

Crop acreage monitoring on the North China Plain using IRS-P6 AWiFS imagery

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In the second half of 2010, the climate conditions caused many acquisition problems for the optical remote sensing data. Nevertheless, 3 registrations from IRS-P6 AWiFS sensors from June till October 2010 were acquired for estimating the crop area within the interested region (southeast of Hebei, north of Henan and west of Shandong). The ground data collection was carried out using the GVG instrument developed by the Chinese partner institute. The image classification was performed using the Maximal Likelihood method. By adopting a very coarse classification legend, the accuracy of the classification reached 94%. The analysis of the crop acreage variation is focused on the Puyang district of Henan province. The acreage of the maize (principal grain product in the autumn) showed a slight increase in comparison with the situation of 2009, while the total agricultural surface is shrinking due to urbanization. The trend mirrors the actual economical situation in the grain producing regions characterized by a labour shortage and a surging urbanization.