

Progress on MTMs in the Rappahannock and Potomac Rivers

– Initiation in the Tidal Rappahannock River

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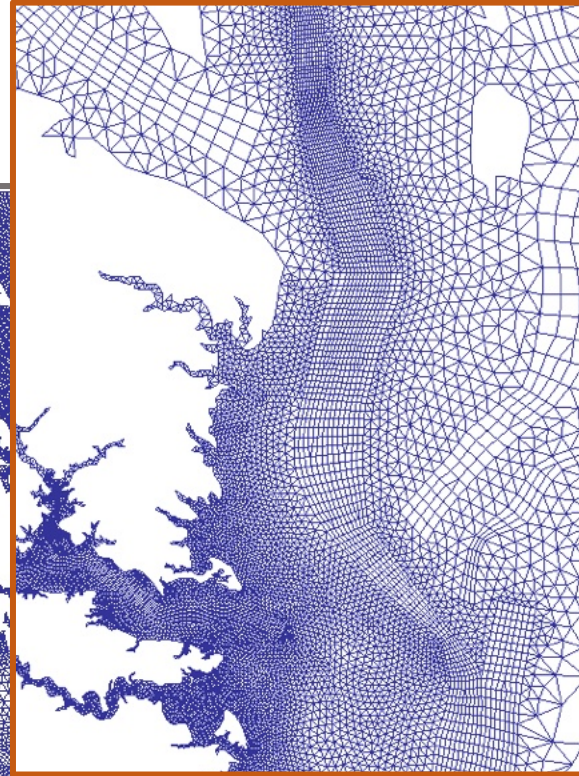
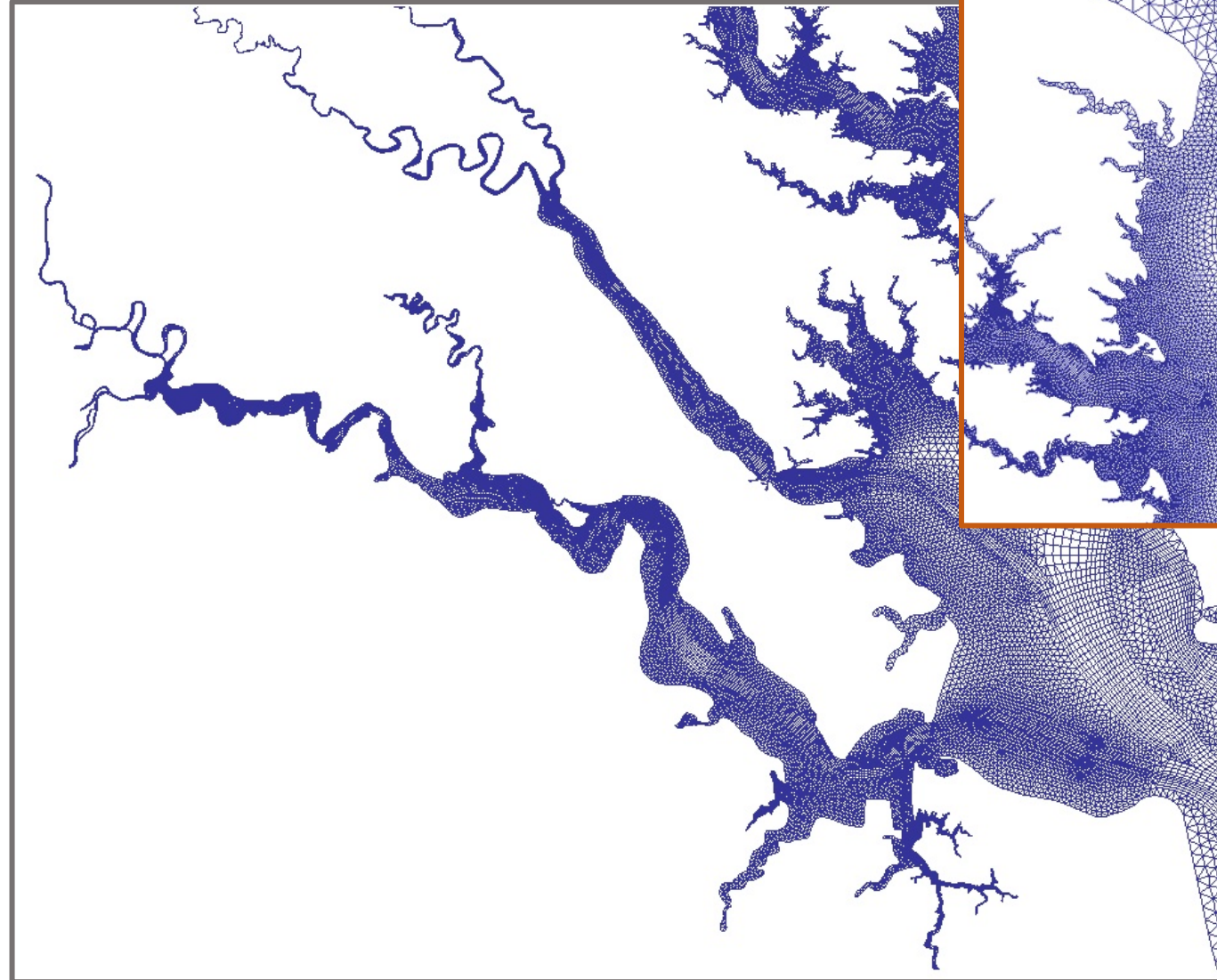


Modeling Quarterly Review, June 21, 2023



Progress of MTM development

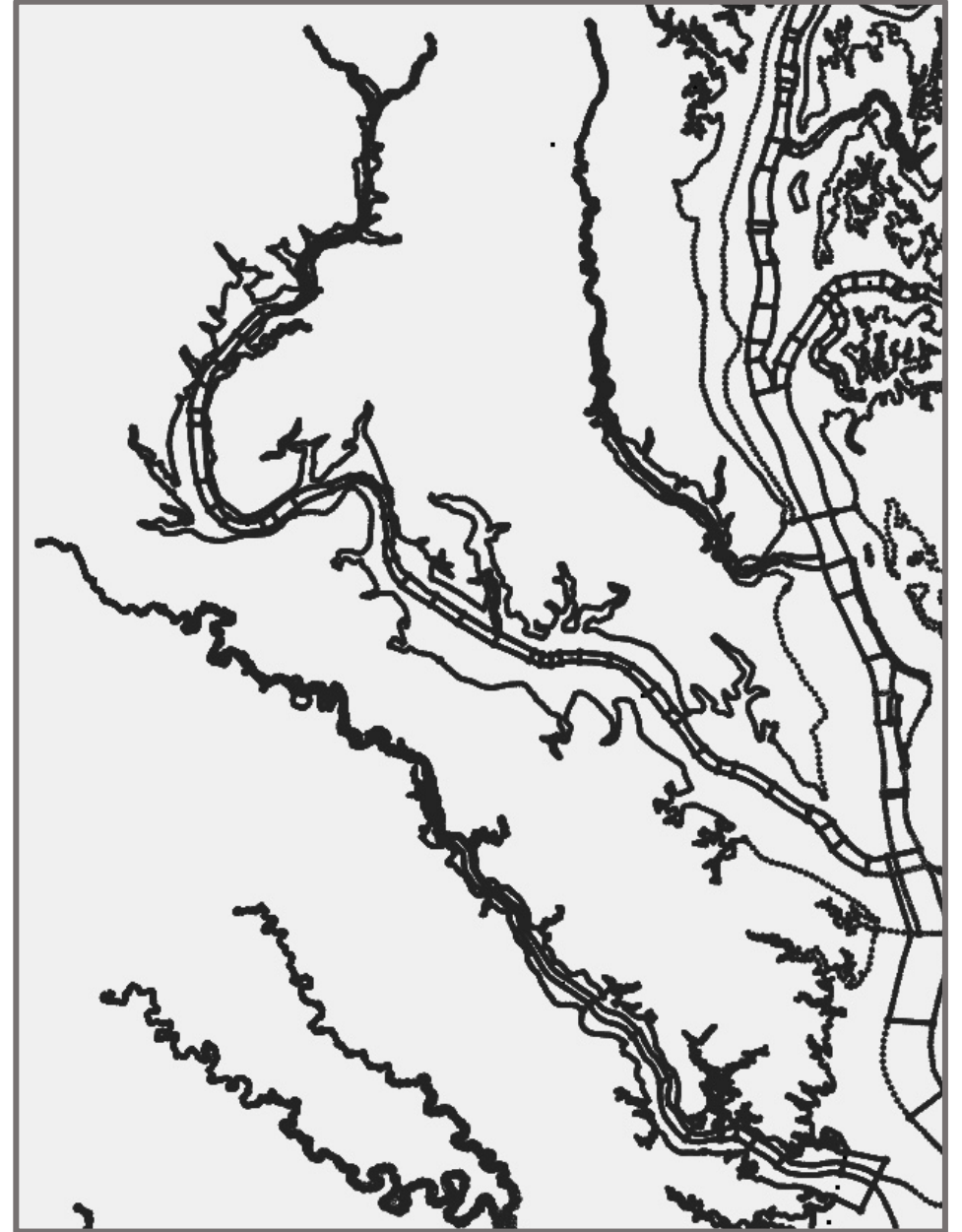
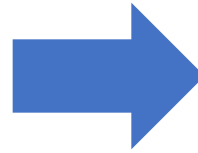
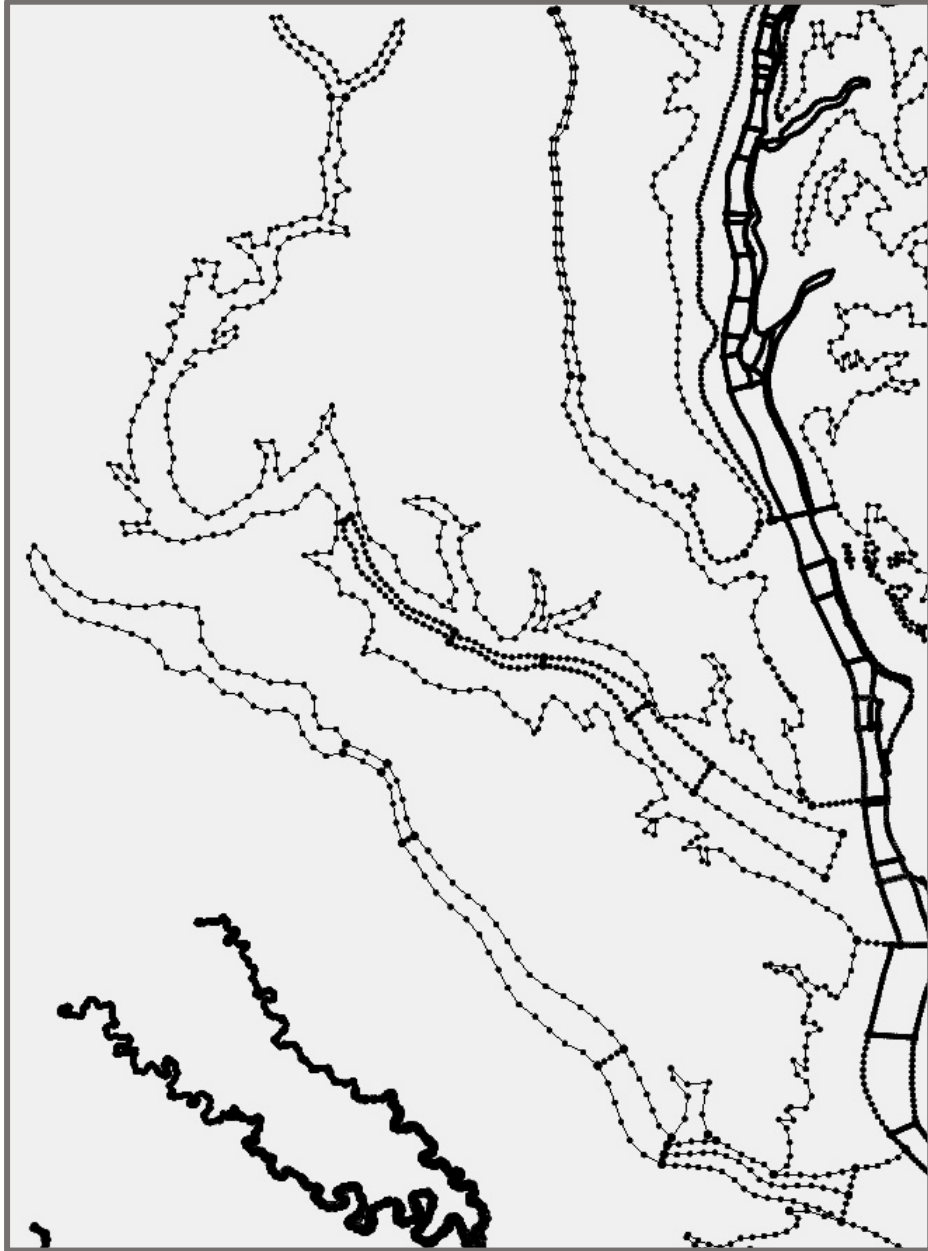
Tidal James and York Rivers



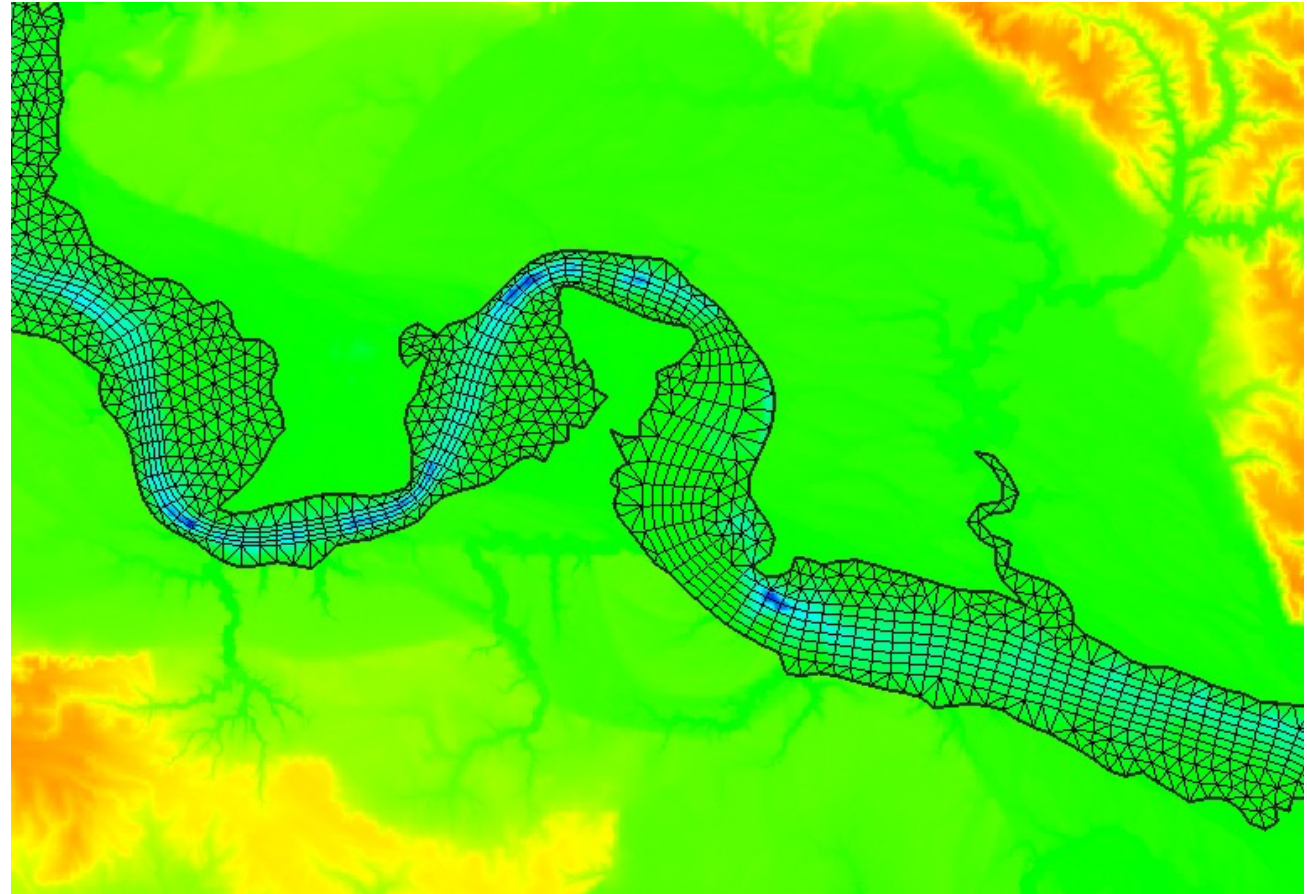
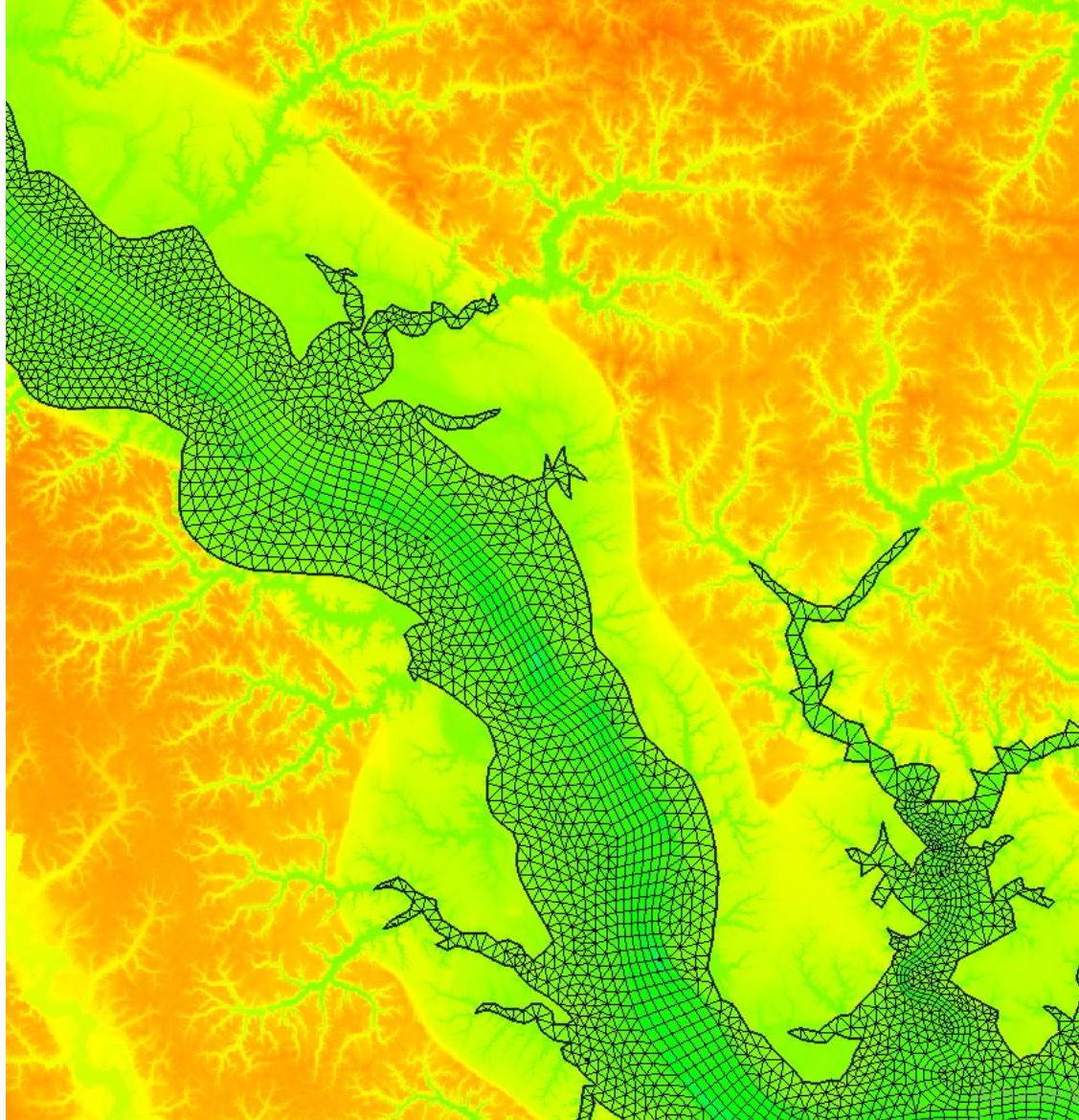
Going upwards for
the linkage between
the MBM and MTM



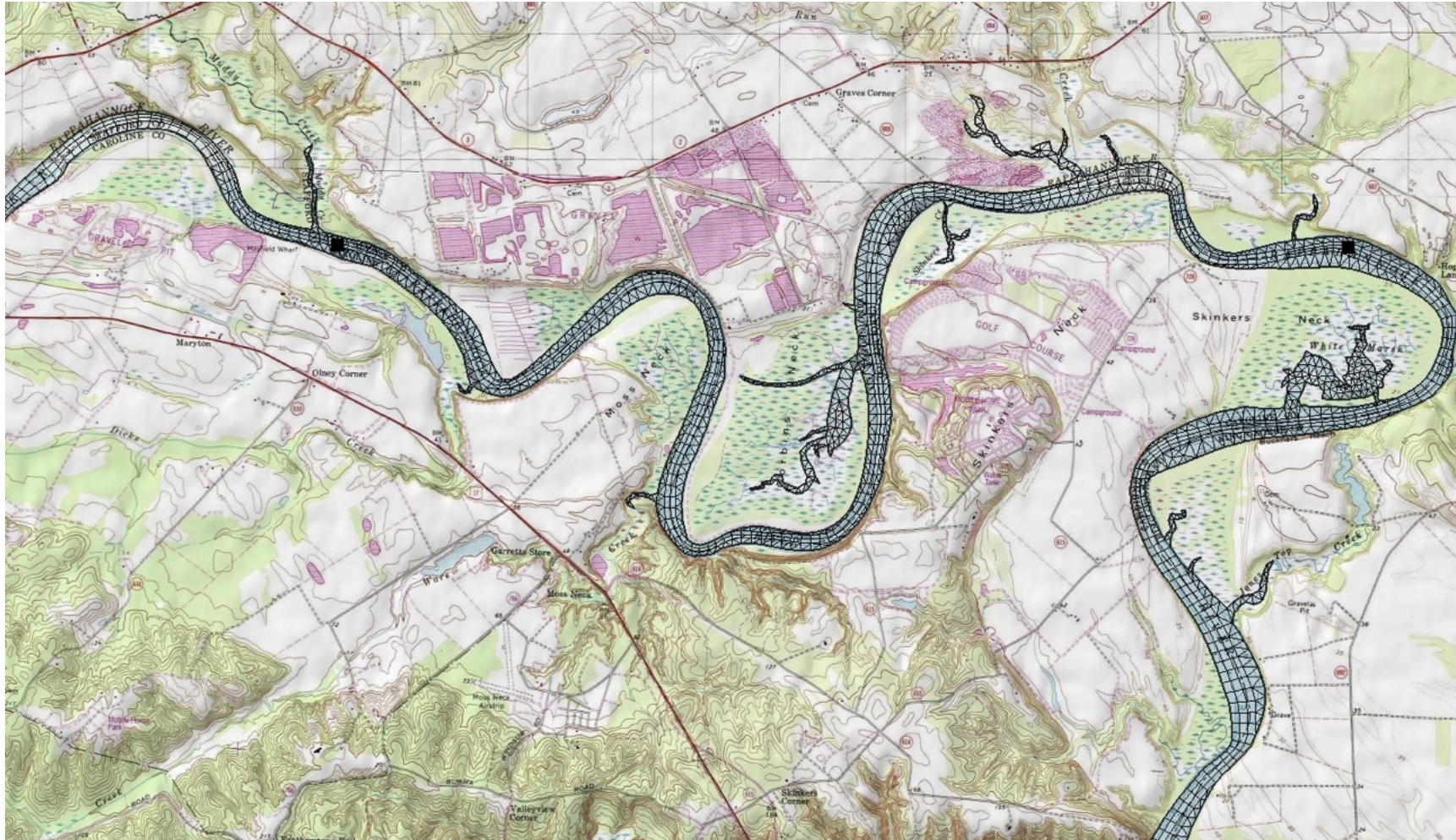
Grid construction screenshots



Rappahannock horizontal grid

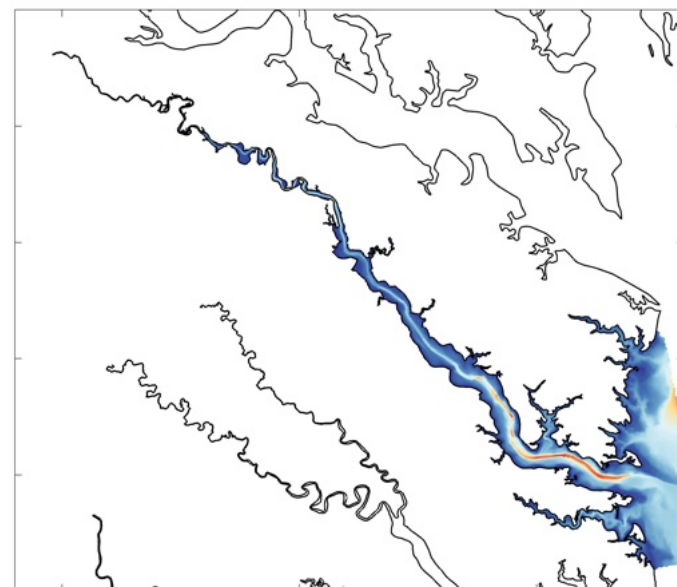
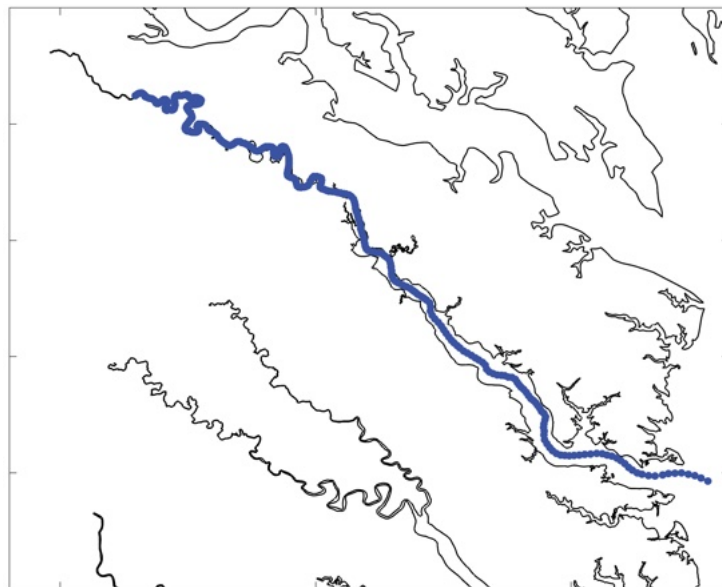


Rappahannock horizontal grid

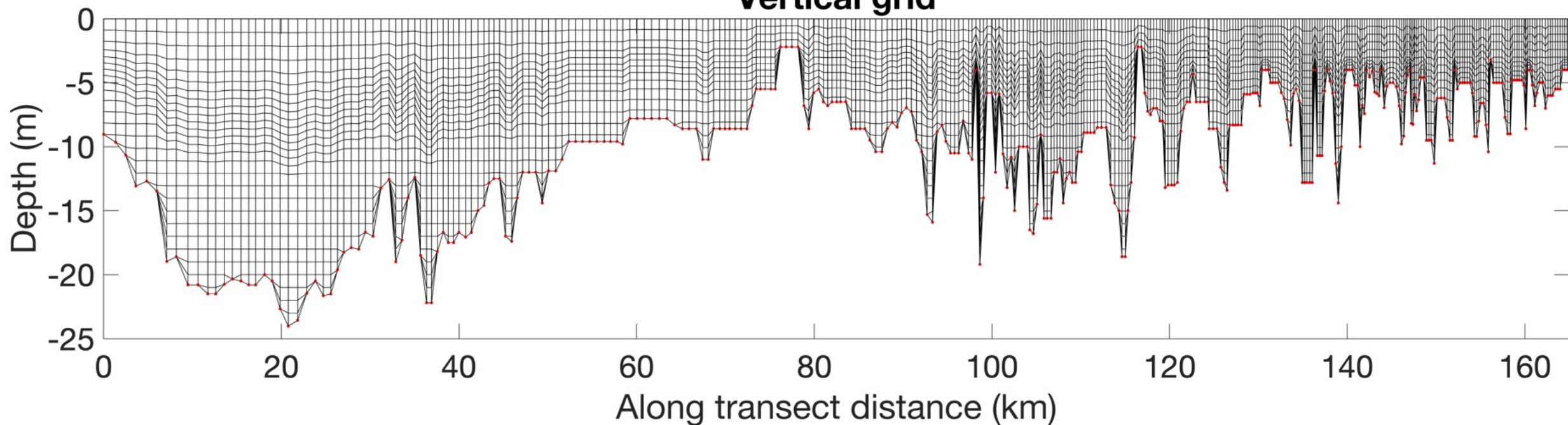


Vertical grid and bathymetry

Up to 29 vertical layers inside the Rappahannock River

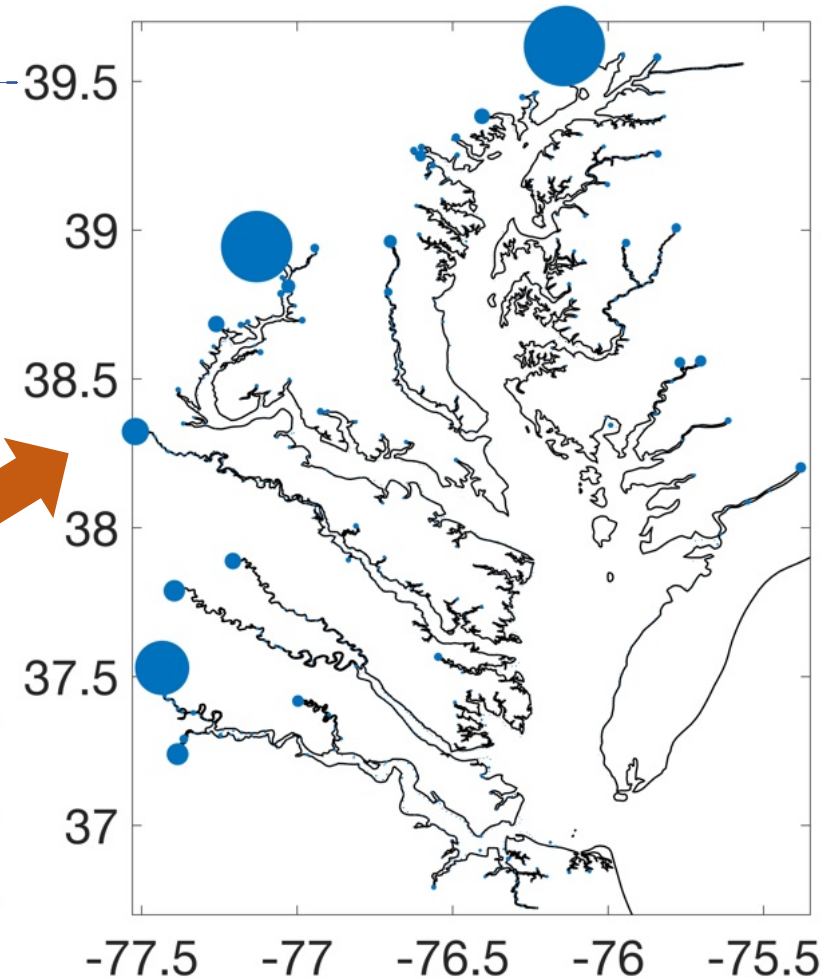
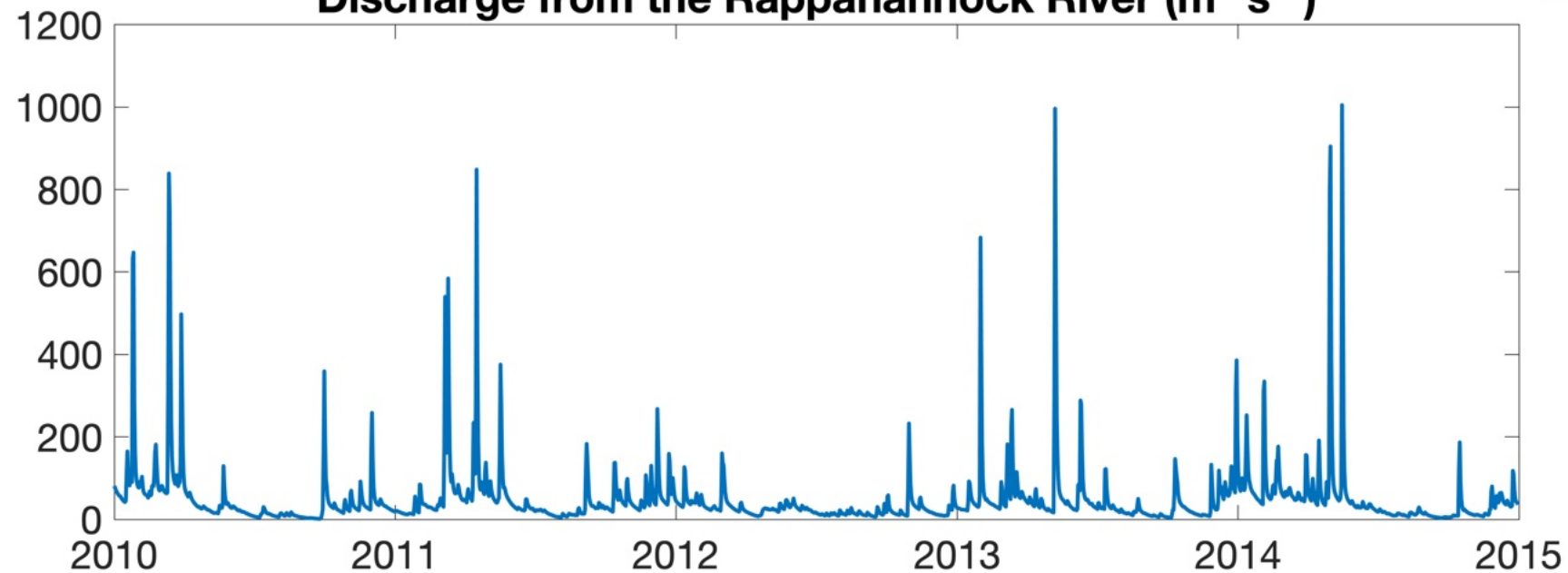


Vertical grid



Loadings – P6 watershed

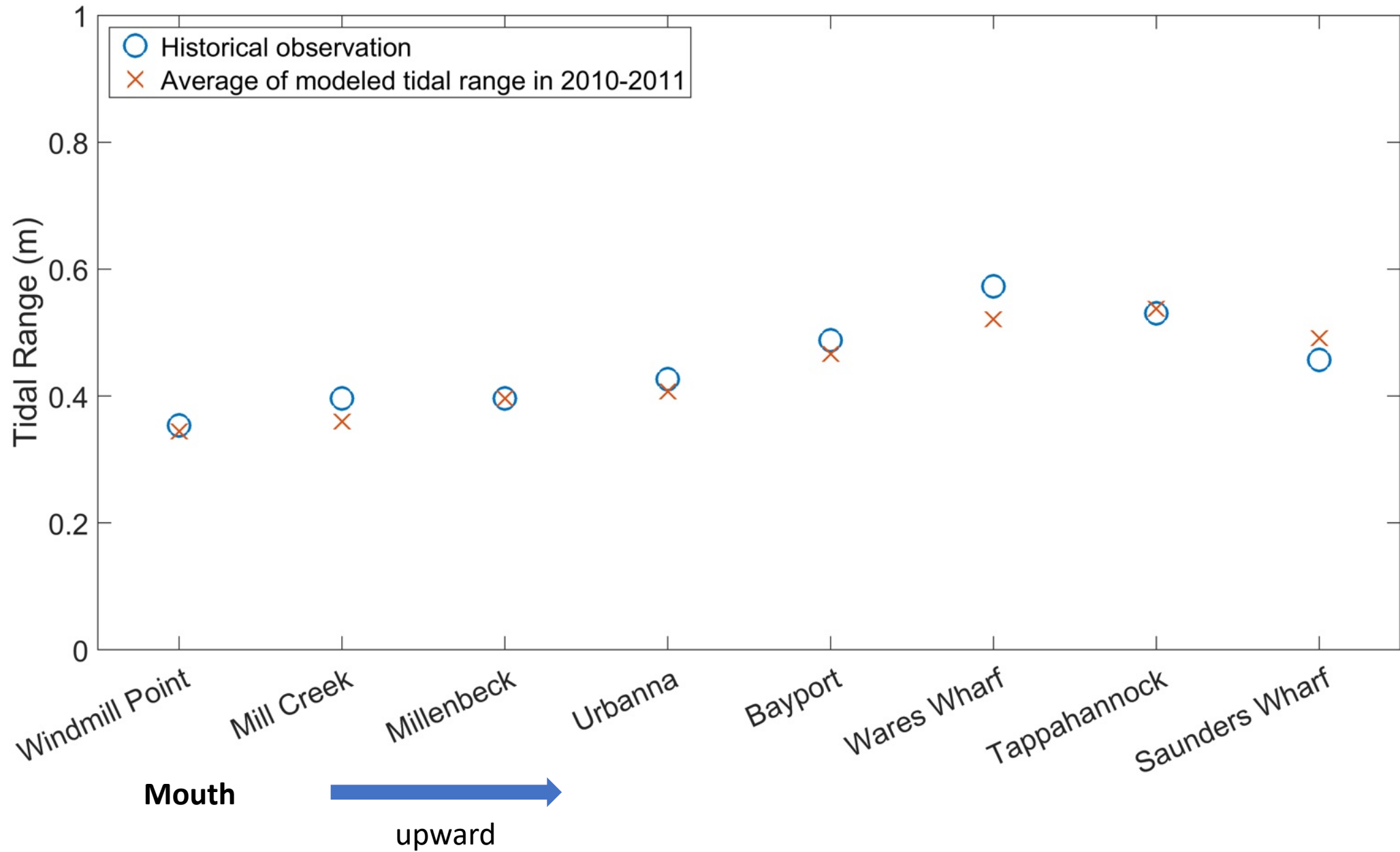
Discharge from the Rappahannock River ($\text{m}^3 \text{s}^{-1}$)



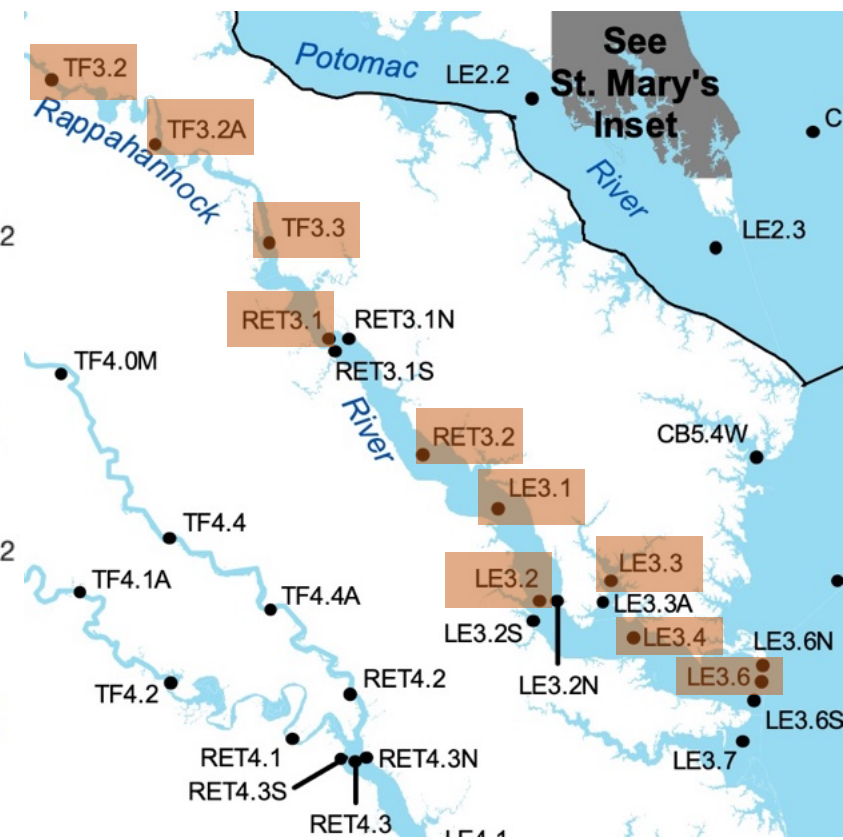
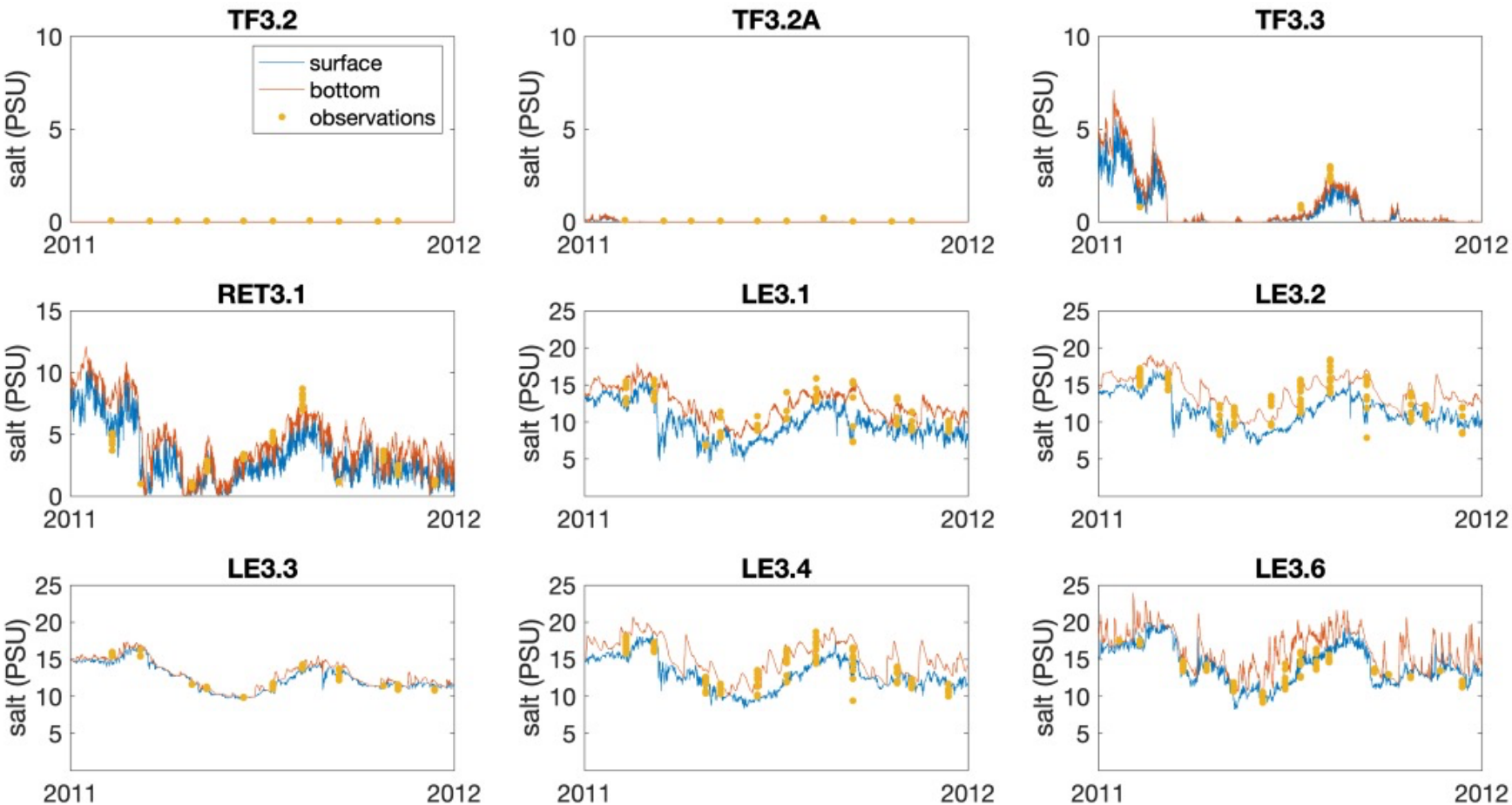
Preliminary results evaluation

-- Rappahannock River

Tidal range



Salinity



Summary

Start of Rappahannock MTM based on the SOPs

