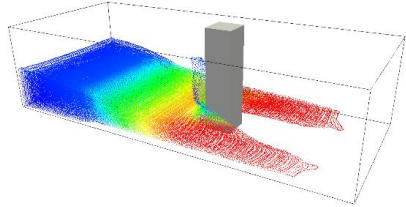
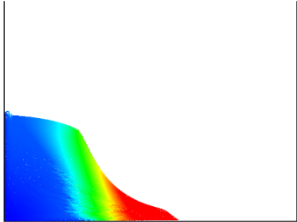
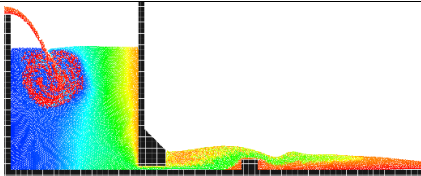
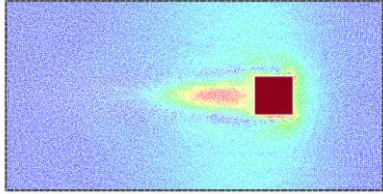
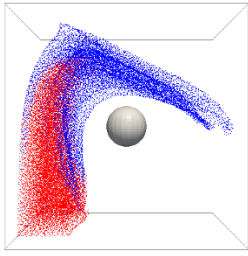
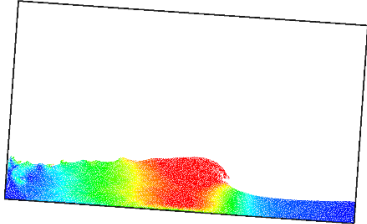
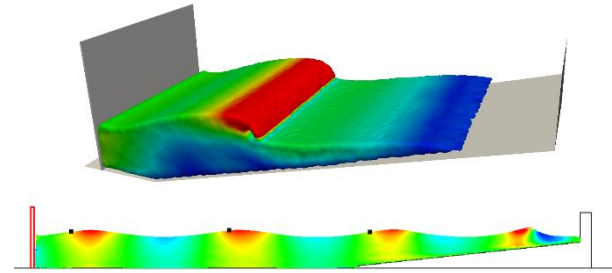


RUN DIRECTORY:

<p>1_CASEDAMBREAK</p> <ul style="list-style-type: none">• 3-D dam break flow impacting on a structure: numerical velocity, pressure and force are computed.• 2-D dam break and validation data from [Koshizuka and Oka, 1996] experiment.	 
<p>2_CASEPERIODICITY</p> <ul style="list-style-type: none">• 2-D case with Periodicity in X direction.• Delta-SPH is also used.	
<p>3_CASEMOVINGSQUARE</p> <ul style="list-style-type: none">• 2-D case with square that moves with rectilinear movement.• Example of no gravity so parameter “b” needs to be specified by the user.• Shifting is used for this internal flow (no need to detect free surface).	
<p>4_CASEFORCES</p> <ul style="list-style-type: none">• External acceleration is loaded from a file and applied to two different volumes of fluid.• Delta-SPH is also used.	
<p>5_CASESLOSHING</p> <ul style="list-style-type: none">• 2-D sloshing tank that reads external acceleration from a file.• The same 2-D tank but reads the rotational movement of the tank itself from a file.• Validation with SPHERIC Benchmark #10 where pressure is computed.	

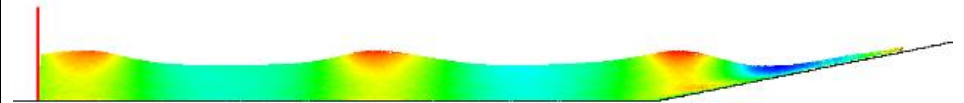
6_CASEWAVEMAKER

- 3-D tank with Periodicity in Y direction and piston with sinusoidal movement. Delta-SPH and Shifting are used.
- 2-D tank with piston motion loaded from external file and external structure (STL). Validation data from CIEMito experiment: numerical computation of wave surface elevation and force exerted onto the wall.



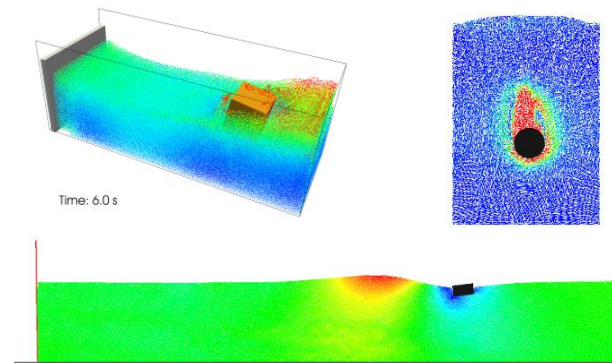
7_CASEWAVEGENERATION

- 2-D automatic generation of regular waves (H, T, d) and comparison with wave theory.
- 2-D automatic generation of irregular waves (H_s, T_p, d) and comparison with wave theory.



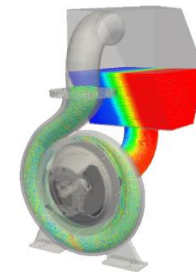
8_CASEFLOATING

- 3-D floating box in a wave tank with Periodicity in Y direction and piston with sinusoidal movement. Delta-SPH is used.
- 2-D floating box under action of non-linear waves in a tank with flap that reads rotational motion from an external file and uses laminar+SPS viscosity. Validation data from [Hadzic et al., 2005].
- 2-D falling sphere that uses laminar+SPS viscosity. Validation data from [Fekken, 2004] and [Moyo and Greenhow, 2000].



9_CASEPUMP

- 3-D external geometries are imported (STL) and rotational movement is imposed.



10_CASEDEM

- 2-D case only with DEM of a ball that impacts with blocks. Example without fluid particles.
- 3-D dam break and blocks where interaction between blocks and with walls used DEM and properties of materials. Delta-SPH is also used.

