A: Datasheet

Algorithm: lookman_4

Developer: Lookman Electroplast Industries

Submission Date: 2018_10_28

Template size: 548 bytes

Template time (2.5 percentile): 318 msec

Template time (median): 320 msec

Template time (97.5 percentile): 349 msec

Investigation:

Frontal mugshot ranking 120 (out of 265) –– FNIR(1600000, 0, 1) = 0.0091 vs. lowest 0.0009 from sensetime_005

Mugshot webcam ranking 132 (out of 227) –– FNIR(1600000, 0, 1) = 0.0394 vs. lowest 0.0062 from sensetime_005

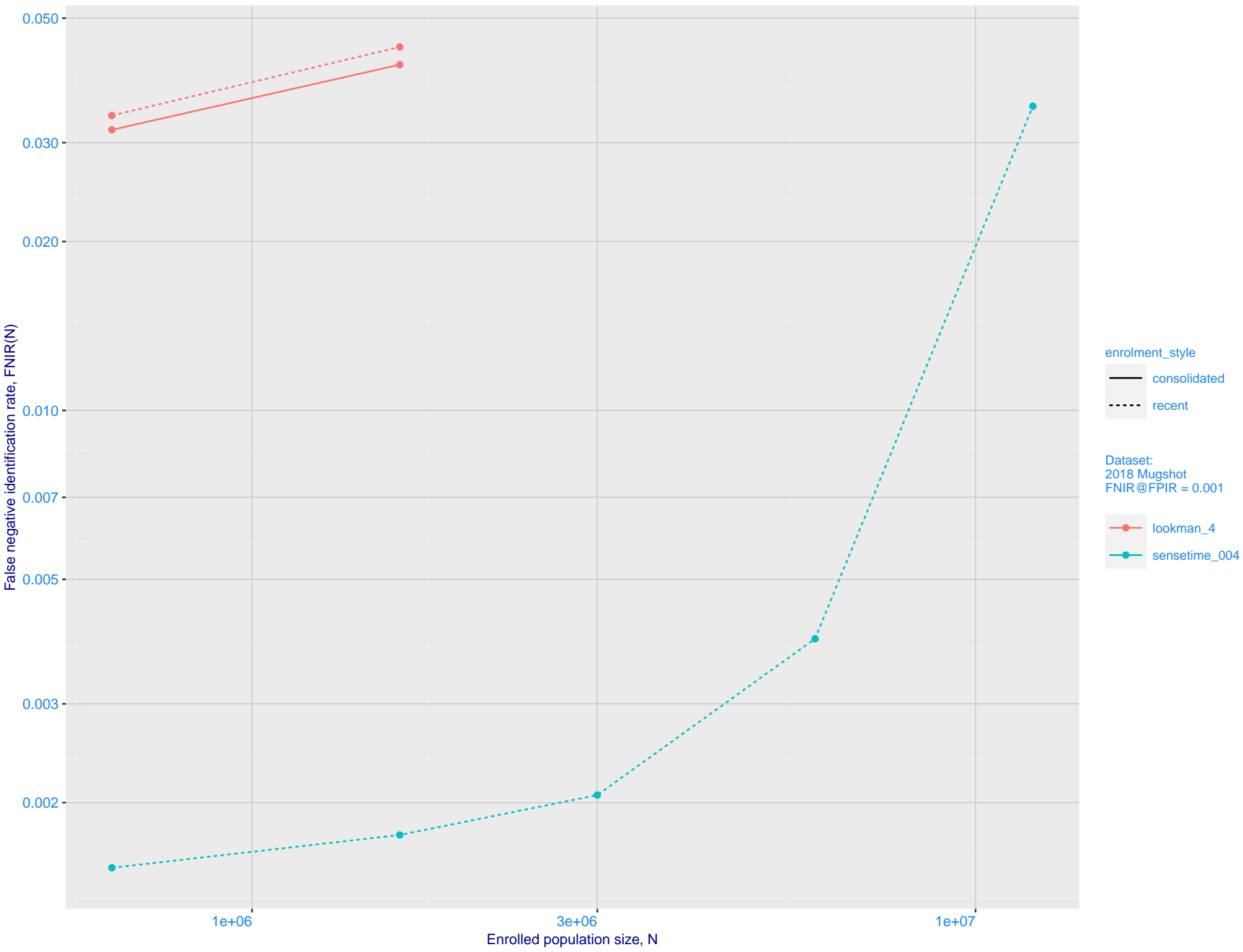Mugshot profile ranking 173 (out of 196) –– FNIR(1600000, 0, 1) = 0.9732 vs. lowest 0.0591 from sensetime_005

Identification:

Frontal mugshot ranking 72 (out of 265) –– FNIR(1600000, T, L+1) = 0.0444, FPIR=0.001000 vs. lowest 0.0018 from sensetime_004
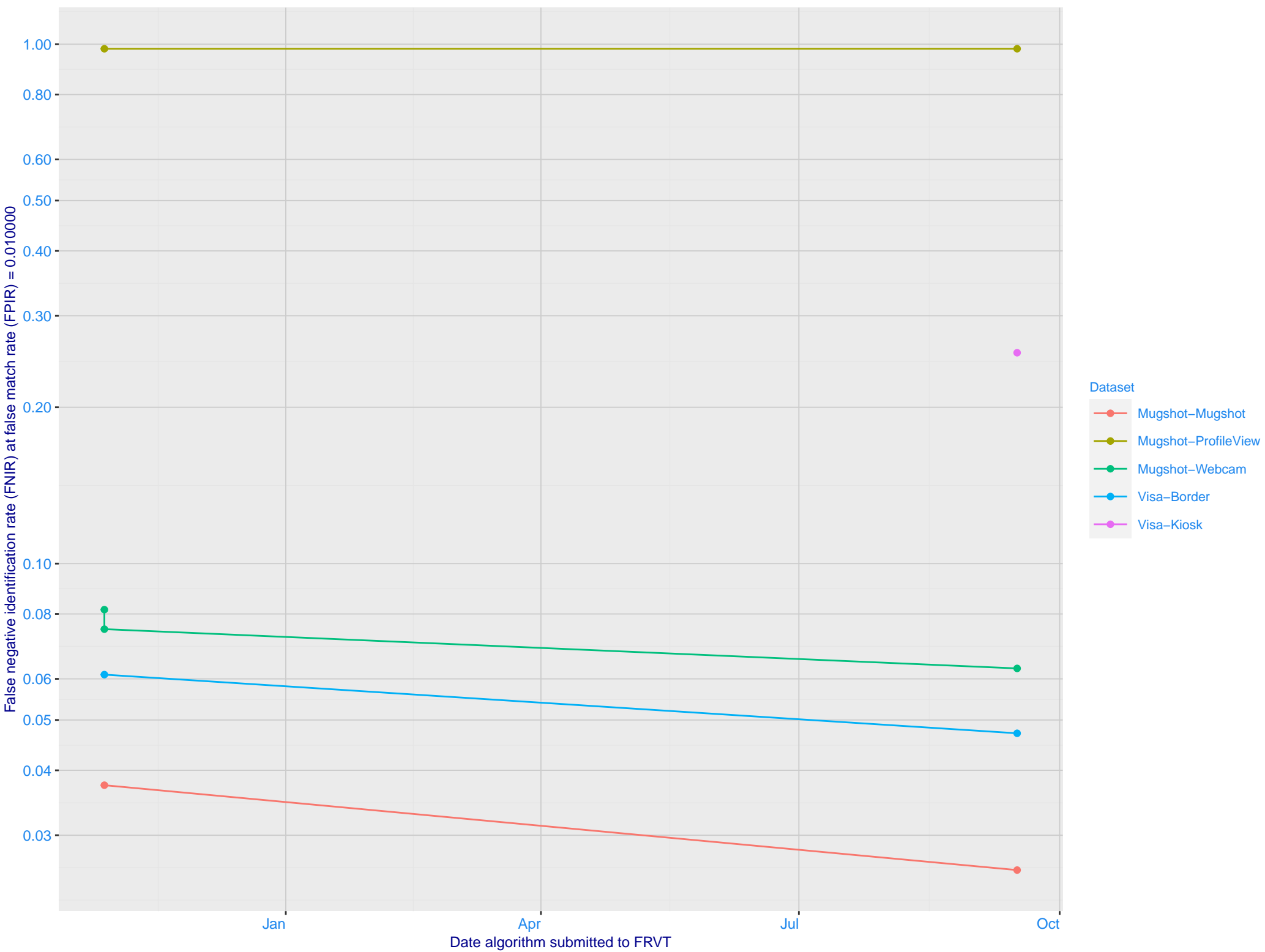
Mugshot webcam ranking 70 (out of 225) –– FNIR(1600000, T, L+1) = 0.1052, FPIR=0.001000 vs. lowest 0.0122 from sensetime_003

Mugshot profile ranking 52 (out of 195) –– FNIR(1600000, T, L+1) = 0.9768, FPIR=0.001000 vs. lowest 0.1331 from hr_000
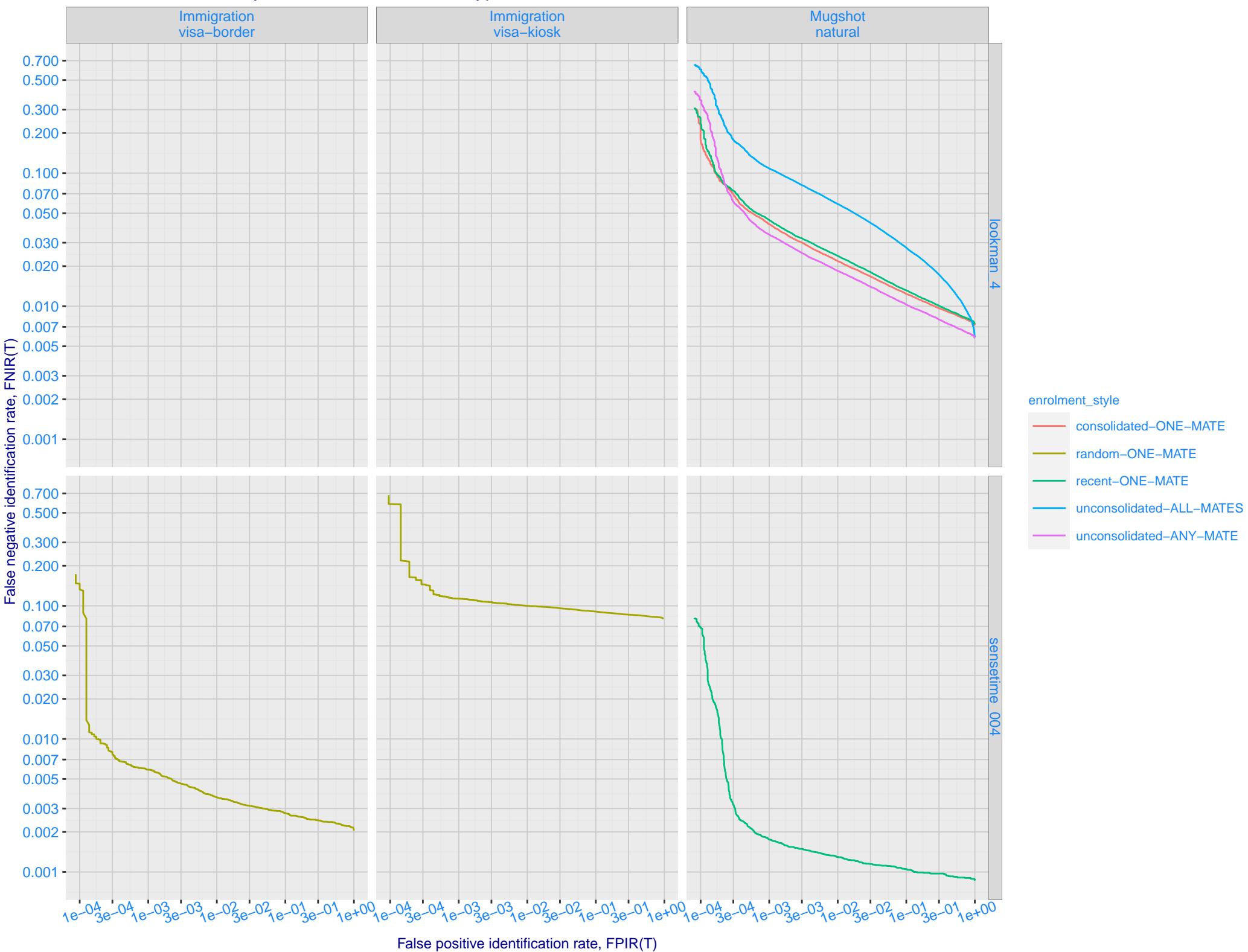
B: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime_004)
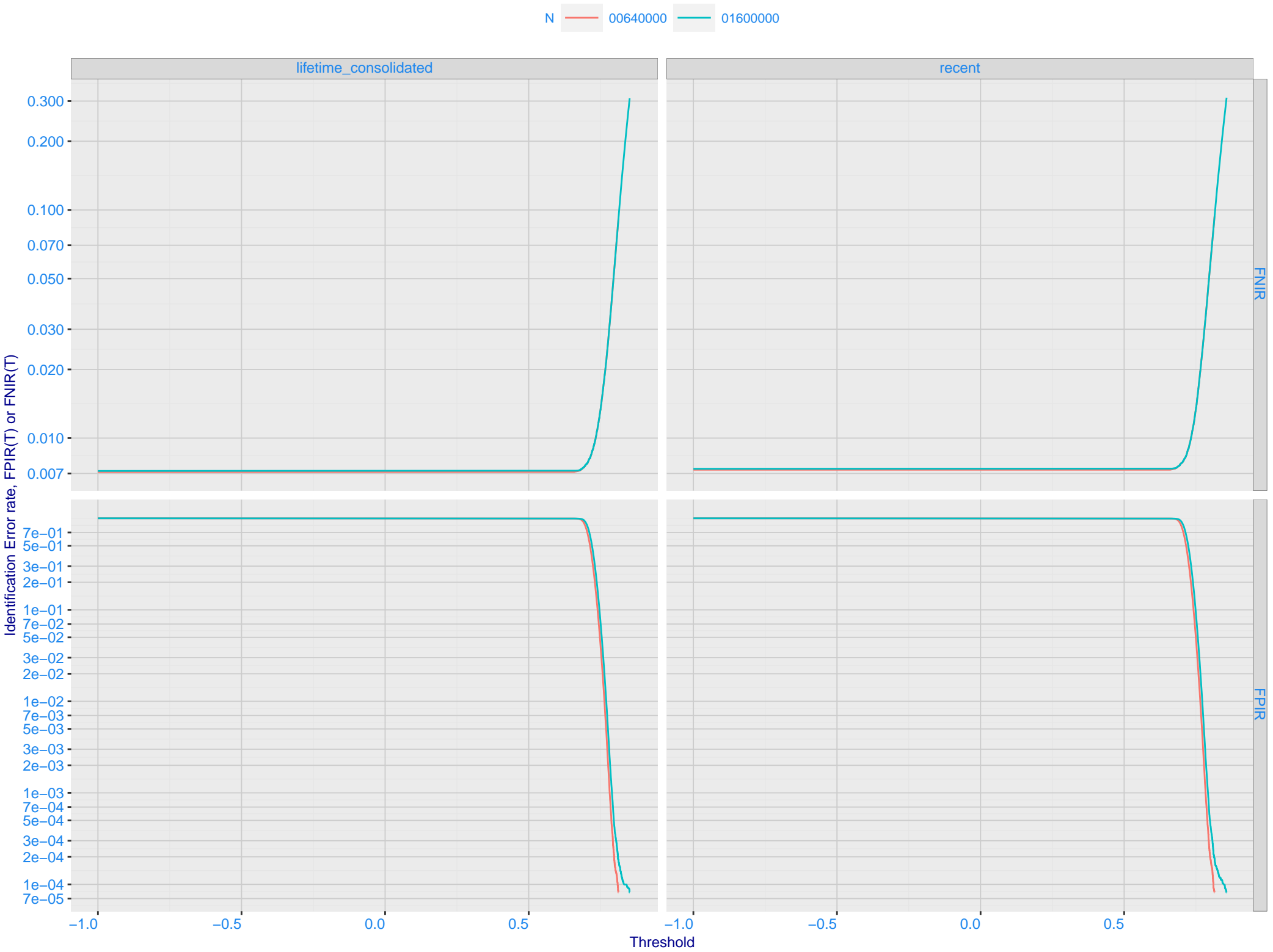
C: Evolution of accuracy for LOOKMAN algorithms on three datasets 2018 – present
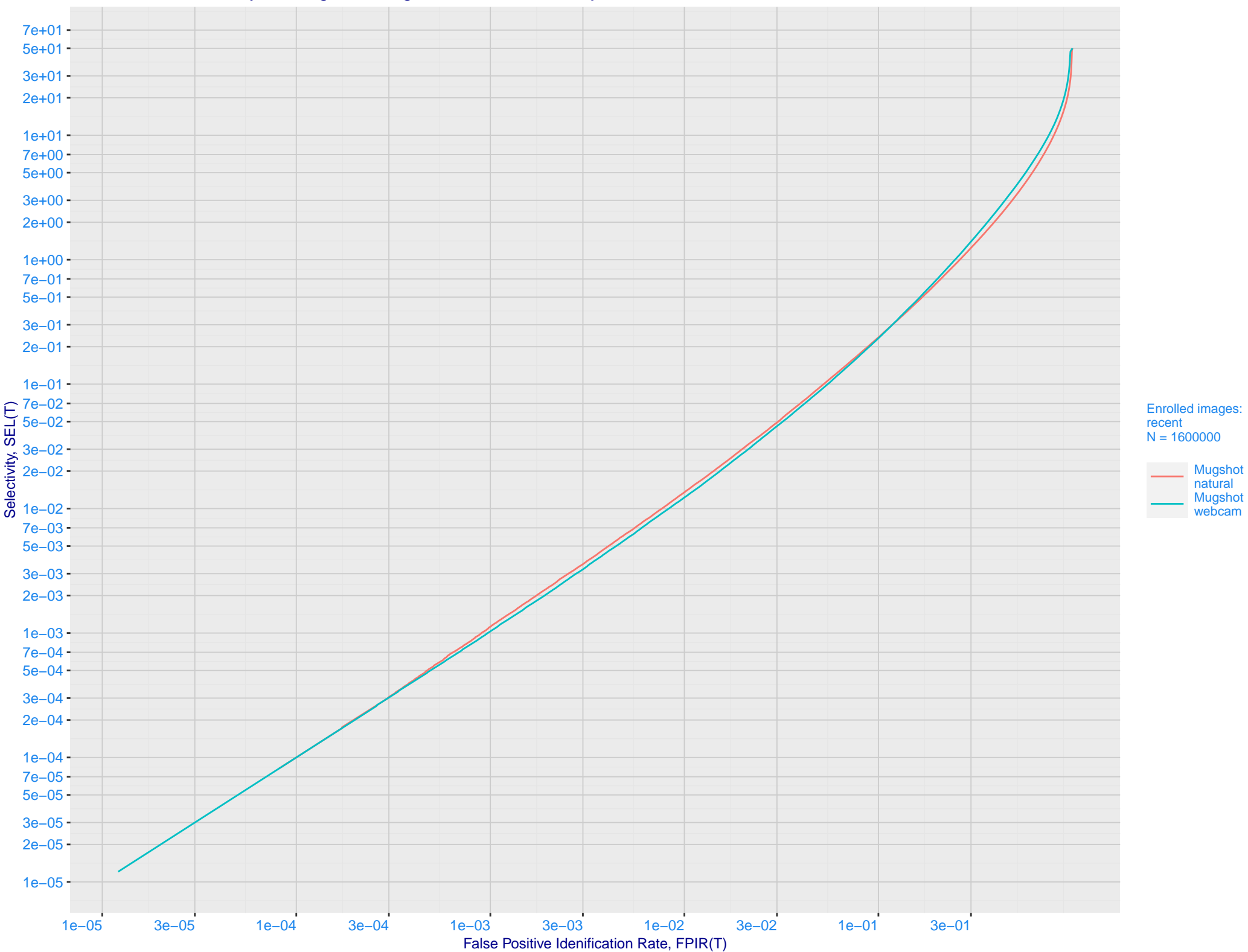
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images
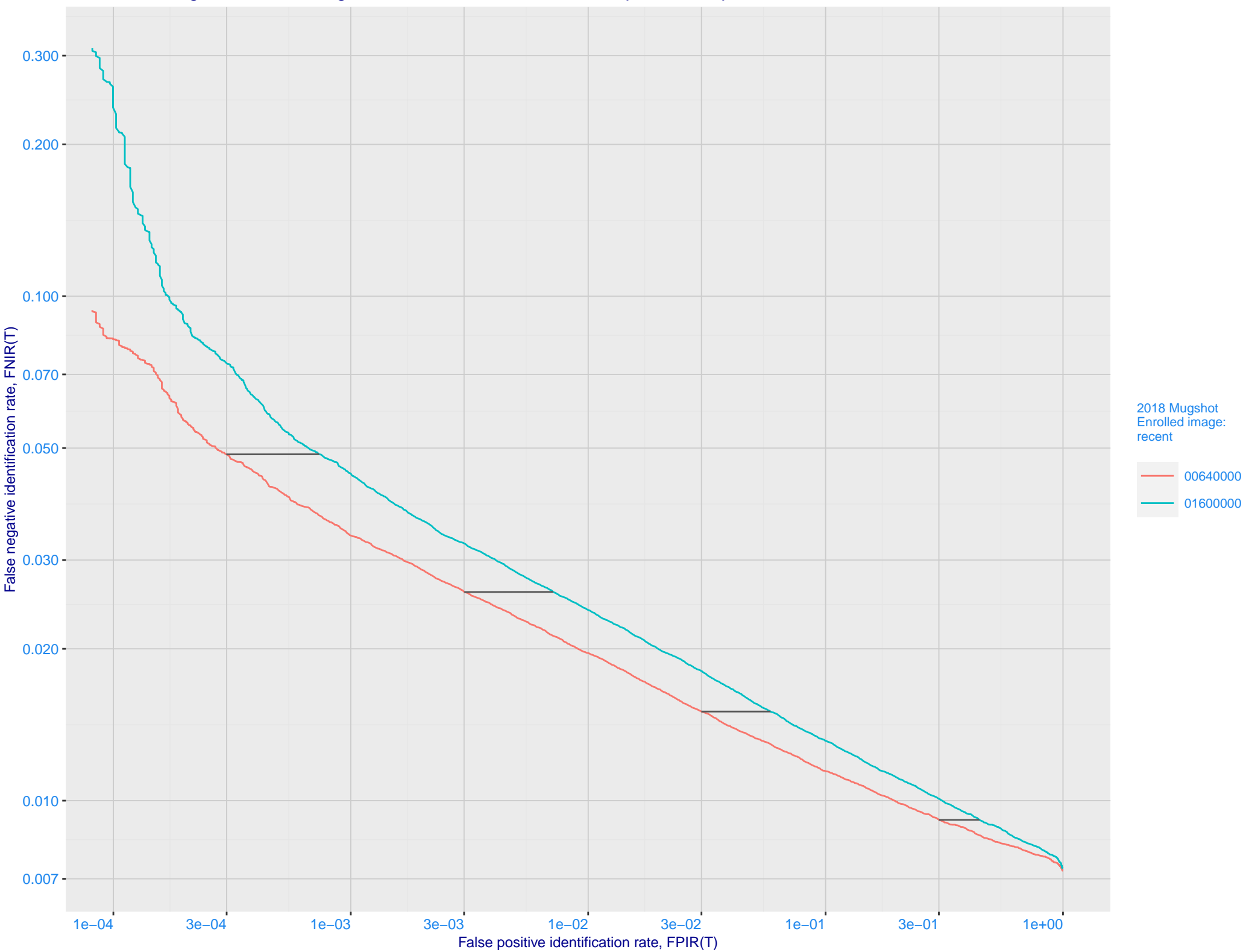
F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate
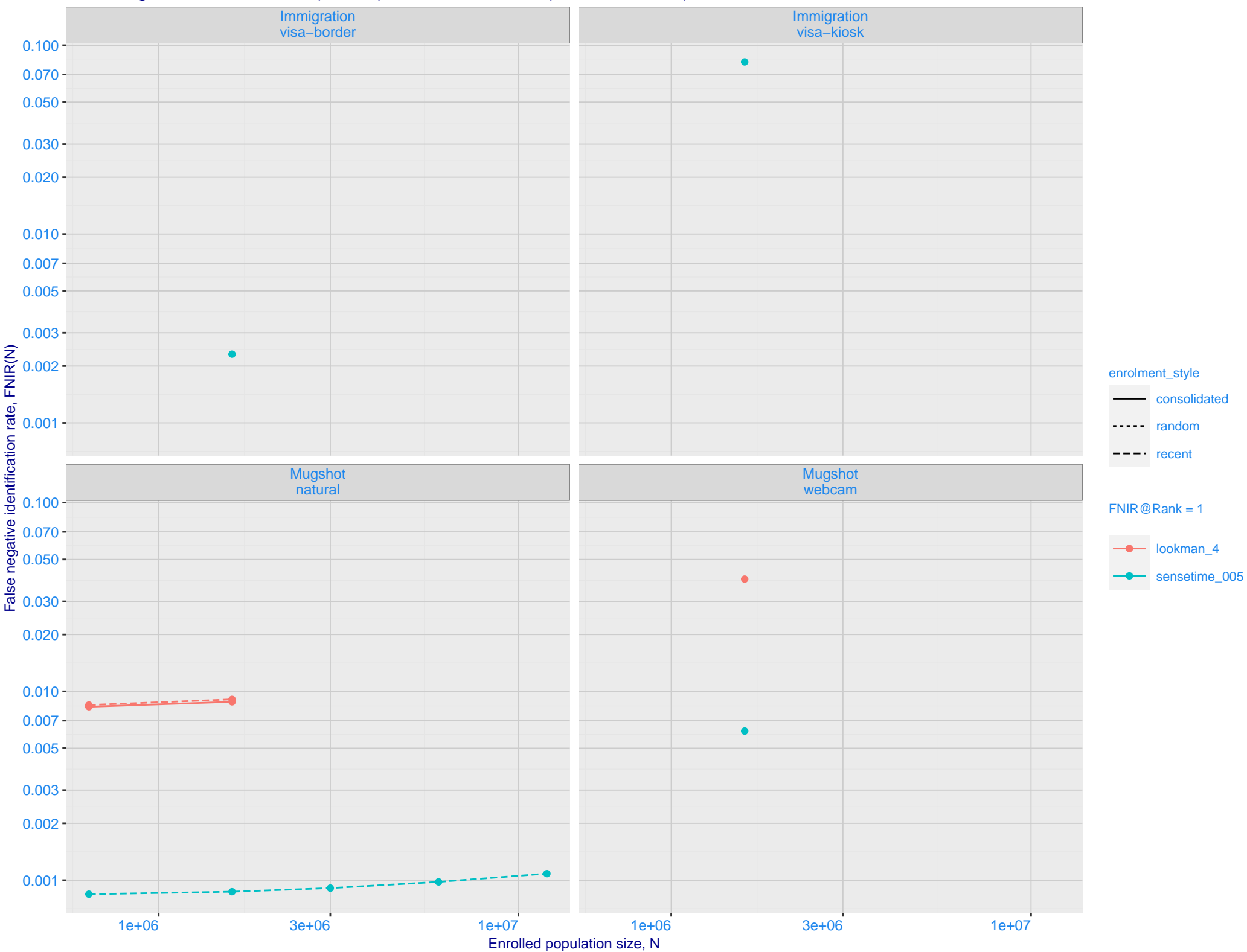
G: FPIR dependence on T by probe type for N = 1600000 subjects

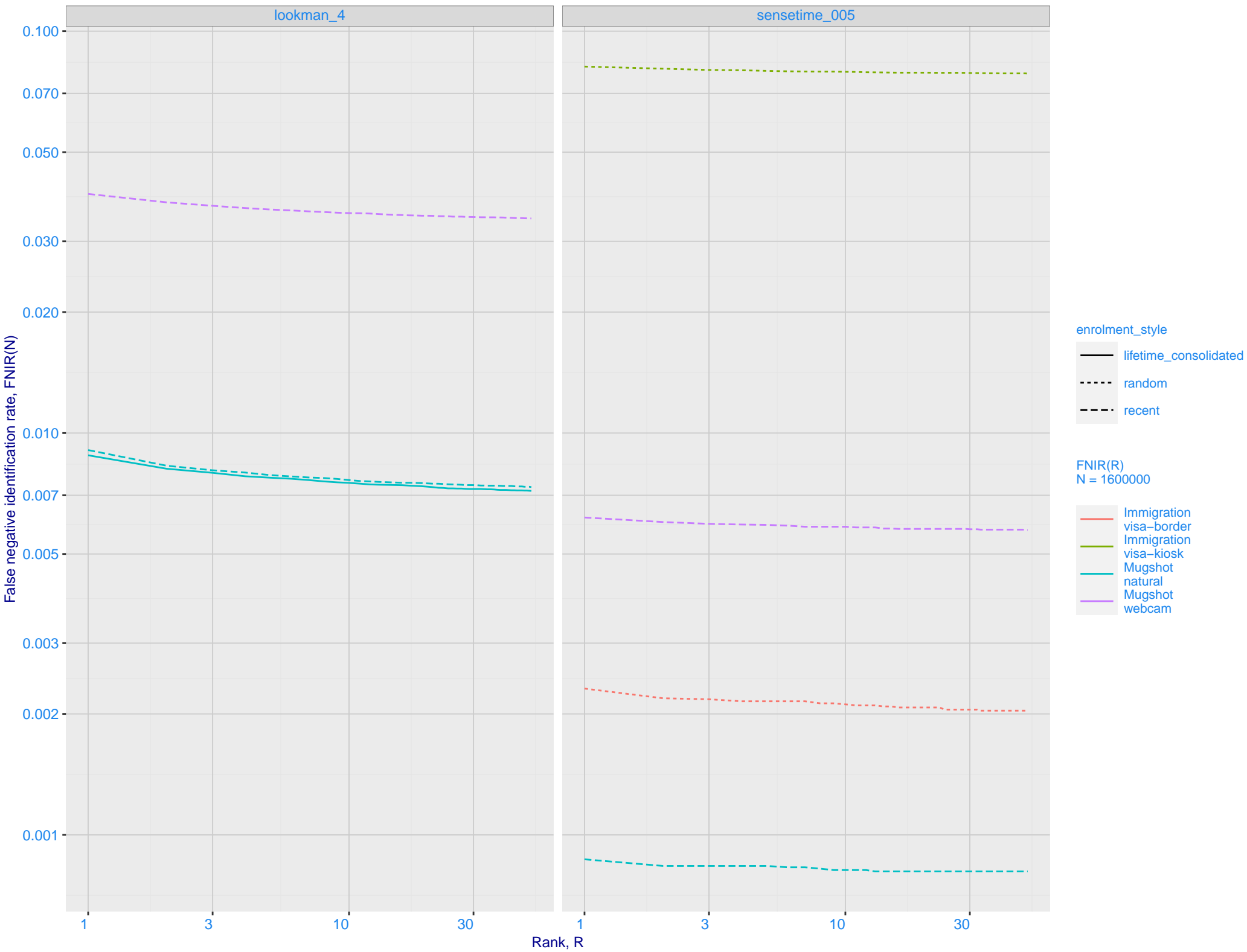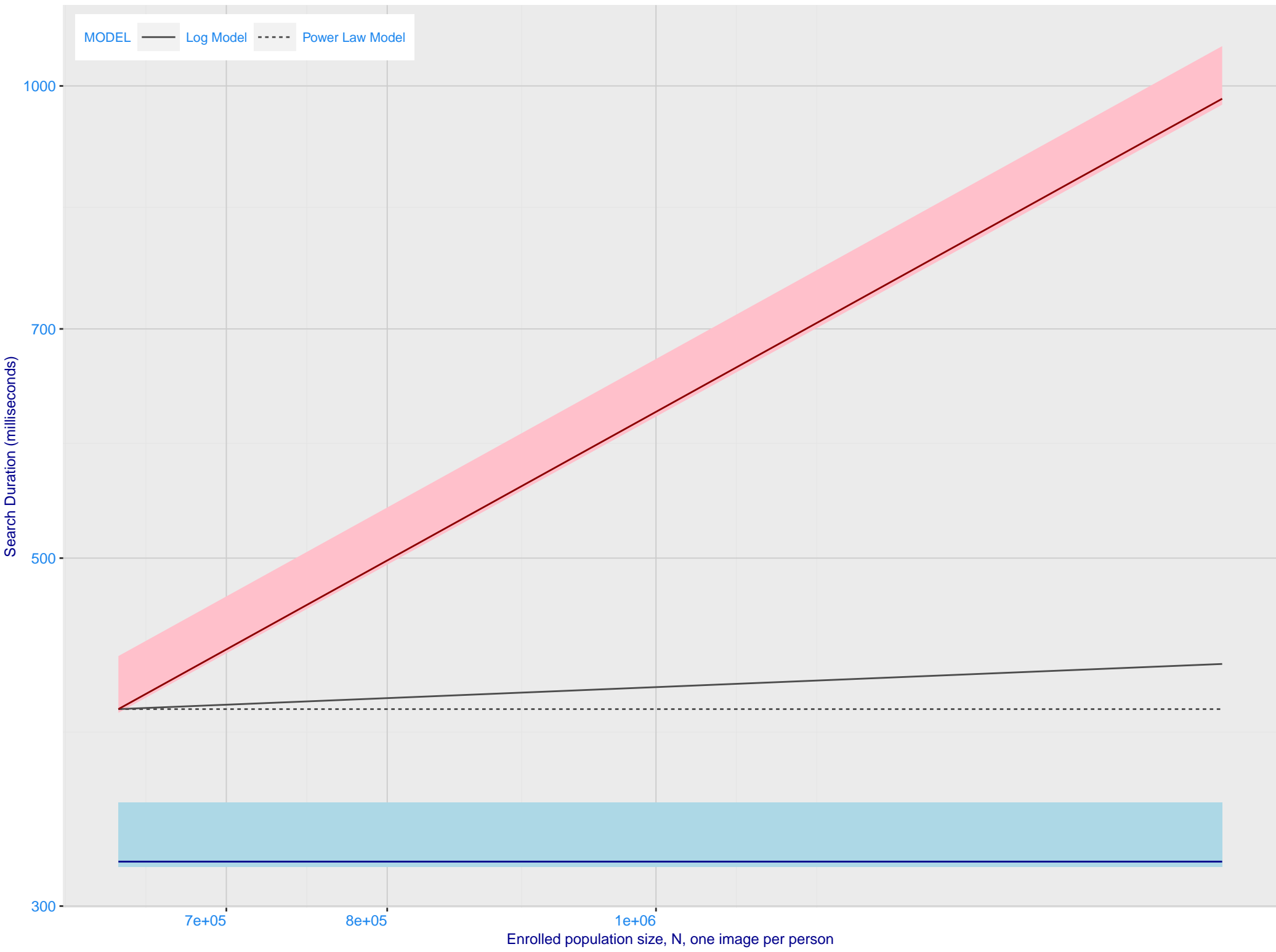H: DET for Mugshot natural images and various N. Links connect points of equal threshold.

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