

### **C-N-H<sub>2</sub>O fluxes observational research of ChinaFLUX**

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Eddy Covariance technique (EC) achieves the direct measurement of ecosystem carbon, nitrogen and water fluxes, which provides valuable data for accurately assessing ecosystem functions in mitigating global climate change. Through the improvement of spatial representativeness and the enhancement of observational capability, ChinaFLUX gradually become a unique scientific and technological platform for carbon, water and nitrogen cycle and global change research in China. By more than 10-year's network observations, ChinaFLUX accumulated long-term valuable data of ecosystem carbon, water and nitrogen fluxes in China and gained great progresses in the researches of ecosystem carbon, nitrogen and water exchange dynamics and environmental controlling mechanisms, the spatial pattern of carbon, nitrogen and water fluxes and biogeographical mechanisms, and the regional terrestrial ecosystem carbon budget assessment.