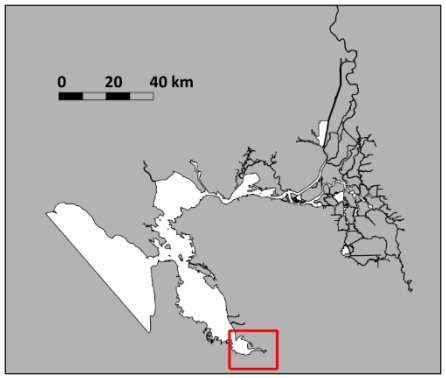
Model Upscaling From Tributaries to Entire Bay

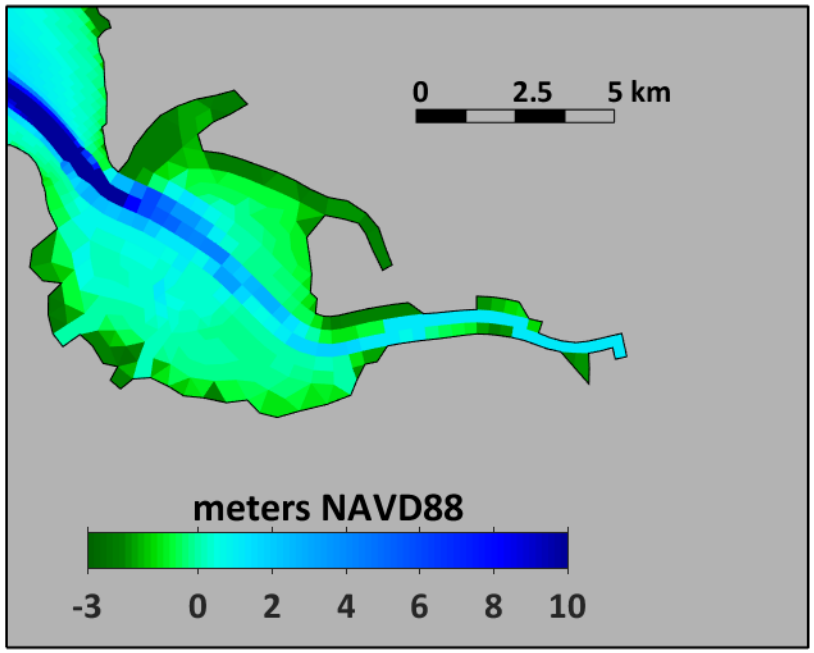
- Whole-Bay high-resolution model
  - High-resolution results throughout the Bay
  - Computationally intensive
- Grid nesting
  - Computationally more efficient than Bay-wide high-resolution model
  - Could be used as an offline one-way nested grid for scenario analysis
  - Open boundary conditions are difficult
- Targeted focus regions of grid refinement
  - Computationally more efficient than Bay-wide high-resolution model
  - No open boundary conditions for high-resolution area
  - Cannot be run as standalone high-resolution model

Model Upscaling From Tributaries to Entire Bay

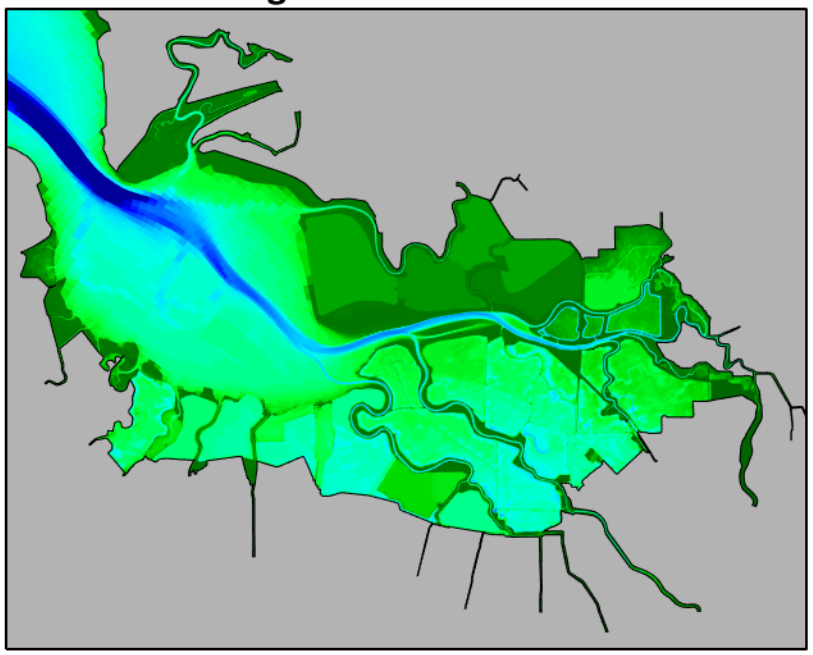
- Focus region refinement:
  South San Francisco Bay



Base Resolution Grid

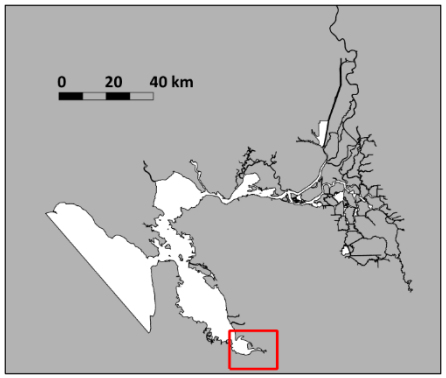


High Resolution Grid

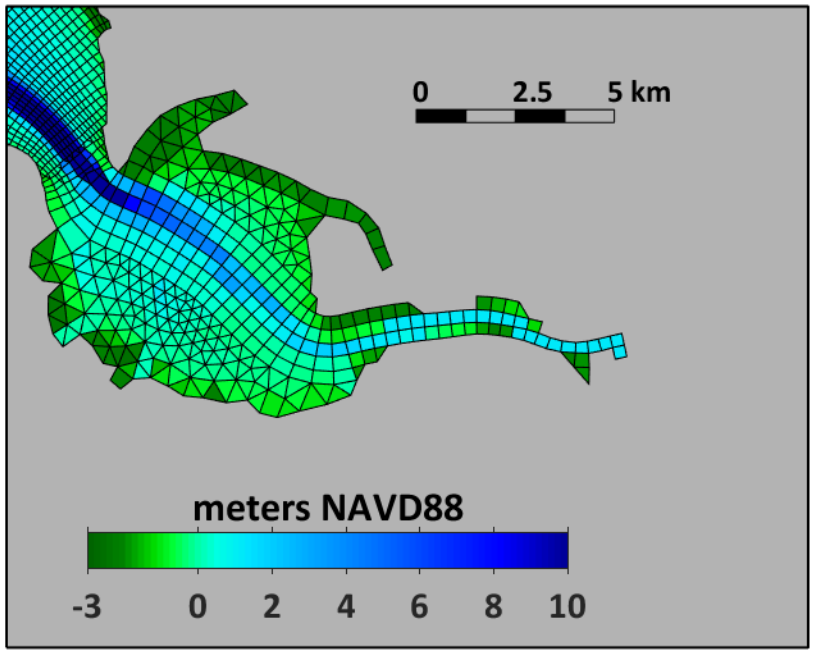


Model Upscaling From Tributaries to Entire Bay

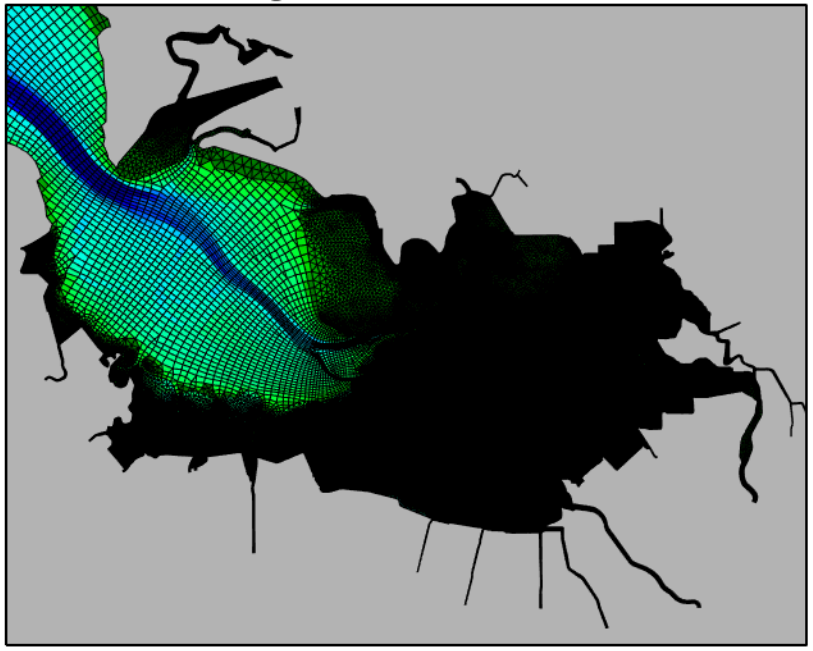
- Focus region refinement: South San Francisco Bay
- 500 versus 135,000 grid cells south of constriction



Base Resolution Grid

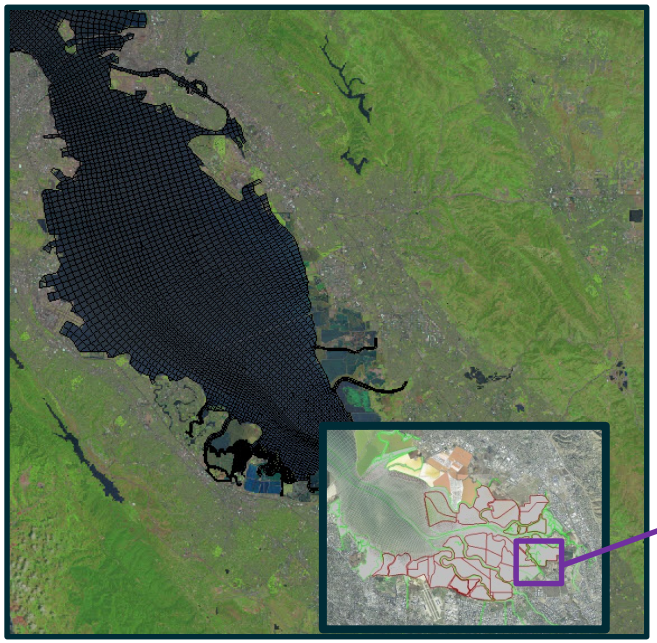


High Resolution Grid

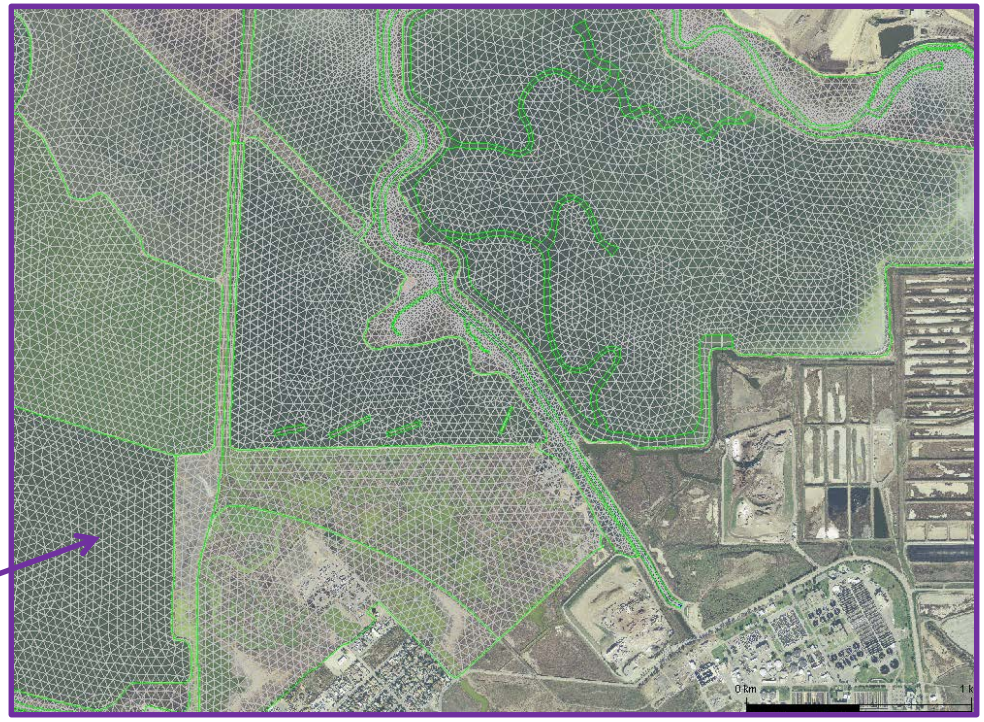


Model Upscaling From Tributaries to Entire Bay

- Focus region refinement: South San Francisco Bay
- 500 versus 135,000 grid cells south of constriction



Green are levee and channel alignments



Questions/Discussion

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