UGRID update

Bert Jagers

2017 NetCDF-CF workshop 6-8 September, Boulder, CO

UGRID 1.0

- Stable for 2D/3D models
 - Some discussions about "periodic grids" solved using existing conventions.
- Increasing uptake worldwide
 - Uni Hamburg: UGRID reader for Paraview
 - QGIS: Crayfish plugin to visualize (2D) UGRID results
 - ESRI: Contact with Nawajish Noman (Feb 2) about "native" support for UGRID ... no concrete followup yet

Next steps

- Splitting river geometry (curvature of 1D "river" space) and mesh (space discretisation)
 - Basic 1D network of confluences and bifurcation (standard UGRID plus edge_geometry attribute pointing to item 2.)
 - 2. Branch geometry (stored as "simple geometries")
 - 3. 1D mesh (UGRID again with coordinate_space attribute pointing to item 1.)
- Connectivity between meshes (e.g. 1D-2D contact regions)

At Deltares we're currently implementing these in code to be used by clients ... to be submitted as formal extension proposal to UGRID shortly.