

References

Dong, J. & Foreman-Mackey, D. 2023, AJ, 166, 112

Table 1. Hyperparameters for the beta-distribution.

Population	N	μ_0	κ_0	w_0	μ_1	κ_1	w_1
all systems ^{a)}	151	0.43 ± 0.09	4 ± 6	0.28 ± 0.09	0.98 ± 0.02	14 ± 27	0.72 ± 0.09
all systems	205	0.47 ± 0.06	5 ± 4	0.31 ± 0.07	0.981 ± 0.016	33 ± 43	0.69 ± 0.07
not applying info i_\star	81	0.42 ± 0.05	8 ± 6	0.31 ± 0.06	0.986 ± 0.018	31 ± 35	0.69 ± 0.06
applying info on i_\star	81	0.45 ± 0.03	11 ± 3	0.35 ± 0.05	0.990 ± 0.006	30 ± 17	0.65 ± 0.05
$T_{\text{eff}} \geq 6250 \text{ K}, a/R_\star < 7$	41	0.46 ± 0.05	13 ± 11	0.49 ± 0.11	0.95 ± 0.05	20 ± 24	0.51 ± 0.11
$M_p < 0.2 M_J$	17	0.40 ± 0.09	23 ± 28	0.52 ± 0.16	0.92 ± 0.07	21 ± 30	0.48 ± 0.16
$T_{\text{eff}} \geq 6250 \text{ K}, a/R_\star < 7$	41	0.43 ± 0.15	130 ± 400	0.3 ± 0.2	0.85 ± 0.10	80 ± 300	0.7 ± 0.2
$M_p < 0.2 M_J$	17	0.39 ± 0.13	1300 ± 4000	0.4 ± 0.2	0.82 ± 0.11	400 ± 2000	0.6 ± 0.2

Subscript 0 denotes the parameters for the misaligned component, while subscript 1 is for the aligned component. The true mean of $\cos \psi$ is given as $2\mu - 1$. ^{a)}Results from [Dong & Foreman-Mackey \(2023\)](#). A Gaussian prior was applied to $\log \kappa$ ($\mathcal{N}(0, 3)$) as in [Dong & Foreman-Mackey \(2023\)](#) for the runs above the dashed line, whereas a uniform prior of $\mathcal{U}(-4, 10)$ for the runs below.