Now that precision agriculture is in its second decade, where are we? Yield mapping is gaining commonplace status for many crops and locales. Site-specific management of field fertilization has a growing number of users. Remote sensing applications are maturing. Irrigation control, field leveling, variable rate seeding, disease/pest modeling, stress maps and a myriad other computer mapping uses are edging over the horizon. However, it is important to keep in mind that site-specific farming isn’t just a bunch of pretty maps, but a set of new technologies and procedures linking mapped variables to appropriate management actions. These revolutionary approaches are ushering in such radical changes as a shift in agriculture research from a historical emphasis on traditional experimental fields to "on-farm" research/studies; a possibility of "as applied" mapping for sensitive field inputs; a movement from traditional multivariate statistics to knowledge engines that assess patterns and relationships within and among map layers; and even a latent challenge of the 400 year-old Cartesian coordinate system for geographic referencing that utilizes hexagons and polyhedrals for detailed modeling of agricultural flows and cycles. This presentation investigates the legacy of Precision Ag’s unique expression of Geotechnology, its current challenges and probable future directions.

Online References (contact the presenter for URL to download the PowerPoint slide set used in the presentation)

- Beyond Mapping III, online compilation of Beyond Mapping columns appearing in GeoWorld magazine 1996 to present with many addressing Precision Ag topics. http://www.innovativegis.com/basis/MapAnalysis/Default.htm

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