CREATION OF MULTISCALE COVERAGES OF RUSSIAN TERRITORY BY ORTHORECTIFIED SATELLITE IMAGES

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ISPRS WG IV/2

ABSTRACT:

In the end of 2012 SCANEX finished complete coverage of the whole territory of Russia (about 17 million square km) with 0.5 m resolution imagery data from GeoEye and WorldView-2 satellites. The images were collected within the frames of the project for Rosreestr and were supplied in global (WGS84) and local coordinate systems. All of the data were also orthorectified.

Of course there are a number of images with snow, but SCANEX will replace them during next two years.

The next questions is: Will Rosreestr provide access to this data for commercial maps producers, etc? This is very important if to take into account current condition of global maps.

At SCANEX’s side, we developed service Express.Kosmosnimki (express.kosmosnimki.ru), which provides authorized remote access to orthorectified satellite images with the ability to load them into the end-user environment, which can be a website, the geoportal or desktop applications (ArcGIS, MapInfo, Credo-Diologue, Autodesk, etc.). In other words, the data is physically stored on SCANEX servers, but you can work with them remotely via the Internet.

Service is designed to simplify and speed up access to the data, if the user needs the finished product or satellite images to create their own products.

Each user of the service has access to his "personal map" (a set of ordered data) on a special website. Custom user key is used for access authorization and accounting of statistics.

Currently, the service provides the following data:
1. GeoEye-1 (2009-2012) - about 50% of the Russian Federation
2. Mosaics of SPOT 5 - more than 1.5 million sq. km
3. IKONOS (2010-2012) - about 2 million sq. km. In the near future the volume of IKONOS data will be extended to 50 million sqr. km collected worldwide.

The cost of data on Express.Kosmosnimki is 0.23 to 1.25 US dollars per 1 square kilometer a year (10% of the commercial price). It is quite cheap and well used by commercial map providers today.

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International Workshop on

"GLOBAL GEOSPATIAL INFORMATION"

25 April 2013
Novosibirsk, Russian Federation

Proceedings

Prepared by
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Publisher’s license LP № 020461, 04 March 1997.
Approved for printing 15.04.2013.
Format 60×84/16. Digital printing.
Conventional printing sheets 2.56.
Printing run 50. Print order 36.

Printing and Publication Office, SSGA
10, Plakhotnogo St., Novosibirsk, 630108.

Printed at Printing Laboratory, SSGA
8, Plakhotnogo St., Novosibirsk, 630108.