

KIC 008316526

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
008316526-01	OBS	No	1.355924	132.775098	5.7	11.370	8.4	3.6	2.18	6845	0.53	12290.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008316526-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

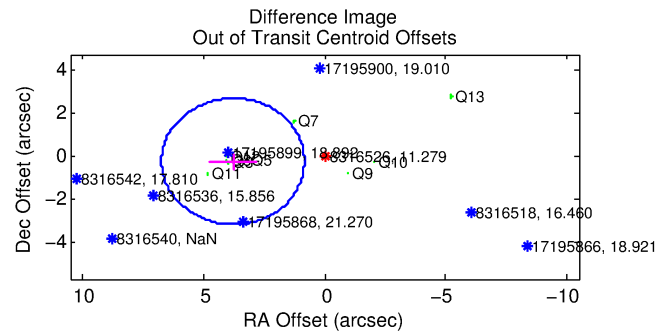
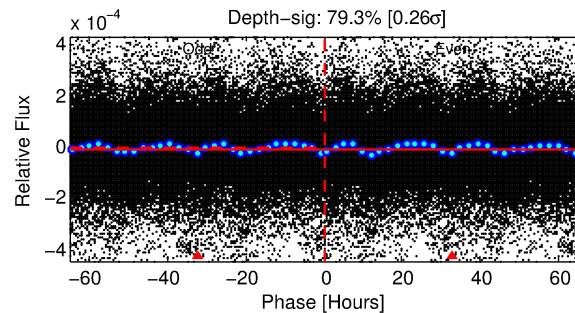
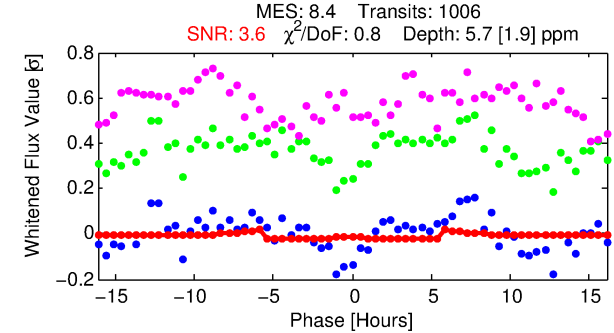
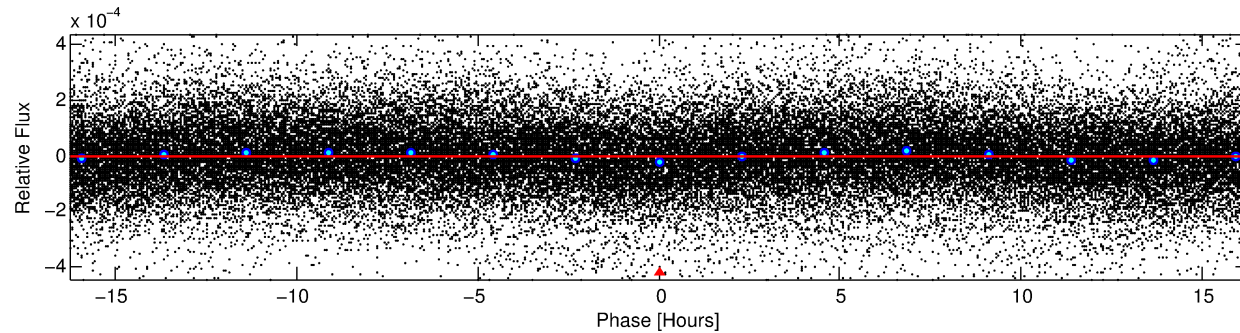
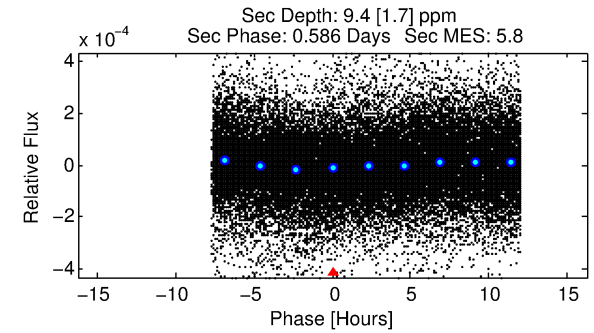
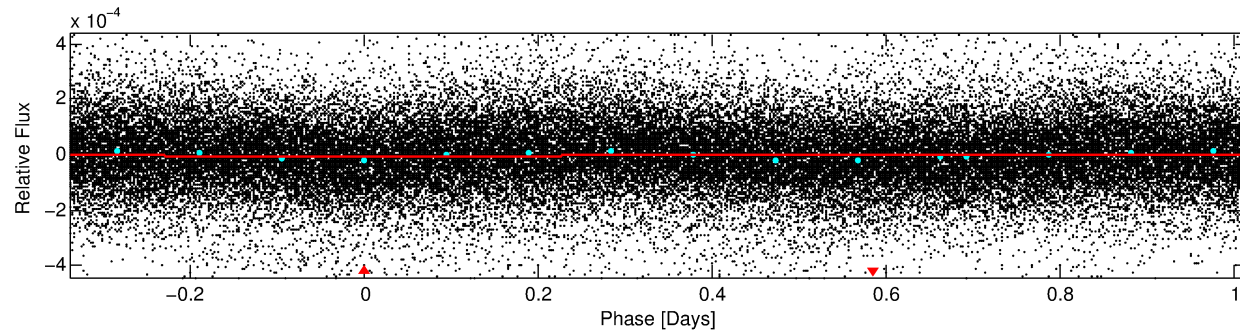
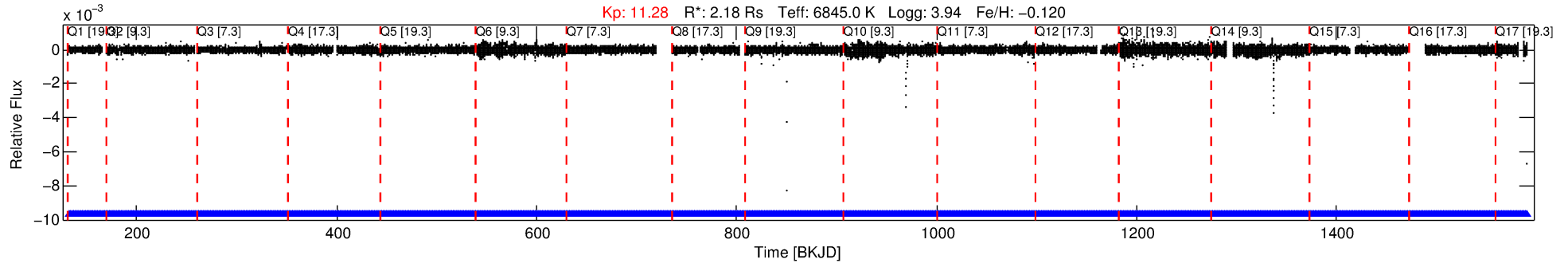
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008316526-01

No Significant Match Found

DV One-Page Summary

KIC: 8316526 Candidate: 1 of 1 Period: 1.356 d



DV Fit Results:

Period = 1.35592 [0.00004] d
Epoch = 132.7751 [0.0095] BKJD
Rp/R* = 0.0022 [0.0030]
a/R* = 1.12 [1.67]
b = 0.30 [23.33]
Seff = 12290.77 [5468.73]
Teq = 2685 [299] K
Rp = 0.53 [0.72] Re
a = 0.0276 [0.0077] AU
Ag = 14.16 [38.26] [0.34σ]
Teffp = 8052 [5378] K [1.00σ]

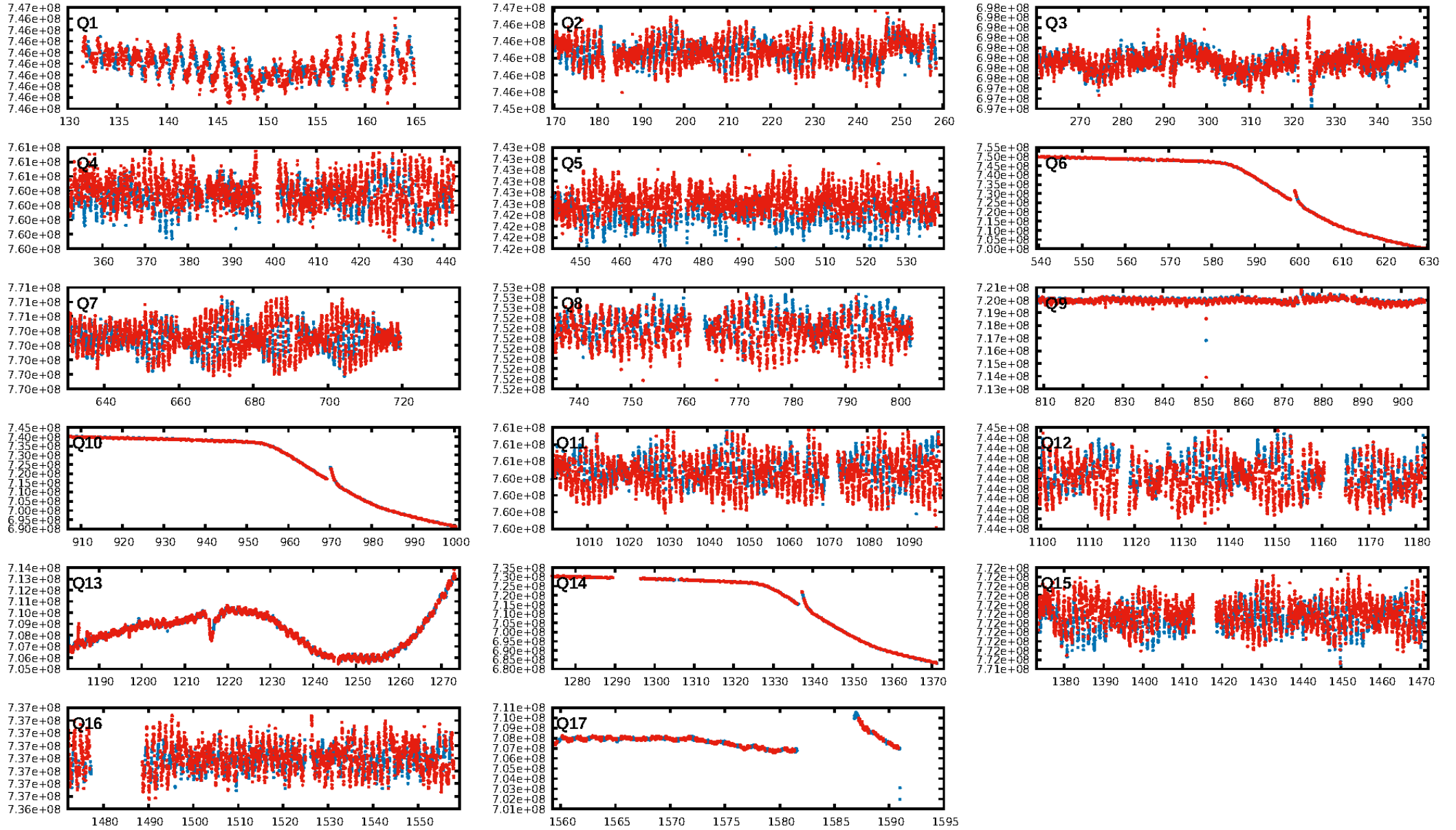
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [961/961]
GhostDiagnostic-chr: 0.5335
Centroid-sig: 0.0%
Centroid-so: 10.684 arcsec [2.98σ]
OotOffset-rm: 3.791 arcsec [3.86σ]
KicOffset-rm: 3.415 arcsec [3.31σ]
OotOffset-st: 1/3/2/3 [9]
KicOffset-st: 1/3/2/3 [9]
DiffImageQuality-fgm: 0.56 [5/9]
DiffImageOverlap-fno: 1.00 [17/17]

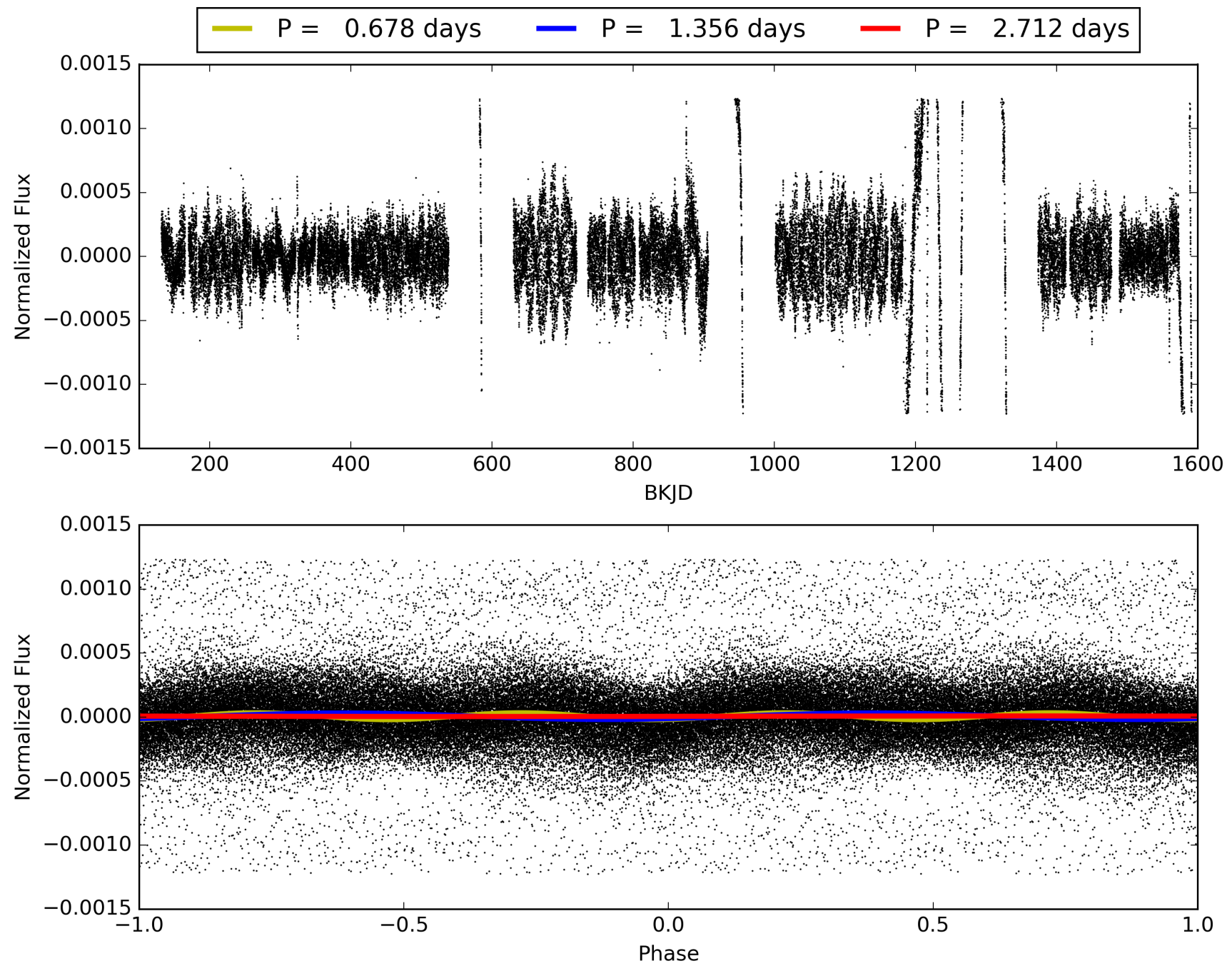
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:01:17 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 008316526-01, PDC Light Curves

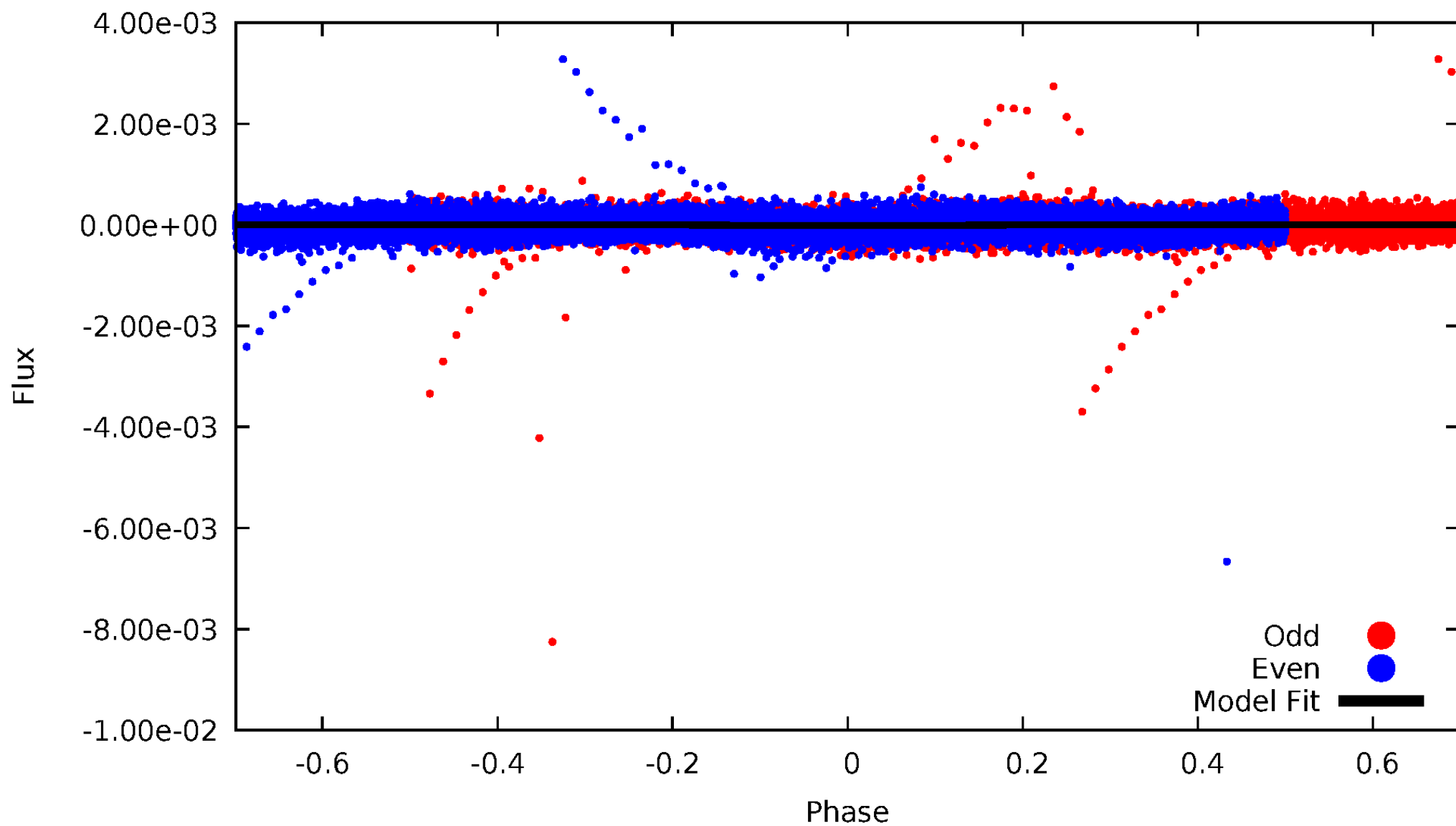


TCE 008316526-01



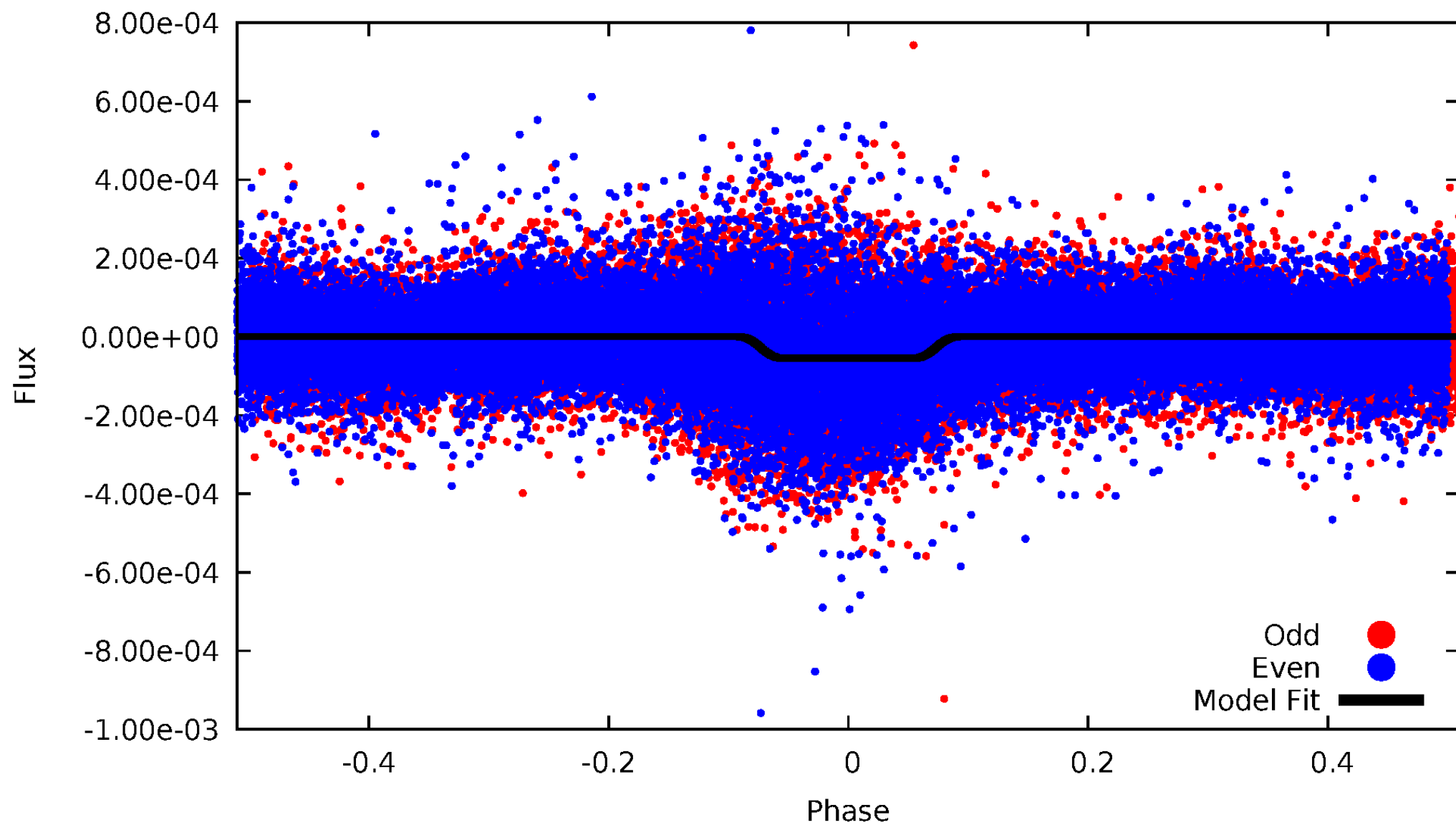
DV Odd/Even

TCE 008316526-01

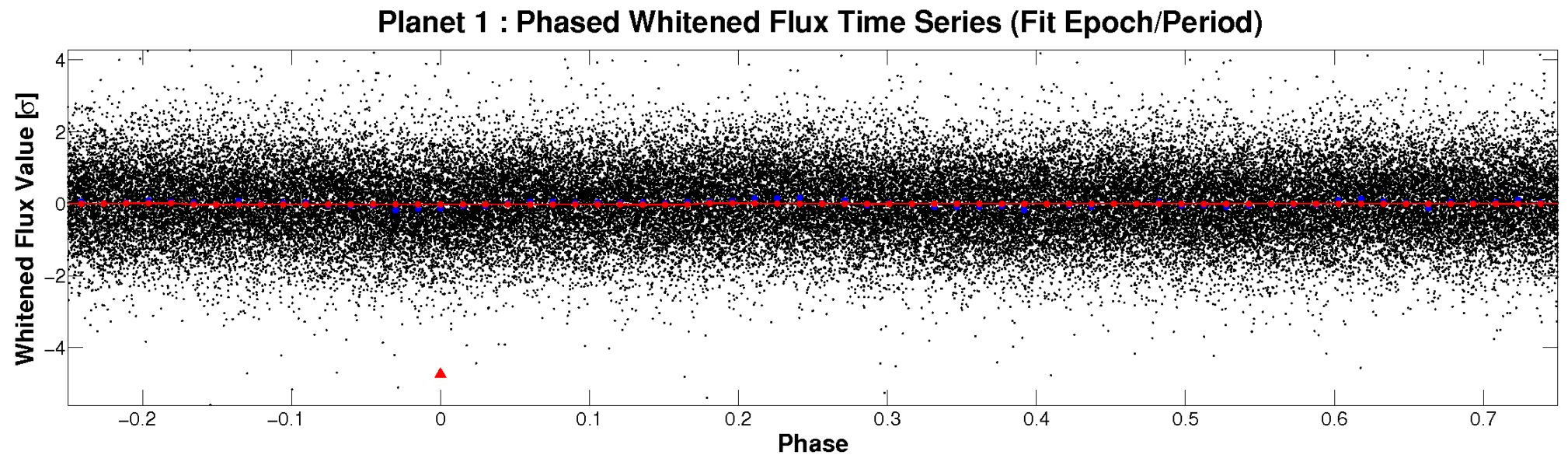
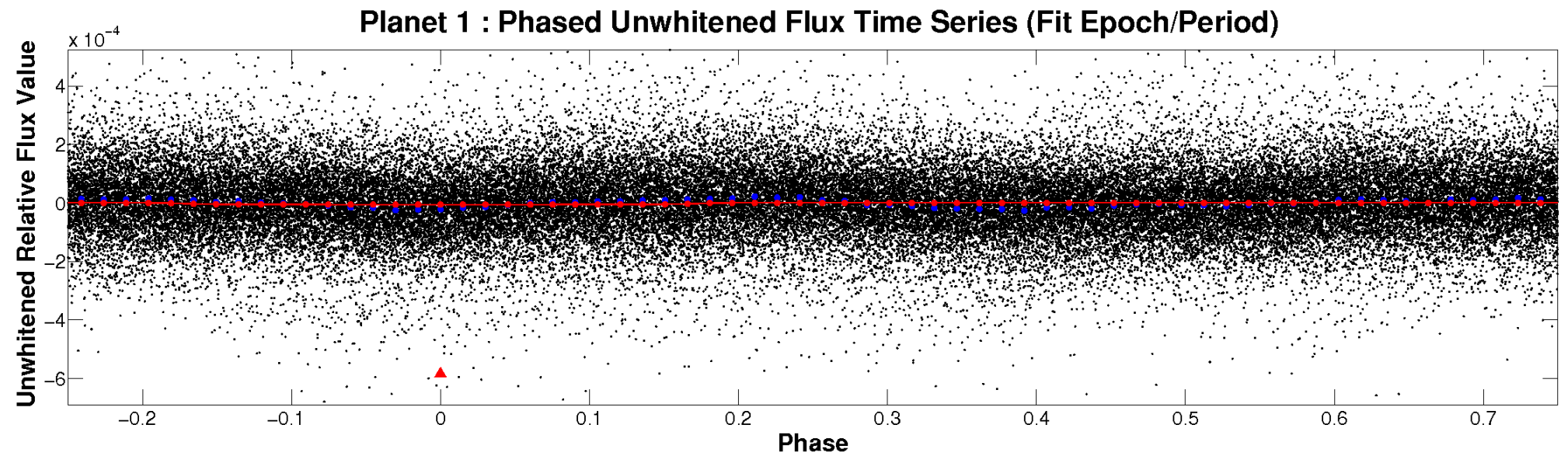


ALT Odd/Even

TCE 008316526-01

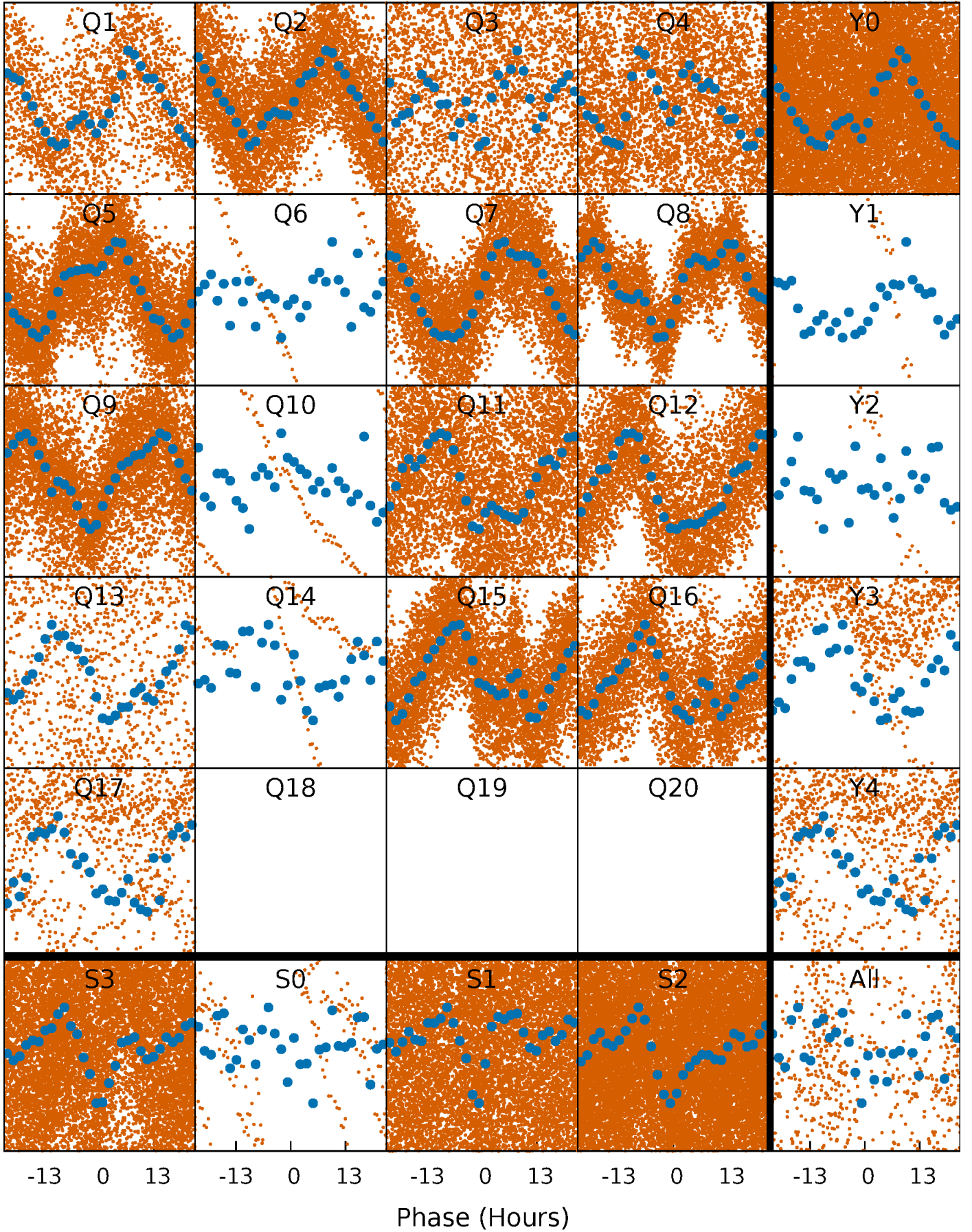


Non-Whitened Vs. Whitened Light Curve



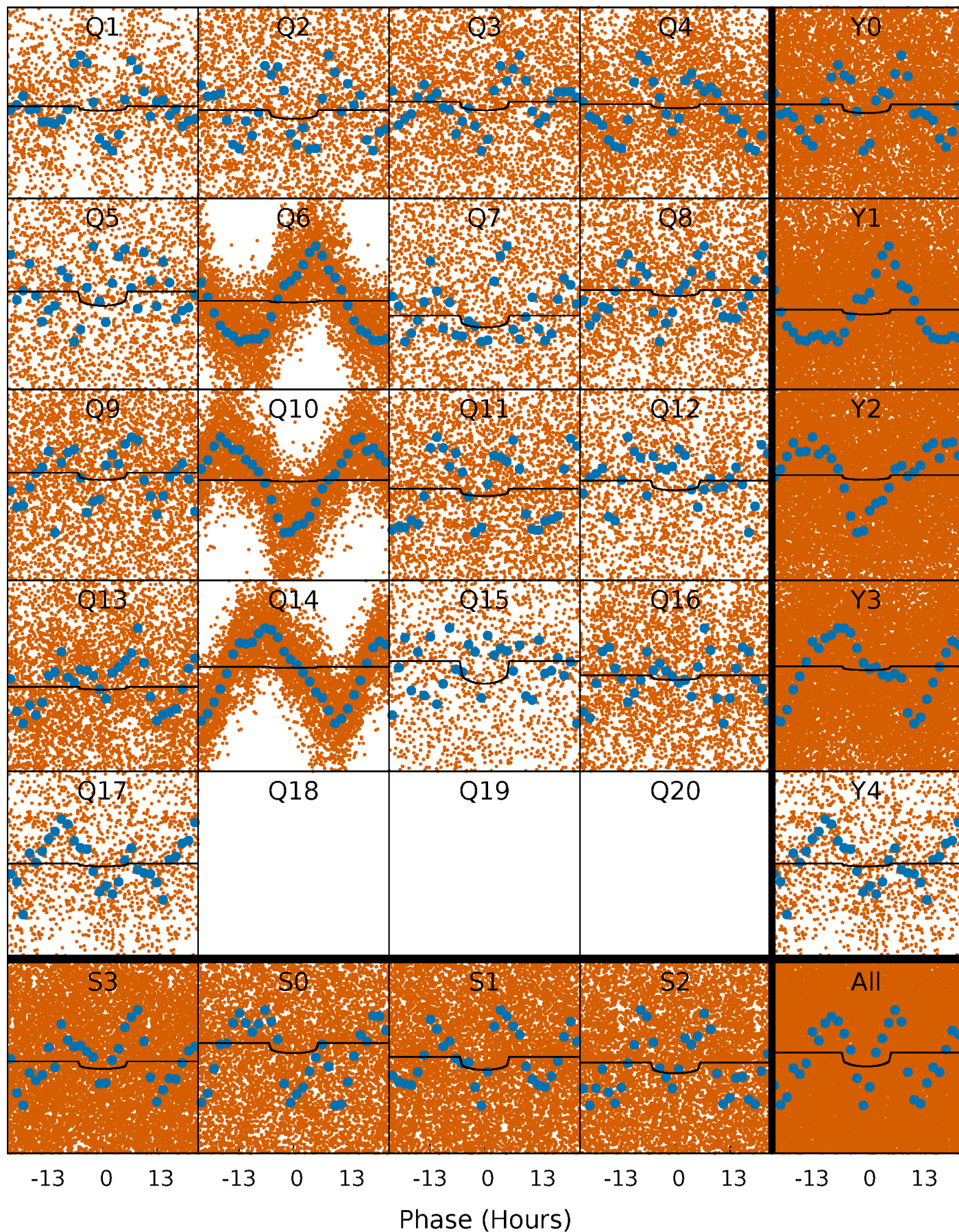
PDC Quarter-Phased Transit Curves

TCE 008316526-01 P= 1.355924 Days $T_0=132.775098$ (BKJD)



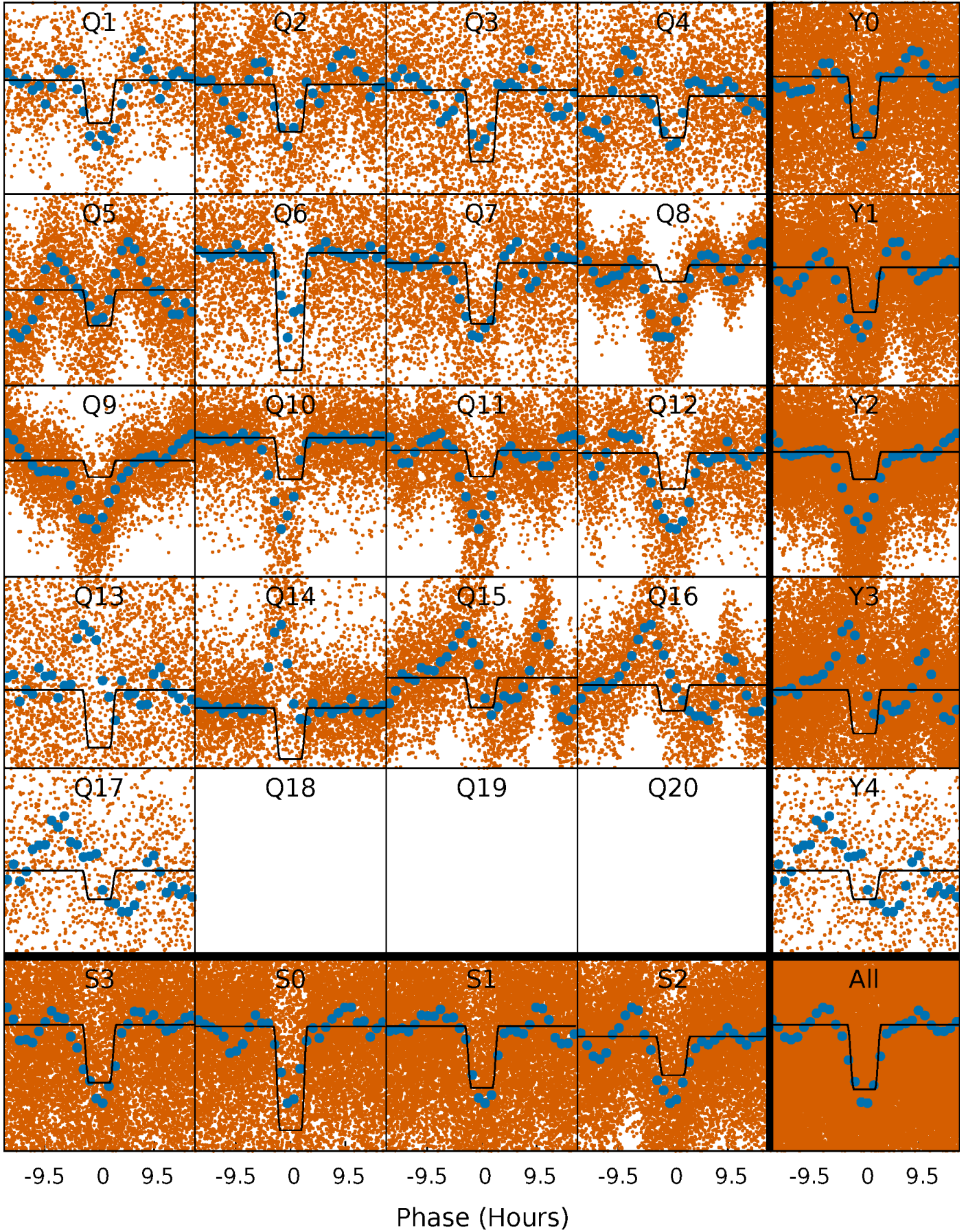
DV Quarter-Phased Transit Curves

TCE 008316526-01 P= 1.355924 Days $T_0=132.775098$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

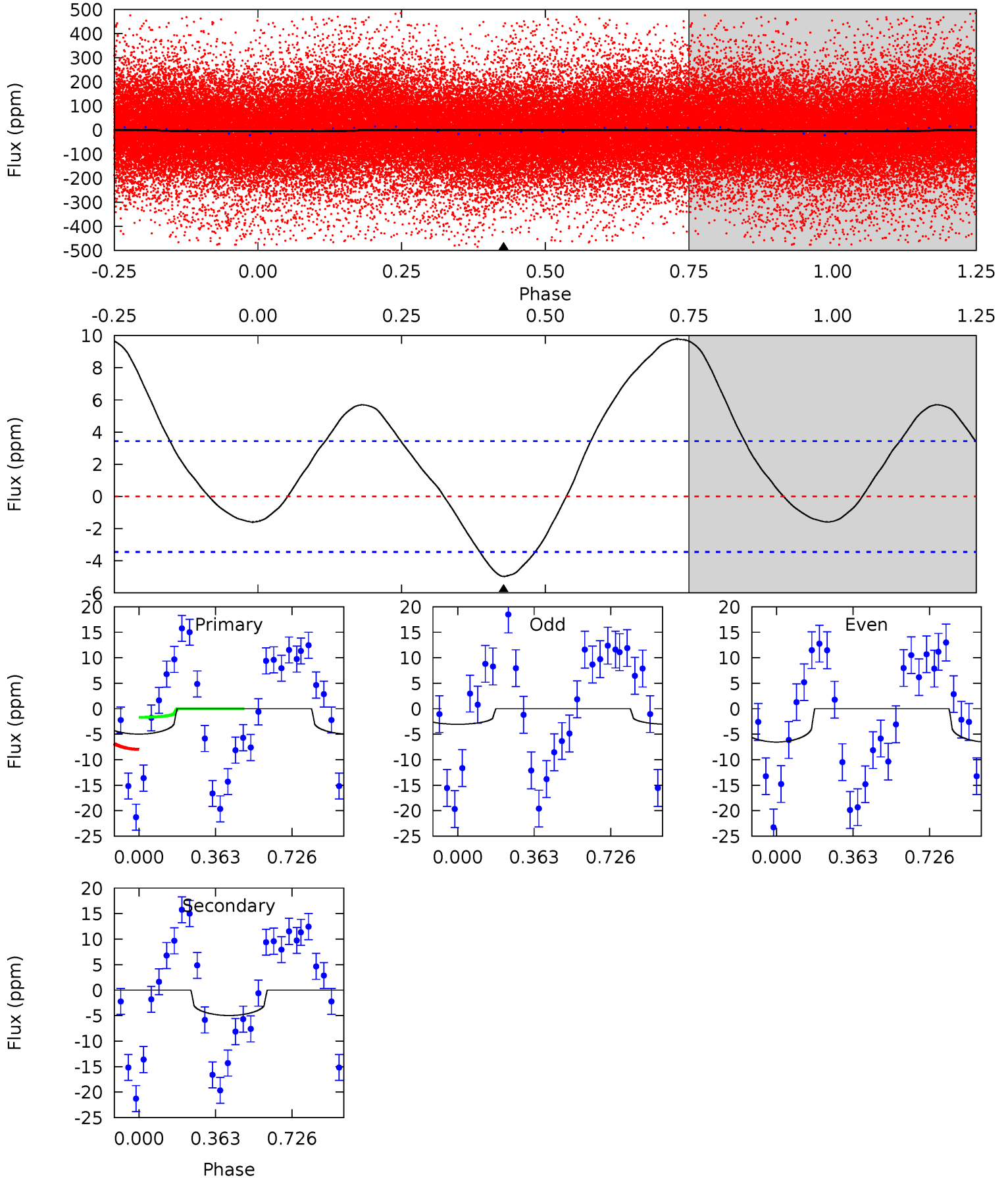
TCE 008316526-01 P= 1.355811 Days $T_0=132.786890$ (BKJD)



DV Model-Shift Uniqueness Test

008316526-01, P = 1.355924 Days, E = 131.419174 Days

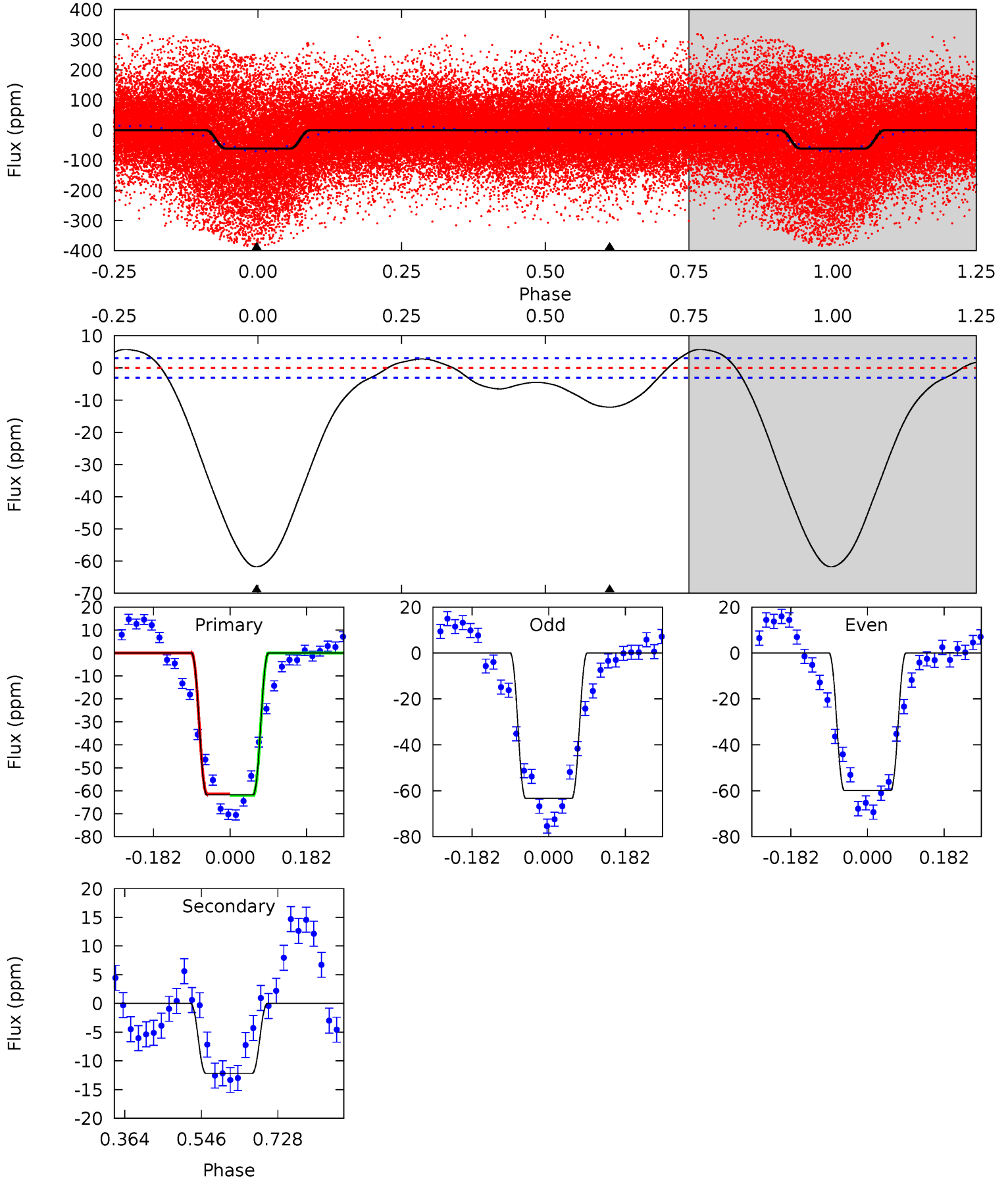
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.19	6.19	0	0	4.29	0.91	3.32	6.19	6.19	6.19	6.19	2.17	1.56	0.66	3.95



Alt Model-Shift Uniqueness Test

008316526-01, P = 1.355811 Days, E = 131.431079 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
89.8	17.7	0	0	4.44	1.33	4.93	89.8	89.8	17.7	17.7	2.45	1.01	0.09	0.50



Stellar Parameters For KIC 008316526

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6845^{+170}_{-221}	$3.943^{+0.241}_{-0.130}$	$-0.120^{+0.250}_{-0.300}$	$2.179^{+0.459}_{-0.689}$	$1.518^{+0.183}_{-0.297}$	$0.207^{+0.335}_{-0.069}$
	+2%/-3%	+6%/-3%	+208%/-250%	+21%/-32%	+12%/-20%	+162%/-33%
Source	PHO1	FLK73	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 008316526-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5 ± 1	$0.73^{+0.58}_{-0.48}$	3680^{+271}_{-273}	5465^{+4942}_{-1314}	$3.814^{+29.389}_{-2.688}$
Alt.	-12 ± 1	$1.73^{+0.75}_{-0.72}$	3711^{+237}_{-279}	4560^{+1334}_{-726}	$1.680^{+3.362}_{-0.854}$

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

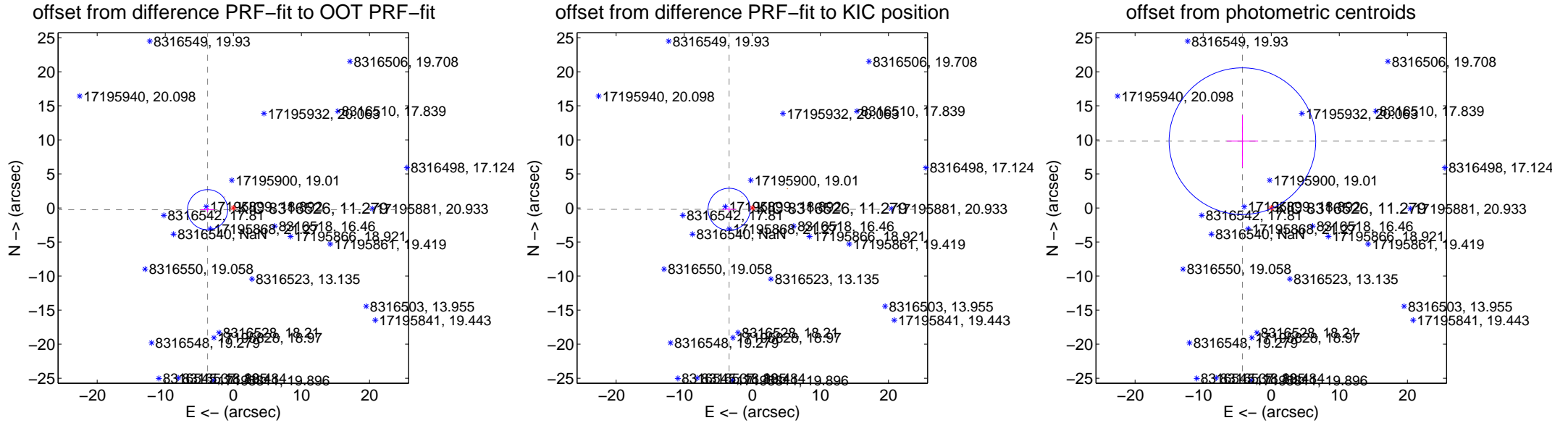
DV Centroid Data

Supplemental centroid analysis for 008316526-01. **Kepler magnitude: 11.28.** Transit SNR 3.62

There are 5 quarters with good PRF difference image offsets

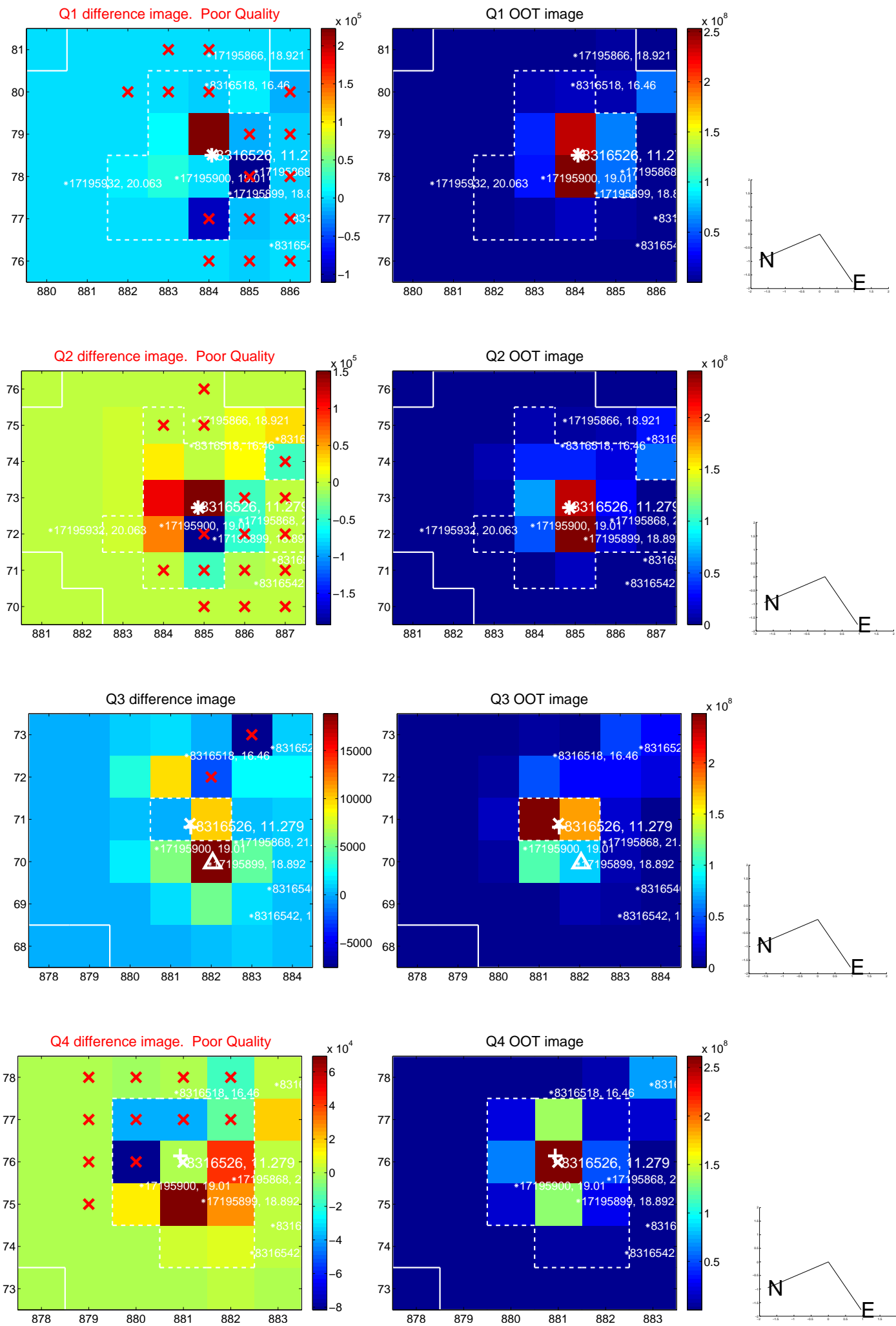
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.791 \pm 0.983	3.86	3.783 \pm 0.971	-0.257 \pm 0.360
PRF-fit source offset from KIC position	3.415 \pm 1.031	3.31	3.409 \pm 1.018	-0.202 \pm 0.376
photometric centroid source offset	10.68 \pm 3.59	2.98	4.23 \pm 2.30	9.81 \pm 3.78

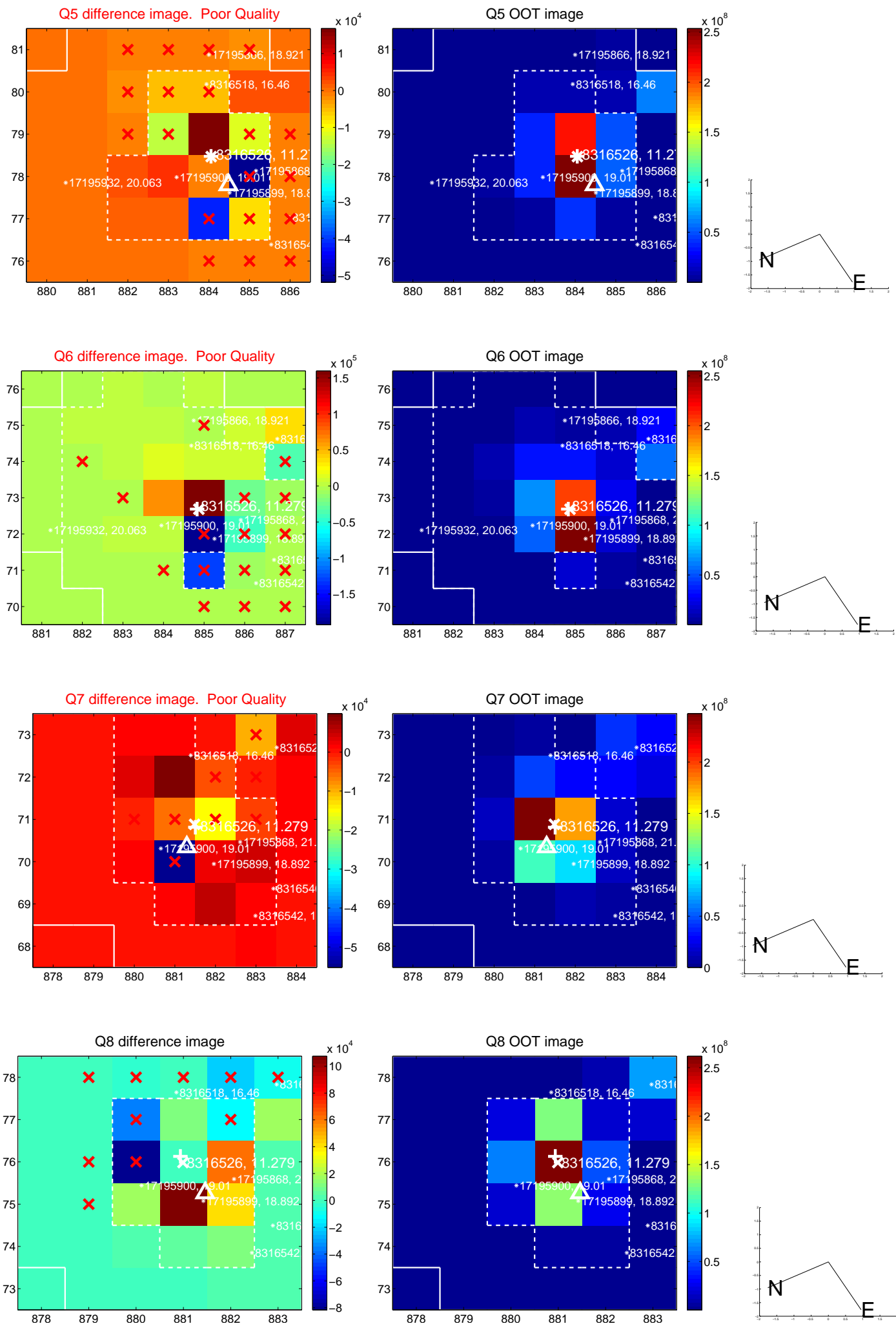


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

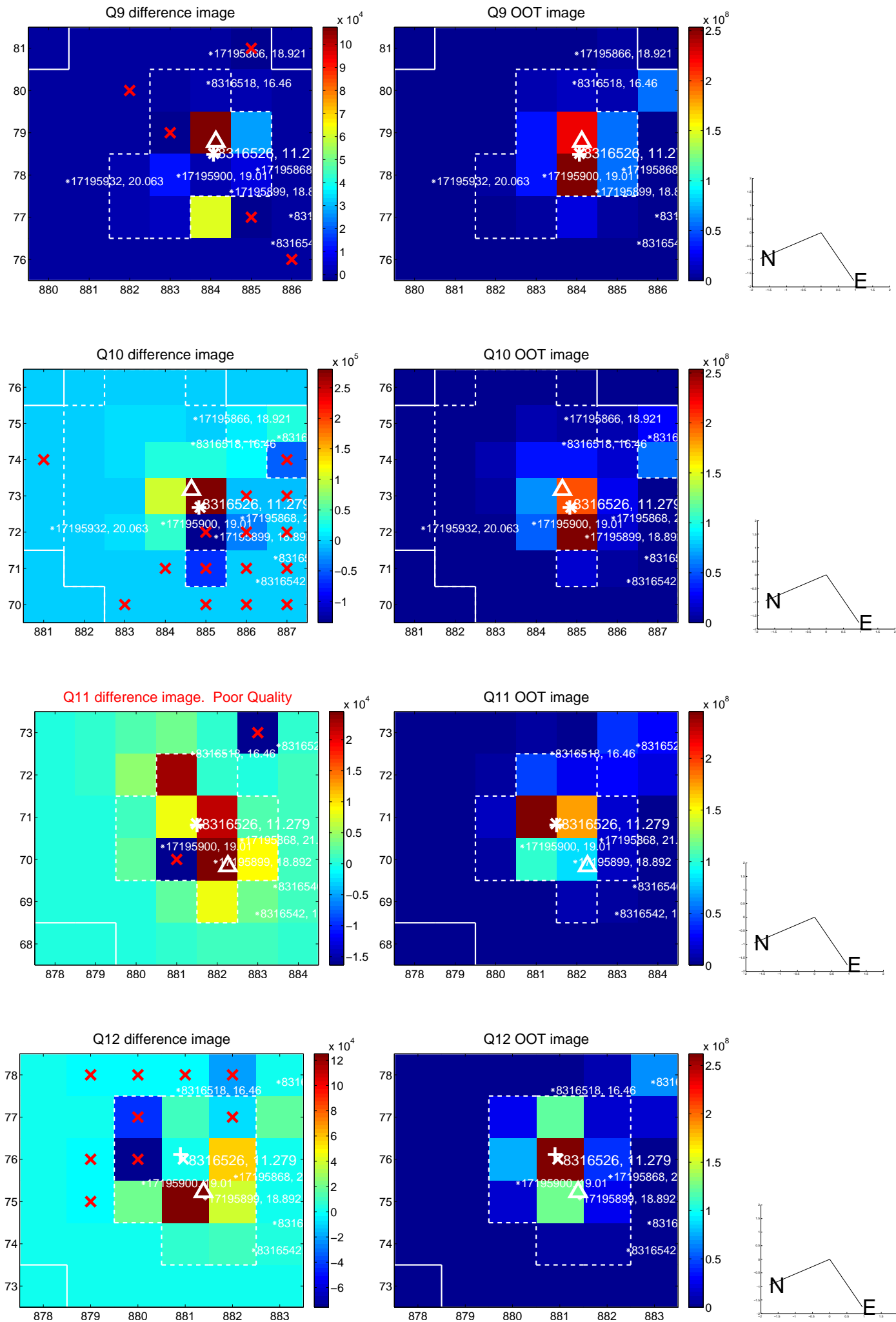
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



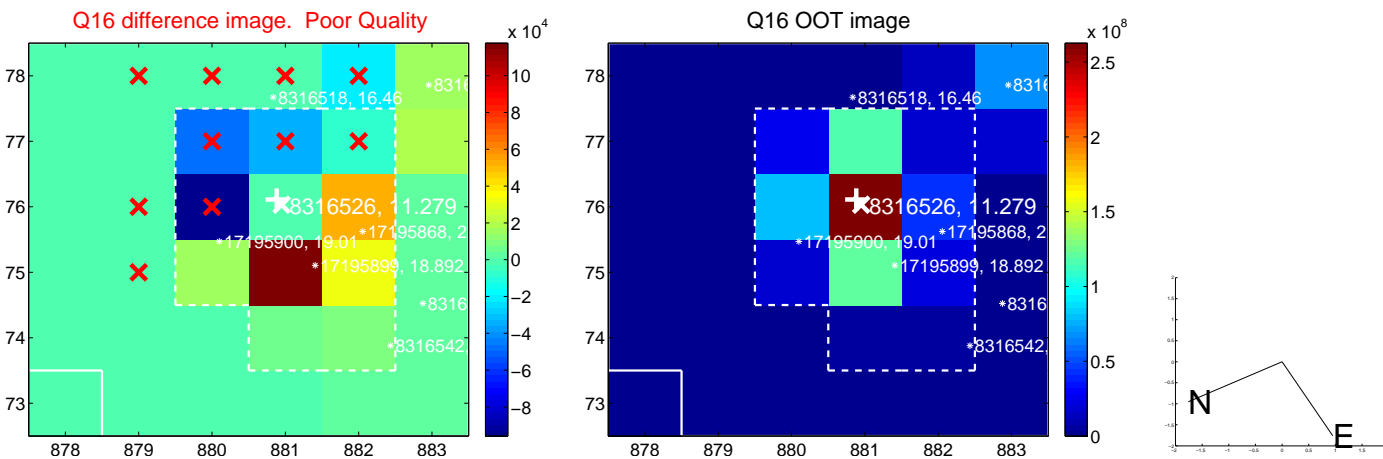
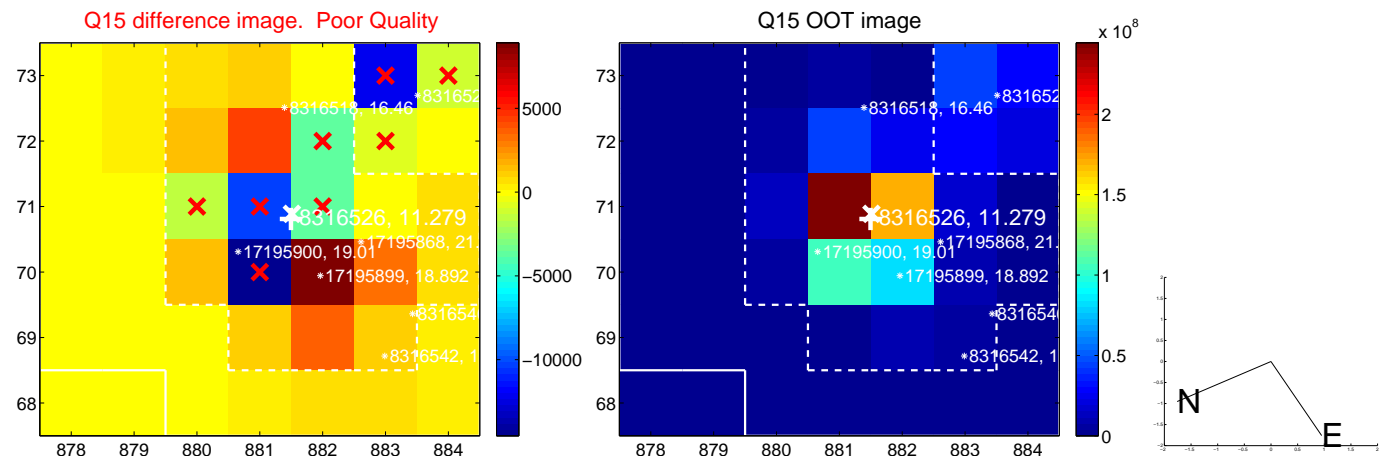
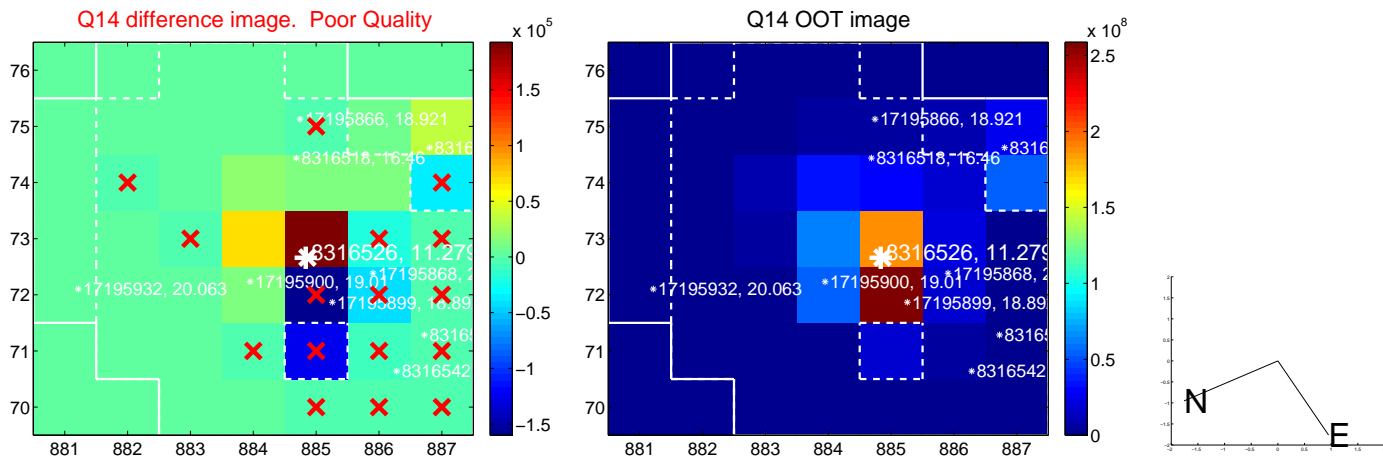
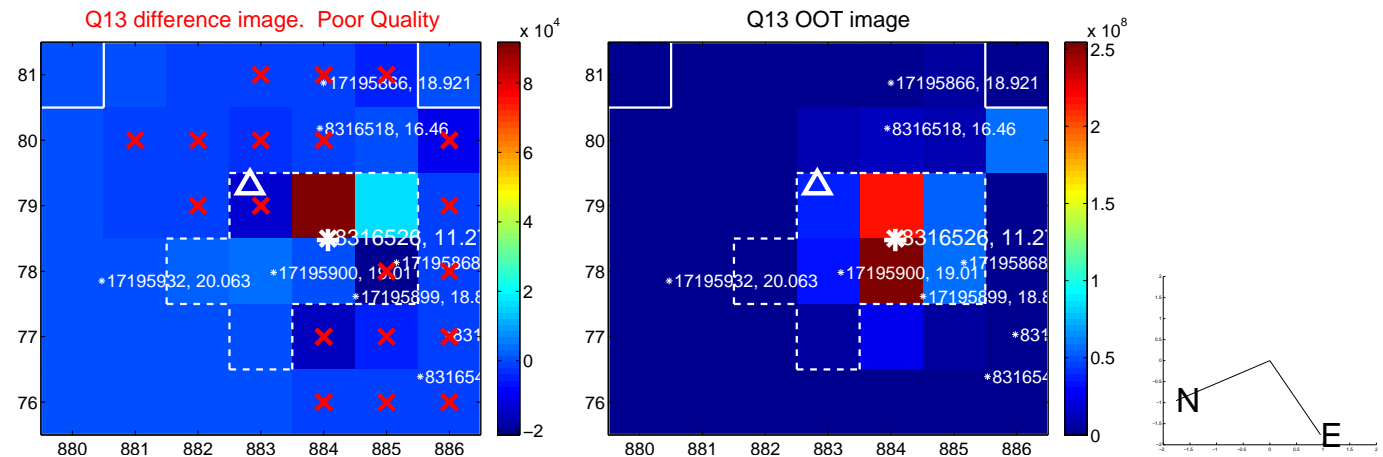
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



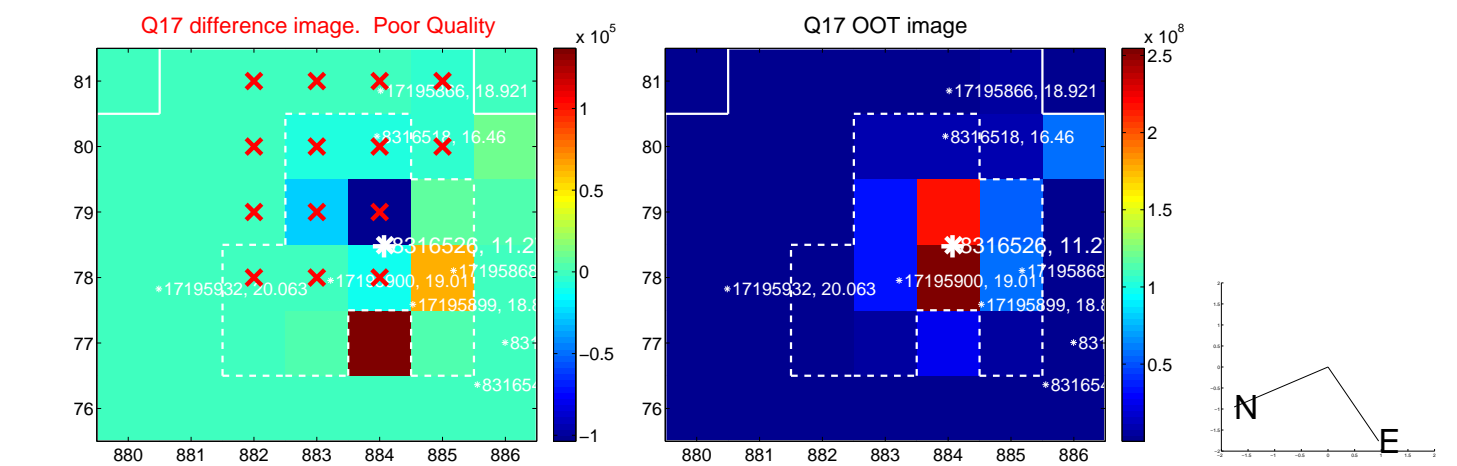
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



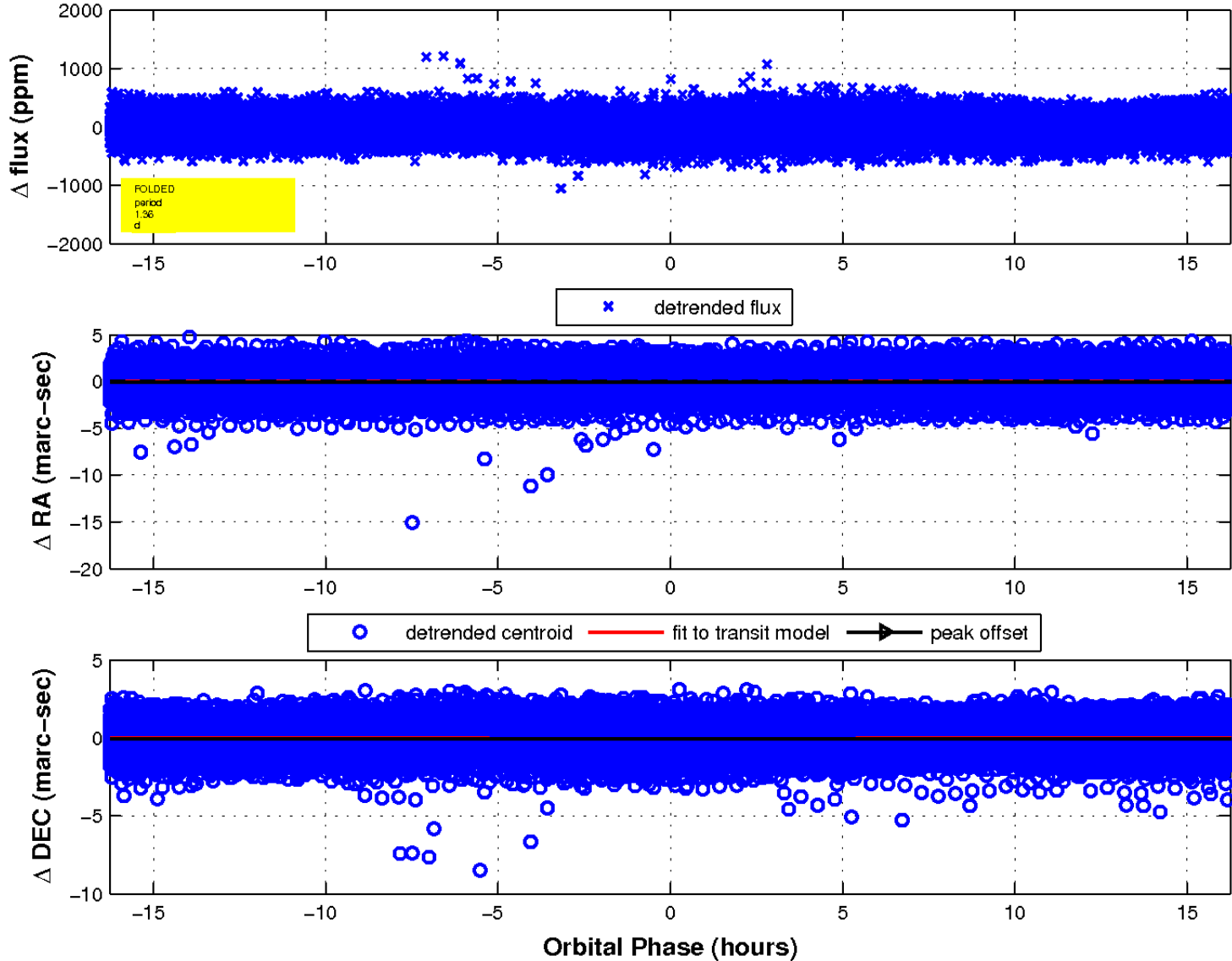
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

