

1. Robert C. Beardsley and Changsheng Chen - *NECOFS: a FVCOM-based regional coastal and local inundation forecast tool*
2. M.J. Berger, D.L. George, R.J. LeVeque, and K.T. Mandli - *Using Adaptive Mesh Refinement to Model Ocean Flows*
3. Mustafa Kemal Cambazoglu, Cheryl Ann Blain, Kendra Dresback, Randall A. Kolar - *Modeling 3D Density-Driven Flow in a Complex Two-Strait, Three-Sea System*
4. V. Carey and D. Estep - *Adjoint-based error control and sensitivity analysis for shallow water models*
5. Changsheng Chen and Robert C. Beardsley - *A Global-to-Wetland Scale FVCOM System: A New Unstructured-grid Model Tool to Resolve Multi-scale Ocean Processes*
6. Vivien P. Chua and Oliver B. Fringer - *Assessing the effects of numerical diffusion in a three-dimensional unstructured-grid model of a periodically-stratified estuary*
7. Andrea Cucco, Christian Ferrarin, Aaron Roland, Debora Bellafiore, Marco Bajo, Francesca De Pascalis, Michol Ghezzi and Georg Umgiesser - *SHYFEM, a numerical tool for investigating environmental processes in coastal seas and lagoons*
8. Haiyang Cui, J.D. Pietrzak and Guss S. Stelling - *A non-hydrostatic two-dimensional unstructured finite volume model for tsunami waves*
9. K. M. Dresback, R. L. Kolar, C. A. Blain, M.K. Cambazoglu, C. M. Szpilka, A. M. Szpilka, and R. A. Luettich - *A Coupled HYCOM/ADCIRC System for the Northern Gulf of Mexico*
10. S. M. Durski, Y. H. Spitz, A. M. Baptista, J. Cho - *Active particle-based modeling of blooms of a mixotrophic ciliate in the lower Columbia River Estuary*
11. Mike Foreman, Roy Walters, Mike Tarbotton - *Circulation Models for the Discovery Islands, British Columbia*
12. S. Funke, C. Pain, S. Kramer and M. Piggott - *A new wetting and drying algorithm using a combined pressure/free-surface finite element method*
13. Shiva Gopalakrishnan, Frank Giraldo and Jim Kelly - *Development of a Coastal Inundation Model using a Triangular Discontinuous Galerkin Method*
14. O. Gourgue, J. Lambrechts, E. Deleersnijder, V. Legat and E. Wolanski - *A fine sediment module for the two-dimensional component of SLIM*
15. D Greenberg, Florent H. Lyard and Zeliang Wang - *TUGOm – progress, application and testing*

16. S. Harig, D. Sidorenko, Q. Wang, R. Timmermann, C. Wekerle, N. Rakowsky, S. Danilov and J. Schroter - *Recent applications of FEOM and TsunAWI: regional and global experiments*
17. J. Hill, M. Piggott, D. Ham, E. Popova and M. Srokosz - *On the performance of a generic length scale turbulence model within an adaptive mesh finite element ocean model*
18. M.E. Hope, J.J. Westerink, A.B. Kennedy, J.C. Dietrich, C. Dawson, J. Proft, J. Atkinson, H. Roberts - *Application of the Coupled ARCIRC+SWAN Model to Hurricane Ike on the Texas Gulf Coast*
19. S. M. Jachec - *Numerical modeling the development of field-scale internal boluses via barotropic tidal forcings*
20. Tarang Khangaonkar, Zhaoqing Yang, and Taeyun Kim - *Tidally Averaged Circulation in Fjoldal Sub-basins of Puget Sound: Model Validation Using Historic Records*
21. S.C. Kramer, M.D. Piggott, R.B. Nelson, D.A. Ham, C.J. Cotter, P.E. Farrell, G.J. Gorman and C.C. Pain - *Validation of the Imperial College Ocean Model with a wind-driven baroclinic gyre*
22. Ethan J. Kubatko, Clint Dawson, Colton Conroy and Ashley Maggi - *A sigma-coordinate, discontinuous Galerkin method for the three-dimensional shallow water equations*
23. J. Lambrechts, J.-F. Remacle and K. Hillewaert - *Efficient assembly of high order continuous and discontinuous finite element operators*
24. Lyon W. J. Lanerolle, Richard C. Patchen and Frank Aikman III - *The Design, Calibration, Validation and Application of a Model Nesting Methodology*
25. Yoann Le Bars and Florent Lyard - *Gradient, divergence and laplacian discrete approximations for numerical ocean modelling*
26. V. Legat - *SLIM: a three-dimensional baroclinic finite-element model; Time and spatial discretizations*
27. R. Martyr, J.C. Dietrich, J. Westerink, S. Tanaka, H. Westerink, L. Westerink, P. Kerr, H. Roberts, J. Atkinson - *Multi-scale Modeling of Riverine and Porous Coastal Environments In a Hydrodynamic Model*
28. Silvia Matt, Mohamed Iskandarani, Kevin Leaman - *Simulation of Mixing in 2D Gravity Currents Subject to Time-Dependent Forcing*
29. P. McKay and C.A. Blain - *Modeling of a Coastal River and Associated Floodplains*

30. S.A. Melchior, V. Legat, and P. Van Dooren - *Multigrid-based solvers for the shallow-water equations*
31. Arthur J. Miller and Hajoong Song - *State Estimate of the California Current System Using 4DVAR Ocean Data Assimilation*
32. P. Oddo and N. Pinardi - *The generalized Flather lateral open boundary condition*
33. O. Svenstrup Petersen and I. Sehested-Hansen - *A very large application of unstructured coastal models for infrastructure projects – cannot present on Friday (20<sup>th</sup>)*
34. J. Pietrzak, O. Kleptsova, O. Cui and G. Stelling - *A comparison of Finite Volume and Finite Element Methods for simulating The Indian Ocean Tsunami*
35. Shanon M. Reckinger and Oleg V. Vasilyev - *Ocean Circulation Modeling Using Adaptive Wavelet Collocation Method*
36. J. Sasaki, Y. Komatsu, R. Matsumaru and R.U.A. Wiyono - *Application of FVCOM to 2004 Indian Ocean Tsunami Focusing on Inundation in Banda Aceh, Indonesia*
37. B. Seny, J. Lambrechts, J.F. Remacle and V. Legat - *Multirate Time Stepping for Accelerating Explicit High Order Discontinuous Galerkin Computations*
38. Y. Peter Sheng, Vladimir A. Paramygin, Tianyi Liu, Andrew Lapetina, and Justin R. Davis - *Recent Advances of An Integrated Modeling System for Coastal and Estuarine Environments – requests slot on the 18<sup>th</sup>*
39. D. Shirokoff and R. Rosales - *An efficient method for the Incompressible Navier-Stokes Equations on Irregular Domains with no-slip boundary conditions, high order up to the boundary.*
40. S. Tanaka, J.J. Westerink, C. Dawson, and R.A. Luettich, Jr. - *Scalability of Unstructured Grid Based Hurricane Storm Surge Model*
41. H. S. Tang and X. G. Wu - *Simulation of Thermal Discharge into Coastal Flow: An Example of CFD and GFD Hybrid Approach to Resolve Small-Scales*
42. B. Wang, O.B. Fringer - *High-resolution simulation of stratified flow and separation over an abrupt sill in a estuary*
43. Lei Wang, Robert Krasny and John P. Boyd - *A Lagrangian vortex method for the barotropic vorticity equation on a rotating sphere*
44. John C. Warner, Brandy Armstrong, Ruoying He, Joseph Zambon - *Development and application of a Coupled-Ocean-Atmosphere-Wave-Sediment Transport (COAWST) Modeling System*

45. C. Wekerle, S. Harig, W. Pranowo, A. Androsov, A. Fuchs, N. Rakowsky, J. Schroter and J. Behrens - *Dependency of tsunami simulations on bathymetry, grid resolution and bottom friction*
46. J.J. Westerink, J.C. Dietrich, A.B. Kennedy, M. Zijlema, L.H. Holthuijsen, C. Dawson and R.A. Luettich, Jr. - *Coupled Waves and Storm Surge during Hurricane Gustav*
47. Y.J. Zhang, A.M. Baptista, A. Azevedo, A. de Oliveira, A.B. Fortunato, A. Roland - *SELFE Cross-Scale Modeling System: new developments and applications*
48. Aijun Zhang, Eugene Wei - *NOAA's Coastal Ocean Operational Forecast Systems*
49. Di Zhao - *HSS Preconditioner for Incompressible Navier-Stokes Equation on Multiscale Unstructured Mesh*

### **POSTER Presentations**

1. Colton J. Conroy and Ethan J. Kubatko - *An Advanced Mesh Generator for Hydrodynamic Models*
2. H. El-Asrag, T. C. Iannetti, F. Ham, H. Pitsch - *Large Eddy Simulation of a Lean Direct Injection Combustor*
3. Ashley L. Maggi, Ethan J. Kubatko and Damrongsak Wiraset - *Discontinuous Galerkin Methods for the Shallow Water Equations Using Mixed Meshes*
4. Meng Xia - *The response of northern Gulf of Mexico estuary plume, water exchange to wind forcing: A model-guided mechanism study to Perdido Bay*
5. Zhaoqing Yang, Taiping Wang, and Tarang Khangaonkar - *Pushing the Limits of Coastal Ocean Modeling: from Estuarine and Coastal Waters to Upstream River Floodplains*