

# Manual for Package: delft3d

## Revision 1M

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1.2	export_bc	
1.3	export_cross_section_geometry	
1.4	export_his	
1.5	export_pli	
<b>2</b>	<b>@DFM/old</b>	
2.1	write_mor	
2.2	write_sed	
<b>3</b>	<b>@DFM</b>	
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**

4.5 `extract_discharge`

4.6 `extract_water_level`

4.7 `getstate`

4.8 `log`

4.9 `print_calibration_parameter`

4.10 `run`

5 `@DFM_Map`

5.1 `DFM_Map`

5.2 `FlowLink_waterdepth`

5.3 `FlowLink_width`

5.4 bed\_shear\_stress

5.5 bedform\_dimension

5.6 cat

5.7 cross\_section\_1d

5.8 discharge\_1d

5.9 elem\_x\_centre

5.10 elem\_y\_centre

5.11 energy\_transport\_1d

5.12 flicker

5.13 grain\_size

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`

5.34 transport\_stage\_rijn

5.35 velocity\_1d

5.36 video

5.37 waterlevel

## 6 @Delft3D

6.1 Delft3D

6.2 default\_bcc

6.3 export\_bcc

6.4 export\_bct

6.5 export\_bnd

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