

Table 1: Detection performance evaluated on multiple one-month datasets containing identical real detector noise (offset = 0 and noise seed = 2514409456) but different sets of signal injections, using the number of detections N^F at fixed FAR as a metric. All datasets are still contaminated with a number of confident astrophysical signals not included in GWTC-2 [?].

| # | Injection Seed | N^F 1/month | N^F 10/month | N^F 100/month | Total Injections |
|----|------------------------|----------------------|----------------------|----------------------|------------------|
| 1 | 2514409456 | 2892 | 3879 | 5436 | 95719 |
| 2 | 12019 | 2949 | 3889 | 5415 | 95691 |
| 3 | 10209 | 2924 | 3921 | 5429 | 95733 |
| 4 | 9801 | 2923 | 3853 | 5375 | 95701 |
| 5 | 6291 | 2935 | 3829 | 5261 | 95696 |
| 6 | 555 | 2904 | 3824 | 5338 | 95698 |
| 7 | 291 | 2874 | 3872 | 5459 | 95704 |
| 8 | 93 | 2852 | 3778 | 5339 | 95711 |
| 9 | 32 | 2949 | 3878 | 5386 | 95684 |
| 10 | 9 | 2927 | 3826 | 5406 | 95712 |
| | μ_N (mean) | 2913 ± 23 | 3855 ± 29 | 5384 ± 42 | N/A |
| | σ_N (std. dev.) | $\in [22, 59]$ | $\in [28, 75]$ | $\in [40, 107]$ | N/A |
| | σ_N/μ_N | $\in [0.8\%, 2.0\%]$ | $\in [0.7\%, 1.9\%]$ | $\in [0.7\%, 2.0\%]$ | N/A |