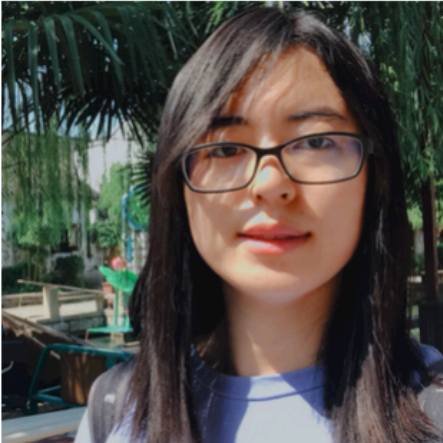


# Liyin He

Remote Access Only



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### Resnick Graduate Research Fellow

Liyin is a PhD student working with Prof. Christian Frankenberg. She holds a BS in geographical information science, with a minor in financial engineering, from Nanjing University, China. She came to Caltech in 2016 to pursue a PhD in environmental science and engineering, focusing on the response of ecosystems to climate change using remote sensing techniques. Her current research involves using satellite observations of solar-induced chlorophyll fluorescence (SIF), which is more directly related to photosynthesis than traditional monitoring techniques, to estimate the photosynthetic uptake of CO<sub>2</sub> in forests and agricultural fields. This will better quantify the trajectory of terrestrial carbon uptake, as well as open a path towards large-scale crop monitoring and forecasting. She aims to utilize the information acquired by satellite remote sensing across space and time, to help farmers assess the condition of crops, and to inform policy makers addressing food security and sustainability.

**RSI Research:** Global Monitoring of Crop Productivity Using Solar-induced Fluorescence

**Faculty Adviser:** [Christian Frankenberg](#)