

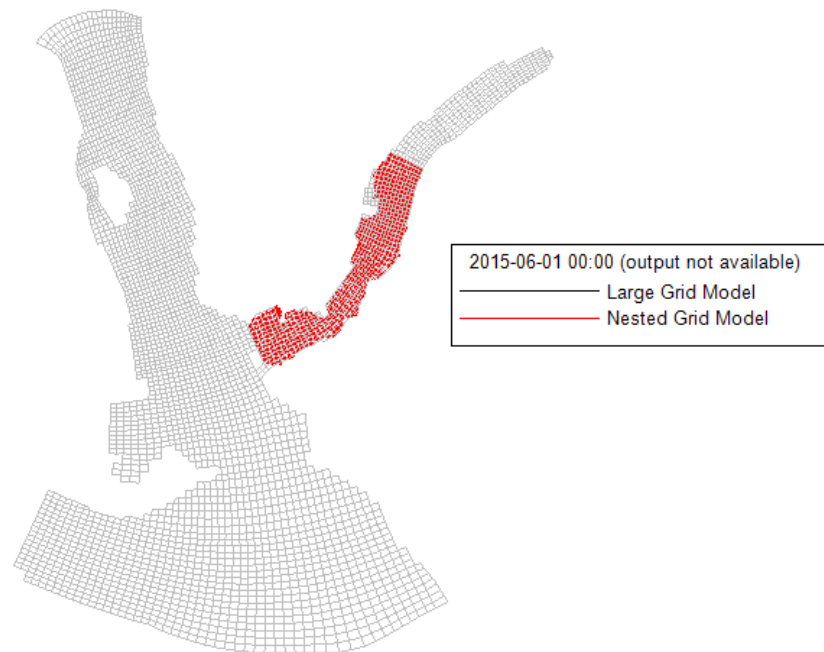
Read Me:

Model Name: DM-23_Caloosahatchee_Nesting_(EE10)

Objective: Use EFDC+ Explorer (EE) and EFDC+ to simulate hydrodynamics, salinity, temperature in the Caloosahatchee Estuary. Use model nesting to simulate in more detail a specific region using a finer grid.

Model Grid: 4,002 horizontal grid cells and 1 vertical layer in the coarse model; 3,366 horizontal grid cells and 1 vertical layer in the nested model

EFDC+ Demonstration



Click mouse to get grid cell information

418320.30, 2946178.67

Figure 1 Model Domain of DM-23_ Caloosahatchee_River.

Folder Structure:

Data: This folder contains data that can be used with the model. These data can be measured data or output from model or derived from analytical equations.

Model: EFDC models that can be loaded in EE to pre- and post-process.

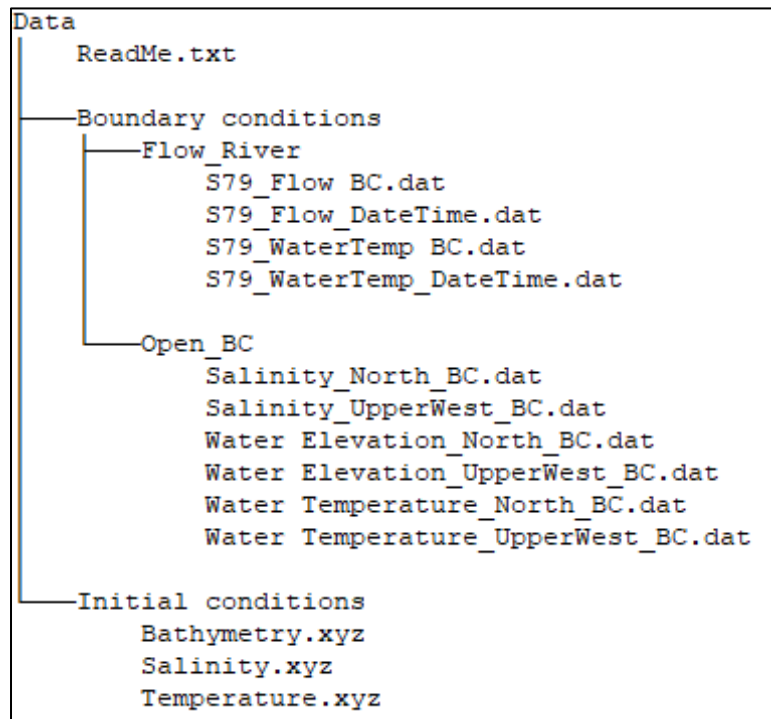
Grid: This folder contains grid that can be used with the model.

Test_record file: This file is just a record file that informs which EFDC+ executable was used to run the model.

Modules Activated: Hydrodynamics, salinity, temperature.

Description: The steps to build this model are provided in this [video](#). The coarse grid model is built first and bathymetry can be updated using the Online Download Data tool to fill in missing data. After running and obtaining output from the coarse model, the nested model from a refined grid is used.

Disclaimer: The model is provided to our users to demonstrate that EFDC_Explorer and EFDC+ can be used to better understand how to build this kind of model. The model is running as expected; however, shouldn't be considered final as the model can be modified / refined to obtain improved results.

Files in Data Folder:

Model Results:

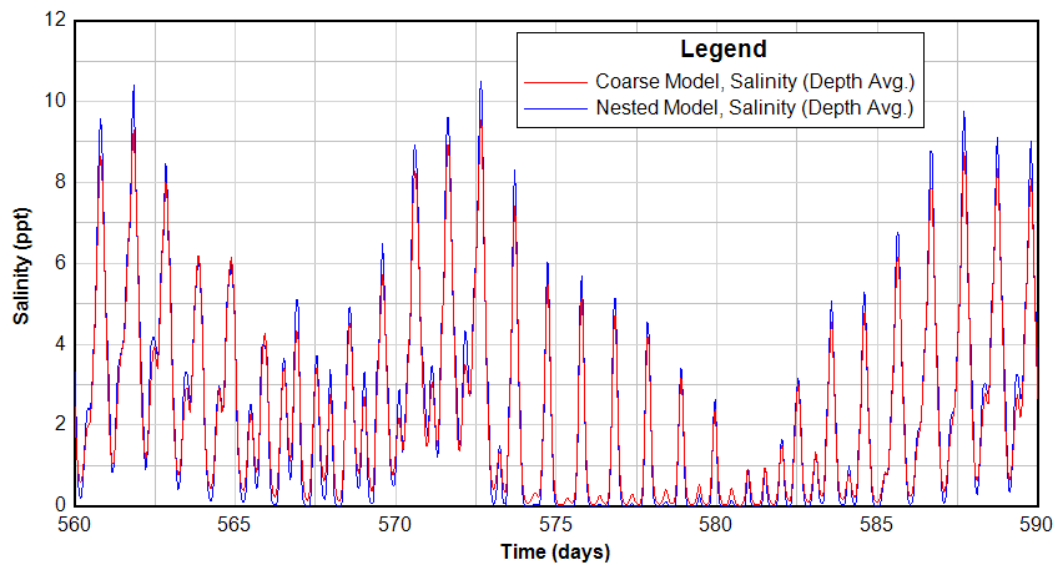


Figure 2 Comparison of salinity from the large and nested models at same location.

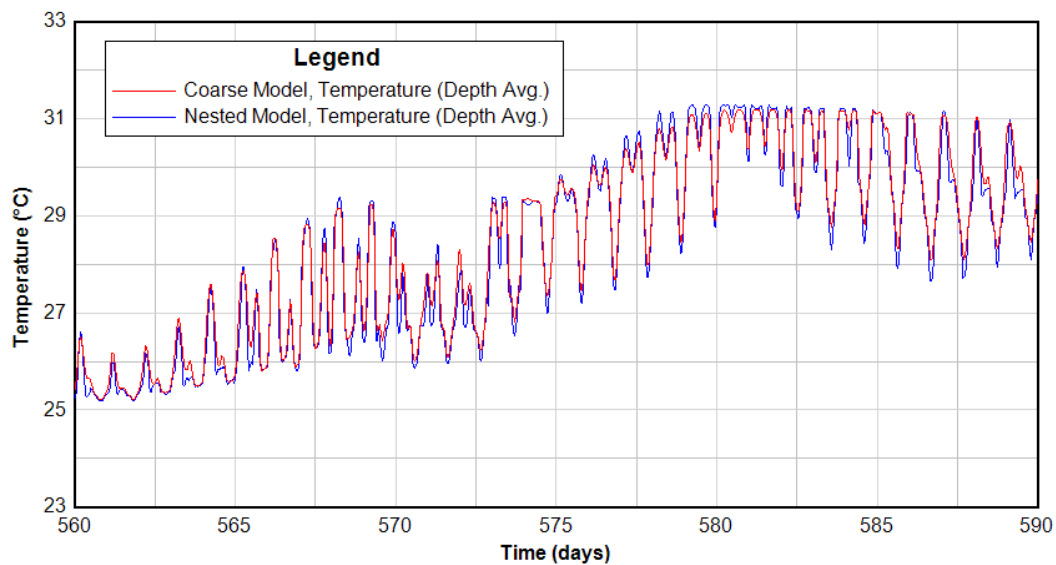


Figure 3 Comparison of water temperature from the large and nested models at same location.