

A: Datasheet

Algorithm: sensetime\_007

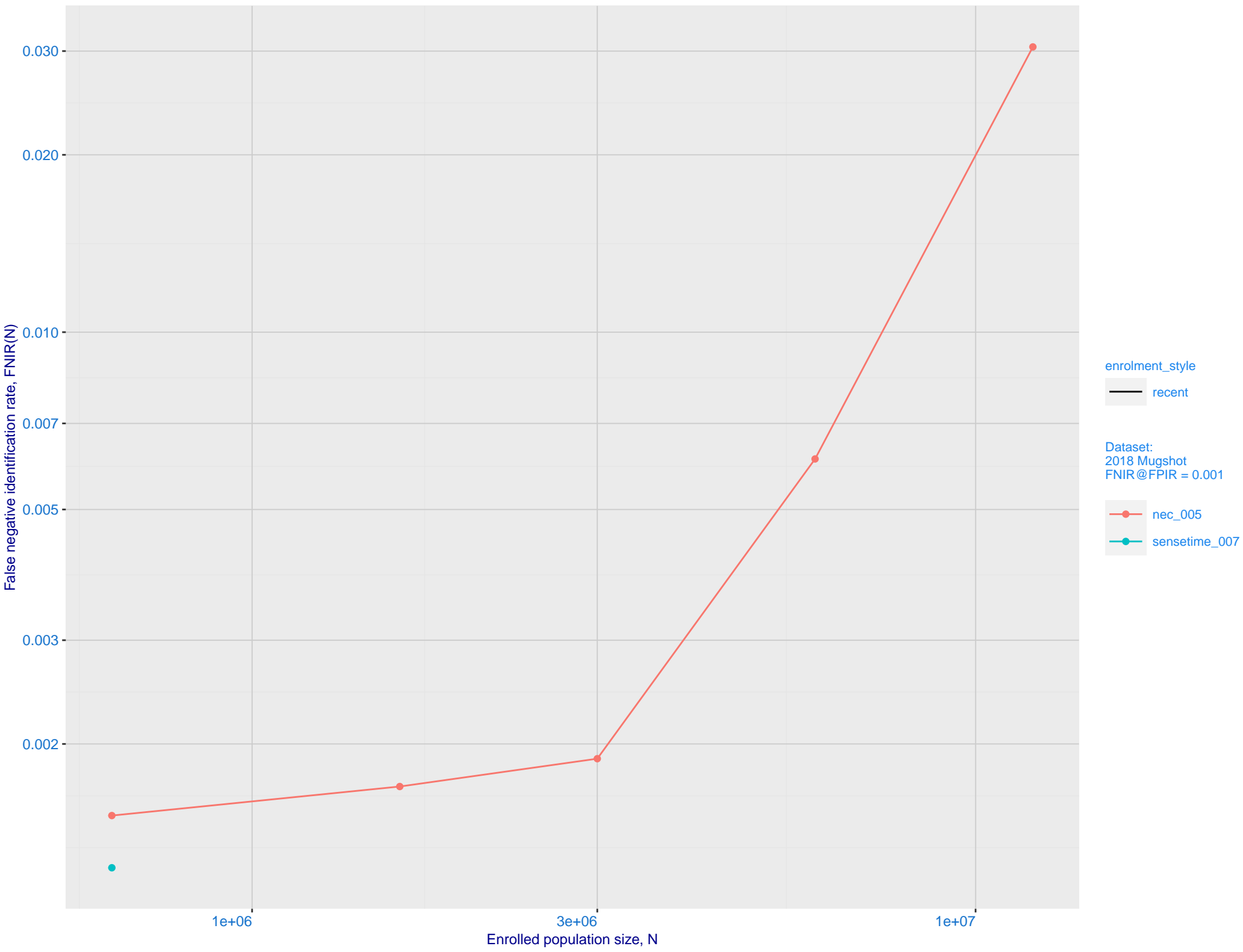
Developer: Sensetime Group

Submission Date: 2022\_01\_15

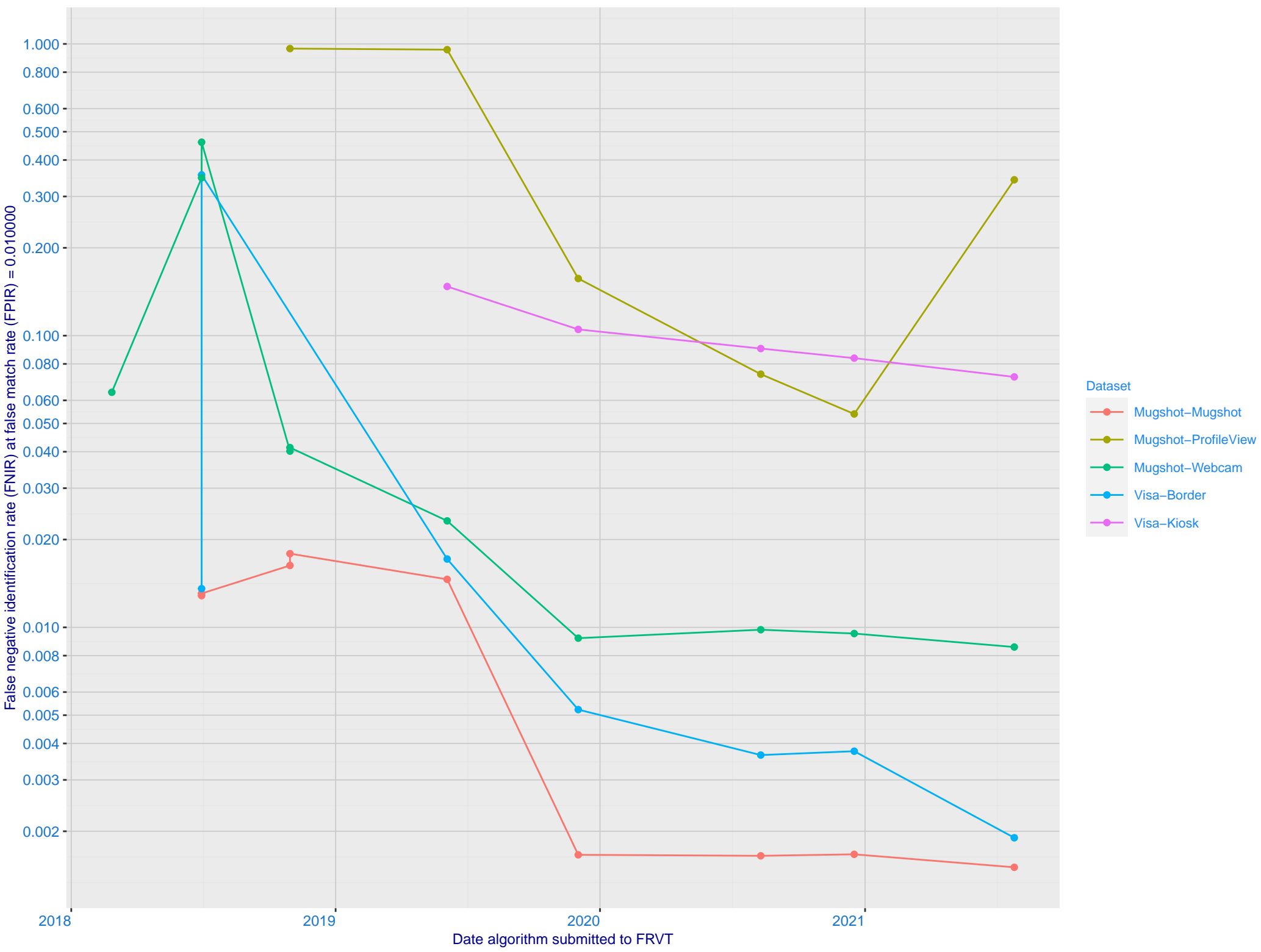
Investigation:

Identification:

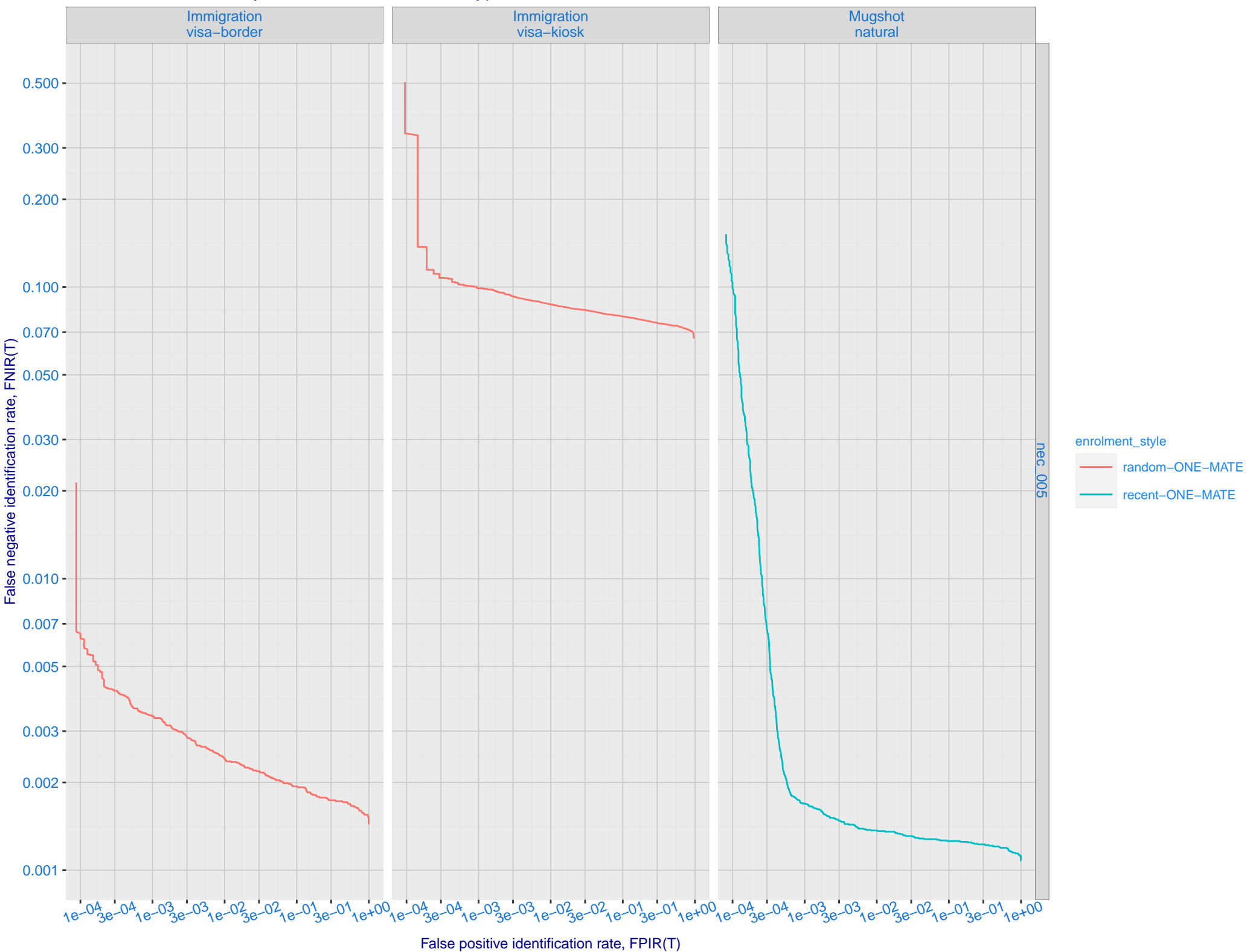
B: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (nec\_005)



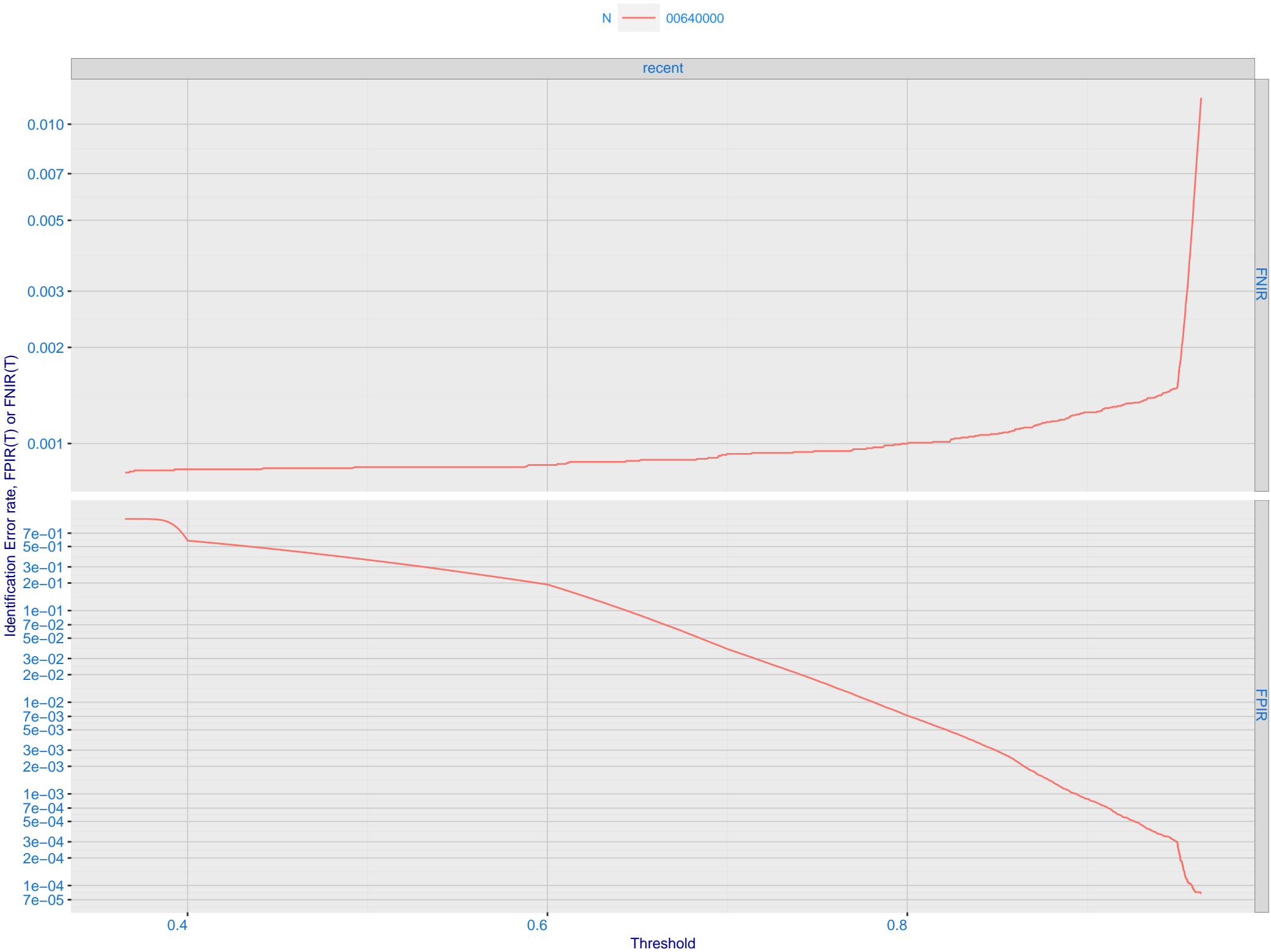
C: Evolution of accuracy for SENSETIME algorithms on three datasets 2018 – present



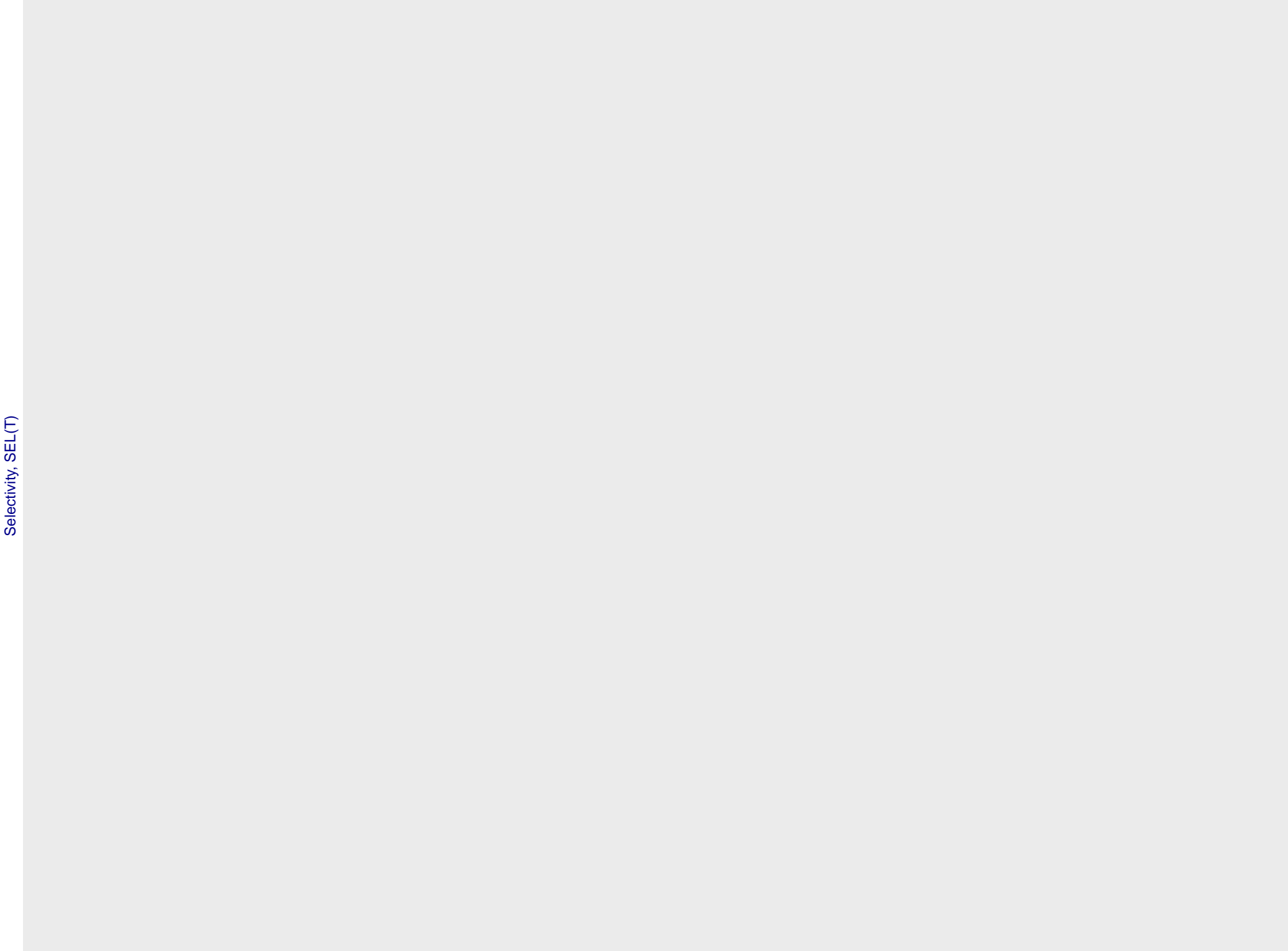
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



False Positive Identification Rate, FPIR(T)

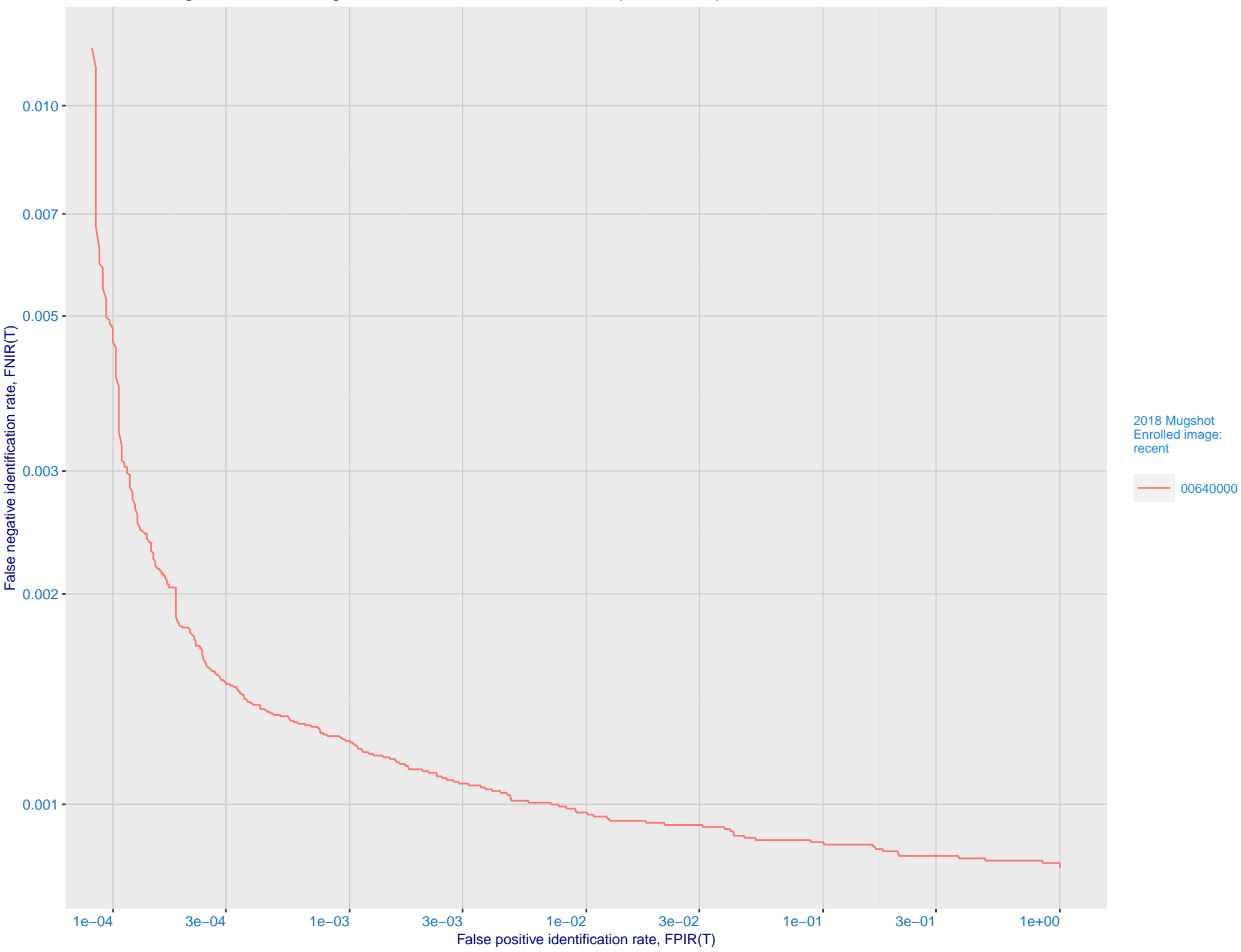
Selectivity, SEL(T)

G: FPIR dependence on T by probe type for N = 1600000 subjects

False Positive Identification Rate,  $FPIR(T)$

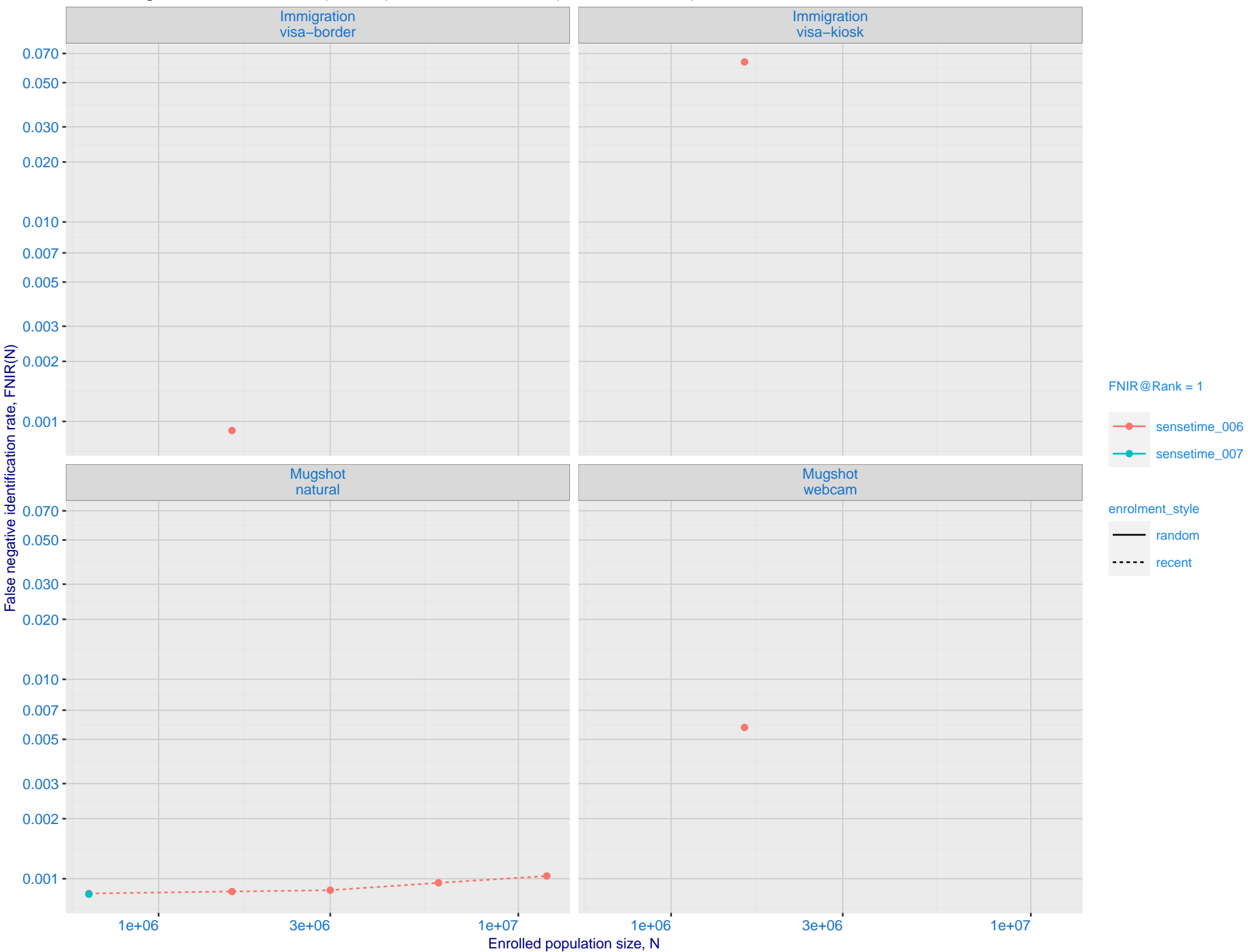
Threshold

J: DET for Mugshot natural images and various N. Links connect points of equal threshold.

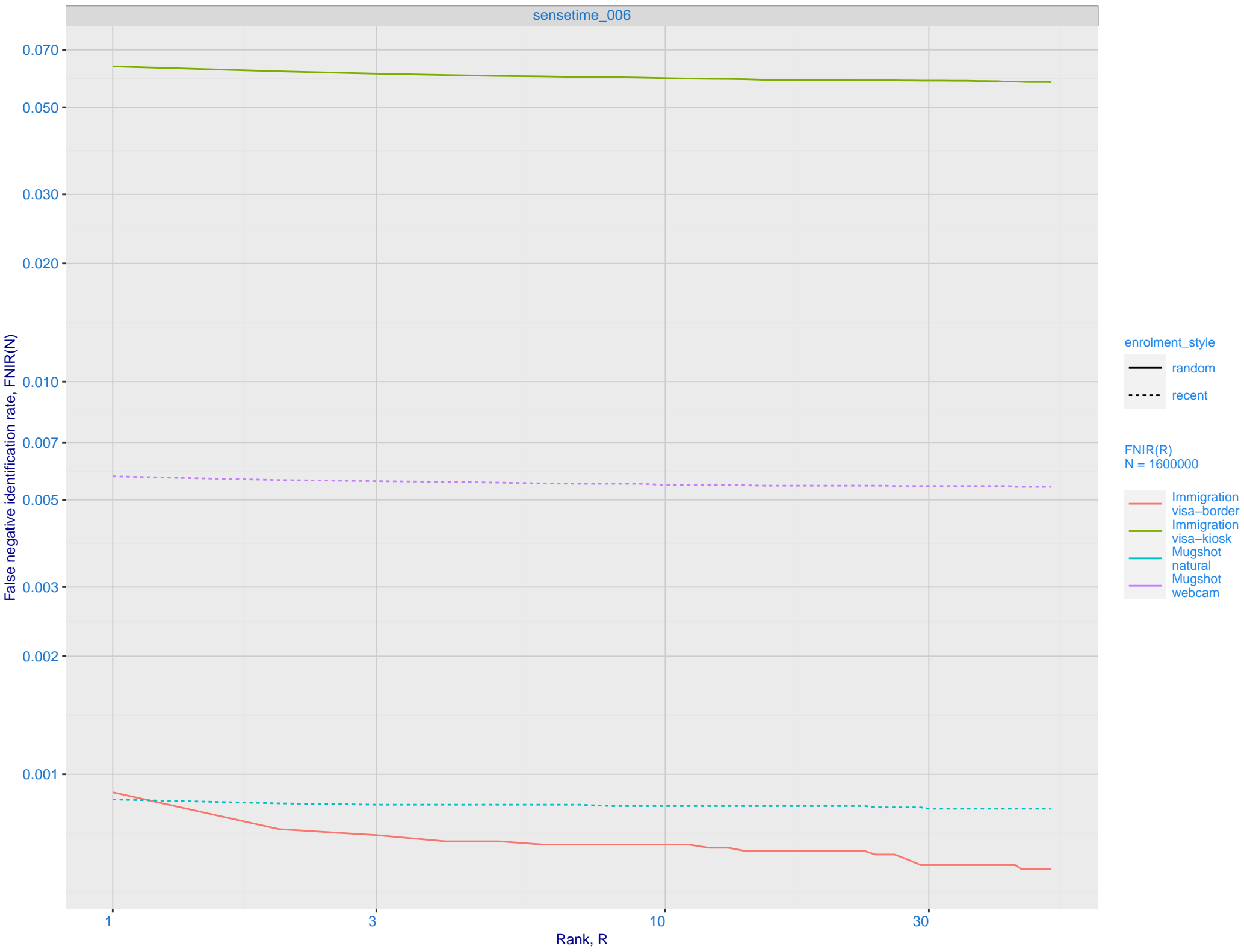




K: Investigational mode: FNIR(N, 1, 0) vs. most accurate (sensetime\_006)



L: Investigational mode: FNIR(1600000, R, 0) by probe type



M: Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements.  
The template generation time is independent of N. The log and power-law models are fit to the first two (N,T) observations

Search Duration (milliseconds)

Enrolled population size, N, one image per person

Q: Identification FNIR(N, T, L+1) and Investigational FNIR(N, 0, R) under ageing

Dataset: 2018 Mugshot N = 3068801

