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Evergreen forest change in the Brazilian Amazon in 2000-2017

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The data, information and knowledge on the tropical forest area and dynamics in the Brazilian Amazon remain contentious. Here we generated annual forest maps of the Brazilian Amazon for 2000-2017, which were then used to quantify the annual dynamics of forest area, deforestation, and reforestation. Our annual forest maps revealed ~15% more forest area but annual rates of deforestation twice as high as those from the official Brazilian forestry statistics (PRODES). Over 90% of deforested areas occurred within 5-km of those areas deforested before 2002, a strong indicator of the spatial expansion dynamics of anthropogenic deforestation. Annual forest loss areas were high in those drought years with large amounts of fire and active fire events occurred in ~70% of deforested areas. Forest loss was substantially reduced within protected areas. We also reported the annual reforested area, which offset annual deforestation by about 21%.

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