THE USE OF SATELLITE DATA
FOR DETERMINING THE ONSET AND THE END OF THE GROWING SEASON

**Key words:** growing season, Lublin Region, remote sensing method, vegetation index

**Summary**

The aim of this study is to evaluate the possibility of using satellite data to determine dates of the onset and end of the growing season. The analysed characteristics were determined based on the Enhanced Vegetation Index (EVI) and satellite images with spatial resolution of 500 m, derived from MODIS scanner (MOD12Q2 product). Based on this method, dates of the onset and end of the growing season were determined for areas within 10 km from the location of three meteorological stations in the Lublin Region: Czesławice near Nałęczów, Felin (eastern district of Lublin) and Bezek near Chełm. The study period covered the years 2001–2009 and dates referred to the selected land cover types (arable lands, meadows and forests). It was found that the growing season determined with the remote sensing method was on average shorter by one month compared with that estimated with traditional methods such as those by Gumiński and Huculak-Makowiec. The onset of the growing season was significantly correlated with the mean air temperature in January-March period and the number of days with snow cover from December to March. In addition, dates of the end of growing season showed the highest correlation with the sum of the total radiation in September.