1. When and why does Space weather forecasting fail?

R. Evans, T. Nieves-Ch., I. Richardson, N. Savani

Space weather forecasting has made tremendous strides in recent years. Nevertheless, there are numerous examples of mismatches between predicted and measured impacts. We propose a session to discuss examples of these failures, and connect them to limitations in observations, modeling, forecasting methods, and our understanding of the physics involved. Invited speakers from the forecasting community, e.g. the Space Weather Prediction Center (part of the National Weather Service , and the Community Coordinated Modeling Center (located at NASA Goddard Space Flight Center will lead the discussion. We encourage contributions from the research community on all aspects of space weather predictions, including flares, energetic particle events, coronal mass ejections, high speed streams, and impacts to spacecraft and planetary environments. One goal of this session is to identify specific events that have challenged forecasters and scientists in order to plan the research directions needed to improve future forecasts. Ultimately, the aim of these discussions will be to identify areas in which forecasting might be improved and the methods that might be employed.