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## New horizons in Earth observation: overcoming spatiotemporal divides with CubeSats

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The last few years has witnessed a paradigm shift in how we undertake earth observation. Traditional remote sensing has always required a compromise between spatial and temporal resolution. That is, one could obtain highresolution imagery occasionally; or frequent imagery that is spatially coarse. These spatiotemporal constraints are increasingly being removed via the emergence of new earth observation platforms, such as those now being afforded by constellations of small space-based CubeSat systems. Here we review some of the recent developments in these technologies across the broad area of environmental monitoring, but with some focused attention on applications in precision agriculture. Particularly attention is addressed towards determining vegetation properties such as LAI dynamics and also in the estimation of crop water use. Likewise, efforts to utilize the rich spatiotemporal information afforded by these new platforms, to provide insights into crop management and behavior, is also explored. Some of the outstanding challenges and opportunities that these technologies present will also be discussed.