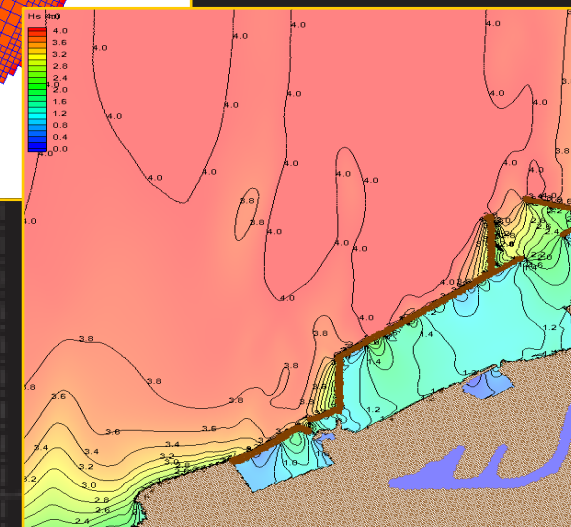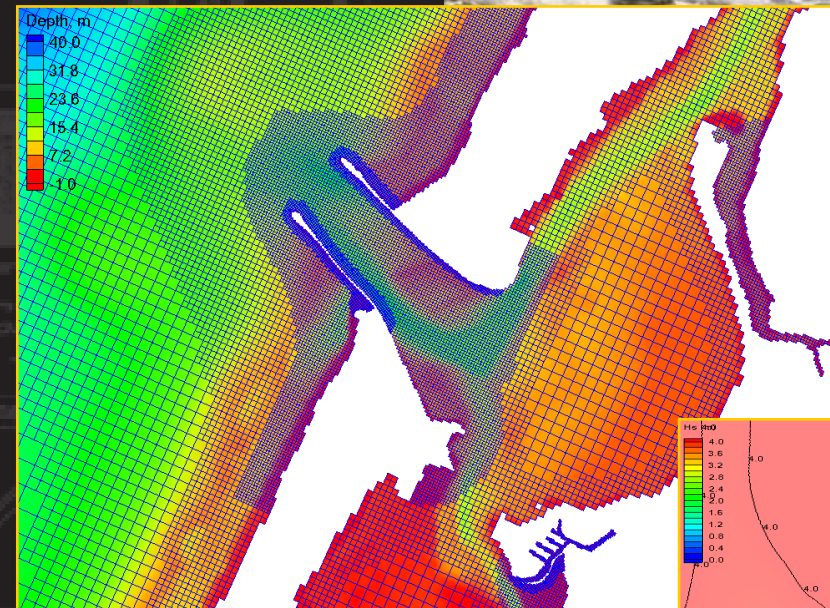# VIEWING AND POST-PROCESSING RESULTS

Mitchell Brown
Liz Holzenthal
Honghai Li

Coastal & Hydraulics Laboratory
US Army Engineer Research and Development
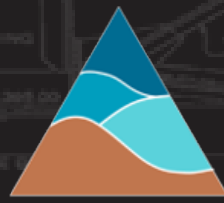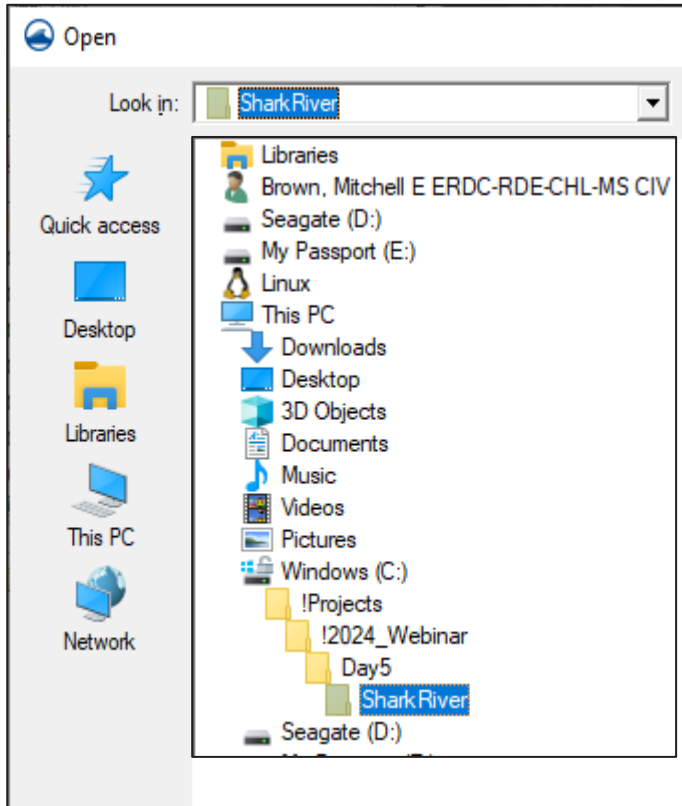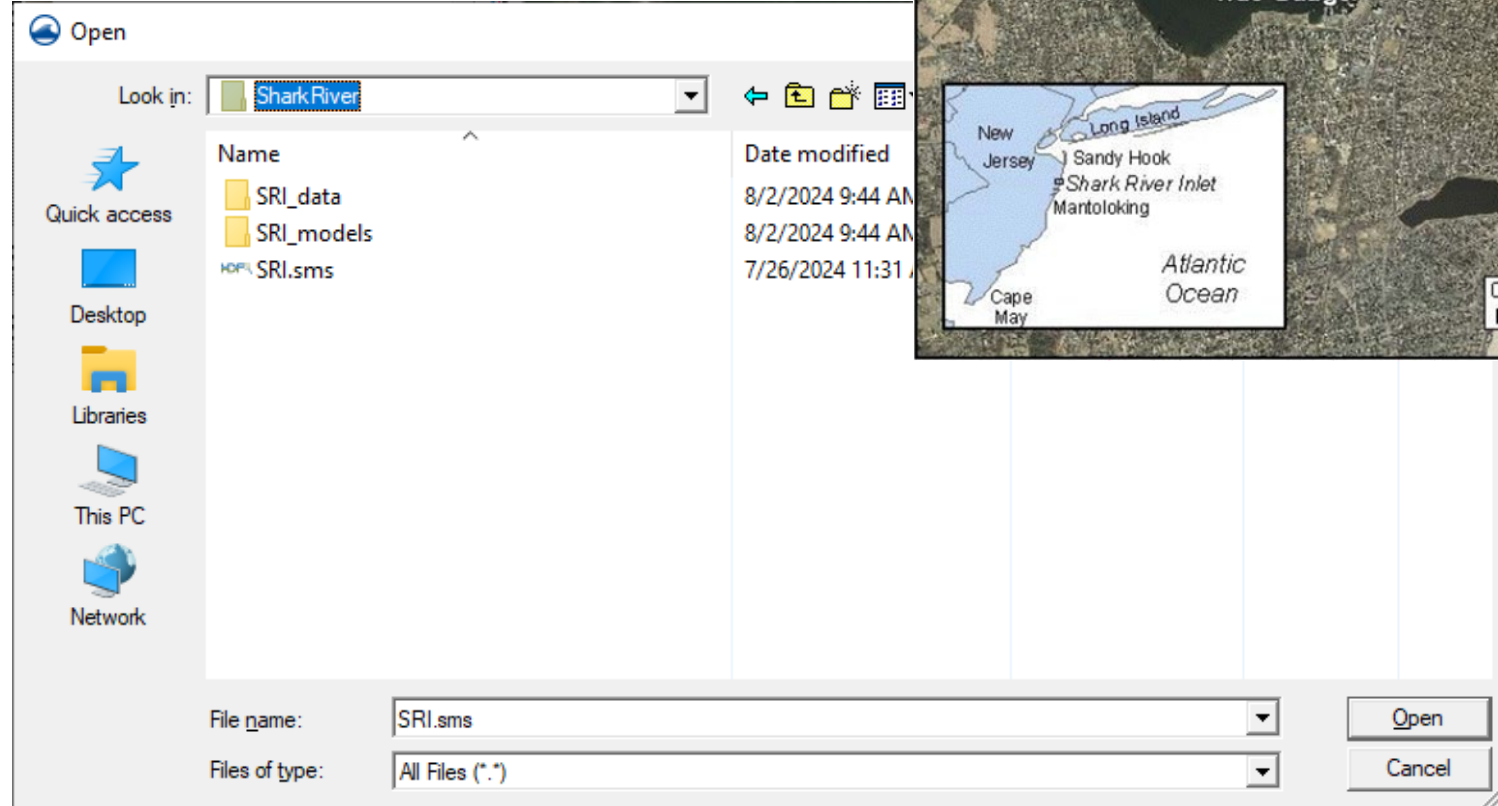Center (ERDC)

Load Project

Model Solution

– *Import Project (*.sms)*

1

2

Time Series – Water Surface Elevation Solution

Model Solution

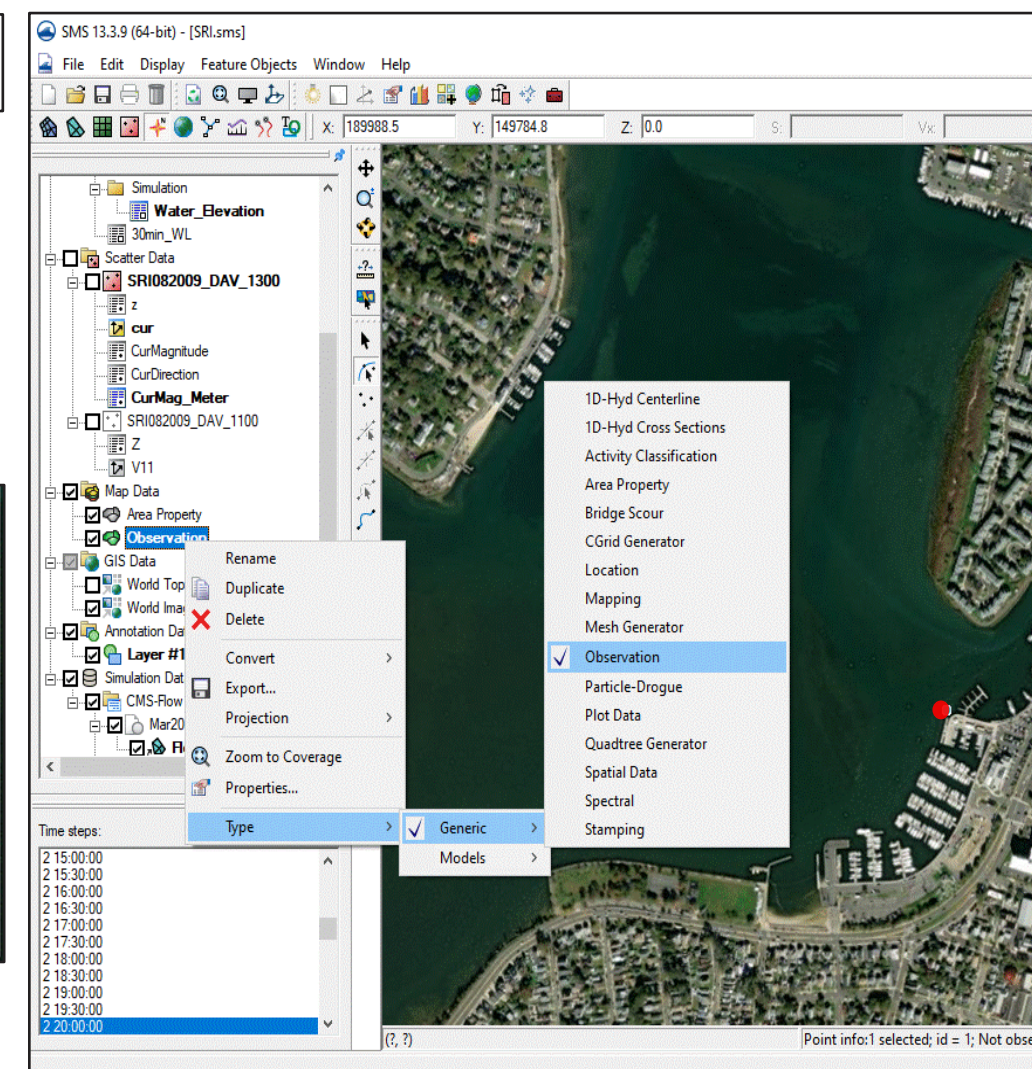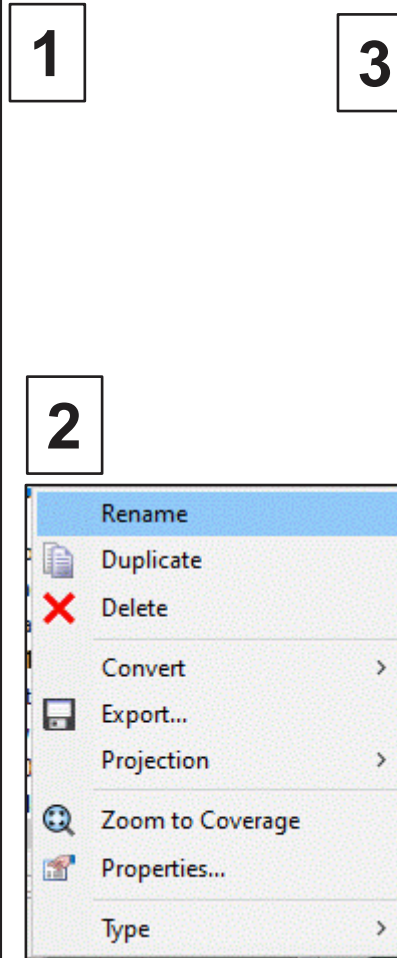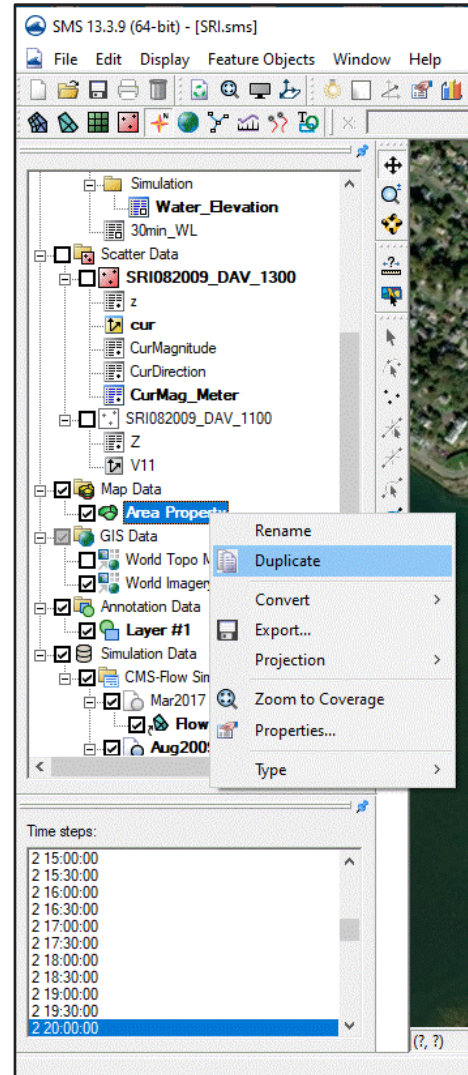– *Import Datasets (*_wse.h5)*

Time Series – Water Surface Elevation
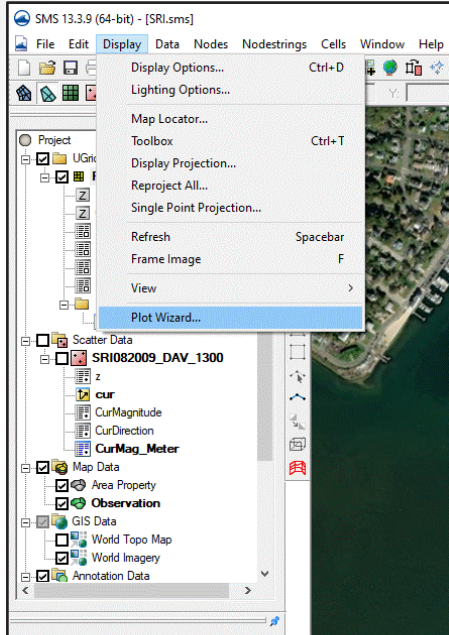
Model Solution

– *Generate an observation feature point at the location of tide gauge*

– *Assign the point attribute as "observation"*

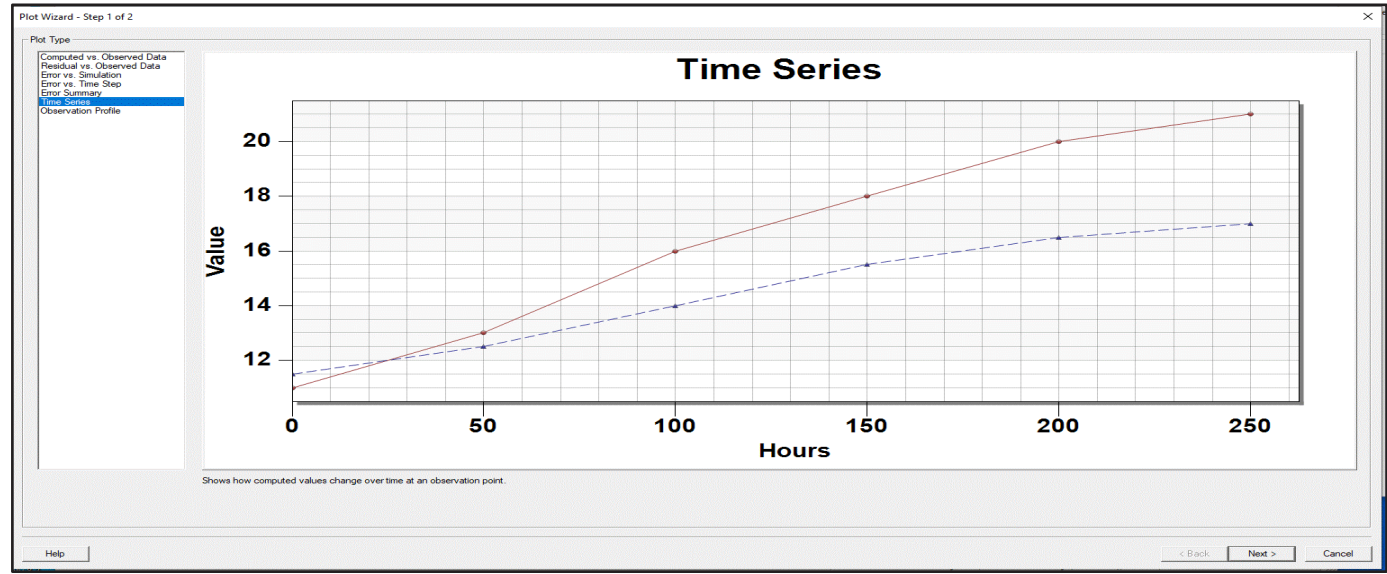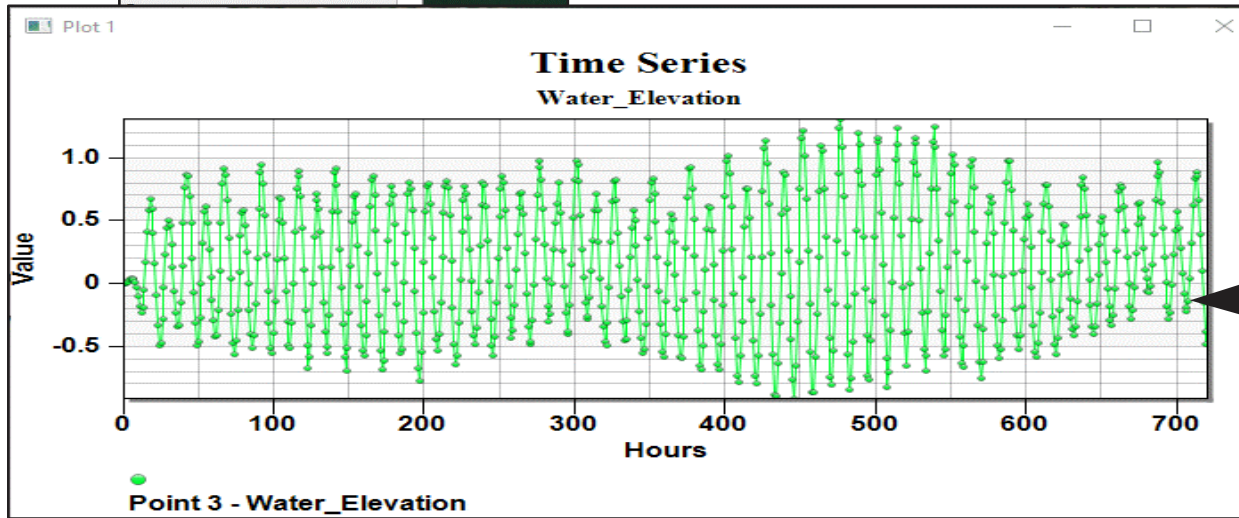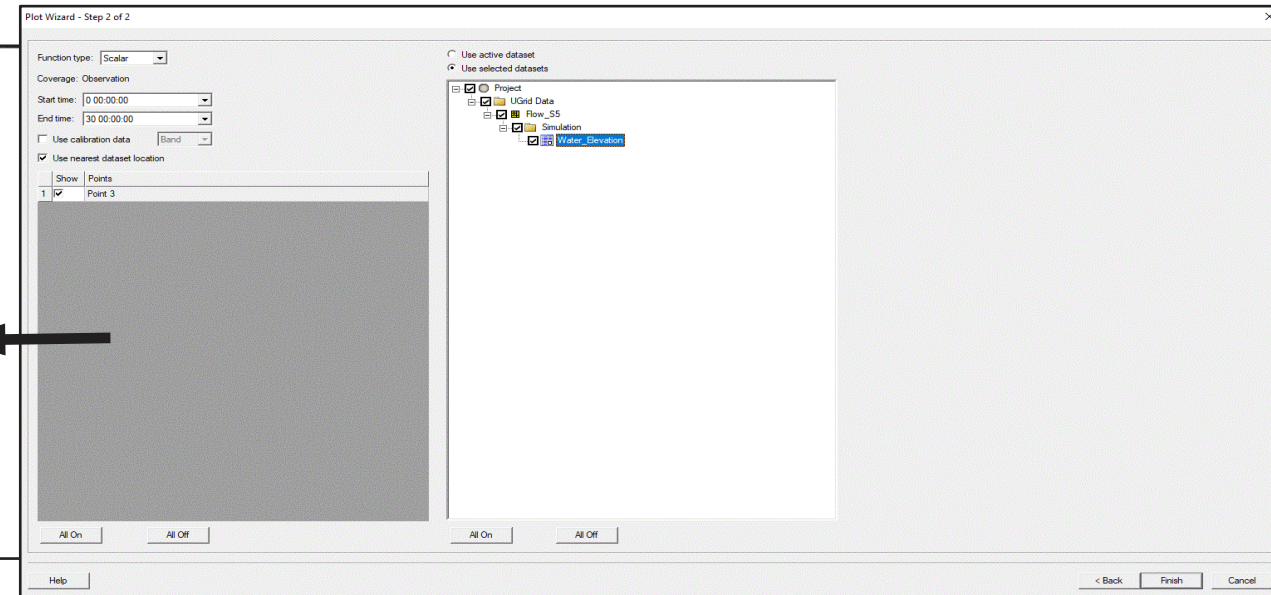# Time Series – Water Surface Elevation

Time Series – Water Surface Elevation

Model Solution

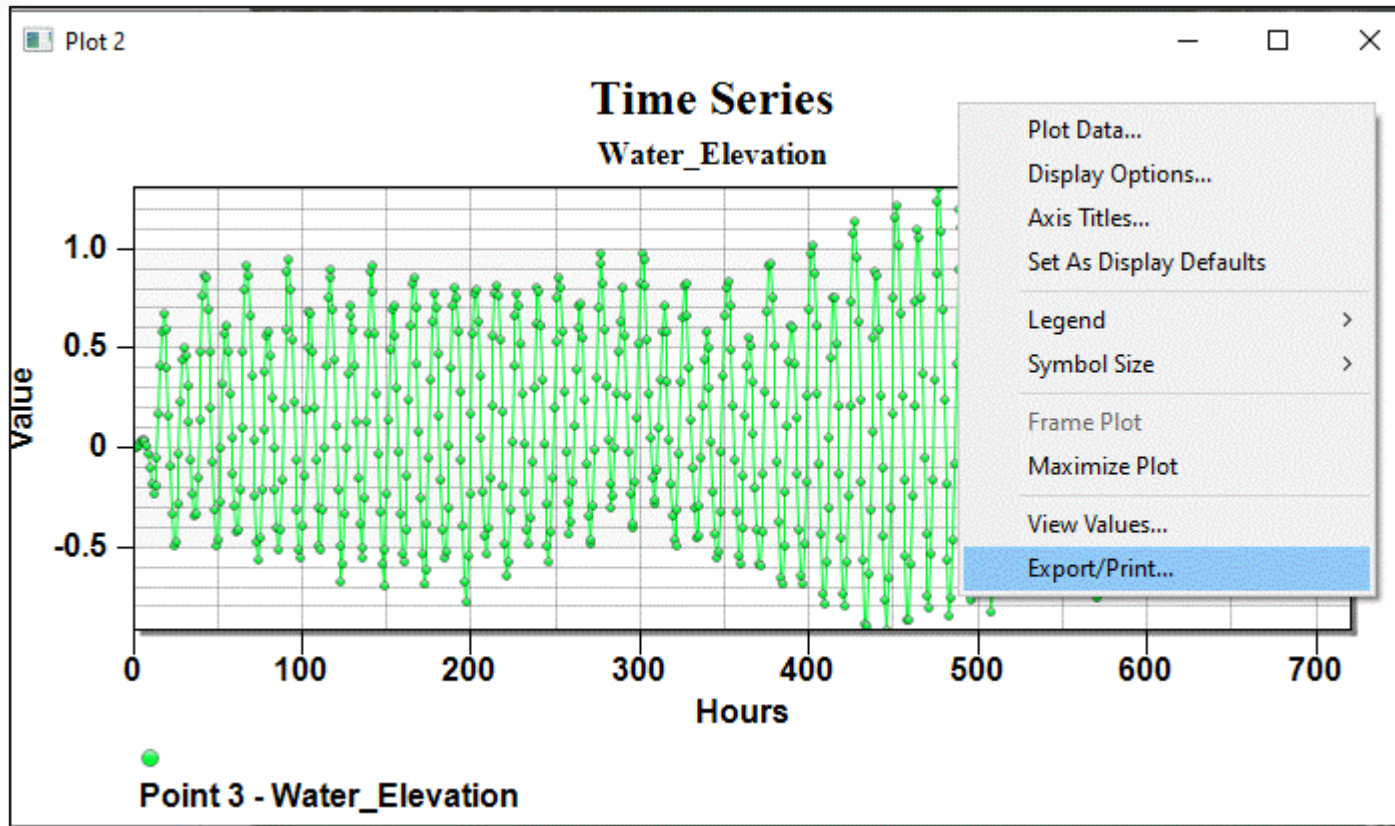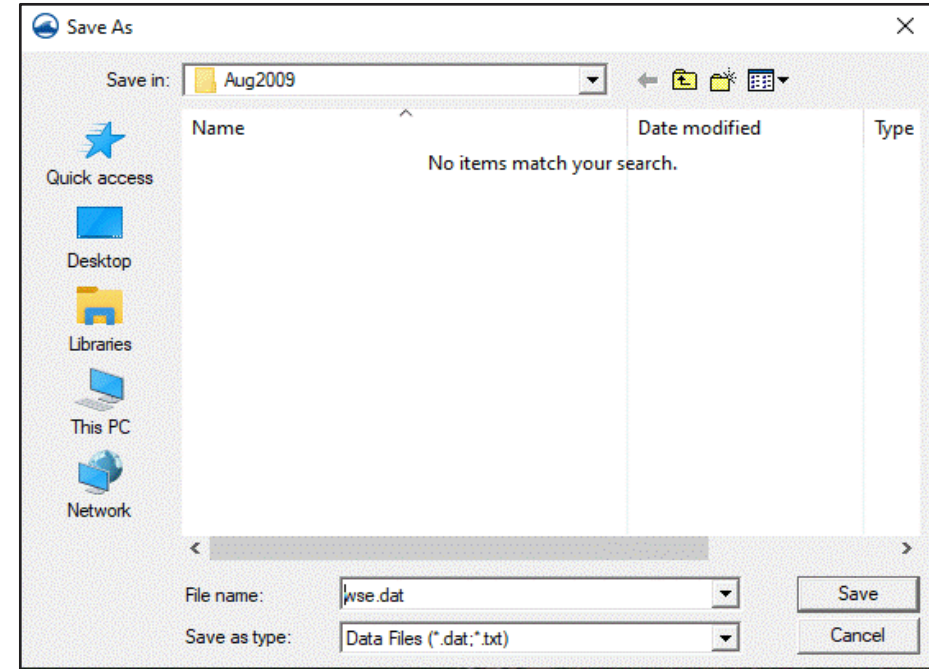– *Extract the raw data values from the plot*

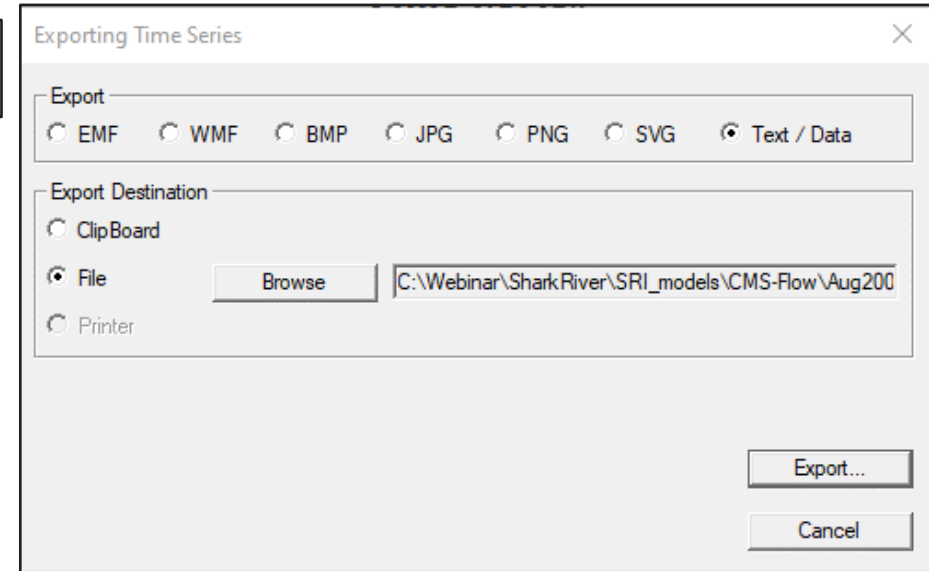# Time Series – Water Surface Elevation

Model Solution

– *Extract the raw data values from the plot*

Time Series – Water Surface Elevation

Model Solution

– *Extract the raw data values from the plot*

– *View the calculated data values*

– *The data are presented in a table that can be highlighted and copied to another program.*

Time Series – Water Surface Elevation

Measurements

– *Import water surface elevation measurements*

– *Compared the calculated water surface elevation with the measured data at the tide gauge*

Time Series – Water Surface Elevation

Measurements

– *Import water surface elevation measurements*

– *Compared the calculated water surface elevation with the measured data at the tide gauge*

10

Time Series – Water Surface Elevation

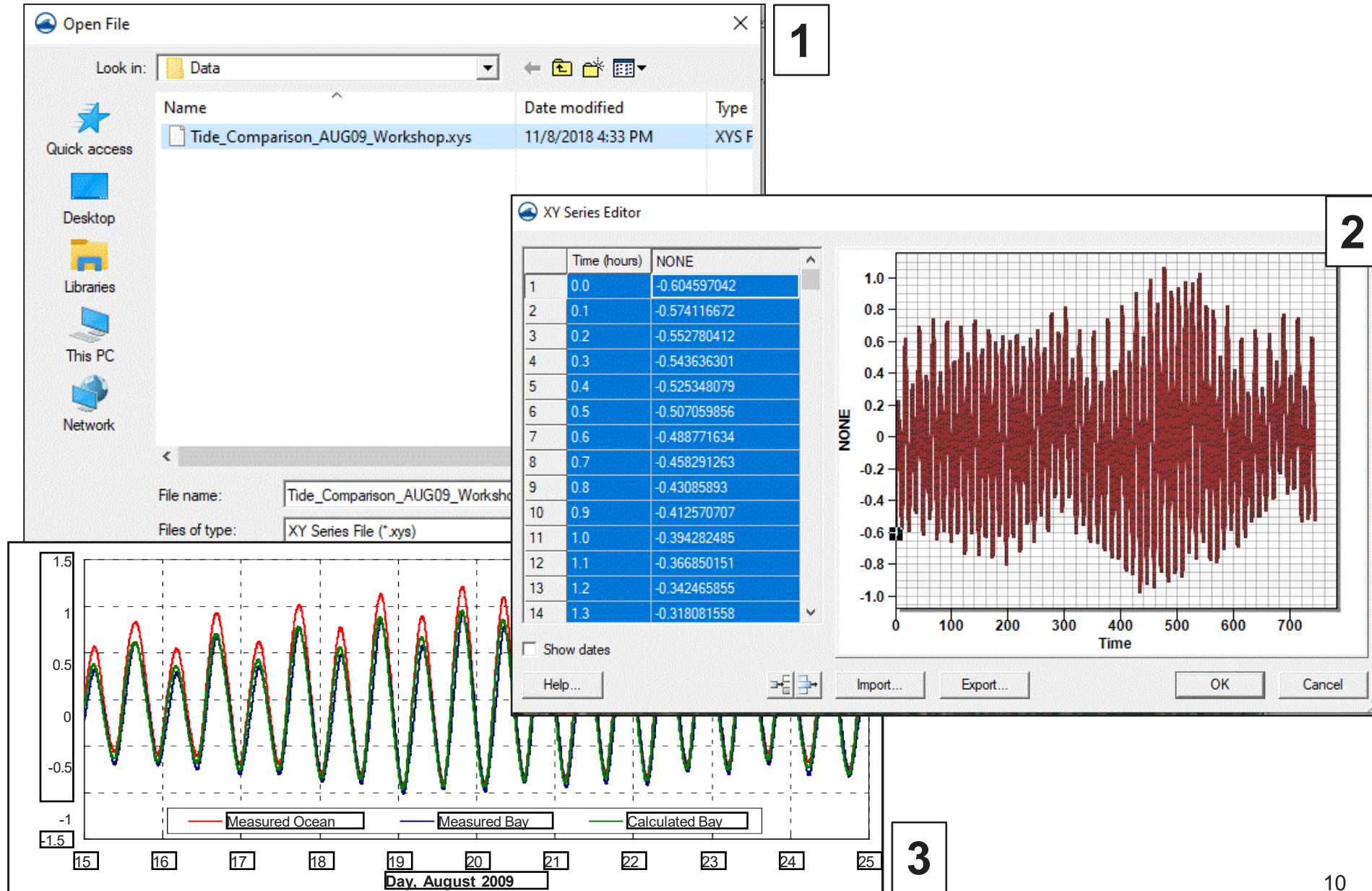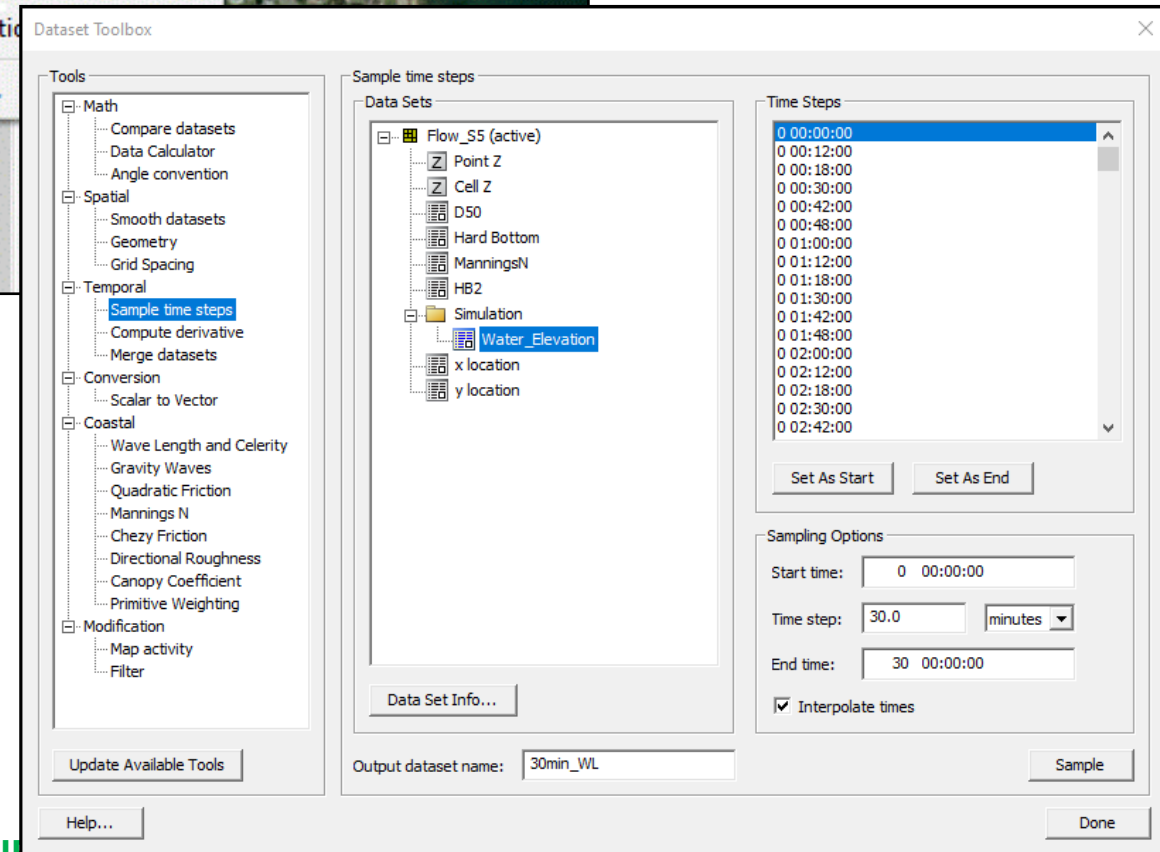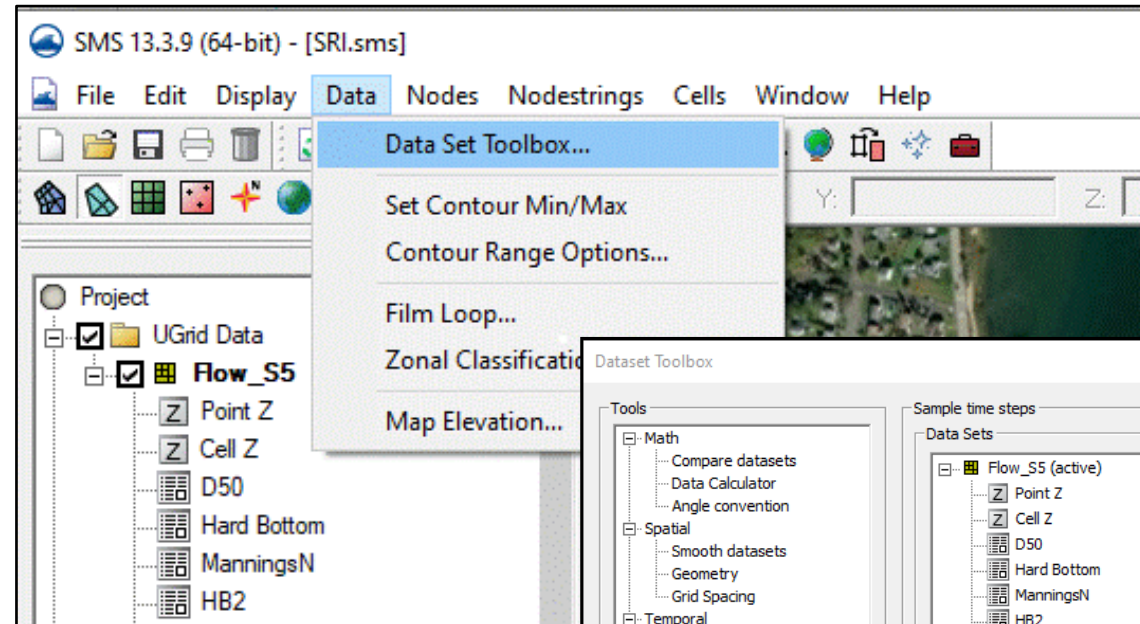## Model-Data Comparison

– *Time series calculated and measured data do not have the same time interval for statistical analysis*

– *Use "Sampling" feature within the data calculator to retrieve the output from the solution with desired time interval*
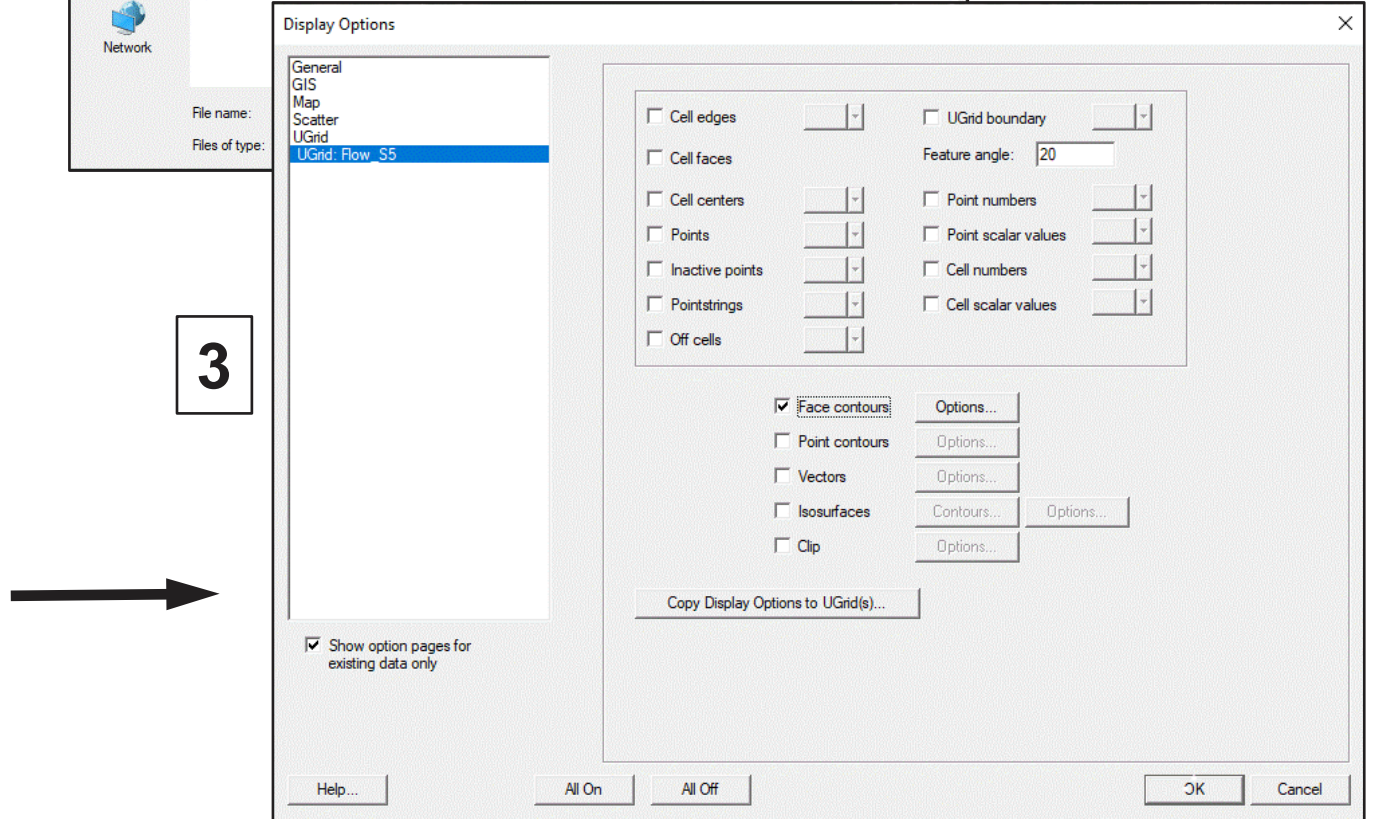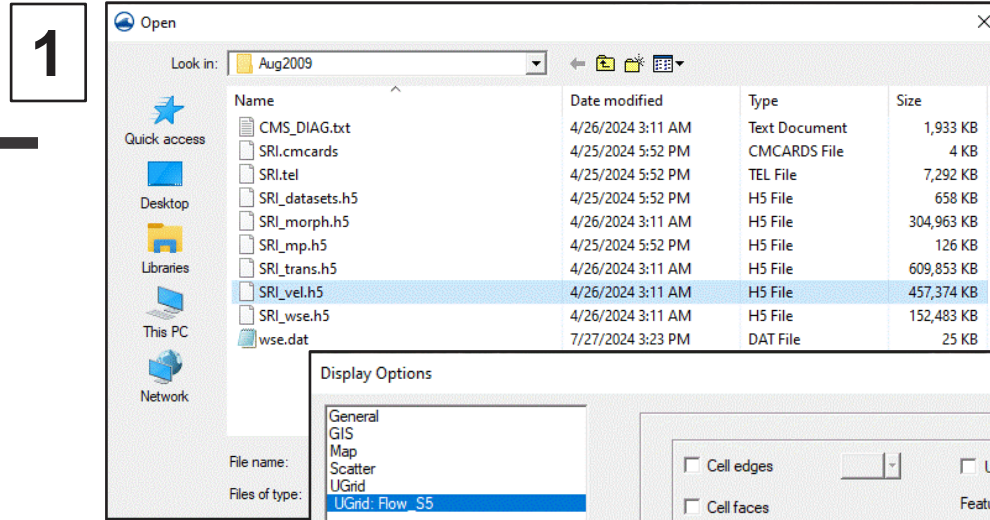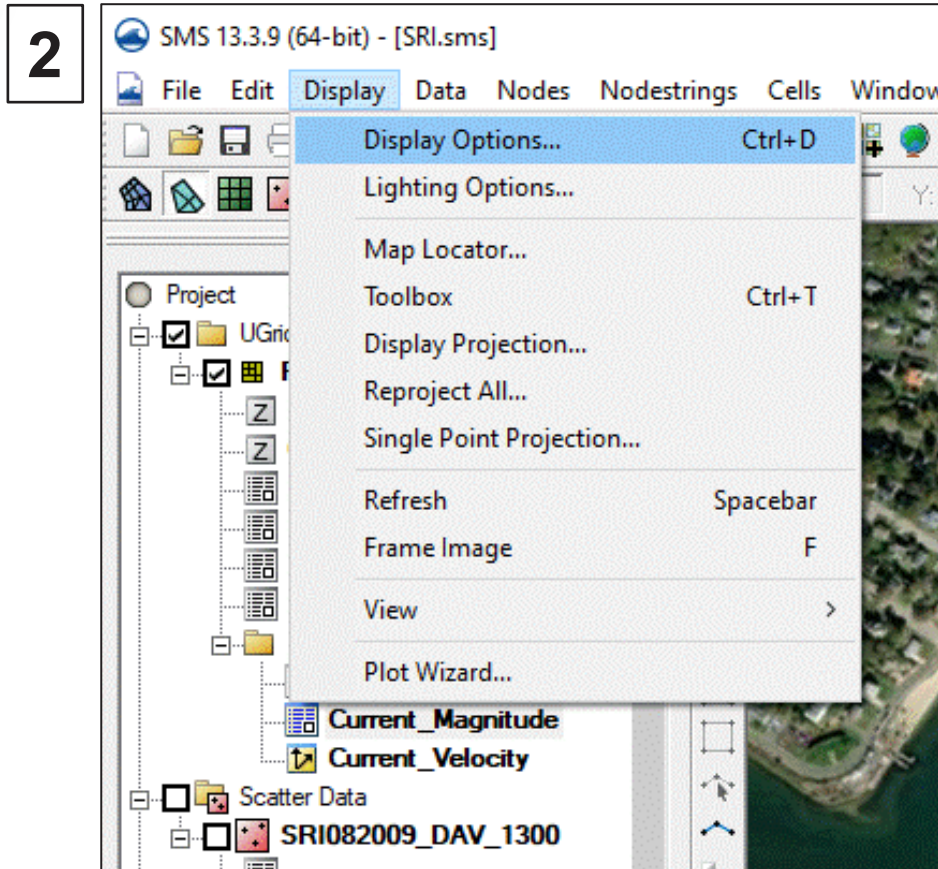
Contour and Vector Plotting

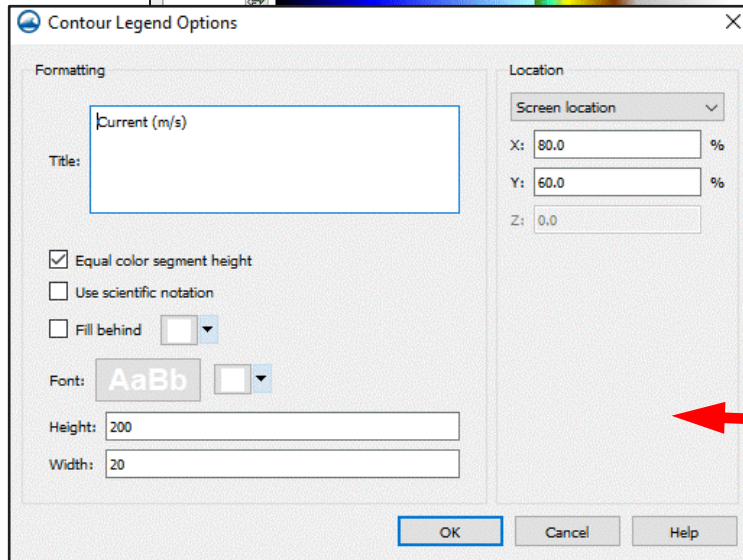**Model Solution - Current**
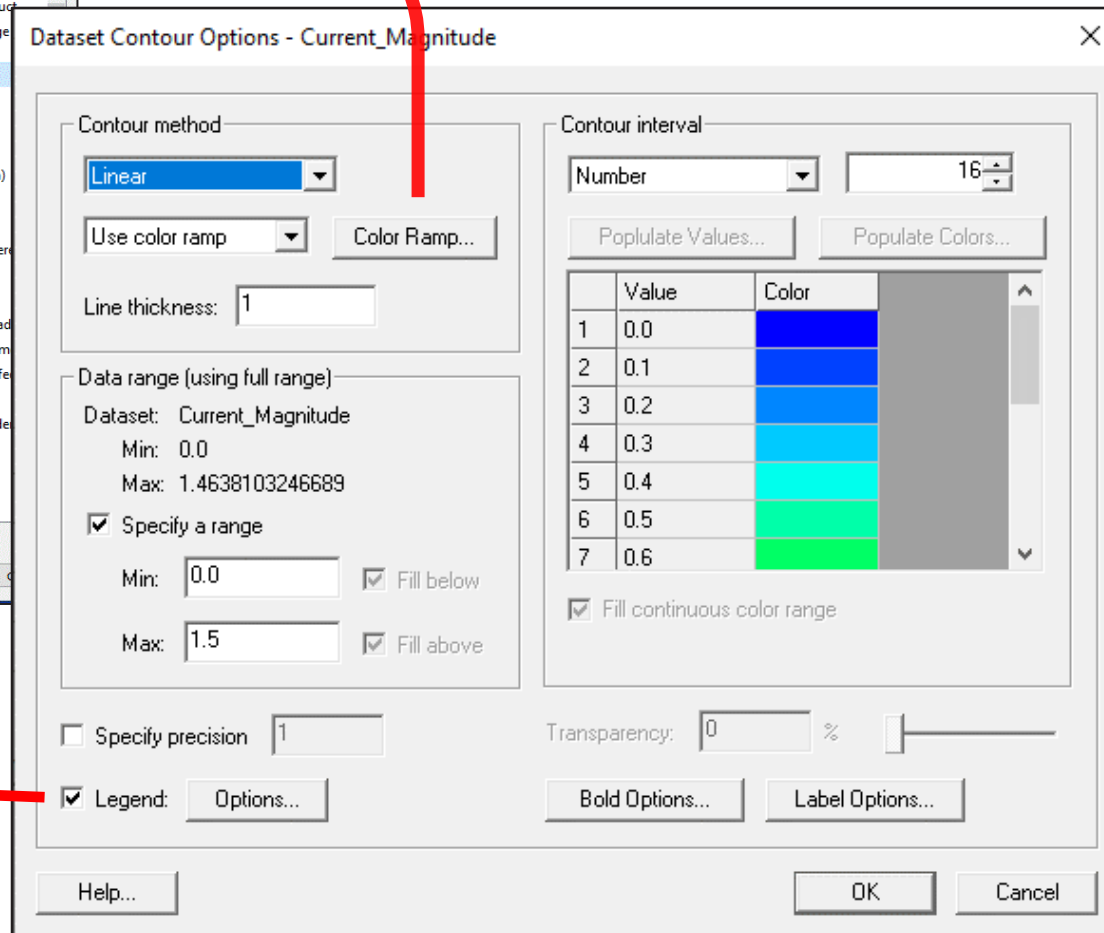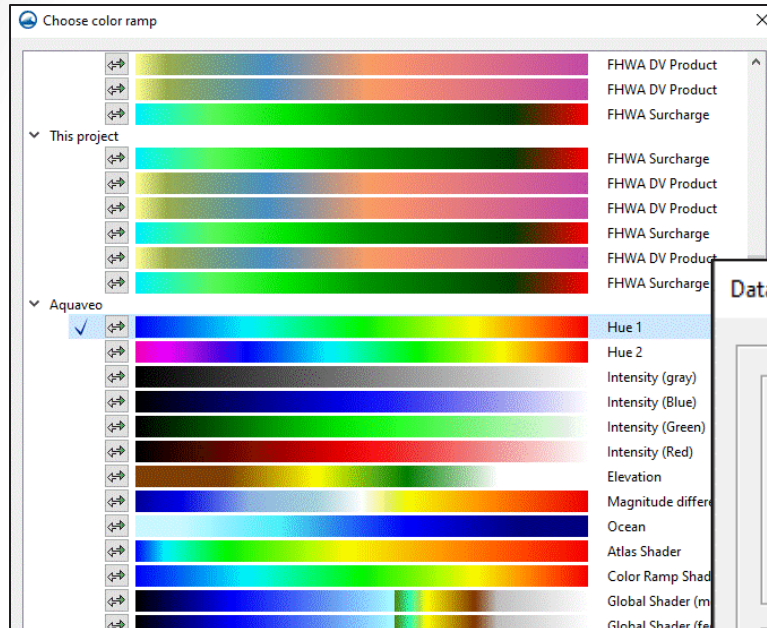
*– Import Datasets (*_vel.h5)*

Contour and Vector Plotting

Contour Options

– *Method*

– *Color map*

– *Line thickness*

– *Data range*

– *Data precision*

– *Legend*

– *Interval*

– *Transparency*
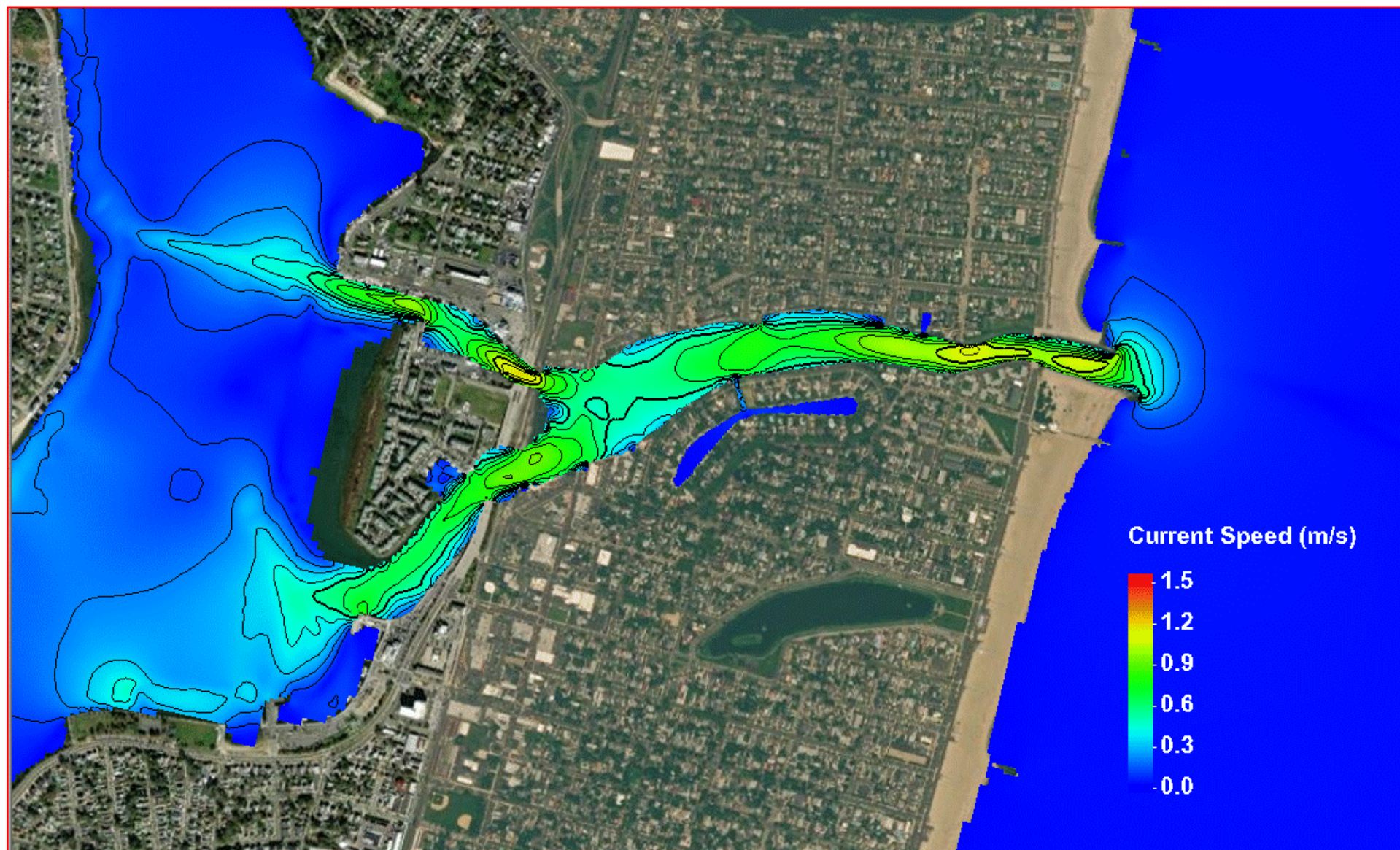
– *Bold options*

– *Label options*
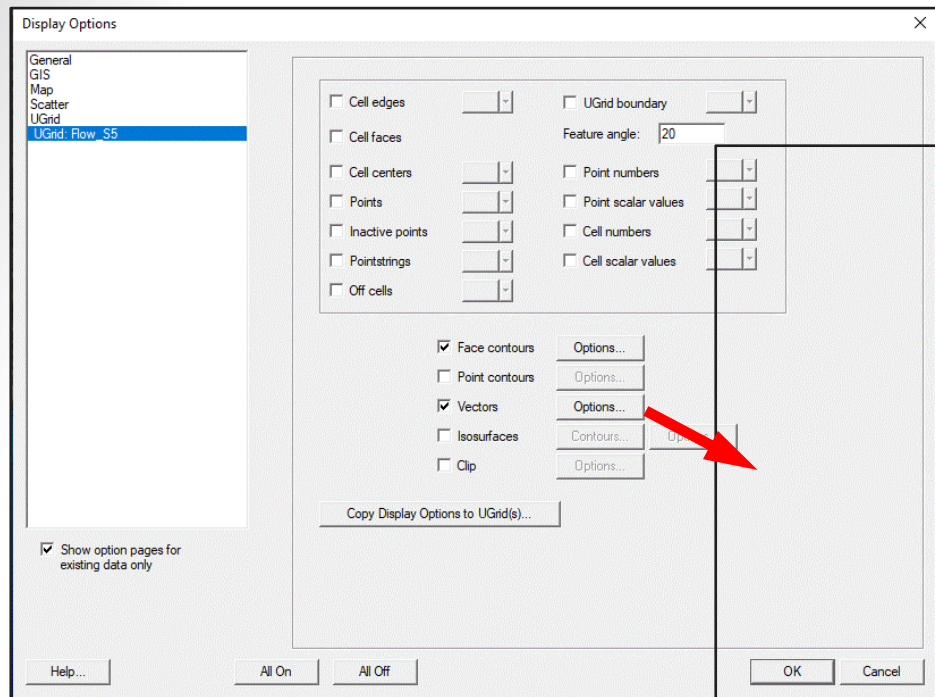
Contour and Vector Plotting

August 9, 2009

08:00 AM GMT

Contour and Vector Plotting
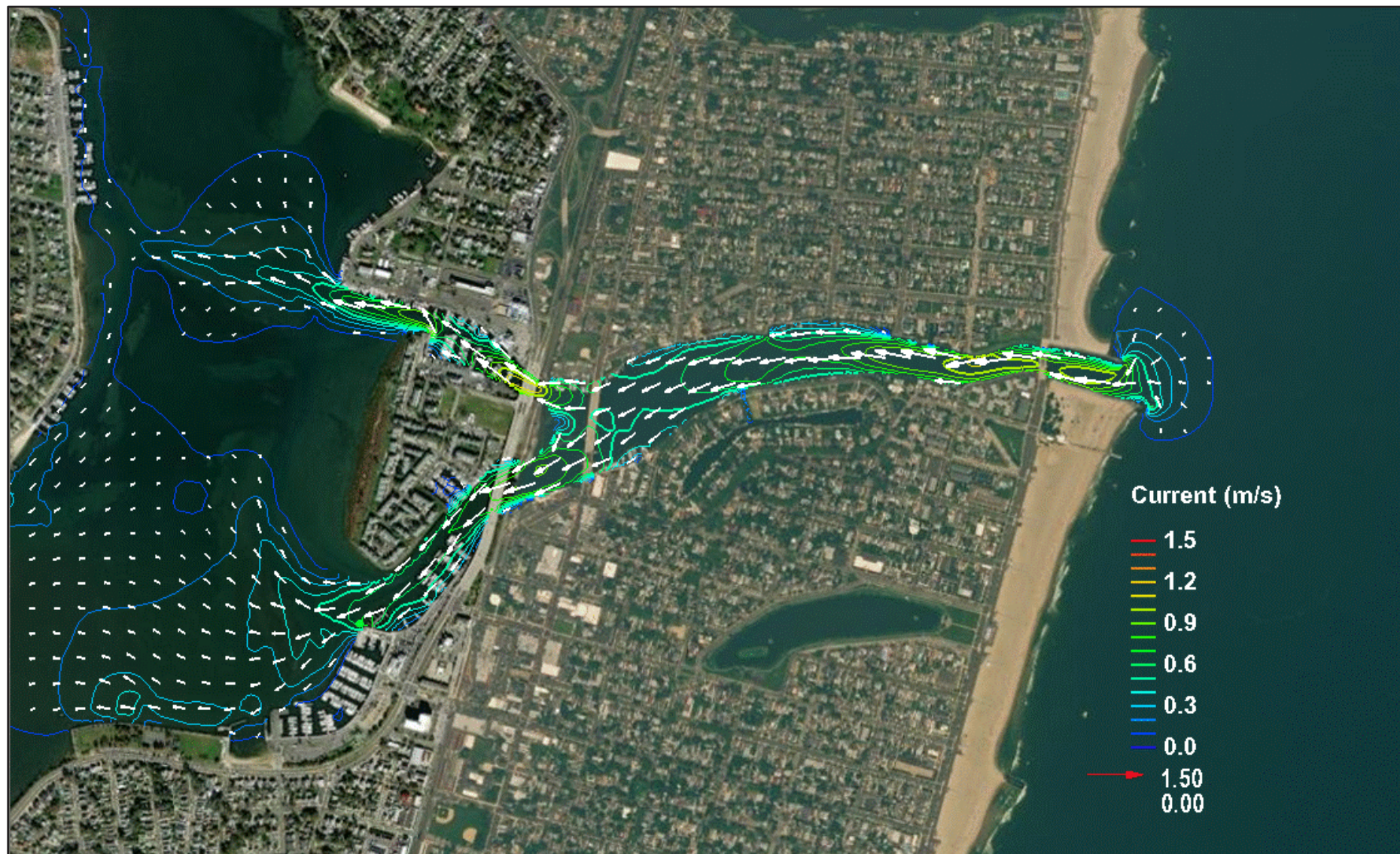

Vector Display

- *Display*
- *Spacing*
- *Offset*
- *Data range*
- *Legend*
- *Length*
- *Scale*
- *Color range*
- *Vector size*

Contour and Vector Plotting

August 9, 2009

08:00 AM GMT

Contour and Vector Plotting

Current across Transects

– Import ADCP current measurements

1

2

3

4

Contour and Vector Plotting

Current across Transects

– *Import ADCP current measurements*

Contour and Vector Plotting

Current across Transects
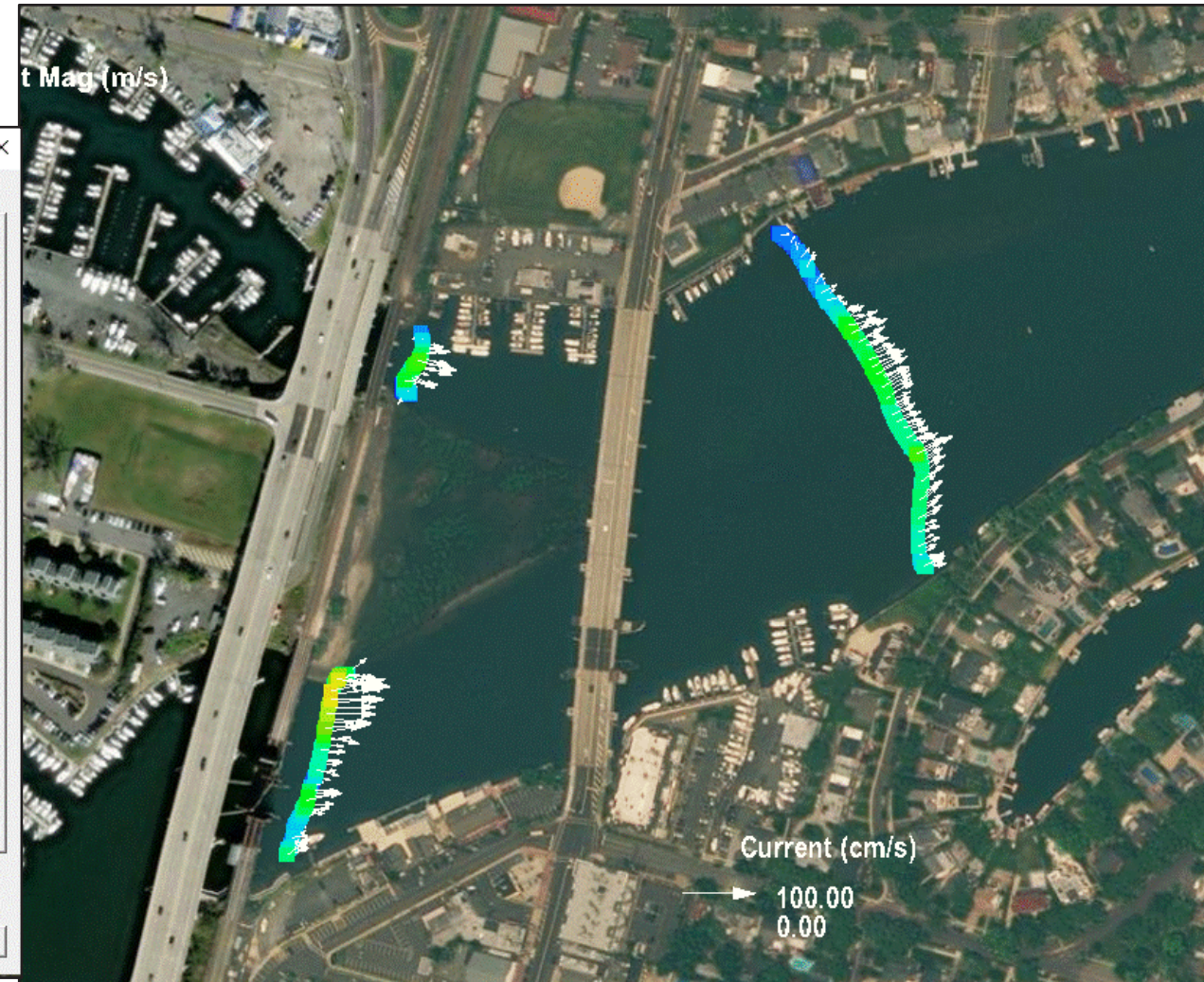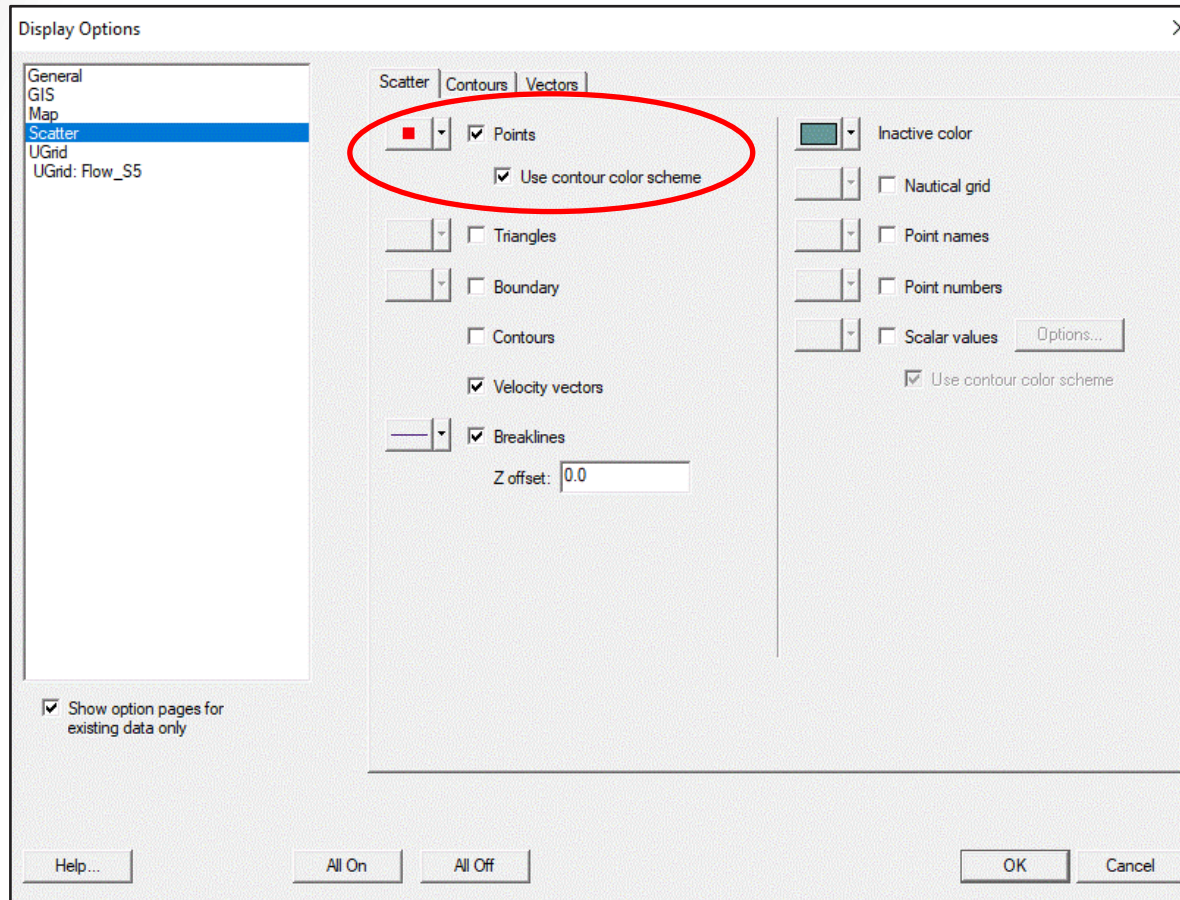
– *Import ADCP current measurements*

Contour and Vector Plotting
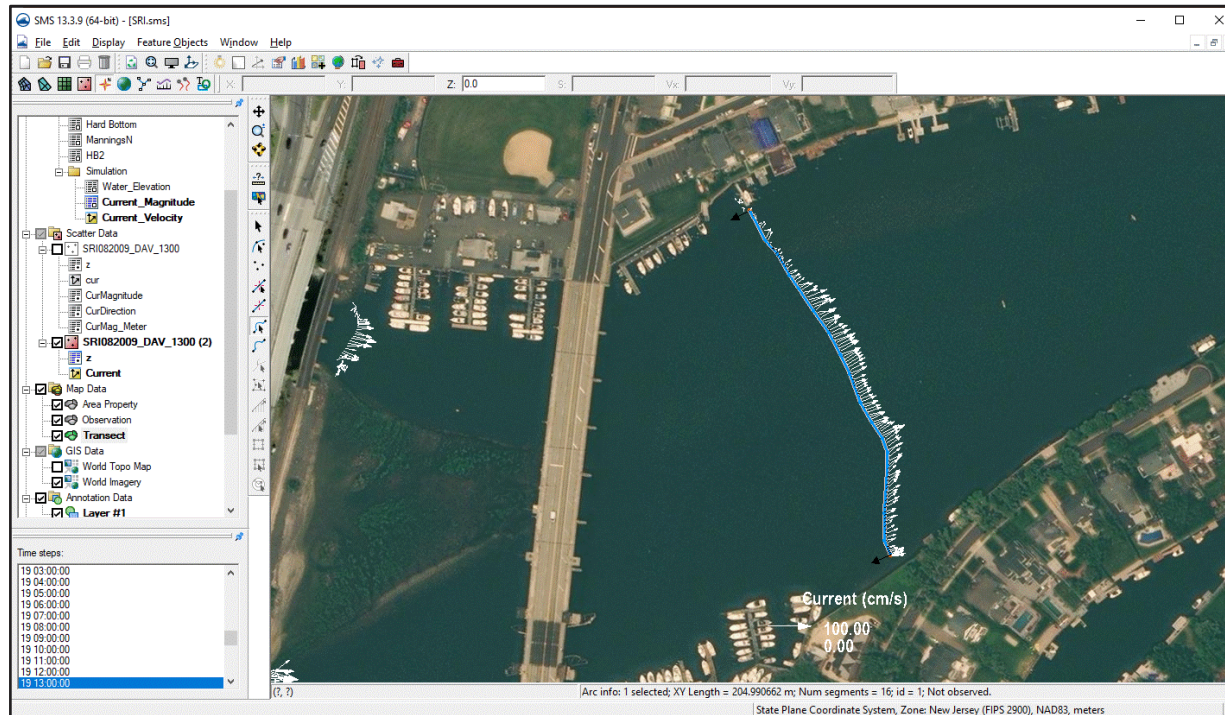
Current across Transects

– Use contour color scheme

Contour and Vector Plotting

Measured and Calculated Current Speed

– *Generate an arc through the measured points*
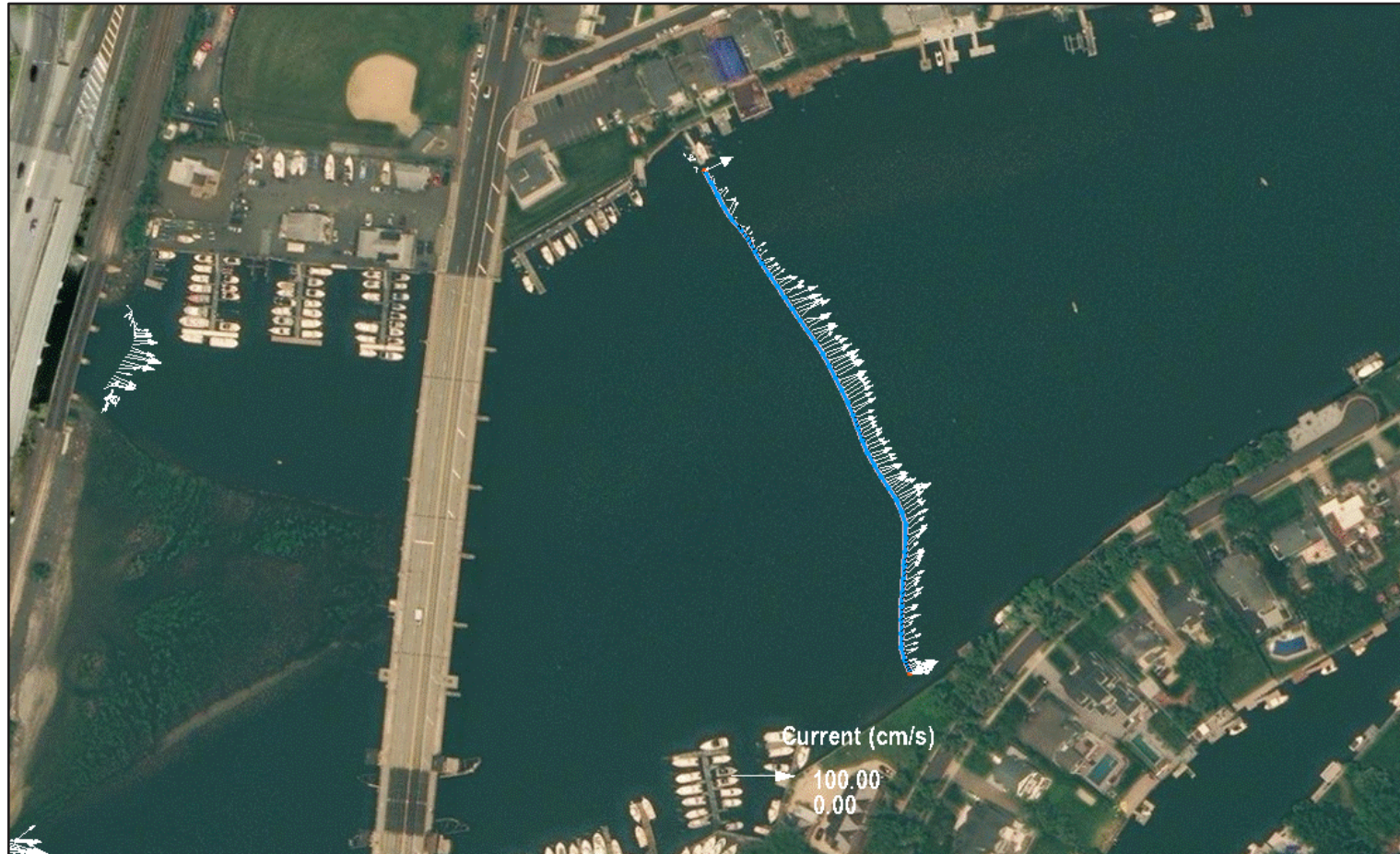
1

2

3

Contour and Vector Plotting

Measured and Calculated Current Speed

– *Generate an arc through the measured points*

Contour and Vector Plotting

Measured and Calculated Current Speed

– Create a new dataset in meters

Contour and Vector Plotting

Measured and Calculated Current Speed

– *Display current data*

Contour and Vector Plotting

– *Extract profile from model calculation and measured data*

Contour and Vector Plotting

– *Extract profile from model calculation and measured data*

Sediment Transport and Morphology Change

- – *Calculate sediment fluxes across observational arcs*
- – *Import Datasets (*_trans.h5)*

Sediment Transport and Morphology Change

– *Calculate sediment fluxes across observational arcs*

– *Import Datasets (*_trans.h5)*

– *Generate a dataset with the constant value, 1.0.*
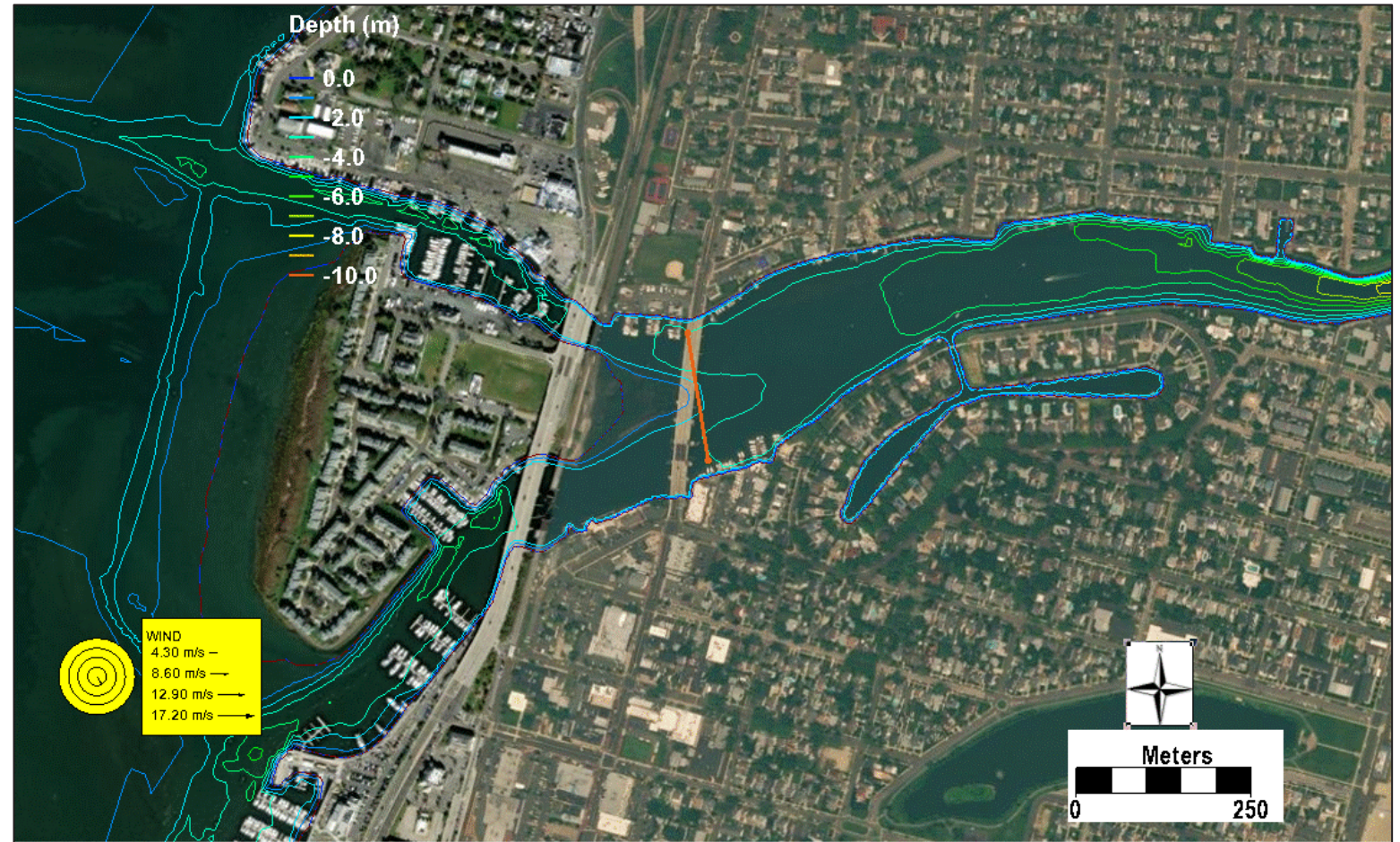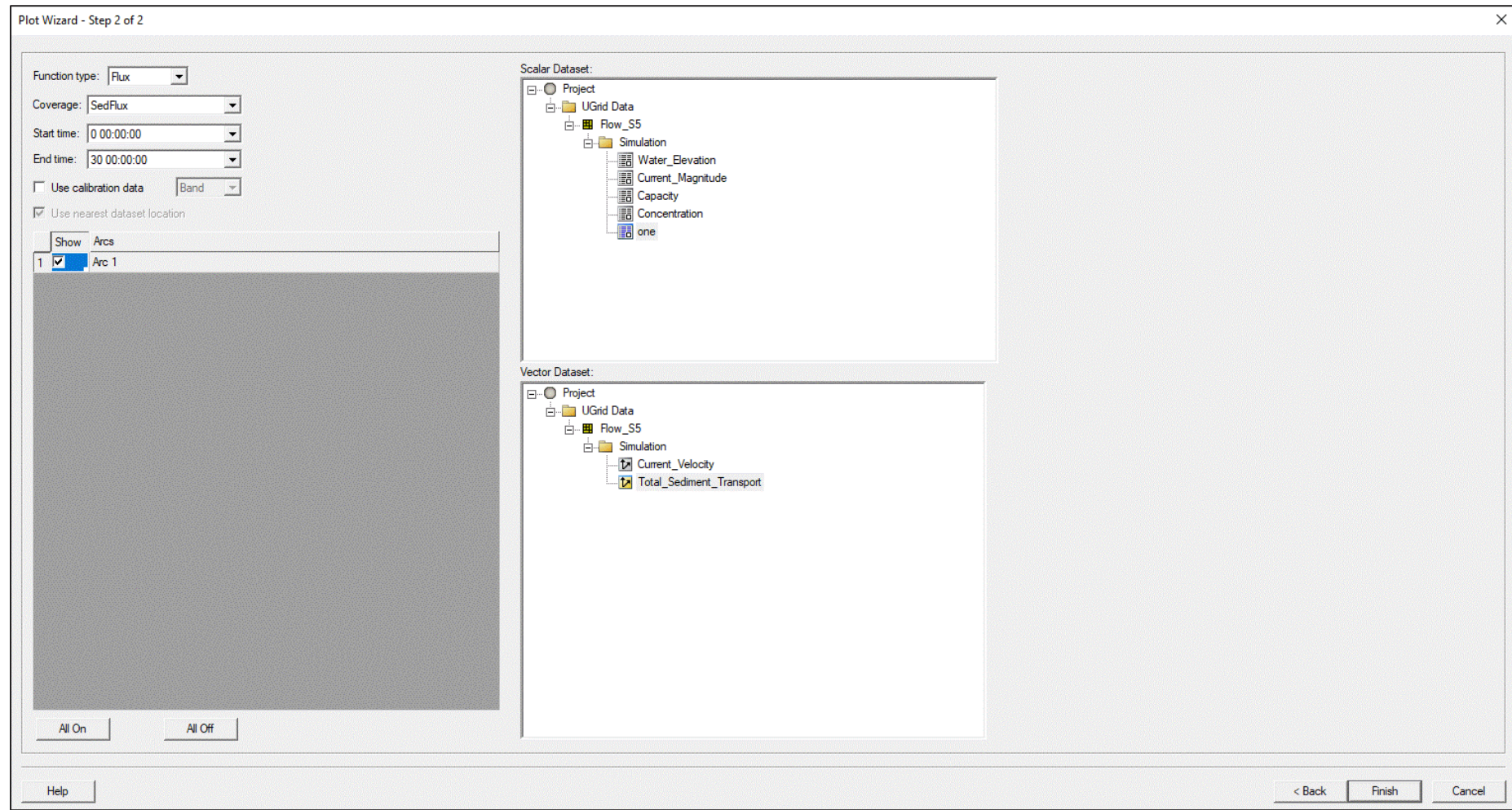
Sediment Transport and Morphology Change

– *Calculate sediment fluxes across observational arcs*

– *Use an executable code to obtain total sediment flux across the transect*

Sediment Transport and Morphology Change

– *Calculate sediment fluxes across observational arcs*

– *Use an executable code to obtain total sediment flux across the transect*

Sediment Transport and Morphology Change

– *Channel depth change*

Sediment Transport and Morphology Change

- *Channel depth change*

- *Use Data Set Toolbox to switch the sign of the depth dataset*

QUESTIONS?

CMS Team

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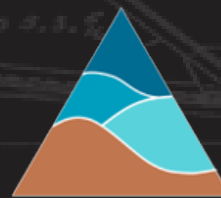Dylan Robinson   – Dylan.M.Robinson@usace.army.mil