IAF EARTH OBSERVATION SYMPOSIUM (B1) Interactive Presentations - IAF EARTH OBSERVATION SYMPOSIUM (IP)

Author: Ms. Nigar Abasova

National Aerospace Agency (NASA) of Azerbaijan Republic, Azerbaijan, abasovanigar@yahoo.com

## DETERMINATION OF DEPENDENCIES BETWEEN PHYTOMETRIC PARAMETRS OF VEGETATION BASED ON SPECTROPHOTOMETRIC DATA AND PRODUCTIVITY FORECASTING


#### Abstract

In the article, had explored the sown areas of Juma village of Sheki region with a total area 210 km 2 , on 6 fields. Grain fields were assessed on the basis of aerospace images and types, characteristics of objects were determined on the basis of NDVI indices. On the basis remote sensing data, the dependences between the intrinsic parameters of the of the soil- plant octopuses are determined. Using the ArcGis 10.3, QGis3.10 proqrams and high-resolution aerospace "Azersky/ Spot-6" images thematic layers were created for months april, may of vegetation cover of the Sheki region, according to these layers the area was studied to be of medium and dense vegetation type, regression equations were constructed using various phytometric indicators. Thus, for May, 57 ha of medium-density plants of the total area of 338 ha on the 1st field, 247 ha of dense plants on the 2nd field, 86 ha of medium-density plants of the total area of 426 ha, 325 ha of dense plants 0,2 ha of medium density plants of the total area of 108 ha on the 3 rd area, 108 ha of dense plants on the 4th area, 7 ha of medium density plants on the area of 88 ha, 45 ha of dense plants on the 5th field 3 ha of medium-density vegetation of the area of 62 ha, 59 ha of dense vegetation, 2 ha of medium-density vegetation and 29 ha of dense vegetation were identified in the 6th field. Productivity for April was $2,5 \mathrm{~T} / \mathrm{ha}$ for 1 st field, $3,6 \mathrm{~T} / \mathrm{ha}$ for 2 nd field, $5,4 \mathrm{~T} / \mathrm{ha}$ for 3rd field, 4th $3,2 \mathrm{~T} / \mathrm{ha}$ for field, $5,9 \mathrm{~T} / \mathrm{ha}$ for 5 th field, $4,3 \mathrm{~T} /$ ha for 6 th field and $2,2 \mathrm{~T} /$ ha for 1 st field for May $\mathrm{T} / \mathrm{ha}, 3,2 \mathrm{~T} /$ ha on the 2nd field, 4,9 T/ha on the 3rd field, 2,9 T/ha on the 4th field, 5th 5,9 T/ha for the field and 4,9 T/ha for the 6th field.


