

A review of “Tracing and visualisation of contributing water sources in the LISFLOOD-FP model of flood inundation” (Wilson and Coulthard, preprint 2021)

Testing the model

I followed the instructions on the Zenodo archive page (<https://zenodo.org/record/5541123>) to test the model on a Windows 10 laptop. It would be good to have a clearer step-by-step tutorial for the user depending on which case study they wanted to look at, just to make the page a bit more user-friendly. For example, I wasn't sure whether all the files on the archive were required for testing, but then I realised I would only need either the *CarlisleTestCase.zip* or the *PlanarTest.zip* file which would have all the files I needed.

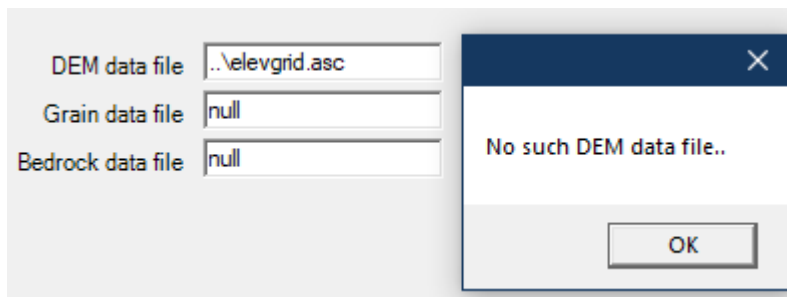
The Carlisle test case worked out of the box, but the Planar test case required some editing of the XML file. It would be good to perhaps tweak the files within *PlanarTest.zip* so that it works out of the box like the Carlisle test case.

Carlisle Test Case

The data loaded in fine and a dialogue box showed that the variables were OK. I did not finish the simulation as it was still going after a few hours. But the in-progress map seemed to be approaching what was displayed in the paper.

Planar Test Case

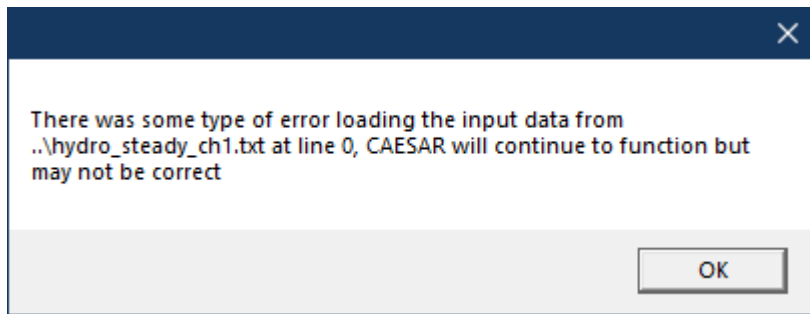
This did not work for me out of the box. I opened the *CAESAR-lisflood 1.8_WS* application and opened the *model_trace_8.xml* file per instructions. When I clicked load data, this dialogue box appeared:



The folder for *PlanarTest* contained the *elevgrid.asc* file, so it is possible that the programme is not seeing it. The .xml file for the Carlisle test case did not have the trailing characters at the beginning of the file, so I edited the *model_trace_8.xml* file's DEM section to look like this:

```
<FileNames>  
  <Desc>DEM Data File</Desc>  
  <Name>elevgrid.asc</Name>
```

When I clicked load data, this new dialogue box appeared:



Pressing OK led to a new dialogue box with the same message, but the integer in the filename was incremented by 1 each time (e.g. *hydro_steady_ch1.txt* until *hydro_steady_ch8.txt*). Following the same method used to fix the DEM filename, I edited the .XML file to remove the trailing characters “..\” at the beginning of each filename. After loading this in again, the dialogue boxes were gone and the programme told me “All other variables are OK” and let me run the model.

It did not look like anything was happening at first because the screen was not automatically updating as it had done in the Carlisle test case. But pressing the *update graphics* button caused the screen to update with the images expected. I am unsure why the Carlisle test case automatically generates the images, but the Planar test requires the user to press the *update graphics* button.