

Appendix C: Additional figures

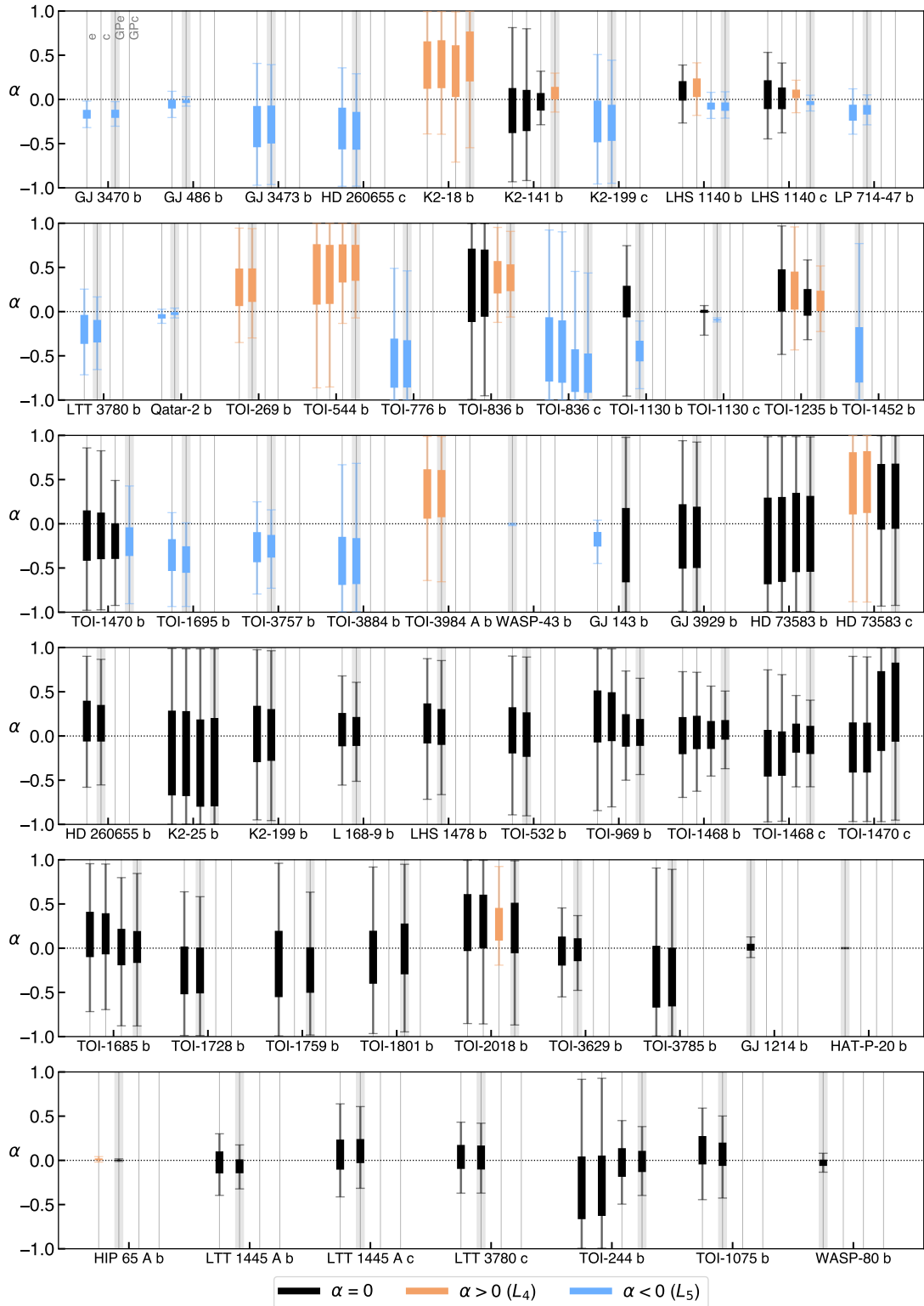


Fig. C.1. Inferred α parameter for the transiting planets ordered by groups as in Table B.4. The analysis of each planet is divided in four different models (dotted vertical lines) corresponding, from left to right, with the slightly eccentric orbit (e), the circular-orbit when the period of the planet is under 10 d (c), and both of these adding a GP if required (GP and GPc). The model used for the co-orbital mass estimation in Sect. 5.1 is indicated with a vertical grey region. The null value is indicated with an horizontal dashed line. Color-code informs on the result of α within $1\text{-}\sigma$ as indicated in the legend. Errorbars show the 68.3% (wide bar) and 99.7% (narrow bar) confidence intervals (1 and $3\text{-}\sigma$).

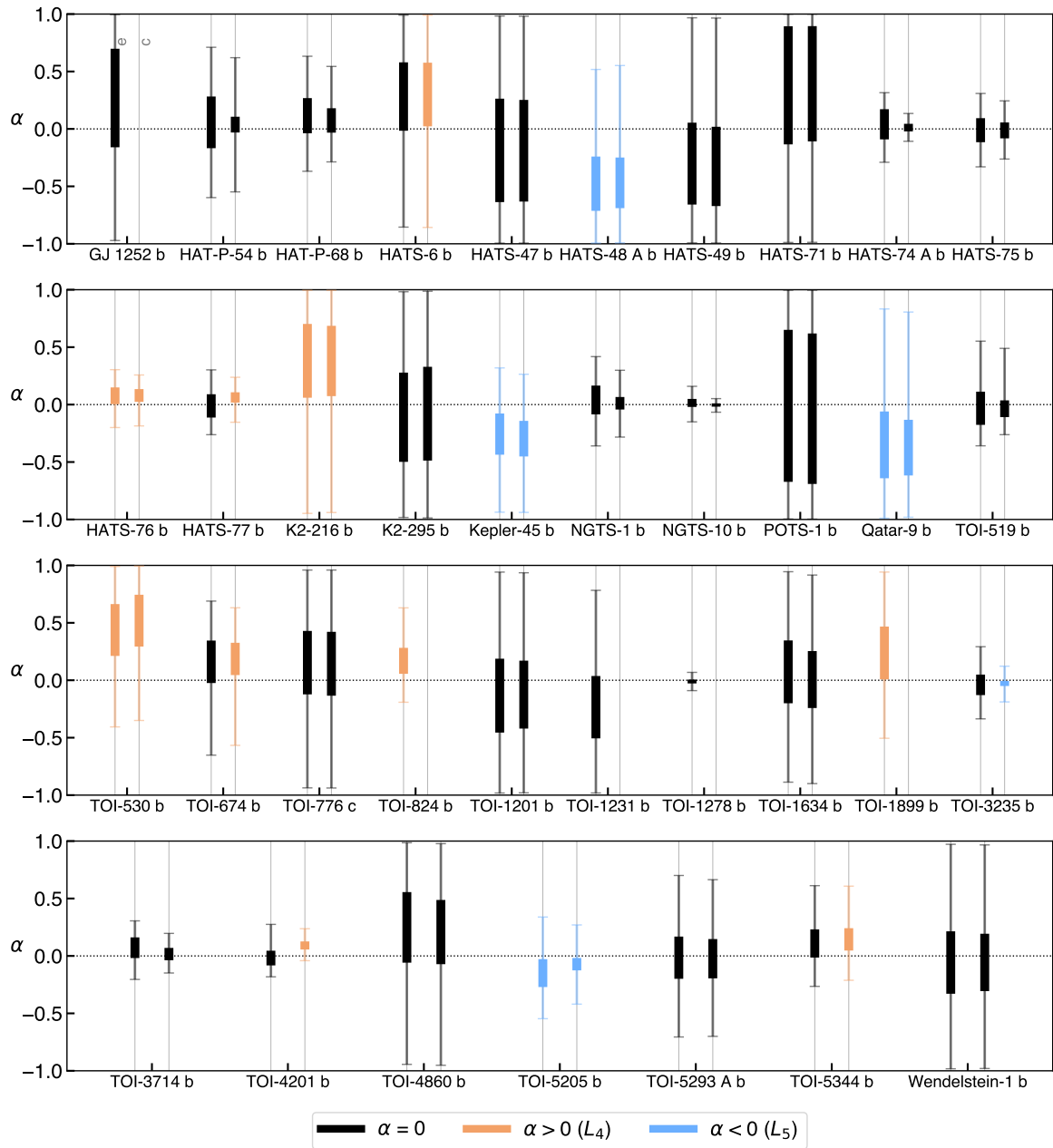


Fig. C.2. Inferred α parameter for the targets sparsely sampled. See details in the caption of Fig. C.1.

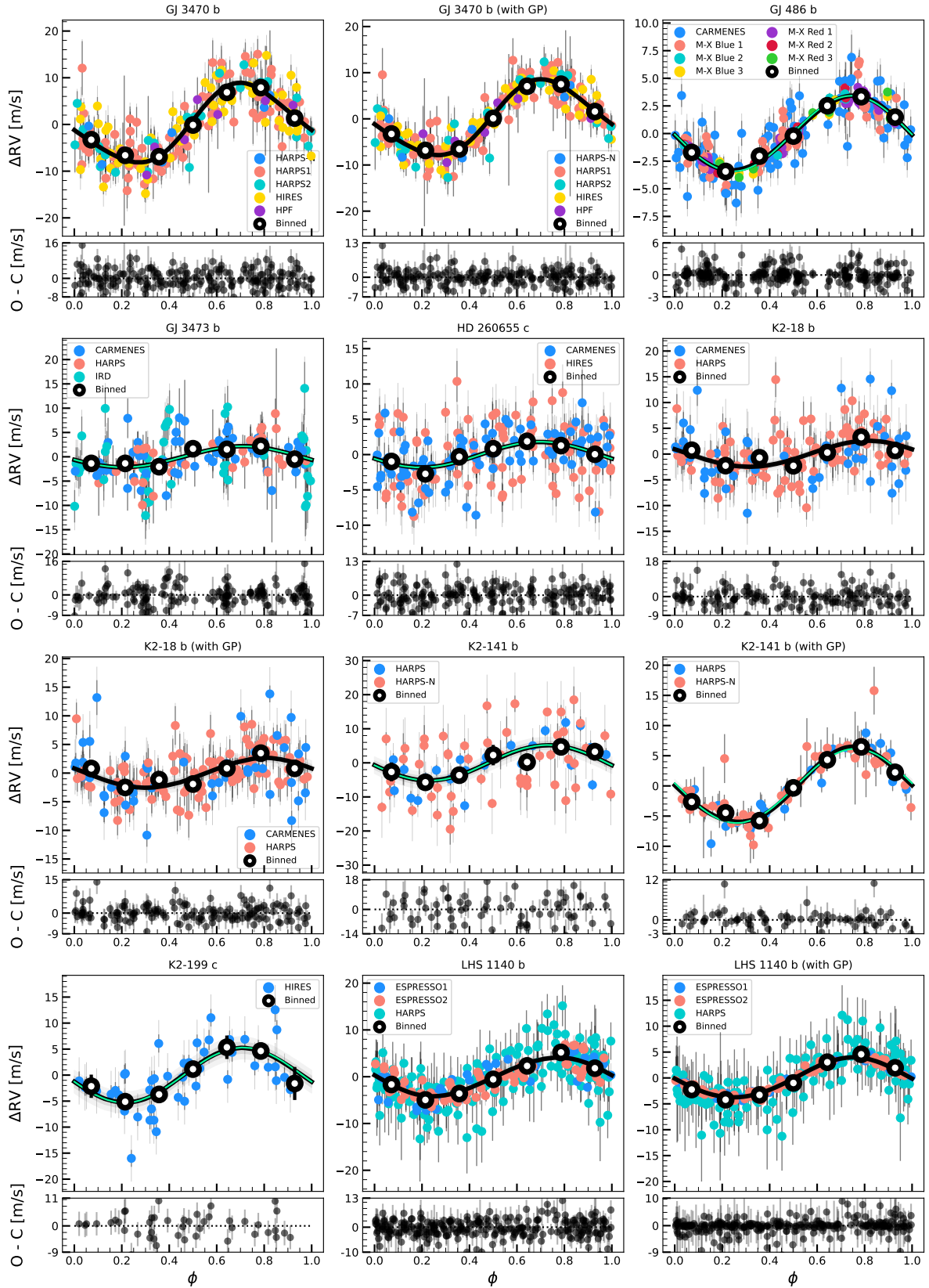


Fig. C.3. Phase-folded radial velocity curves for the transiting planets ordered by groups as in Table B.4. The colors of the measurements identify the instrument as shown in each legend. Error bars show the measurement uncertainty (dark grey) and its quadratic sum with the instrument jitter (light grey). Instrument offsets, trends, and GPs have been subtracted when required. Black solid line corresponds with the median of the predicted posterior distribution of the model, and the dark and light grey shaded regions are its corresponding 1- σ and 2- σ intervals. Green line shows the model for the circular case. We assume the trends and GPs of the circular models to be the same as in the eccentric except for TOI-1130 b, for which we separate both cases in different charts.

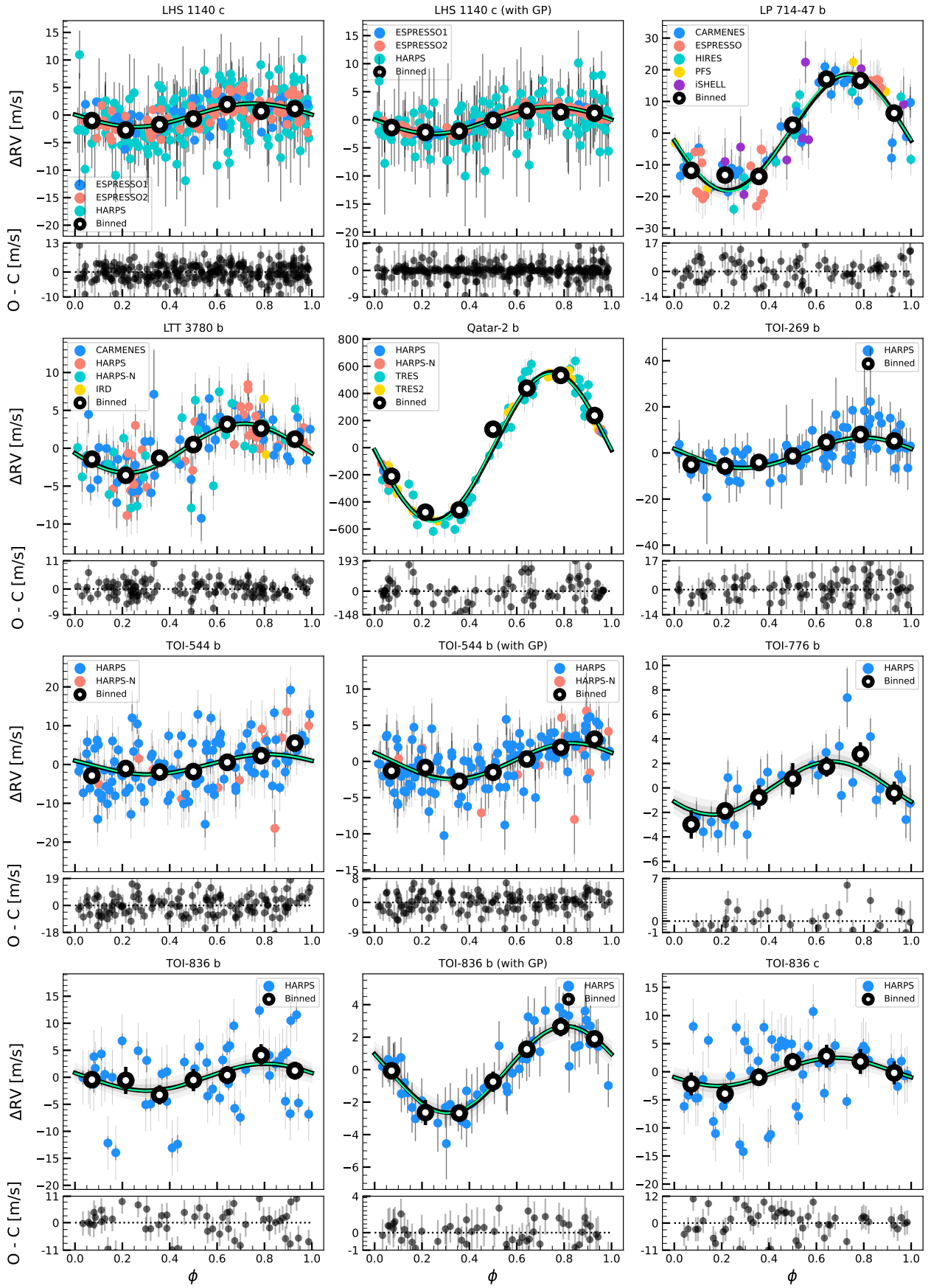


Fig. C.3. Continued.

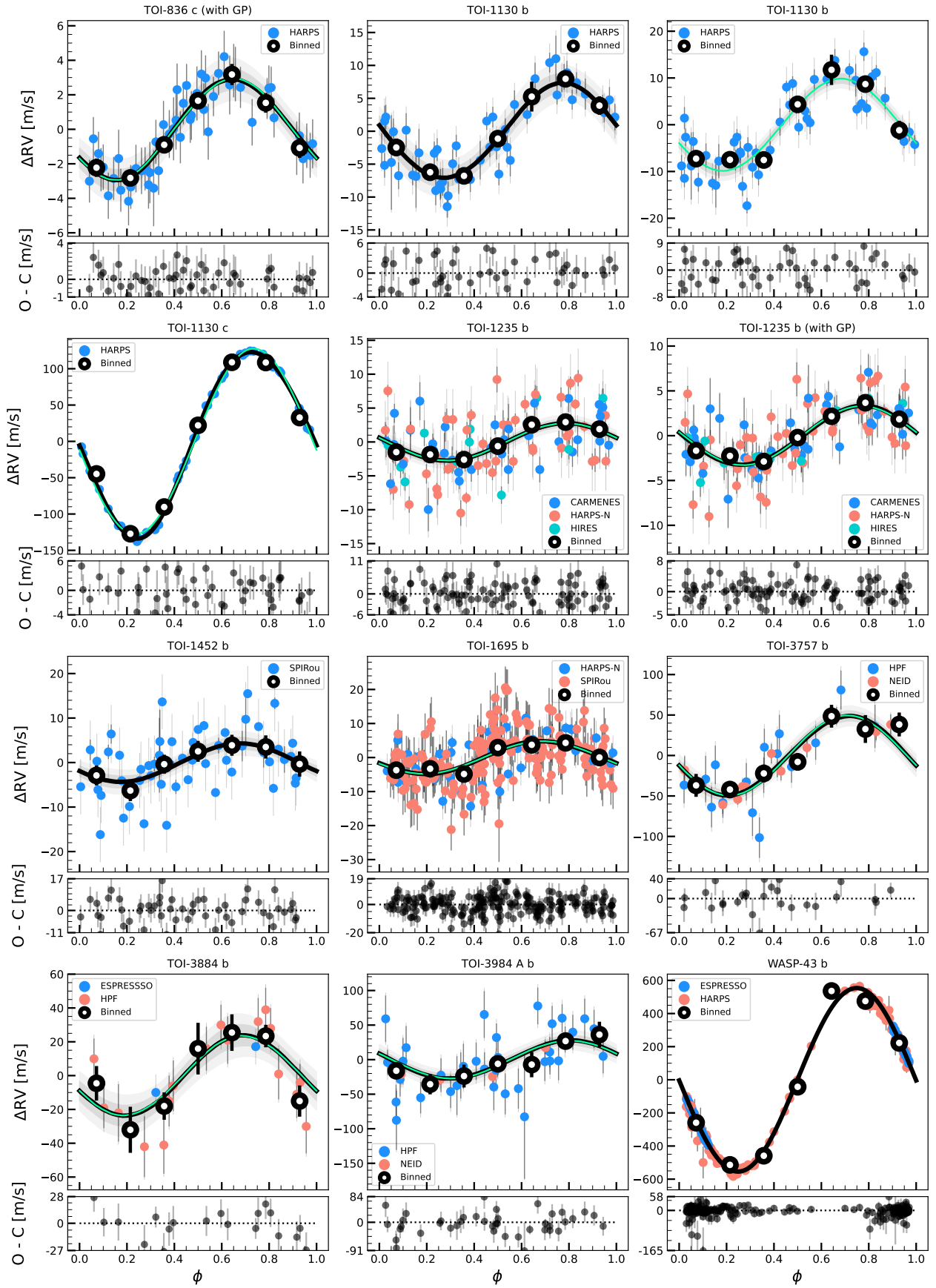


Fig. C.3. Continued.

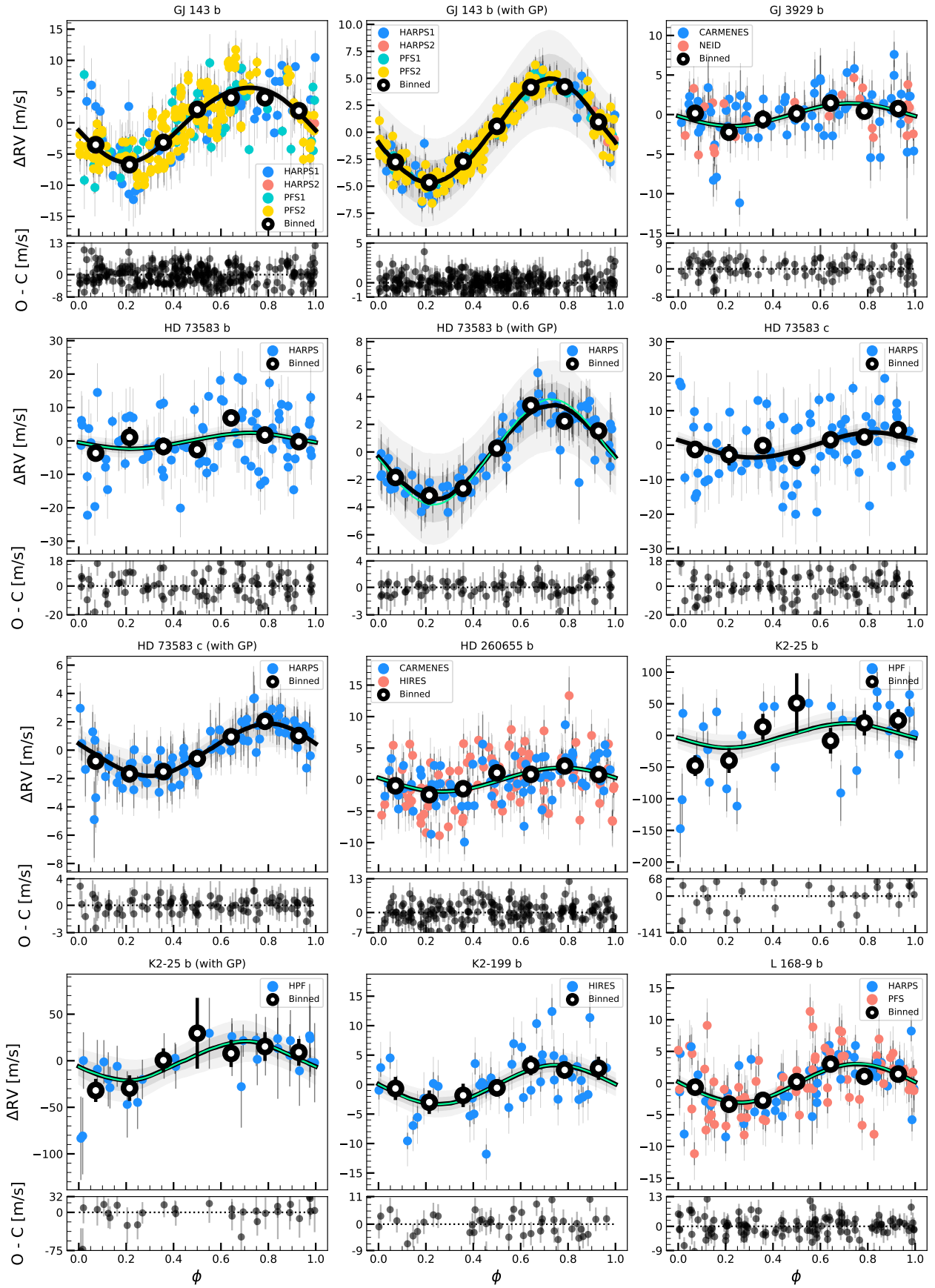


Fig. C.3. Continued.

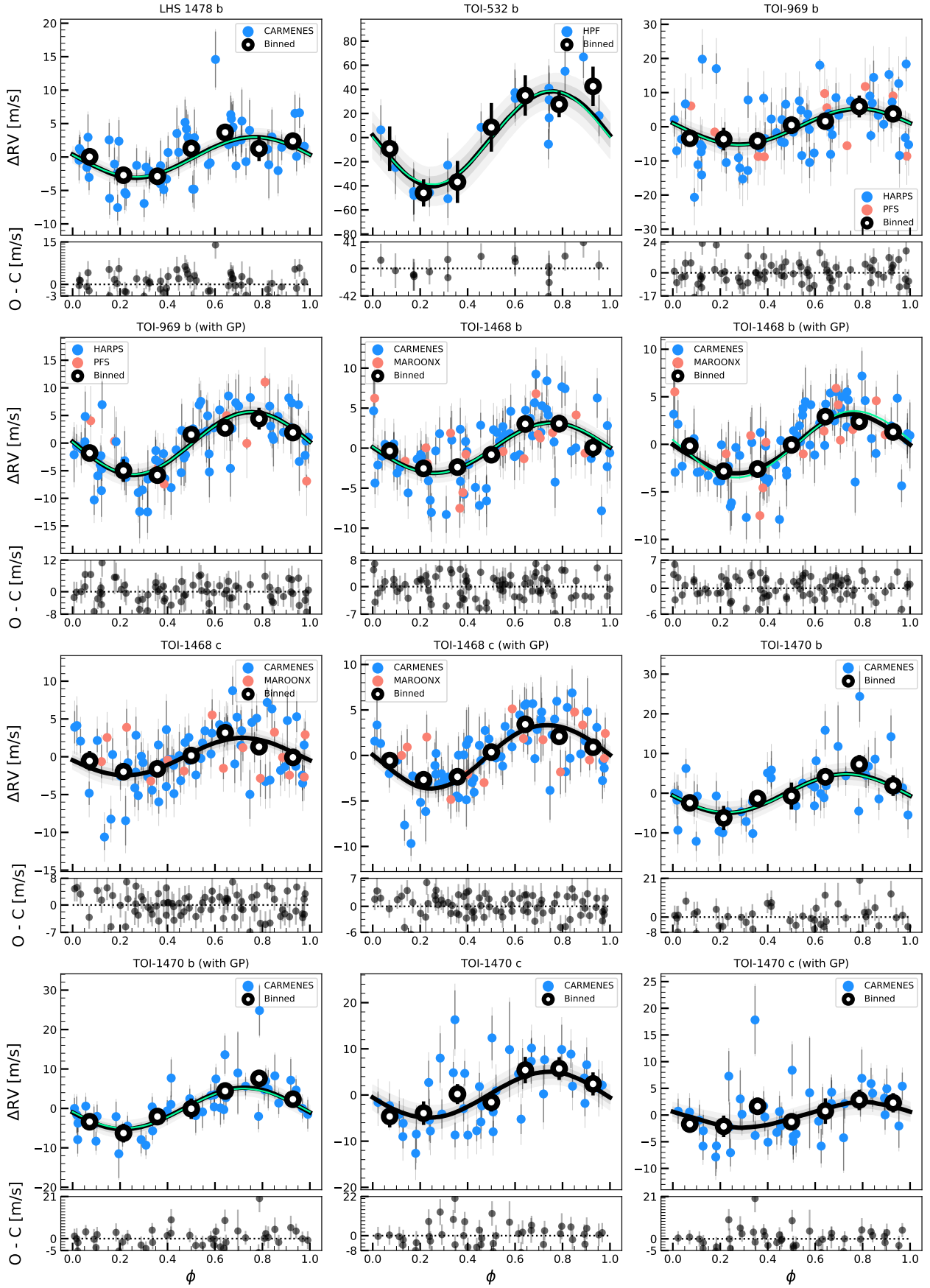


Fig. C.3. Continued.

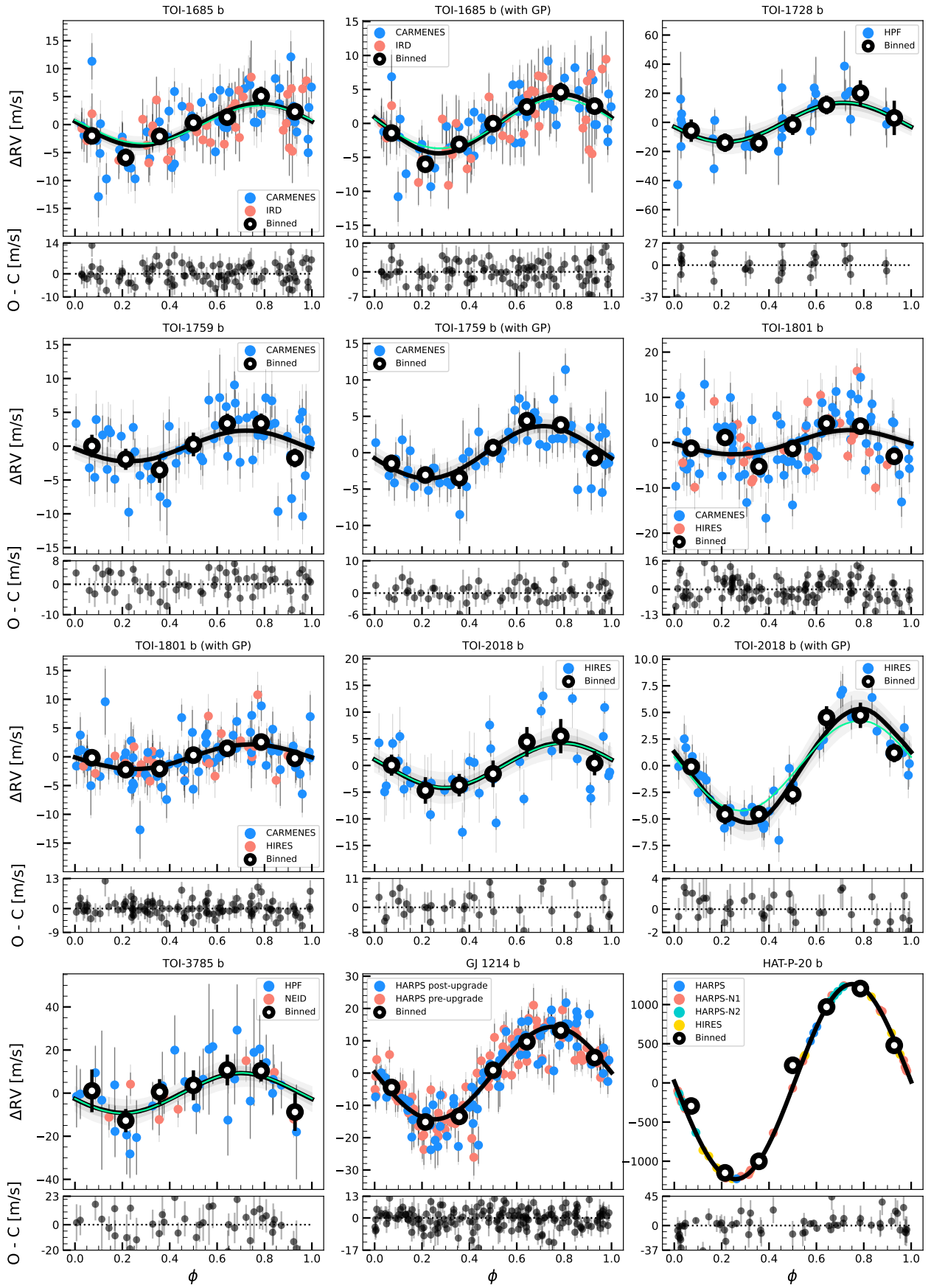


Fig. C.3. Continued.

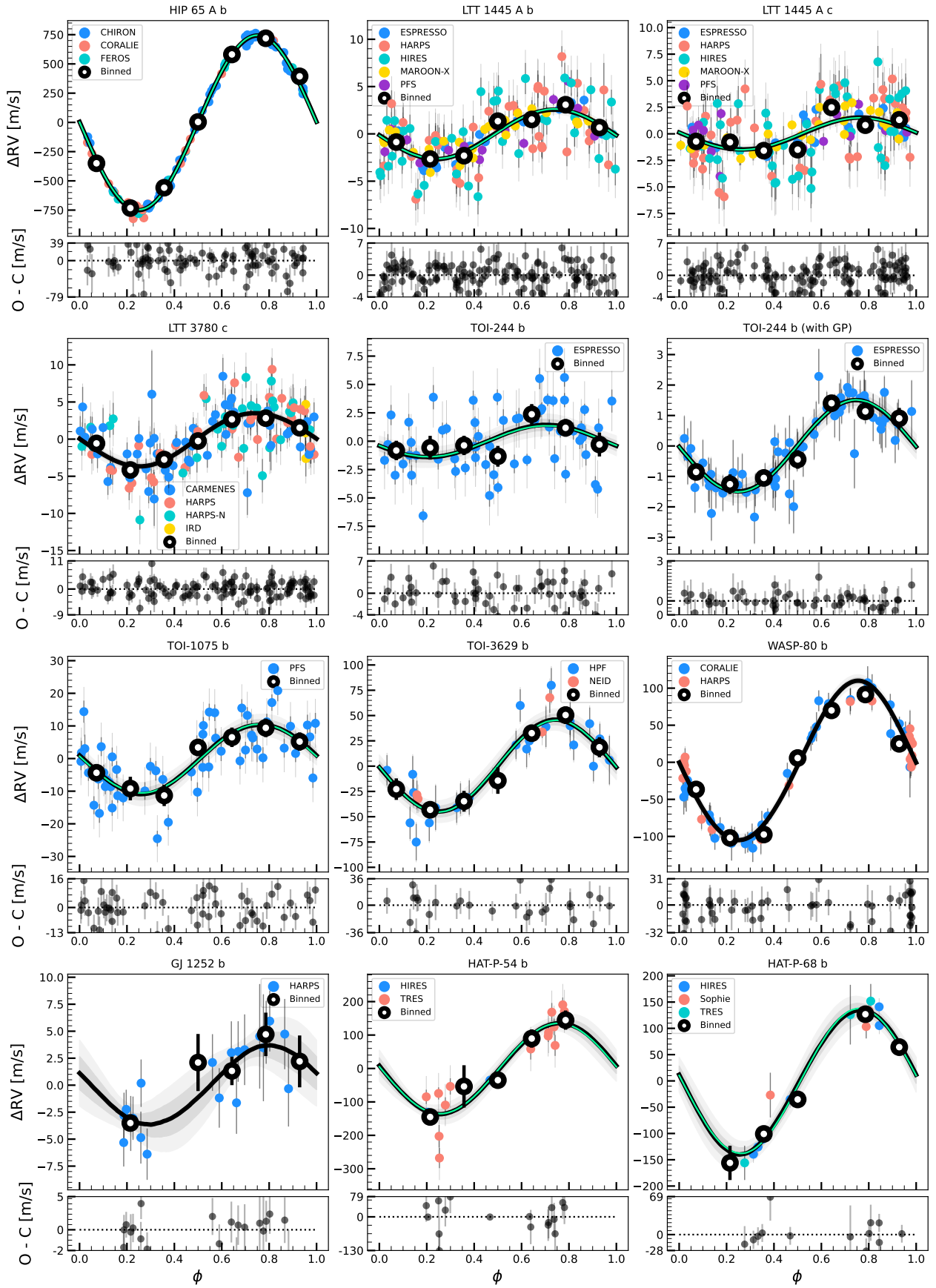


Fig. C.3. Continued.

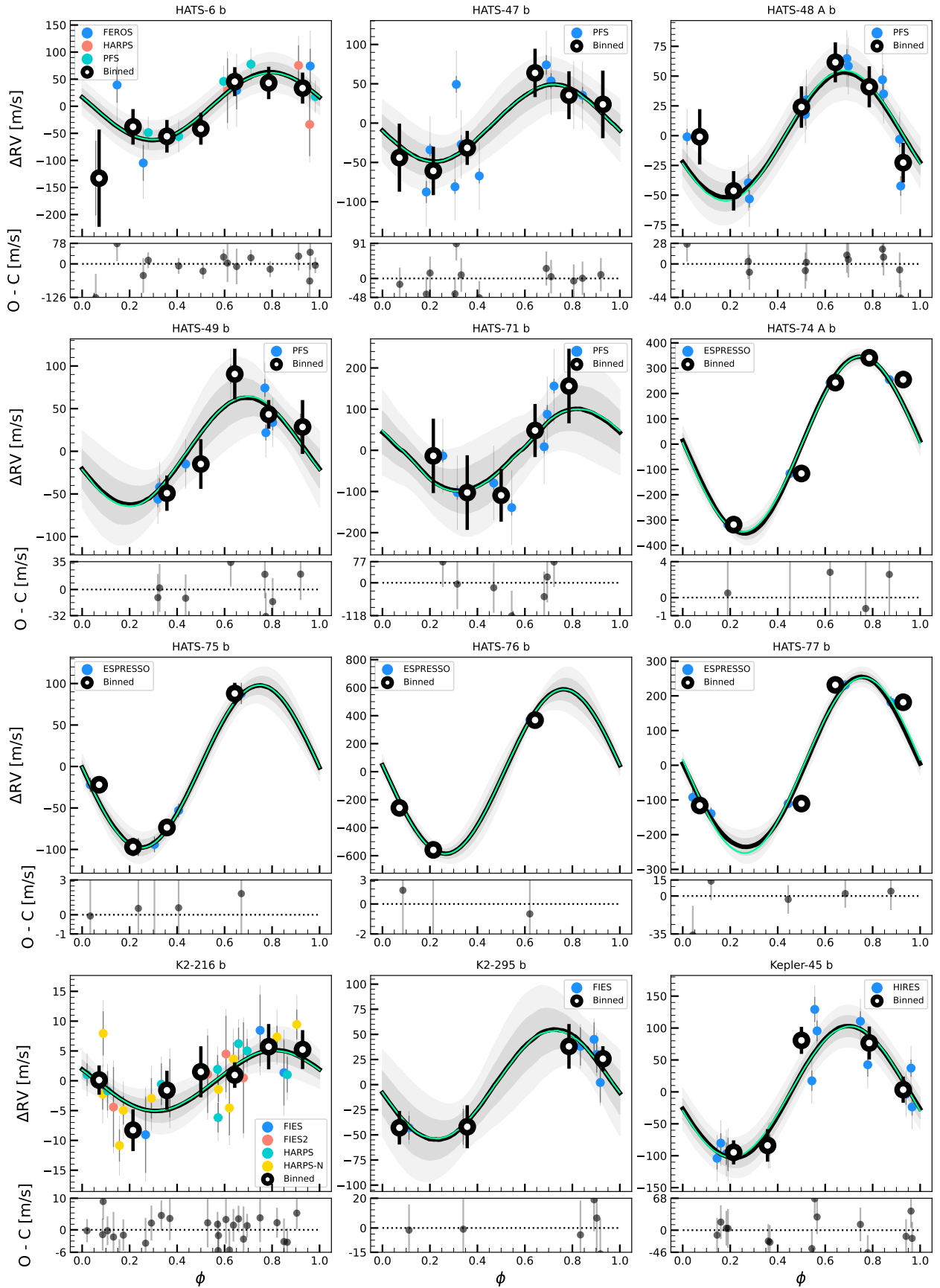


Fig. C.3. Continued.

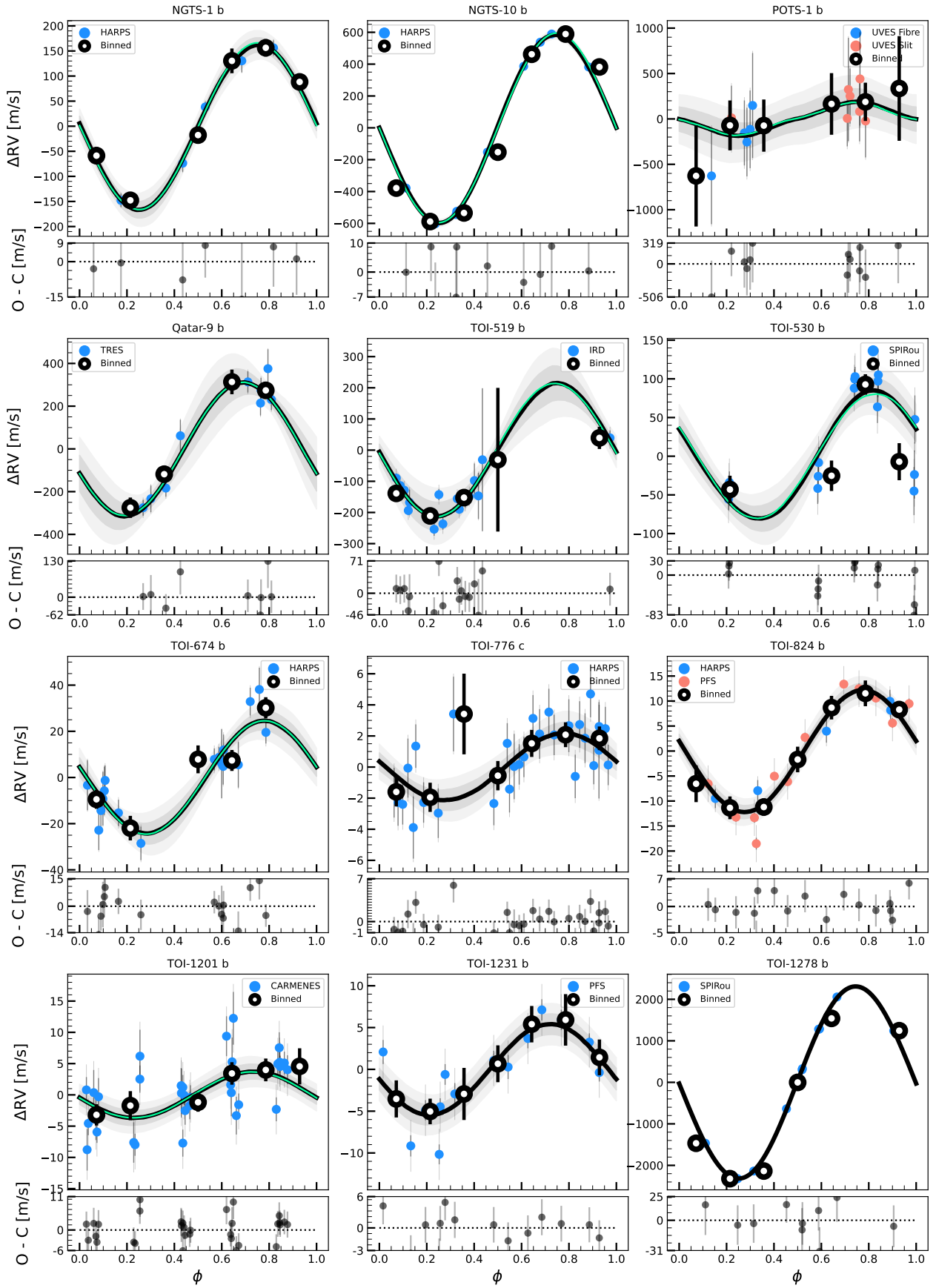


Fig. C.3. Continued.

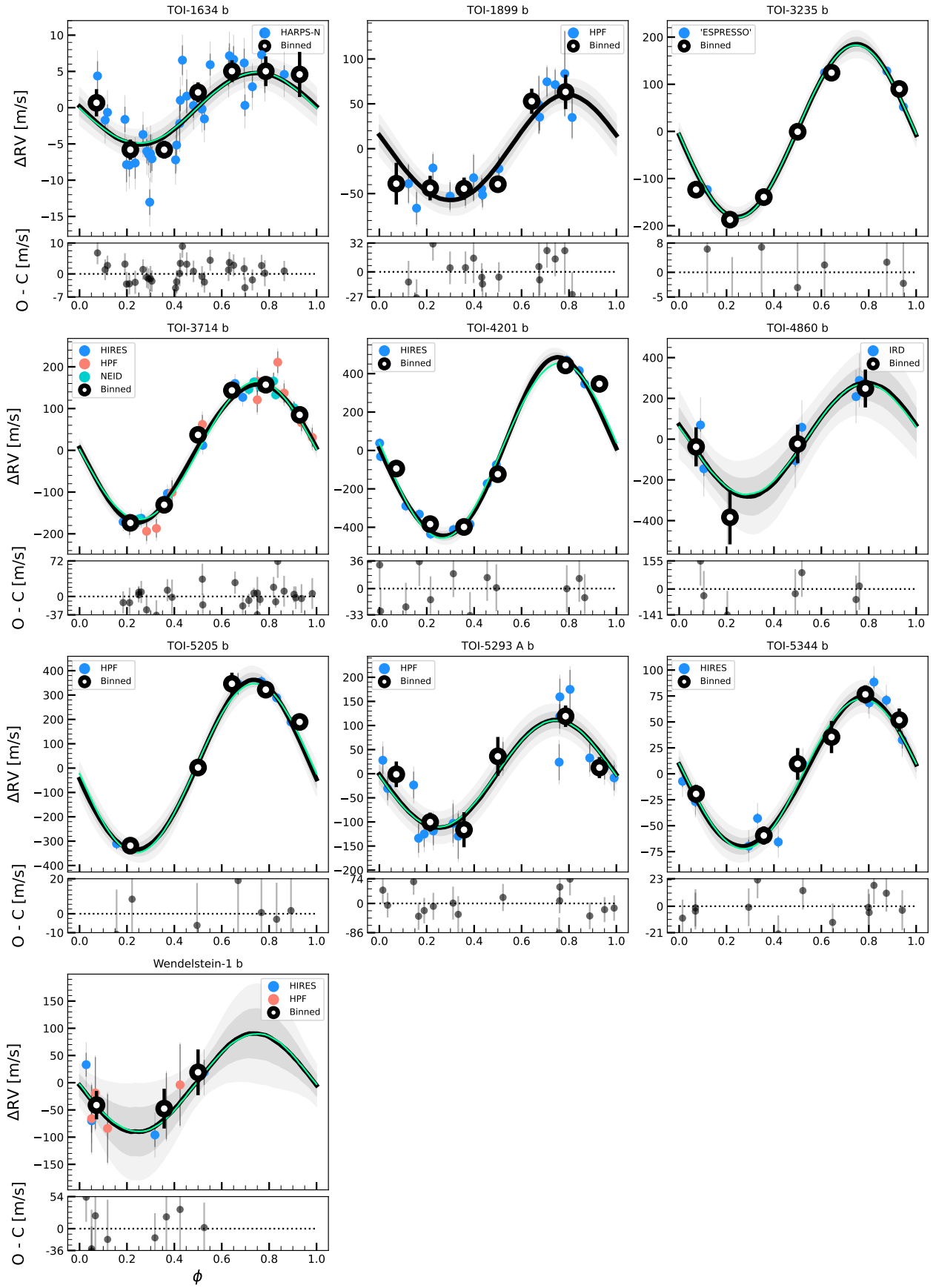


Fig. C.3. Continued.

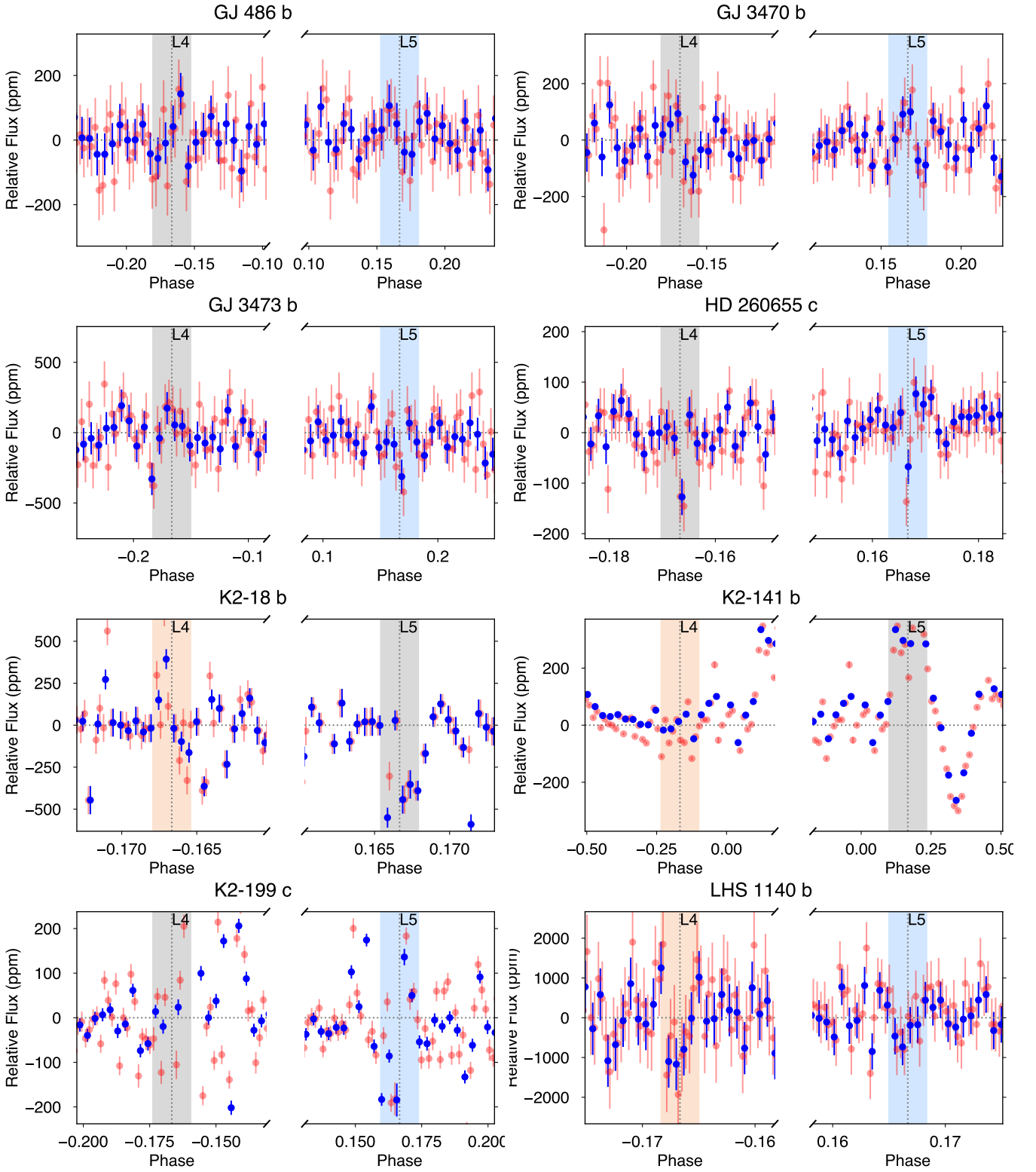


Fig. C.4. Phase-folded light curves (from the TESS mission, except for K2-18 b, K2-141 b, and K2-199 c where we used the K2 data) around the L_4 and L_5 regions for the weak candidate (WC) sample. The phase-folded light curves are binned with a bin size corresponding to 10% (red symbols) and 20% (blue symbols) of the main-planet transit duration. The Lagrangian point phase of conjunction is marked by a dotted vertical line and the shaded region indicates the duration of the main-planet transit. We highlight in color (blue for L_5 and orange for L_4) the region where our model indicates the potential location of the co-orbital, while in gray the opposite region. Cases where both regions are colored indicate systems where some of the models (circular versus eccentric) showed candidates at either Lagrangian point.

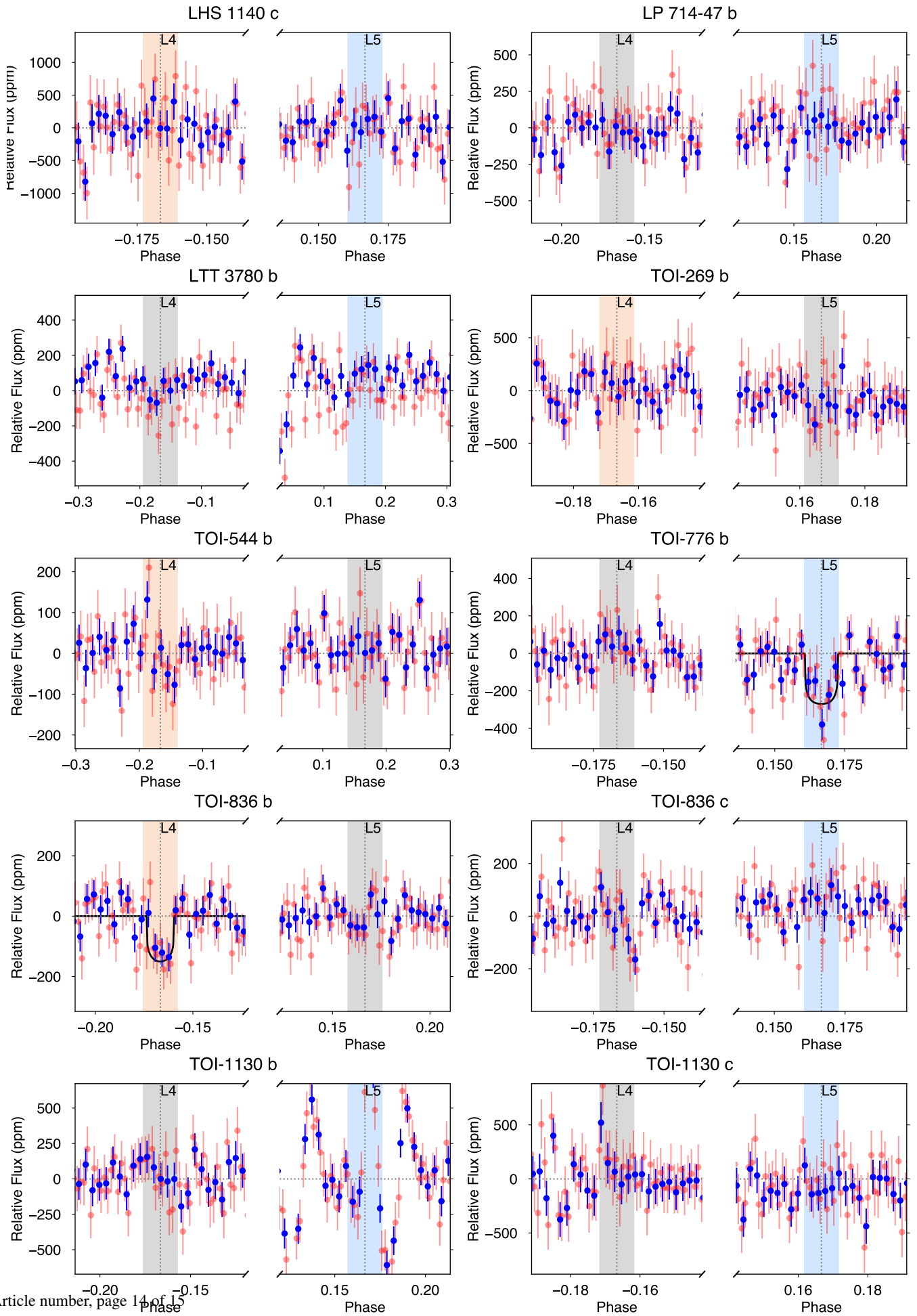


Fig. C.4. Continued.

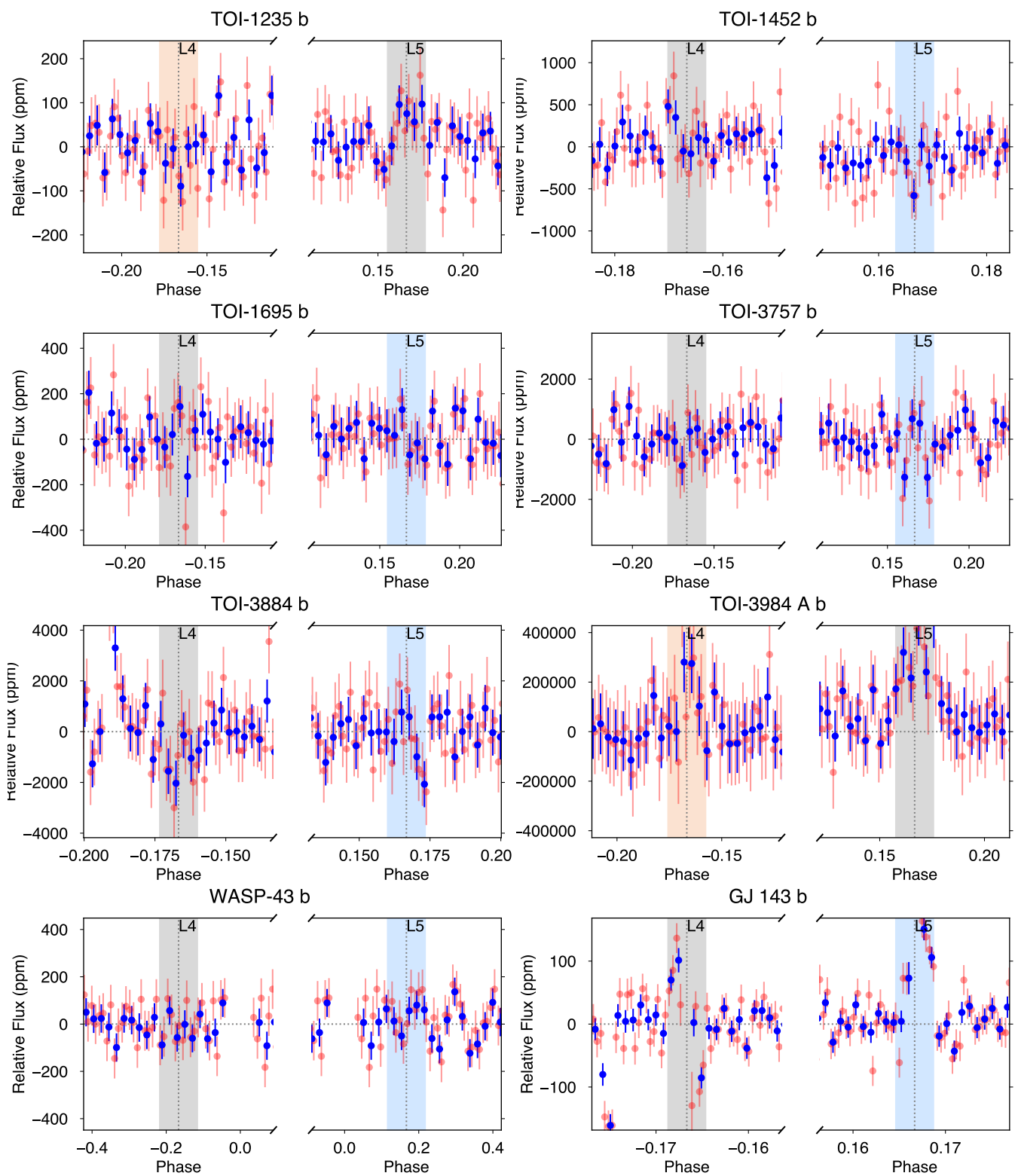


Fig. C.4. Continued.