

Products of radar monitoring of the Earth surface from space

APPLICATION FIELD

- Mapping of territories
- Control of natural resources
- Ecological monitoring
- Prevention of disasters and acts of God
- Oceanographic surveys
- Urban and regional planning
- Geological surveys
- Making and creation of geo-information systems

LIST OF SAR-PRODUCTS

Products of primary processing are designed for visual estimation of the obtained information and cataloging

For further use:

- radiohologram
- quick look image
- images for fast delivery
- data in complex form.

Products of secondary processing are designed for comparison with the available data, measurement of distances,

Recognition of natural and anthropogenic objects:

- normalized image
- geo coded image
- geo coded image with consideration of relief.

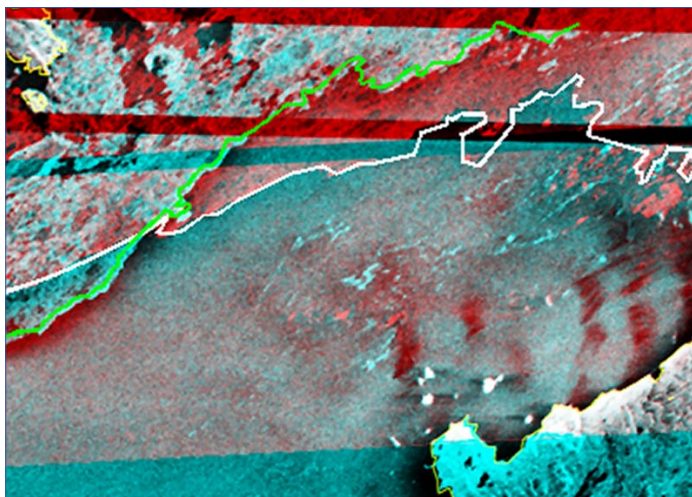
Products of special processing are identified by specific requirements of Customer:

- image with the reduced level of speckle noise,
- images being filtered for detection of typical objects,
- sets of images of surface areas taken at different time and results of their processing,
- digital models of relief,
- topical maps of terrain.

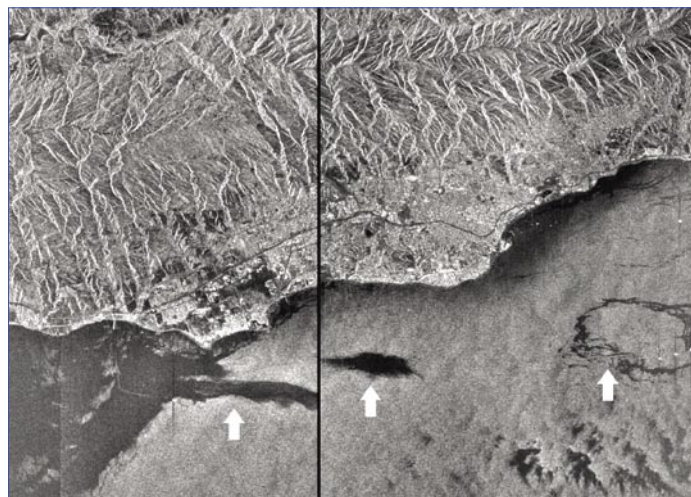
SERVICES OF JSC MIC NPO MASHINOSTROYENIA

JSC MIC NPO MASHINOSTROYENIA renders services on standard processing and topical de-coding of Earth remote sensing radar data, including:

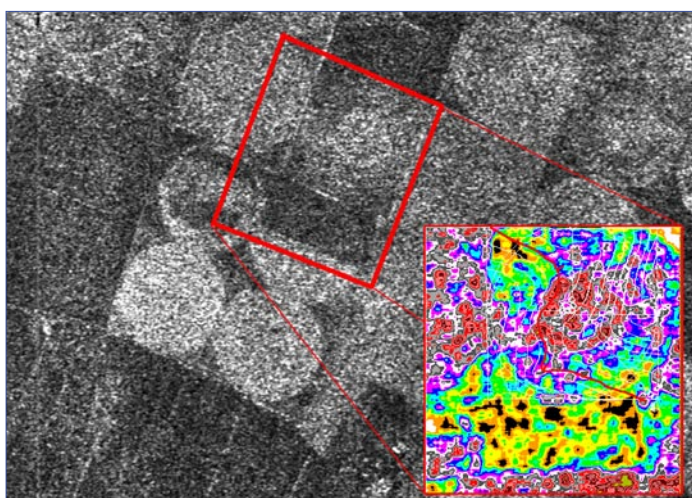
- delivery of archive data of radar surveys from space stations "Cosmos-1870" and "Almaz-1" (www.almaz1.ru)
- full cycle of standard processing of radar data including synthesis of images from radio holograms taken from different SAR platforms,
- reduction of images to map projection
- geo coding and orthorectification of images,
- making of digital relief models based on radar survey data, three dimensional simulation of surface relief
- processing of SAR data in different topical fields
- development and conducting of scientific and practical experiments using SAR data
- design of software for processing of remote sensing data.



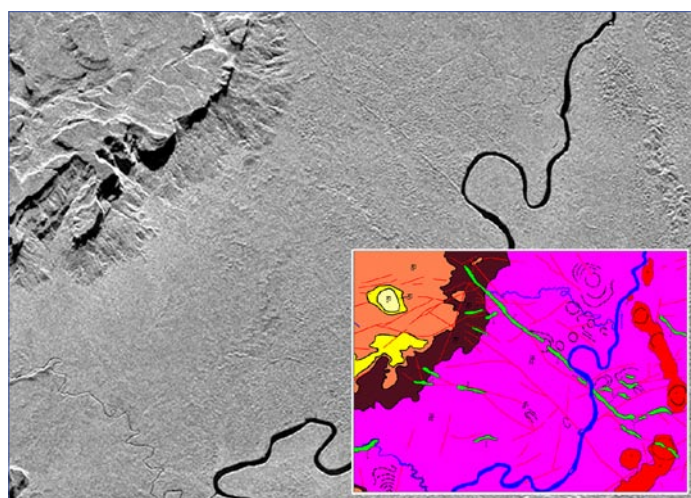
Control of ice situation, mapping of sea ice motion. The Kara strait. Different time data are marked green and white characterizing different positions of ice.
Survey from SS "Almaz-1".



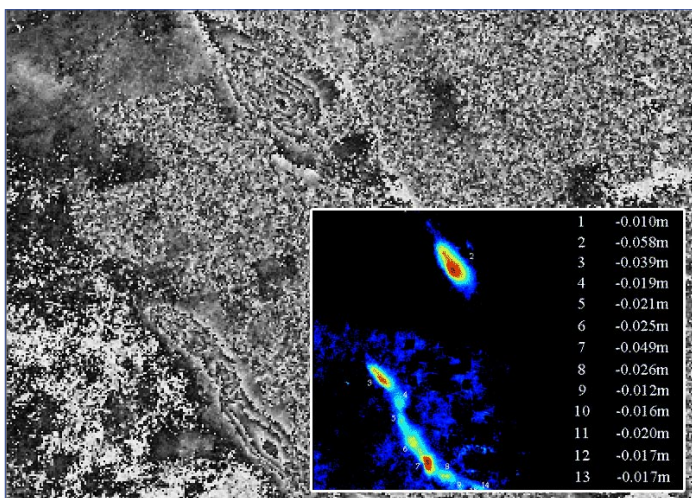
Clear circular structures — oil spill in oil producing regions. Bright points are clearly visible on the sea surface — sea oil platforms.
Survey from SS "Almaz-1".



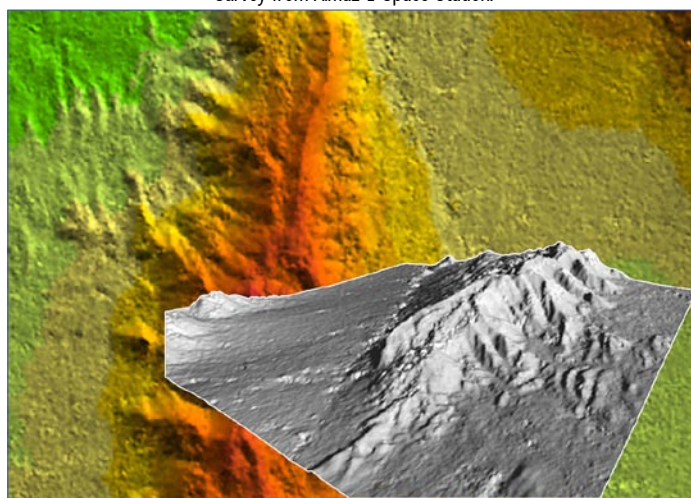
Analysis of melioration of agricultural areas.
Estimation of relief effect on biomass concentration of plants.
Survey from Almaz-1 Space Station.



Geological map. Analysis of geological structure of areas completely covered with forests, identification of areas where mineral deposits are possible based upon the results of analysis of geological formations.
Survey from Almaz-1 Space Station.



Differential interferogram (ERS-1 data) and altitude map with the relief height variation marks. Control of subsidence and heaves of soil on tracks near trunk pipelines, in the regions of oil and gas producing and storage.



Pseudo-colour and perspective images of digital relief model in the White Sands region, California, USA, obtained through interferometric processing.