The Prairie Precision Sustainability Network (PPSN): Can we identify marginal field areas using only satellite imagery and precision yield data?

PPSN is a collaborative research project with researchers from the University of Calgary and the University of Saskatchewan. Principle Investigators include Dr. Paul Galpern (UCalgary), Dr. Christy Morrissey (USask), Dr. Steve Shirtliffe (USask), and Dr. Tristan Skolrud (USask).

Precision yield data (PYD) enables farmers to map yield and profitability within fields, and long-term data can be used to identify consistent unprofitable marginal areas. Unfortunately, PYD coverage can be patchy, and may only be available for certain years or fields. The Prairie Precision Sustainability Network (PPSN) aims to solve this problem by developing accurate crop yield models using PYD and satellite imagery, which can be used to “fill in the gaps” in missing fields. Our work will give growers the tools to identify marginal areas using minimal yield data and help to increase their overall farm profitability and efficiency.