



Contribution ID: 39

Type: **Poster**

## Radio Observations and Their Role in Understanding Solar Energetic Particle Events

We present two case studies on solar energetic particle (SEP) events involving type III storms and type II bursts in metric and decimetric-hectometre (DH) wavelengths. In one case, a type III storm was disrupted by an eruption, while in the other, the storm remained unaffected. Both events featured fast and wide coronal mass ejections (CMEs) and regular type III bursts. Analysing Nancay Radioheliograph (NRH) data, we found that in the high-intensity SEP event, the source locations of the type III storm and type II bursts were the same, indicating storm disruption. In contrast, the weak SEP event displayed spatial separation between the type III storm and type II bursts. These findings support the Gopalswamy hypothesis, providing insights into particle radiation aspects of space weather forecasting.

### Contribution Type

#### Theme

Energetic Phenomena

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