

September 05, 2018

Dr. Peter Bauer, ECMWF Consortium Leader for ExtremeEarth

Dear Dr. Bauer,

On behalf of the international community and leaders of AgMIP – the Agricultural Model Intercomparison and Improvement Project – I write to enthusiastically support the Flagship candidate project ExtremeEarth and its intent to enormously advance capabilities in model parameterization, data assimilation, and empirical inference for a greatly improved Earth system and climate simulations of the past, present, and future.

These capabilities are greatly needed to improve agricultural models and scientific and technological capabilities for assessing impacts of climate variability and change and other driving forces on agriculture, food security, and poverty at local to global scales – the mission of AgMIP. The anticipated computational, science, and technology advancements will greatly improve information on key drivers affecting food security, enabling improved coordinated global and regional assessments of impact. The advancements in data and model interoperability will accelerate innovation in agricultural models of the future – including improved simulation of agricultural systems and adaptations important to sustainable food security in both developed and developing regions. The higher resolution of data and models will improve our understanding of extreme events and their unique characteristics across space and time, leading to better approaches for climate adaptation, disaster resilience, and anticipation of market and social vulnerability.

We anticipate that many in the AgMIP community are well placed to directly contribute to the planning and execution of ExtremeEarth, and we stand ready to help advance it. Our endorsement of the Flagship candidate project ExtremeEarth means AgMIP supports the scientific, technological and planned objectives of ExtremeEarth, and we share this statement and our logo for this purpose. Our support does not, however, constitute any legal or financial commitment towards the ExtremeEarth project.

We wish you every success in advancing the vision of ExtremeEarth.

Sincerely, and on behalf of the AgMIP Leaders and Members,

Cynthia Rosenzweig

Executive Committee, AgMIP

Senior Research Scientist, NASA GISS

Cynthea Tosaywer

Adjunct Senior Research Scientist, Columbia University