



# **Plans and Ideas in Sweden for Involvement in ILWS**

**Working Group Meeting in Nice  
2003 April 14-15**

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Swedish National Space Board**



# Recent Developments

## Aspera-4 on Venus Express

**Hardware similar to Aspera-3 (Mars Express)**

**Measures: electrons, ions, energetic neutral atoms**

**PI: S Barabash (Swedish Institute of Space Physics)**

## Swedish Solar Telescope on La Palma

**Aperture: 1 meter**

**Resolution: 90 km**

**Operated by: Royal Swedish Academy of Sciences**



# **Recent Developments – cont.**

## **Space Weather**

**The Swedish Institute of Space Physics in Lund has become a Regional Warning Center of the International Space Environment Service (leader: H Lundstedt)**

**The Institute is also contracted by ESA for the GIC Pilot Project “Real-time forecast service for geomagnetically induced currents”**



# **Proposed Future Projects**

## **Call for Ideas**

**Issued in the Autumn of 2001**

**35 responses were received**

## **Scientific priority**

**STEAM, a microwave satellite for atmospheric research**



# **Near-term plan: TechnoSat**

**Phase A funded, to start in Spring of 2003**

**Intended for launch within 2-3 years**

**Many different technology tests for TechnoSat have been proposed. Of special relevance to ILWS:**

- **Ecaps wire boom systems (Alfvén Lab.) ?**
- **Plasma instrument package ?**



# **Other proposals relevant to ILWS**

## **Auroral Quartet**

**4 satellites, well-studied, requires international cooperation**

## **Atmosphere-Ionosphere Mission (A-IM)**

**New project, very low orbit?, ambitious**

## **SAGA**

**Plasma instruments for planetary research, in particular Venus**

## **Instruments for other space missions**

**Contributions to Bepi Colombo (ESA), Solar Orbiter (ESA), McPearl (Canada), MMS (NASA)**



# **Sounding Rocket Programme**

## **Swedish Sounding Rocket Programme for Aeronomy**

**A programme of sounding rockets for atmospheric research is currently under consideration. A decision on funding is expected in the Spring of 2003.**