Strategic Goals for CFSv3:
A Climate Goal Perspective

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Selected Strategic Priority Issues for CFSv3

• Provides an important scientific basis for iterative risk management for adaptation.
• Provides an important scientific basis for private sector supply chain disruptions
• Helps provide insight and justification for observing system assets, e.g., frequency and diversity of GCOS ECVs.
• Is an operational system that delivers timely information on broadly advertised schedules.
• Open source and flexible that can incorporate new and more realistic Earth System – human components
New Modeling Challenges for CFSv3

• Atmospheric chemistry
  – Ozone forcings
  – Aerosols
    - Black Carbon
    - Sulfate
    - Volcanic aerosols

• Stratosphere
  – Fluxes and circulation
  – Lower and upper

• Land Surface Processes
  – Irrigation
  – New hybrid crops

• Arctic Sea Ice
  – Thickness and extent
New Modeling Challenges for CFSv3

• **Assimilation Issues**
  – Aerosol Emissions
  – Soil moisture
  – Crop maturity
  – Salinity
  – SSU (upper stratosphere)

• **Open Source Code**
  – Process to incorporate Process modules
    - Testing
    - Validation

• **Partnerships**
  – Governing Process
    - NOAA cross line office
    - Cross Agency
    - Academia
    - Private Sector