



NGGPS Community Modeling Programmatic Perspective

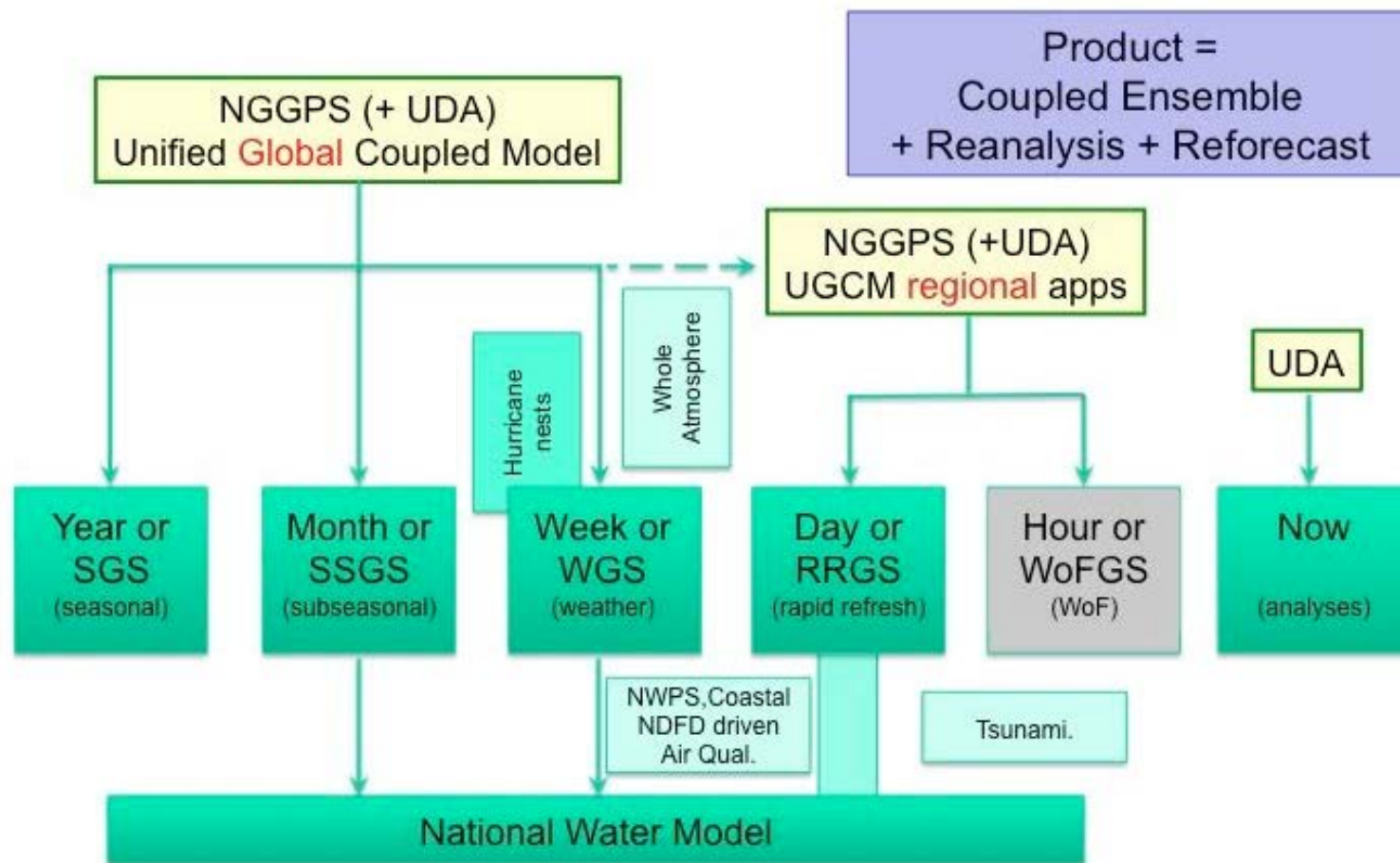
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Roadmap



UDA: Unified Data assimilation
SGS: Seasonal Guidance System
SSGS: Subseasonal Guidance System

WGS: Weather Guidance System
RRGS: Rapid Refresh Guidance System
WoFGS; WoF Guidance System



Community Modeling Workshop



- UCACN* Modeling Advisory Committee (UMAC) emphasized the importance of NCEP to more effectively work with the community (private sector, government, and academia)
 - With NGGPS selection of the FV3 dynamical core, seeking to assure that the global model is developed as a community model
- The Community Modeling Workshop will inform:
 - Goals and needs of a community unified modeling system including governance, infrastructure, and modeling component priorities
 - Best practices for a modeling community including most effective means of engagement

* UCACN = UCAR Community Advisory Committee for NCEP



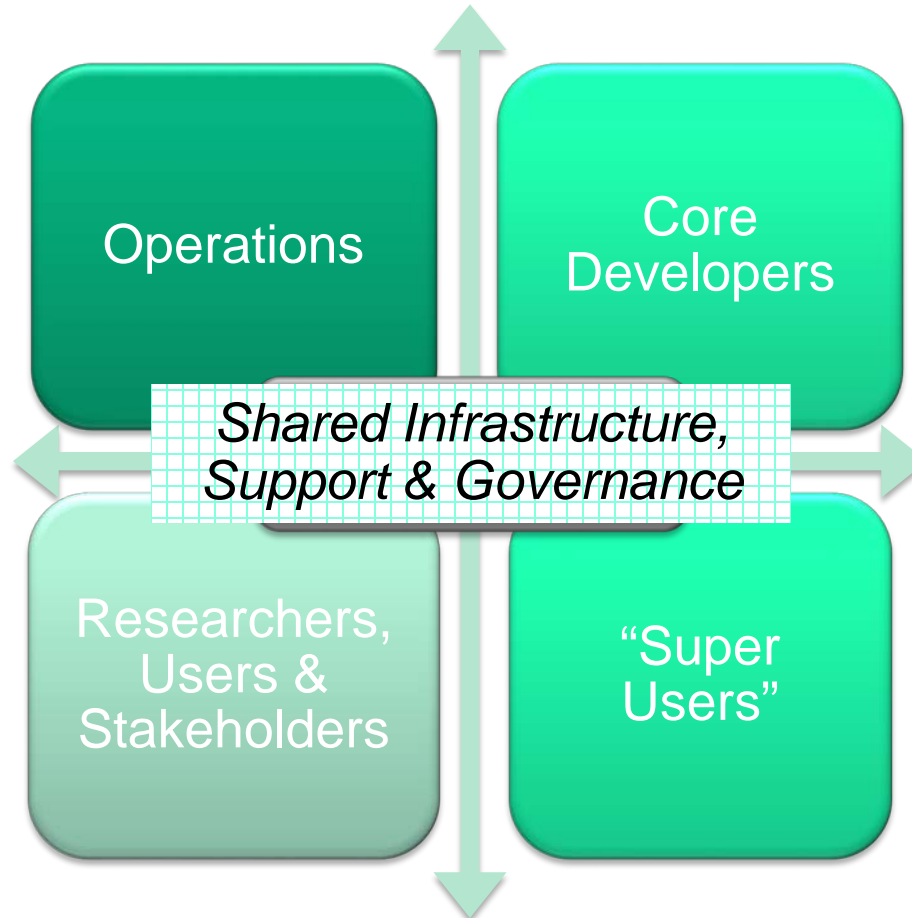
Community Participation



- 2016 Federal Funding Opportunity
 - 17 NGGPS proposals awarded (\$2.9M)
 - NWS/STI external grants and projects are listed at:
<https://www.weather.gov/sti/stigrants>
- Global Model Test Bed (GMTB)
 - Provides infrastructure for community to interact with NOAA



Potential Concept for NGGPS/FV3 Community



Inclusive of Public, Private, and Academic Sectors



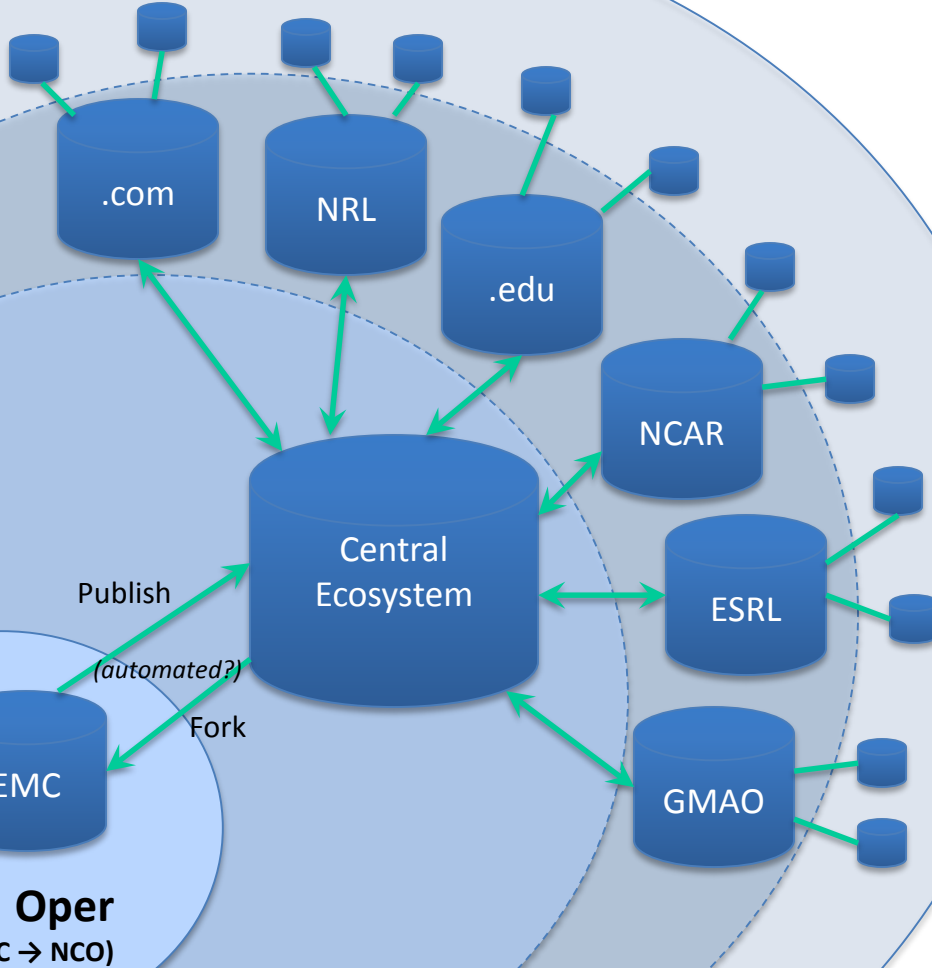
Collaborations and Operations



Sandbox

Exchange

Community Supported



Ecosystem

= **collaborative** environment

Code repo & Reviews

Issue tracking

Testing

Documentation

Support

Governance

Identify code utility

Define interfaces

Specify roles + authorities

Allocate resources

Variation of Concept by Tom Auligné (JCSDA)



Collaborations and Operations (Variation)

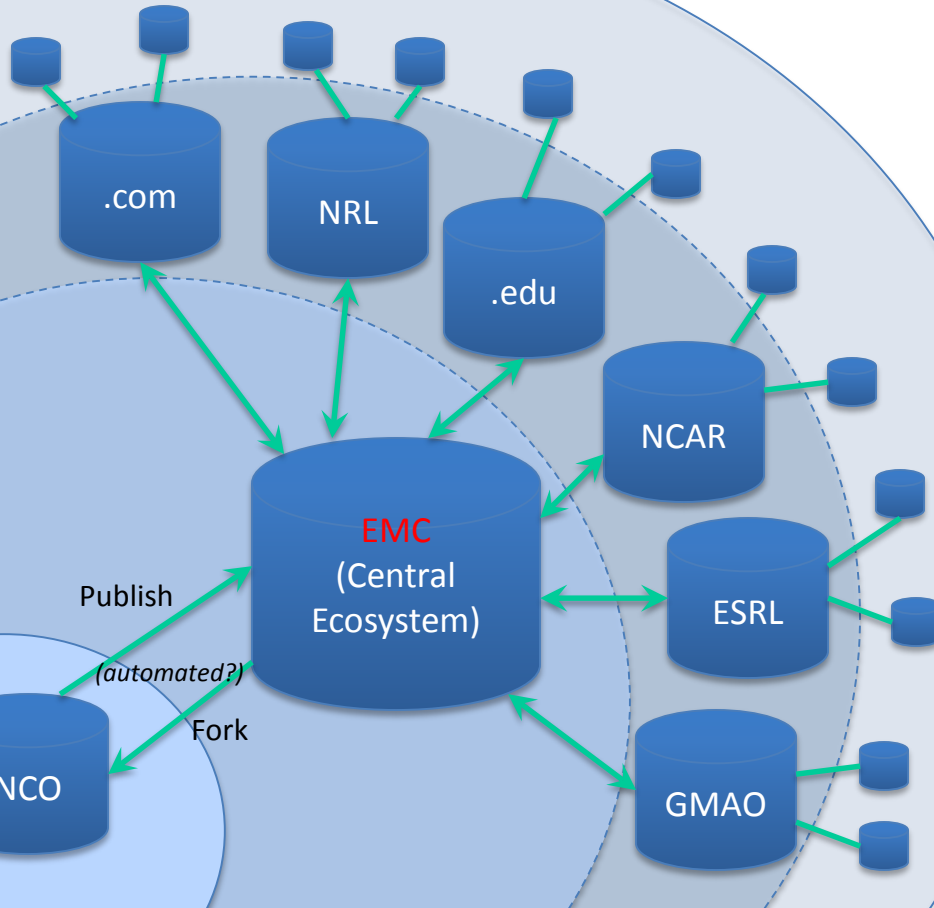


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Challenges



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- Governance
 - Align with UMAC recommendations
 - Involvement vs ownership
 - Repository design, IT Security, IP issues (copyright, license)
 - Balance between operations and research
 - Degree of support
 - Well-defined path for research to operations transition
 - Resources to support the research community participation
 - Partnership with R&D agencies



STI Modeling Program Website:

<http://www.weather.gov/sti/stimodeling>

Information NGGPS:

http://www.weather.gov/sti/stimodeling_nggps

Information on Grants:

<http://www.weather.gov/sti/stigrants>