Exploratory analysis of Recurrent deforestation warnings in São Félix do Xingu - Brazilian Amazon

Alber Sanchez alber.ipia@inpe.br

TreesLab Instituto Nacional de Pesquisas Espaciais Brazil

March 30, 2023

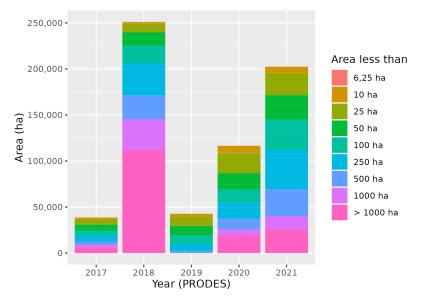
Introduction

- ▶ Deforestation by sucessive degradation remains an challenging question in the scientitic literature.
- We think the potential answer to this question could lie in DETER's warning data set.
- We use DETER data from 2016 to 2021 of São Félix de Xingu, Pará, Brazil.

DETER

► TODO

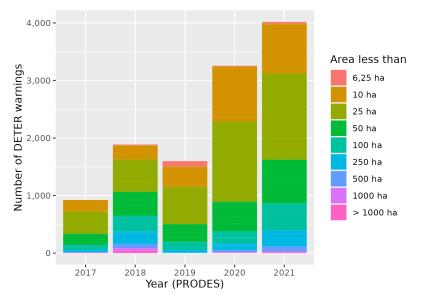
Area of DETER warnings in SFX



Note the increasing trend and its area distribution.



Number of DETER warnings in SFX



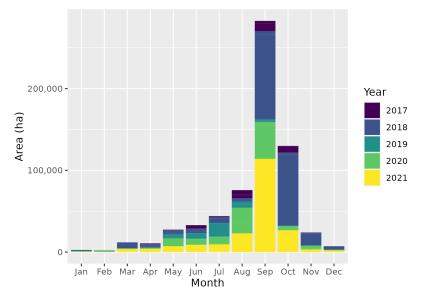
Note the increasing trend and the small peak in 2018.



Warning subareas

► TODO: Explain what subareas are.

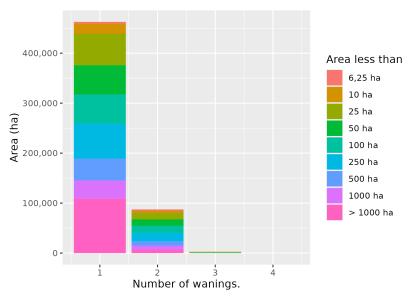
Periodicity of DETER warnings in SFX



Note Sep-Oct 2018 and Aug-Sep 2020



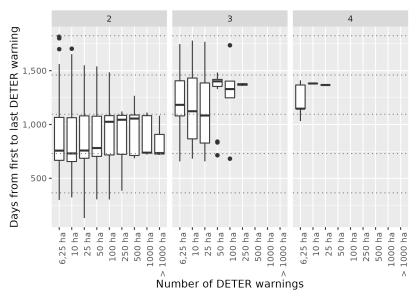
Subareas of recurrent warnings



Most subareas are issued a single warning.



Days between first and last warnings



The mean lag between 2 and 3 warnings is one year.



Discussion

- Our results could help imporving the characterization of degradation in the Brazilian Amazon.
- A potential application of our work is to identify spatio-temporal areas which could help training Machine-Learning algorithms for automatic indentification of forest degradation.