

CCHE-GUI FAQ

1. For Users using Window Vista OS, before installing CCHE-GUI:
 - Go to “Control Panel”;
 - Select “Users Account”;
 - Select “Turn User Account on or off”;
 - Uncheck the option “Use User Account Control (UAC) to help protect your computer”, and then click OK;
 - Restart your computer.
2. If error message “This beta version of CCHE2D model has expired. Please contact NCCHE for renewal.” appears, please go to our website to download a newer version. Note that before installing the new version, you need to UNINSTALL all the old versions.
3. For The First Time Users of NCCHE models.
 - The CCHE1D, CCHE-GUI and CCHE-MESH provide Quick Start Guides which give step-by-step instructions through example applications to help the first time users master the use of NCCHE software quickly.
 - It is recommended to go through the Quick Start Guide before applying NCCHE models to real problems.
4. How to specify initial conditions for CCHE2D model.
 - Select a variable (e.g., Initial Water Surface) from “Variable View”.
 - Select the button with the icon of a rectangle and a plus on “Simulation” toolbar.
 - Select two different mesh nodes in the domain to define an area.
 - In the dialog window, specify a value and click OK. This value will be assigned to the above selected area.
 - Repeat the above process until all the initial conditions are specified for the whole domain.
5. When using CCHE2D model, the flow simulation doesn’t run or doesn’t give good results or crashes.
 - Check if the initial boundary conditions, especially the “Initial Water Surface”, were correctly set.
 - Check if there are too many dry nodes in the domain at the beginning. If Yes, try to specify higher initial water surface to reduce the dry nodes.
 - Check if the time step is too big. You may go to “Set Flow Parameters...” menu in “Simulation” menu to reduce the time step.

- Check if the mesh is too coarse. If Yes, you may need to use Mesh Editing Tool to refine the mesh locally or use CCHE-MESH to regenerate a finer mesh.
6. When using CCHE2D model, the sediment transport simulation doesn't run or doesn't give good results or crashes
- For Sediment Parameters:
 - Check if the sediment "Size Classes" are defined.
 - Check if the "Number of Bed Layers" is equal to or greater than 3.
 - Check if the "Bed Samples" are defined.
 - Check if the sediment "Boundary Condition Files" are prepared.
 - Check if the sediment "Transport Mode" is selected.
 - Check if the "Adaptation Length for Bedload" and the "Adaptation Factor for Suspended load" are correctly set.
 - For Sediment Initial Conditions.
 - Check if the Layer Thickness is correctly set for EACH layer. Usually for the first layer, the thickness is 1~2 times of the D50.
 - Check if the Layer Sample is set for EACH layer.
 - For Sediment Boundary Conditions, check if it is attached to the desired flow inlet. If NO, select the desired inlet, select "Import SBC File" or/and "Import BBC File" to attach the prepared sediment boundary condition files.
 - The sediment transport simulation is based on an existing flow result. If this flow result is not good enough, it would definitely affect the sediment transport simulation.
7. Conversion from a raster to a "DEM" format for CCHE1D model
- Open ArcMap 9.x.
 - Display "ArcToolbox" in your ArcMap window. "ArcToolbox" can be found in the ArcMap menu bar, its icon looks like a "red box".
 - Expanding "Conversion Tools" under the "ArcToolBox" list, you will find "From Raster" toolbox. Under this toolbox, you can see "Raster to ASCII" tool.
 - Double Click "Raster to ASCII" Tool and open it window. Browse the input raster file you want to convert at the "Input raster", and enter a name for the "Output ASCII raster file", then the generated ASCII file is a "DEM" file that CCHE1D can load as a "Grass ASCII file".
8. How to get the related documents (Users' Manual, Technical Report, etc)?
- Usually all related documents will be included into the Installer. After installing the CCHE-GUI or CCHE-MESH or CCHE1D into your computer, you can go to the corresponding "Group" by selecting Start-> All Programs. All the documents can be found in "Documents".
9. Exports or conversion of CCHE2D results

- The CCHE-GUI can export results into a bitmap image.
- The CCHE-GUI can export and convert the selected results into a text file which can be opened by any text editor. By adding an appropriate header, it can be easily imported by Techplot. This function can be accessed when viewing the results in a Table (The fourth button in the middle toolbar).
- The CCHE-GUI can export results from the selected I or J line, or extract results from a predefined polyline into a text file when using Data Probe tool.
- The CCHE-GUI can export a selected Frame from a History results into the ASCII file when viewing the history results by History File Editor.
- The CCHE-GUI can generate animation from the History results by History File Editor.
- Except the above, the CCHE-GUI cannot convert the results into other formats, e.g., ArcGIS formats, etc.