

PHOTOMOD 6.0. Increasing of Performance and Processed Data Volume

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In October 2014 Racurs is going to release the full 64-bit version of digital photogrammetric system PHOTOMOD, on which developers have worked quite intensively recently.

The first part of the presentation is devoted to chronological stages of transition from 32-bit to 64-bit of PHOTOMOD system version with change of operating environment.

The main advantage of the 64-bit system version is full and optimal usage of computer random-access memory. While 32-bit applications are limited by 4 GB of RAM, 64-bit software has practically no such restrictions. So you can involve so much memory that is installed on your computer "physically". It is obvious, that when dealing with extremely large volumes of data, processed in contemporary digital photogrammetric systems, usage of 64-bit architecture is practically the first-order condition. The main part of the presentation includes comparison tables of data volumes used in PHOTOMOD x32 and PHOTOMOD x64. This refers to the number of project images and

output orthophotos, number of tie points used for phototriangulation procedure, number of pickets for digital elevation model generation and number of vector objects for digital maps creation.

Thus, for example, PHOTOMOD x32 allowed to edit about 6-7 million pickets relatively comfortable for operator. Number of pickets loaded to PHOTOMOD x64 for displaying and editing depends on computer RAM size. The presentation contains illustrations of processing of dozens of millions of pickets using computers with different RAM size. Pickets may either be computed by photogrammetric method, or acquired during laser scanning. Among other advantages of the new system version – overall redraw acceleration of great deal of any type objects on screen, a significant increase in the number of images in space borne scanner survey projects, speeding up of orthorectification and orthomosaicing, as well as optimization of computation operations in distributed processing mode.