



AgMIP Coordinated Global and Regional Assessment of the Agricultural Implications of +1.5 and +2.0 °C Worlds



Alex Ruane, NASA GISS on behalf of all CGRA 1.5 co-investigators IMPACTS World Potsdam, Germany October 13th, 2017





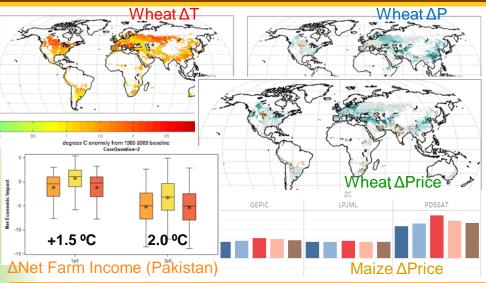






Coordinated Global and Regional Assessments Model Intercomparison and Improvement Project Of 1.5 and 2.0 C Warming -- Synopsis





Key Messages:

- The agricultural sector in +1.5 and +2.0 °C Worlds is characterized by differential outcomes across regions, farming systems and populations
- Rice, soy, and wheat systems benefit from increased rainfall and CO₂, but maize yield declines drive markets
- Direct climate effects combine with land use change and mitigation policies to affect overall prices.
- Substantial uncertainties and data shortcomings persist

Key Coordinated Studies of 1.5 and 2.0 Worlds

Ruane et al.: Overview of CGRA 1.5 / 2.0 Worlds Rosenzweig et al.: CGRA framework Hoogenboom et al.: Crops in US/Senegal/Pakistan Ruane et al.: Agro-climatic changes and extremes

Asseng et al.: Wheat impacts Havlik et al.: Mitigation pathways Elliott et al.: Global crop production Mason-D'Croz et al.: Global Ag markets

Schleussner et al.: Impact of Extremes Webber et al.: West Africa and Europe Valdivia et al.: Regional economics Liu et al.: China wheat impacts Cammarano et al.: Scottish barley