



Gameplan for Sustained Engagement

Unifying Innovations in Forecasting
Capabilities Workshop

July 22, 2022

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What Is Engagement?

The **definition** of an engagement is **an appointment, a promise to marry someone or a period of employment**. An example of an engagement is a holiday party or accepting an offer of marriage.



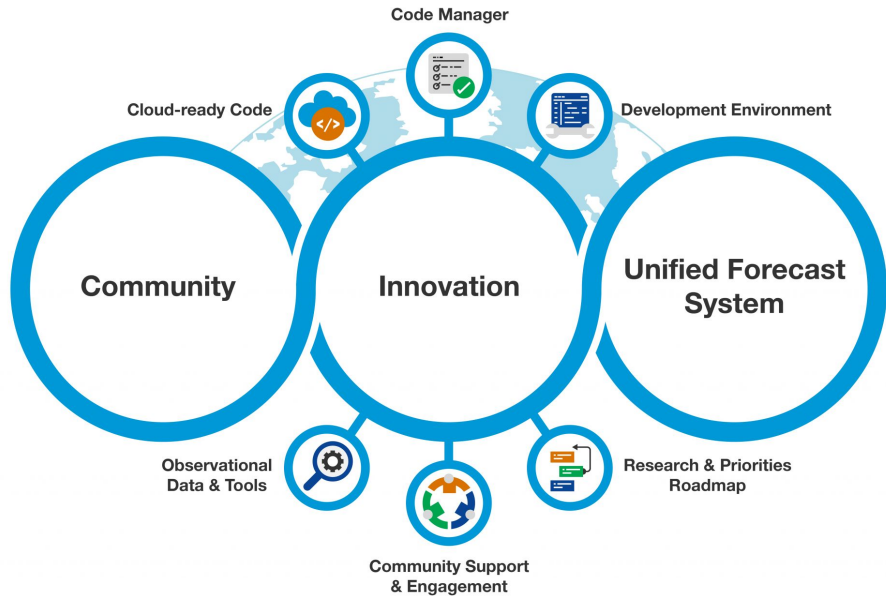
For today it
means... **Get
involved!**

What's What?

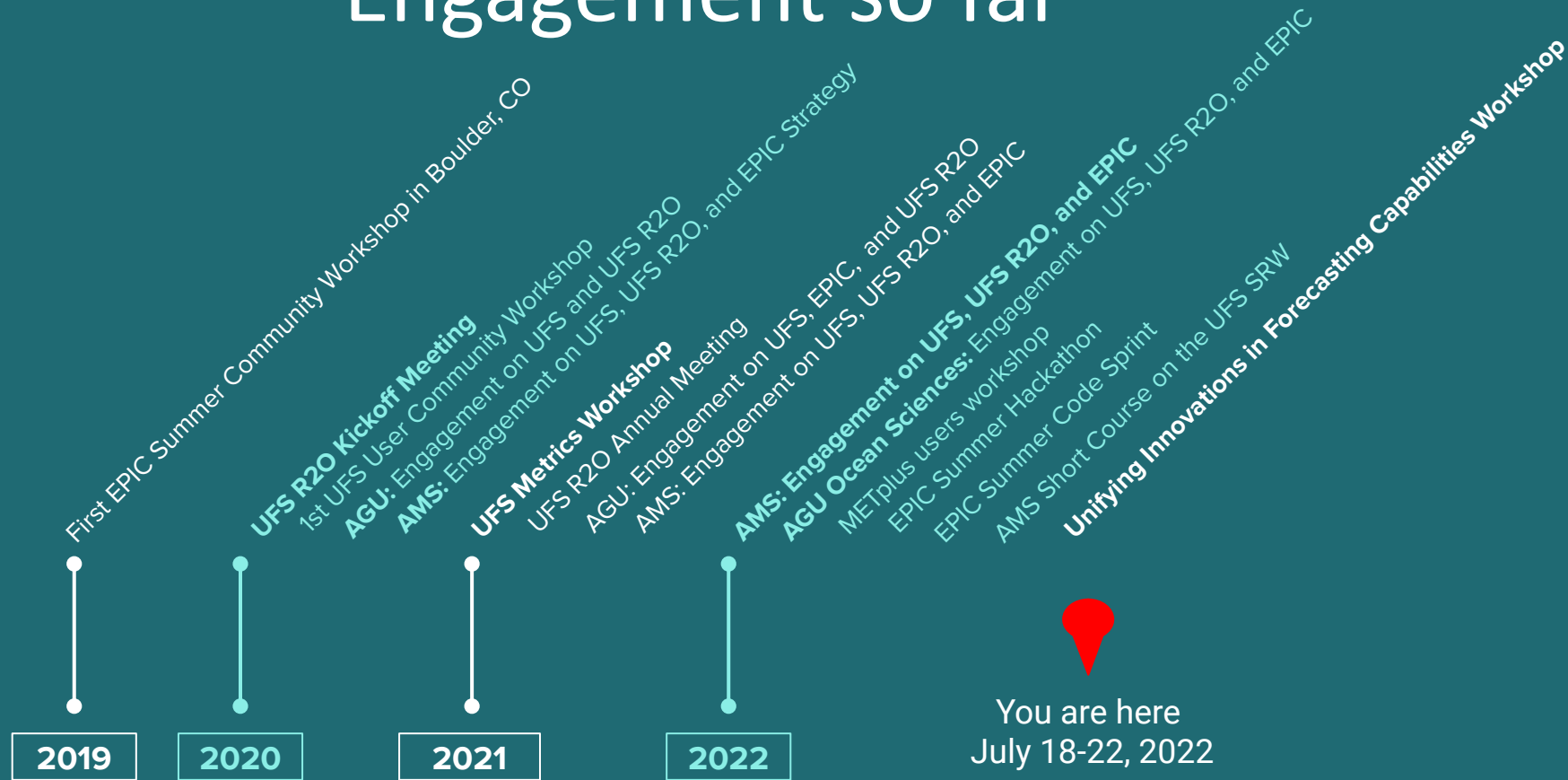
The Unified Forecast System (UFS) is a community-based, coupled, comprehensive Earth modeling system.

R2O - a broad collaboration among scientists launched in July 2020 to accelerate innovation into its operational modeling for weather and climate prediction.

EPIC accelerates advances in our nation's operational forecast modeling systems.



Engagement so far



What we've heard from you...

- Inclusion of additional topics (e.g., waves, ocean, ecosystem, hydrology)
- Recorded presentations, virtual options, resources available after engagements
- Open forums for discussion
- Easier-to-use systems, accessible systems
- Provide community vetted metrics for each gate between the R2O stages
- Define authoritative metrics for evaluating UFS applications in operation
- Clarification between EPIC, UFS, UFS R2O

What's happening in our community?

Everyone

Websites (EPIC portal and UFScommunity.org), GitHub, forums, FAQs, governance, webinars

New Users & Students

Hackathons, code sprints, short courses, coming soon: training videos and tutorials

UFS/EPIC
Community
Atlas

Developers

UFS Working Groups, UFS R2O Project including Application Teams and Cross-Cutting Development Teams

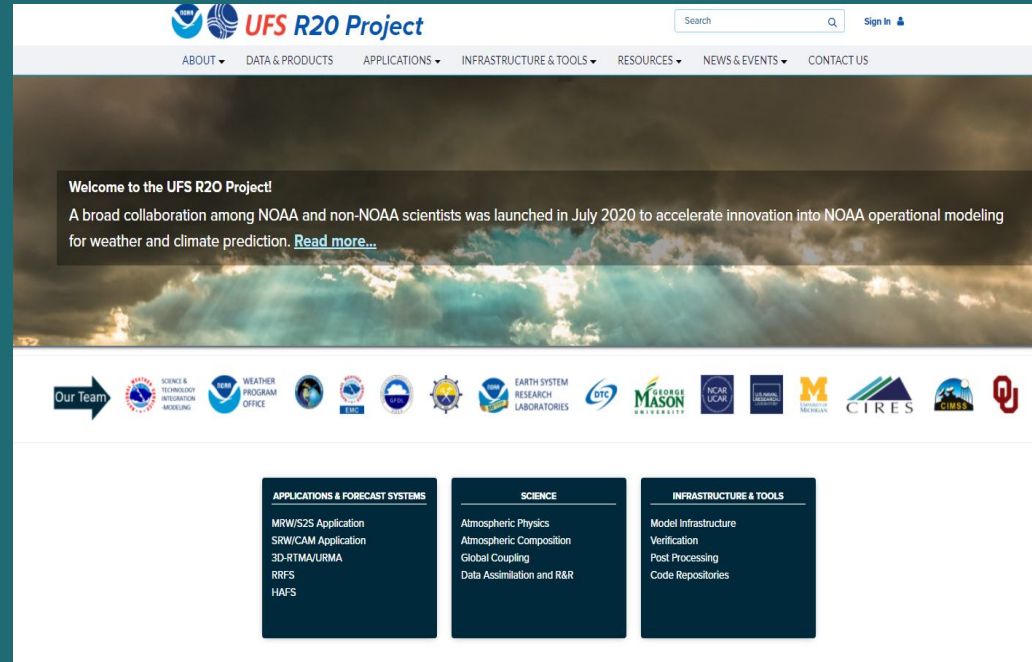
Super User

Coming soon: CI/CD pipeline access, use cases on cloud, ticketing system

UFS R2O Website: At Your Service!

The UFS-R2O Website provides communication with the wider community

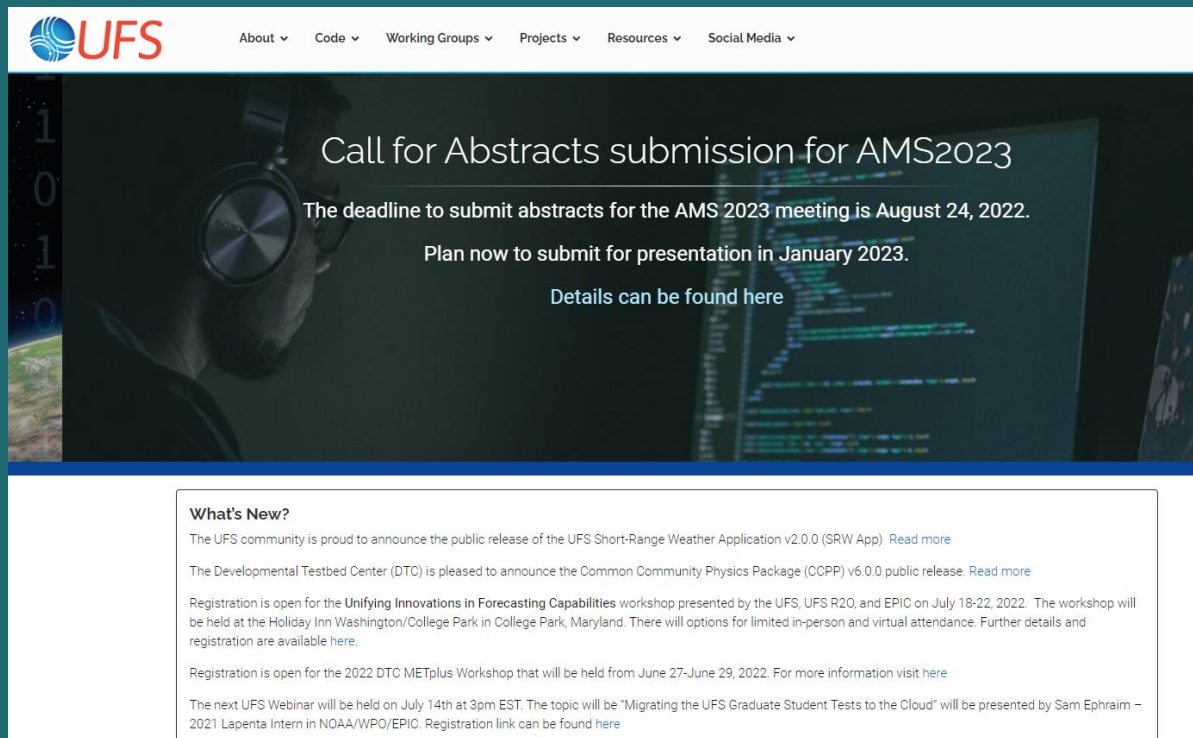
- Announcements/events
- [UFS Webinars](#)
- [Weeks 3-4/S2S Webinar](#)
- [Data products and prototypes](#)
- [UFS R2O Town Hall](#)
- UFS R2O [Annual meeting](#)
- Contact information



UFS Community Site: At Your Service!

Get current on UFS...

- Navigate to What's New?
- Community News
- Graduate Student Test: Got Code?
- Archived newsletters, videos, etc.



The screenshot shows the UFS Community Site homepage. At the top is a navigation bar with the UFS logo and links for About, Code, Working Groups, Projects, Resources, and Social Media. The main banner features a dark background with a person wearing headphones and a computer screen displaying code. The text on the banner reads: "Call for Abstracts submission for AMS2023", "The deadline to submit abstracts for the AMS 2023 meeting is August 24, 2022.", "Plan now to submit for presentation in January 2023.", and "Details can be found here". Below the banner is a section titled "What's New?" containing four news items, each with a brief description and a "Read more" link.

UFS About ▾ Code ▾ Working Groups ▾ Projects ▾ Resources ▾ Social Media ▾

Call for Abstracts submission for AMS2023

The deadline to submit abstracts for the AMS 2023 meeting is August 24, 2022.

Plan now to submit for presentation in January 2023.

Details can be found here

What's New?

The UFS community is proud to announce the public release of the UFS Short-Range Weather Application v2.0.0 (SRW App). [Read more](#)

The Developmental Testbed Center (DTC) is pleased to announce the Common Community Physics Package (CCPP) v6.0.0 public release. [Read more](#)

Registration is open for the **Unifying Innovations in Forecasting Capabilities** workshop presented by the UFS, UFS R20, and EPIC on July 18-22, 2022. The workshop will be held at the Holiday Inn Washington/College Park in College Park, Maryland. There will options for limited in-person and virtual attendance. Further details and registration are available [here](#).

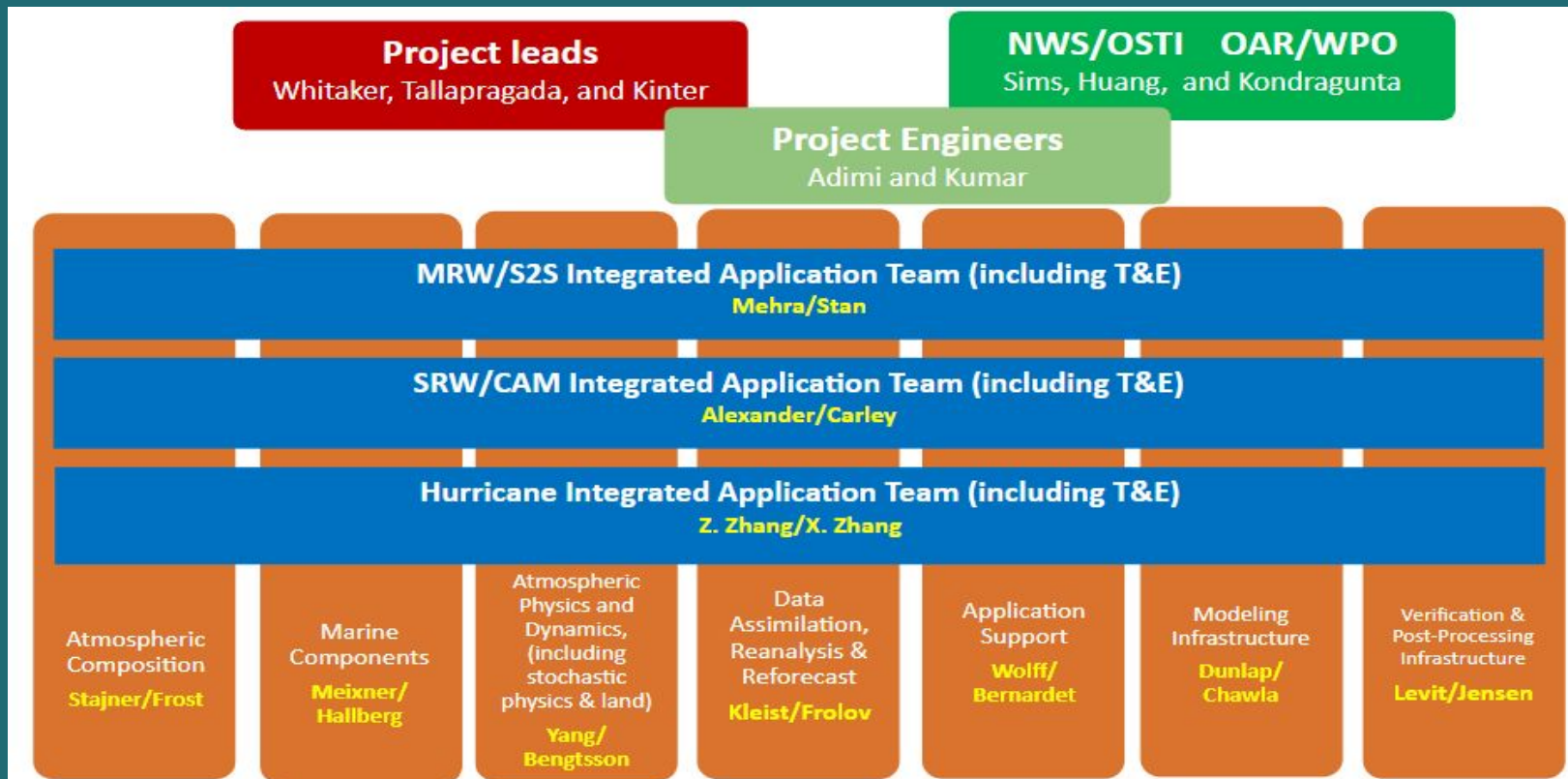
Registration is open for the 2022 DTC METplus Workshop that will be held from June 27-June 29, 2022. For more information visit [here](#)

The next UFS Webinar will be held on July 14th at 3pm EST. The topic will be "Migrating the UFS Graduate Student Tests to the Cloud" will be presented by Sam Ephraim – 2021 Lapenta Intern in NOAA/WPO/EPIC. Registration link can be found [here](#)

EPIC Portal: At your service!

- Github forums
- User support
- News
- Events
- Get code
- Metrics
- Cloud Cost Estimator

UFS-R20 Project Structure



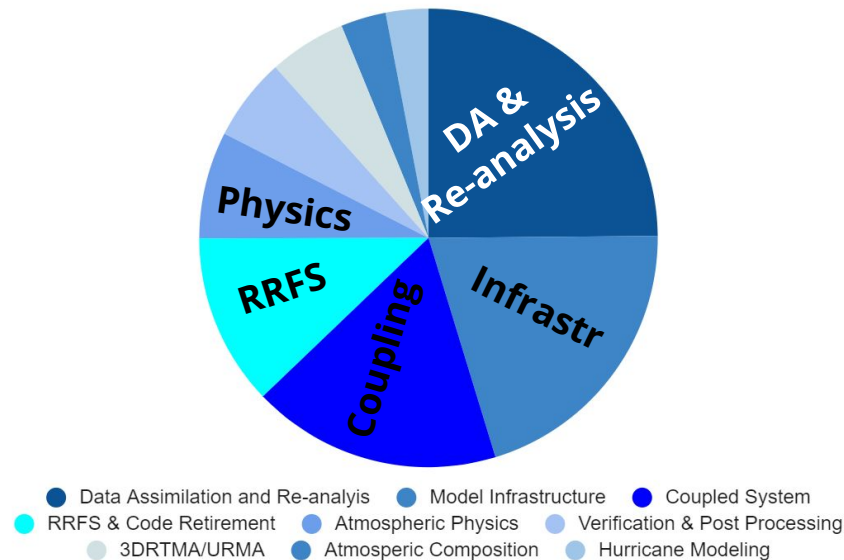
Aligning UFS-R20 priorities to investment areas

Key UFS-R20 Priorities

- Reduce near-surface biases
- Implement a coupled ensemble prediction system
- Advance initialization through improved use of observations and advances in data assimilation algorithms
- Develop a unified regional system and retire legacy regional systems

Key Investment Areas for UFS-R20

- Model Infrastructure (Physics, Coupling, and Verification)
- Coupled system
- Data Assimilation, Observations, and Reanalysis
- RRFS & Code Retirement
- Physics parameterization



800+ Twitter followers

Avg. of 100 webinar attendees

Over 400 of you registered to be here this week!

2,000+ regular page visits

Have you gotten engaged?

Psst...no ring is needed!



A few other places to get involved...

Fellowship

WPO is establishing a dissertation fellowship to fund PhD students to focus their research on UFS...we're starting small, but hope to have a big impact!

Working Groups

Join a UFS Working Group!
See the list here: [UFSWG](#)

For more information:
secretariat@ufsccommunity.org

Notice of Funding Opportunity at NWS/OSTI-Modeling

<https://vlab.noaa.gov/web/osti-modeling>

Schedule:

Every two years, FY18, FY20, FY22

Eligible Applicants:

US institutions of higher education, industry, non-profit, state, local, Indian government

Three competitions:

NGGPS, Weeks 3-4/S2S, HFIP

Point of Contact (POC) & Readiness Level (RL):

*POC from NCEP centers or UFS R2O teams;
RL from 4 to 7 with target operational systems*

Publication date:

Around Nov 3

LOIs due:

Around Dec 6

Application due:

Around Feb 7

Project start date:

Sep 1

Contact:

nws.sti.modeling.team@noaa.gov

NGGPS:

Advance the *UFS Medium-Range Weather Application*, coupling among atmosphere, ocean, wave, ice, land and atmospheric composition, data assimilation and ensemble techniques, post-processing forecast tools

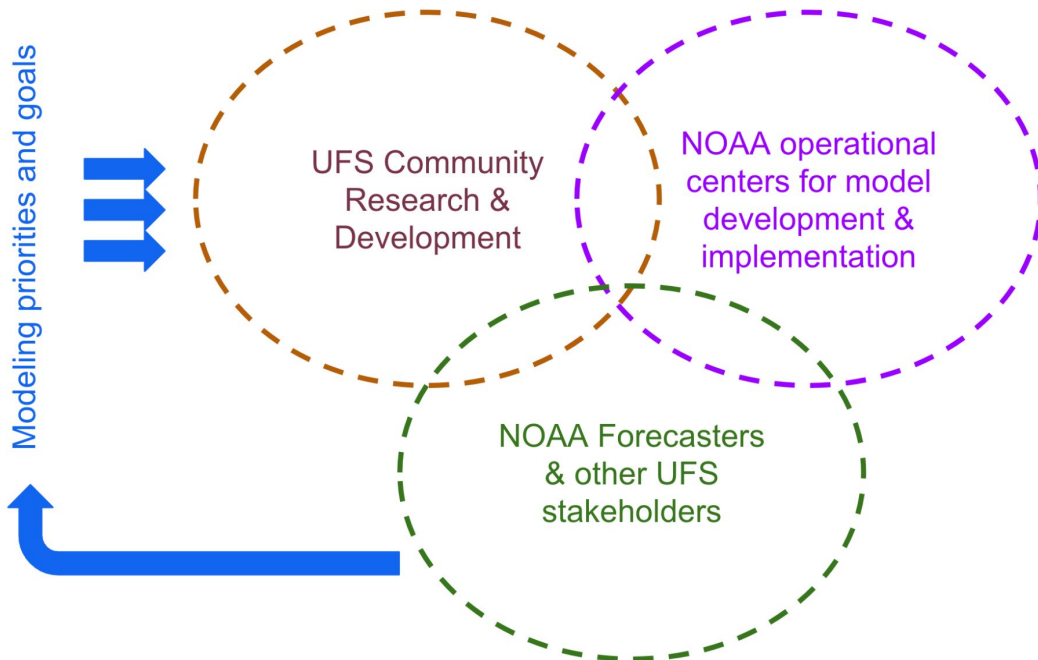
Weeks 3-4/S2S:

Advance the *UFS Subseasonal and Seasonal Applications*, coupled data assimilation, reanalysis, process-level diagnostic tools and validation/verification metrics

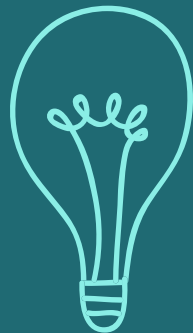
HFIP:

Advance the *UFS Hurricane Application*, improve operational hurricane forecasts to meet societal requirements to save lives and mitigate loss of economic disruption

Engaging Forecasters in the UFS (a case study...)



- User feedback helps clarify model errors and define development priorities
- Close coordination is critical!
- What is your diamond ring?



How're we doing?

Tell us what else you need!

What's next?

Hackathons

Code Sprints

AMS

AGU

Short Courses

Tutorials

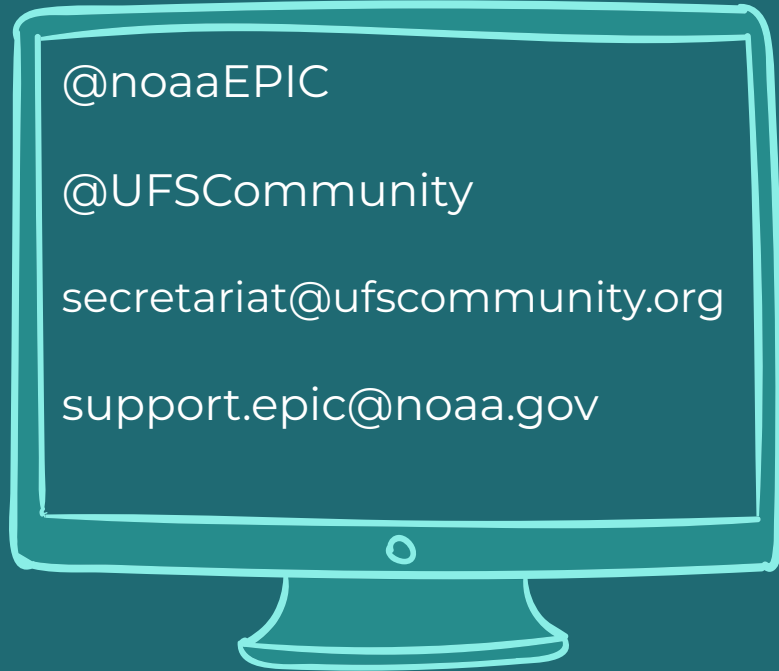
Connect with us

@noaaEPIC

@UFSCommunity

secretariat@ufscommunity.org

support.epic@noaa.gov





Thanks!

Do you have any questions?

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