




MTSAT-1R IR 2005 08 11 17:00 IST

# Welcome to ACDR2010 Public Forum

## Application of Space Technology to DRR

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**JAXA**

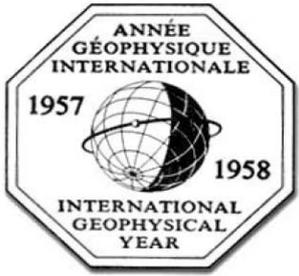
**JMA**

**JWI**  
Japan Weather Association



## International Geophysical Year (IGY)

July 1957-December 1958


**Sputnik 1**  
Launched by Soviet Union  
on October 1957

**Explorer 1**  
Launched by the U.S.A  
on January 1958



## Is Space Technology extremely special?

- **Broadcasting Satellites (BS)**
  - **TV Broadcasting**
  - **Digital Audio Broadcasting**
- Global Navigation Satellites (GNS)
- Communications Satellites (COMSAT)
- Earth-observation Satellites (EOS)

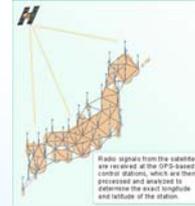
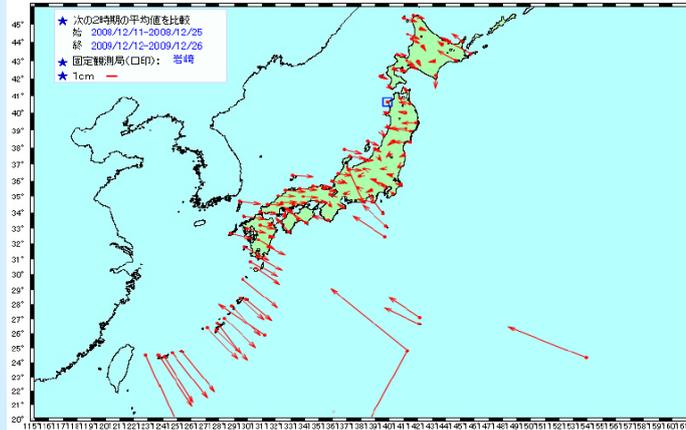


## Is Space Technology extremely special?

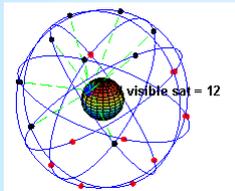
- Broadcasting Satellites (BS)
- **Global Navigation Satellites (GNS)**
  - **Global Positioning System**
    - **Navigation, ranging from devices fitted to aircraft, ships and cars, to personal hand-held devices for hiking,**
    - **Tracking devices used in wildlife management**
    - **Surveying**
    - **Geophysical Sciences, etc.**
  - **Crustal Movement Monitoring, etc.**
- Communications Satellites (COMSAT)
- Earth-observation Satellites (EOS)



# Crustal movement as identified by GPS-based control stations

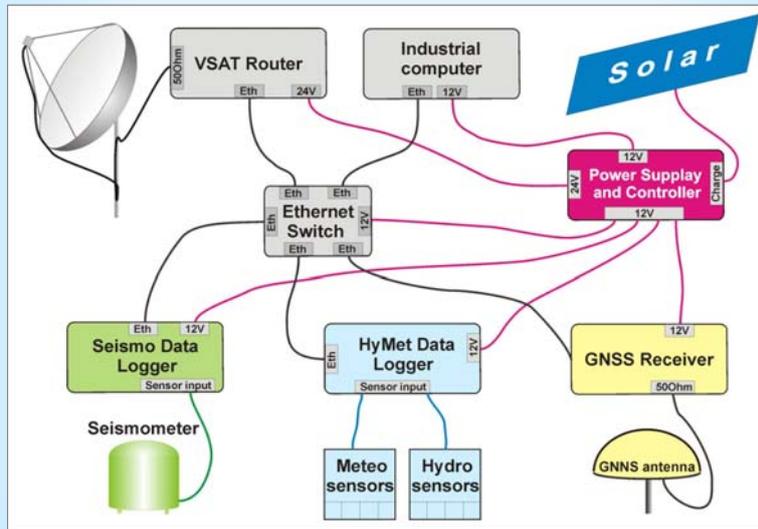


Geographical Survey Institute of Japan





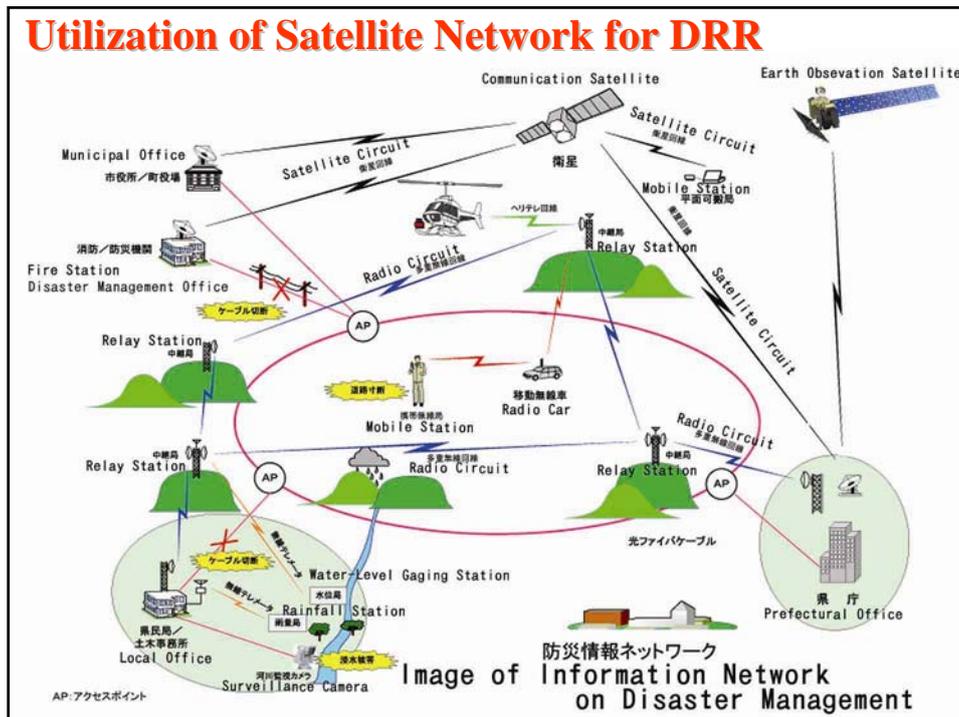
## Scheme of Natural Disaster Monitoring Station



## Is Space Technology extremely special?

- Broadcasting Satellites (BS)
- Global Navigation Satellites (GNS)
- **Communications Satellites (COMSAT)**
  - **Telephony (Iridium and Globalstar System)**
  - **Satellite Internet**
  - **Amateur Radio**
- Earth-observation Satellites (EOS)

## Utilization of Satellite Network for DRR

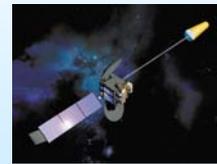
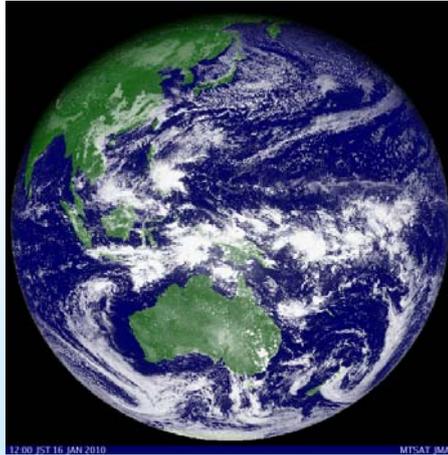


## Is Space Technology extremely special?

- Broadcasting Satellites (BS)
- Global Navigation Satellites (GNS)
- Communications Satellites (COMSAT)
- **Earth-observation Satellites (EOS)**
  - **Weather Monitoring**
  - **Oceanographic Information**
  - **Environmental Information**
  - **Remote-sensing,**
  - **Mapping, etc.**



## Meteorological Satellite Image

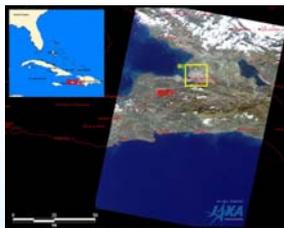


*MTSAT-IR*  
*JMA*



## M7.0 Haiti Earthquake on 13 January 2010

**ALOS AVNIR-II**



**JAXA**

[http://www.eorc.jaxa.jp/ALOS/img\\_up/jdis\\_av2\\_haiti\\_100114.htm](http://www.eorc.jaxa.jp/ALOS/img_up/jdis_av2_haiti_100114.htm)



## *Application of Space Technology to DRR*

1. **Promotion of application of Space Technology to DRR**  
Mr. David Stevens,  
United Nations Office for Outer Space Affairs (UNOOSA)
2. **Application of Space Technology into DRR in Japan**  
Mr. Futoshi Takiguchi,  
Japan Aerospace Exploration Agency (JAXA)
3. **Use of Satellite Data for DRR**  
Dr. Lal Samarakoon  
Asian Institute of Technology (AIT)
4. **Introduction on Space Technology Application for Disaster Reduction and HJ-1-A/B satellites in China**  
Mr. Zhiyong FANG  
National Disaster Reduction Center of China (NDRCC)
5. **Use of Satellite Data in Saptakoshi Basin of Nepal**  
Mr. Thir Bahadur G.C.,  
Ministry of Home Affairs, Nepal
6. **Application of Satellite Rainfall Estimation for Flood Risk Reduction in the HKH region**  
Ms. Mandira Shrestha  
International Center for Integrated Mountain Development (ICIMOD)
7. **Use of Satellite Data in Disaster Risk Management System in Gifu Prefecture, Japan**  
Mr. Satoshi Wada  
Gifu Prefecture, Japan

*ADRC promotes disaster reduction through multi-national/multi-stakeholder/multi-lateral cooperation in the Asian region.*



<http://www.adrc.asia>

**Thank You For Your Attention**