Manual for Package: delft3d
Revision 1M

Karl Kästner

September 8, 2020

Contents

1 @DFM

1.1 DFM

1.2 export_bc

1.3 export_cross_section_geometry

1.4 export_his

1.5 export_pli

2 @DFM/old

2.1 write_mor

2.2 write_sed

3 @DFM

3.1 read_cross_section_geometry

3.2 read_mdu

3.3 read_pli

3.4 write_friction_ext

3.5 write_initial_water_level

3.6 write_project

4 @DFM_Calibrator

4.1 DFM_Calibrator

4.2 calibrate

4.3 calibration_objective

4.4 extract

5.14 mtime

5.15 nearest_FlowElem

5.16 nearest_FlowLink

5.17 nedge

5.18 nelem

5.19 nvertex

5.20 order_coordinates

5.21 plot

5.22 plot_ElemLink

5.23 plot_FlowElemContour

5.24 plot_FlowLink

5.25 plot_NetLink

5.26 plot_NetLinkContour

5.27 read_grain_size

5.28 read_rgh

5.29 resample

5.30 roughness

5.31 sediment_transport

5.32 sediment_transport_rijn

5.33 time

6.6 export_crs

6.7 export_obs

6.8 export_thin_dams

6.9 export_tra

6.10 export_trt

6.11 export_trtdef

6.12 folder_name

6.13 read_all

6.14 set_fractions

6.15 write_all

6.16 write_bch

6.17 write_ini

7 @Delft3D_His

7.1 Delft3D_His

```
fdx = (Xc~=0) & (Yc~=0);
fdx(1,:) = true; fdx(end,:) = true;
fdx(:,1) = true; fdx(:,end) = true;
fdx = fdx & (X>0);
X = obj.X;
for idx=1:size(u3,2)
 % first
 if (isnan(u3(1,idx,1,1)))
       u3(:,idx,1,:) = 0;
 end % if first
 % centre
 for jdx=2:size(u3,3)-1
       if (~isnan(X(idx,jdx)) && isnan(u3(1,
           idx,jdx,1)) ...
            && ( isnan(X(idx,jdx+1)) || isnan(X
                (idx,jdx-1)) ) )
              u3(:,idx,jdx,:) = 0;
       end
 end % for jdx
 % last
 if (isnan(u3(1,idx,end,1)))
       u3(:,idx,end,:) = 0;
 end % if last
end % for idx
```

8 @Delft3D_Map

8.1 Delft3D_Map

8.2 cs_flux

8.3 difference

8.4 discharge

8.5 mark_cs

8.6 plot_cs

8.7 plot_cs_1d

8.8 plot_stratigraphy

8.9 quiver_cs

8.10 to_earth

8.11 video

```
x = obj.elem_x();
y = obj.elem_y();
```

9 @Delft3D_Mdf

9.1 Delft3D_Mdf

9.2 compose_domain

9.3 compose_mdf

10 @Delft3D_Mor

10.1 Delft3D_Mor

11 @Delft3D_Sed

11.1 Delft3D_Sed

11.2 set_gsd

12 delft3d

12.1 dfm_export_bc