

A: Datasheet

Algorithm: vigilantsolutions_0

Developer: Vigilant Solutions

Submission Date: 2018_02_08

Template size: 1544 bytes

Template time (2.5 percentile): 795 msec

Template time (median): 825 msec

Template time (97.5 percentile): 878 msec

Investigation:

Frontal mugshot ranking 231 (out of 279) -- FNIR(1600000, 0, 1) = 0.1230 vs. lowest 0.0009 from sensetime_005

Mugshot webcam ranking 205 (out of 241) -- FNIR(1600000, 0, 1) = 0.2123 vs. lowest 0.0062 from sensetime_005

Mugshot profile ranking 195 (out of 210) -- FNIR(1600000, 0, 1) = 0.9803 vs. lowest 0.0587 from xforwardai_002

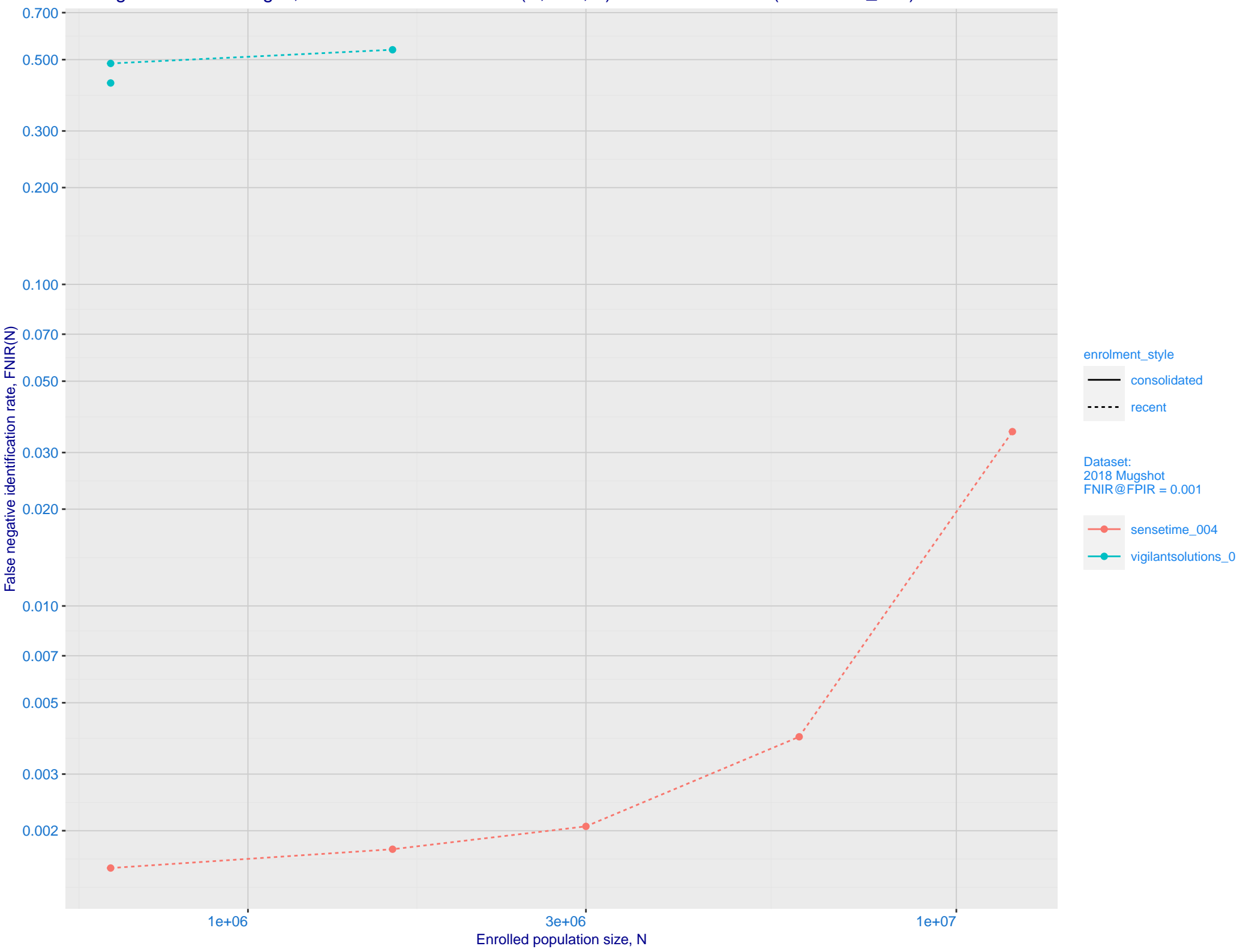
Identification:

Frontal mugshot ranking 236 (out of 279) -- FNIR(1600000, T, L+1) = 0.5366, FPIR=0.001000 vs. lowest 0.0018 from sensetime_004

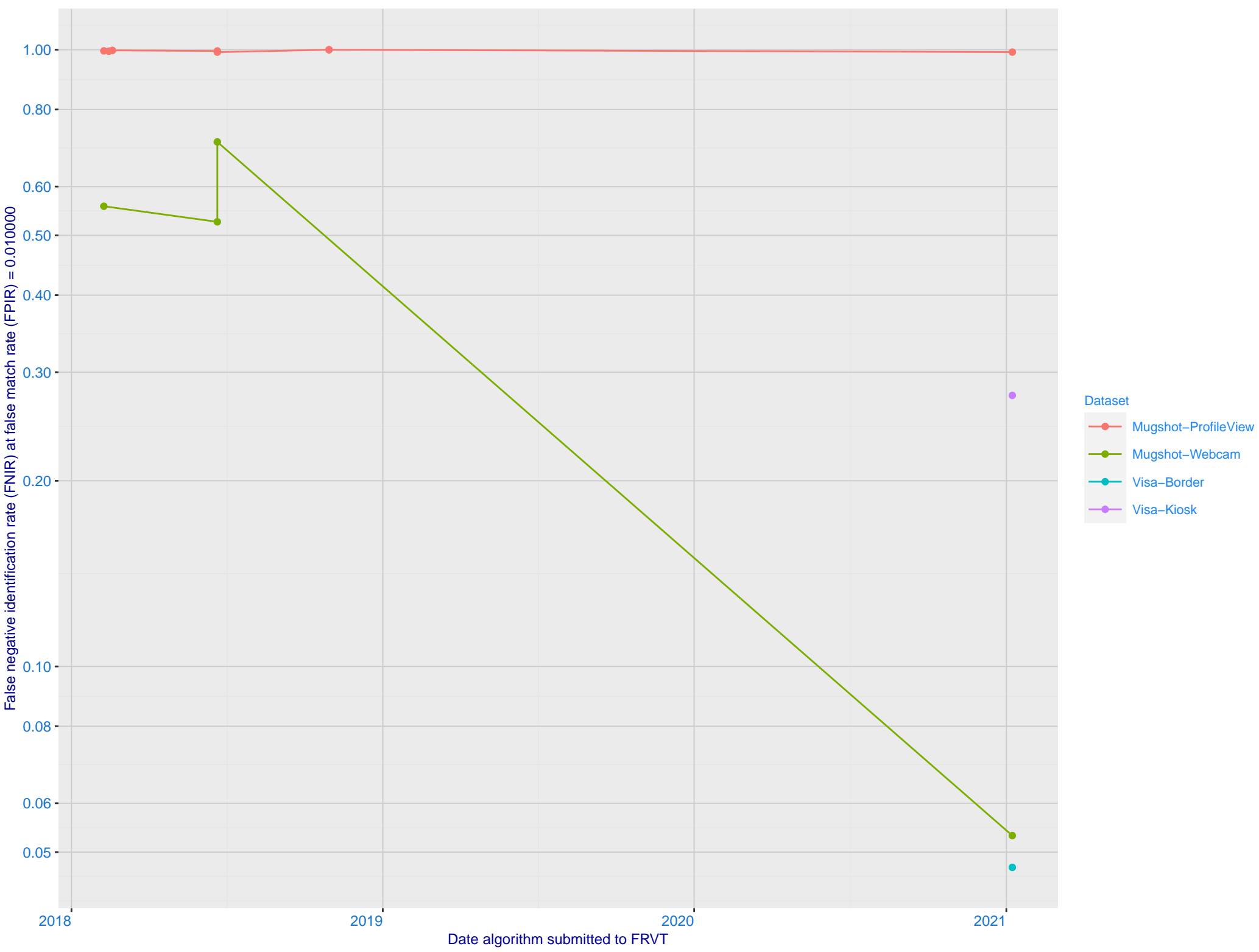
Mugshot webcam ranking 208 (out of 236) -- FNIR(1600000, T, L+1) = 0.6953, FPIR=0.001000 vs. lowest 0.0122 from sensetime_003

Mugshot profile ranking 124 (out of 209) -- FNIR(1600000, T, L+1) = 0.9978, FPIR=0.001000 vs. lowest 0.1331 from cloudwalk_hr_000

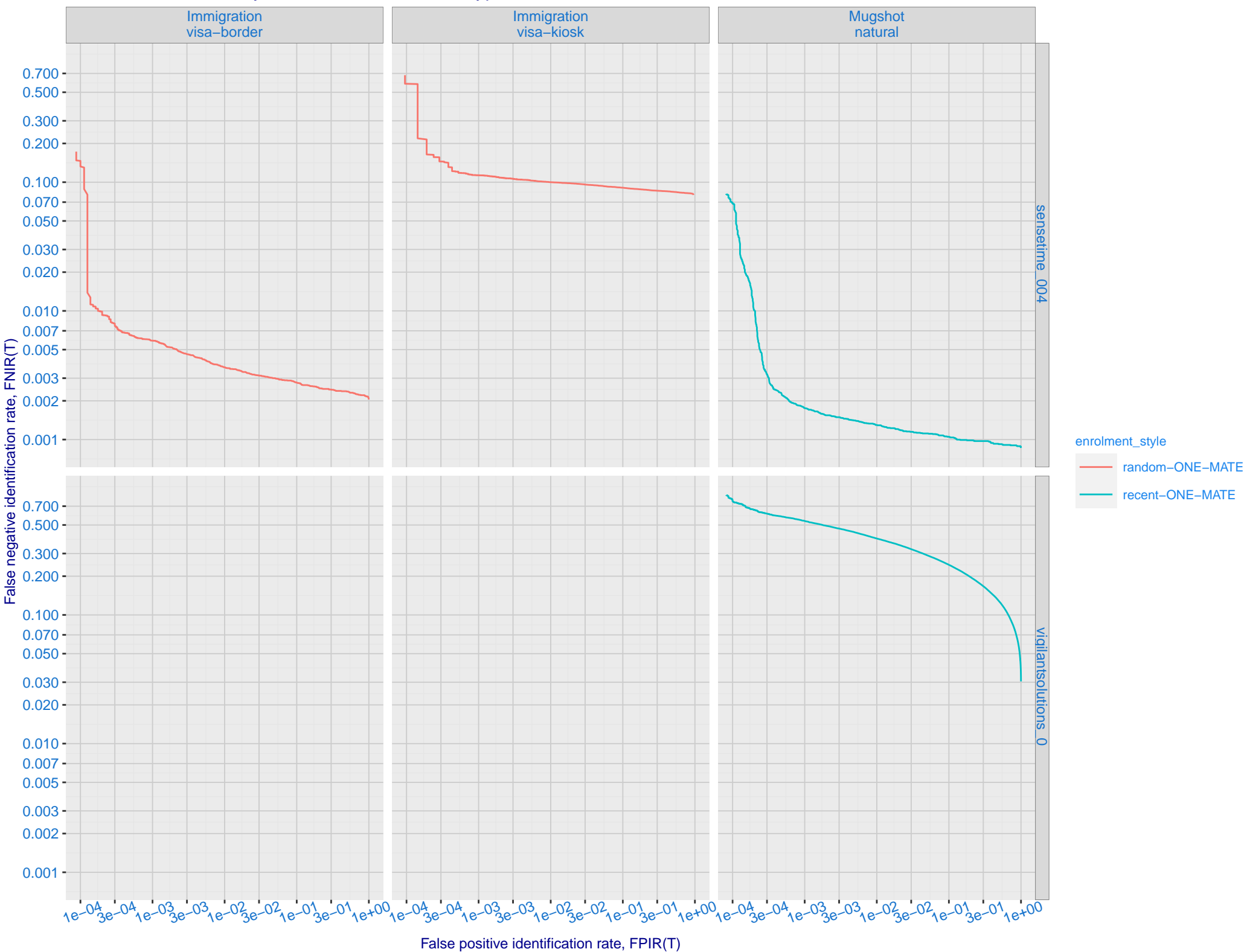
B: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime_004)



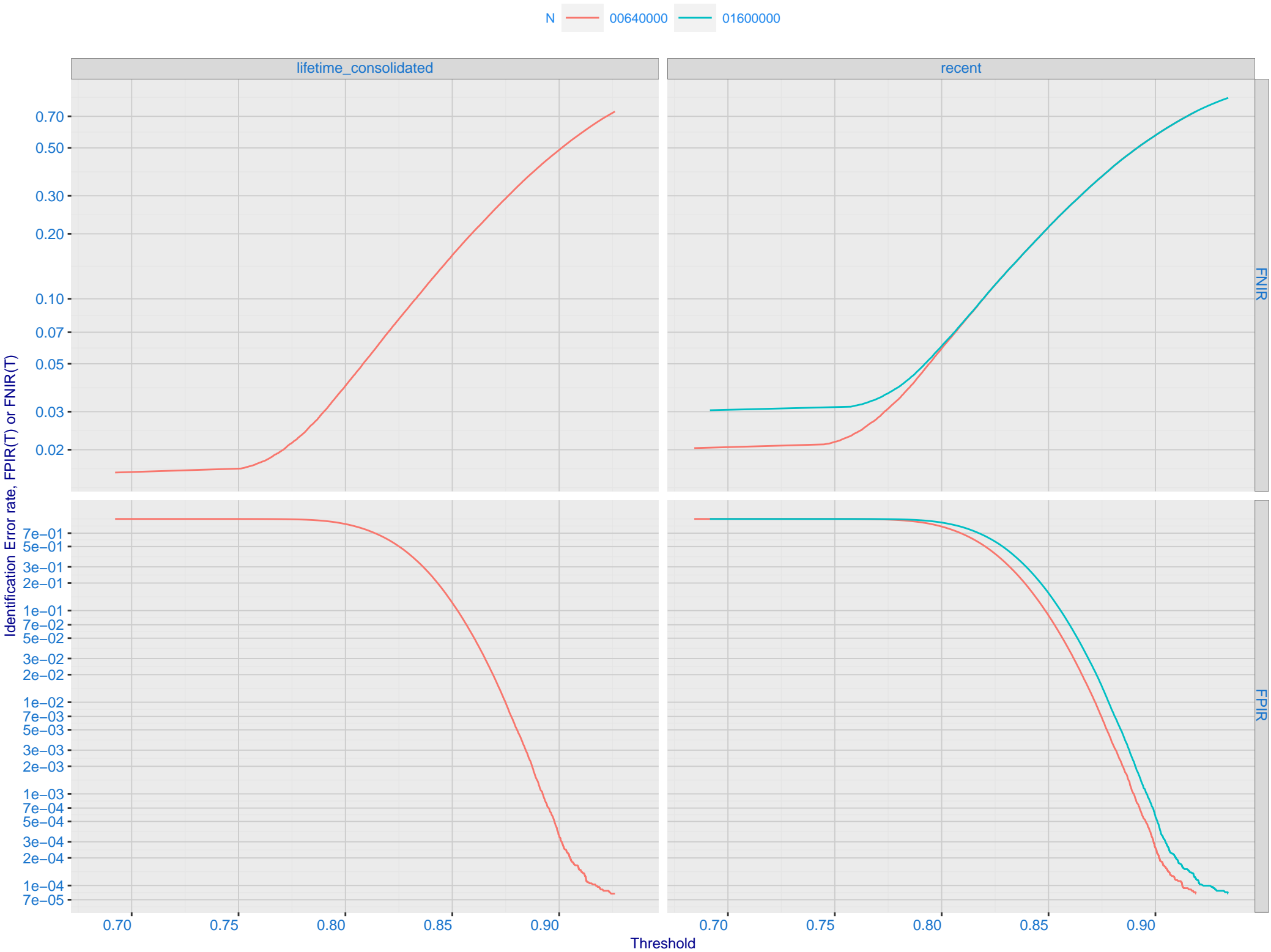
C: Evolution of accuracy for VIGILANTSOLUTIONS algorithms on three datasets 2018 – present



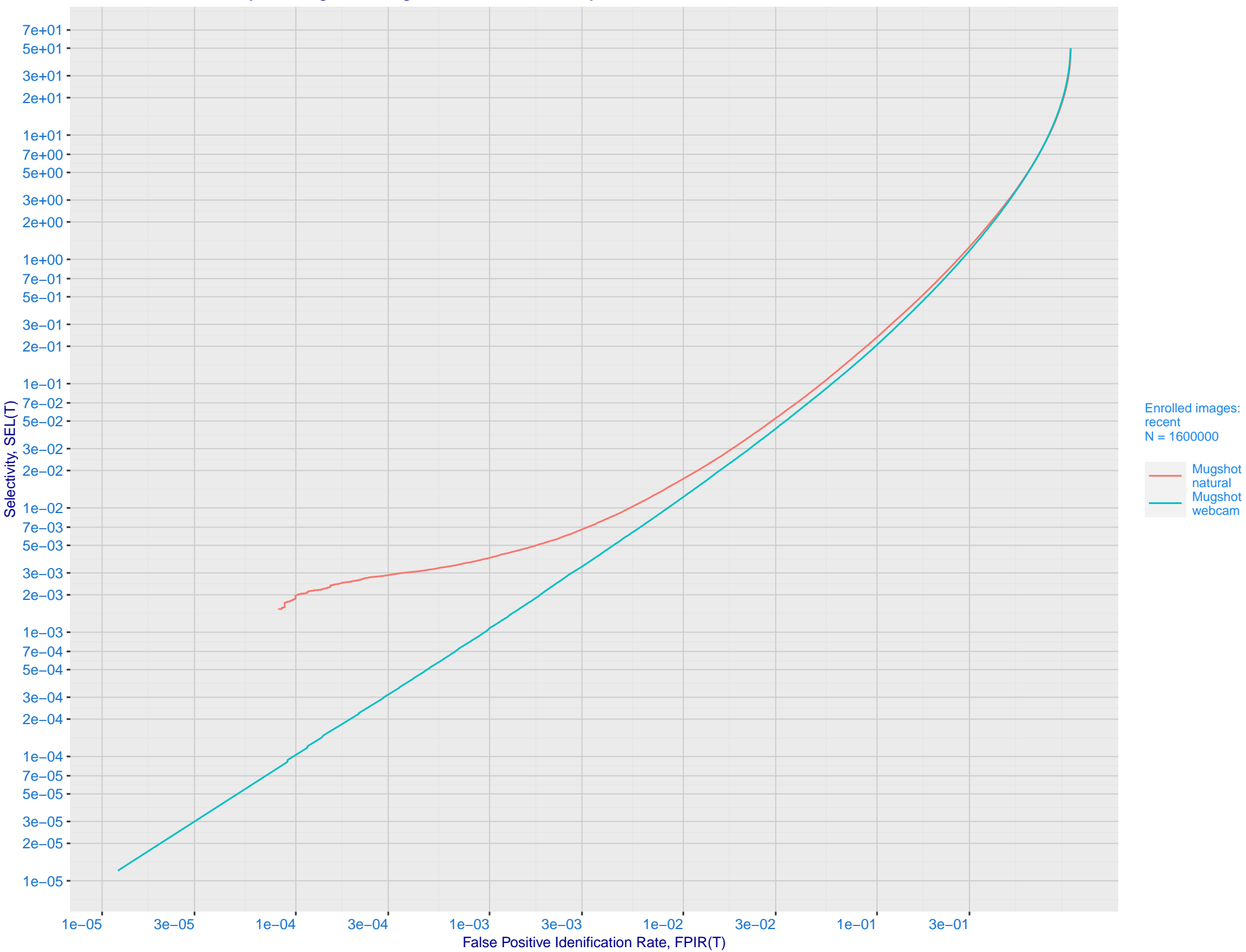
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



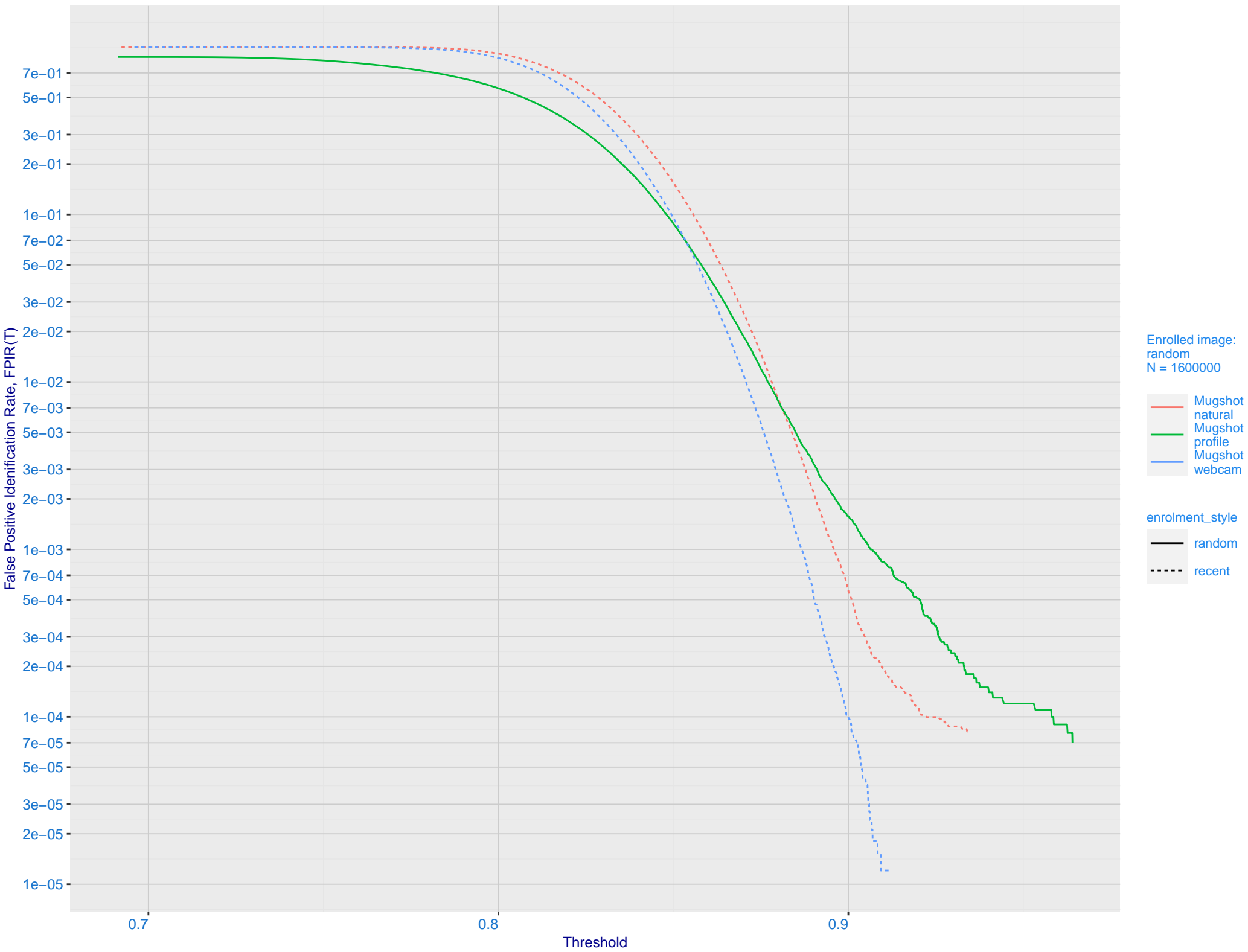
E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



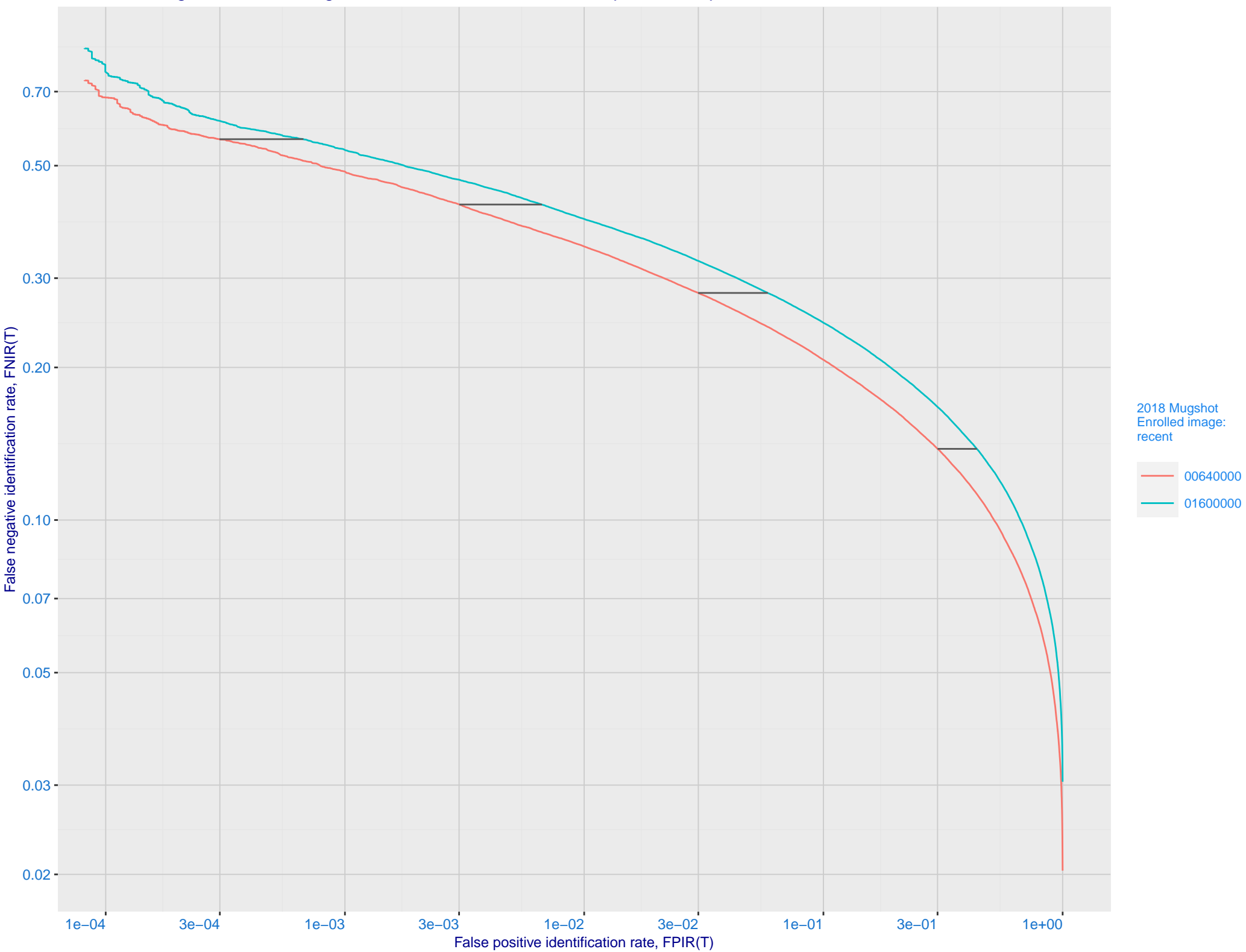
F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



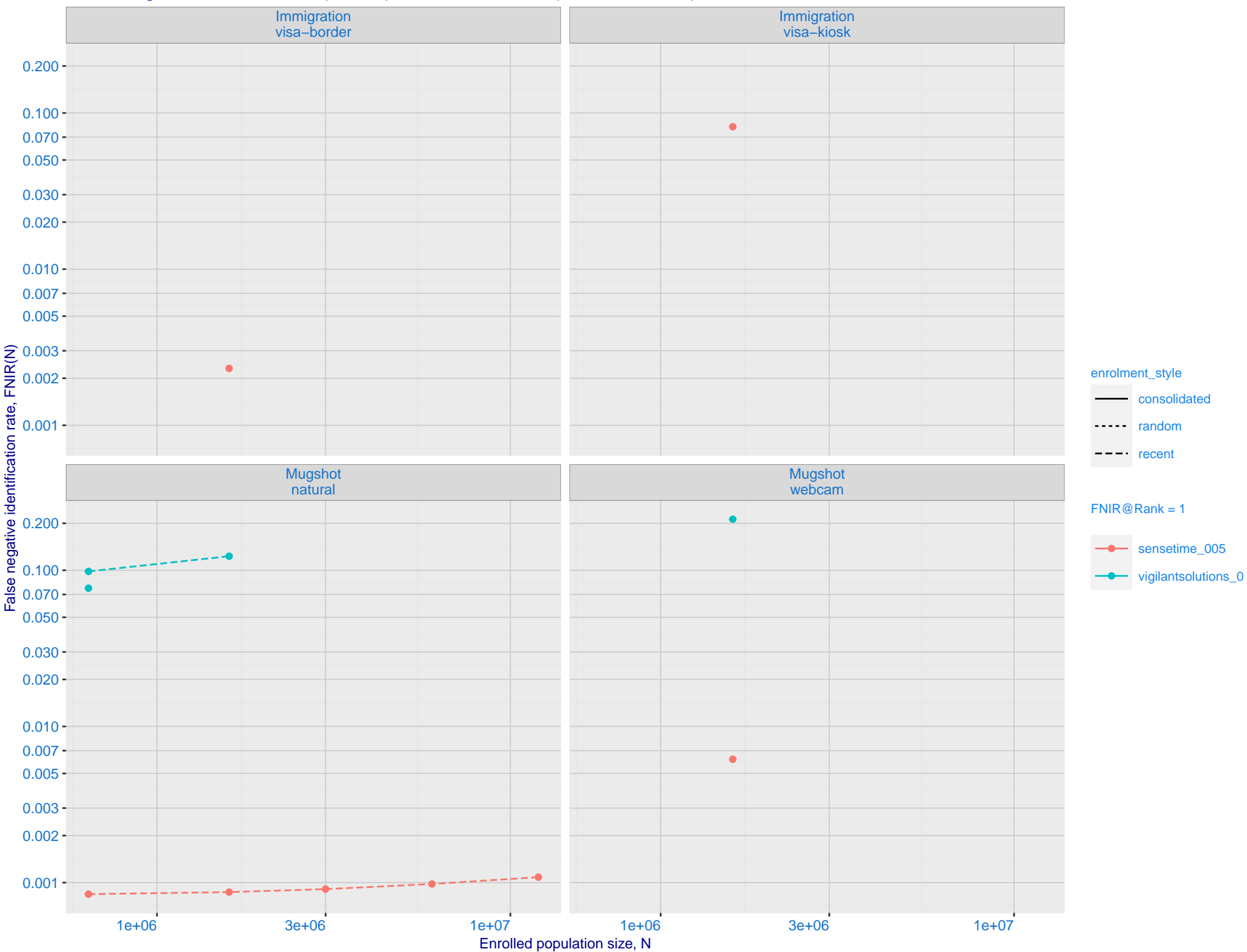
G: FPIR dependence on T by probe type for N = 1600000 subjects



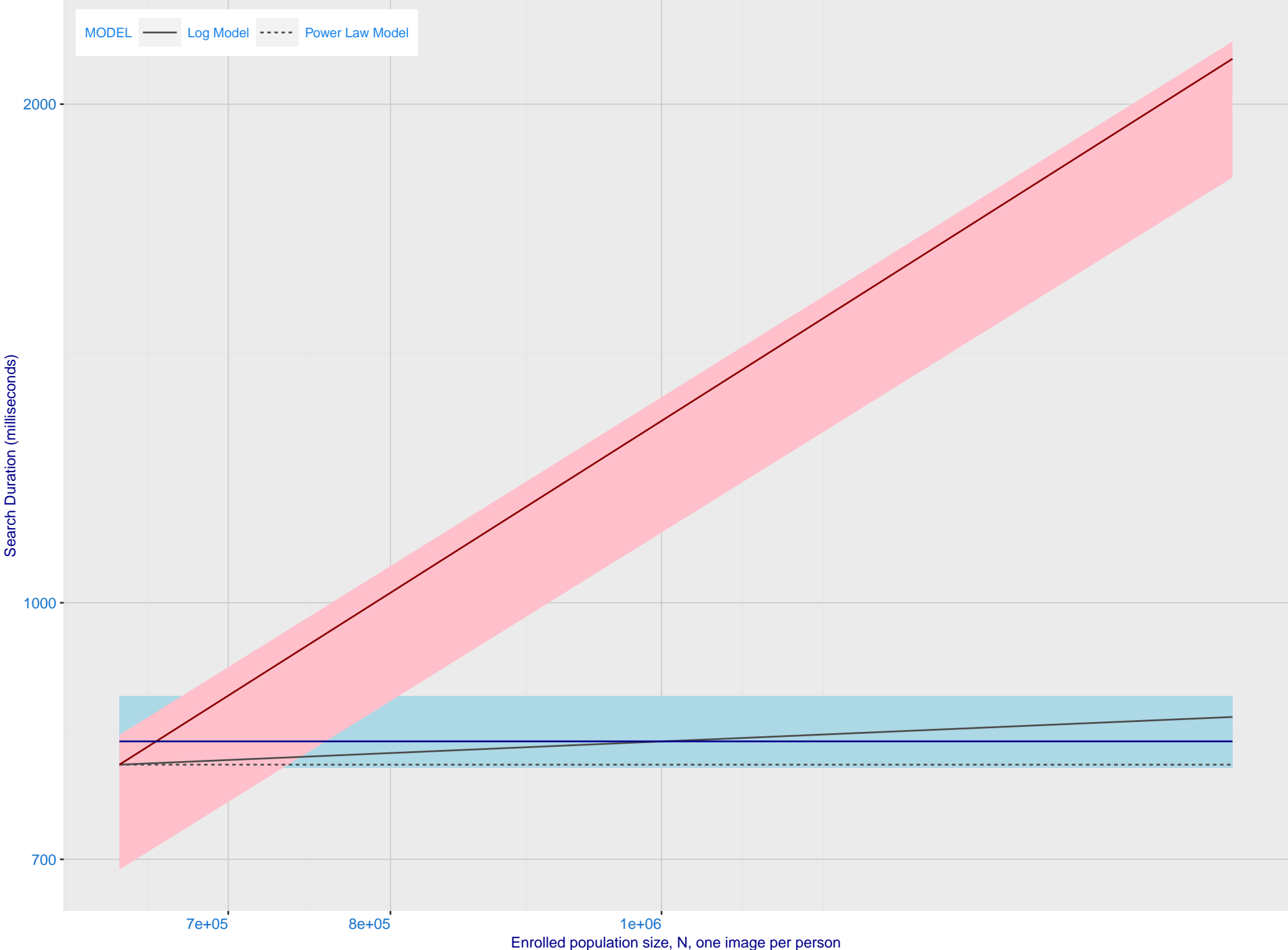
J: DET for Mugshot natural images and various N. Links connect points of equal threshold.



K: Investigational mode: FNIR(N, 1, 0) vs. most accurate (sensetime_005)



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

