

Agenda and Notes

CC CoP Webinar

August 20, 2020

1:00 am - 2:30 pm CT

Hangouts Meet

Join online: meet.google.com/ijy-ruop-oos

Phone: +1 470-735-5877

PIN: 104 883 783#

Meeting Purpose and Objectives:

- Provide an update to the community about progress
- Inform about future engagements
- Collect feedback from the community on engagements
- Give scientific/technical updates

Outline

1. Introduction and update on the CC CoP activities
2. Ehab Meselhe (Tulane University) presentation - "Continental Scale Heterogeneous Channel Routing Strategy for Operational Forecast Model"
3. Ali Abdolali (NOAA/EMC) presentation - "Advances in the Unstructured WAVEWATCH III Within Earth System Modeling Framework"
4. Future engagement opportunities and adjourn

Documents

[CoP presentation](#)

[Ehab presentation](#)

[Ali presentation](#)

Attendees

Ali Abdolali, Alison Macneil, Alfredo Aretxabaleta, Analise Keeney, Antonia Sebastian, Audra Luscher, Brenna Sweetman, Brian Blanton, Caimie Schoenbaechler, Camaron George, Cary Talbot, Changsheng Chen, Chris Massey, Coraggio Maglio, Daniel Sharar-Salgado, Dina Sang, Ehab Meselhe, Eric White, Erick Boehmler, Gina Martinez Graeme Aggett, Hamed Moftakhari, Hassan Mashriqui, Hendrik Tolman, Himangshu Das, J Arnold, Jaimlyn Sypniewski, Jocelyn Burston, John Ratcliff, Jon Allen, Joseph Zhang, Julia Engdahl, Jungwoo Lee, Karen Bareford, Kendra Dresback, Kris Lander, Lauren Grimley, Li Erikson, Lianyuan Zheng, Marouane Temimi, Melissa Lupher, Michelle Burt, Mitra Talukdar, Mohammed Islam, Page Weil, Panagiotis Velissariou, Prema Panthi Neupane, Qi Shi, Richard Luetlich, Robert Hetland, Rocky Dunlap, Sam Rendon, Seann Reed, Taiye Sangoyomi, Taylor Barnhart, Tracy Fanara, Travis Wilhoite, Trey Flowers, Tyler Madsen, William Saunders, Xuanyu Chen, Youcan Feng, Yu Zhang

Notes and action items

Chat box messages:

Seann Reed - NOAA Federal 1.30PM

what if you have a 100 yr flow in that location?

Hendrik Tolman - NOAA Federal 1:32 PM

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Very happy to see this study. From my Civil Engineering / Fluid Mechanics / Coastal Engineering background I expect to need full dynamic wave in coastal areas. Without your systematic approach, the argument would simply be that you need a wave to be able to move upstream in these areas, and there is lots of wave-related flooding, all influencing total coastal water.

Richard Luettich 1:33 PM

I saw you used a relationship between watershed size and channel width. How did you compute channel depth?

Hendrik Tolman - NOAA Federal 1:34 PM

Additional test cases: it would be awesome if you could also look at total coastal water

Richard Luettich 1:35 PM

got it
thanks

Hendrik Tolman - NOAA Federal 1:36 PM

Important for the 2-way coupling of NWM and coastal models

Trey Flowers - NOAA Federal 1:36 PM

Hendrick, we're working on Coastal Total Water under another initiative.

Ali Abdolali - NOAA Affiliate 1:36 PM

I'll show sth related to Hendrik point in my presentation within Coastal Act

Trey Flowers - NOAA Federal 1:36 PM

It will be a more complete hydraulic solution that will connect with Ehab's and Eric's work. We'll be deploying both capabilities in version 3.0 of the NWM, which will wrap development in Sept. 2021 with operational deployment in March 2023.

Hendrik Tolman - NOAA Federal 1:45 PM

Trey: understood, but these are all pieces of the same puzzle :-)

Ehab Presentation

- Muscumguge (sp.?) will substantially increase validity while not increasing cost too much.

Chat box messages:

Hendrik Tolman - NOAA Federal 1:45 PM

Ehab: same compliments to you!

Hendrik Tolman - NOAA Federal 1:46 PM

I am just very excited about all of this.

Trey Flowers - NOAA Federal 1:49 PM

Absolutely, Hendrick. I'm happy to chat offline about the other pieces (we have what you're asking about covered through the other effort).

We're incredibly excited about this as well. Ehab, Eric, and team are doing incredible work.

Hendrik Tolman - NOAA Federal 1:52 PM

If you switch between equations, does that create any spurious internal waves?

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Hendrik Tolman - NOAA Federal 1:54 PM

Do you have any info on costs savings in hybrid approaches?

Ehab Meselhe 2:05 PM

Thank you very much Hendrik for the kind words.

Ali Presentation

- Contact Ali with technical questions. Email on last slide
- Only currently being used in the Great Lakes in an operational capacity

Chat box messages:

Changsheng Chen 2:05 PM

Ali: We are testing the unstructured grid WWIII in the NECOFS domain. We have experienced some technical issues. Who should we contact in your group?

William Saunders - NOAA Federal 2:18 PM

WHERE/ WHEN CAN WE GET COPIES OF THESE PRESENTATIONS?? tHEY'RE GREAT!

Cayla Dean- NOAA Affiliate 2:18 PM

I will send out the slides and recordings of the presentations in a few days

They will also be posted at www.weather.gov/watercommunity

William Saunders - NOAA Federal 2:22 PM

Are these changes scheduled for inclusion into specific WW3 builds yet?