

A: Datasheet

Algorithm: line\_001

Developer: Line Corporation

Submission Date: 2021\_11\_21

Template size: 2048 bytes

Template time (2.5 percentile): 899 msec

Template time (median): 907 msec

Template time (97.5 percentile): 924 msec

Investigation:

Frontal mugshot ranking 11 (out of 318) — FNIR(1600000, 0, 1) = 0.0011 vs. lowest 0.0009 from sensetime\_006

Immigration visa–border ranking 11 (out of 206) — FNIR(1600000, 0, 1) = 0.0018 vs. lowest 0.0009 from sensetime\_006

Immigration visa–kiosk ranking 37 (out of 203) — FNIR(1600000, 0, 1) = 0.0854 vs. lowest 0.0487 from cubox\_000

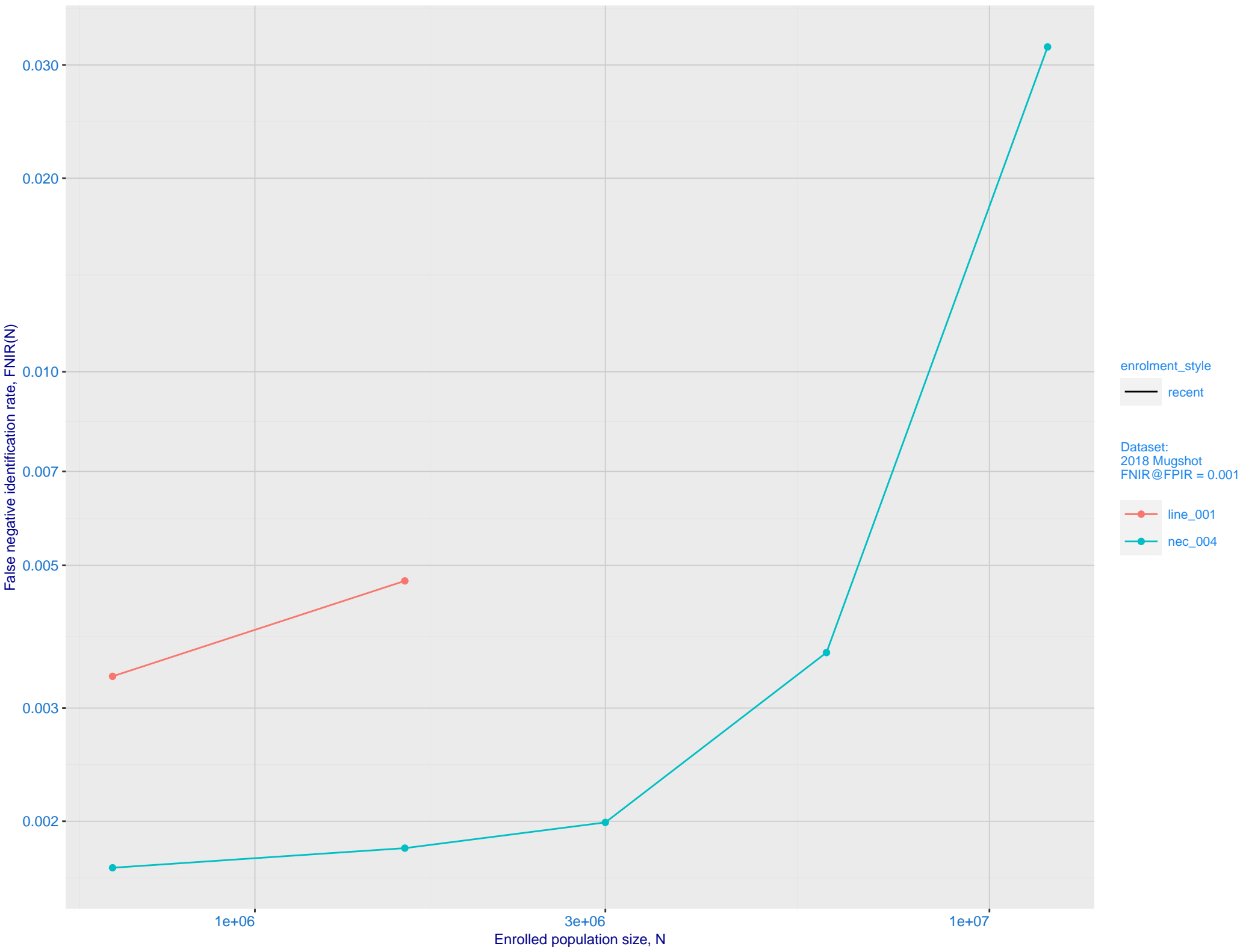
Identification:

Frontal mugshot ranking 19 (out of 318) — FNIR(1600000, T, L+1) = 0.0047, FPIR=0.001000 vs. lowest 0.0018 from sensetime\_004

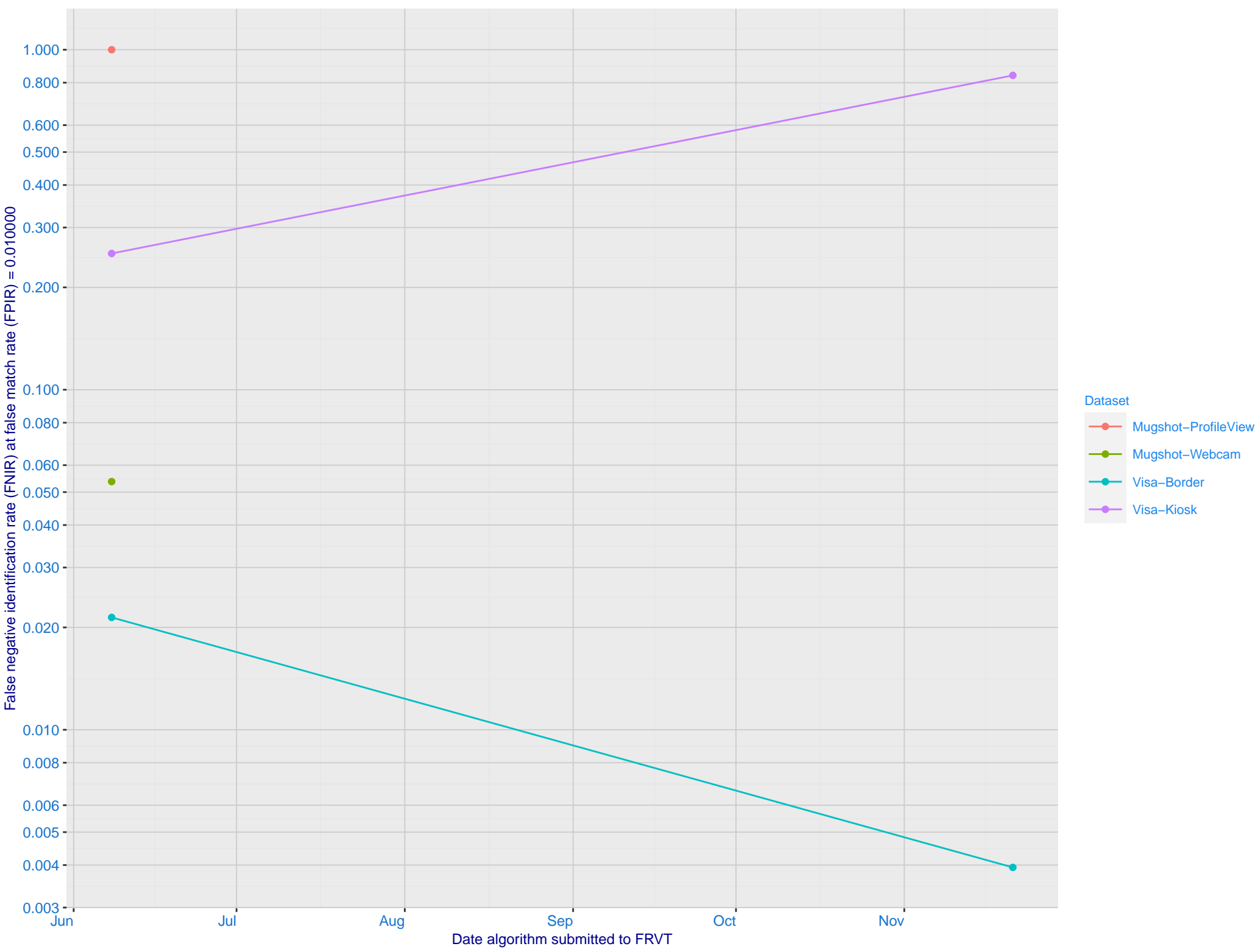
Immigration visa–border ranking 22 (out of 205) — FNIR(1600000, T, L+1) = 0.0087, FPIR=0.001000 vs. lowest 0.0039 from sensetime\_006

Immigration visa–kiosk ranking 192 (out of 200) — FNIR(1600000, T, L+1) = 1.0000, FPIR=0.001000 vs. lowest 0.0729 from cubox\_000

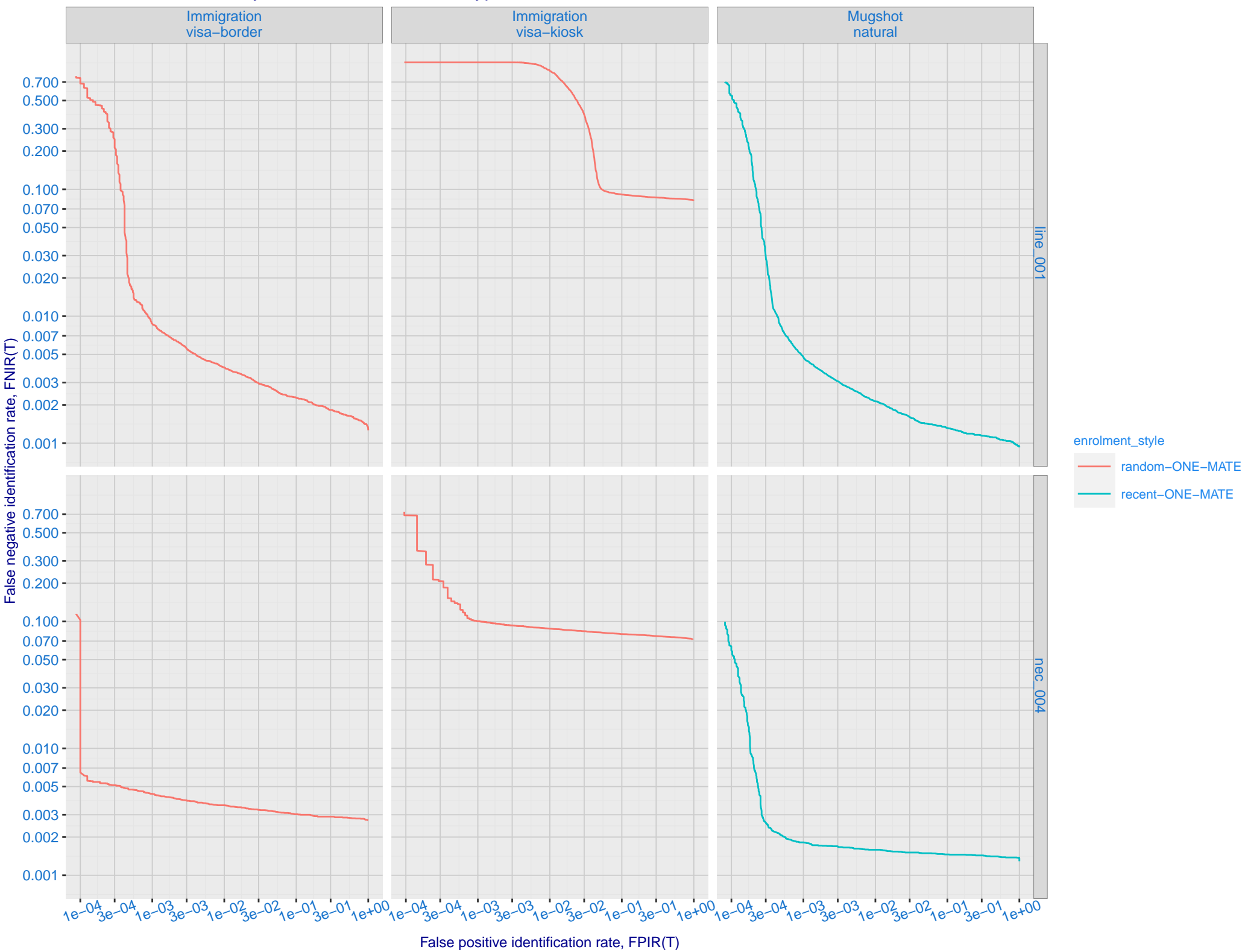
B: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (nec\_004)



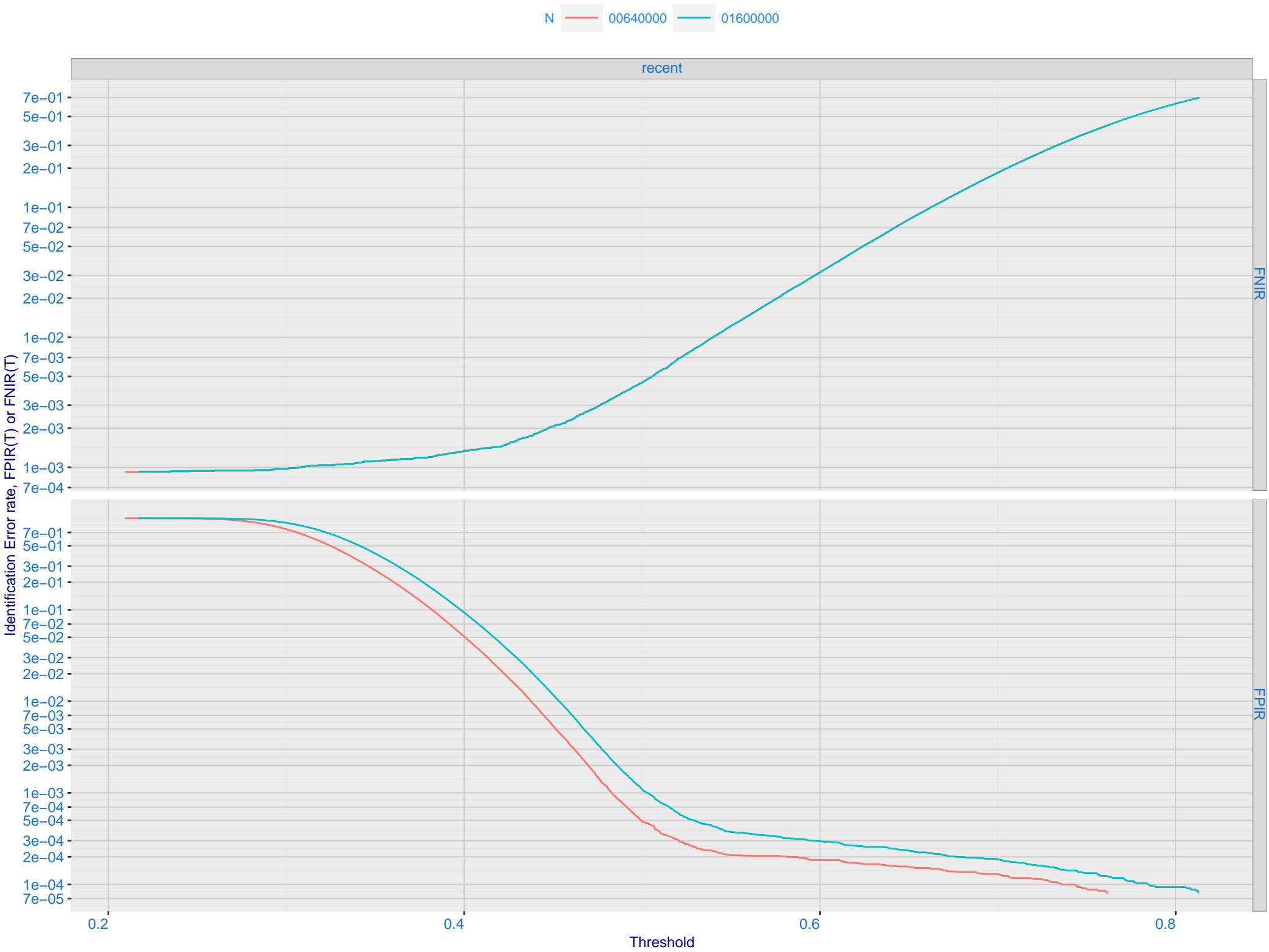
C: Evolution of accuracy for LINE algorithms on three datasets 2018 – present



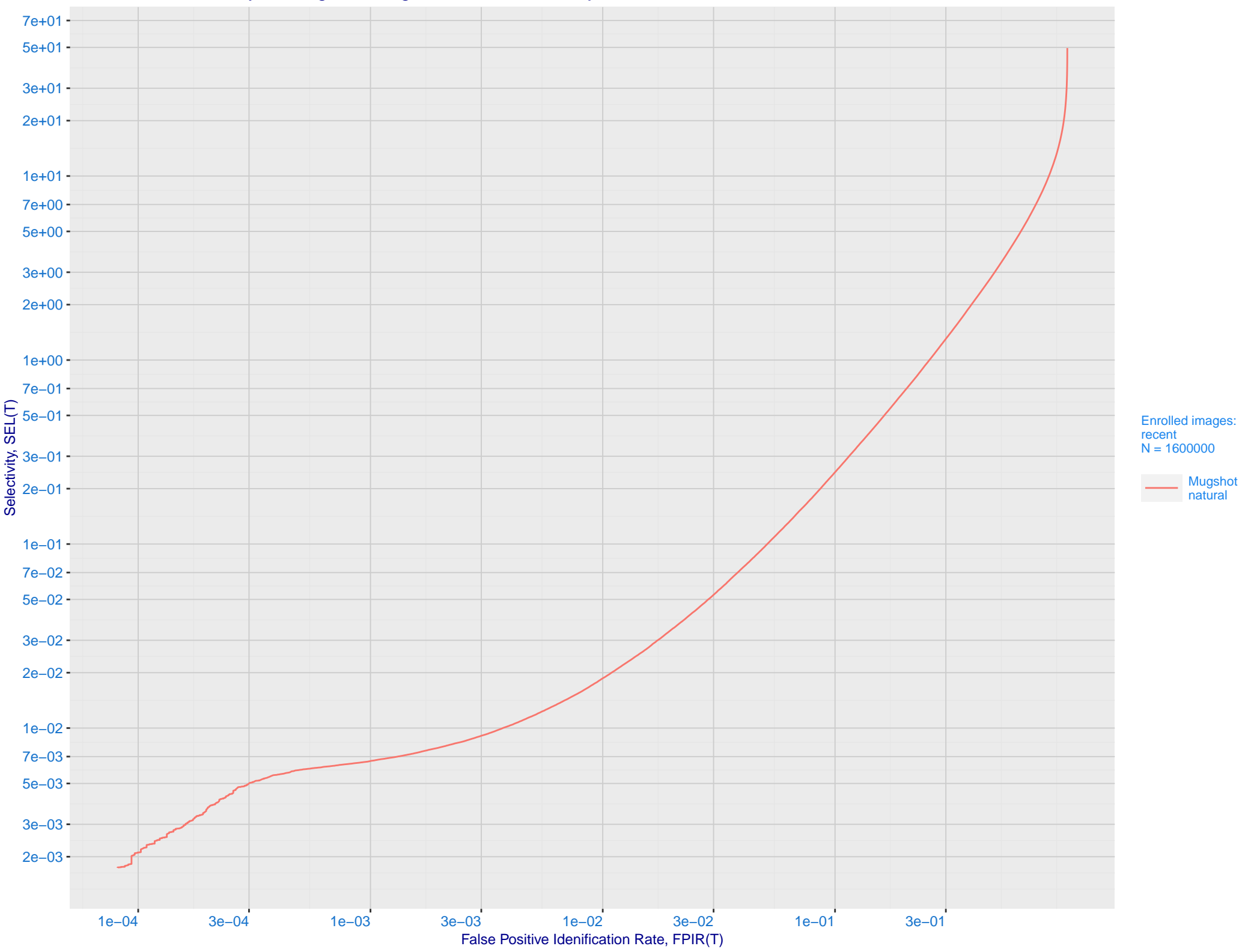
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



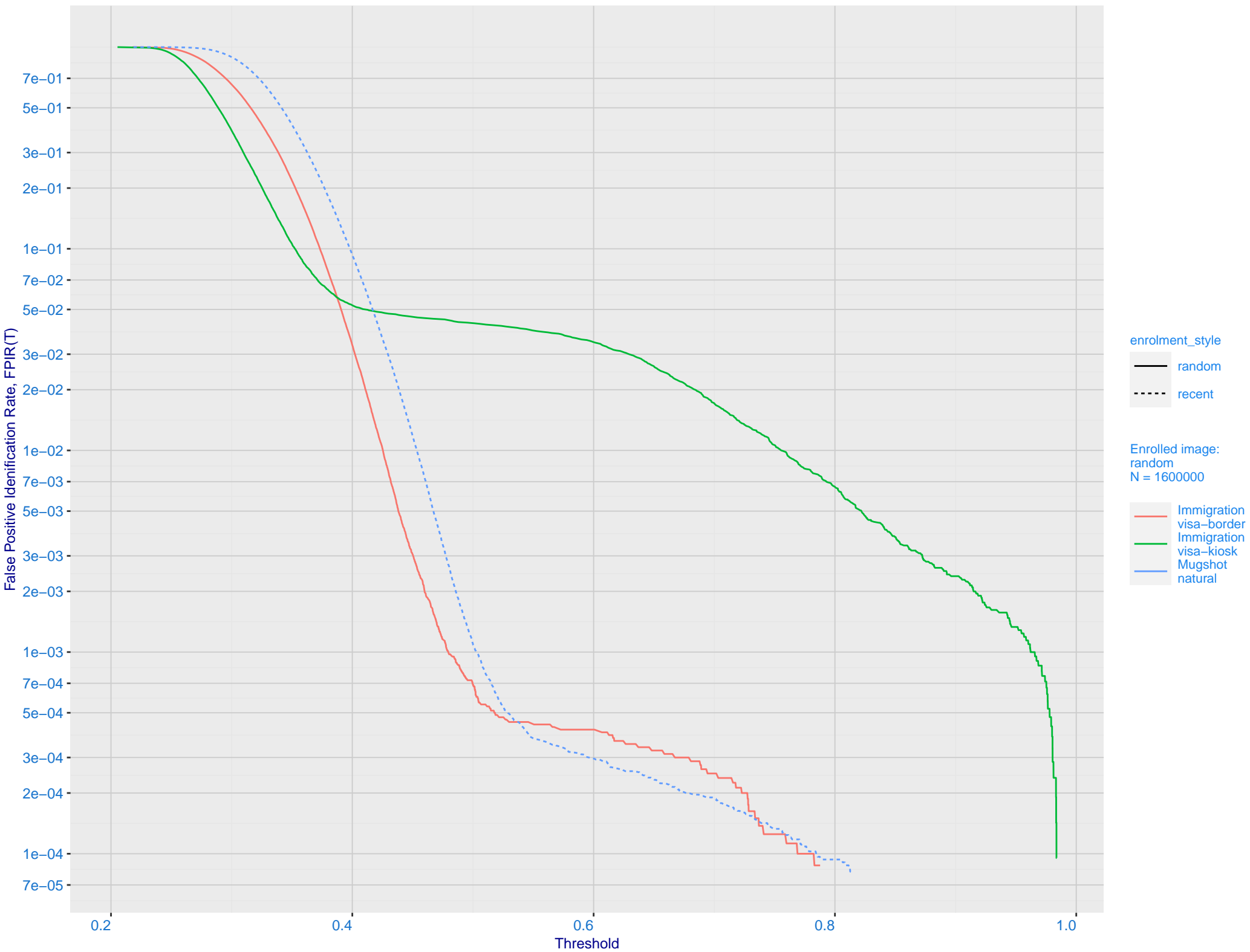
E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



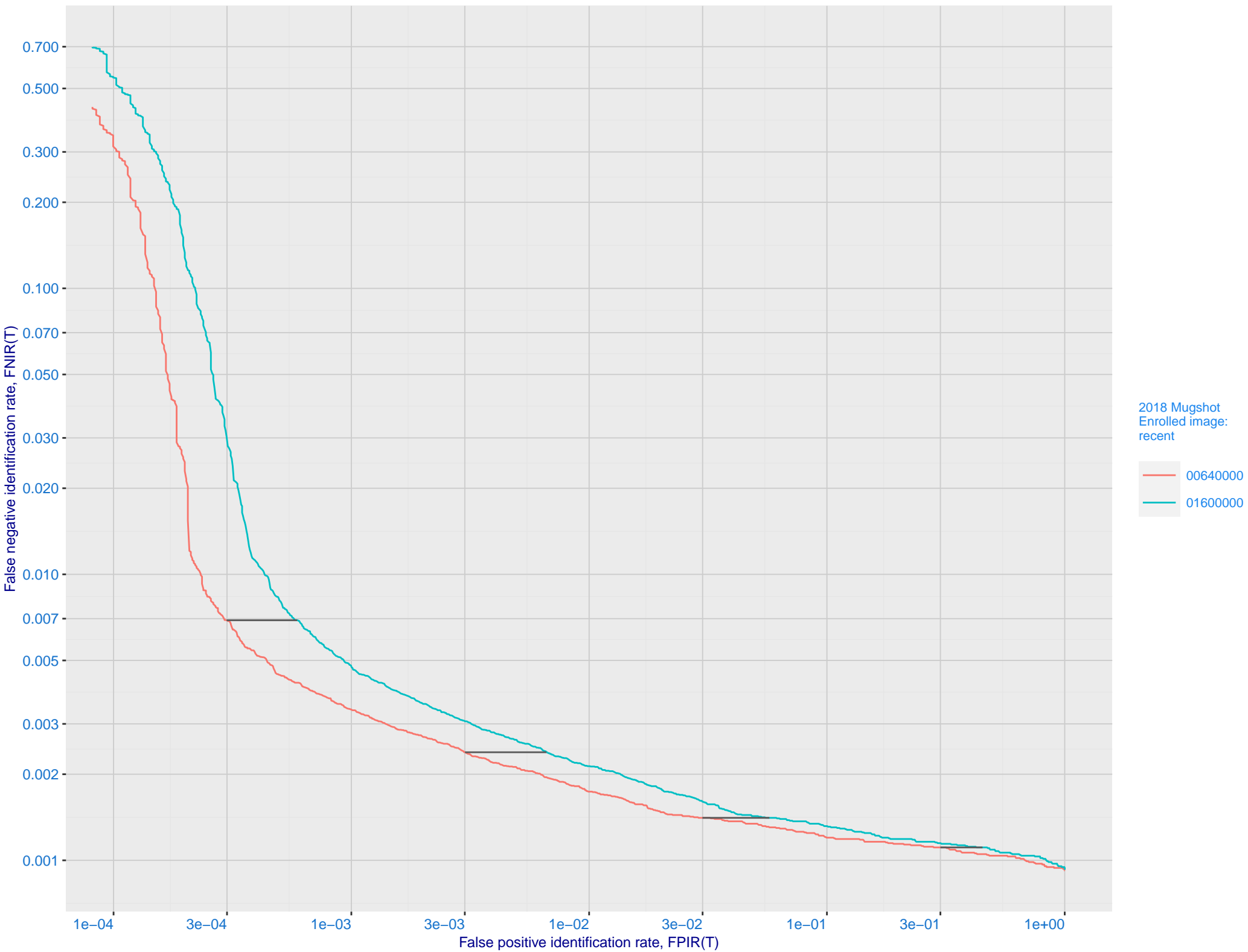
F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



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

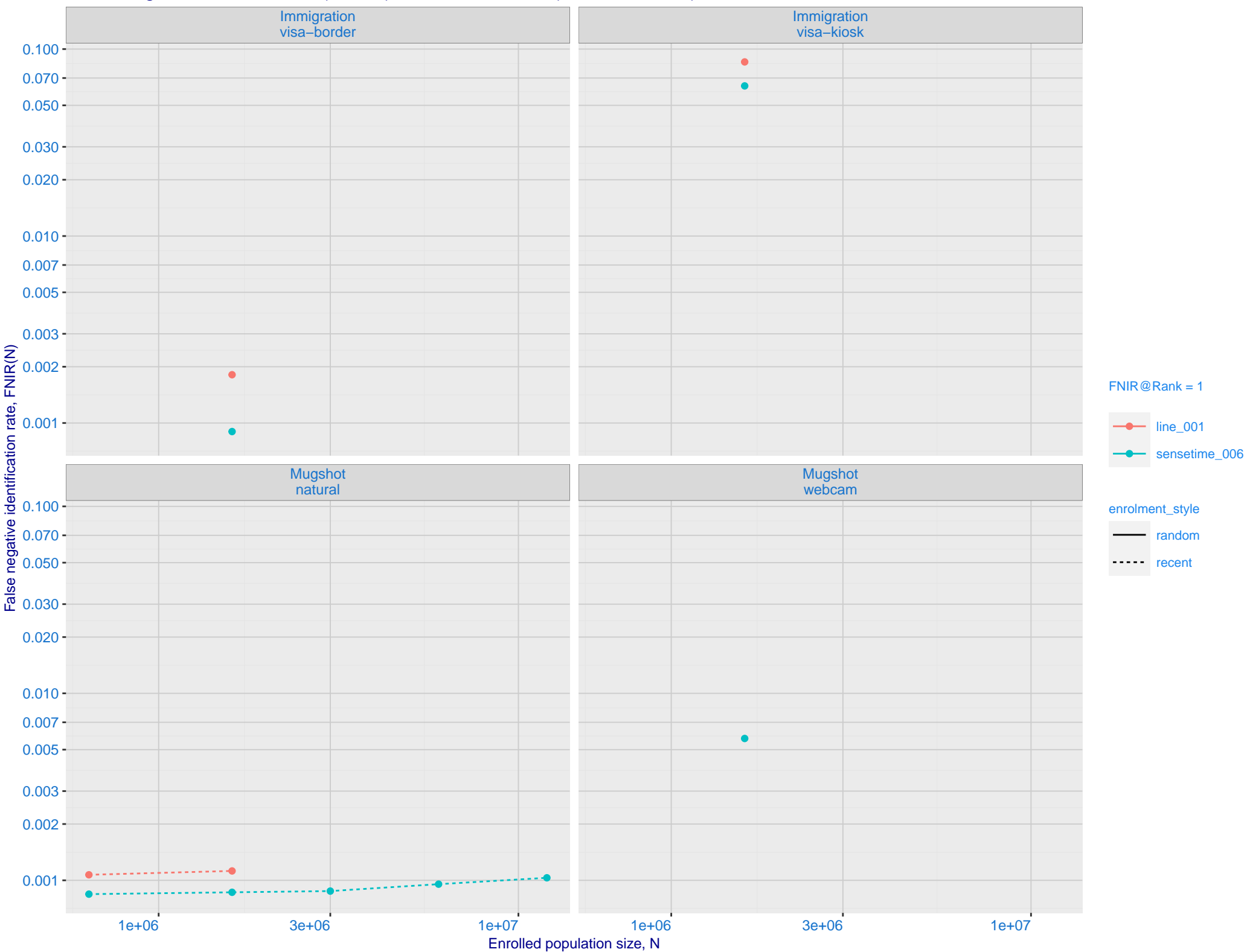


J: DET for Mugshot natural images and various N. Links connect points of equal threshold.

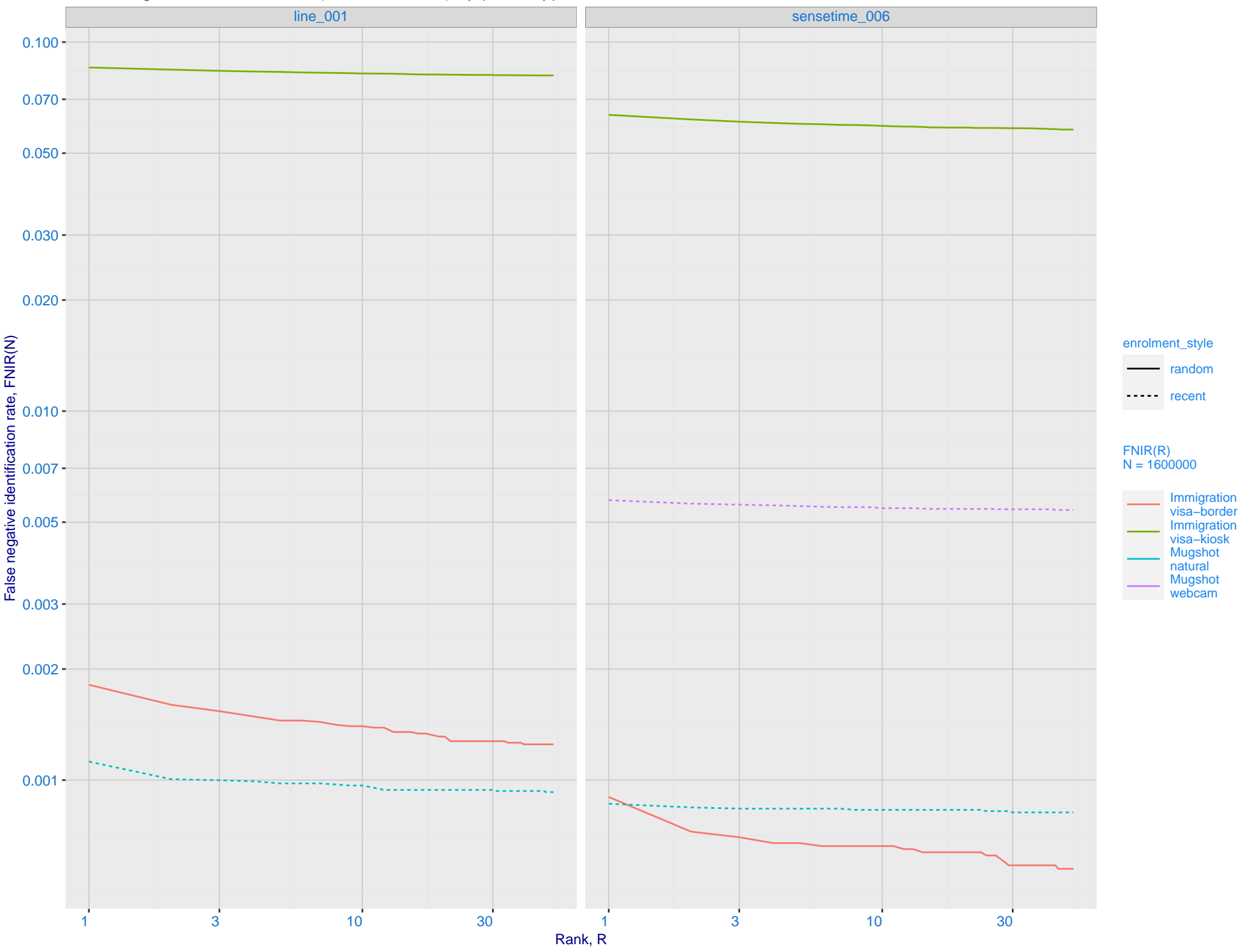




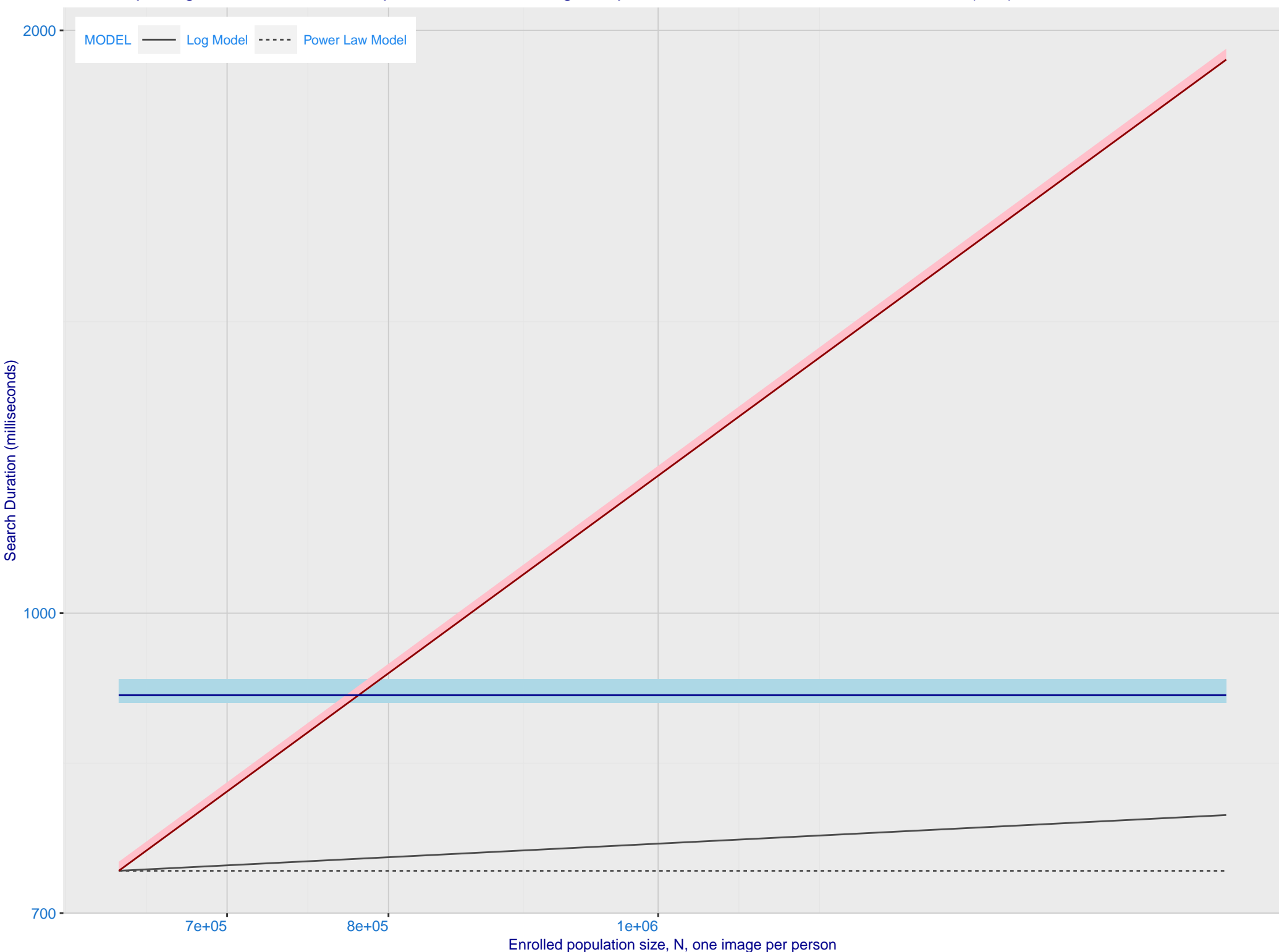
K: Investigational mode: FNIR(N, 1, 0) vs. most accurate (sensetime\_006)



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



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

Dataset: 2018 Mugshot N = 3068801

