

Assessing the frequency of cyanobacterial blooms in waterbodies across the United States

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Introduction

Satellite Data



Cyanobacteria occur frequently in freshwater systems. Exposure can negatively affect human health. We assess the frequency of cyanobacterial blooms to support efficient water management efforts.

Cyanobacteria was estimated from satellite data based on reflectance in the red portion of the electromagnetic spectrum. Weekly data were analyzed for 2,321 lakes across 46 U.S. states.





When data are available, each satellite pixel is classified as either containing or not containing cyanobacteria. Observations are summarized per state allowing for pie charts to display the proportion of each category. Management efforts can then focus on states and lakes with higher bloom occurrence.

Cyanobacterial Bloom Frequency

