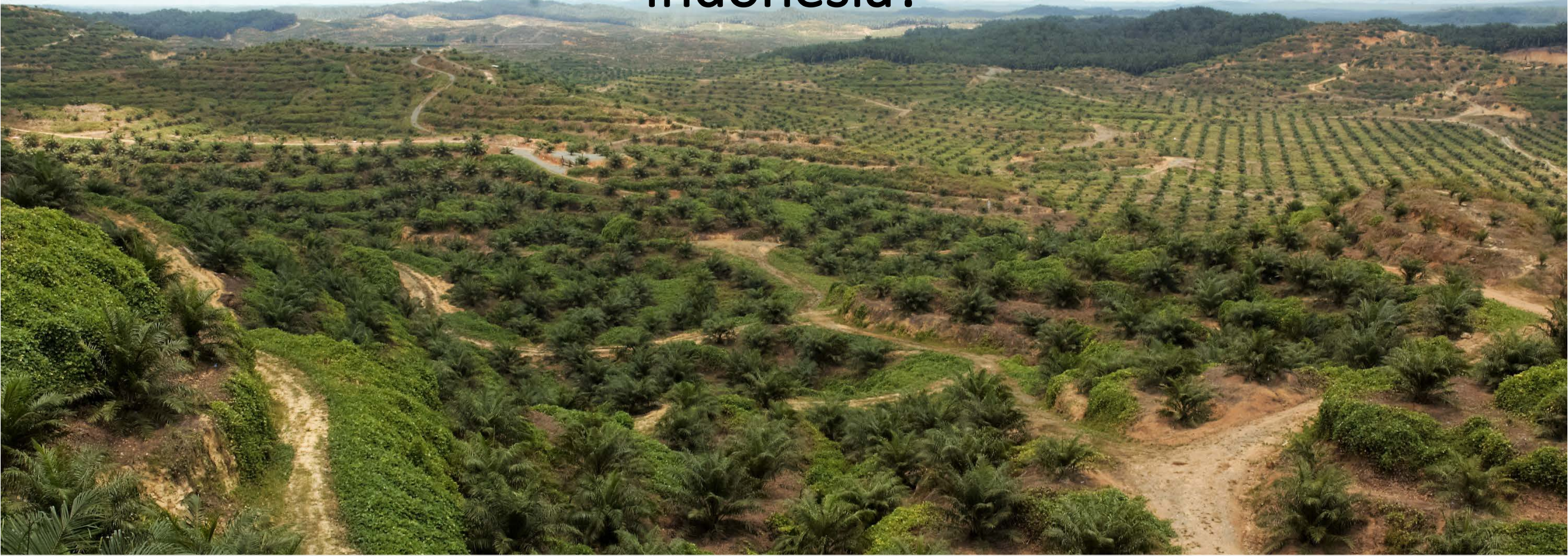


Does RSPO Certification Reduce Deforestation or Fire in Indonesia?



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Why would certification reduce deforestation?

Riparian buffer protection

Preservation of High Conservation Value areas

No use of fire for land clearing

No primary forest clearing after 2005






Noncertified source: Sawit Watch, Greenpeace

Certified source: GLUE (University of Wisconsin), Carlson Lab (University of Hawai'i)

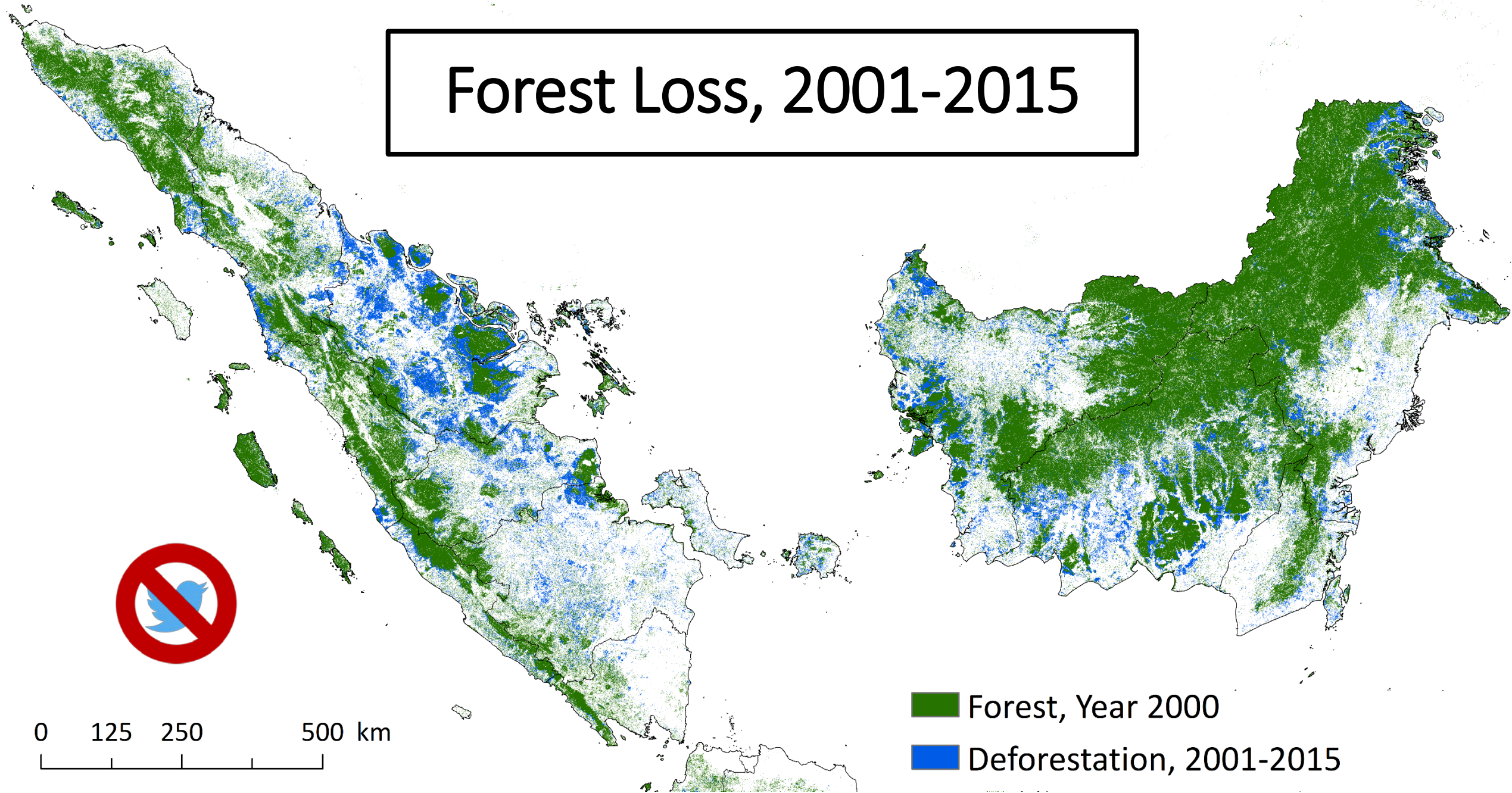
Oil Palm Plantations



0 125 250 500 km

-  RSPO Certified ($n = 163$)
-  Noncertified RSPO Member ($n = 228$)
-  Noncertified Non-Member ($n = 1,940$)

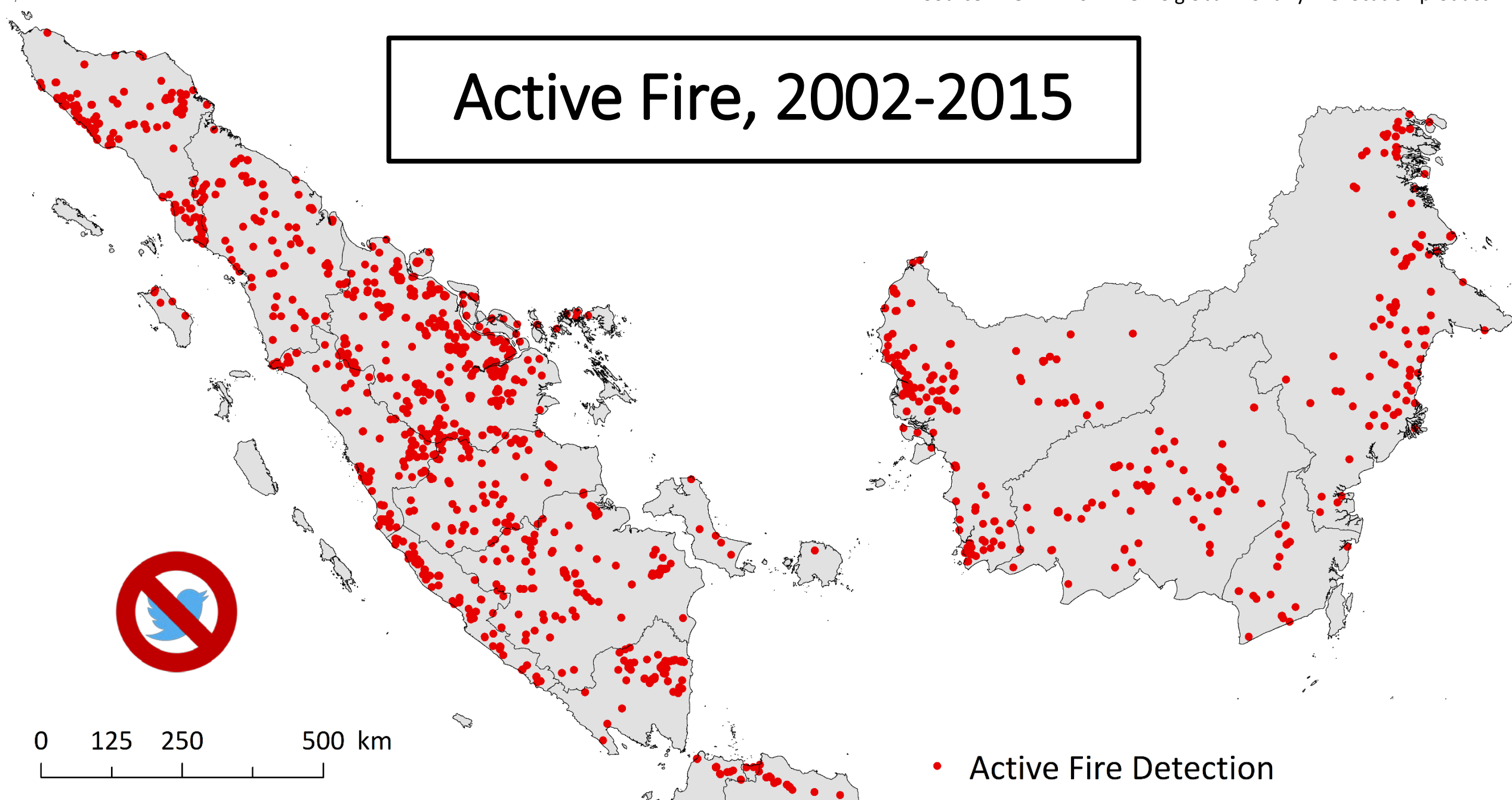
Forest Loss, 2001-2015



0 125 250 500 km

Forest, Year 2000
Deforestation, 2001-2015

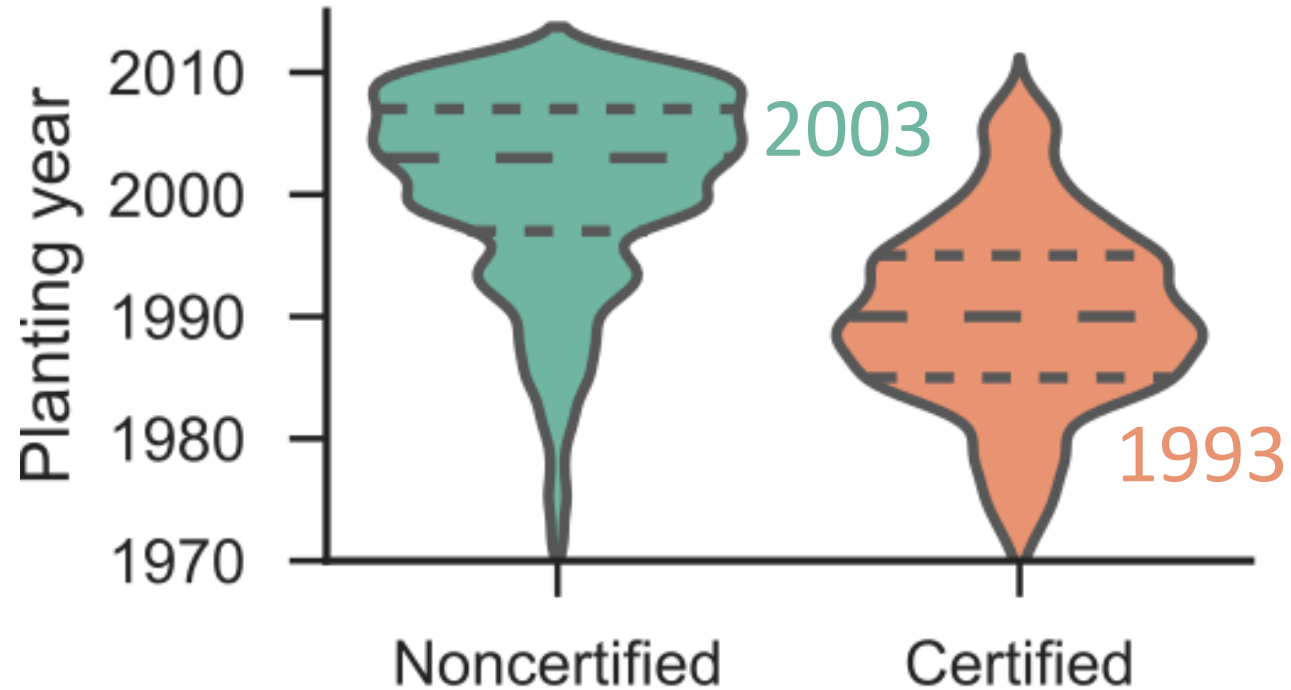
Active Fire, 2002-2015



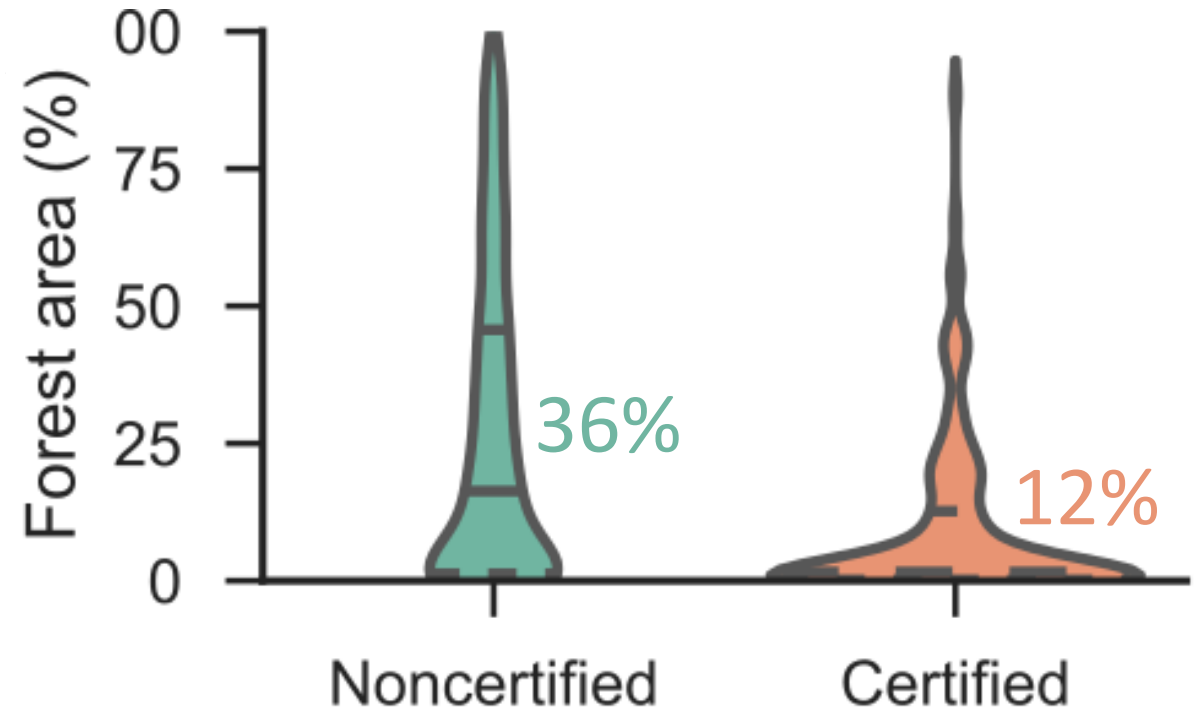
0 125 250 500 km

• Active Fire Detection

When were plantations developed?

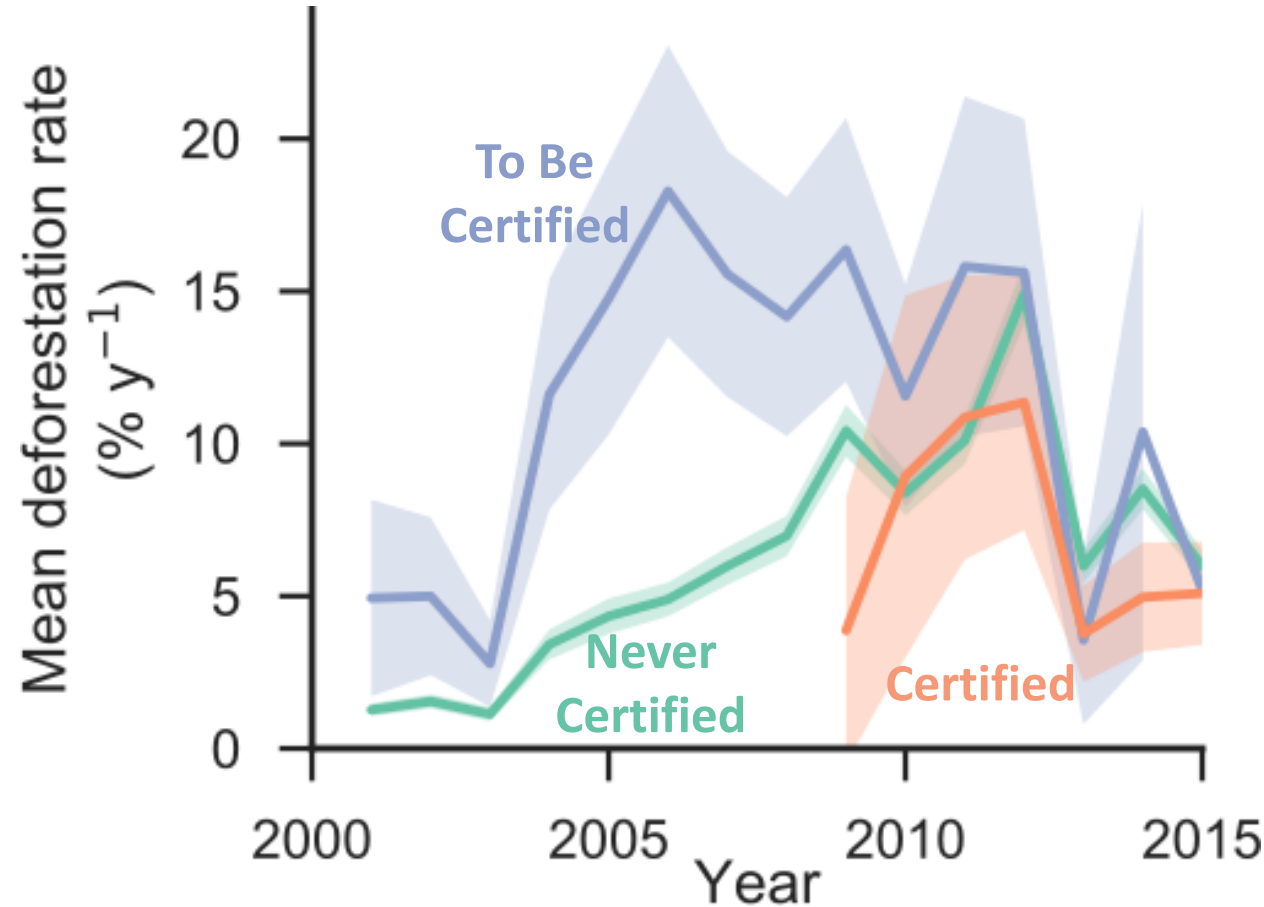


How much forest did they have in year 2000?

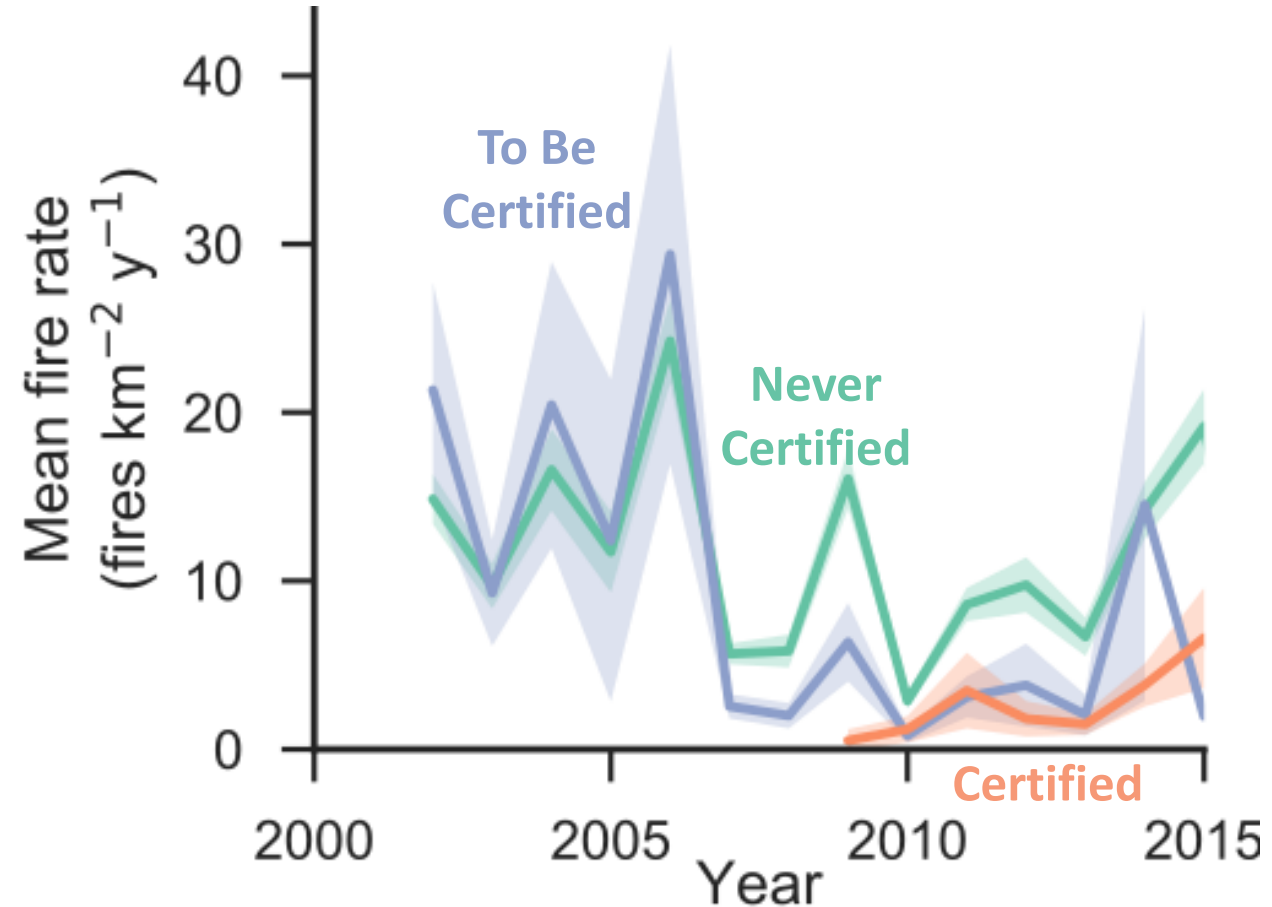


Certified plantations were older and had less forest in 2000 than non-certified areas

How much deforestation happened in certified areas?

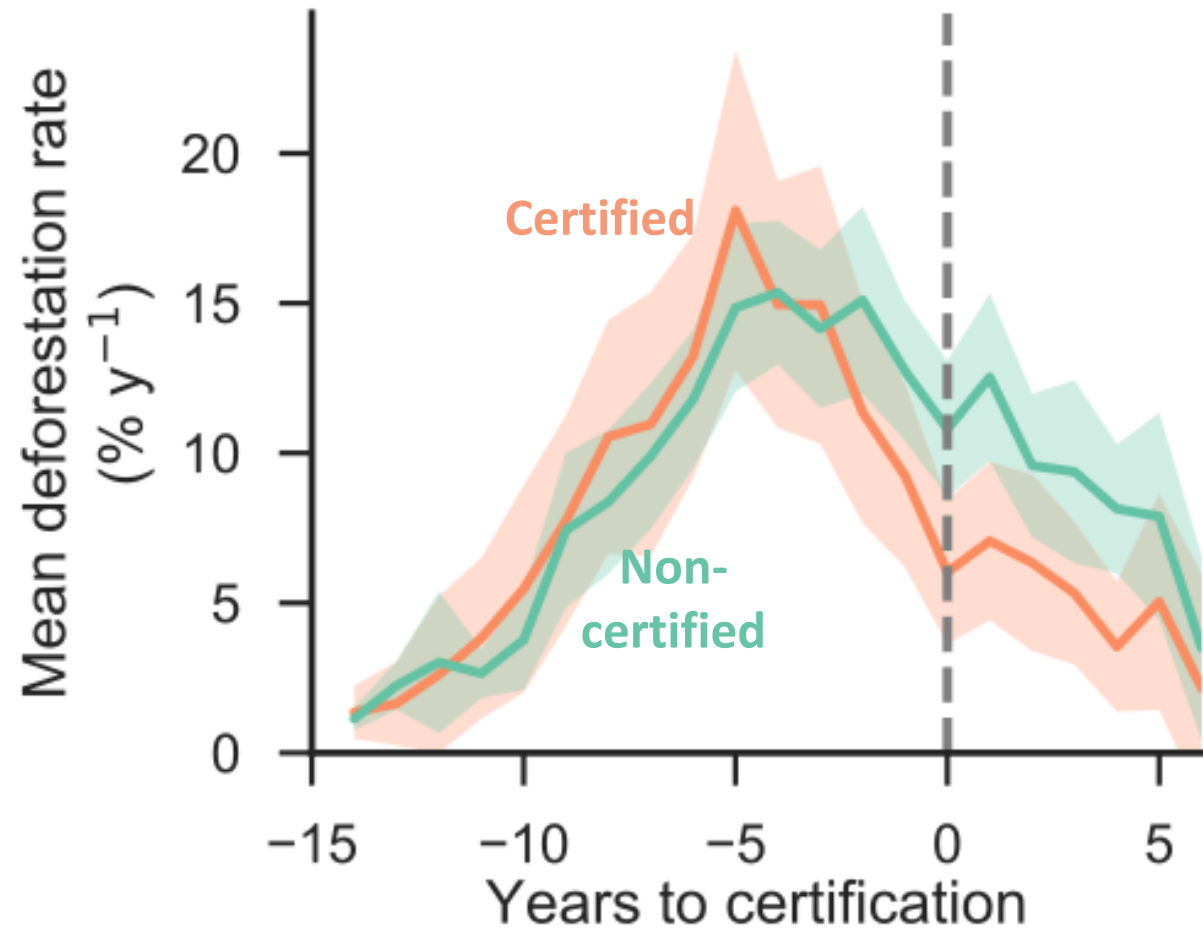


How much fire happened in certified areas?

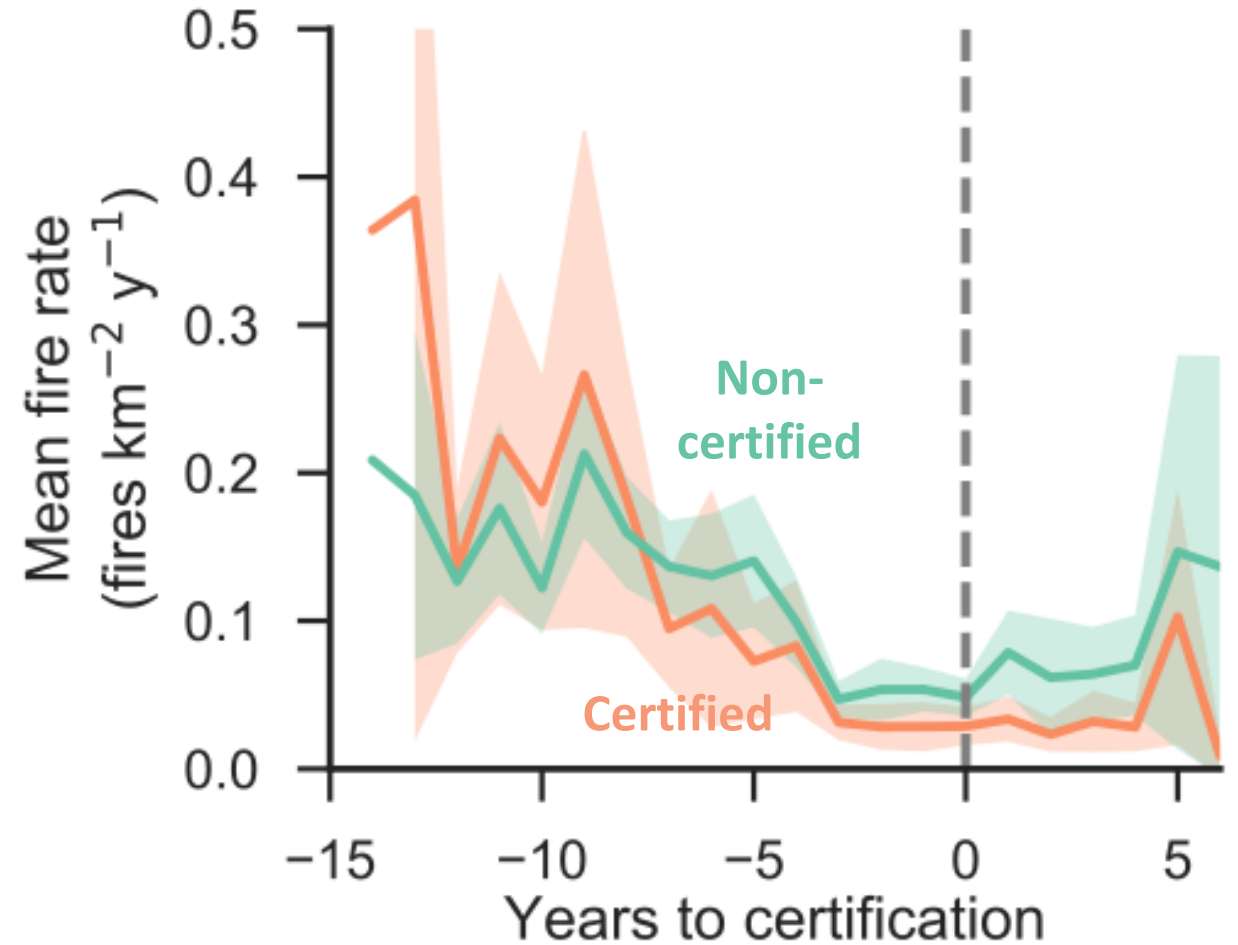


About 91 km² of deforestation and 1,810 fires occurred in certified plantations after certification

Did certification reduce deforestation?



Did certification reduce fire?



Certification reduced deforestation rates by about 30%, but had no apparent impact on fire

Key Findings & Recommendations



- Certification led to 20 km² of “avoided” deforestation in high tree cover areas, but had no apparent effect on fire
- Certified palm oil is associated with lower recent loss of high tree cover forests and fire, mostly due to certification skewed toward plantations with few forests
- Certified palm oil is not sufficient for most corporate zero-deforestation commitments
- A remote-sensing capable definition of deforestation is needed to demonstrate “deforestation-free” certified palm oil
- Producers have few incentives to expand area of forest under their control, so positive incentives may be needed to support forest conservation
- Controlling for selection bias is critical for studies of voluntary certification



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