

Space-based Earth Observations

- Powerful Tool for Disaster Risk Reduction -

Kiyoshi Higuchi

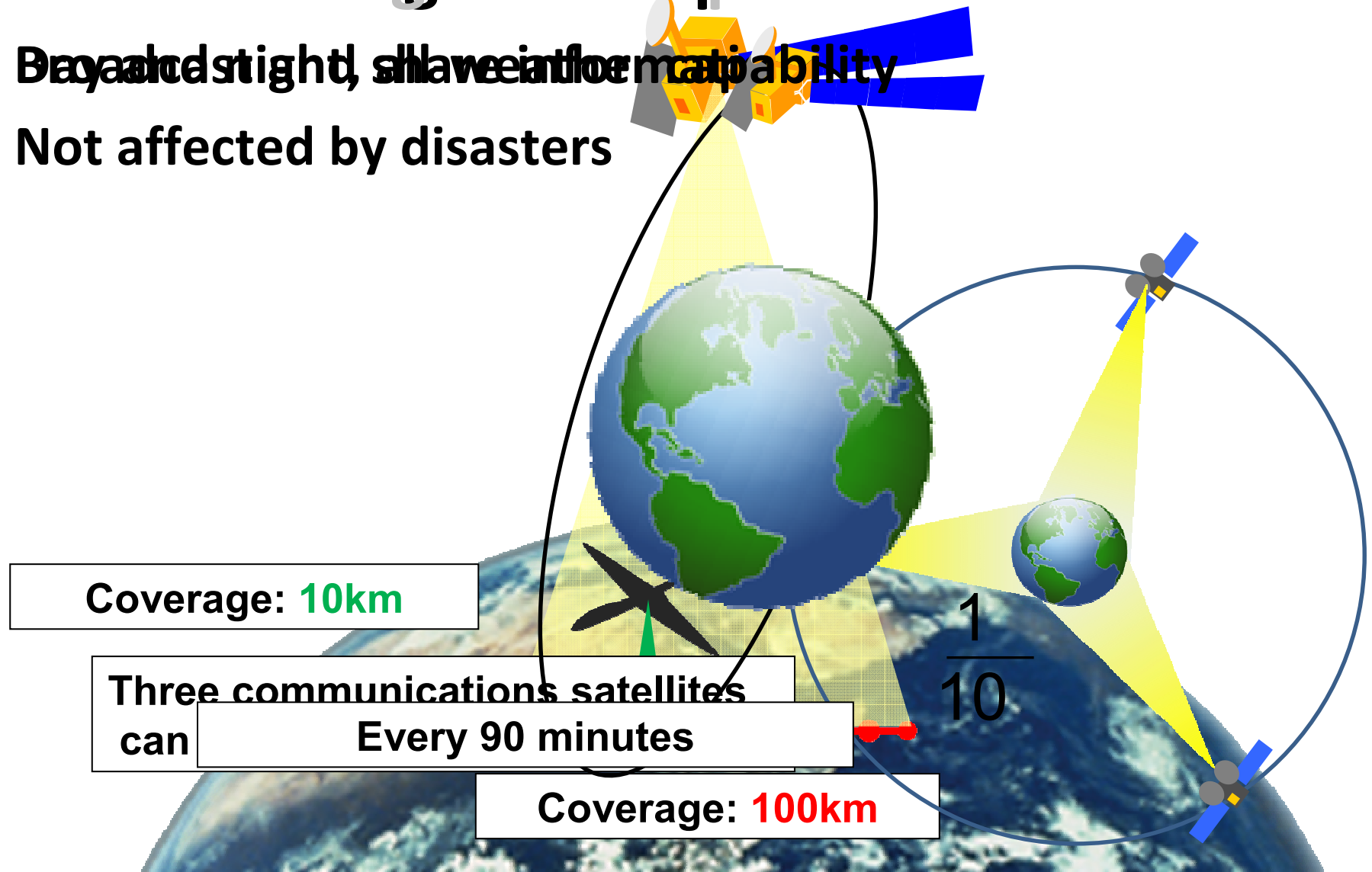
Senior Vice President

Japan Aerospace Exploration Agency



3. Robustness, coverage and Repetitive

- ✓ Beyond sight, shallave information capability
- ✓ Not affected by disasters

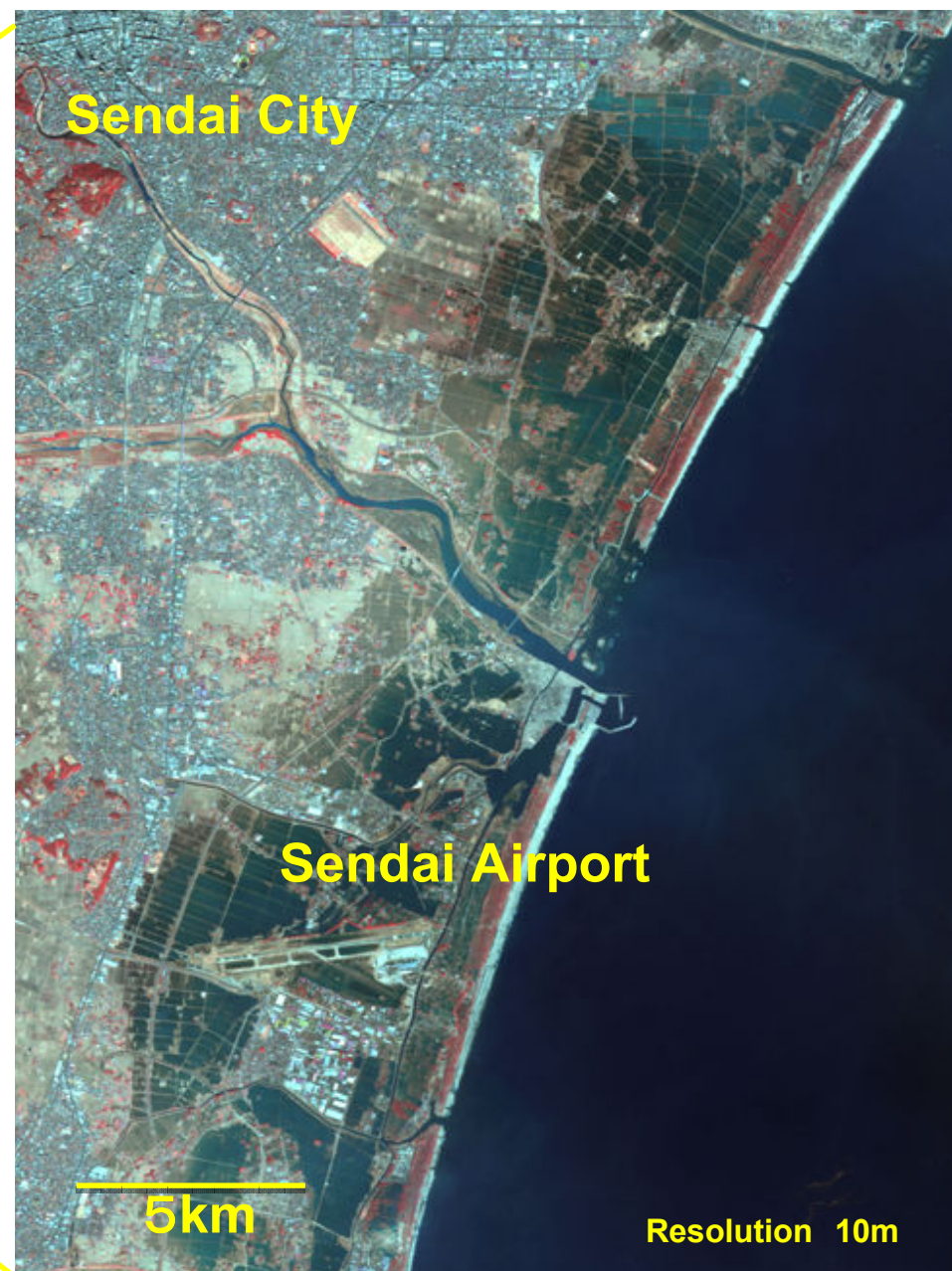
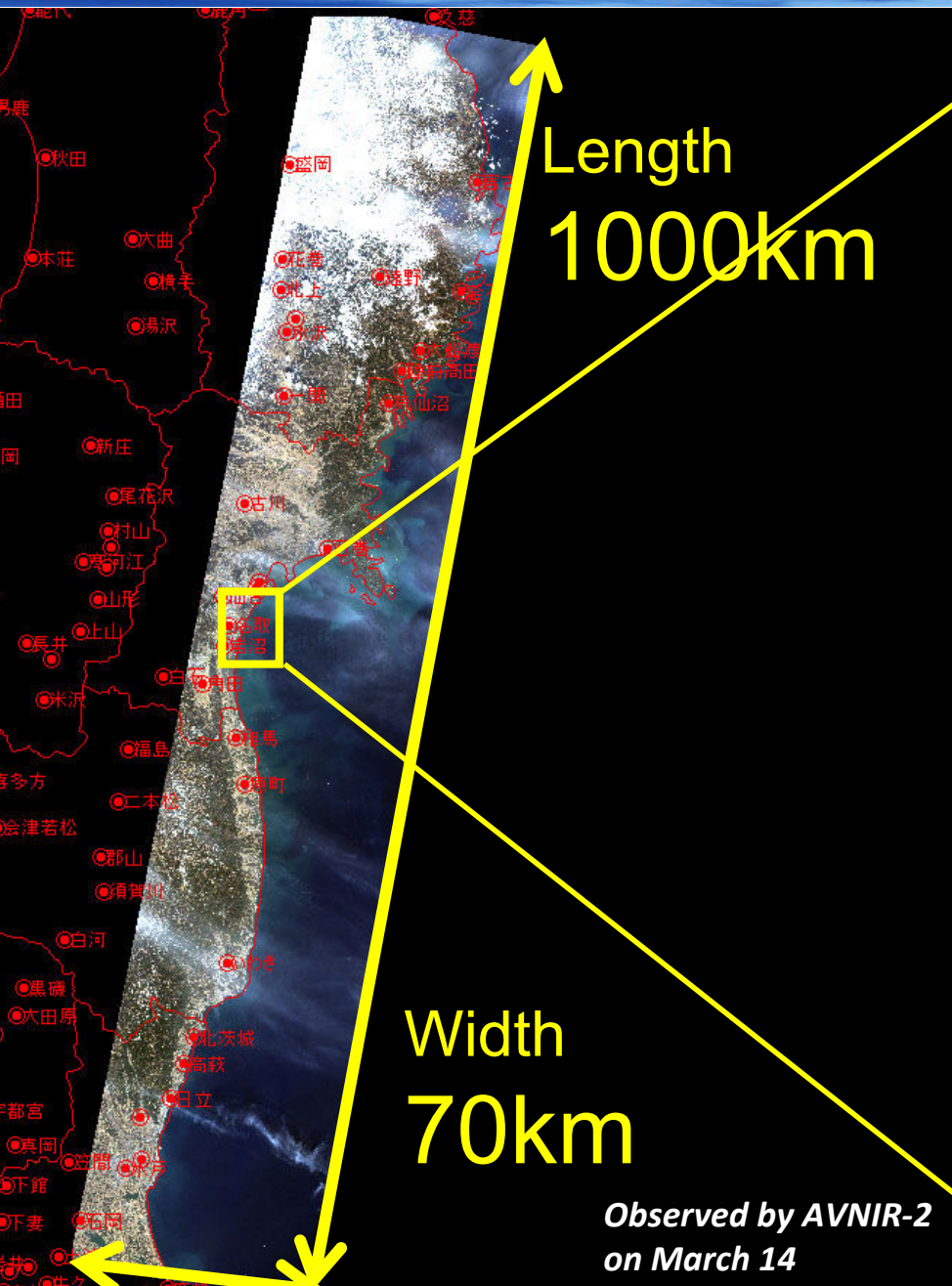


More importantly,

4. Monitoring and understanding processes and phenomena of the Earth system

- ✓ **enabling understanding and predicting local disaster risks by the knowledge**

Wide-area Monitoring on 14 March, 2011



After Great East Japan Earthquake, satellites provided

- TV conferences services to local governments
- Internet access for local residents

■ High-speed internet communications satellite: WINDS

■ Mobile communications test satellite: ETS-8



WINDS 'Kizuna'



ETS-8 'Kiku-8'

■ **Satellite data is unique, but not enough**

- **necessary to be combined with other data and information**
- **needs to be transformed into information easy to understand.**

■ **Timely satellite data delivery is not guaranteed**

- **A single satellite can not provide timely data delivery in response to disasters.**

■ Int'l Charter and Sentinel Asia

- Space agencies provide timely and easy-to-understand information through the International Charter and the Sentinel Asia.

■ GEO (Group on Earth Observations) and CEOS (Committee on Earth Observation Satellites)

- Space agencies support understanding disaster risks on global and local scales through GEO and CEOS projects.
- CEOS is willing to provide coordinated satellite observation plan in response to requirements of Disaster Management community.