



Strategic Implementation Plan (SIP) for a Community-based Unified Modeling System



Infrastructure Working Group

Presented by

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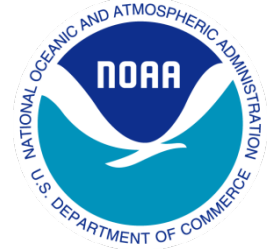
Presented at NOAA Community Modeling Workshop

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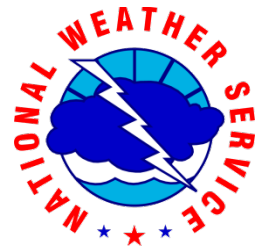


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Membership

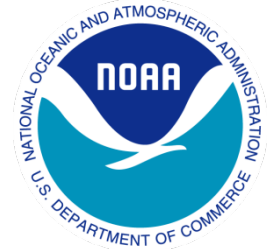


- *Arun Chawla (NWS/EMC) ***
- *Cristiana Stan (GMU) ***
- *Joshua Hacker (NCAR/RAL) ***
- *Rusty Benson (NOAA/GFDL) ***
- Alex Reinecke (NRL, Monterey)
- Bill Bua (UCAR/COMET)
- Laurie Carson (NCAR/RAL)
- Ligia Bernardet (CIRES-NOAA/ESRL)
- Marat Khairoutdinov (Stony Brook)
- Mark Govett (NOAA/ESRL)
- Niki Zadeh (NOAA/GFDL)
- Rocky Dunlap (CIRES-NOAA/ESRL)
- Seth Underwood (NOAA/GFDL)
- Sharanya Majumdar (Univ. of Miami)
- Tom Clune (NASA/GMAO)
- *Co-Chair ***



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Topics of Discussion (so far...)



- **Software Repository**
 - Broad support for Git
 - Open, external, and centralized
 - Seamlessly link in existing community components
 - Operational mirror(s)
 - Integrated software engineering tools
 - Examine in more detail previous WG data and recommendations
- **Code Management and Governance**
 - Quantify rules of engagement for different tiers
 - Repository management rules (e.g., fork vs. branch)
 - Everyone in a tier plays by the same rules
 - Balance operational (slow) vs. research (fast)
- **Workflow System**
 - Must be simplified (operational system seen as overly complex)
 - Research workflow will have own requirements
 - Exploit synergies between operational and research system
 - Must include pre and post toolsets



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Topics of Discussion (so far...)



- Community Support
 - Centralized helpdesk *and* social collaboration system
 - Documentation
 - Training and tutorials
 - Evaluation metrics
 - Data availability
 - Computational resources
 - Validation and verification system
- Determine Role of GMTB, DTC, and other Testbeds
- NGGPS Program Office and NCEP/EMC
 - Set schedule of roadmap updates
 - Frequent examination and publishing of operational deficiencies
 - List of existing sponsored community projects
 - Outreach via webinars, professional society meetings, etc.
 - Periodic evaluation of metrics (including computational performance)
 - ***Must be engaged at all levels of the organizations!***