Tropical forests play major roles in the Earth system. By absorbing and storing large amounts of atmospheric CO₂, tropical forests help reduce anthropogenic warming effects. And by exchanging water with the atmosphere, tropical rainforests act as a global center of rainfall. A key component of tropical forest dynamics is tree mortality that affects, among other features, patterns of productivity, biomass, and floristic composition. How disturbed natural forests recover depends upon complex interactions among soil, climate, tree species, etc. However, our current understanding of that recovery is limited due to the scarcity of observational studies. Remote sensing offers a unique means to study post-disturbance recovery. Here we explore this possibility.