Figures

Abb	Scale	Metric	Connectivity Type	Split Value	Delta k
cd	nws	Closest lake distance	long	2776.81	0.27
ll	nws	Average Link Length	long	2237.34	0.19
lc	focal	Lake Connection	long	NA	0.17
la	nws	Upstream lake area	lat	153.50	0.16
md	focal	Max Depth	NA	19.81	0.15
ll	iws	Average Link Length	long	2177.08	0.14
sd	nws	Stream density	lat	10.40	0.13
bf	iws	Baseflow	lat	63.76	0.12
sr	iws	Stream order ratio	long	0.67	0.10
cd	iws	Closest lake distance	long	3773.61	0.05
sr	nws	Stream order ratio	long	0.47	0.05
sd	iws	Stream density	lat	4.43	0.03
bf	nws	Baseflow	lat	52.94	0.00

metric	direction	k	connectivity	in_lake_processing	axis	connectivity type
closest lake distance	lower	higher	lower	higher	lake-stream	long
average link length	lower	higher	lower	higher	stream	long
lakeconnection	DR_Stream	higher	lower	higher	lake	long
upstream lake area	lower	higher	lower	higher	lake	lat
stream density	higher	higher	lower	higher	stream	lat
baseflow	higher	higher	lower	higher	stream	lat
stream order ratio	higher	higher	lower	higher	stream	long

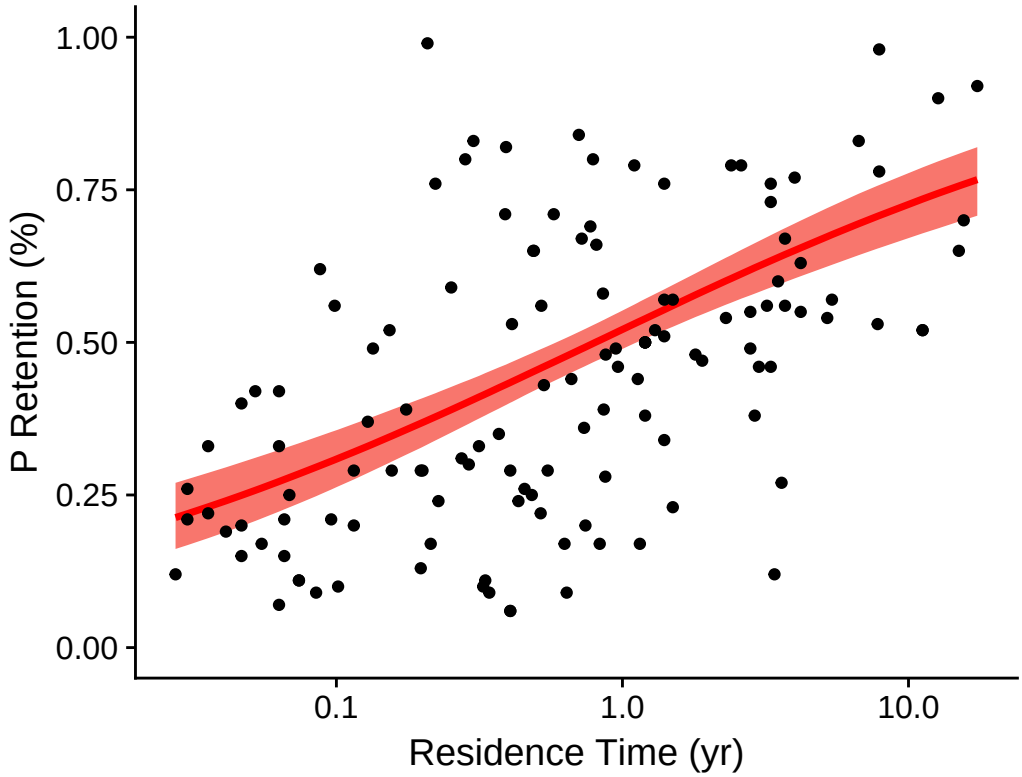

Figure 1: Median and central 95% interval estimates from the non-hierarchical model posterior relative to raw data.

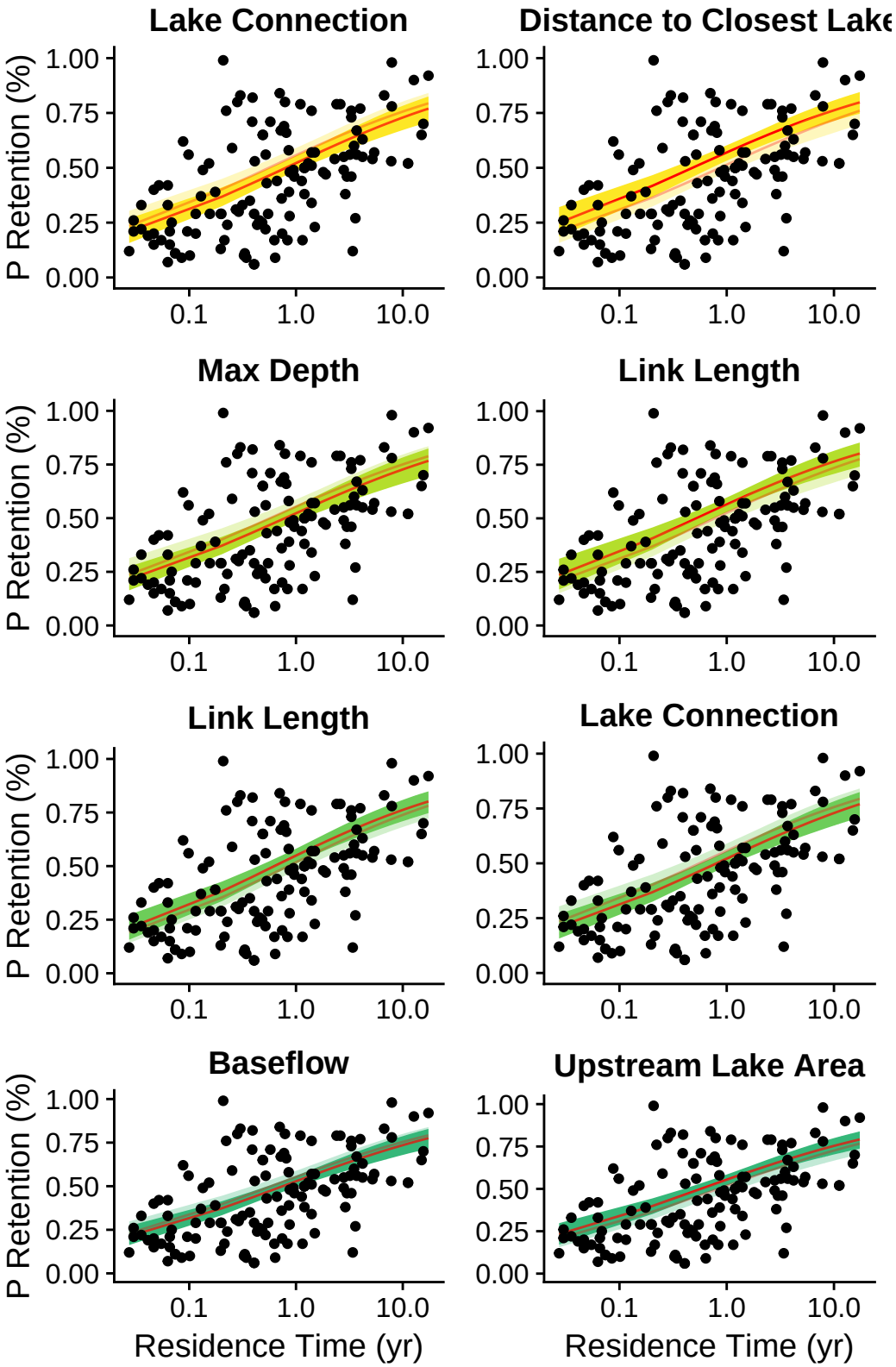

Figure 2: Median and central 95% interval estimates from the hierarchical model posteriors relative to raw data. Dark lines and shaded polygons represent the estimates from the lower of the two partition groups (see Table 1)

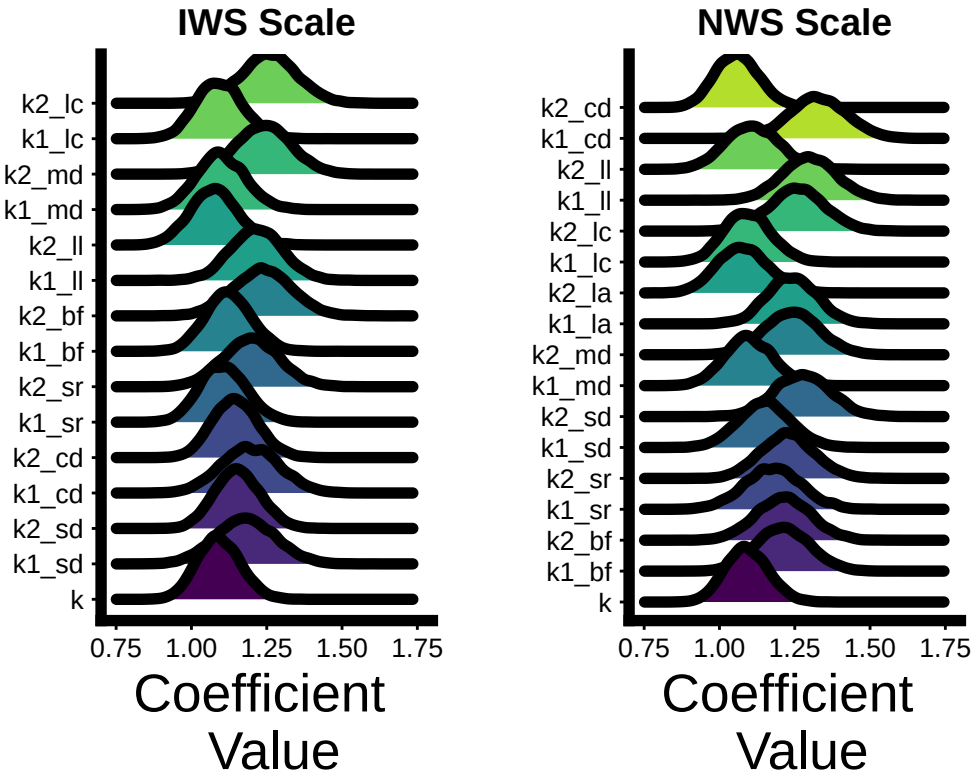

Figure 3: Distribution of Vollenweider's k in low and high connectivity partitions at the IWS and NWS scales.

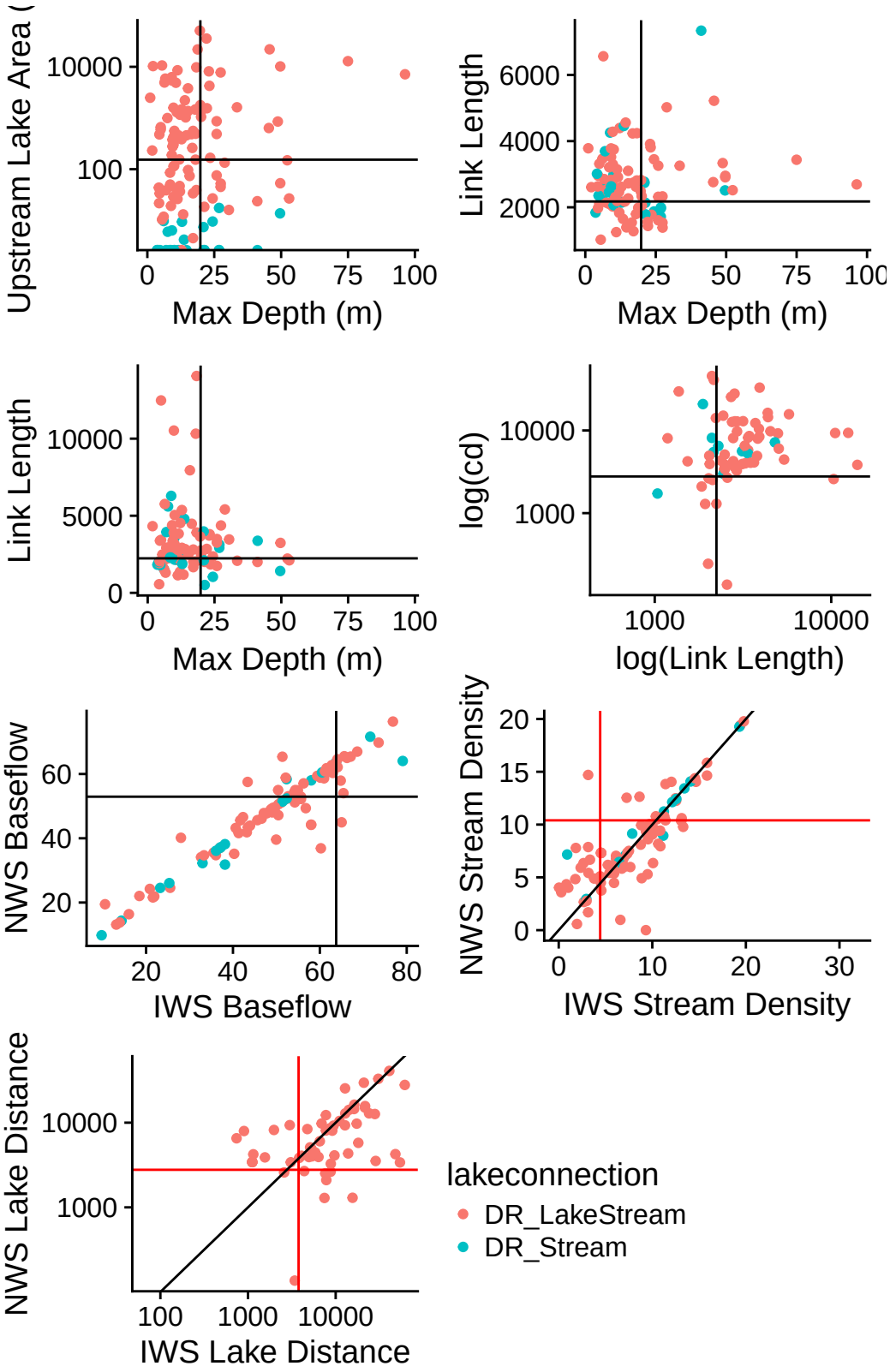

Figure 4: Exploratory plots

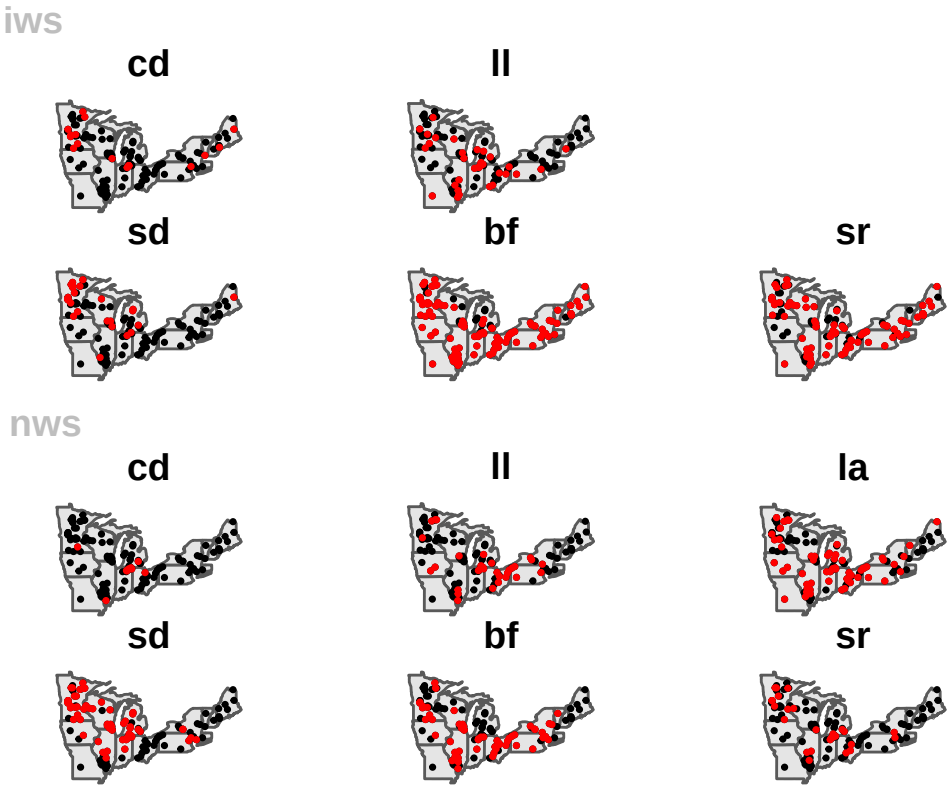

Figure 5: Map of lake connectivity partitions.