

A: Datasheet

Algorithm: aware_2

Developer: Aware

Submission Date: 2018_02_16

Template size: 2076 bytes

Template time (2.5 percentile): 848 msec

Template time (median): 909 msec

Template time (97.5 percentile): 989 msec

Investigation:

Frontal mugshot ranking 206 (out of 265) -- FNIR(1600000, 0, 1) = 0.0575 vs. lowest 0.0009 from sensetime_005

Mugshot profile ranking 177 (out of 196) -- FNIR(1600000, 0, 1) = 0.9768 vs. lowest 0.0591 from sensetime_005

Immigration visa-border ranking 111 (out of 148) -- FNIR(1600000, 0, 1) = 0.1489 vs. lowest 0.0013 from visionlabs_010

Immigration visa-kiosk ranking 110 (out of 145) -- FNIR(1600000, 0, 1) = 0.3947 vs. lowest 0.0568 from hr_000

Identification:

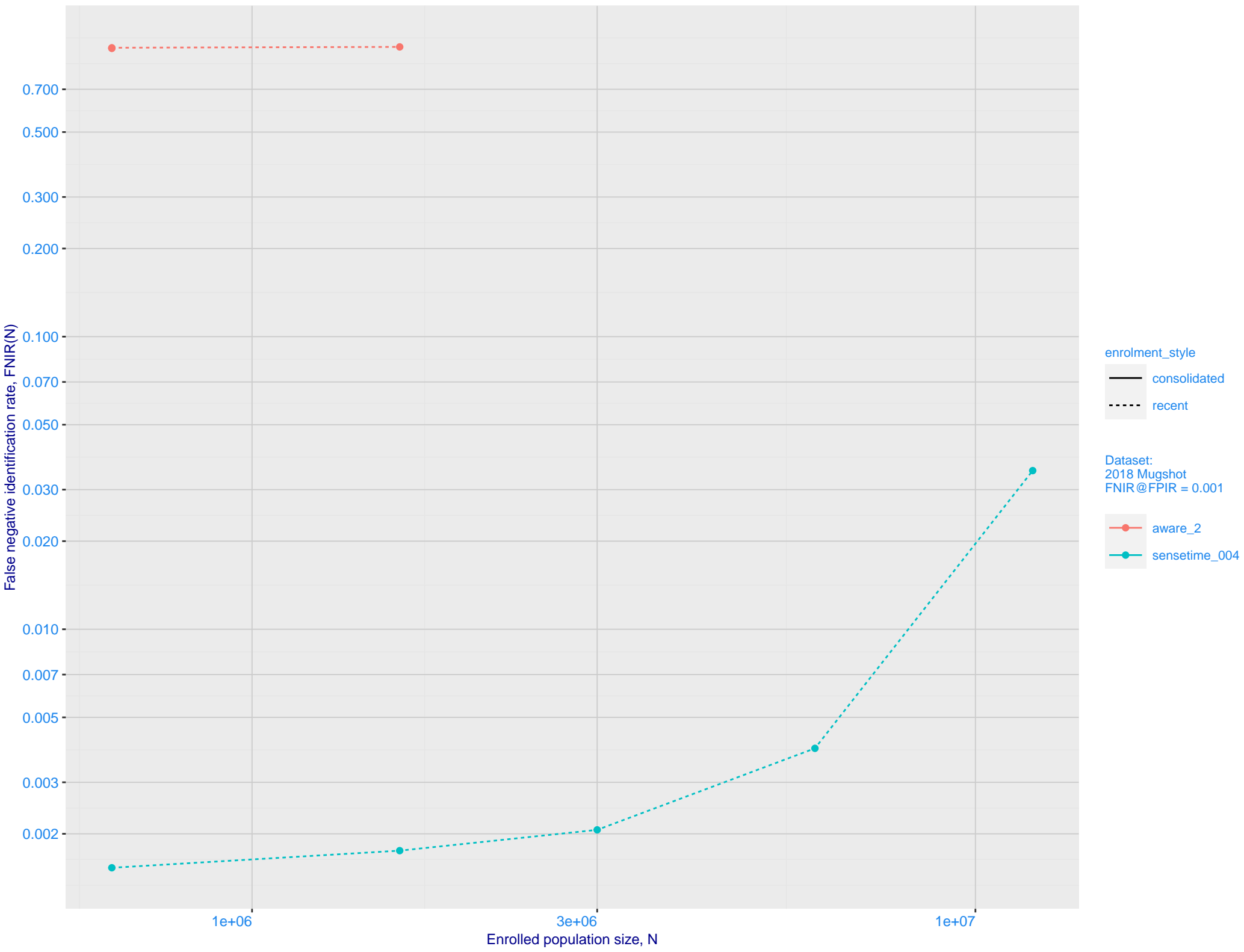
Frontal mugshot ranking 255 (out of 265) -- FNIR(1600000, T, L+1) = 0.9772, FPIR=0.001000 vs. lowest 0.0018 from sensetime_004

Mugshot profile ranking 176 (out of 195) -- FNIR(1600000, T, L+1) = 0.9999, FPIR=0.001000 vs. lowest 0.1331 from hr_000

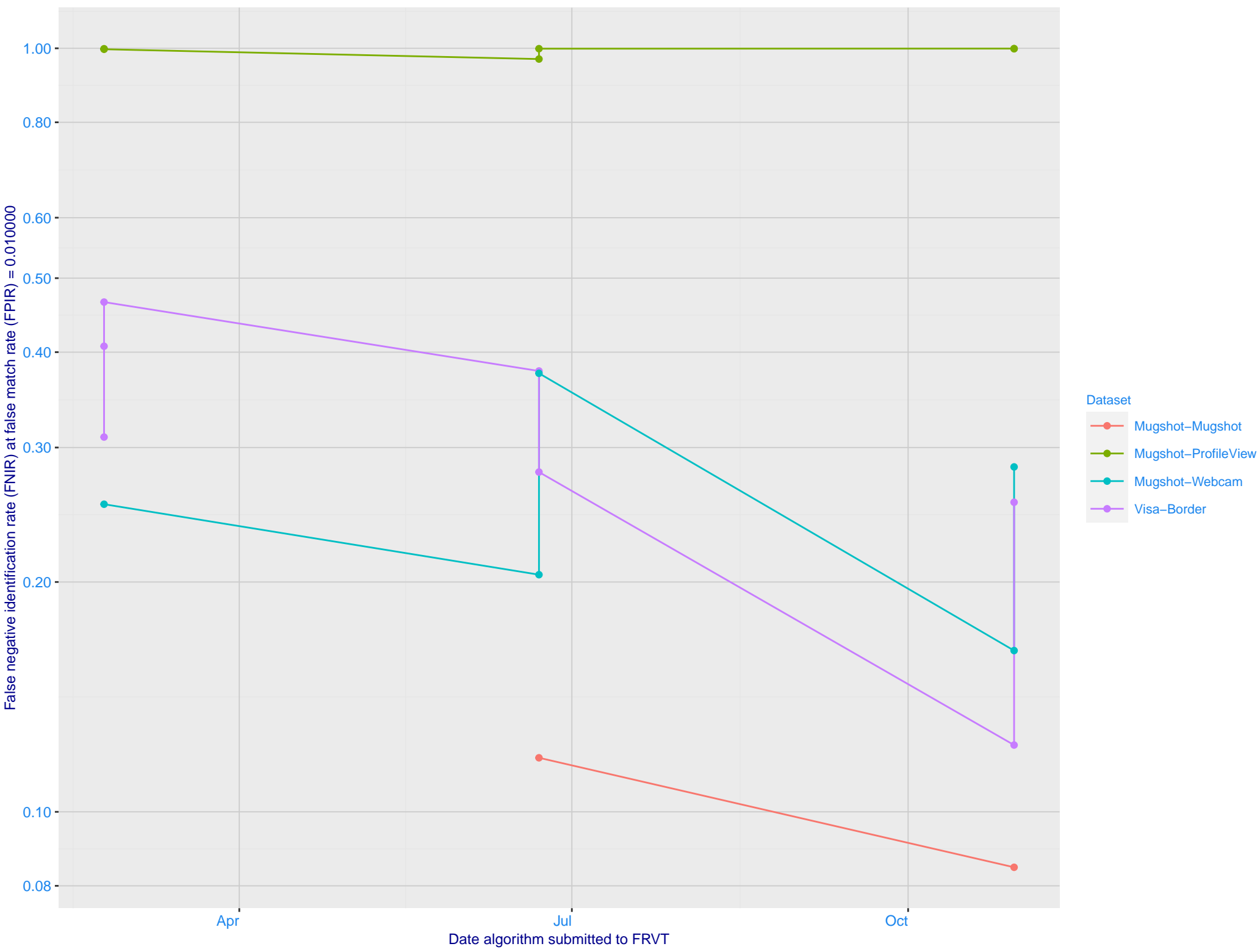
Immigration visa-border ranking 117 (out of 146) -- FNIR(1600000, T, L+1) = 0.7433, FPIR=0.001000 vs. lowest 0.0049 from hr_000

Immigration visa-kiosk ranking 110 (out of 141) -- FNIR(1600000, T, L+1) = 0.9431, FPIR=0.001000 vs. lowest 0.0996 from hr_000

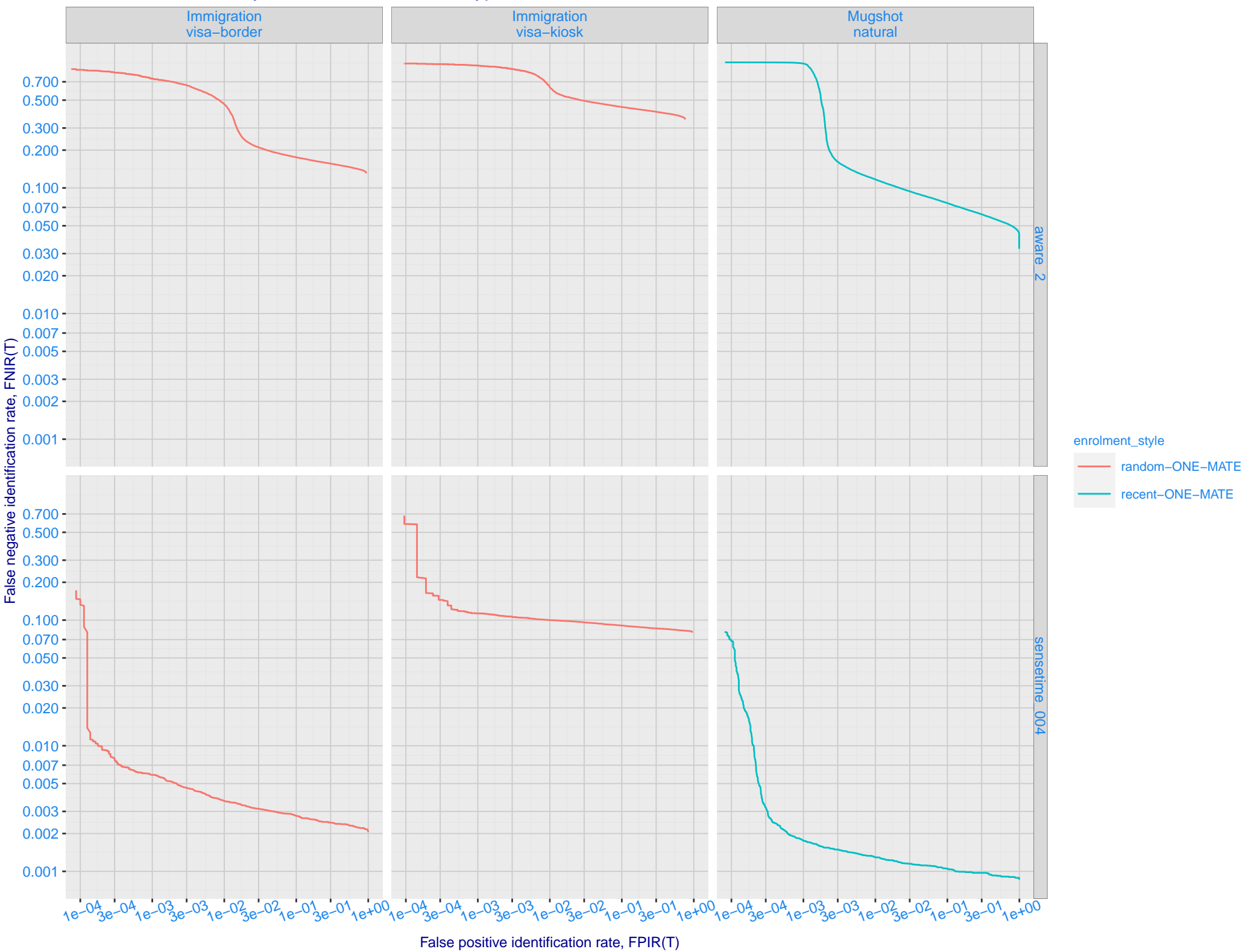
B: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime_004)



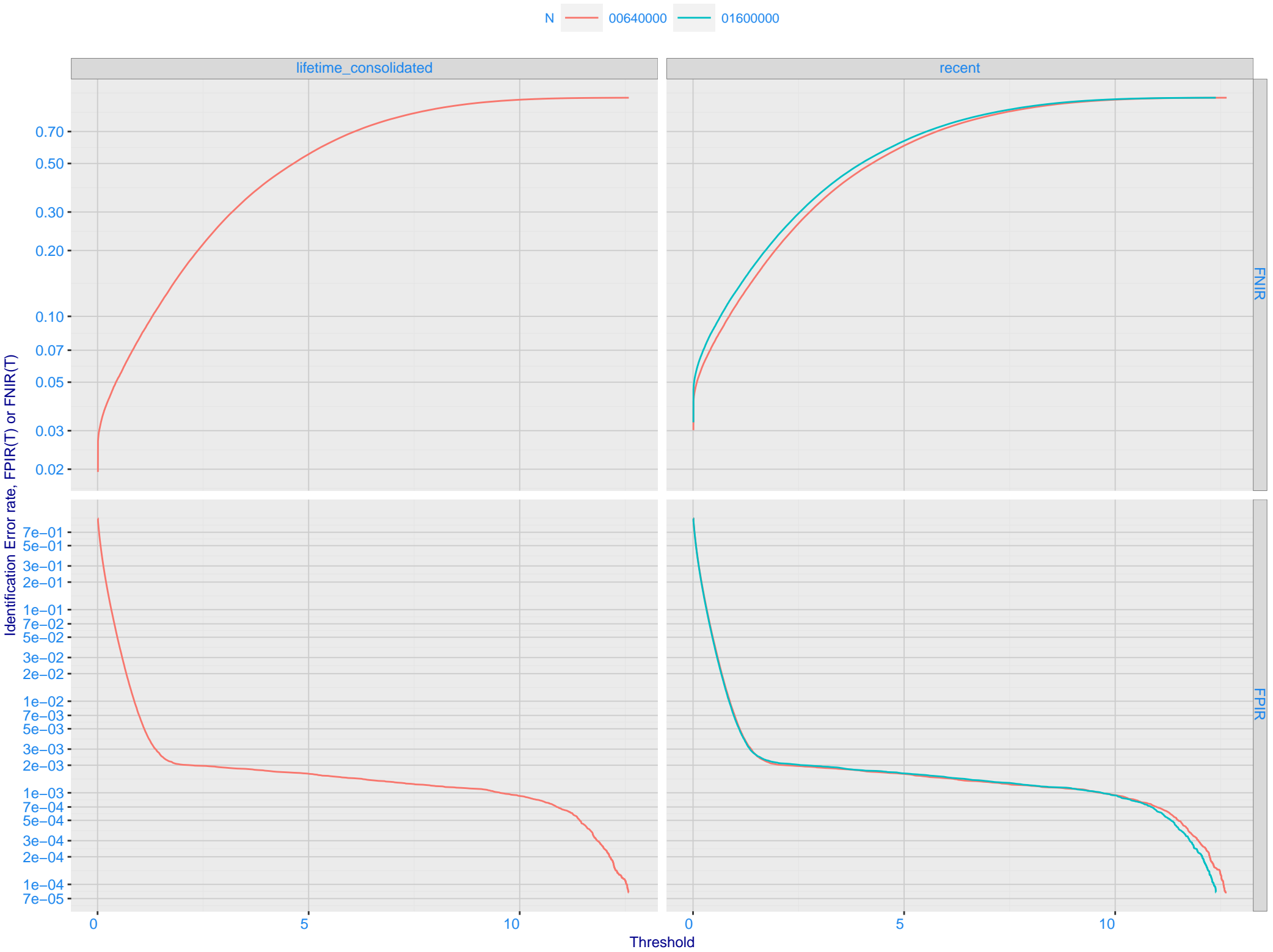
C: Evolution of accuracy for AWARE algorithms on three datasets 2018 – present



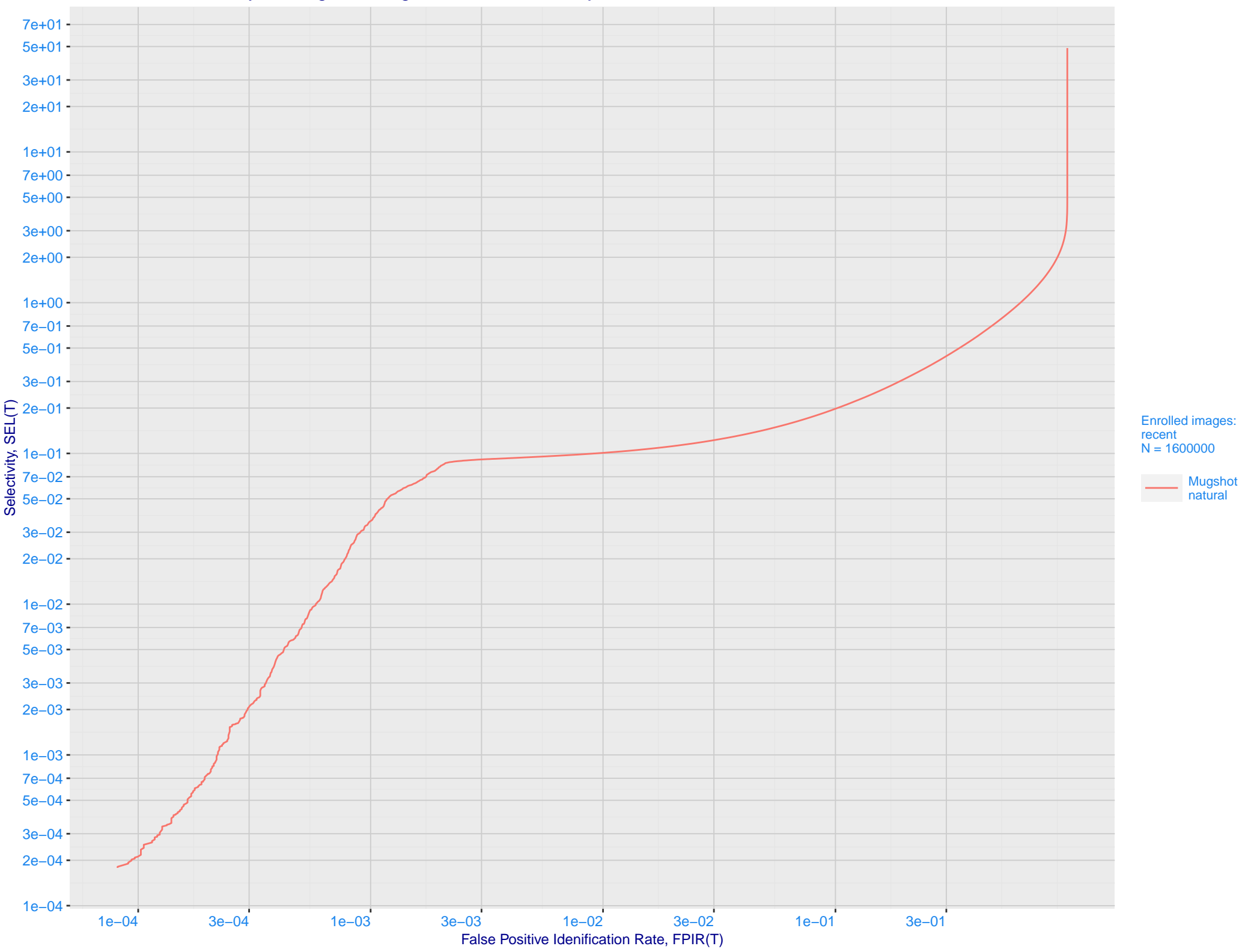
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



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



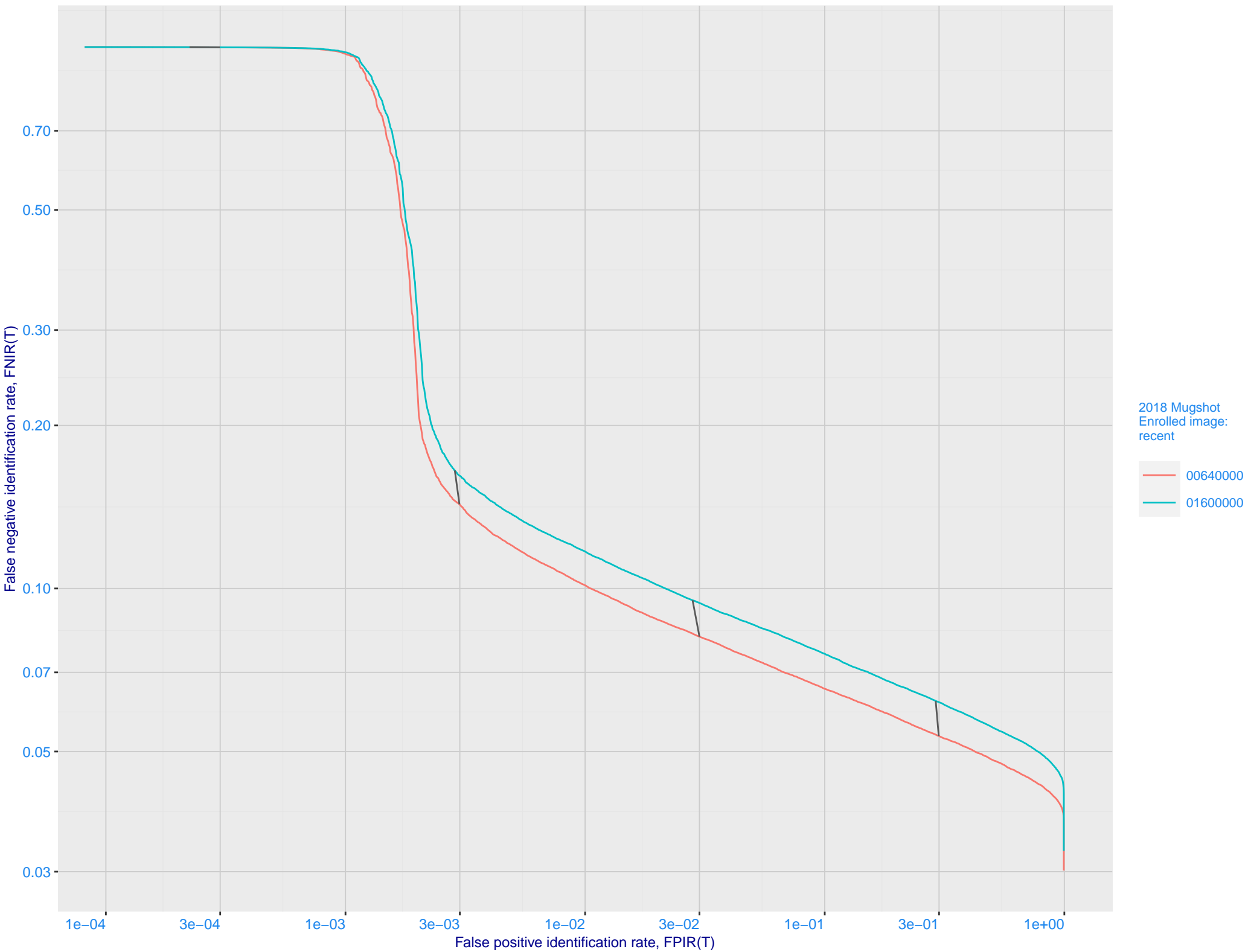
F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



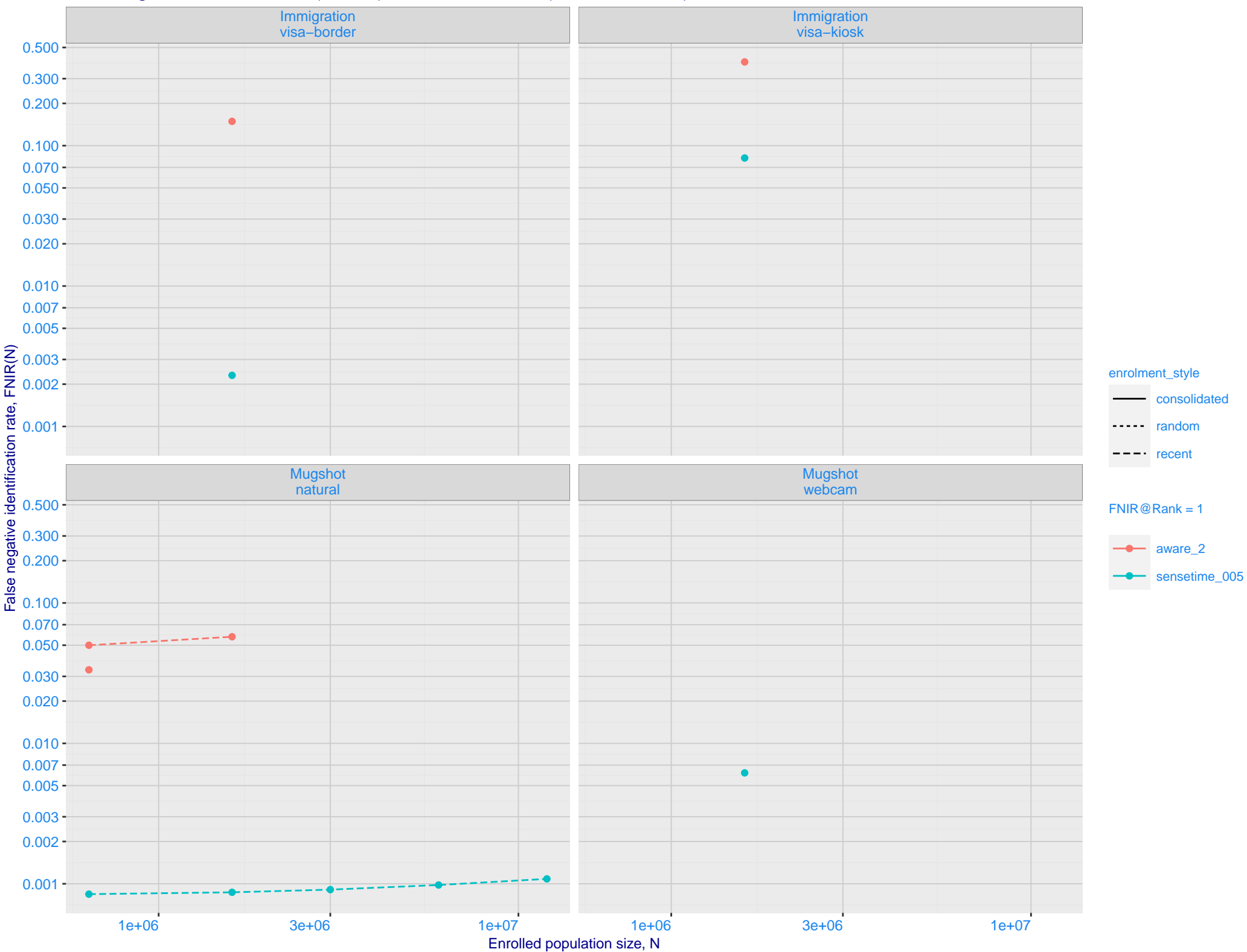
— random
- - - recent

- Immigration visa-border
- Immigration visa-kiosk
- Mugshot natural
- Mugshot profile

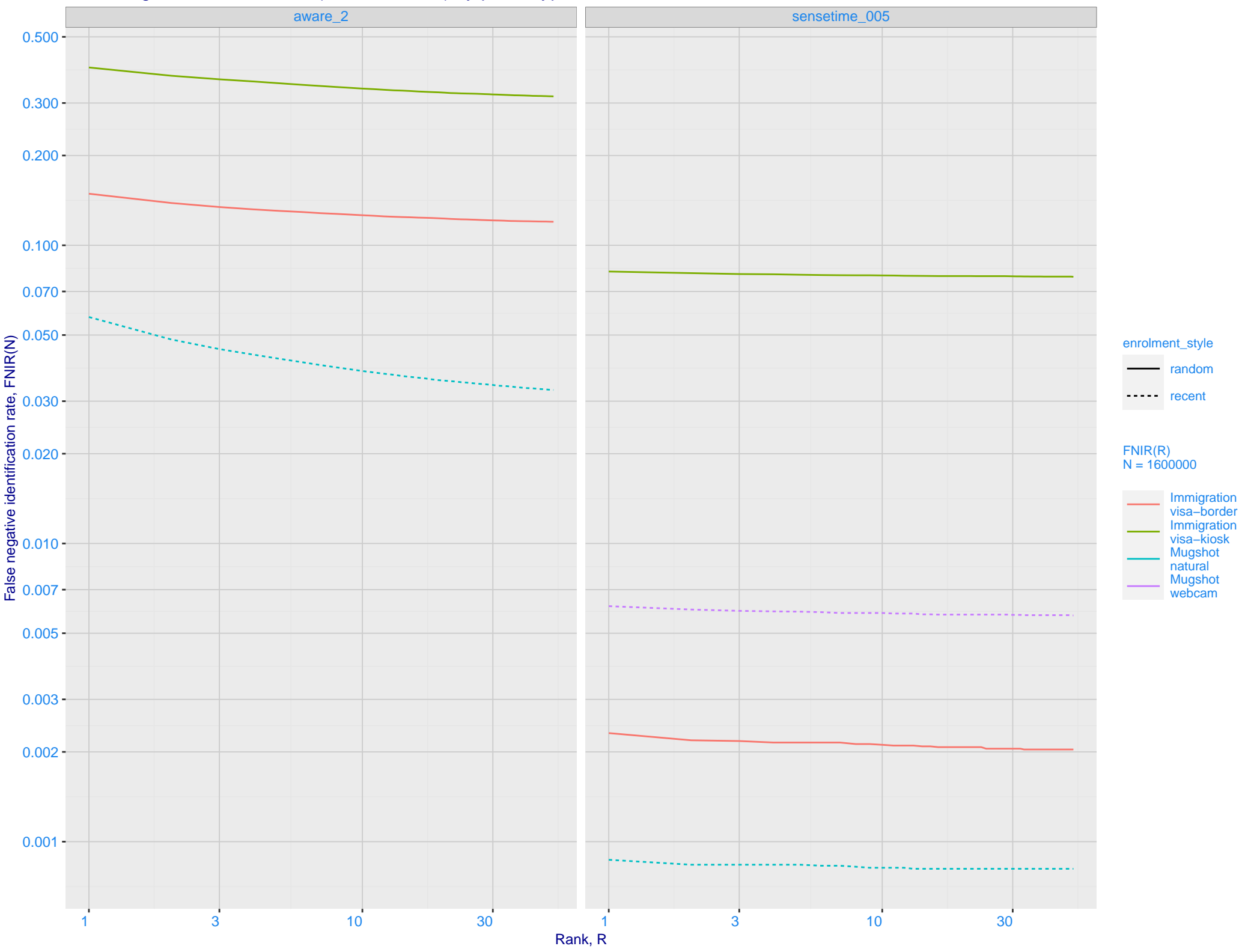
H: DET for Mugshot natural images and various N. Links connect points of equal threshold.



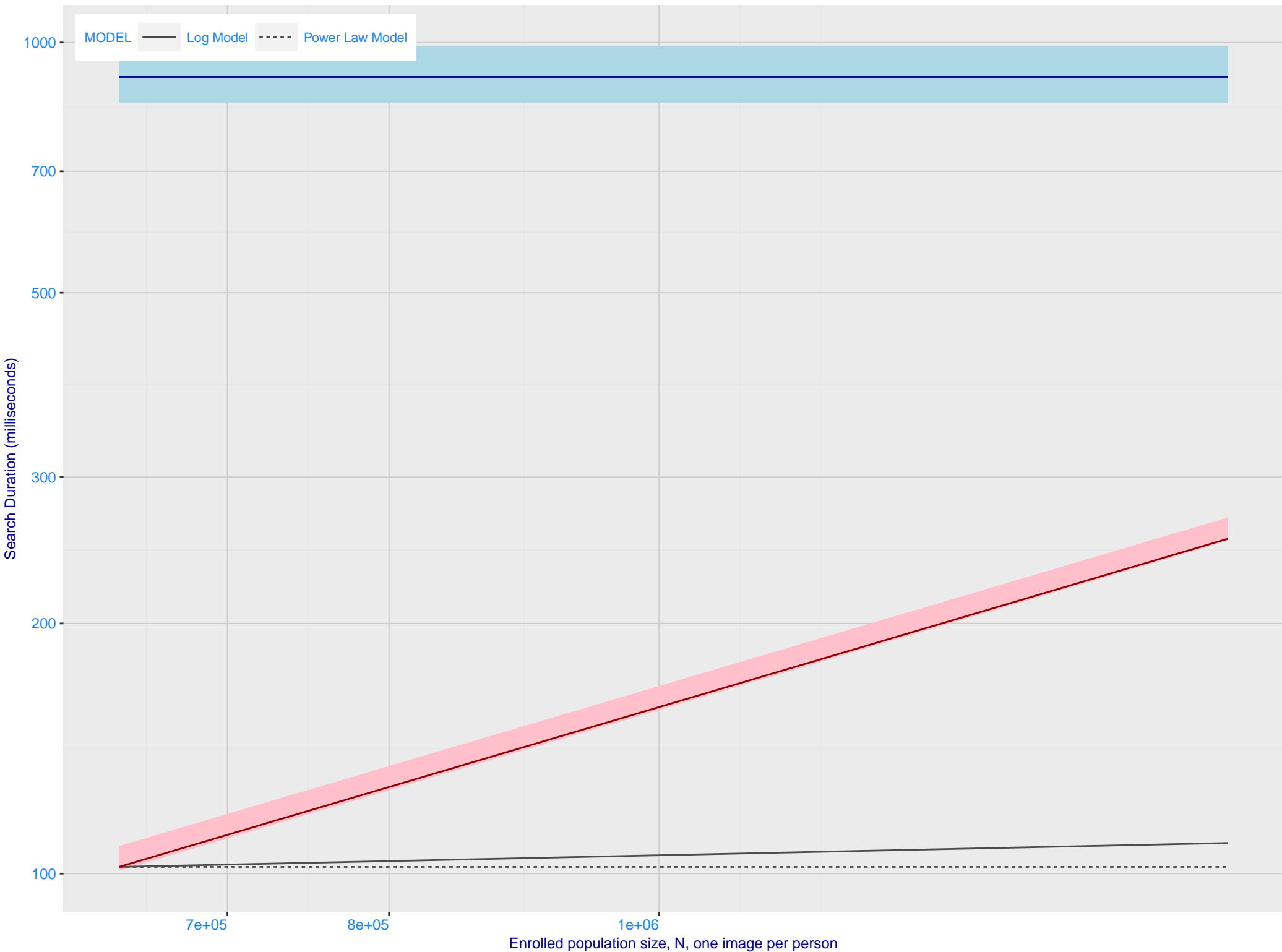
I: Investigational mode: FNIR(N, 1, 0) vs. most accurate (sensetime_005)



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



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



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

Dataset: 2018 Mugshot N = 3068801

