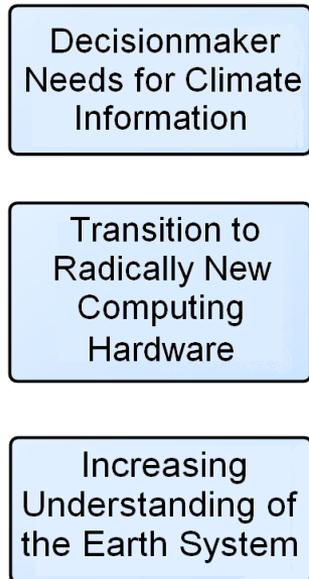
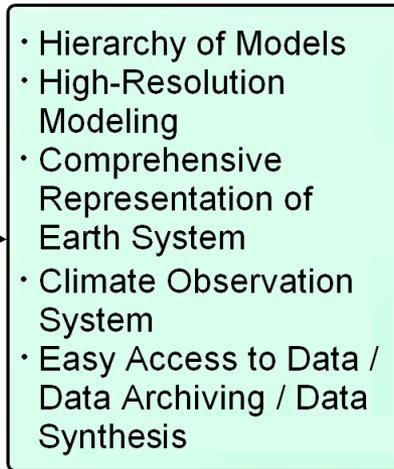


A National Strategy for Advancing Climate Modeling

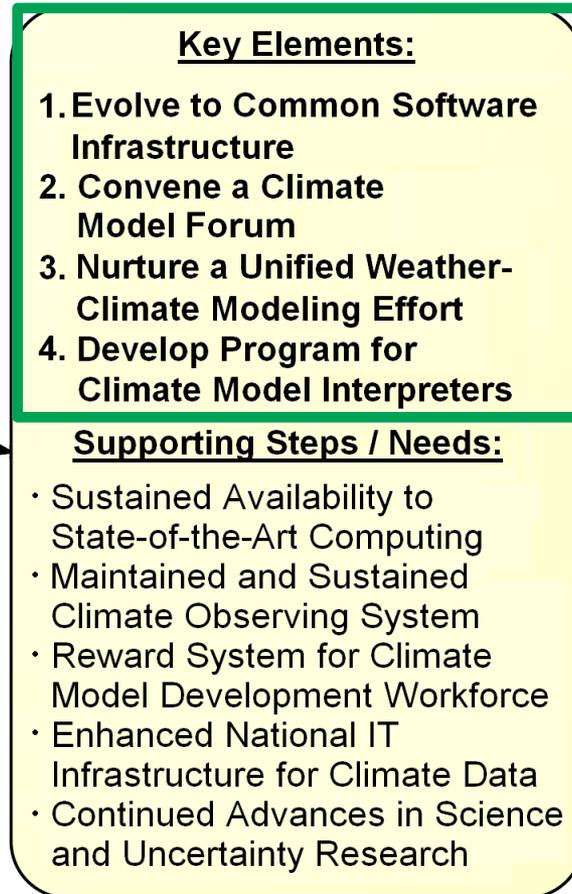
Drivers



Vision for the Next Generation of Climate Models



National Strategy



- ▶ Support a nationally linked hierarchy of models
 - We are not done learning from simpler or coarse resolution models or idealized experiments yet!
 - Use simpler models to learn about first order behaviors of sophisticated models and use that to guide development to capture higher order effects
 - Given large uncertainty in climate projections, it also makes a lot of sense to continue develop and improve simpler models (e.g., statistically based) to translate and improve the use of climate model outputs – are there benefits of having these models be a part of the hierarchy?

- ▶ Evolve to common software infrastructure
 - Foster MIPs to attribute differences in models simulations and behaviors and diagnose model biases
 - Not just technical issues but need agreements on how things “should” be done – science issues?
 - Support research to bring analysis to data
- ▶ Convene a climate model forum
 - How will a climate model forum facilitate the resolution of issues and interactions between modeling community and users community?

- ▶ Training programs for climate interpreters
 - What are the functions of climate interpreters?
 - Inform and promote more meaningful use of climate data
 - Provide feedbacks to climate modeling community
 - How do they fit in the US modeling community, what are their prospects?

Recommendation

- Develop training program for climate model “interpreters”
 - Could involve degree or certificate program offered by universities
 - Possible accreditation through national organization (possibly AMS or AGU)

Goal

- Trained interpreters can facilitate two-way communication between climate modelers and users
 - Take technical findings and output from climate models and use them in diverse range of private and public-sector applications
 - Provide feedback to climate model developers of what information users desire
- Interpreters not envisioned as solution to all users needs/ climate services
 - Rather, training program is crucial step that benefits any system that bridges climate modeling and user communities