A: Datasheet

Algorithm: innovatrics_0

Developer: Innovatrics

Submission Date: 2018_02_16

Template size: 530 bytes

Template time (2.5 percentile): 303 msec

Template time (median): 513 msec

Template time (97.5 percentile): 555 msec

Investigation:

Frontal mugshot ranking 204 (out of 279) -- FNIR(1600000, 0, 1) = 0.0395 vs. lowest 0.0009 from sensetime_005

Mugshot webcam ranking 181 (out of 241) -- FNIR(1600000, 0, 1) = 0.0763 vs. lowest 0.0062 from sensetime_005

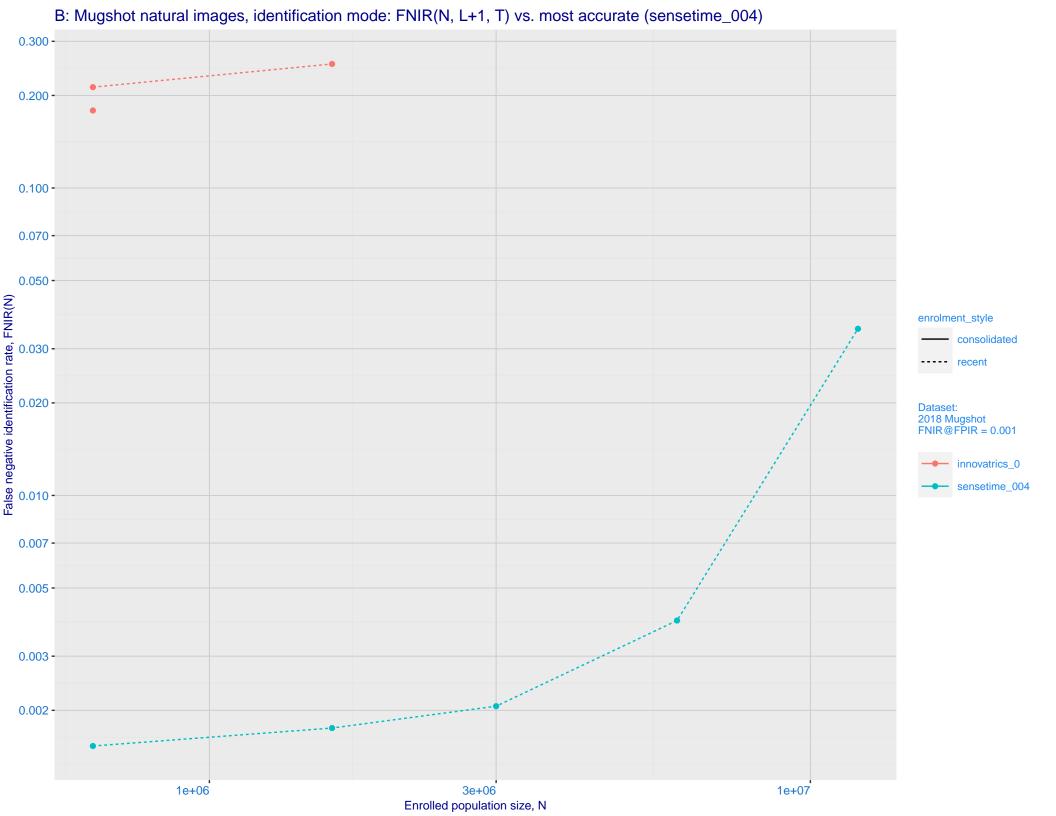
Mugshot profile ranking 170 (out of 210) -- FNIR(1600000, 0, 1) = 0.9644 vs. lowest 0.0587 from xforwardai_002

Identification:

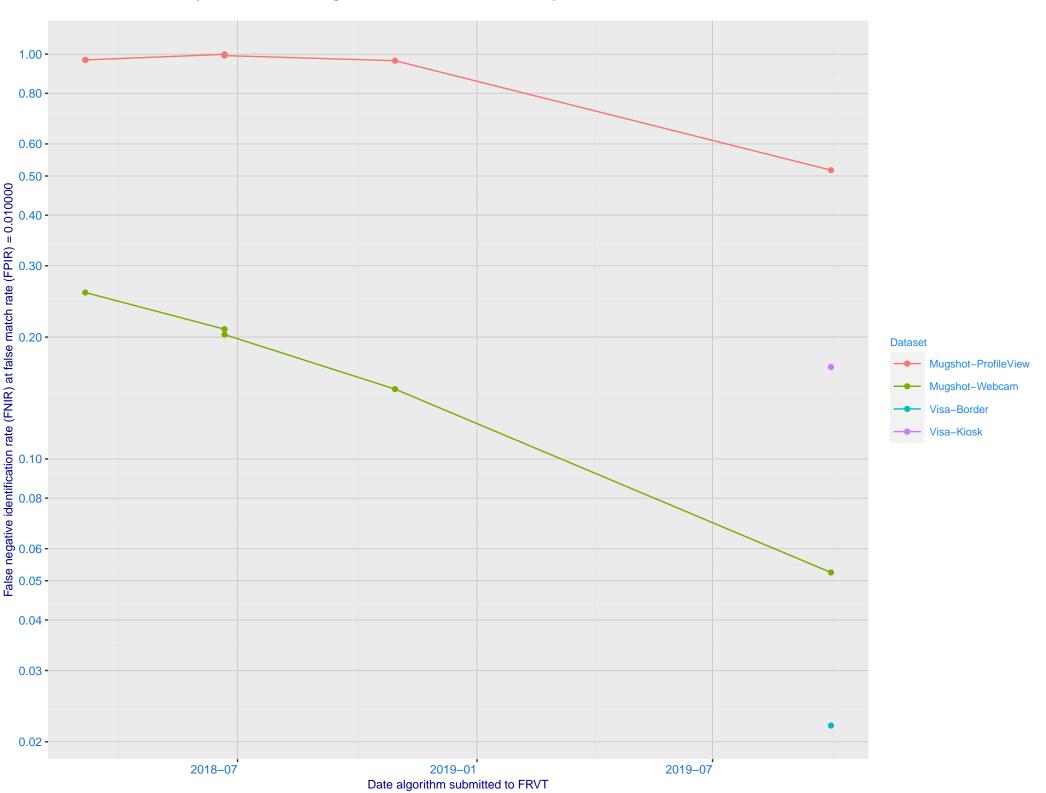
Frontal mugshot ranking 198 (out of 279) -- FNIR(1600000, T, L+1) = 0.2532, FPIR=0.001000 vs. lowest 0.0018 from sensetime_004

Mugshot webcam ranking 178 (out of 236) -- FNIR(1600000, T, L+1) = 0.3605, FPIR=0.001000 vs. lowest 0.0122 from sensetime_003

Mugshot profile ranking 70 (out of 209) — FNIR(1600000, T, L+1) = 0.9828, FPIR=0.001000 vs. lowest 0.1331 from cloudwalk_hr_000



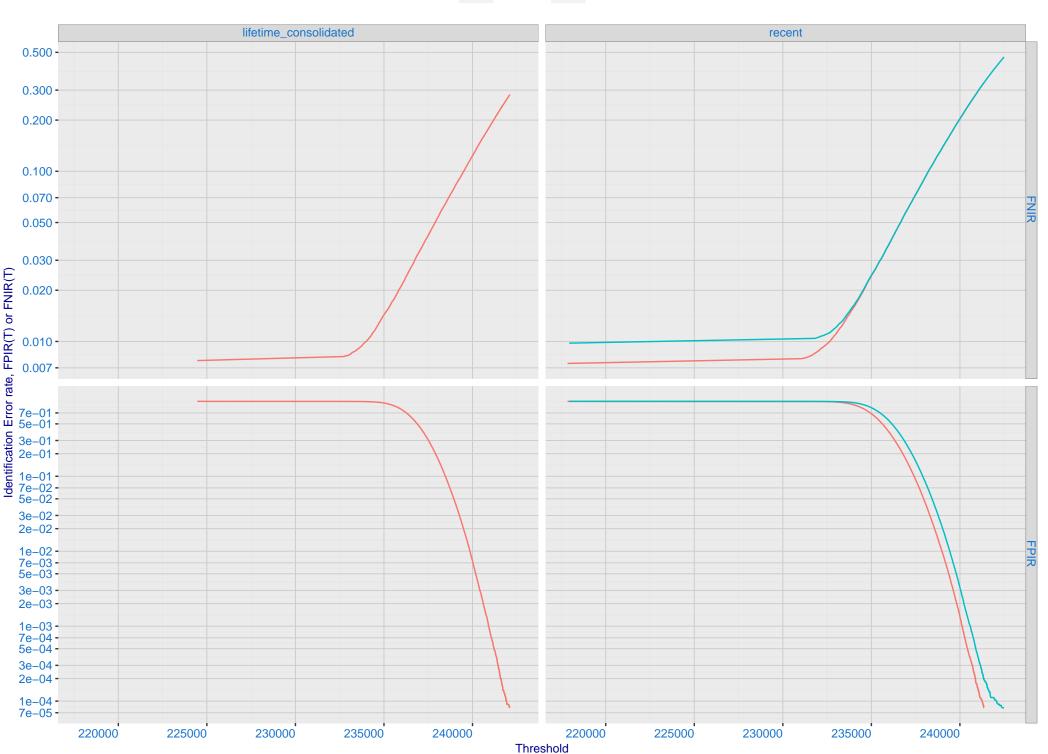
C: Evolution of accuracy for INNOVATRICS algorithms on three datasets 2018 – present



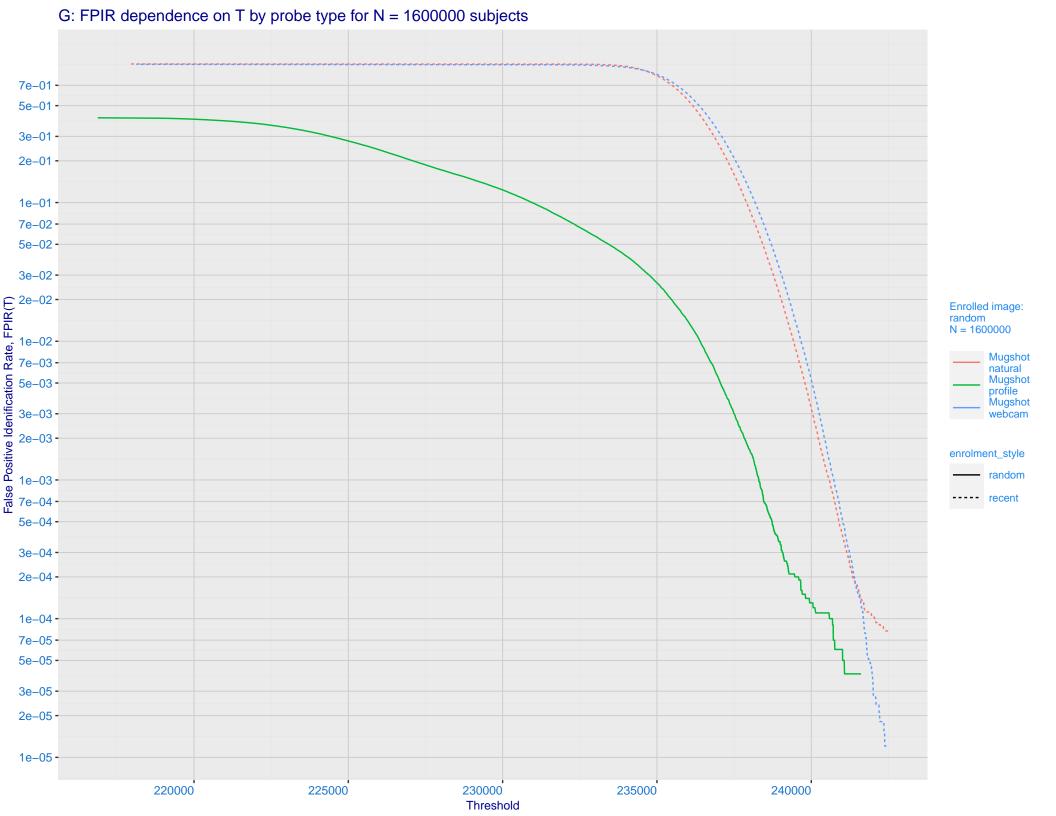
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Immigration Immigration Mugshot visa-border visa-kiosk natural 0.700 -0.500 -0.300 -0.200 -0.100 -0.070 -0.050 innovatrics 0.030 -0.020 -0.010 -0.007 -Ealse negative identification rate, FNIR(T) 0.003 - 0.000 - 0.500 - 0.500 - 0.200 - 0.100 - 0. enrolment_style random-ONE-MATE recent-ONE-MATE 0.070 -0.050 sensetime 004 0.030 -0.020 -0.010 -0.007 -0.005 -0.003 -0.002 -0.001 -

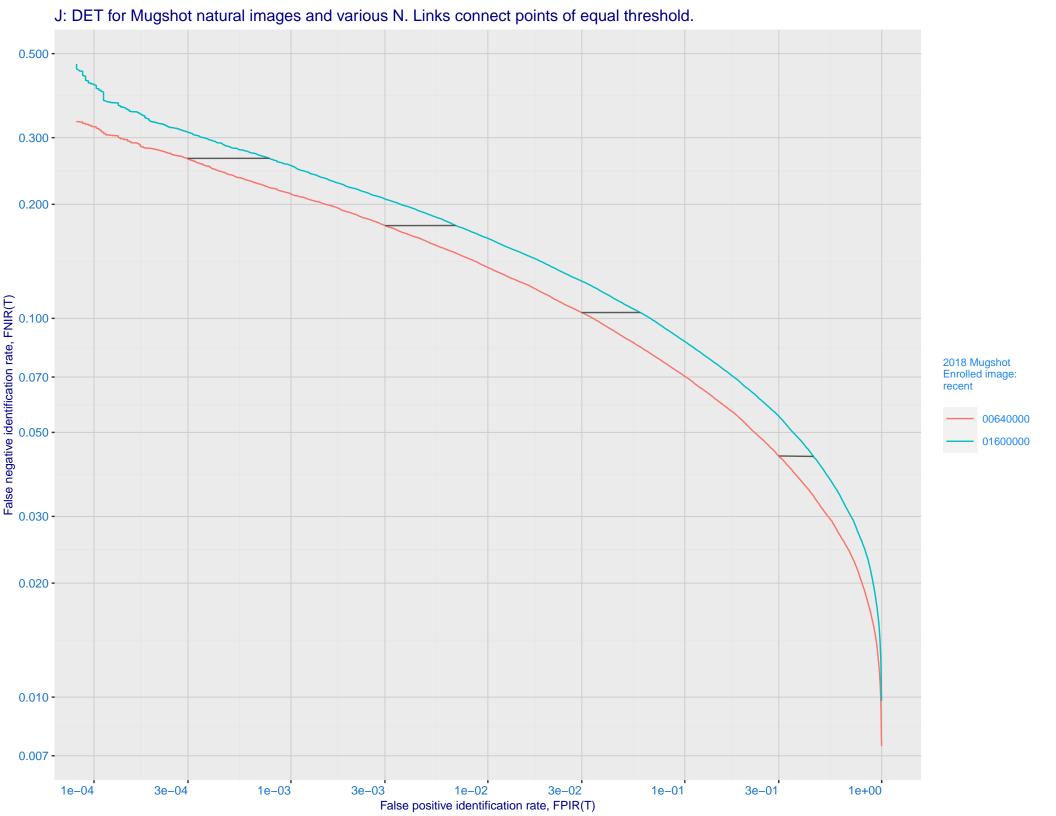
False positive identification rate, FPIR(T)

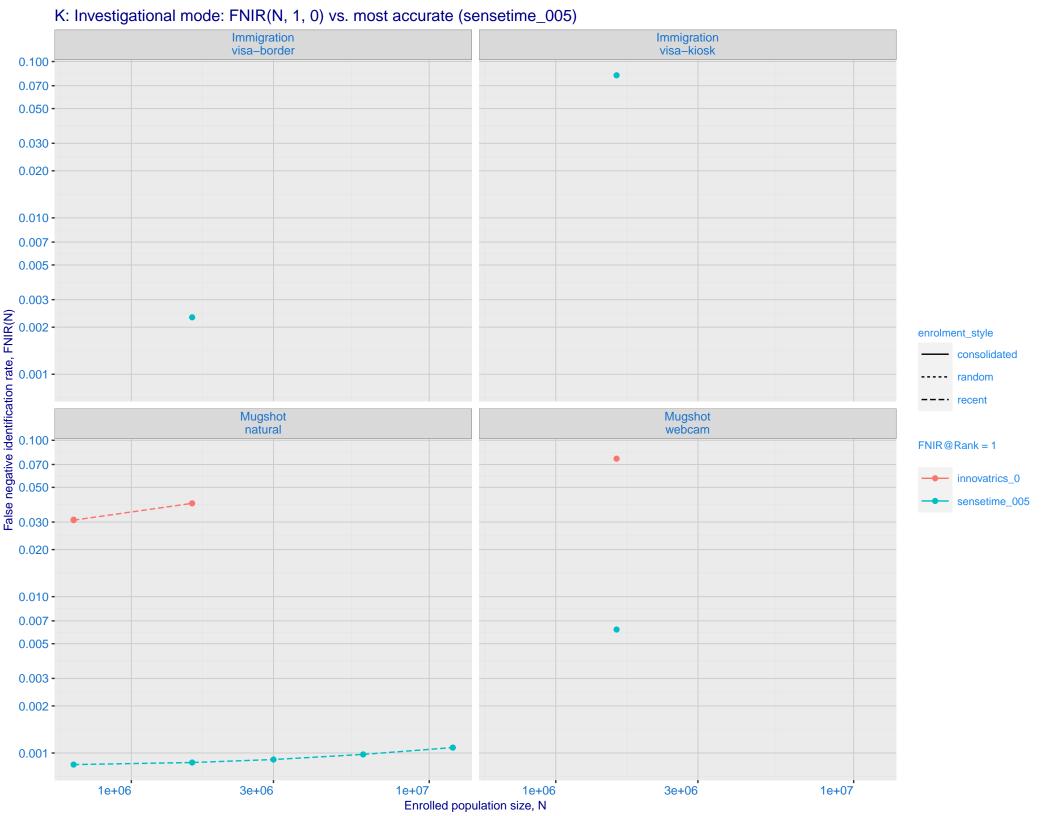


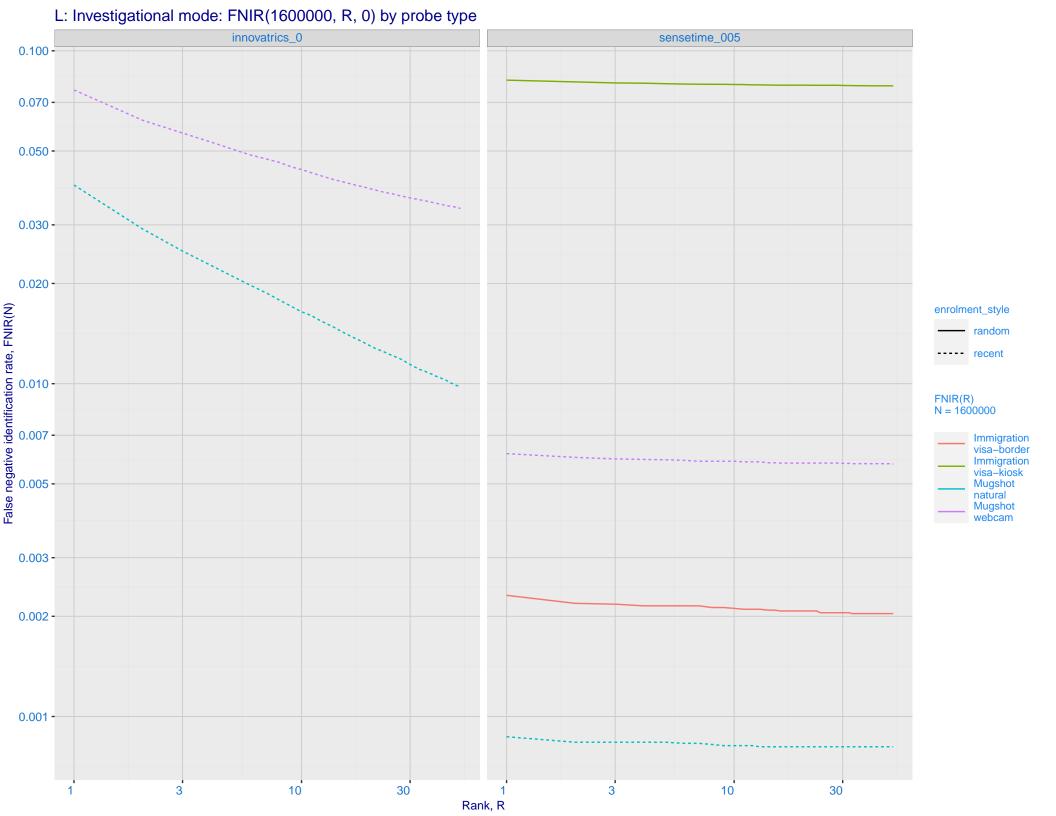


F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 -5e+01 -3e+01 -2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 -2e-01 -1e-01 -7e-02 -5e-02 -3e-02 -3e-02 -1e-02 -**Enrolled images:** recent N = 1600000 Mugshot natural Mugshot webcam 7e-03 -5e-03 -3e-03 -2e-03 -1e-03 -7e-04 -5e-04 -3e-04 -2e-04 -1e-04 -7e-05 -5e-05 -3e-05 -2e-05 -1e-05 -1e-05 3e-05 1e-04 3e-04 1e-03 3e-03 1e-02 3e-02 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)

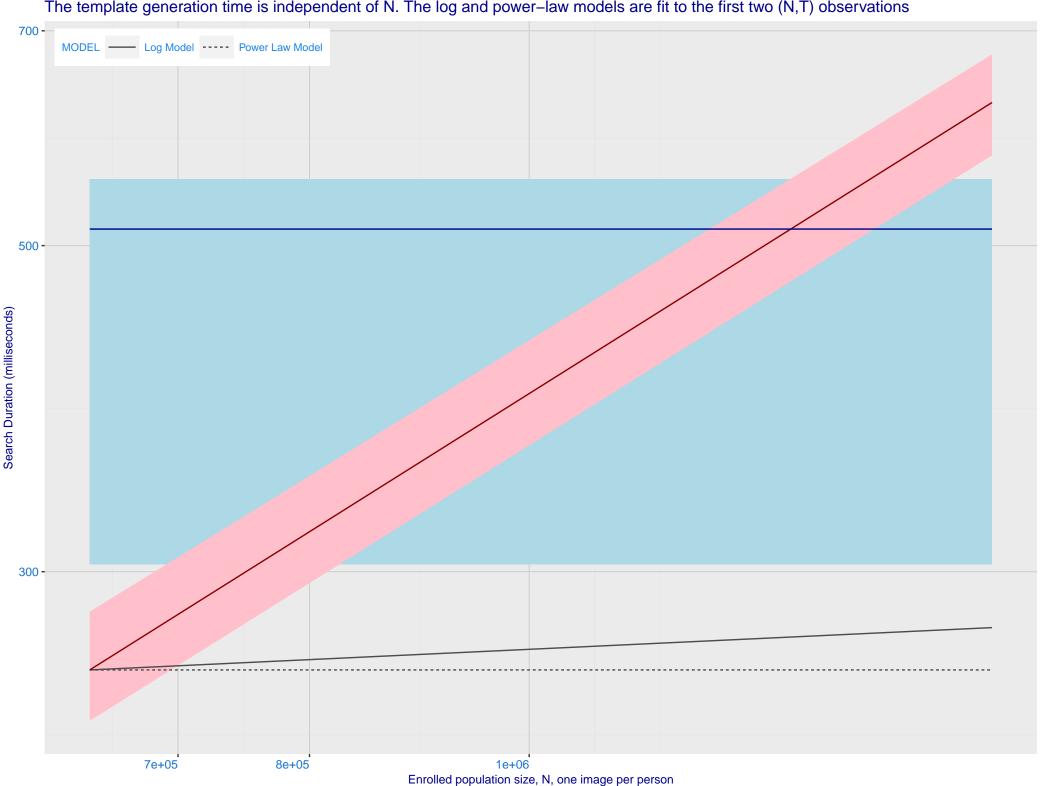








M: Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements. The template generation time is independent of N. The log and power–law models are fit to the first two (N,T) observations



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



