

Can earth observations detect drought in Californian ecosystems?

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Droughts cause a significant disruption on terrestrial ecosystems. Moreover, droughts are becoming more frequent and increasingly severe. The intern will use remote sensing and machine learning to detect drought across a variety of Californian biomes. This multi-scale project will include collecting and collating biogeochemical and biogeophysical information from field-based eddy covariance towers, satellite-based Earth Observation (EO) and global plant trait databases (e.g. TRY) . The intern will then feed this unique and extensive dataset into a machine-learning carbon cycle model (CARDAMOM) to assess the sensitivity of ecosystems to intermittent precipitation patterns and assess performance of earth observations for detecting these patterns.