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Poster

Space weather (SWx) describes variations in the space environment between the sun and the Earth. These solar variations can disrupt critical technology including electric power grid, satellite communications and aviation. NOAA's mission to build a weather ready nation includes observing, studying, and advising citizens and industry stakeholders of SWx conditions. MITRE is working with NOAA to perform an economic benefits study of their Next Generation space weather program. An extensive literature review to identify benefit mechanisms and understand how observations inform forecasts and alerts. Applying value of information theory, the observations were linked to benefits via value chains, emphasizing the decisions and actions industries can take, based on NOAA information, to mitigate economic impact. These valuations are incorporated into an event-driven model applying the probability of different magnitude events via Monte Carlo simulations. Results will be included in a Cost Benefit Analysis underpinning NOAA's budget submission.

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