

Recommendations to the NOAA
Science Advisory Board concerning
the Earth Prediction Innovation
Center (EPIC)

Environmental Information Services
Working Group (EISWG)

9 September 2019

EISWG EPIC Activities

- EISWG reviewed available EPIC material from NOAA, the Community Modeling review Committee (CMrC), and the UCACN Model Advisory Committee
- 28 June – NOAA Leadership discussed EPIC priorities at our face-to-face meeting held in DC
- 6 - 8 August – Three members (Colman, Petty, and Ramamurthy) participated in the August Workshop
- 3 September – Prepared the Report Letter for the SAB
- 9 September – EISWG co-chairs brief SAB

EISWG Strongly Endorses the EPIC Program

The EISWG feels EPIC is both timely, and critical, to the U.S. Earth-system modeling efforts and has the potential to bring incredible value to public and private stakeholders. As such, we strongly endorse the overall meeting summary recommendations as presented by Fred Carr, Jim Kinter, Cliff Mass, Peter Neilley, DaNa Carlis, and Brian Gross.

Recommendation 1

It is recommended that NOAA implement EPIC's governance structure and processes as soon as possible, with a focus on the managing institution, leadership team, and advisory boards, and providing the community clear statements of the EPIC vision, mission, and values.

Recommendation 2

It is recommended that NOAA work with the broader community to develop inclusive community engagement processes, and to anticipate and articulate the appropriate roles NOAA and other entities will play in EPIC.

Recommendation 3

It is recommended that early and direct efforts be made to welcome into the Unified Forecast System (UFS) research and development sandbox contributions from other dynamic cores, physical parameterization schemes, Earth-system observation strategies and data assimilation techniques (atmosphere and ocean) and models (e.g., MPAS, UKMO Unified Model).

Recommendation 4

It is recommended that NOAA initiate a multi-agency R&D partnership program into which NOAA and other agencies contribute significant multi-year resources.

Recommendation 5

It is recommended that NOAA organize its Cooperative Institutes that have existing capabilities in NWP and related areas into a nascent, distributed EPIC co-laboratory charged with quickly carrying out one or two narrowly focused R&D thrusts that have potential for near-term success.

Recommendation 6

It is recommended that NOAA immediately invest in and execute a Cloud implementation plan to promote community engagement and in support of research-to-operations.

Concluding comments

- The EPIC program offers great potential, yet delivering on that potential will not be easy
- Building trust and alignment across the broader enterprise will require a leadership team that is willing to work to remove obstacles and drive collaboration
- Success will require alignment around community priorities and a willingness across programs for individual sacrifice
- Early milestones and successes will be necessary to draw the broader community into the program; yet resources are sub-critical. Furthermore, the stability of long-term stable funding will be critical

Discussion
&
Decisions