



# OBCSW sub-team

Mid-semester Meeting Presentation



Planned Done Backlog  
In Progress (\*) : critical to the integration schedule

## Planned, In Progress & Completed tasks/subtasks

STATUS AT THE TIME OF THE  
END-OF-SEMESTER MEETING

### Experiment tasks

- Nanoprop(\*):
  - Read gyro values
  - Manual abort
  - Abort based on gyro readings
  - Delays for Nanoprop API
  - FDIR review
  - uint8 datatype fix
  - FDIR test methods
  - TM/TC
  - HK
  - Testing NanoProp & gyro code on simulators
  - NanoProp automatic heater usage for the thermal tests
- SEUD/Camera(\*):
  - Rebase the old SEUD branch
  - Apply the changes of the students from the old project course
  - Update simulator code
  - Write unit tests
- Unit test coverage report generation for the OBCSW code
- Elveti real time HK visualization
- Add more TM queues
- LEGS & CUBES tests(\*)
  - Collaboration on CUBES integration with Thedi
- Initialization phase FDIR(\*):
  - Automatic I2C speed adjustments
- Add new TM sources in accordance with M154\_035(\*):
  - Add parts of the ADCS library HK to the basic HK beacon

- Add/remove exectime for TCs
- Define authenticated/troubleshooting TCs
- Separate HK interval for realtime/stored
- TM\_S160\_ADCS\_LIB\_HK to realtime HK
- Be less dependent on SD card(\*)
- Strange macro TC bug (manual memory allocation/bit rotate bug)
- Elveti module improvements

### Misc:

- Integration of MIB repo into OBCSW repo
- Open sourcing OBCSW repo
- Onboarding of new students after the mid-semester meeting
- General improvements to the build process



- Planned
- Done
- Backlog
- In Progress
- (\*): critical to the integration schedule

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# Status updates regarding the experiments

- SEUD:
  - Received a draft report from the students
  - Requested small changes regarding MSP addressing
  - Next steps: Refactoring of SEUD interface code based on the student's report
- CUBES:
  - Thedi & William are in close cooperation, work in progress
- Nanoprop:
  - Ozan is working on refactoring and integrating Niklas' code into the OBCSW



# Commits added since end-of-semester meeting

- **071e424 feat: reset bootcount as the last thing in the initialization task**
- **f4631c9** Add git hooks for generating version file
- **0684279** Make CUBES TC scripts more human-friendly
- **6d10617** More misc fixes
- **ccf256e Lower I2C clock frequency to 100 kHz**
- **ce7b8f3** Misc FT command fixes
- **ef88d80** Remove XTEST
- **3376c73** Shrink docker images and publish them to docker hub
- **a563455** Fix setup.sh
- **5264d99** Resolve "Misc issues encountered during office day"
- **c324fc8** Add git instructions for building the MCS files
- **5dc71f2** fix: minor bug fixes related to docker files
- **db9a632** Reduce error log spam and increase fault tolerance
- **fb35e30** Persistent storage for Arduino sims in Ftcmd/OBCSW S-I-L mode



Thank you!  
Any questions?