

| event_id | grace_id | m1_rec | m2_rec | chi1_rec | chi2_rec | SNR | GTWC | p_HasNS | p_HasREM |
|-----------------|----------|-----------|-----------|--------------|--------------|---------|------|---------|----------|
| GW170823 | G298936 | 59.126324 | 24.816019 | -0.29820532 | 0.89852035 | 11.296 | 1 | 0.000 | 0.000 |
| GW170817 | G298048 | 1.5270051 | 1.2422962 | -0.015901944 | -0.035747342 | 14.45 | 1 | 1.000 | 1.000 |
| GW170814 | G297595 | 29.478622 | 24.901943 | -0.56879753 | 0.13079314 | 16.1496 | 1 | 0.001 | 0.000 |
| GW170809 | G296853 | 43.061466 | 30.084999 | -0.12096803 | 0.84671402 | 11.2619 | 1 | 0.001 | 0.000 |
| GW190408 | G329243 | 32.132198 | 23.224018 | 0.27901691 | -0.64744294 | 13.9286 | 2 | 0.000 | 0.000 |
| GW190412 | G329483 | 26.368868 | 12.002029 | 0.44773224 | -0.72697771 | 18.2125 | 2 | 0.000 | 0.000 |
| GW190413.052954 | G329577 | 45.688461 | 32.476582 | -0.87123221 | 0.14125946 | 9.0342 | 2 | 0.000 | 0.000 |
| GW190413.134308 | G329615 | 73.181816 | 67.166664 | -0.14388607 | 0.24100354 | 10.3324 | 2 | 0.000 | 0.000 |
| GW190421 | G330300 | 57.254688 | 21.741816 | -0.99540198 | -0.2165785 | 9.9563 | 2 | 0.000 | 0.000 |
| GW190425 | G330564 | 2.2661283 | 1.3069071 | 0.088768743 | -0.027511597 | 13.0987 | 2 | 1.000 | 0.999 |
| GW190426 | G330687 | 7.5904498 | 1.3392493 | 0.067197911 | -0.007580552 | 10.059 | 2 | 0.996 | 0.009 |
| GW190503 | G331315 | 55.742626 | 7.7206206 | -0.74016863 | -0.82957315 | 11.9346 | 2 | 0.000 | 0.000 |
| GW190512 | G332169 | 26.352001 | 16.432217 | -0.59847999 | 0.80223149 | 12.3291 | 2 | 0.000 | 0.000 |
| GW190513 | G332333 | 47.117332 | 23.614485 | 0.038690284 | 0.14594713 | 12.5778 | 2 | 0.000 | 0.000 |
| GW190517 | G333132 | 48.22736 | 43.633629 | 0.65398544 | 0.93295497 | 11.1693 | 2 | 0.000 | 0.000 |
| GW190519 | G333443 | 91.274368 | 37.288105 | 0.32283878 | 0.14751123 | 13.5088 | 2 | 0.000 | 0.000 |
| GW190521.074359 | G333664 | 42.442223 | 33.601784 | -0.69702137 | -0.15595561 | 23.7673 | 2 | 0.000 | 0.000 |
| GW190602 | G335015 | 99.914513 | 5.7674003 | -0.38966206 | -0.8887217 | 11.9352 | 2 | 0.000 | 0.000 |
| GW190630 | G337426 | 47.117332 | 23.614485 | 0.038690284 | 0.14594713 | 15.2795 | 2 | 0.000 | 0.000 |
| GW190706 | G337919 | 133.33333 | 37.090908 | 0.59081638 | 0.9692477 | 12.4635 | 2 | 0.005 | 0.000 |
| GW190707 | G337978 | 41.523457 | 4.1126451 | 0.58418924 | 0.58958942 | 12.5254 | 2 | 0.000 | 0.000 |
| GW190708 | G338125 | 78.389603 | 5.7662673 | 0.68662262 | 0.81365162 | 11.9672 | 2 | 0.000 | 0.000 |
| GW190720 | G344653 | 17.278727 | 8.2001104 | -0.061079368 | 0.76201552 | 10.691 | 2 | 0.003 | 0.000 |
| GW190727 | G345173 | 47.362637 | 28.55905 | -0.95342147 | 0.030223127 | 12.1147 | 2 | 0.009 | 0.000 |
| GW190728 | G345315 | 21.592342 | 21.592342 | 0.45995906 | -0.60057747 | 13.5572 | 2 | 0.001 | 0.000 |
| GW190814 | G347305 | 20.846231 | 3.0455875 | -0.22075345 | 0.38675523 | 24.497 | 2 | 0.116 | 0.000 |
| GW190828.063405 | G348500 | 52.002979 | 27.973516 | -0.025977064 | 0.32933086 | 16.2177 | 2 | 0.000 | 0.000 |
| GW190828.065509 | G348519 | 30.383705 | 12.924967 | -0.24138632 | 0.69482648 | 10.9892 | 2 | 0.001 | 0.000 |
| GW190915 | G350491 | 34.684841 | 32.121094 | 0.21161352 | -0.9510231 | 13.0914 | 2 | 0.000 | 0.000 |
| GW190924 | G351423 | 14.338296 | 4.1252065 | 0.16565751 | 0.59049678 | 13.1556 | 2 | 0.045 | 0.000 |
| GW190930 | G351993 | 36.524567 | 4.330317 | 0.67452186 | -0.91833872 | 10.0846 | 2 | 0.002 | 0.000 |
| GW191109 | G354231 | 106.23571 | 10.805781 | 0.49525386 | 0.27880779 | 14.1976 | 3 | 0.000 | 0.000 |
| GW191129 | G355916 | 13.095535 | 7.4272113 | 0.11810204 | 0.10190055 | 13.0631 | 3 | 0.002 | 0.000 |
| GW191204.171526 | G356500 | 16.0224 | 7.9930396 | 0.11109667 | 0.5737958 | 16.9267 | 3 | 0.001 | 0.000 |
| GW191215 | G357403 | 47.154507 | 17.760225 | 0.077376045 | 0.27354625 | 10.6819 | 3 | 0.000 | 0.000 |
| GW191216 | G357490 | 34.448246 | 3.8925426 | 0.61318028 | 0.37041351 | 18.6183 | 3 | 0.001 | 0.000 |
| GW191222 | G358088 | 80.27549 | 11.620949 | -0.73432344 | -0.32293683 | 12.2304 | 3 | 0.000 | 0.000 |
| GW200112 | G359994 | 50.928673 | 32.735661 | 0.75219172 | -0.97495586 | 18.7937 | 3 | 0.003 | 0.000 |
| GW200115 | G360364 | 4.3046298 | 2.0849757 | -0.65294266 | 0.041389052 | 11.424 | 3 | 1.000 | 0.002 |
| GW200129 | G361581 | 47.73967 | 29.955526 | 0.83113605 | -0.98355848 | 26.6116 | 3 | 0.000 | 0.000 |
| GW200219 | G364596 | 61.230534 | 10.482111 | -0.81323576 | -0.92677218 | 10.5899 | 3 | 0.000 | 0.000 |
| GW200224 | G365371 | 86.812164 | 13.472847 | 0.009163484 | 0.009163484 | 16.9285 | 3 | 0.011 | 0.000 |
| GW200225 | G365427 | 20.317394 | 19.07118 | 0.38694957 | -0.90194446 | 12.4941 | 3 | 0.000 | 0.000 |
| GW200302 | G366190 | 47.138294 | 27.403164 | 0.36166081 | -0.60057169 | 10.9044 | 3 | 0.000 | 0.000 |
| GW200311 | G367788 | 34.684841 | 32.121094 | 0.21161352 | -0.9510231 | 17.7958 | 3 | 0.000 | 0.000 |
| GW200316 | G368545 | 36.925163 | 4.9437113 | 0.58745402 | -0.14540812 | 10.2106 | 3 | 0.002 | 0.000 |
| GW200322 | G369200 | 54.669945 | 15.419386 | 0.99574167 | 0.86283016 | 8.753 | 3 | 0.002 | 0.000 |

Table 1: Probability predictions for real events from weighted average of 23 RFs with 23 different EoS