Supplementary Table S6 Previous reported anammox rates and corresponding contributions to the total nitrogen removal (ra% = anammox/(denitrification + anammox)) in various biological environments

Location of studies	Environments	Anammox rate [a] (nmol N·g^{-1}·h^{-1})	ra%	References
Eastern China	River and riparian sediments	14.9–36.7 (24.2) 30.3–66.7 (46.5) mmol N L^{-1} h^{-1} 6.1–13.3 (9.3) mmol N m^{-2} h^{-1}	35.6–58.3 (47.7)	This study
Gullmar Fjord, Sweden	Marine sediments	6.1	23.0–47.0	[15]
Jiulong Rirver Estuary, China	Mangrove sediments	0.9–46.2 [b]	33.0–57.5	[16]
Shanghai, China	River sediments	5.6–10.3 (7.9)	17.2–67.5 (33.3)	[17]
Yangtze River, China	Riparian sediments	0.1–23.7	3.5–82.8	[18]
Amundsen Sea Polynya, Antarctica	Marine sediments	0.1–0.3 mmol N L^{-1} h^{-1}	45.5–80.2	[19]
Long Island Sound, USA and Skagerrak, Denmark	Marine sediments	1.1–7.0 [c]	4.0–79.0	[20]
Goa, India	Mangrove sediments	3.0–202.3	4.0–67.0	[21]
Taihu Lake, China	River sediments	98.0–826.0 mmol N L^{-1} h^{-1}	26.5–46.8	[22]
Cosumnes River, California	Riparian sediments	290.0–2140.0 [b]	41.0–84.0	[23]
Cixi, Ningbo, China	Coastal sediments	0.1–1.3	40.0–87.5	[24]
Hampshire Avon Catchment, UK	River sediments	0.3–29.4	7.0–58.0	[25]
Shandong, China	River sediments	0.1–2.4 [b]	14.0–74.0 (44)	[26]
Qinghai-Tibet Plateau, China	Riparian sediments	1.5–26.0	28.8–88.8	[27]
Changjiang Estuary, China	Estuarine sediments	70.0–130.0 (105)	2.0–5.8 (4)	[28]
Yangtze River, China	River sediments	0.4–8.0 [b]	1.6–54.8	[29]
Peru margin sediments	Marine sediments	1.8–44.2 (14.7) mmol N L^{-1} h^{-1}	2.6–47.4 (34.2)	[30]
Aarhus Bay and Skagerrak, Denmark	Marine sediments	1.4–4.1 [c]	2.0–67.0	[31]
Thames Estuary, England	Estuarine sediments	6.6–48.9 [b]	21.0–48.0	[32]
Deep Norwegian Trench in the Skagerrak	Marine sediments	0.8–2.0 [b]	72.0–77.0	[33]
Pearl River Estuary, China	Riparian sediments	70.0–2600.0 [c]	0.5–7.0	[34]
Five wetlands, Singapore	Wetland sediments	5.8–18.0	29.8–57.3	[35]
Yangtze River Delta, China	Estuarine sediments	0.6–11.4 (3.7)	11.6–47.7 (22.2)	[36]
Estuarine sediments, China	Eestuarine sediments	0.3–13.7 (2.4)	2.4–82.6 (15.9)	[37]
Taihu Lake region, China	River sediments	0.1–6.8 [b]	0.8–10.7	[38]
Zhangjiang Estuary, China	Mangrove sediments	0.4–23.1	1.6–16.7	[39]
Inland waters, China	Lake sediments	1.0–975.9 [b]	0.9–82.2	[40]
Baiyangdian Lake, China	Lake sediments	0.2–20.0 (5.9)	0.6–35.0 (12.6)	[41]

a Data in parenthesis are the mean values.

b The unit is umol N m^{-2} h^{-1}.

c The unit is umol N L^{-1} h^{-1}

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