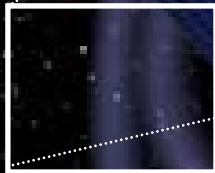
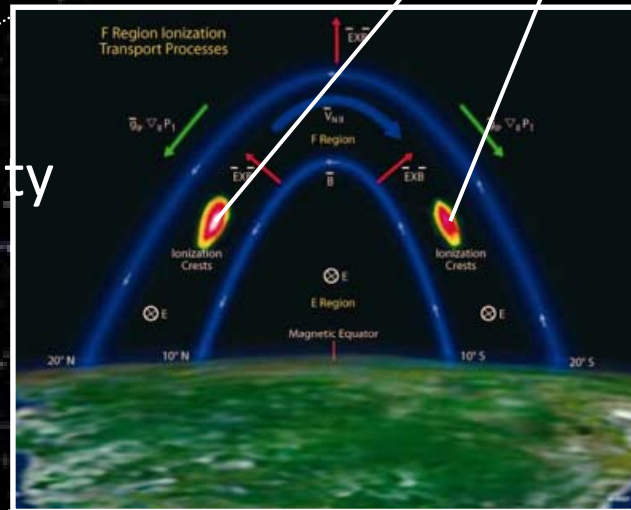
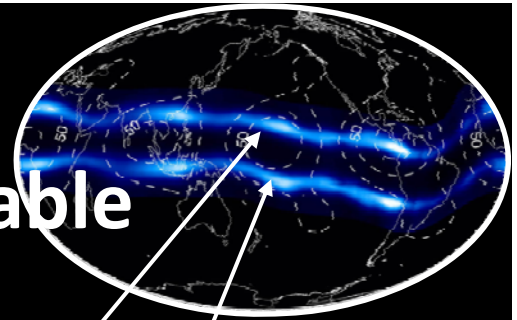


# CAWSES-II Task Group 4: What is the geospace response to variable inputs from the lower atmosphere? 2009–2013

Kazuo Shiokawa, STEL, Nagoya University  
Jens Oberheide, Clemson University  
and CAWSES-II Task Group 4





# TG4 Newsletter Vol. 6, October 2011

## Inside this Issue

Article 1: Results from the C/NOFS Satellite Mission.....	1
Article 2: MAARSY—A new powerful MST radar in the Arctic.....	3
Highlights on Young Scientists: Low-latitude Radio Beacon Receiver Network for Ionosphere and Space Weather.....	5
Short News 1: Swarm Science and Validation Opportunity.....	6
Short News 2: ISEA-13: Second Announcement and call for papers.....	6
Short News 3: News from the SCOSTEP Bureau.....	6
Short News 4: TG4 business meeting at IUGG in Melbourne.....	7
List of upcoming meetings.....	7

# TG4 Newsletter

(editor: Michi Nishioka)

- Articles
- Short news
- Young scientists
- Meeting announcements
- Campaign reports

## Article 1

### Results from the C/NOFS Satellite Mission

Odile de La Beaujardière<sup>1</sup> and C/NOFS Team

<sup>1</sup> Air Force Research Laboratory, Space vehicle Directorate,  
Kirtland AFB, NM, USA



Odile de La Beaujardière

The Communication/Navigation Outage Forecast System (C/NOFS) satellite was launched in April 2008 in a 13° inclination orbit between 400- and 850-km altitude. C/NOFS is an Air Force mission with participation from NASA and the Navy to study the equatorial ionosphere with the goal of improving forecasts of ionospheric scintillation and electron density profiles. A network of ground instruments that monitor the presence of scintillation is also part of the C/NOFS Mission.

Six instruments on the satellite measure electric fields, plasma characteristics, neutral winds, and the strength of scintillation-producing irregularities. Models and algorithms assimilate the satellite observations, and combine them with ground-based and other satellite data to forecast the global ion density as well as the regions where strong ionospheric irregularities are likely to produce scintillation. C/NOFS was launched during the deepest solar minimum in almost 100 years. Thus, the most interesting findings in the mission correspond

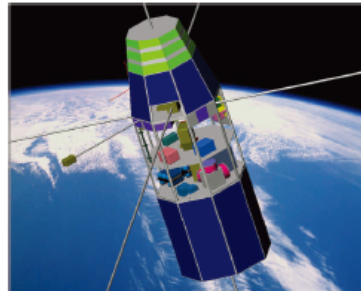


Figure 1. C/NOFS satellite with 6 state-of-the-art instruments:

- \*VEFI: Electric & Magnetic Field
- \*CINDI: Ion Velocity Meter (IVM)  
+ Neutral Wind Meter (NWM)
- \*PLP: Plasma Langmuir Probe
- \*CORRIS: GPS receiver
- \*CERTO: Beacon Transmitter

## TG4-related Campaign Observations

### Stratospheric Warming Campaign

Larisa Goncharenko, January 2010

### Longitudinal network observation of mesosphere-ionosphere coupling (LONET)

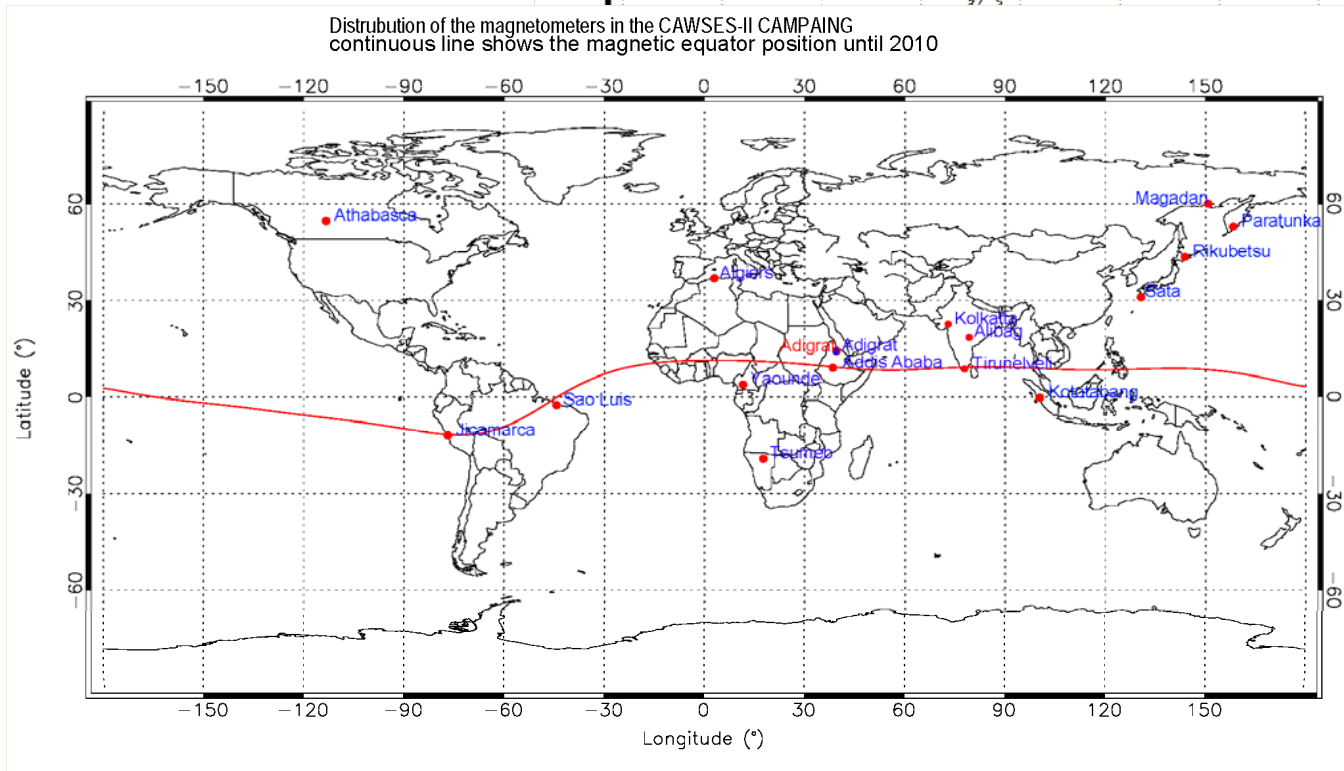
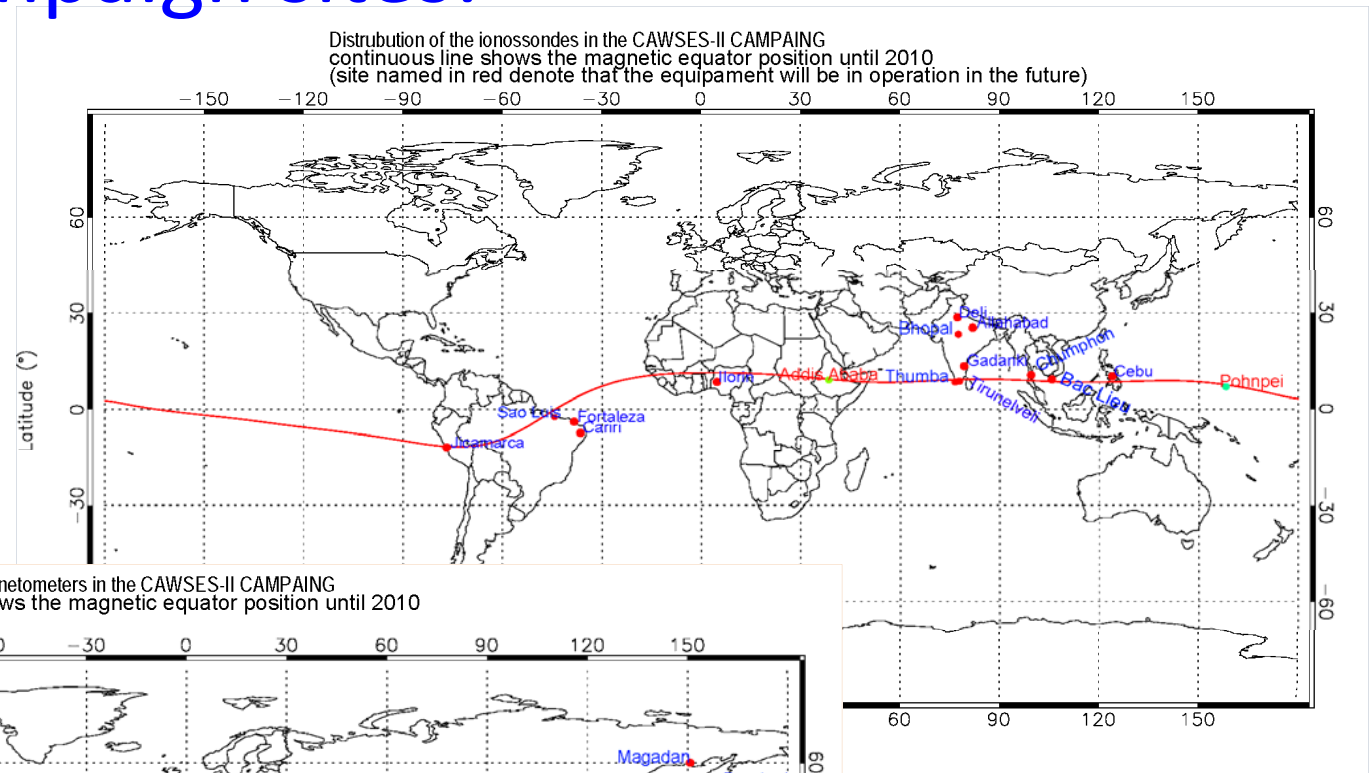
Project 2: Hisao Takahashi and Jon Makela, September –  
November 2010, August–November 2012

### Global Observing Campaigns on Tides

William Ward, continuation since CAWSES era

# LONET Campaign sites:

## Ionosondes



## Magnetometers:

# 日本学術会議 SCOSTEP小委員会

第22期の立ち上げ:世話人:中村卓司(国際SCOSTEP Bureauメンバー)

委員:柴田一成、津田敏隆、大村善治、荻野 龍樹、草野完也、坂尾太郎、塩川和夫、篠原育、高橋幸弘、寺田直樹、中村卓司、長妻努、廣岡俊彦、星野真弘、山本衛

CAWSES-IIの新co-leader: 津田敏隆(京大)、Joe Davila (NASA)

## CAWSES-II/ISWI国際セッション

### 2012年5月 JpGU大会幕張

## CAWSES-II 国際シンポジウム

### 2009-2013年のCAWSES-IIの総まとめ

### 2013年11月18日(月)-22日(土)

### 名古屋大学 豊田講堂・シンポジオンホール