

Space weather services: now and in the future

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The NOAA Space Environment Center has provided continuous 24 hours per day, 7 days per week, space weather products and services to the United States and the international community (via the International Space Environment Service) for more than 30 years. Over that time span, an evolutionary process has occurred. In the early days, the products consisted of short text and coded messages, to accommodate the communications technologies of the period. The birth of the Internet made the sharing of graphical imagery and real-time data possible, enabling service providers to communicate more information more quickly to the users. Now, in parallel with the advances in telecommunications, the space weather user community has grown dramatically and is enunciating ever-stronger requirements back to the service providers. The commercial airline community is probably the best example of an industry wanting more from space weather. How are the users going to continue to change over the next 10-20 years, and what services might they need? How will they get this information, and how might they use it? This is the overall thrust of the presentation, offering a look to the future and a challenge to the space weather community.