AGRICULTURAL SOIL MAPPING

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Abstract

The recent results of technical development of low cost GPS systems, geographic information systems, equipment and sensors which are needed to identify the state of the crops and soils have shown a growing awareness in agriculture and related sciences. The actual demand for modern crop management is dominated by the economic pressure and by the social request to increase the transparency of environmental impact of agricultural land. Currently, worldwide there are the public policy actions for precision agriculture that involve measurements of the agricultural soil properties. The mapping of the agricultural soil properties is a new developed method that used the latest generation technologies involving a mobile platform with sensors and spectrophotometers. Making maps of agricultural soil properties is carried out based on data collected in real time from ground, using the geo-spatial coordinates, provided by the Global Positioning System (GPS).

Key words: agriculture, Global Positioning System (GPS), mapping, soil properties, spectrophotometry

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