Ana Tenchova, Svetoslav Lubenov, Gotse Tenchov. ESTIMATION OF SNOW COVER OF PIRIN MOUNTAIN, BULGARIA USING SATELLITE IMAGES (November 2001–July 2002)

The use of satellite images for estimation of snow cover in the Pirin Mountain, Bulgaria is tested methodically. Using images from the TERRA satellite and topographic map of the area, the snow cover dynamics in four different zones within altitude from 1000m to 2911m is estimated. A winter–summer period of 2002 is used. The conclusion is that practically, in real time, in an express way and practically for low cost an information for the plain surface covered by the snow can be obtained. The tendency of snow melt dynamics can be outlined as well. The problems about thickness and density of snow remained unsolved.

*Key words*: Snow dynamics, Mountain area, Earth Satellites *PACS numbers*: 92.40.R; 95.40

Prof. G. Tenchov St. Kliment Ohridski Sofia University Faculty of Physics, Depth Meteorology and Geophysics, 5 J. Bourchier Blvd, 1164 Sofia, Bulgaria

E-mail: GGTenchov@Yahoo.com

Received April 2003