

A method for quantifying the number of US lakes with cyanobacterial harmful algal blooms using satellite remote sensing

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Onboard Envisat 2008-2011 Data collected every 3 days





Onboard Envisat 2008-2011 Data collected every 3 days



Onboard Sentinel-3A and 3B 2017 and beyond Data collected every 1-2 days





















Classified as BLOOM











For each weekly composite...



2,370 TOTAL LAKES

= 63.29%



For each weekly composite...





For each weekly composite...





CONUS Bloom Percentage













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EP/

United States Environmental Protection Agency



No bloom No data



Lake Harris, FL, USA







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A small case study at Lake Harris in FL, USA illustrated this phenomenon on a monthly scale. Environmental conditions and satellite artifacts could explain this pattern.





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