Erratum: “A Large and Pristine Sample of Standard Candles across the Milky Way: ~100,000 Red Clump Stars with 3% Contamination” (2018, ApJL, 858, L7)

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Supporting material: machine-readable table

LAMOST provides separate individual spectra for stars that were visited more than once. We have now culled all duplicates in the original LAMOST red clump sample with the same LAMOST designation by including in the catalog only the visit with the highest signal-to-noise ratio (S/N) for each star. We have confirmed that this does not affect the APOGEE red clump catalog in the original article, as we have already taken into account the APOGEE duplicates. We have also verified that this modification does not alter the results in the Letter; if anything, excluding the lower S/N LAMOST spectra reduces the contamination rate slightly. After culling the duplicates, there are a total of 347, 727 stars in our LAMOST catalog, of which we inferred their asteroseismic parameters from the LAMOST spectra. Among these stars, we determine that 149,732 stars are red clump stars (defined through $\Delta P > 250$ s), 51,612 of which are from LAMOST spectra with $S/N_{\text{pix}} > 75$. These 51,612 stars are identified as “RC Pristine” because their classifications are more reliable (see Figure 2 in the original Letter), and we define the other red clump (RC) stars as “RC” in the catalog. When combining with the APOGEE catalog, there are a total of 180,897 unique red clump stars with a contamination rate of ~9%. Most of the contamination comes from the low S/N LAMOST sample. If we restrict ourselves to LAMOST stars with $S/N_{\text{pix}} > 75$, there are a total of 85,539 stars with a contamination of only ~3%. The updated Table 1 below is included in this erratum, along with its machine-readable counterpart.

Table 1
Asteroseismic Parameters Added Catalogs for LAMOST

Designation	R.A. (deg)	DECL. (deg)	S/N	ΔP (s)	$\Delta \nu$ (μHz)	Classification	T_{eff} (K) ^a	$\log g$ ^a	[Fe/H] ^a
J220430.94-011616.7	331.12894	−1.27132	18.6	236.87	3.48	...	4940	2.04	−1.36
J220432.60+005112.5	331.13586	0.85349	199.5	76.99	5.02	...	4725	2.69	−0.45
J030142.28+001548.8	45.42620	0.26358	9.9	354.40	5.55	RC ^b	4901	2.53	−0.57
J233420.50+332151.5	353.58542	33.36431	86.5	302.82	4.55	RC_Pristine ^b	4937	2.47	−0.46
...	...	...	...	...	...	...	...	...	...

Notes. Stars that have $\Delta P > 250$ s are classified as RC stars. This table is available in its entirety (with 347,727 rows) in machine-readable form.

^a The stellar parameters values are adopted from LAMOST DR3.

^b For LAMOST, we further distinguish RC stars with $S/N_{\text{pix}} > 75$ to be “RC_Pristine,” and RC stars with $S/N_{\text{pix}} < 75$ to be “RC.”

(This table is available in its entirety in machine-readable form.)

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