

Discussion Panel 2

ISWI - The Way Forward

ISWI Initiative for Space Weather

- Instrumentation, Data analysis and Modeling
- Education, training and Public outreach
- Attracting Early Career Researchers

Instrumentation, Data Analysis and Modeling

- **Instrumentation:** ISWI can invest in the development of new instruments that can collect more detailed and accurate data on space weather. This could include instruments that measure more parameters, with higher resolution, or operate at higher frequencies.
- **Data analysis:** ISWI can support the development of new data processing and analysis techniques to better understand space weather phenomena. This includes machine learning and Artificial Intelligence algorithms that can identify patterns in large datasets, as well as tools for visualizing and interpreting complex data.
- **Modeling:** ISWI can promote the development of new models for predicting space weather phenomena. This includes both empirical and physics-based models that can simulate and forecast space weather events.

Education, Training and Public Outreach

- **Education and training:** ISWI can offer training and educational resources to students, researchers, and the public, to increase awareness and understanding of space weather. This could include online courses, workshops, hands on sessions and outreach activities.
- **Public outreach:** ISWI can work to increase public awareness of space weather and its impacts on society. This could include social media campaigns, public lectures and events, and collaborations with other organizations to promote space weather awareness.

Attract Early Career Scientists:

- **Provide funding opportunities:** Early career scientists often struggle to secure funding for their research or to attend conferences. By offering funding opportunities, such as travel grants or small research grants, ISWI can help early career scientists to further their research and connect with the broader scientific community.
- **Offer training and mentorship programs:** Early career scientists often lack experience and may benefit from training programs or mentorship opportunities. ISWI can provide these opportunities to support early career scientists and foster their development.
- **Promote networking:** Early career scientists may feel isolated in their research, so promoting networking opportunities and facilitating collaboration with more established researchers could help to build a sense of community and encourage participation.
- **Communicate the impact of the research:** Early career scientists want to know that their work is making a difference. By highlighting the practical applications and impact of their research, ISWI can help to motivate early career scientists and demonstrate the value of their work.
- **Provide opportunities for career advancement:** Early career scientists need opportunities to advance their careers. ISWI can offer opportunities for career advancement, such as leadership positions or access to resources for professional development, to keep early career scientists engaged and motivated in their work.

THANK YOU!