5 Yield Mapping of Potato

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The goal of the research supporting the development of this technology includes the integration of scientific knowledge into decision-support packages for farm managers. A recent publication from the Office of Technology Assessment publication (OTA, 1993) effectively states the justification for this research:

"Computerized farm-management systems include the land-based or remote sensors, robotics and controls, image analysis, geographical information systems, and telecommunications linkages packaged into decision-support systems or embodied in intelligent farm equipment. Such systems will be increasingly important to the farmer’s ability to increase yields, control costs, and respond to environmental concerns."

Continuous yield maps can help to determine precise requirements for management practices and inputs for each square meter of a field. Yield mapping technology is available for seed crops, but not for bulky products such as potato (Solanum tuberosum L.). Potato is a high-value crop with yield and quality highly sensitive to critical management decisions. Balancing profit against potential negative environmental impacts for this crop requires precise

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