Symbol	Meaning	Dimension	Symbol	Meaning	Dimension
a	Cross-sectional convergence length	(L)	Q	Freshwater discharge	($\mathrm{L^3\,T^{-1}}$)
A	Cross-sectional area	($\mathrm{L^2}$)	s	Length scale of the salinity variation	(L)
A_f	Cross-sectional area of the river	($\mathrm{L^2}$)	S	Salinity	($\mathrm{M\,L^{-3}}$)
A_S	Storage cross-sectional area	($\mathrm{L^2}$)	S_f	Freshwater salinity	($\mathrm{M\,L^{-3}}$)
B	Width	(L)	t	Time	(T)
d	Length scale of the dispersion variation	(L)	x	Distance	(L)
D	Dispersion coefficient	($\mathrm{L^2\,T^{-1}}$)	z	Water level	(L)
g	Gravity acceleration	($\mathrm{L\,T^{-2}}$)	α_1	Constant	(–)
h	Water depth	(L)	ε	Factor	(–)
K	Van der Burgh's coefficient	(–)	ρ	Density of water	($\mathrm{M\,L^{-3}}$)
P	Power per unit length	($\mathrm{M\,L\,T^{-3}}$)	ρ_s	Density of seawater	($\mathrm{M\,L^{-3}}$)