ODYSSEA WP4 workshop on Delft-FEWs, AQUASAFE & Delft3D modelling suite

Foundation for Research and Technology-Hellas, Heraklion, Crete, Greece 5-9 March 2018

The workshop has been hosted at FORTH (http://www.forth.gr/ Heraklion, Crete, Greece), and has been co-organised by Deltares and FORTH. *The main aim of the workshop was training technical staff of the 9 ODYSSEA Observatories on the set-up of FEWS and AQUASAFE platforms, which are the local platforms to be used at the observatories for modelling purposes (within WP4) and running of operational hydrodynamic models for the Observatories.*

The targeted audience of the course was: Observatories technical staff/Observatories managers. who will (eventually) be responsible for running the modelling module of the local platform.

Desirable background and technical skills for Observatories personnel joining the workshop:

Most appropriate Background: Oceanographers/physicists/(civil) engineers, (preferably with an understanding of processes in the marine environment).

Skills: basic knowledge and understanding of numerical modelling (and eager to learn).

What did we expect to achieve in the workshop?

The participants should leave the workshop having an understanding of models set up and operation, i.e. processes described by the models, input files required and how to create them, output files produced and visualization, FEWS platform operation, AQUASAFE platform operation.

The pedagogic approach used comprises of 10 % of lectures, 90 % Tutorial and practical works (see agenda below).

Agenda March 5, 2018: Introduction to FEWS (Dave De Koning, Deltares)

Timing	Topic
08:30 - 09:00	Registration
09:00 – 11:00	▪ Introduction to Delft-FEWS ▪ Importing data
11:00 - 11:30	Coffee break

11:30 - 13:00	▪ Basic Delft-FEWS concepts
	    o Time series (sets)
	    o Locations and parameters
	▪ Working with XML files

13:00 - 14:00	Lunch break

14:00 – 16:00	■ Workflows (running tasks and models in Delft-FEWS) ■ Transformations (modifying/converting data: extrapolation, interpolation, defaults)

Agenda March 6, 2018: Introduction to FEWS and Delft3D (Dave De Koning, Deltares)

Timing	Topic
08:30 – 11:00	■ Step by step creation of Delft-FEWS workflows o Importing data (satellite, GFS, observations, your own data) o Setting up a Delft-FEWS transformation (conversion of data) o Let Delft-FEWS guide you in your workflow o Visualisation of the data (1D, 2D)
11:00 - 11:30	Coffee break
11:30 - 13:00	■ Delft Dashboard o How to prepare the grid o How to create the bathymetry o Set up boundary conditions o Create your own model
13:00 - 14:00	Lunch break
14:00 – 16:00	■ Delft3D o How to run o How to inspect the data (quickplot) o Step by step through model files o Cold state files (model restart files)

Agenda March 7, 2018: Implementation of a Delft3D model (Dave De Koning, Deltares)

Timing	Topic
08:30 – 11:00	■ Step by step implementation of a Delft3D model o Implement the model to another area
11:00 - 11:30	Coffee break
11:30 - 13:00	■ Step by step implementation of a Delft3D model (cont'd) o Implement the model to another area
13:00 - 14:00	Lunch break
14:00 – 16:00	■ Step by step implementation of a Delft3D model (cont'd) o Implement the model to another area

Agenda March 8, 2018: Implementation of your Delft3D model (Dave De Koning, Deltares)

Timing	Topic
08:30 – 11:00	■ Step by step implementation of your Delft3D model o Implement the model to your own area
11:00 - 11:30	Coffee break
11:30 - 13:00	■ Step by step implementation of your Delft3D model (cont'd) o Implement the model to your own area
13:00 - 14:00	Lunch break
14:00 – 16:00	■ Step by step implementation of your Delft3D model (cont'd) o Implement the model to your own area

Agenda March 9, 2018: Introduction to AQUASAFE and Delft3D (De. Pedro Galvao & Dr. Joao Rodriguez, Hidromod)

Timing	Topic
08:30 – 11:00	■ Presentation/Implementation of AQUASAFE
11:00 - 11:30	Coffee break
11:30 - 13:00	■ Presentation/Implementation of AQUASAFE (cont'd)
13:00 - 14:00	Lunch break
14:00 – 16:00	■ Presentation/Implementation of AQUASAFE (cont'd)
16:00 – 16:30	Wrap Up workshop