About models code development and validation.

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Outline

Following the Toulouse *strategy meeting* (System task team) :
⇒ redaction of a proposal of new working practices for the collaboration on the
models code development, under progress :

Proposal

- **_Git_ project** : Content, structure of branches, repositories, accessibility

- Continuous **_integration procedure_** for Development releases

- **_Common cycles_** with ECMWF : smooth the process (Git, cross-tests)

- **_Validation System_** : Davaï, portability

- Git-and-around **_development platform_** (GitLab, Redmine, ...) : prototype to come, but : *cloud-based ? MF-hosted (cf. Surfex) ? ... ?*

Status of Davaï

- *State-of-the-art* experiments exist in SWAPP/Olive for **CY46T1** and **CY47T1**, including much of the tests for DA (ARPEGE/AROME). + "model" tests under progress

- *Ciboulaï* dashboard has gained in maturity ; the reporting from the tasks works properly ; most experts have been developed.

- A reference experiment and results will be established on **CY48**, and the use of Davaï will be **strongly recommended** for contributions to **CY48T1**.

- Access to SWAPP/Olive and *Ciboulaï* through firewall (*"Parme"*) ⇒ technically OK

- *Davaï* already helped the validation of DA in CY47T1 :
  - 3 bugs in adjoint of CONV observation operators : Z, T, U
  - issue in adjoint of MW obs-op in LAM in CY46T1 (not solved yet, but OK in CY47T1)
  - bug in GPSSOL screening

Collab. E.Arbogast, T.Montmerle, R.Stappers, P.Moll, F.Suzat

Thank you for your attention !