

Short summary

- The following slides outlines required reporting on remaining WP2 effort and possible requests for support from CINECA. It also summarizes updated and planned work, including new performance-portability campaigns, pending improvements from Task T2.3, code-porting activities, and the integration of TALP into performance-monitoring workflows. Additional updates cover ongoing and planned TALP development and its porting to different GPU architectures.



HySEA codes updates

- **Updated results (if any)**
 - **T2.2**
 - The *clang-tidy* checking tool (WP4) has been applied to the mini-app (CUDA and SYCL versions) to improve and modernize the codes.
 - New feature to deal with periodic borders.
 - New versions of the mini-app have been uploaded to GitHub.



HySEA codes updates to come

- **Planned updates (if any)**

- **T2.3**

- The strong scaling achieved in the second audit was very good (91.2 % efficiency using 64 GPUs).
 - All the obtained metrics were greater than or equal to 0.87.
 - The POP analyst recommended to test the use of CUDA Graphs (very small kernels are running in sequence).
 - We would have to request a benchmark project on Leonardo to test the use of CUDA Graphs and apply TALP to Tsunami-HySEA.

