



Parametric Uncertainty Quantification

39 parameters were tested simultaneously for primary and secondary (interacting) sensitivities

- 400 CICE model runs were used to develop a fast statistical emulator for sea ice volume, area and extent
- CICE is mainly sensitive to **snow conductivity, melt pond drainage, snow grain size, ice radiative scattering layer and snow and ice densities**
- Primary effects are nonlinear in parameter space and interactions can produce the opposite sign

