Unified Forecast System - Steering Committee (UFS-SC) Meeting
20 April 2018
Telecon - 11:00 AM - 12:00 PM EDT

Attendees:

Ricky Rood (Co-Chair)    U. Michigan
Hendrik Tolman            NOAA NWS/OSTI
Whit Anderson             NOAA GFDL
Ligia Bernardet           CIRES; NOAA ESRL/GSD
Jeff Craven               NOAA NWS/MDL
Brian Gross               NOAA NWS/EMC
Tom Hamill                NOAA ESRL/PSD
Tara Jensen               NCAR RAL/JNT
John Michalakes           UCAR; NRL
Tim Schneider             NOAA NWS/OSTI
Ivanka Stajner            NOAA NWS/OSTI
Gerhard Theurich          Navy NRL/NESII
Yannick Tremolet          JCSDA
Mariana Vertenstein       NCAR CGD/CESM
Steve Warren              NOAA NWS/OSTI
Ming Xue                  U Oklahoma

Summary:

The proposed meeting agenda was to address the following topics/questions:

- Plan for engagement (activation) of the SIP Working Groups (WG)
- Periodic meetings with SIP WG Co-Chairs + UFS-SC Liaisons (Communications and Synthesis)
- Response(s) to previous meetings and synthesis activities
  - Graduate Student Test as a "project"
  - Discussion about the EMC release and comments in the presentation of working off of the VLAB repository
  - Progress in developing repository and related practices following previous meetings
- Role of UFS-SC in the Verification and Validation Workshop
- Short-term Communications Goals
  - Development of mailing lists
- Coordination across community
- NGGPS/UFS Portal / Aggregation Site

- Reporting up to NOAA management

Discussion of some additional items that have been posed:

- Is it appropriate to socialize the UFS Communications Team as the venue for information regarding UFS-related activities?
- Does the UFS itself have a website (vice the COG website for the SC)?
- What is the role of the NGGPS website in the UFS?

The meeting began with several general comments. The Strategic Implementation Planning (SIP) Infrastructure WG has spun off a subgroup which is making excellent progress on the repository management issue. The subgroup will have weekly meetings. The subgroup has shown interest in using a CESM externals management utility for management of repositories - see following link:

https://github.com/ESMCI/manage_externals

The subgroup felt an extension of this capability would be good and they are working to define desired repository structure (how granular and how organized).

The SIP Systems Architecture WG (SAWG) sent an email request prior to the meeting to the UFS-SC asking for review/feedback on the UFS definition previously presented to the UFS-SC. See following link to the draft definition:

https://tinyurl.com/ufs-def

The SAWG believes the UFS-SC is well-positioned to provide input on extending the definition to include things like a scientific scope, maybe the connection to the NCEP production suite, the role of testing in defining the system, and the role of governance and community in defining the system. **Action:** UFS-SC members will review/propose edits to the proposed UFS definition. There is an additional outstanding UFS-SC action to edit the short UFS definition, explicitly considering the issue of coupling.

With regard to last week’s EMC release of the FV3GFS, it was mentioned that Primary Investigators (PI) involved in the upcoming NGGPS project call would desire the more current FV3GFS code that would offer more potential to translate their efforts into operational feedback/incorporation (at the moment, that would mean working from the VLAB repository). Non-community access to the more current version/VLAB repository was thought to be problematic and a question was asked about associated issues in working from VLAB. It was
stated that the release via GITHUB was just a snapshot. A stated goal from EMC was to have everybody (community) working in GITHUB.COM and to have the VLAB reserved for the operational version. The current snapshot does not allow for feedback. Although it was recognized that a NGGPS project PI would need to be working currently in VLAB for the more capable model experience, questions over access and a distinction of working with the code vs providing feedback to the code remain. There was also a question of whether sufficient support can be offered via the GITHUB.COM access (vs working in VLAB). An example was given of porting of code by the Global Model Test Bed to Cheyenne. The version of this code for porting would need to be the VLAB version so the ported code would not become orphaned. There was an additional question regarding the degree of difference between the VLAB and GITHUB.COM versions. The need was recognized to get the full working version of the code into GITHUB.com. The desire was again stated for the VLAB version to be reserved for the operational system. It was stated that technical/political issues might arise if NGGPS project/call PI’s are restricted to use of the community model release (less current/non-operational version). **Action:** Brian Gross will work to clarify issues regarding FV3GFS code content (community vs operational versions; VLAB vs GITHUB), broader access issues for VLAB, feedback restrictions tied to GITHUB access use (and any plans/schedules to lessen restrictions), etc.

There was general understanding in the UFS-SC regarding why the public release is currently comprised of a snapshot, but there was also a stated need to manage community expectations regarding access to and use of the FV3GFS code. It was thought that the UFS-SC could have a role in motivating a proactive approach to addressing this issue.

The topic of engaging the SIP WGs was discussed. UFS-SC activities have proceeded to the point where scheduling an open UFS-SC meeting with the SIP WG Co-Chairs and UFS-SC Liaisons was thought to be needed. The UFS-SC Co-Chairs asked UFS-SC members for ideas on how to further engage the SIP WGs. A comment was made that it would be worthwhile to continue to schedule status and/or special topic briefings at upcoming UFS-SC meetings from SIP WGs. The SIP Verification and Validation WG is available in early May to provide a briefing to the UFS-SC. A comment was made that having a briefing on workflow would be beneficial, sooner rather than later. It was also noted that are a number of communication and outreach issues that need to be coordinated between the SIP Communications and Outreach WG and the UFS-SC. These include further discussion of the following posed items:

- Is it appropriate to socialize the UFS Communications Team as the venue for information regarding UFS-related activities?
- Does the UFS itself have a website (vice the COG website for the SC)?
- What is the role of the NGGPS website in the UFS?

It was noted that it would be useful for the UFS-SC to review various ongoing FV3GFS developmental activities. For example, it would be good to juxtapose the University of Oklahoma Center for Analysis and Prediction of Storms (CAPS) work on the FV3GFS with
related work at EMC. Related to this topic, Bill Lapenta had sent weblinks to a UFS-SC Co-Chair regarding verification efforts with FV3GFS. A comment was made that it would be good to share this information with the community as part of a broader communications effort. It also stated, however, that sharing of information such as this in general requires cooperation and concurrence with EMC and OSTI (a general communications issue).

A statement was made that there is a general need to communicate UFS / FV3GFS and related activities to the community more coherently. The recent FV3GFS public release represents a subset of what will be released in the future. It was noted that there is a need to promote an arena for testing and that the UFS was the thing to market. A previous UFS-SC briefing on the SIP Communications and Outreach Plan was noted. A UFS web capability is a high priority within the proposed plan (a related scoping exercise is underway which includes consideration of projected cost). A proposed strawman for the UFS Web Landscape was shared - see following link:

https://docs.google.com/presentation/d/1c_n8Z1tSv0hjukCDglwBf58rXdRgX574aEGsw0qvc3M/edit?usp=sharing

A brainstorming session had been conducted previously on the potential web architecture.

There was discussion on whether an existing capability/website could be used as an interim solution. A thought was offered that various website links (EMC page, verification links, etc) and applicable briefings such as those from the NGGPS bi-weekly meetings could be organized within COG so all applicable pieces/resources could be found in one place. Comments were made that the EMC website should not be used as the central site for this and that the EMC/NWS operational piece is just a subset of the UFS. There was general agreement on the need for a UFS website and on the usefulness of an interim aggregated site, say in COG. The aggregated site could have links to the subset, such as the public release (just a link on the UFS website – as a subset of UFS).

The proposed strawman for the UFS Web Landscape was discussed further (see above link). The term poly-synchronous was meant to be the opposite of synchronous. The UFS is displayed as the main portal – cross-pollinated with NWS EMC and OSTI webpages. The intent is to have a wiki-like engagement environment. All pages in the proposed landscape are linked and coordinated. An interim vehicle/portal, as previously discussed, could use COG with aggregation of sites. This capability could be advertised as an early start on a longer-term vision. **Action:** Tim Schneider (Co-Chair of the SIP Communications and Outreach WG) will coordinate a draft of a COG-based interim UFS portal, along with identifying potential information, URL’s, etc that can be used in the aggregated site. It was noted that some desired sites may have other protected information requiring login-only access.

Next week’s UFS-SC meeting agenda will include a briefing on proposed CCPP Governance from Ligia Bernardet of the Global Model Test Bed. The following week’s agenda will include a
briefing from Tim Schneider on Subseasonal to Seasonal (S2S) plans/activities. A briefing is also scheduled for a later UFS-SC meeting on Verification and Validation (and potential associated implications for the UFS). The topic of workflow and other SIP WG activities are being considered as topics for May UFS-SC meetings.