
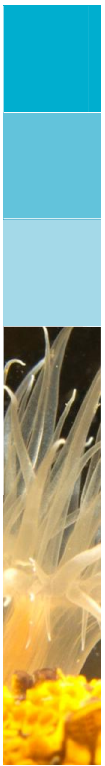












D The hyd-file

D.1 Contents of the hyd-file

keyword	value	
file-created-by		optional
file-creation-date		optional
task	full-coupling coupling-per-domain	
horizontal aggregation	yes no automatic	
minimum-vert-diffusion-used	no real value	
vertical-diffusion	calculated	required
description	'Comment 1' 'Comment 2' 'Comment 3'	3 lines, each line between single quotes
end-description		
geometry	unstructured curvilinear-grid finite-elements z-layers	D-Flow FM, UNTRIM Delft3D TELEMAC SOBEK (not yet defined) D-Flow FM, UNTRIM, Delft3D or TELEMAC
reference-time	'yyyymmddhhmmss'	'19920831000000'
hydrodynamic-start-time	'yyyymmddhhmmss'	'19920831000000'
hydrodynamic-stop-time	'yyyymmddhhmmss'	'19920831002000'
hydrodynamic-timestep	'yyyymmddhhmmss'	'0000000000100'
conversion-ref-time	'yyyymmddhhmmss'	'19920831000000'
conversion-start-time	'yyyymmddhhmmss'	'19920831000000'
conversion-stop-time	'yyyymmddhhmmss'	'19920831002000'
conversion-timestep	'yyyymmddhhmmss'	'0000000000100'
grid-cells-first-direction	integer value	structured: number of cells in first direction unstructured: total number of cells
grid-cells-second-direction	integer value	structured: number of cells in second direction unstructured: 1 
number-hydrodynamic-layers	integer value	to derive thickness of vertical water quality layers
number-horizontal-exchanges	integer number	required
number-vertical-exchanges	integer number	required
number-water-quality-segments-per-layer	integer number	required
number-water-quality-layers	integer number	required
hydrodynamic-file	'file name' 'name.ddb'	
aggregation-file	'name.dwq' none	



keyword	value	
	'per domain'	In case of hydrodynamic domain decomposition model
grid-indices-file	'name.lga'	not unstructured: required
grid-coordinates-file	'name.cco'	not unstructured: required
boundaries-file	'name.bnd'	unstructured: required
waggeom-file	'name.waggeom.bnd'	unstructured: required 
volumes-file	'name.vol'	required
areas-file	'name.are'	required 
flows-file	'name.flo'	required
pointers-file	'name.poi'	required
lengths-file	'name.len'	required 
salinity-file	'name.sal' none	
temperature-file	'name.tem' none	
vert-diffusion-file	'name.vdf' none	
horizontal-surfaces-file	'name.srf'	required 
dps-file	'name.dps'	optional 
discharges-file	'name.src'	optional
chezy-coefficients-file	'name.chz' none	
shear-stresses-file	'name.tau'	 optional
walking-discharges-file	'name.wlk'	optional
attributes-file	'name.atr'	required 
minimum-vert-diffusion upper-layer lower-layer interface-depth end-minimum-vert-diffusion	real real real	
constant-dispersion first-direction second-direction third-direction end-constant-dispersion	real real real	
hydrodynamic-layers	0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	required relative thickness of layers, surface to bed level, to derive thickness of vertical water quality layers 
end-hydrodynamic-layer		
water-quality-layers		required

keyword	value	
end-water-quality-layer	4.000 3.000 2.000 1.000	number of hydrodynamic layers per water quality layer, to derive thickness of vertical water quality layers
discharges	real or integer real or integer integer 'discharges name' type	unstructured: <i>x</i> -coordinate structured: first index unstructured: <i>y</i> -coordinate structured: second index layer number name of the discharge values: normal, inlet, outlet, walking
If aggregation-file is 'per domain'		
domains	'name' integer integer <i>name.dwg</i> '	domain name cell numbers in first direction cell number in second direction aggregation file per domain
end-domains		
If hydrodynamic-file is ' <i>name</i> .ddb'		
dd-boundaries	'name' integer integer integer integer 'name' integer integer integer integer	domain name 1 m1 n1 m2 n2 domain name 2 m1 n1 m2 n2
end-dd-boundaries		