## TopoToolbox 2 - calculating the multiple flow direction



With the introduction of TopoToolbox 2, the new FLOWobj does only support the single (D8) flow direction algorithm. If you have been a user of TopoToolbox 1 and require the multiple flow direction (MFD) algorithm, please read these pages.

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## Requirements

If you want to use the MFD algorithm with TopoToolbox 2, you must have a previous version (e.g. TopoToolbox 1.6) on your search path.

## Here is how to do it

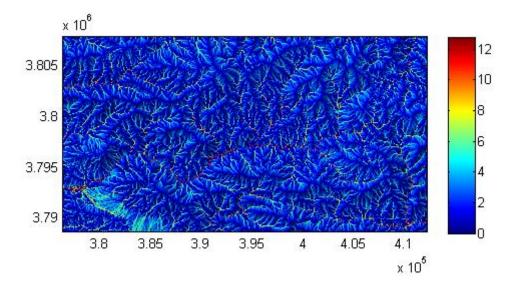
```
% get the coordinate vectors and the DEM in the format required by the
% function flowdir
[dem,X,Y] = GRIDobj2mat(fillsinks(DEM));
% use meshgrid to calculate coordinate matrices
[X,Y] = meshgrid(X,Y);
% calculate the flow direction matrix M
M = flowdir(X,Y,double(dem));
```

Now you should calculate the desired topographic attribute directly from M, e.g. flow accumulation

```
A = flowacc(M,size(dem));
```

and convert the output back to a GRIDobj.

```
A = GRIDobj(X,Y,A);
% if there is projection information in the property .georef, you can copy
% it from the DEM.
A.georef = DEM.georef;
% and plot it
imageschs(DEM,log(A));
```



and this is it.

## **Future developments**

The fact, that TT2 currently does not support the MFD algorithm is unsatisfactory. We are currently working on including MFD in future version of TT.