

## **Modifications and Required Changes from Previous AdH Input Formats and Expected Simulation Differences (Version 3.2)**

- The time stamp applied for the solution output in the \*.dat files will now reference the true time of the solution. The solutions will be saved at the first timestep that exceeds the requested time. In order to compare results from various simulations, you may have to resample the data in the SMS10.1 data calculator so that two solutions have the same time interval and number of timesteps.
- The Eddy Viscosity computations have changed. The estimated eddy viscosity computation now has two options: 1) isotropic and 2) anisotropic. The EEV card now requires a method indicator after the coefficient. All coefficients, regardless of the option, should lie between 0.1 and 1, with 0.5 as a good starting point for both. The method will default to isotropic if one is not specified.
- The wetting/drying tolerance inputs have changed to a single value. When depths fall below this value, additional stability and shock capturing algorithms are applied to help smooth the solution at the wet/dry interface.
- For wet/dry stability, a DF card can be included when using the EEV card for Eddy Viscosity. Be cautious about the value you may have on DF cards in previous bc files because they will now be used regardless of the eddy viscosity option.
- A new interactive user site is being developed for AdH. This site will initially only be available to USACE employees. The site will house the user manual and quick reference as well as video instructions and other documentation. This site will allow users to share knowledge and ask questions. This site will eventually replace the current AdH website for 2D shallow water and will become the primary means of communication with our development team.

For more information on these cards and up-to-date information, see the ADH 2-Dimensional Shallow Water Manual and the ADH Quick Reference at <https://adh.usace.army.mil>. (until the new site gets up and running)