

Results are obtained with h_0^P estimated

| h_0^Q IS UNC UNDER P, UPDATED UNDER Q 1 YEAR, THEN FROZEN | | | | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| θ | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| ω | $8.5020e-08$ | $9.2713e-06$ | $1.9239e-07$ | $2.2129e-06$ | $1.9389e-06$ | $4.1610e-07$ | $5.9988e-07$ | $3.5296e-07$ | $5.5717e-07$ |
| std | $(4.4877e-07)$ | $(2.7968e-05)$ | $(1.0856e-06)$ | $(6.4184e-06)$ | $(6.6239e-06)$ | $(2.4952e-06)$ | $(2.9189e-06)$ | $(2.0142e-06)$ | $(2.7148e-06)$ |
| median | $4.8556e-10$ | $1.1201e-09$ | $8.3045e-10$ | $1.6349e-09$ | $1.4218e-09$ | $1.6699e-09$ | $8.8906e-10$ | $3.3972e-10$ | $4.7252e-10$ |
| α | $2.5053e-05$ | $2.0773e-05$ | $1.8857e-05$ | $1.3866e-05$ | $1.3094e-05$ | $1.3613e-05$ | $1.3838e-05$ | $8.6221e-06$ | $1.4345e-05$ |
| std | $(2.2286e-05)$ | $(2.0915e-05)$ | $(1.6575e-05)$ | $(1.1518e-05)$ | $(8.8443e-06)$ | $(5.8573e-06)$ | $(8.0132e-06)$ | $(5.2512e-06)$ | $(1.0681e-05)$ |
| median | $1.6946e-05$ | $1.8770e-05$ | $1.2068e-05$ | $1.2723e-05$ | $1.2664e-05$ | $1.2849e-05$ | $1.3228e-05$ | $8.5732e-06$ | $1.3804e-05$ |
| β | 0.4924 | 0.3370 | 0.4751 | 0.3745 | 0.1724 | 0.1755 | 0.2466 | 0.1768 | 0.1836 |
| std | (0.3262) | (0.3216) | (0.3449) | (0.3822) | (0.2854) | (0.2334) | (0.3159) | (0.3270) | (0.2983) |
| median | 0.5759 | 0.3823 | 0.5676 | 0.3025 | 0.0002 | 0.0008 | 0.0018 | 0.0001 | 0.0003 |
| γ^* | 150.2212 | 214.4353 | 173.9764 | 268.9184 | 247.7121 | 222.3940 | 210.4781 | 296.4724 | 185.4170 |
| std | (138.1818) | (168.3789) | (143.1116) | (295.6025) | (244.5211) | (41.1800) | (73.6564) | (189.9753) | (149.9507) |
| median | 110.8449 | 155.9251 | 143.9621 | 170.7408 | 196.1680 | 228.8470 | 208.6253 | 252.7287 | 154.5740 |
| h_0^Q | $1.2468e-04$ | $1.5814e-04$ | $8.6791e-05$ | $6.4327e-05$ | $6.2555e-05$ | 0.0001 | $9.5618e-05$ | $4.2789e-05$ | $9.6085e-05$ |
| std | $(8.4854e-05)$ | $(1.0317e-04)$ | $(4.2726e-05)$ | $(3.0386e-05)$ | $(3.9619e-05)$ | $(5.4010e-05)$ | $(6.6049e-05)$ | $(2.5624e-05)$ | $(8.6926e-05)$ |
| median | $1.0398e-04$ | $1.3624e-04$ | $7.8012e-05$ | $5.3266e-05$ | $5.2105e-05$ | $8.5698e-05$ | $7.4335e-05$ | $3.6616e-05$ | $5.7654e-05$ |
| persistence | 0.8233 | 0.8361 | 0.7863 | 0.7230 | 0.6557 | 0.7936 | 0.7599 | 0.6817 | 0.5976 |
| std | (0.1875) | (0.1268) | (0.2318) | (0.2418) | (0.2553) | (0.0951) | (0.1551) | (0.2158) | (0.2878) |
| median | 0.8873 | 0.8444 | 0.8856 | 0.7596 | 0.7135 | 0.7919 | 0.7344 | 0.6894 | 0.6653 |
| MSE | 13.1341 | 29.7013 | 11.0076 | 10.4282 | 20.1567 | 21.2395 | 26.0305 | 26.8897 | 47.4491 |
| median MSE | 4.0691 | 6.5356 | 5.3875 | 6.5788 | 9.0235 | 11.1964 | 17.4622 | 23.3996 | 23.1610 |
| IVRMSE | 0.1878 | 0.2385 | 0.1550 | 0.1445 | 0.1657 | 0.1849 | 0.2030 | 0.1592 | 0.1844 |
| MAPE | 0.2247 | 0.2822 | 0.2447 | 0.2502 | 0.3132 | 0.3755 | 0.3917 | 0.3454 | 0.3111 |
| OptLL | 157.8028 | 158.6809 | 200.4516 | 278.2008 | 271.7112 | 341.9052 | 395.4835 | 495.1797 | 461.7832 |