

# Growing the Space Weather Enterprise

Survival of People and Robots

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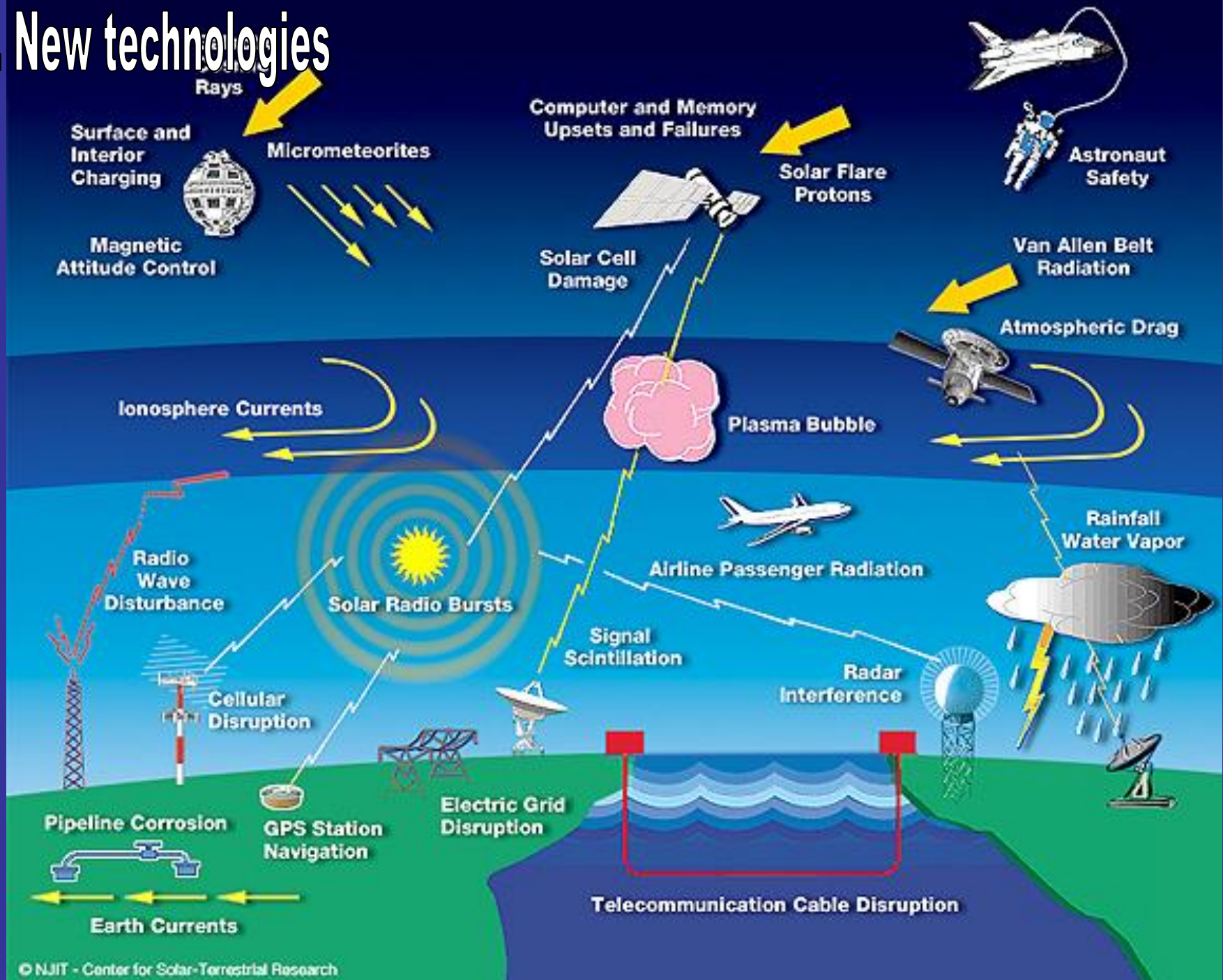
Editor, *Space Weather: The International Journal of Research and Applications*

# Space Weather Enterprise

Survival of people and robots

1. Continued increase in technologies possibly affected
2. National Space Weather Program
3. New Data Sets
4. Modeling
5. Growth in readership: Space Weather journal

# 1. New technologies



## 2. NSWP



- **Soon to be issued: new Strategic Plan**

Should provide directions for growth in commercial, governmental, and academic sectors

- **National Research Council, Space Studies Board: *Severe Space Weather Events—Understanding Societal and Economic Impacts: A Workshop Report*, 2009**
- **New Decadal Survey in Solar and Space Physics 2010**

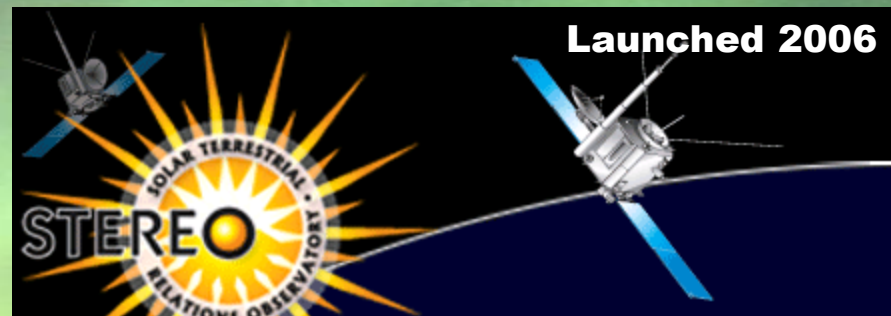


# 3. New Data - Space-based

## Solar Dynamics Observatory



First light: 21 April



Launched 2006

**STEREO**

## Radiation Belt Storm Probes



Launch  
2010 or  
2012

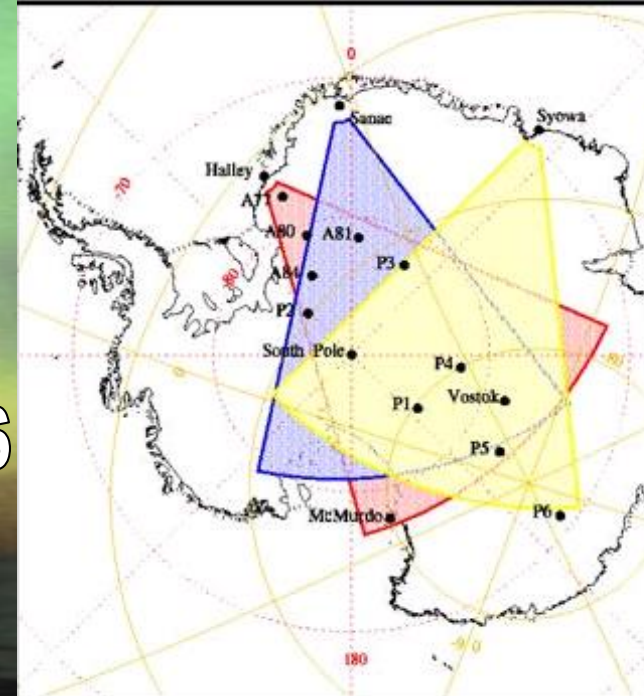
**NSF CubeSats**

# 3. New Data - Ground-based



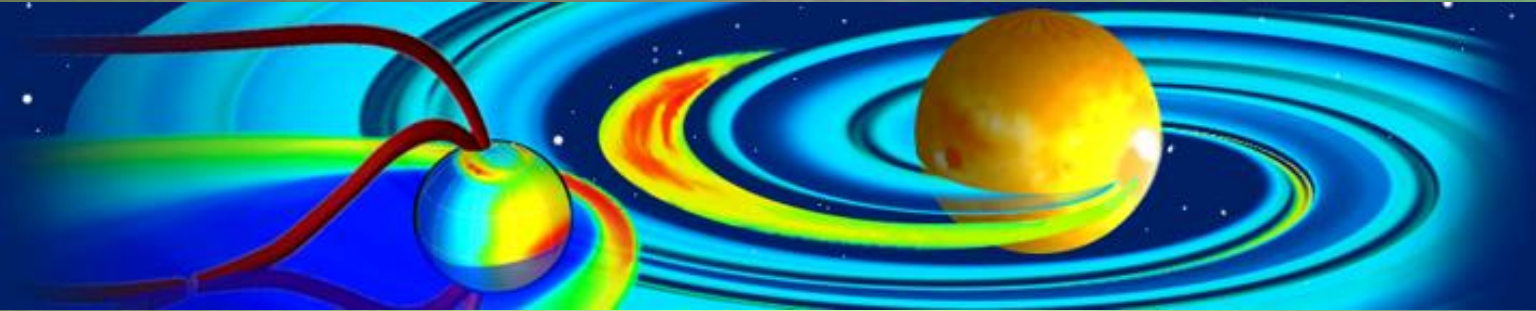
## AMISR Resolute Bay

### Antarctic field sites



### L1 Follow-on?

# 4. Modeling



CCMC

**Space Weather**  
QUARTERLY  
Volume 6, Issue 4, 2009 www.egu.org/journals/spaceweather  
THE INTERNATIONAL JOURNAL OF RESEARCH AND APPLICATIONS

**From Models to Operations**  
**THE BASIC BUILDING BLOCKS**

**News:** The cause of the solar cycle's slow start  
**Feature:** A pilot's view on monitoring radiation  
**Technical:** When bad space weather is good

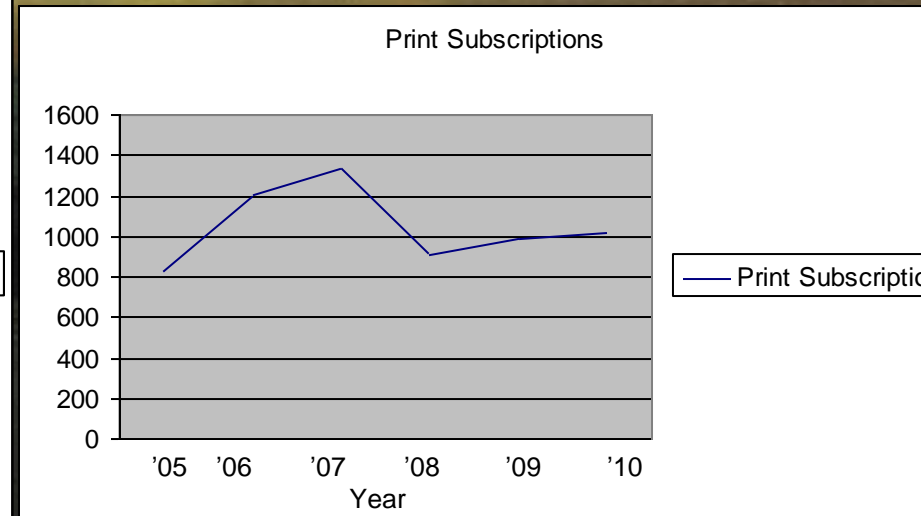
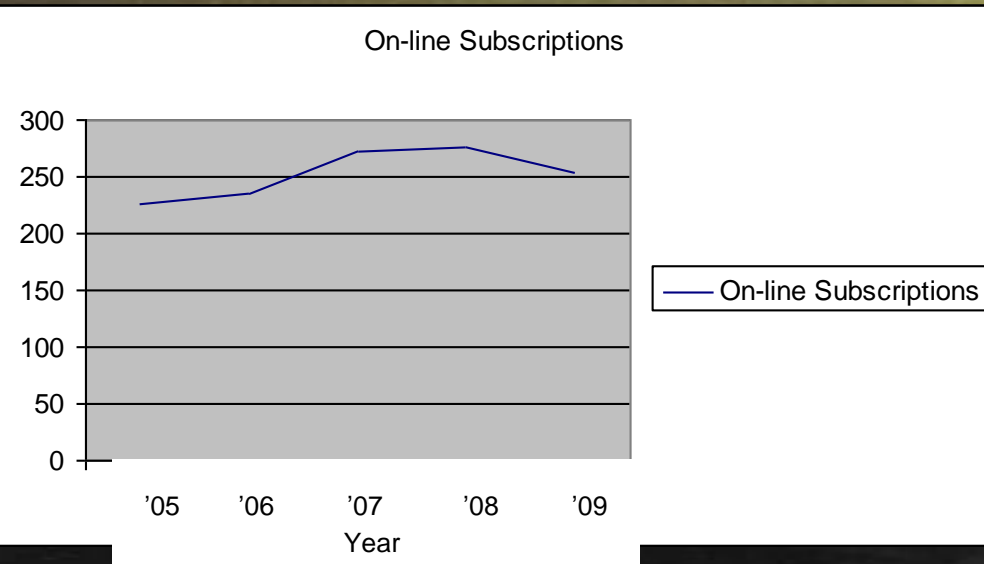
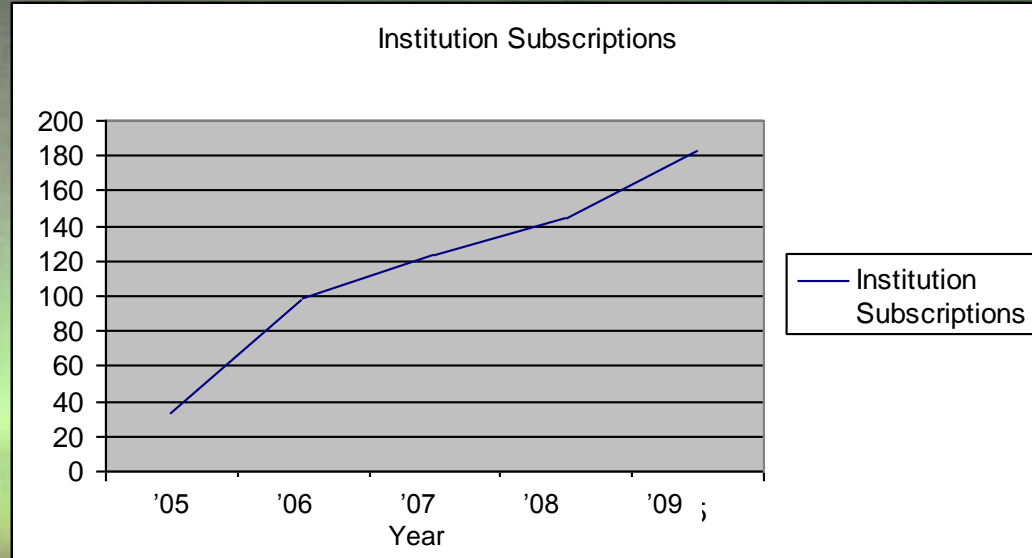
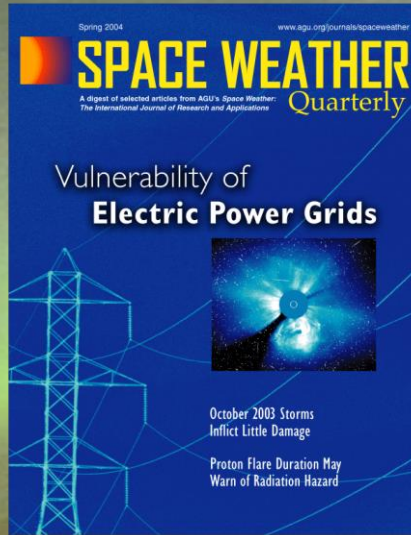
**SOLAR MODELS**

**MAGNETOSPHERE MODELS**

**IONOSPHERE / THERMOSPHERE MODELS**

**HELIOSPHERE MODELS**

# 5. Space Weather journal





# Summary

Continued growth in space weather significance

Growth opportunities for private, academic and government sectors

**Thank you!**