2022-12-15

Infrastructure (update by Dom Heinzeller):

- spack stack installations on different platforms for release v3
- R2D2 mysql progress (Eric and Tariq). The team will communicate the plans for migration in the new year
- Steve H: work in progress on the ioda memory issue

Algorithms (update by Anna Shlyaeva):

- New capabilities in the ewok suites: single suite for deterministic Var + EDA; hybrid covariances; different inner/outer loop resolutions; more plotting capabilities
- Update to BUMP configuration keys: https://github.com/JCSDA-internal/saber/pull/389. All applications that use BUMP would need to adapt their yamls (script available for this). **Anticipated merge date: January 5, 2023.**

Compo (update by Jerome Barre)

- Skylab release: aerosol DA working with gocart using gfs backgrounds. 3DVar configuration tuned over last week, focusing on B. Refined NICAS training and convergence is much better than in the initial experiments. Convergence also became better with less observations (initial experiments were using high res sensors compared to background). Also working on EDA configuration (3 members as a proof of concept, not using the ensembles yet).
- Maryam is presenting at AGU on Friday
- Shih-Wei added the tropomi CO converter and tests in UFO

Observations (update by Hui Shao)

- Reviews and merges in UFO. Note: for all PRs merged in develop there may need to be impact once the observation-convention branches are merged with develop.
- Using Skylab to test different observation data. Making sure configurations including QC and BC have reasonable scientific results
- Changes for obs convention will be merged on January 17 2023. **Branches updating test observation files and test yamls in the model interface repositories need to be prepared before the merge date of January 17, 2023.** A mini-code sprint for assisting with this changes will be in the beginning of January (contact Greg and Anna to participate). See more information and subscribe to updates in https://github.com/orgs /JCSDA-internal/teams/jedi-models/discussions/91.

CRTM (update by Cheng Dang)

- Working on merging updates for v2.4.1 into v3.
- Patrick has been working on the coefficient generation
- Preparation for AMS