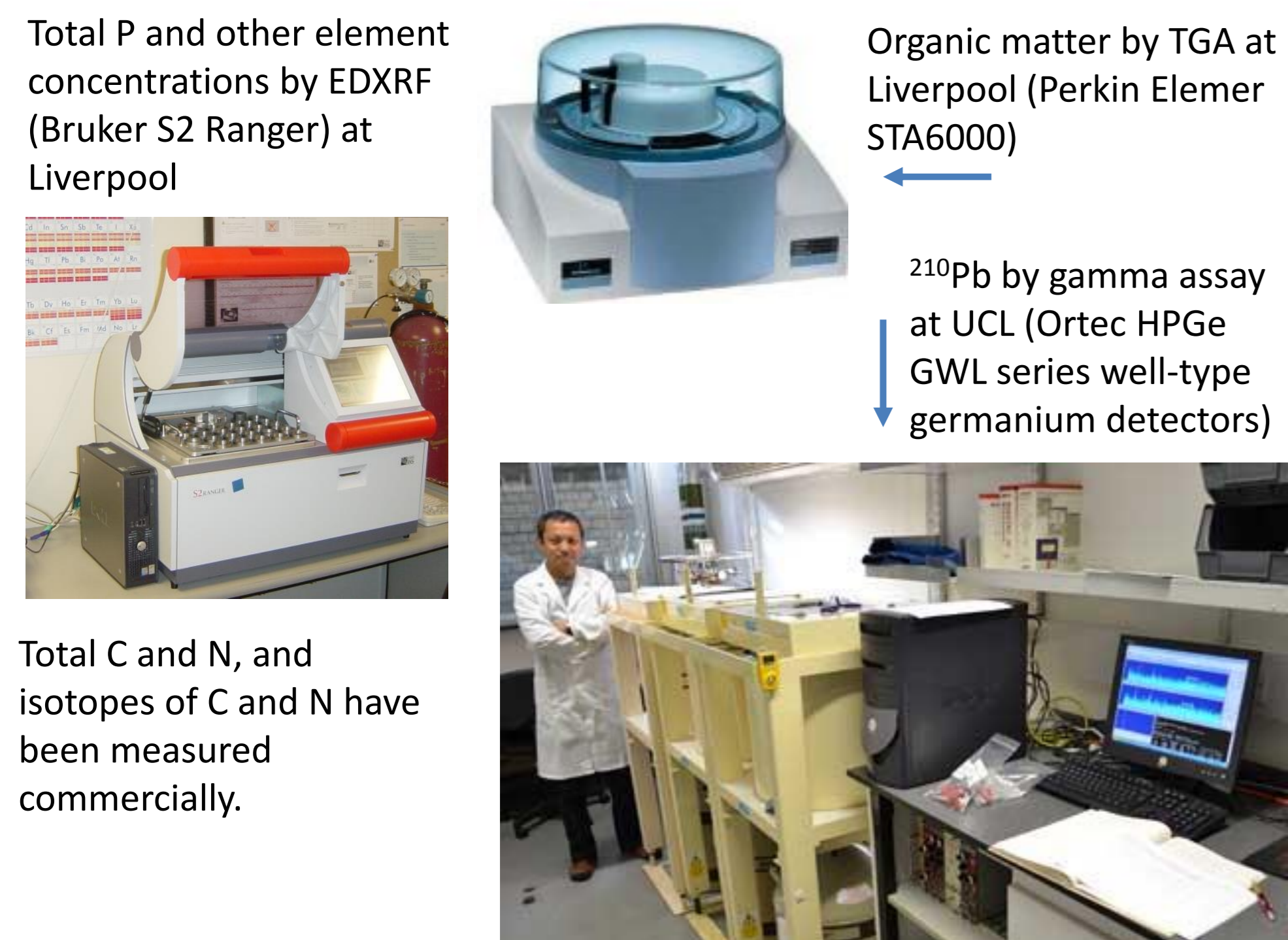


Methods: sediment coring

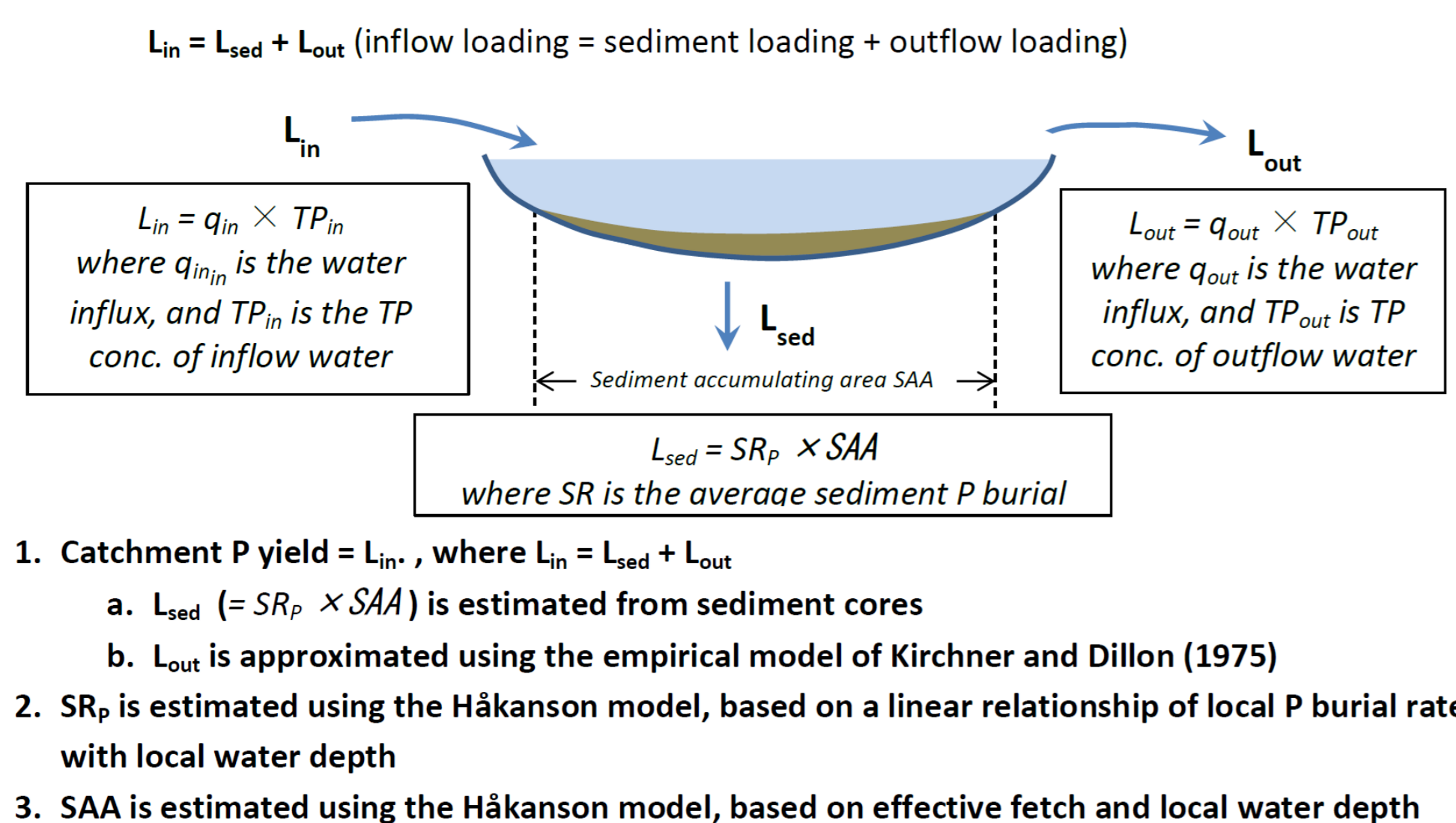


Methods: sediment analysis



Methods: from core to lake

Lake P fluxes (or loadings, L) in a box model

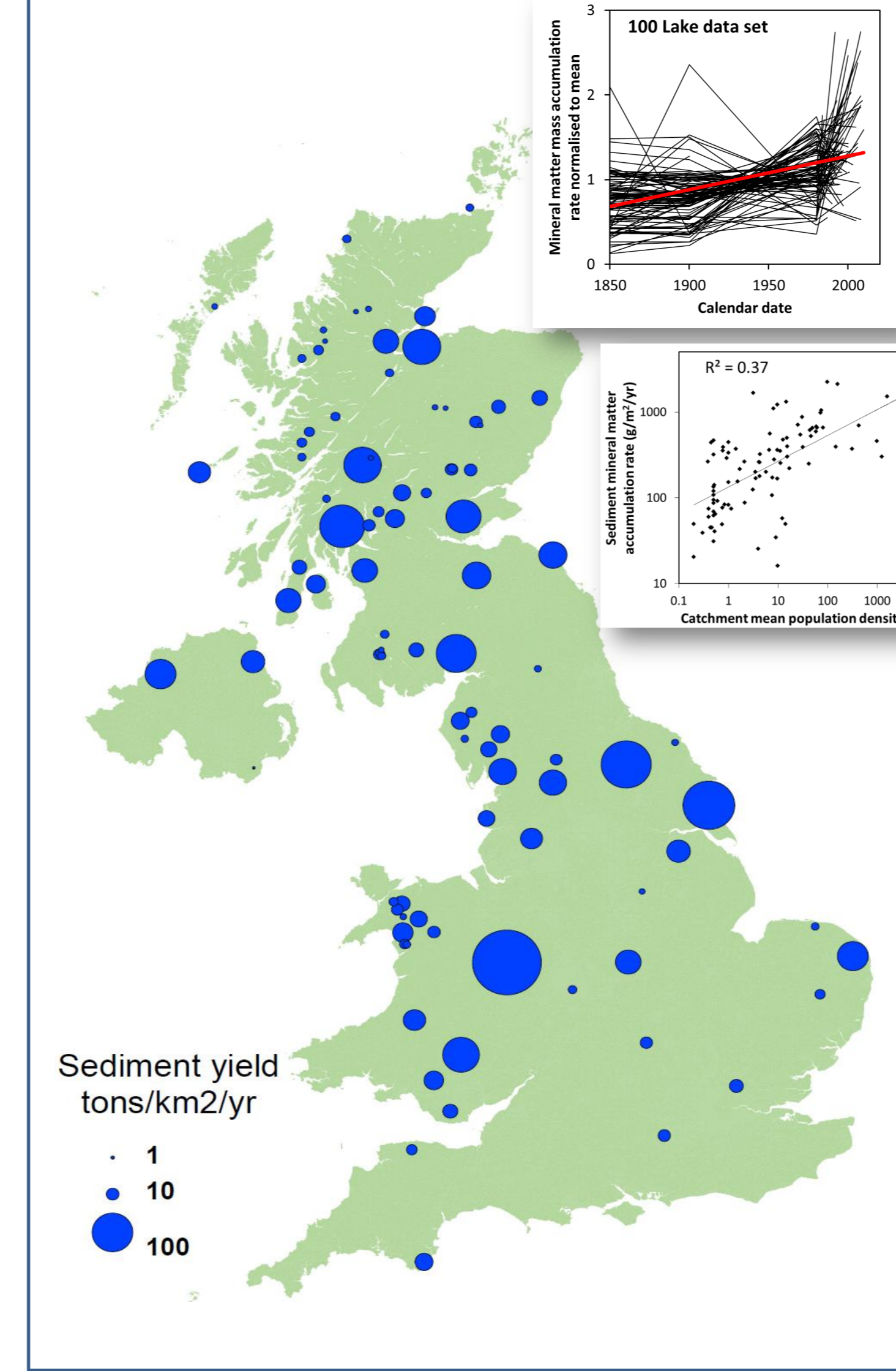


100 Lakes

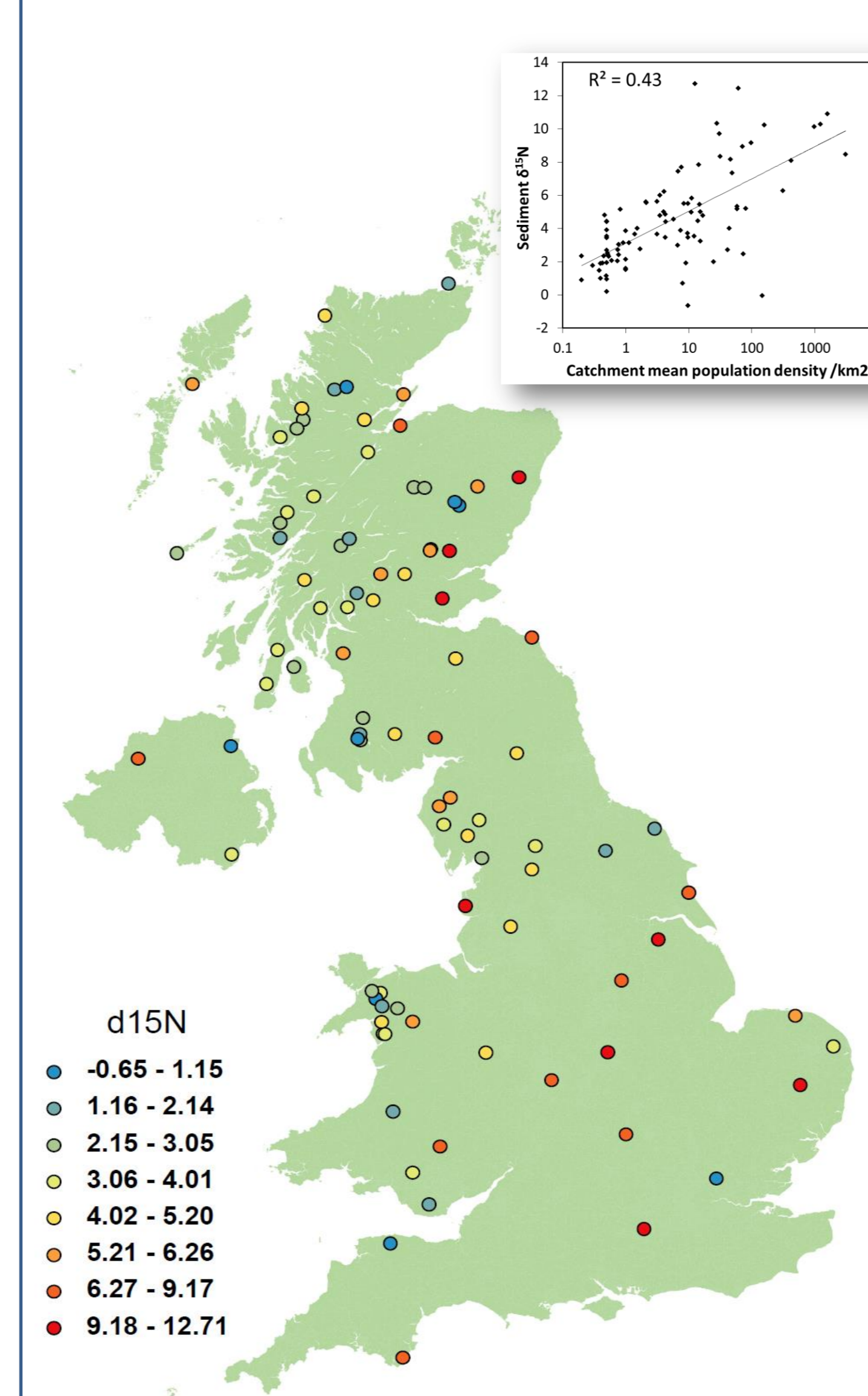
- Exploiting an existing resource – the UCL sediment core archive (²¹⁰Pb dated, diatom counts)
- Wide coverage, mostly 150- years extent, but low temporal resolution, single core per lake



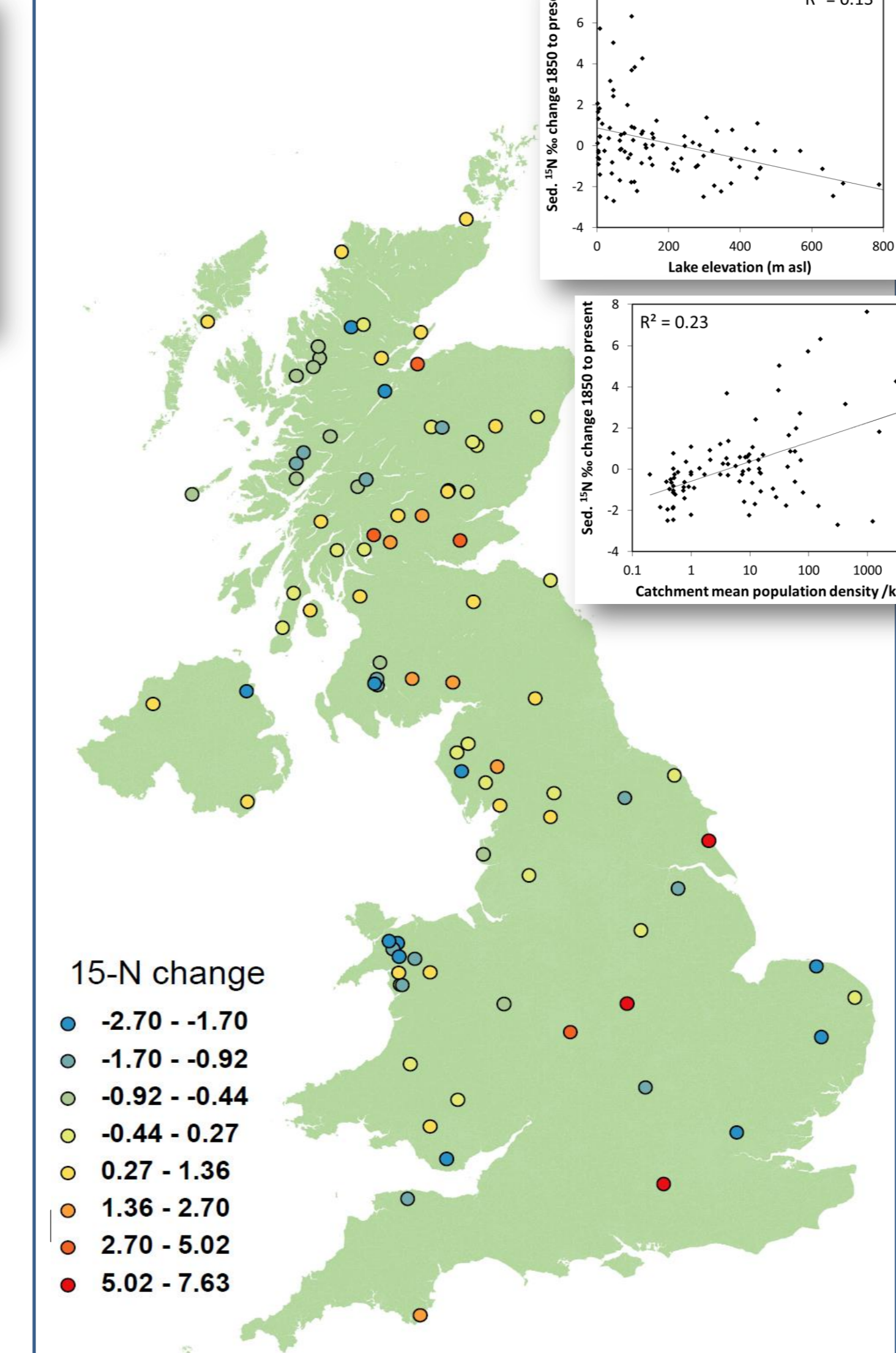
Spatial variation in sediment yield



Spatial variation in $\delta^{15}N$

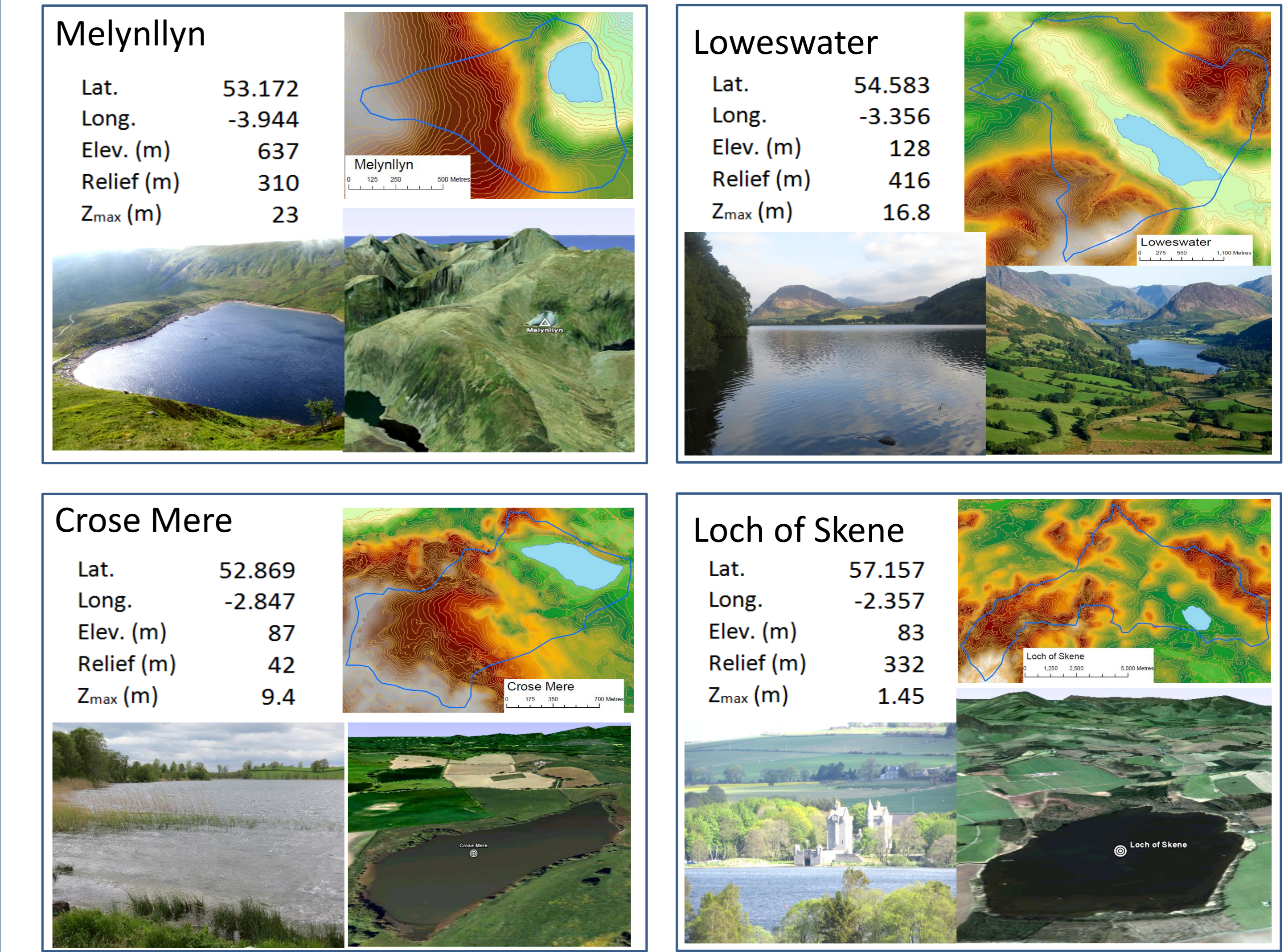


Spatial variation in ¹⁵N (‰) change (from 1850 to recent)

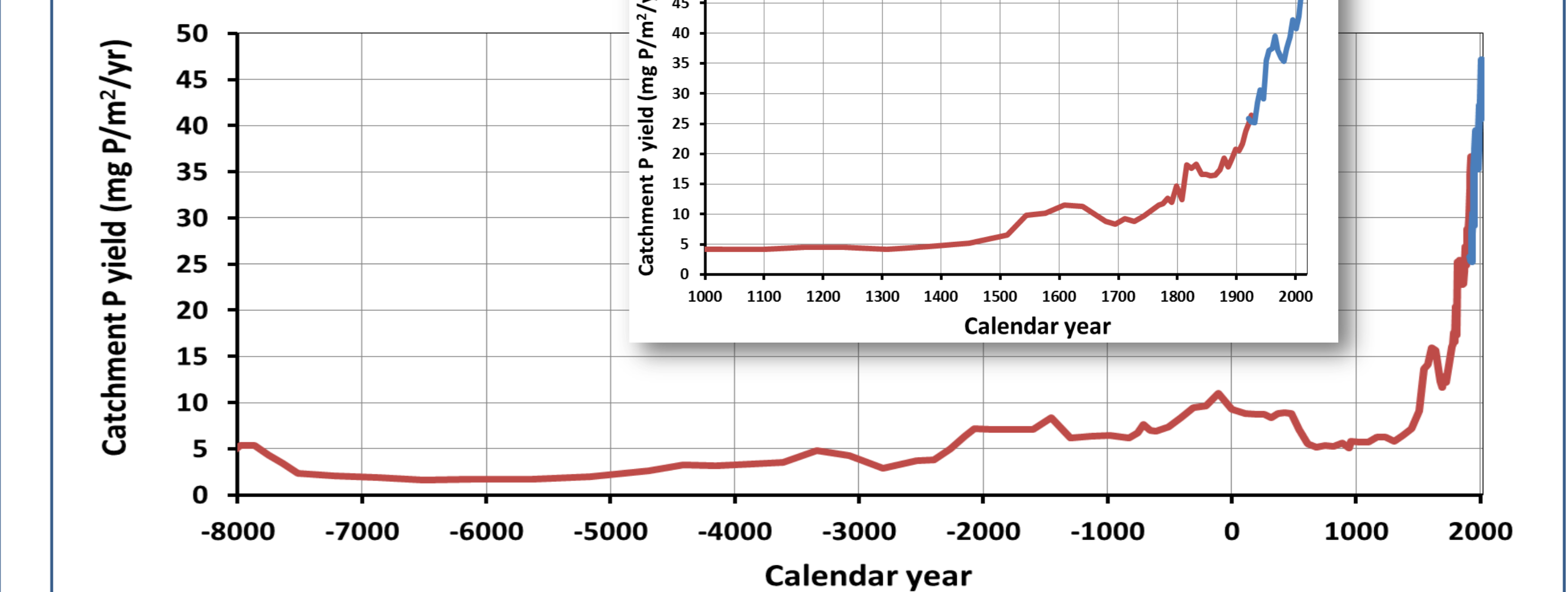


4 sites in detail

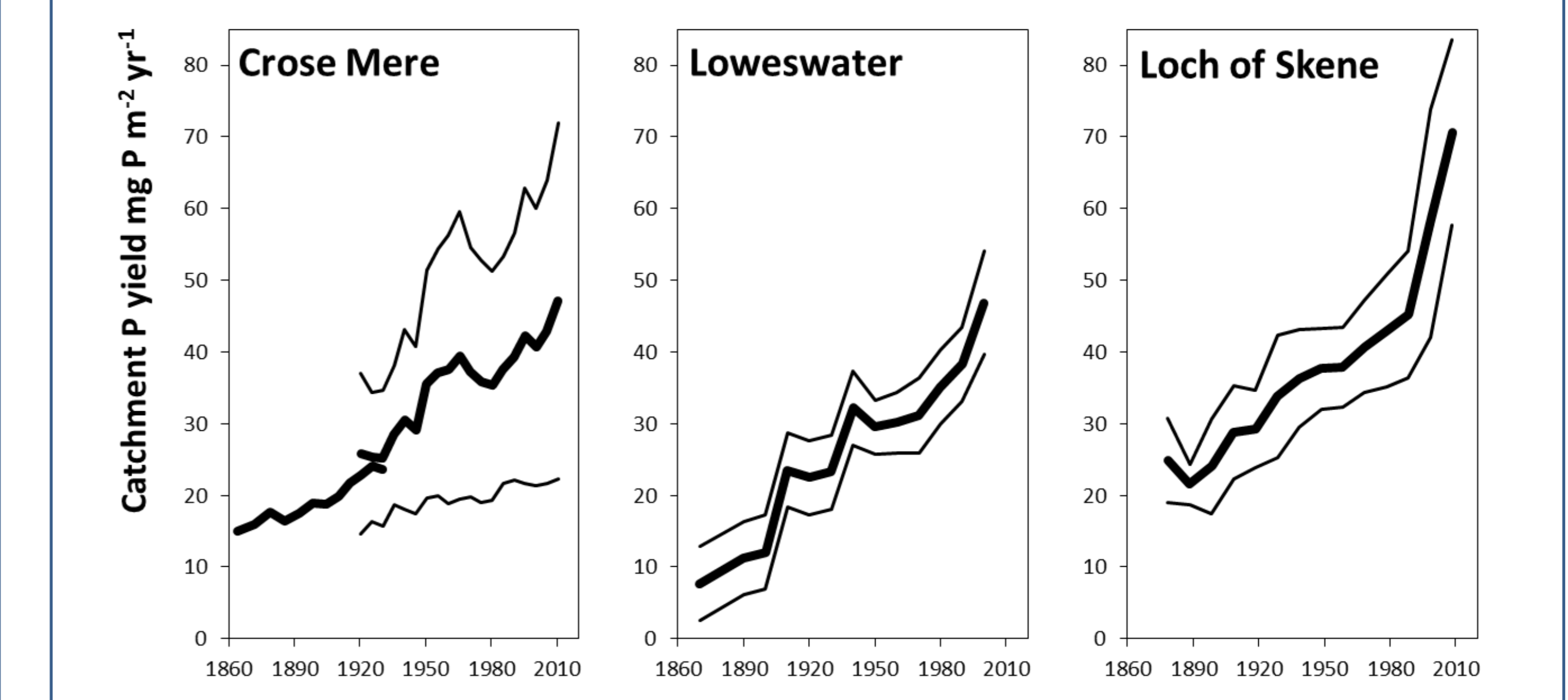
- High resolution long records of C, N & P with good lake mean average values
- Limited spatial coverage, long record, high temporal resolution, multi core

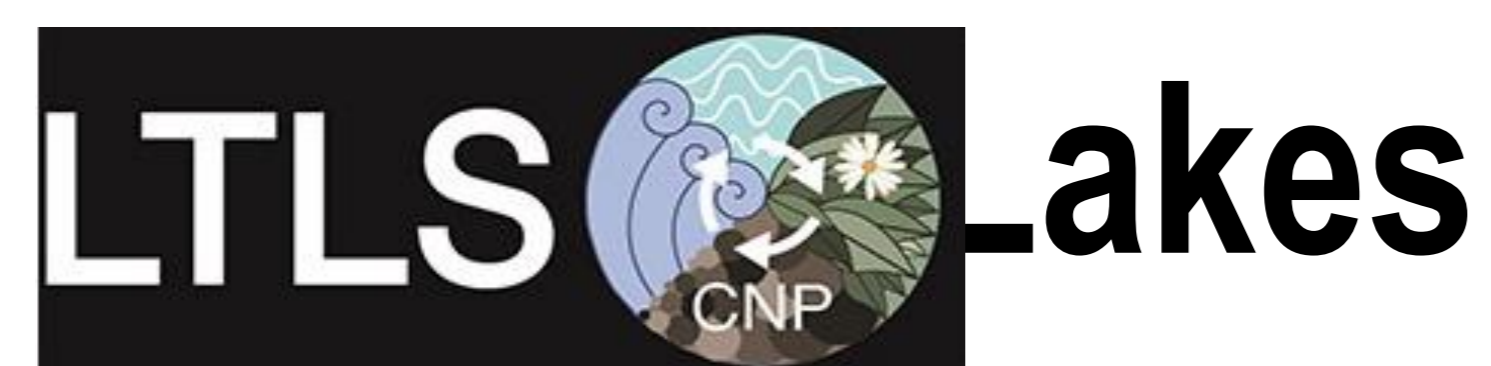


Crose Mere: The long record



All sites - The last 100 years of P yield (with 1 SD error estimate)





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