



National Institute of Information and Communications Technology

ACTIVITY FOR SPACE WEATHER RESEARCH & OPERATION IN NICT

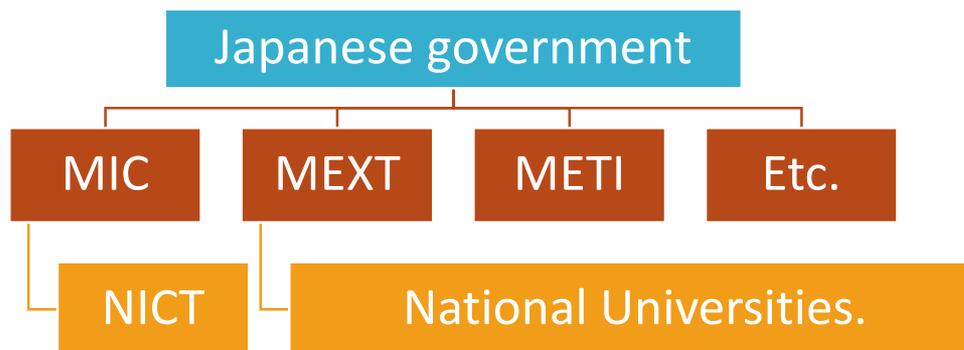
Mizuhiko Hosokawa

Vice President, National Institute of Information
and Communications Technology, Japan

What is “NICT”?

NICT (National Institute of Information and Communications Technology, Japan) is;

- The “ONLY National Institute” of Information and Communications technology in Japan
- Staff: permanent scientists: 300, temporal scientists: 400, administrative: 200 (approximately).
- Headquarter: Koganei, Tokyo
- Main Branches: Keihanna, Kobe, Kashima, Okinawa
- Observatories: Wakkanai, Hiraizo (closed), Yamagawa, Okinawa



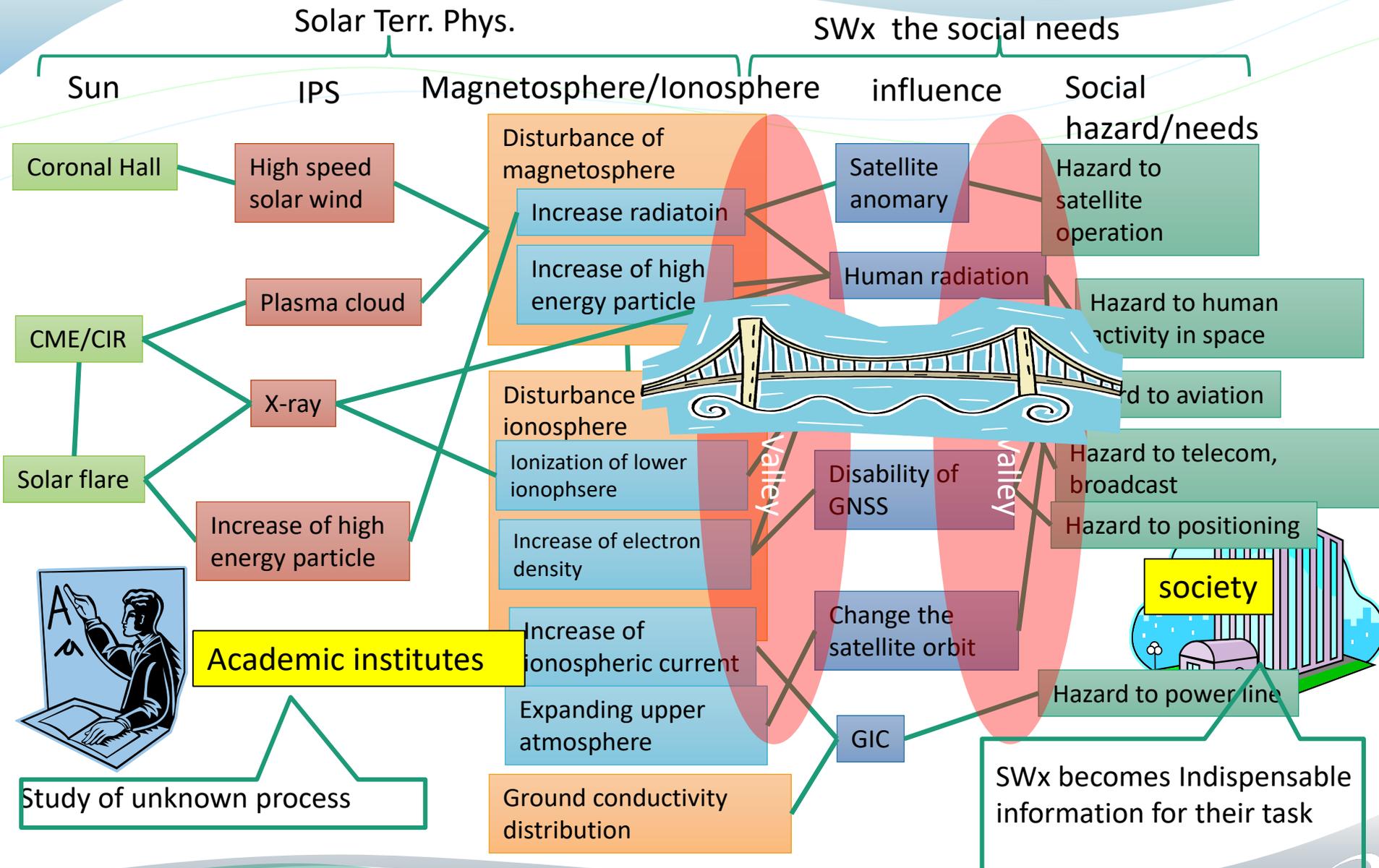
Web access : 160,000/month
No. of e-mail address : 10,000
And also on Facebook, twitter

Forecasting Parameters

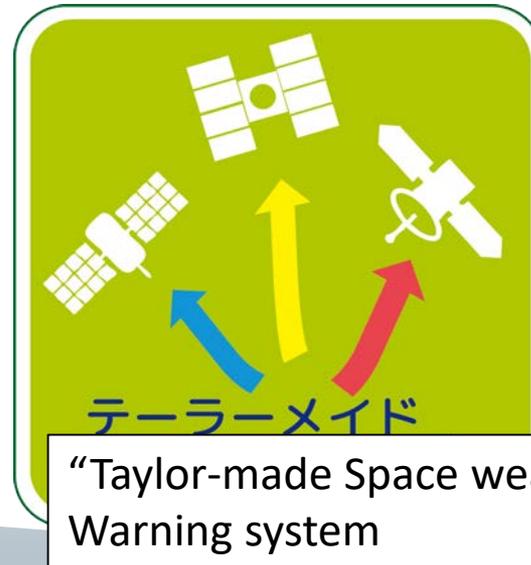
- Flare forecast
- Magnetic field forecast
- High-energy particle forecast
- HF propagation forecast

Domestic users: satellite operator, aviation office and companies, power plant companies, HF telecommunicators / broadcasters, resource survey, Univ. and research institutes, amateur radio operators

Relation of Needs-Seeds in Space Weather



Product to be created



Japan-US Collaboration on Space Weather Research

- ◆ Receiving the Solar wind data obtained with ACE/DSCOVR satellites
- ◆ Discussion in “Space Weather as a Global Challenge”
- ◆ Discussion in multi-national frameworks

Receiving ACE/DSCOVR solar wind data

- ◆ Receiving the Solar wind data obtained with ACE/DSCOVR satellites at Koganei, Tokyo
- ◆ Contribute to 24/7 observation of solar wind



ACE/DSCOVR Receiver in Koganei

Space Weather as a Global Challenge

- ◆ “Space Weather as a global Challenge” symposium has started on 2016
- ◆ The 3rd symposium will be hosted by Japan and held on July 24 at the Embassy of Japan



2nd Space Weather as a Global Challenge

Multi-national framework

- ◆ ISES (International Space Environment Service) is a consortium of operational space weather forecast organization led by NOAA. NICT is one of the original member of ISES
- ◆ Japan-US collaboration in UN framework: WMO, ICAO, UN/COPUOS, ITU



UN/COPUOS

2018 Space Weather as a Global Challenge

- The 3rd meeting of “Space Weather as a Global Challenge” was held at Japan Embassy on July 24, 2018 hosted by Japan Embassy, NICT, JAXA and DoS.
- 77 people attended from various countries.
- Discussing Theme
 - Japan’s Space Weather Efforts and Outlook
 - Perspectives from around the Globe
 - Toward Improved Space Weather Services and preparedness
 - Perspectives from the Private Sector
- Preparedness for severe space Weather disaster with international collaboration and activation of private sector were mainly discussed.

