

Modifications and Required Changes from Previous AdH Input Formats and Expected Simulation Differences (Version 4.5)

- The Umfpack and ParMetis solvers have been upgraded. This upgrade should show speedup on the HPC platforms.
- A breach library has been added to the code. See the Hydrodynamic User Manual for details.
- The User Manual has been split into a Hydrodynamic manual and a Sediment Transport manual.
- The pov and poh output data files will only be generated when using the second order temporal scheme.
- The bug with the PC HOT card has been corrected.
- A bug was found in the error computation used for adaption and has been corrected. This change will cause models with adaption to perform differently.

Multiple Processor Execution:

- A 64 bit Windows multiple processor version of AdH is now available. To utilize this capability you must have the HPC Pack 2008 R2 and HPC Pack 2008 R2 SDK from Microsoft installed on your machine. The generic command line for executing the Windows version is:

```
mpiexec -n "processors #" adh.exe "filename"
```

- Requests for multi-processor executables for other operating systems such as Mac OS, Linux etc., will require a scope of work and payment due to the time necessary to compile and test on a new machine.

Additional Information Sources:

- The AdH website now includes a project map. If you have information that you would like to add to our AdH website, please let us know. Additional "how-to" information from users is nice to share with others. The Windows PC executables and the documentation can all be accessed through links on the lower left of the home page.

For more information on these cards and up-to-date information, see the ADH 2-Dimensional Shallow Water Manual at http://adh.usace.army.mil/new_webpage/main/main_page.htm.