UBC & MEOPAR Model of the Salish Sea

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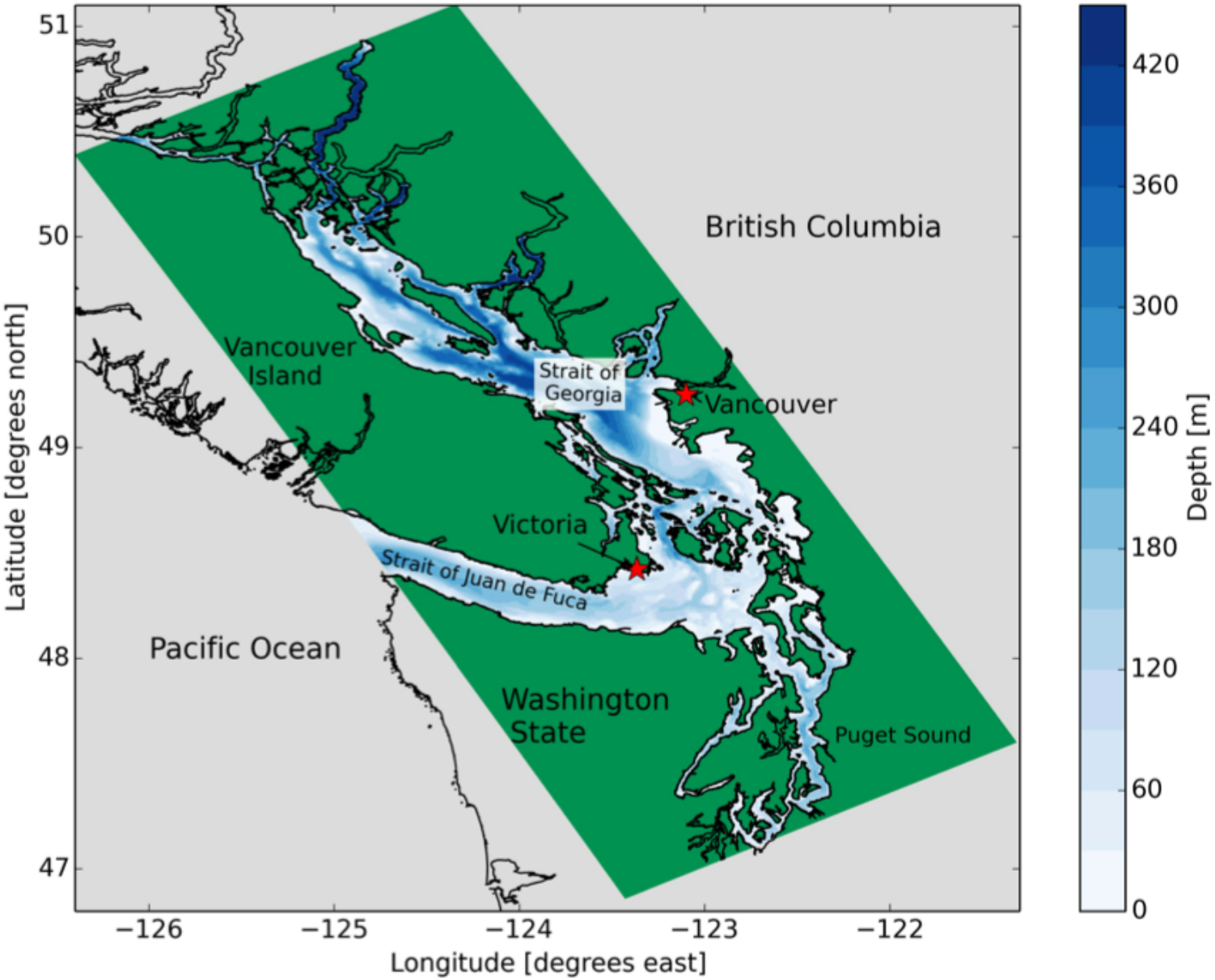
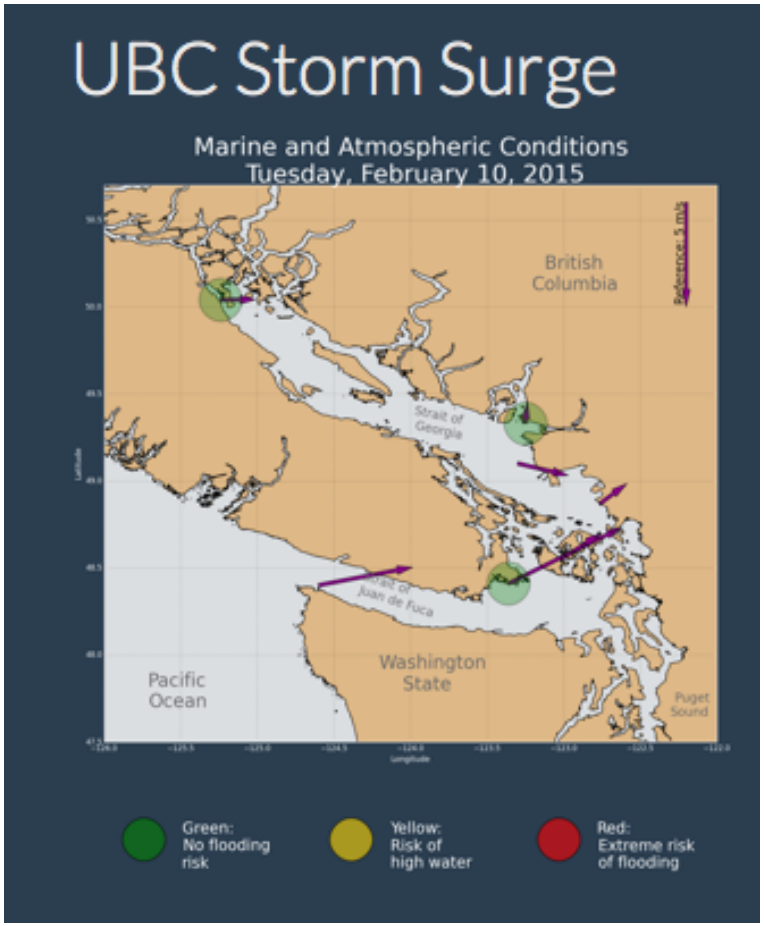
Domain


British Columbia
Vancouver Island
Strait of Georgia
Vancouver
Victoria
Strait of Juan de Fuca
Pacific Ocean
Washington State
Puget Sound
Latitude [degrees north]
Longitude [degrees east]
51
50
49
48
47
−126
−125
−124
−123
−122
Depth [m]
420
360
300
240
180
120
60
0

Model

- Full three-dimensional stratified model with tides
- Based on NEMO (Nucleus for European Modelling of the Ocean)
- Horizontal grid space about 500 m
- Vertical grid spacing 1 m near surface, 20 m at bottom (430 m)
- Run daily : nowcast and forecast for tomorrow
- Storm surge evaluated, surface salinity good

`salishsea.eos.ubc.ca/storm-surge`



Forcing

- Winds: Environment Canada : HRDPS 2.5 km resolution (downloaded from Web)
- Rivers: 149: Climatology (John Morrison), Fraser River: Environment Canada (downloaded from Web)
- Tides: 8 tidal constituents : WebTide + tuning
- Sea surface height anomaly at Neah Bay : NOAA (downloaded from Web)
- Temperature and Salinity Climatology, Juan de Fuca (from Masson and Fine), Johnstone Strait (from Thomson and Foreman)

Team

- UBC Model Team
  - Nancy Soontiens
  - Ben Moore-Maley
  - Idalia Machuca
  - Jie Liu
  - Elise Olson
  - Doug Latornell
  - Kate Le Souef
- Other UBC
  - Rich Pawlowicz
  - Mark Halverson
  - Chuning Wang
  - Stephanie Chang
  - Jackie Yip
- Bedford Institute: Youyu Lu
- Dalhousie University
  - Keith Thompson
  - Jean-Philippe Paquin, Dalhousie University
  - Vasily Korabel, Dalhousie University
- Environment Can.: Luc Fillion
- Storm Surge BC: Scott Tinis
- Institute of Ocean Sciences
  - Diane Masson
  - Pramod Thupaki
  - Mike Foreman
  - John Morrison
  - Peter Chandler
  - Charles Hannah

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`salishsea.ubc.ca/nemo`

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HPC courtesy:
Westgrid.ca
Ocean Networks Can.