

1.3 Recent updates and applications of the WRF-Hydro modeling extension package

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The WRF-Hydro hydrological modeling extension package issued its second community release in April of 2014. This release includes a few new physics components and a number of software upgrades to enable better performance for large computing systems and very large computational domains. Specifically, within version 2, users now have the option to use the NoahMP land surface model in both coupled-WRF and uncoupled modes. We have updated the reach-based channel routing functions and have updated the reservoir module. A number of additional pre- and post-processing tools have also been added to the WRF-Hydro community web portal. This talk will review each of these enhancements and provide short presentations on several different recent applications of the WRF-Hydro system for extreme rainfall and flooding events as well as longer-term hydro-climatic studies.