Key to data file

Field	Unit of measure	Explanation
ID	–	Unique identifier of each case study
name	–	River-system name
latitude	Decimal degrees	Latitude of a point near the centre of the study area
longitude	Decimal degrees	Longitude of a point near the centre of the study area
avulsion_data	[class]	Indicates avulsion-event data availability and quality (high vs low)
channel_data	[class]	Indicates channel-thread data availability and quality (high vs low)
lobe_data	[class]	Indicates delta-lobe data availability and quality (high vs low)
data_sources	[text]	Reference to literature sources for data on avulsion events, channel threads, and delta lobes (see reference list in file named 'references')
n_avulsions	–	Number of avulsion events recorded for the studied time interval; may represent a complete record
n_avuls_min	–	Number of avulsion events recorded for the studied time interval; thought to represent an underestimate of the true number
time_a_kyr	kyr	Duration of time window over which avulsion events are counted
n_channels	–	Number of channel threads counted for the studied time interval; may represent partial or complete record
time_c_kyr	kyr	Duration of time window over which channel threads are counted
n_lobes	–	Number of delta lobes counted for the studied time interval; may represent partial or complete record
time_l_kyr	kyr	Duration of time window over which dellta lobes are counted
rate_a_high	kyr^{-1}	Number of avulsion events per unit time, based on avulsion records thought to be more complete
rate_a_any	kyr^{-1}	Number of avulsion events per unit time, based on all avulsion records
rate_c	kyr^{-1}	Number of channel threads per unit time
rate_l	kyr^{-1}	Number of delta lobes per unit time

norm_rate_a_high	$kyr^{-1} \cdot km^{-2}$	Number of avulsion events per unit time, based on avulsion records thought to be more complete, normalized by study area size and river number
norm_rate_a_any	$kyr^{-1} \cdot km^{-2}$	Number of avulsion events per unit time, based on all avulsion records, normalized by study area size and river number (avulsion-even density)
norm_rate_c	$kyr^{-1} \cdot km^{-2}$	Number of channel threads per unit time, normalized by study area size and river number (channel-thread density)
norm_rate_l	$kyr^{-1} \cdot km^{-2}$	Number of delta lobes per unit time, normalized by study area size and river number (delta-lobe density)
study_area	km^2	Size of study area
study_area_a	km^2	Size of study area considered for computing normalized avulsion-event density, where this refers to an area that differs from that reported as 'study_area'
study_area_c	km^2	Size of study area considered for computing normalized channel-thread density, where this refers to an area that differs from that reported as 'study_area'
study_area_l	km^2	Size of study area considered for computing normalized delta-lobe density, where this refers to an area that differs from that reported as 'study_area'
progr_rate	$m \cdot yr^{-1}$	Shoreline progradation rate, averaged through time and alongshore over the study area
progr_rate_time	kyr	Length of time over which 'progr_rate_time' is computed
suspended_load	$Mt \cdot yr^{-1}$	Total suspended sediment load of the river near upstream end of the study area
drainage_area	km^2	River drainage-basin area
avg_gradient	dimensionless ($m \cdot m^{-1}$)	Average longitudinal topographic gradient of the study area, from the upstream end of the study area to the shore
mean_yr_discharge	$m^3 \cdot s^{-1}$	Mean annual water discharge of the river at studied location
backwater_length	km	Approximation of the river backwater length based on estimated mean bankfull depth for the proximal part of the study area
bathymetric_slope	dimensionless (m·m-1)	Gradient of the receiving basin offshore of river mouths (Caldwell et al. 2019, Earth Surf. Dynam., 7, 773-787)
mean_wave_height	m	Mean significant wave height
tidal_range	m	Mean tidal range
Qw_Qr	–	Wave-to-fluvial sediment discharge ratio (Nienhuis et al. 2020, Nature, 577, 514-518) for avulsion and channel-thread metrics

Qw_Qr_L	–	Wave-to-fluvial sediment discharge ratio (Nienhuis et al. 2020, Nature, 577, 514-518) for delta-lobe metrics
Qt_Qr	–	Tidal-to-fluvial sediment discharge ratio (Nienhuis et al. 2020, Nature, 577, 514-518) for avulsion and channel-thread metrics
Qt_Qr_L	–	Tidal-to-fluvial sediment discharge ratio (Nienhuis et al. 2020, Nature, 577, 514-518) for delta-lobe metrics
sl_change	mm·yr-1	Present-day sea-level change based on AVISO satellite altimetry records (Caldwell et al. 2019, Earth Surf. Dynam., 7, 773-787)
ice6g_rsl_change	mm·yr-1	Present-day ICE6-G glacioisostatic relative sea-level change
t_rsl	mm·yr-1	ALTIGAPS present-day relative sea-level change
s_rsl	mm·yr-1	ALTIGAPS present-day relative sea-level change standard deviation
altigaps_datatype	[class]	ALTIGAPS data type, classified as GPS or tide gauge (TG)