

User Input  
path/to/config.file

IN: path to config file

**INITIALIZE**

Configuration  
File

OUT: flow parameters

IN: path to DEM

**DEM\_LOADER**

Elevation  
Model

OUT: global data grid

IN: flow parameters

**INITFLOW**

IN: flow cells list,  
cell location

**ACTIVATE**

OUT: list of flow cells

OUT: appended  
flow list

IN: flow cells list, vent info

**PULSE**

OUT: updated remaining lava

IN: flow cells list,  
cell location

IN: flow cells list

**DISTRIBUTE**

**NEIGHBOR\_ID**

OUT: updated Flow

OUT: list of lower  
neighbor cells

**ACTIVATE**

Remaining  
Lava > 0  
?

Yes

No

Mass  
Conserved  
?

No

**END w/  
Error Message**

Yes

IN: flow cells list,  
output file type

**OUTPUT**

GeoTiff files

ASCII files

**END**