A: Datasheet

Algorithm: gorilla_005

Developer: Gorilla Technology

Submission Date: 2021_02_22

Template size: 6288 bytes

Template time (2.5 percentile): 481 msec

Template time (median): 483 msec

Template time (97.5 percentile): 489 msec

Investigation:

Frontal mugshot ranking 54 (out of 265) –– FNIR(1600000, 0, 1) = 0.0032 vs. lowest 0.0009 from sensetime_005

Mugshot webcam ranking 63 (out of 227) –– FNIR(1600000, 0, 1) = 0.0180 vs. lowest 0.0062 from sensetime_005

Mugshot profile ranking 20 (out of 196) –– FNIR(1600000, 0, 1) = 0.2086 vs. lowest 0.0591 from sensetime_005

Immigration visa–border ranking 42 (out of 148) –– FNIR(1600000, 0, 1) = 0.0060 vs. lowest 0.0013 from visionlabs_010

Immigration visa–kiosk ranking 46 (out of 145) –– FNIR(1600000, 0, 1) = 0.1243 vs. lowest 0.0568 from hr_000

Identification:

Frontal mugshot ranking 100 (out of 265) –– FNIR(1600000, T, L+1) = 0.0580, FPIR=0.001000 vs. lowest 0.0018 from sensetime_004
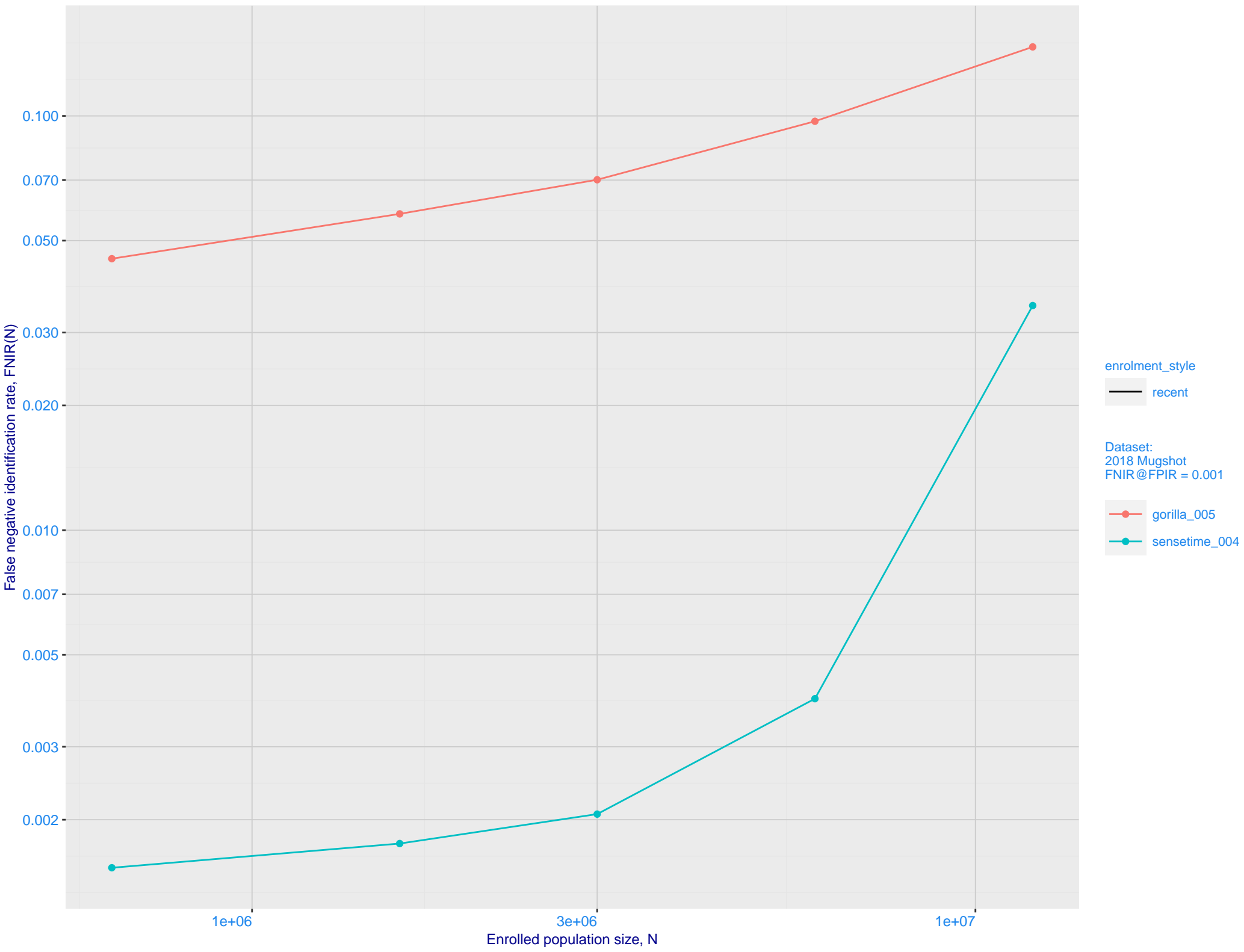
Mugshot webcam ranking 101 (out of 225) –– FNIR(1600000, T, L+1) = 0.1423, FPIR=0.001000 vs. lowest 0.0122 from sensetime_003

Mugshot profile ranking 16 (out of 195) –– FNIR(1600000, T, L+1) = 0.7005, FPIR=0.001000 vs. lowest 0.1331 from hr_000
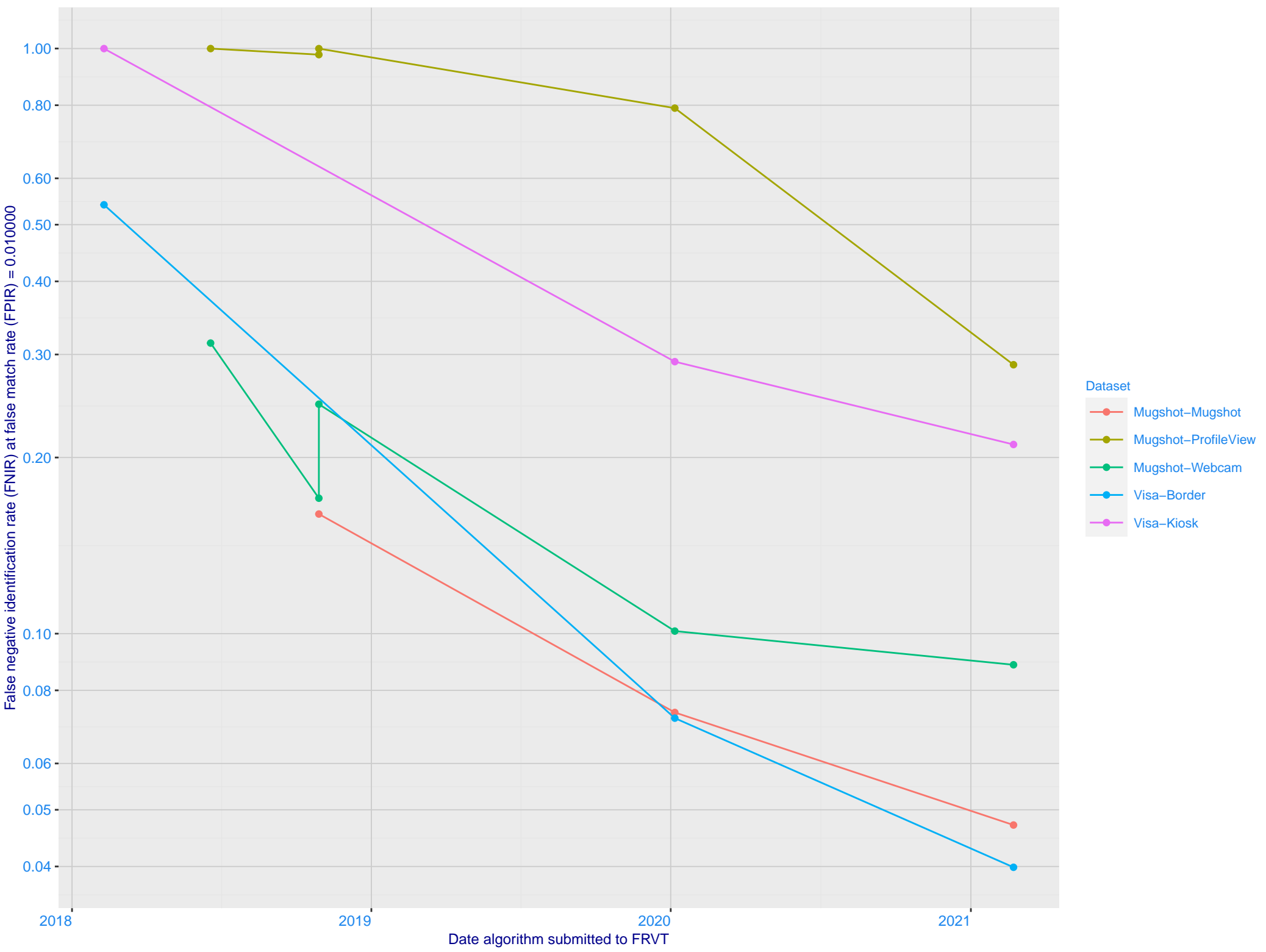
Immigration visa–border ranking 66 (out of 146) –– FNIR(1600000, T, L+1) = 0.0878, FPIR=0.001000 vs. lowest 0.0049 from hr_000

Immigration visa–kiosk ranking 43 (out of 141) –– FNIR(1600000, T, L+1) = 0.3173, FPIR=0.001000 vs. lowest 0.0996 from hr_000
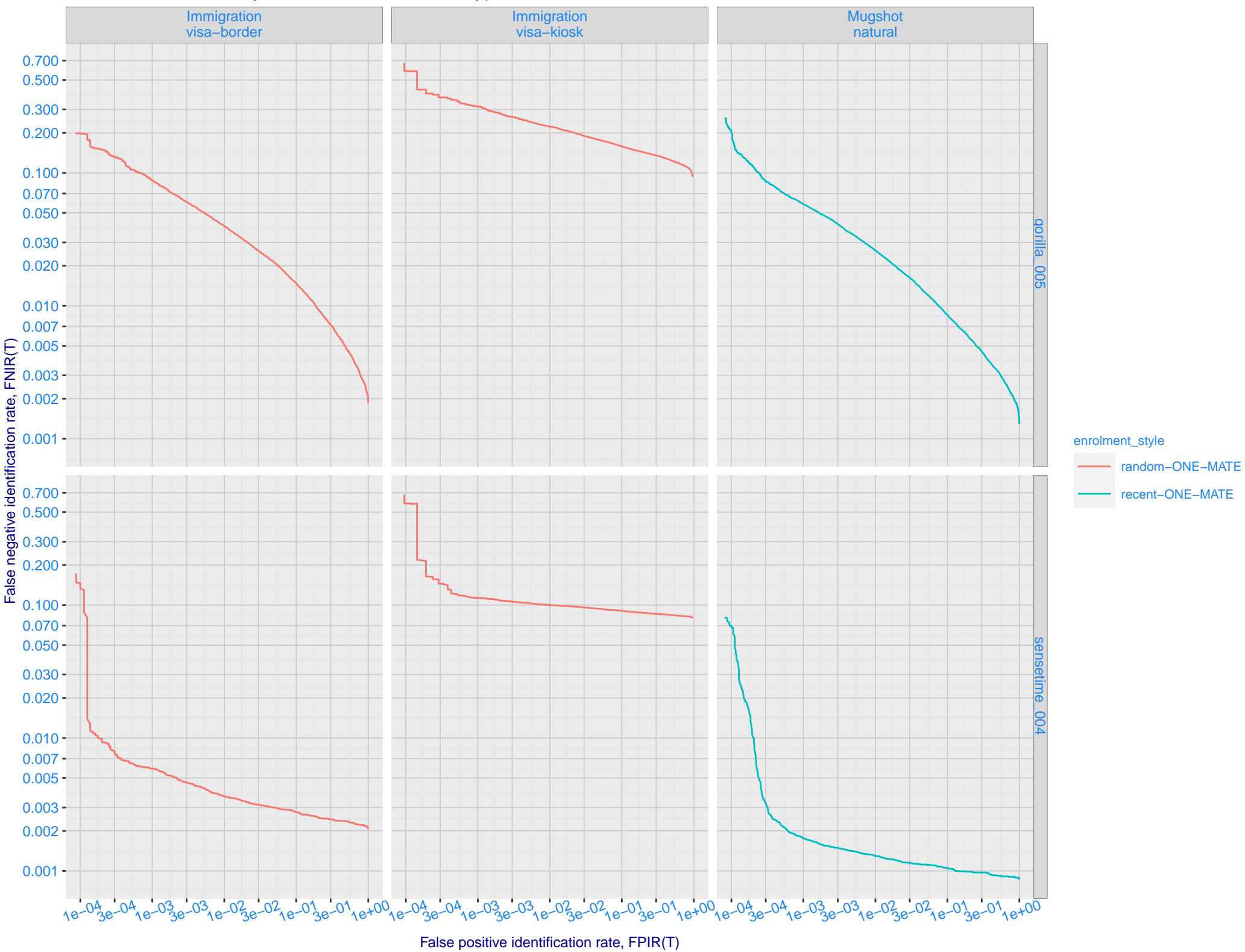
B: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime_004)

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

Dataset
- Mugshot–Mugshot
- Mugshot–ProfileView
- Mugshot–Webcam
- Visa–Border
- Visa–Kiosk

False negative identification rate (FNIR) at false match rate (FPIR) = 0.010000
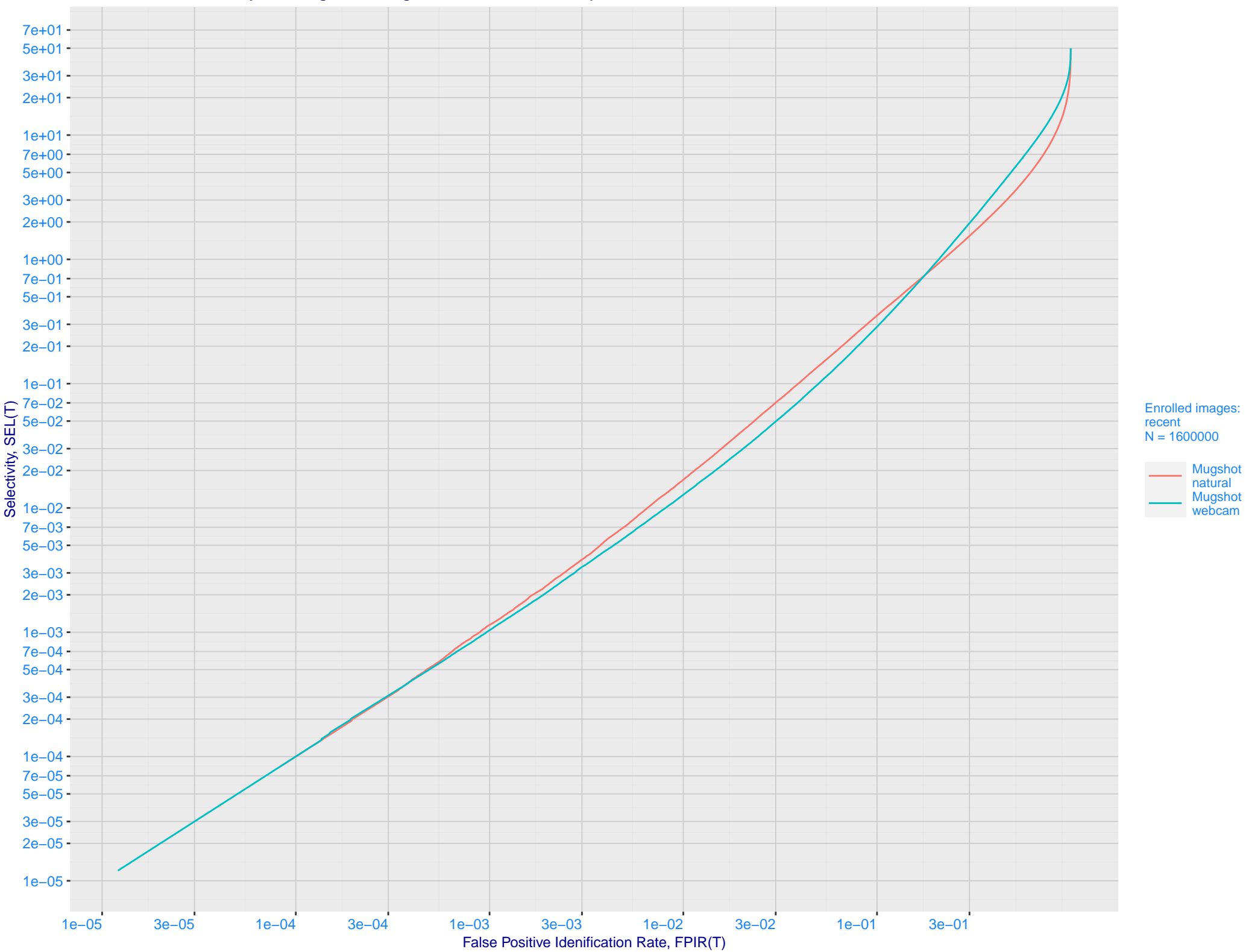
Date algorithm submitted to FRVT

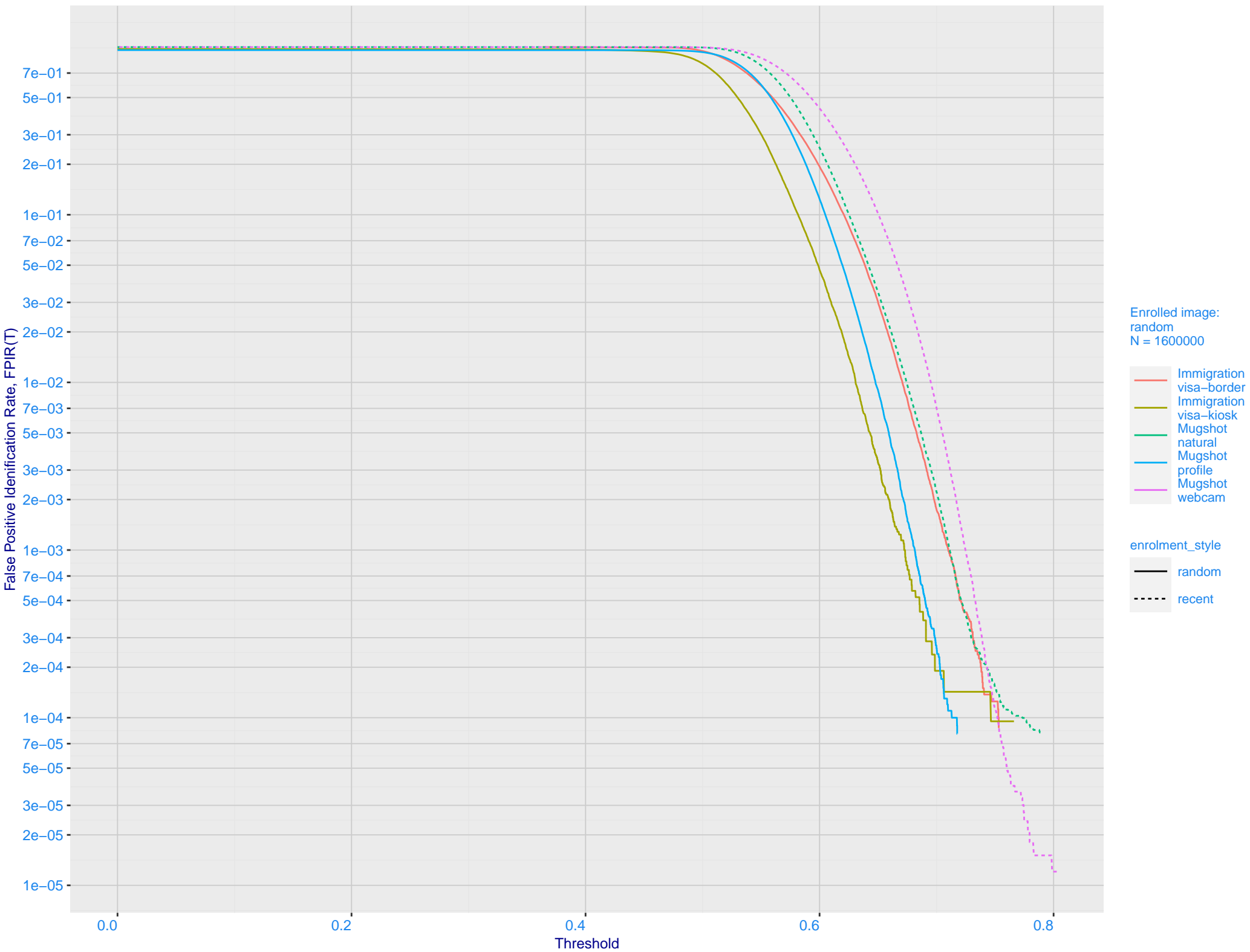D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

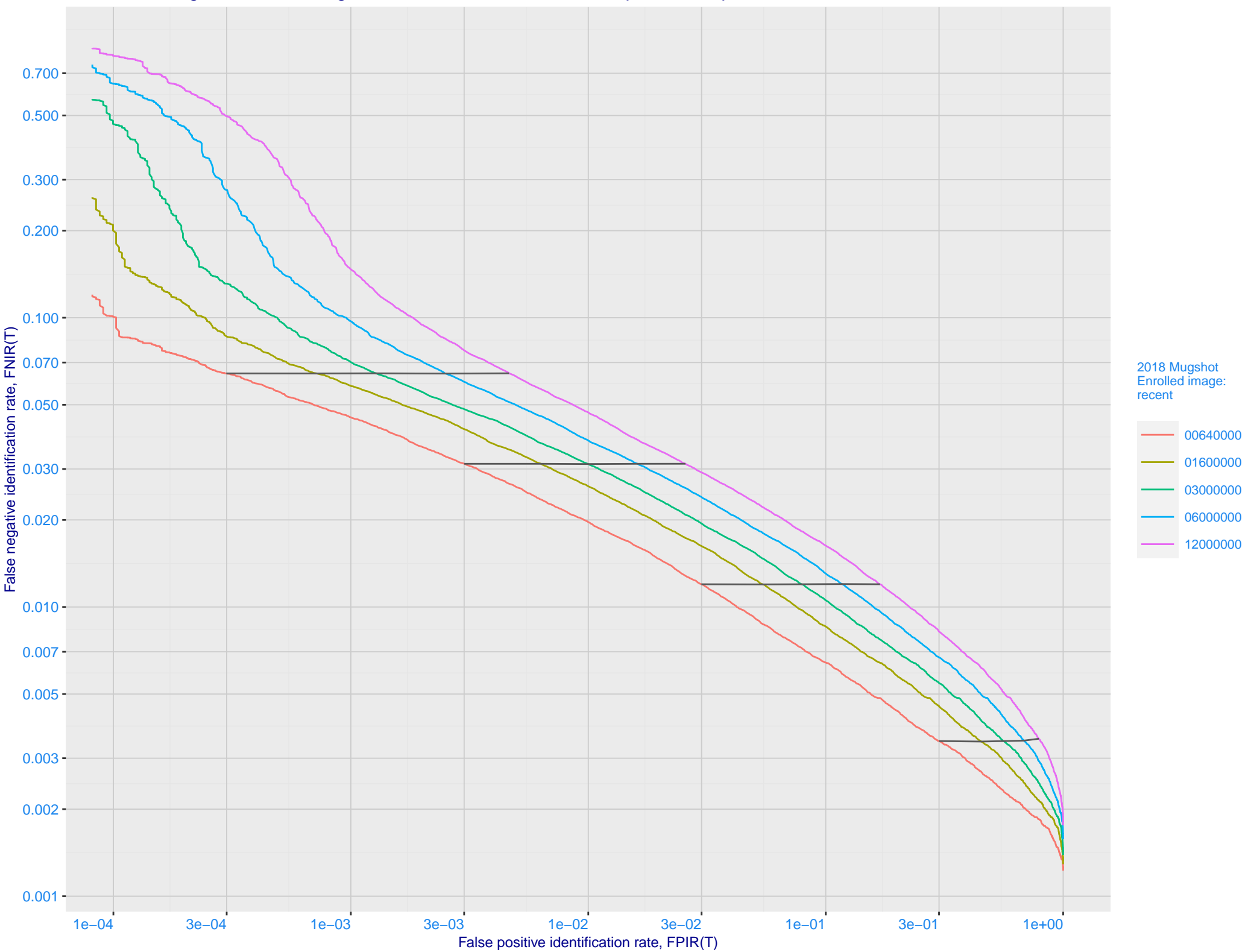E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images
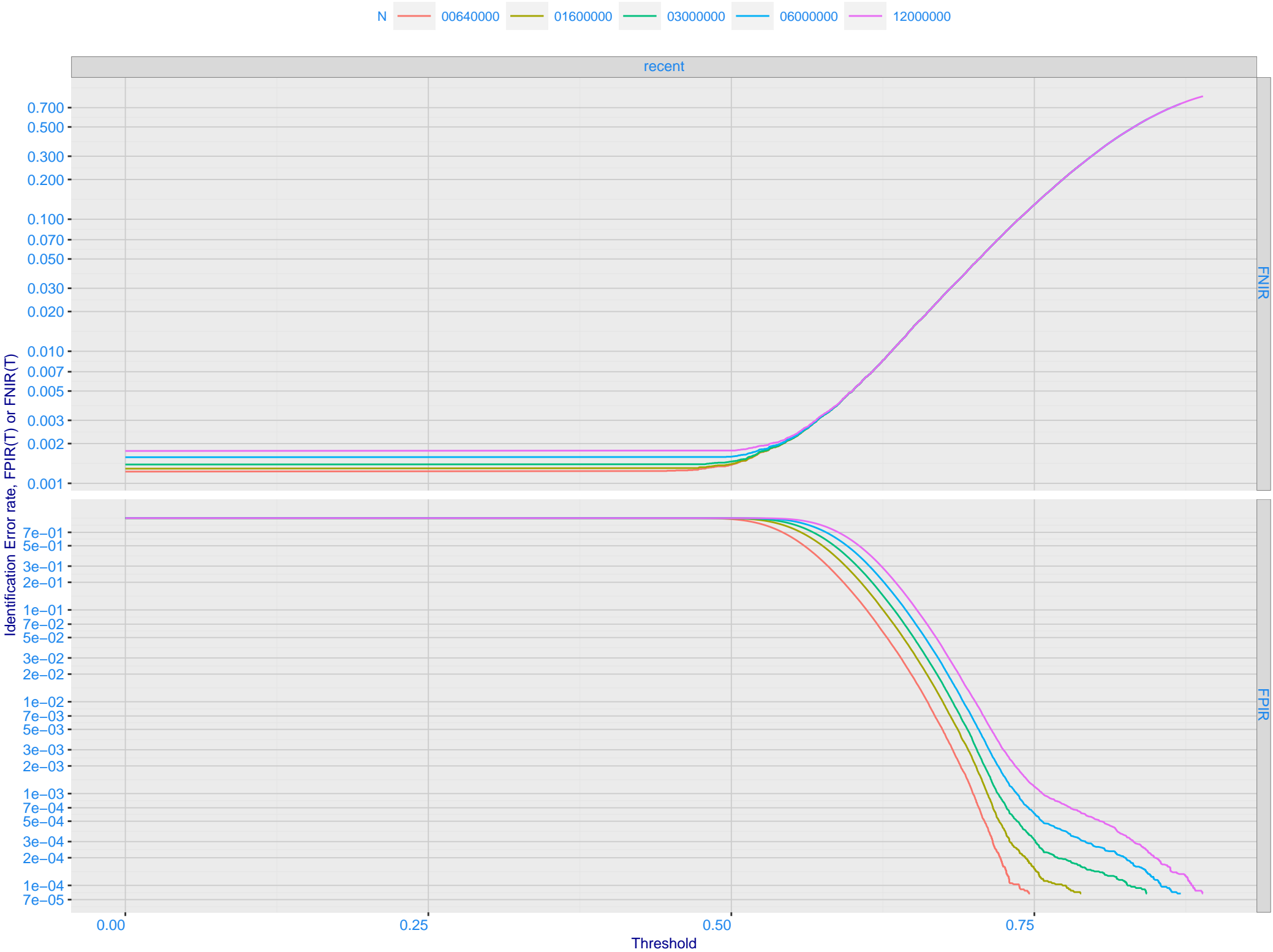
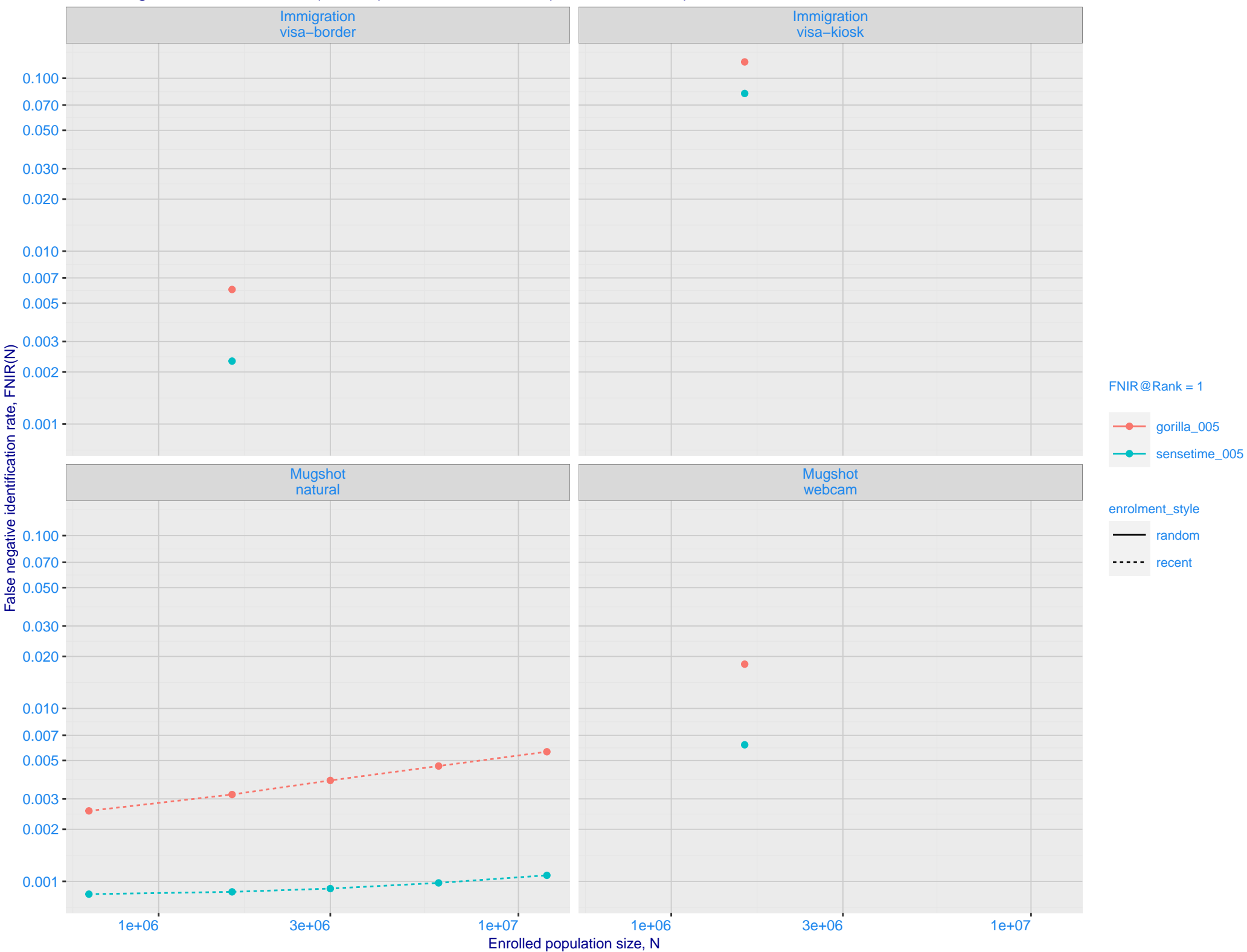F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate

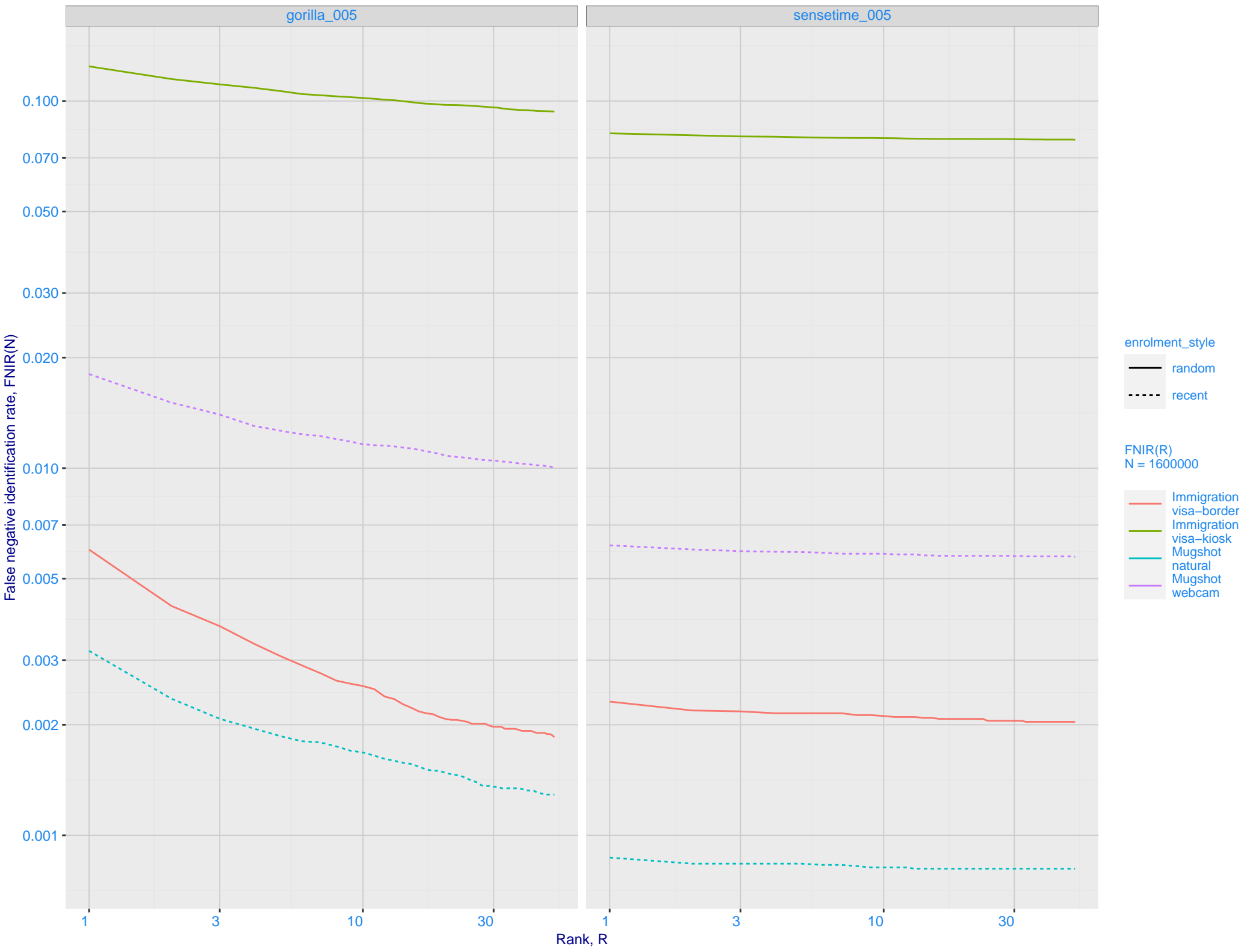G: FPIR dependence on T by probe type for N = 1600000 subjects

H: DET for Mugshot natural images and various N. Links connect points of equal threshold.
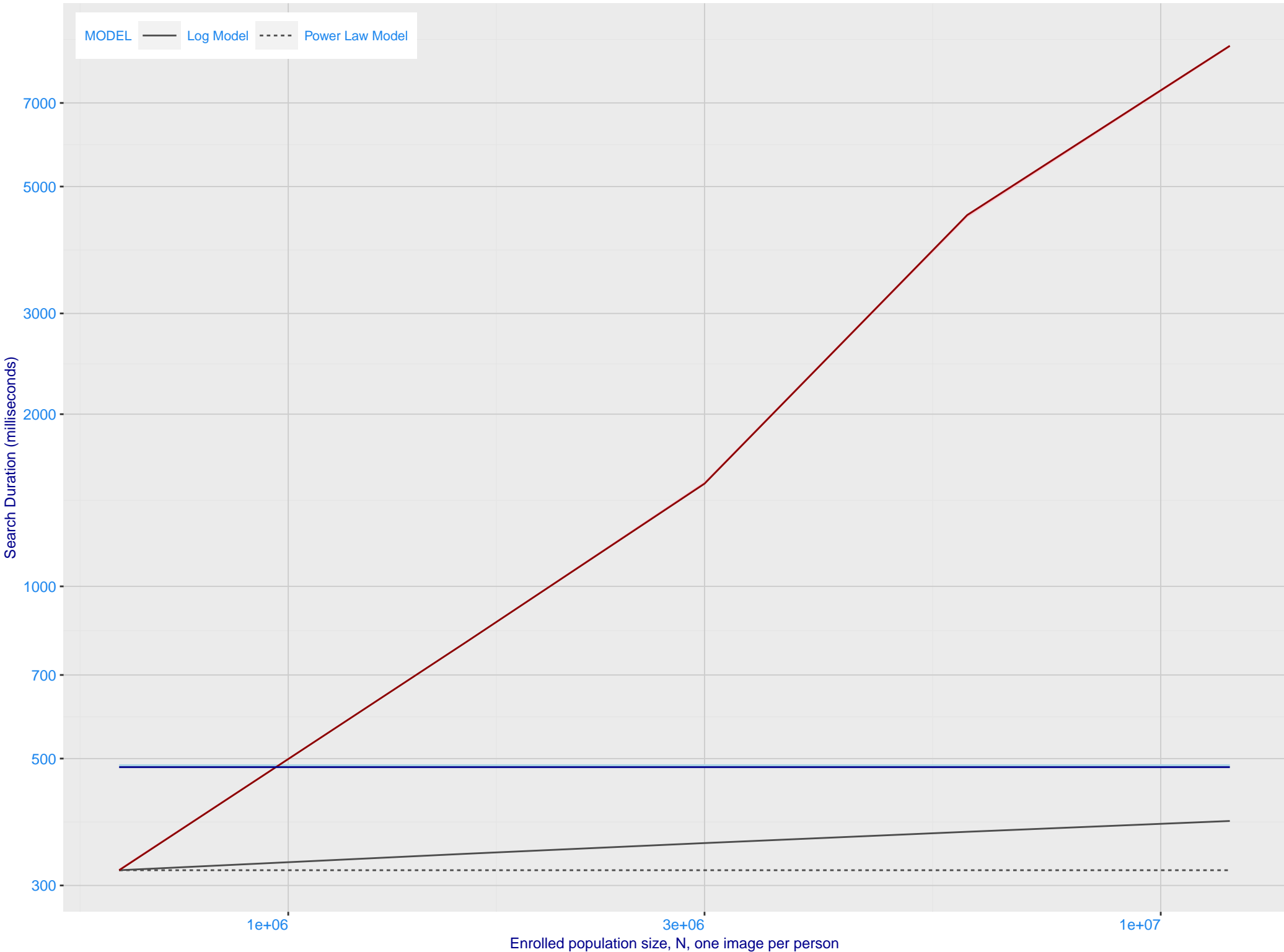
I: Investigational mode: FNIR(N, 1, 0) vs. most accurate (sensetime_005)

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