

Activity Report of URSI-F

Reported by Y. Yamaguchi (Chair)

1. Commission meetings in the period of Aug. 2010 – Oct. 2010(For more detail, please see <http://www2.nict.go.jp/pub/ursi-f/>)

AP-RASC 2010 was successfully carried out during Sept. 22-26, 2010 at Toyama International Conference Center, Toyama, Japan. (1)AP-RASC 2010 was successfully carried out during Sept. 22-26, 2010 at Toyama International Conference Center, Toyama, Japan. It includes following sessions organized by the F-Commission (session conveners):

- F1 Remote Sensing of Subsurface Objects and Landmine Detection (M. Sato (Japan) and S.-Y. Kim (South Korea))
- F2 Remote Sensing of the Earth and Planetary Atmosphere (T. Manabe (Japan), Y. Kasai (Japan))
- F3 Remote Sensing of the Earth and Planetary Surfaces (Including Earthquake Detection and Prediction) (T. Moriyama (Japan), S. Park (Japan) and W. -M. Boerner (USA))
- F4 Satellite and Terrestrial Propagation
(Y. Maekawa (Japan), T. Hatsuta (Japan), A. Sato (Japan), W. Yamada (Japan))
- FBC Mobile Propagation (J. Takada (Japan), H. Iwai (Japan), T. Maeyama (Japan))
- Poster Session (Y. Yamaguchi (Japan))

For more details, please see: <http://www.ap-rasc10.jp/>

(1) No. 547 Meeting Date: Sept. 28-29, 2010 Place: Tokimate, Niigata University (Niigata)

International Polarimetric SAR Workshop in Niigata 2010 was held in corporation with Niigata University and IEEE GRS Japan Chapter, and IEICE SANE. 18 papers were presented.

September 28 (8:50-17:00)

1. Recent advances in fully polarimetric space SAR development
2. Polarimetric SAR calibration method using forest, surface, and decomposition model
3. Forest mapping and biomass estimation with SAR
4. SAR polarimetry for terrestrial and lunar surfaces
5. Classification of SAR and polarimetric SAR images for land cover application
6. Velocity correlation functions of a moving target in SAR imagery
7. Supervised land-cover classification by ALOS/PALSAR polarimetric interferometry
8. New airborne X-band SAR system (Pi-SAR2)
9. Issues in quantitative remote sensing of land surface using polarimetric SAR

September 29 (9:00-17:00)

10. Applications of high-resolution polarimetric SAR data to forests feature extraction of a target and its applications
11. Microwave emission and scattering models
12. Polarimetric target decomposition theory and FDTD analysis
13. Application of polarimetric SAR remote sensing to snow and ice monitoring
14. The estimation of Faraday rotation and its impact on soil moisture estimation
15. Estimating underwater laver cultivation area from TerraSAR-X, ENVISAT-ASAR, and ALOS-PALSAR amplitude data, and polarimetric entropy
16. Urban parameter extraction using POLSAR data
17. Development of circularly polarized synthetic aperture radar onboard UAV and microsatellite
18. Study of Chasew plant growth using PALSAR data in Cambodia

For more details, please see: http://www.wave.ie.niigata-u.ac.jp/yamaguchi/polsar_ws10.html

(2) No. 548 Meeting Date: Oct. 14-15, 2010 Place: Iwate University (Iwate)

This meeting was held under the co-sponsorship of the IEICE Technical Committee on AP and IEEE AP-S Japan Chapter. Four papers relevant to the field of URSI-F were presented:

1. MINO sensor - Ray tracing analysis of break-in detection performance in indoor environment
2. Ray-tracing analysis of multi-keyhole effect in indoor MIMO relay transmission
3. Simulation of service availability for satellite broadcasting using 21-GHz band
4. On simple configuration of MIMO-OTA fading emulator

For more details, please see: <http://www.ieice.org/cs/ap/jpn/>

2. Others

IGARSS 2011 will take place in Sendai, Japan during August 1-5, 2011.

Asia-Pacific Synthetic Aperture Radar (APSAR 2011) will be held in Seoul, Korea, which deals with recent radar technology. Date: Sept. 26-30, 2011.

APSAR 2013 will be held in Japan.