

Geology and Geography Session

Chair: Waldir R. Paradella

INPE (National Institute for Space Research), Brazil

Co-chair: Akira Sasagawa

Geographical Survey Inst., Japan

GLG01) The GEMS Project Geological Mapping of Sensitive environments in Yemen, Tunisia, Lebanon and France

Jean-Paul Deroin, Univ. de Marne-la-Vallee, France.

GLG02) Application of ALOS and Other Satellite Data to Study Landscape Changes Related to Petroleum Fields and Their Exploration and Exploitation.

Irina Smirnova, Inst. of Remote Sensing Methods for Geology, Russia.

GLG03) Comparative analysis and computer processing of Japanese ALOS Avnir, Russian KFA 1000 and Rader (Japanese JERS-1 and Canadian Radersat) Multitemporal Satellite Data for Change Detection.

Irina Smirnova, Inst. of Remote Sensing Methods for Geology, Russia.

GLG4) The importance of SAR frequency, polarization, and incident angle for mapping and regions, the Jabali test site, Yemen.

Jean-Paul Deroin, Univ. de Marne-la-Vallee, France.

GLG05) Use of PALSAR Data for Geoscience Applications in the Tropical Environment of Brazil

Waldir R. Palladera, INPE (National Institute for Space Research), Brazil

GLG06) Application of cartography estimation from polarimetric SAR data for land use over tropical vegetation and flooded area in estuary regions

C. Lardeux, Univ. de Marne-la-Vallee, France

GLG07) Orientation of PRISM images and DEMs by matching SRTM DEM

Jose A. Gocalves, Univ. of Porto, Portugal

GLG8) Automatic Change Detection Using Pair of PRISM Triplet images

Akira Sasagawa, Geographical Survey Inst., Japan

GLG09) Large Scale Mapping from ALOS imagery: Ranong Province, Thailand

Panu Nuangjumnong, GISTDA, Thailand

GLG10) Making of the remains base map in the Mesopotamia area using the ALOS data

Ken Matsumoto, Kokushikan Univ., Japan

Discussion Summary in Geology and Geography Session

In our session, there were various research areas. All three sensors (PRISM, AVNIR-2, PALSAR) were used. Each research area can be classified to “cartographic mapping” and “thematic mapping”.

For cartographic mapping,

Periodical observation is important for further research.

Digital elevation produced by Palsar stereo pair needs appropriate intersection angle (difference of incidence of each image).

For thematic mapping,

Flexible observation (incidence angle, azimuth looking, descending or ascending) in PALSAR is critical.

Software tools,

we have presentation based on commercial software, Erdas and PCI. Further information from JAXA is necessary to further research. In addition, RPC information is necessary for specific application.

Creating critical mass: necessity of education packages in ALOS data.