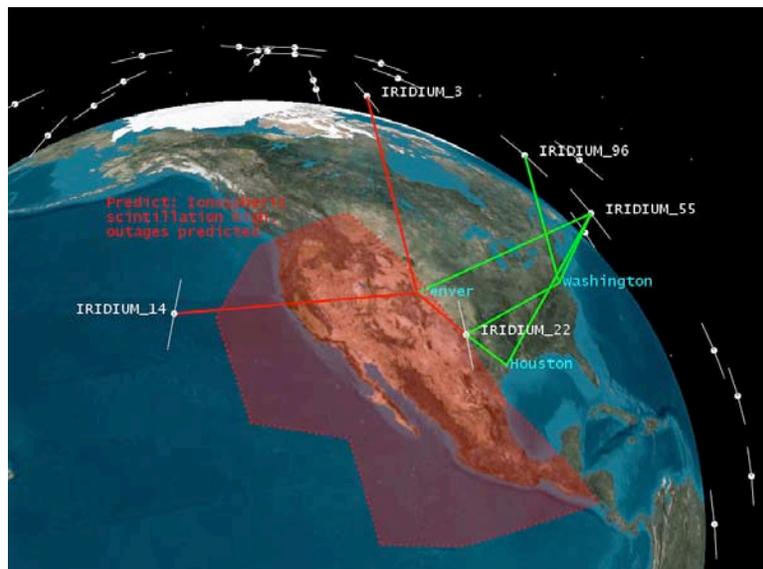


Fig. 1. Example of a 6-hr scintillation forecast (red) over a region; affected (red) Iridium links are shown using Satellite Tool Kit.

For more information, contact: Space Environment Technologies.