(a) $\mu = \mu_0 + \mu_1 \text{GMST}$

$\mu_0 = 0.23$ (0.19, 0.28)

$\mu_1 = 0.1$ (-0.003, 0.21)

(b) 2020 observed magnitude

GEV shift fit 1900

GEV shift fit 2020

empirical return periods