

KIC 008625925

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})
008625925-01	OBS	0580.01	6.521208	136.583997	760.1	2.910	58.7	66.8	0.90	5822	2.80	178.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008625925-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

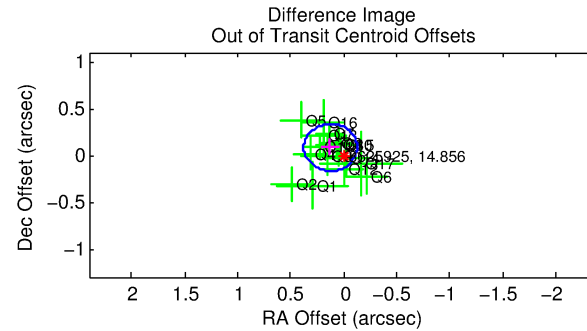
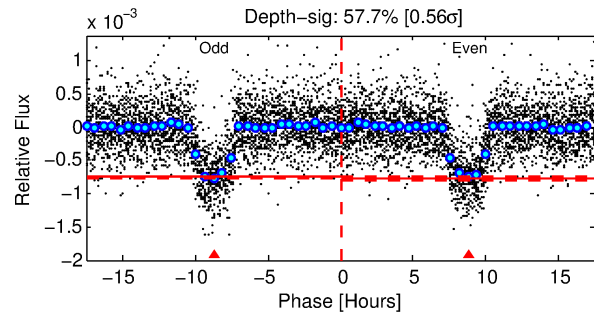
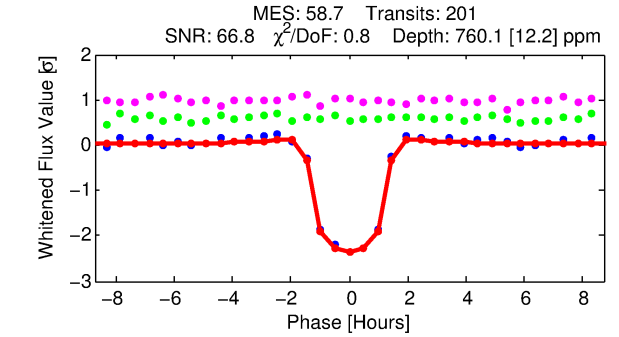
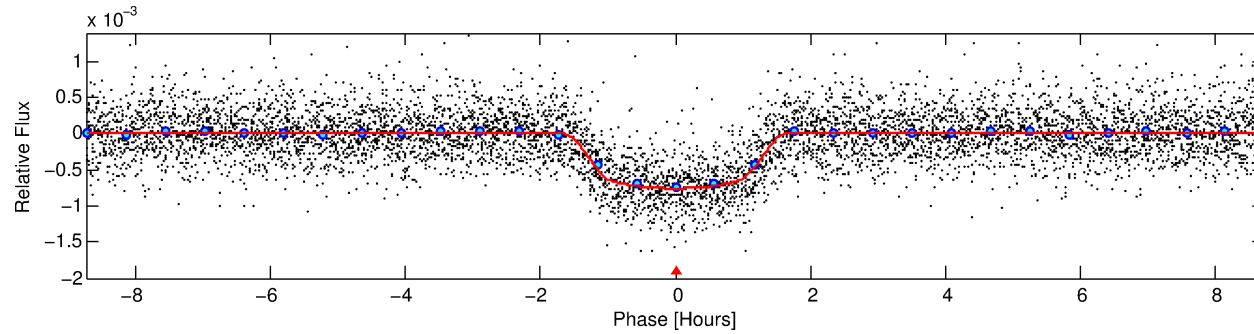
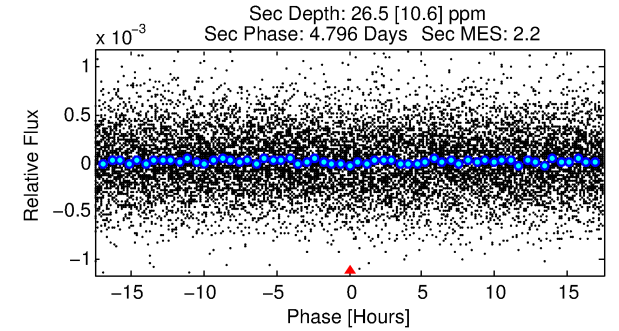
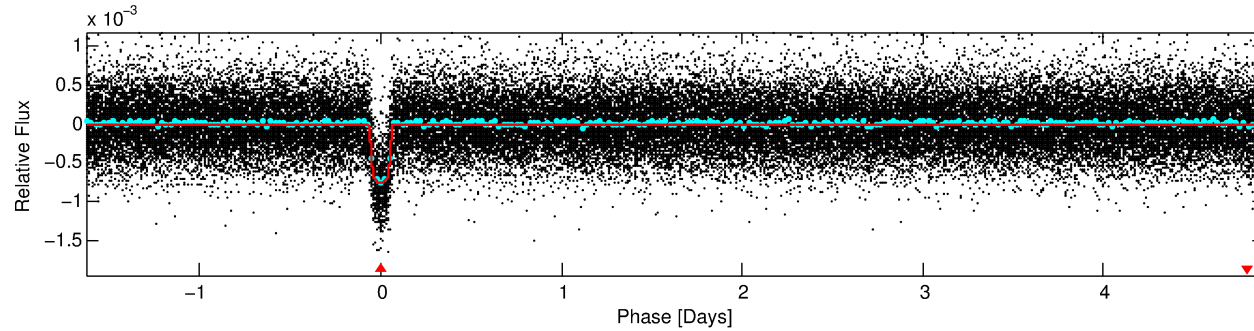
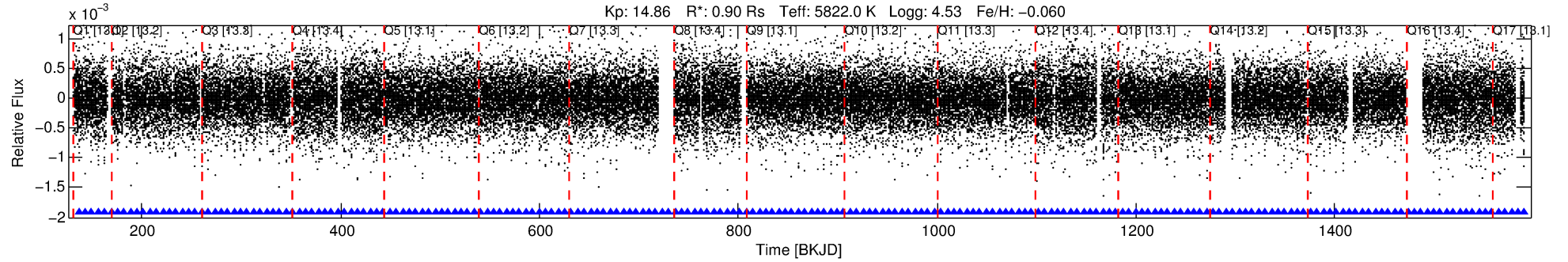
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008625925-01

No Significant Match Found

DV One-Page Summary

KIC: 8625925 Candidate: 1 of 1 Period: 6.521 d
KOI: K00580.01 Corr: 0.983



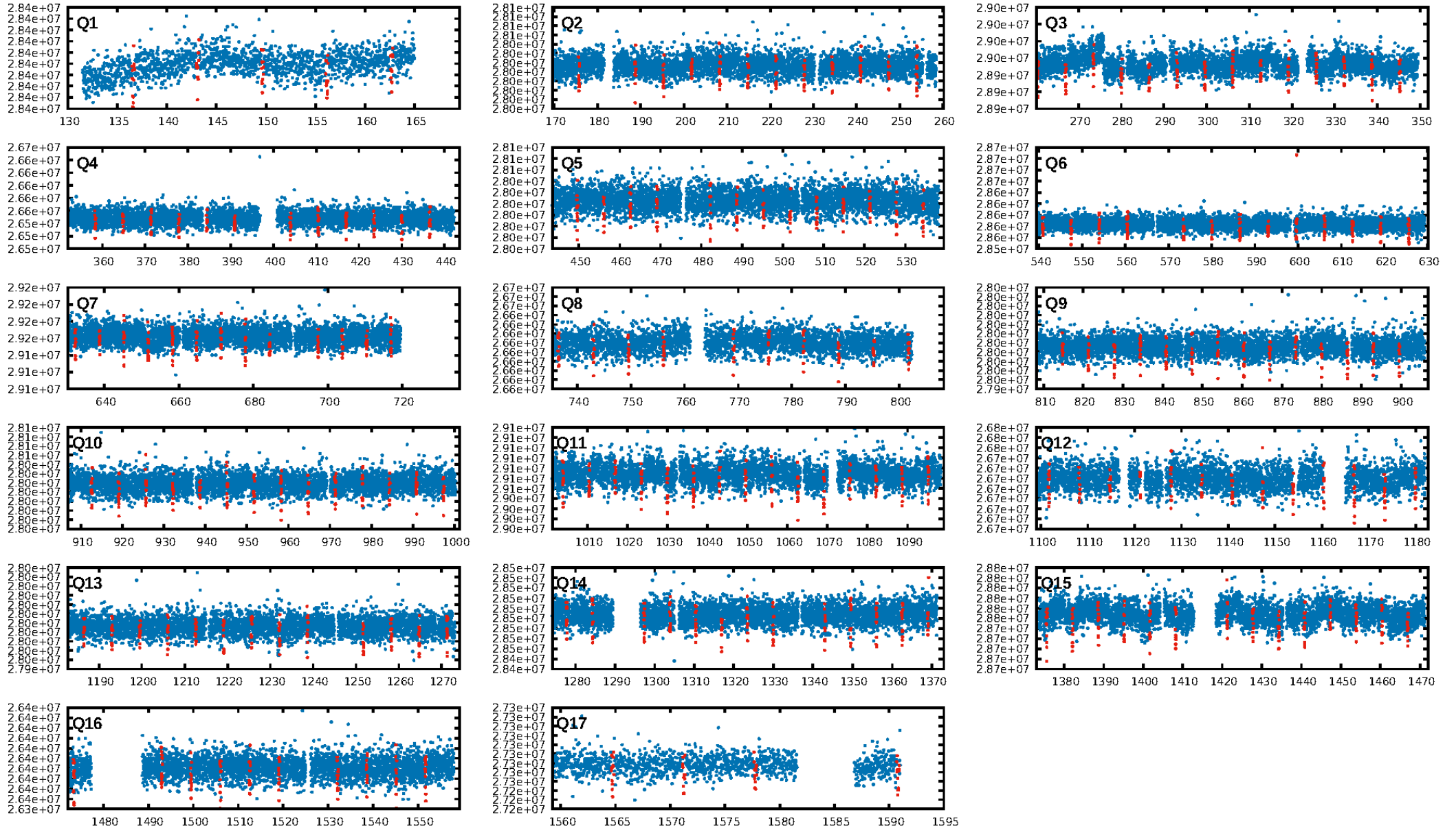
DV Fit Results:

Period = 6.52121 [0.00001] d
Epoch = 136.5840 [0.0009] BKJD
Rp/R* = 0.0286 [0.0025]
a/R* = 10.36 [4.09]
b = 0.83 [0.15]
Seff = 178.48 [58.36]
Teff = 932 [76] K
Rp = 2.80 [0.72] Re
a = 0.0682 [0.0141] AU
Ag = 8.65 [4.59] [1.66σ]
Teffp = 2471 [279] K [5.32σ]

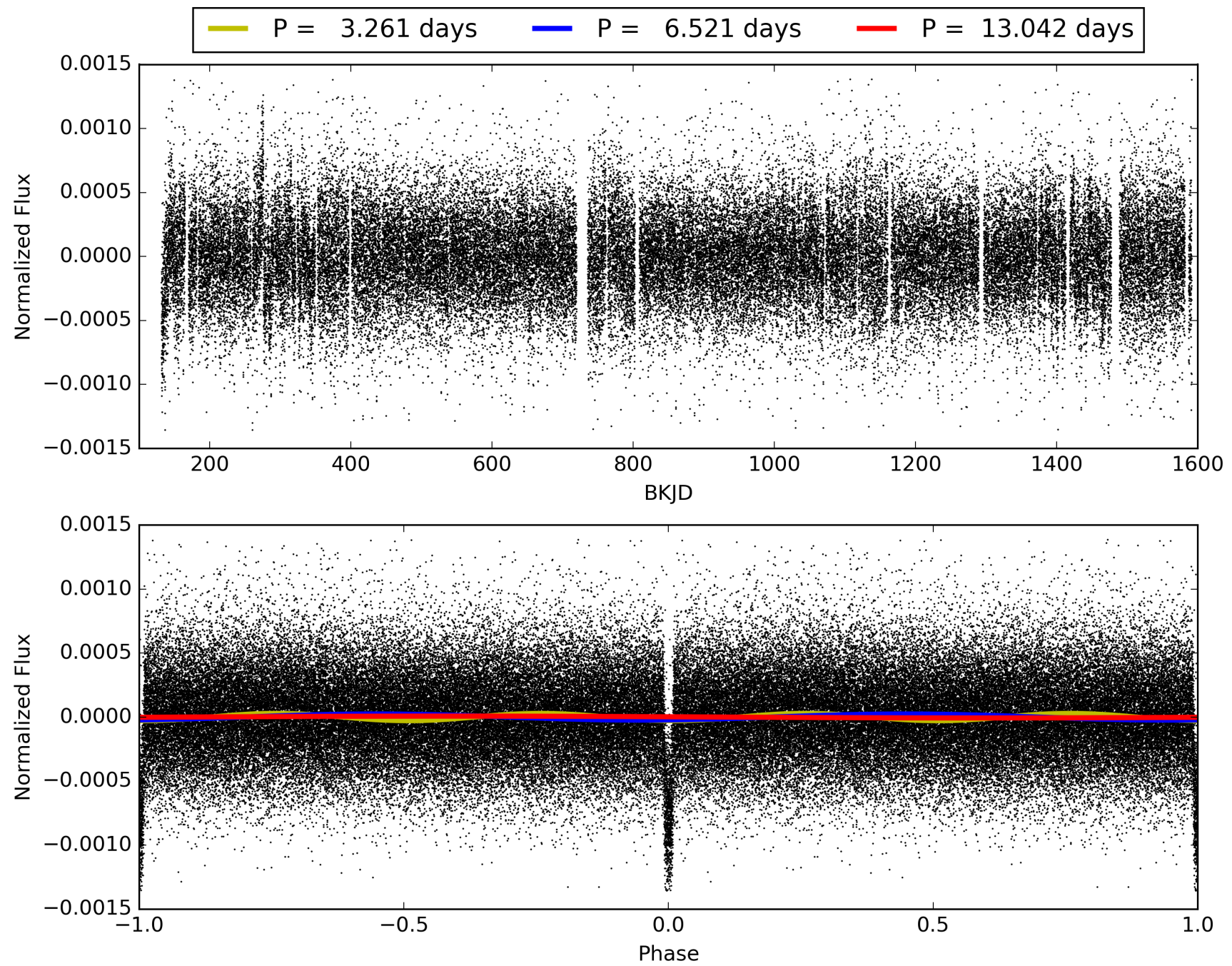
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [192/192]
GhostDiagnostic-chr: 5.301
Centroid-sig: 1.0%
Centroid-so: 0.358 arcsec [1.72σ]
OotOffset-rm: 0.149 arcsec [1.78σ]
KicOffset-rm: 0.126 arcsec [1.49σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008625925-01, PDC Light Curves

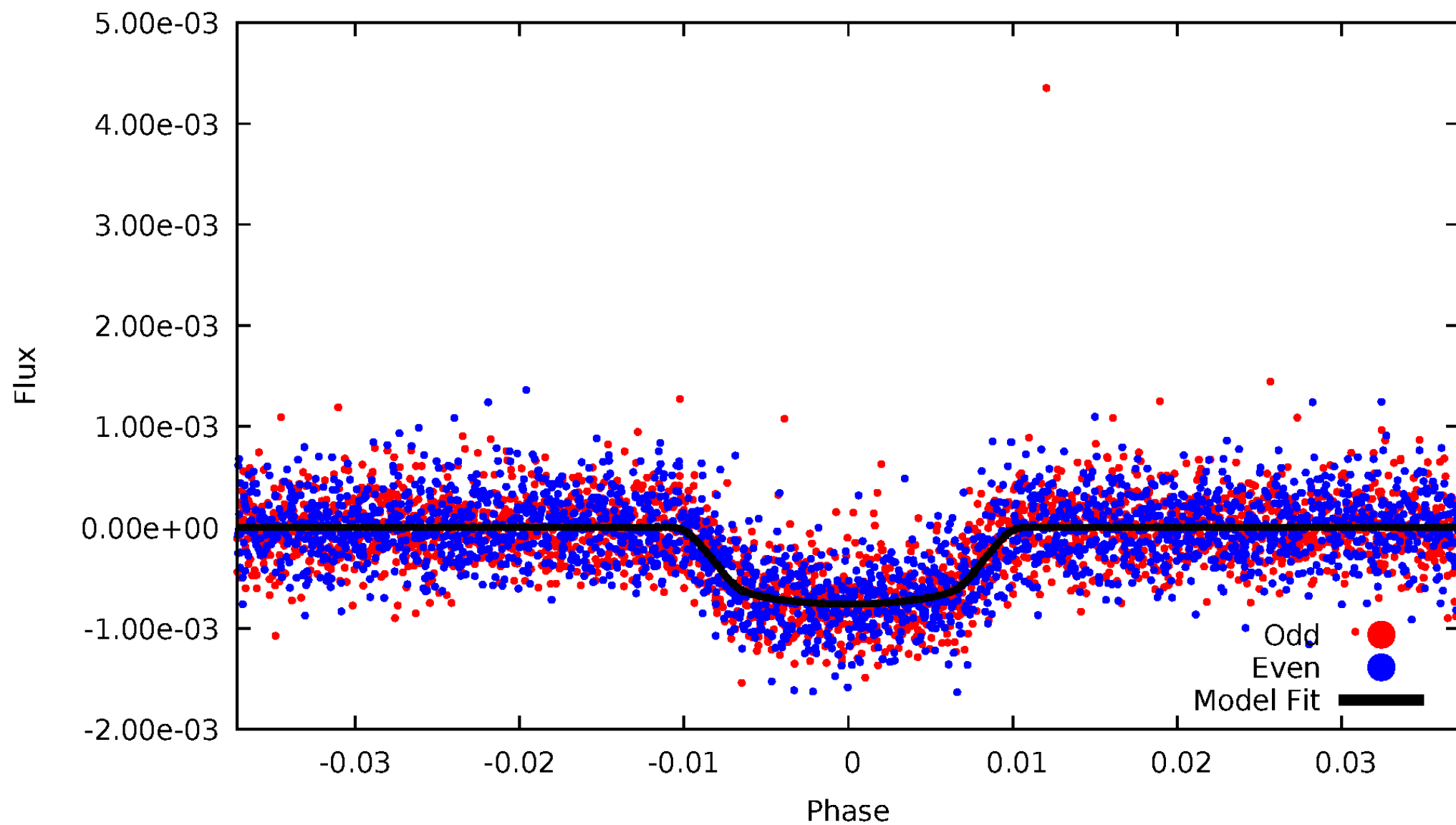


TCE 008625925-01



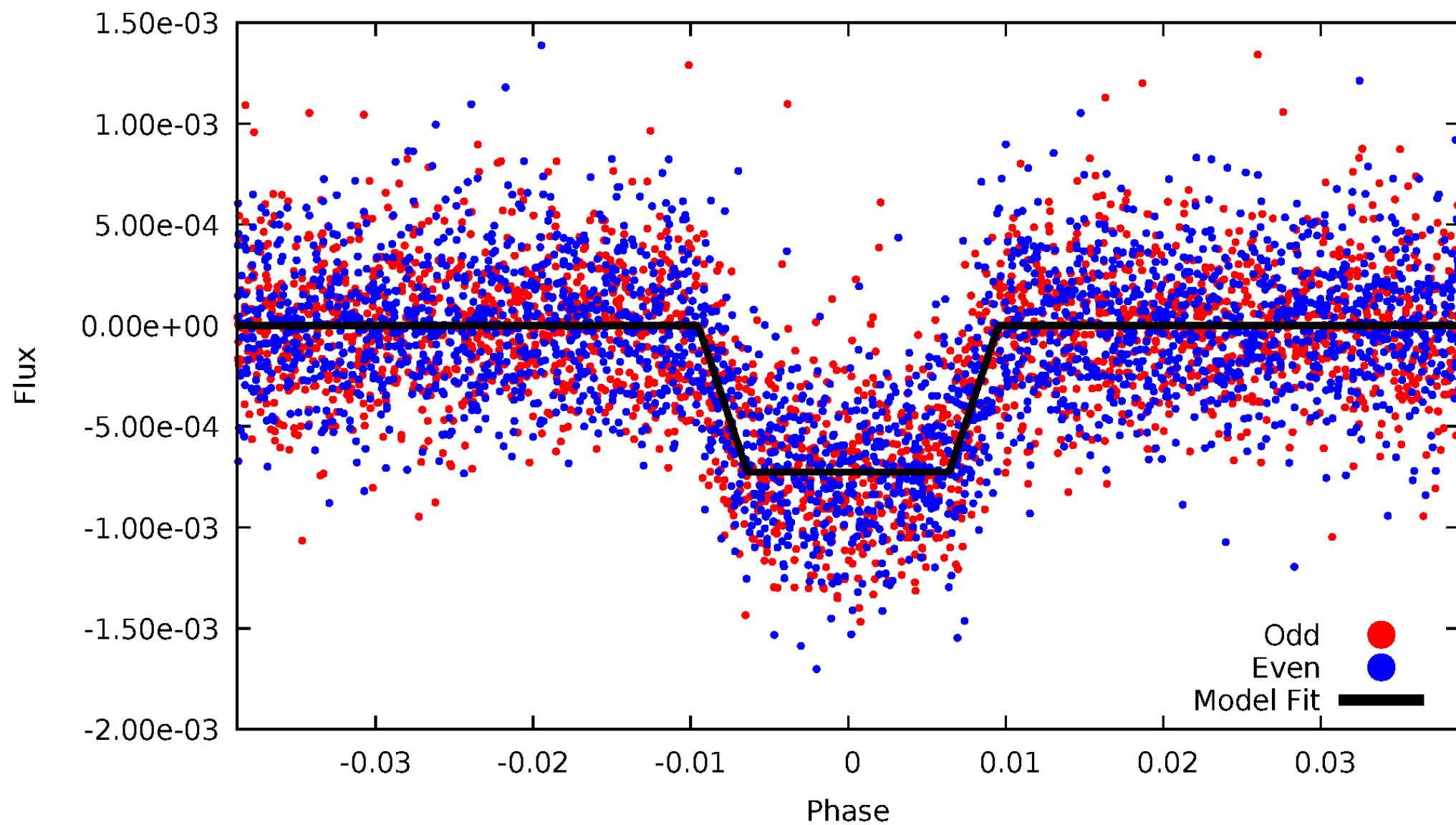
DV Odd/Even

TCE 008625925-01

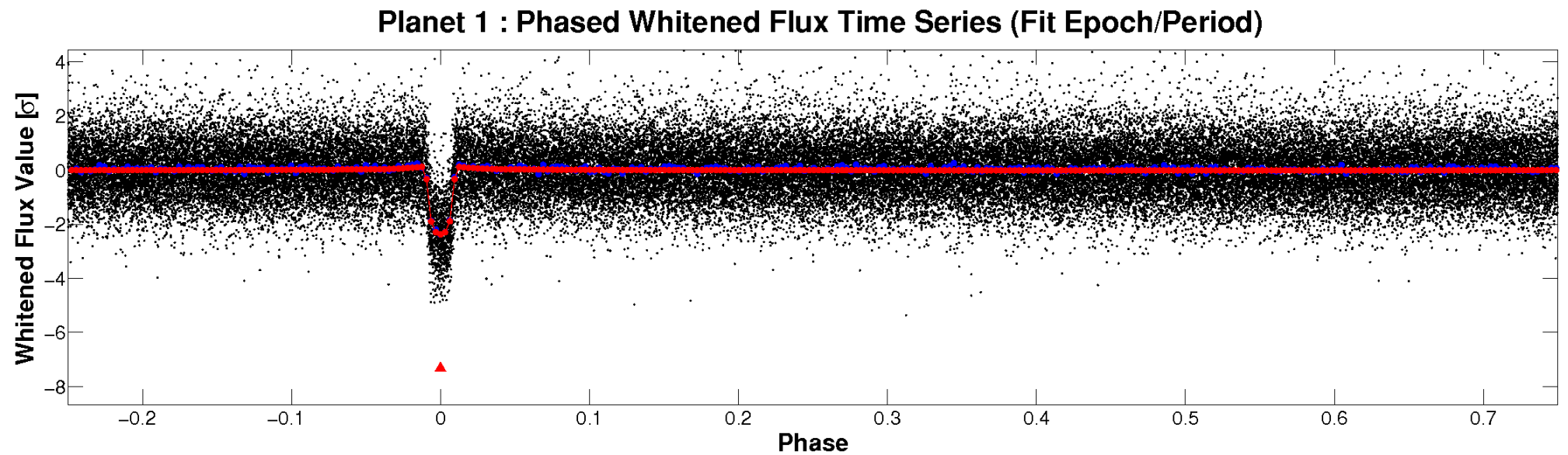
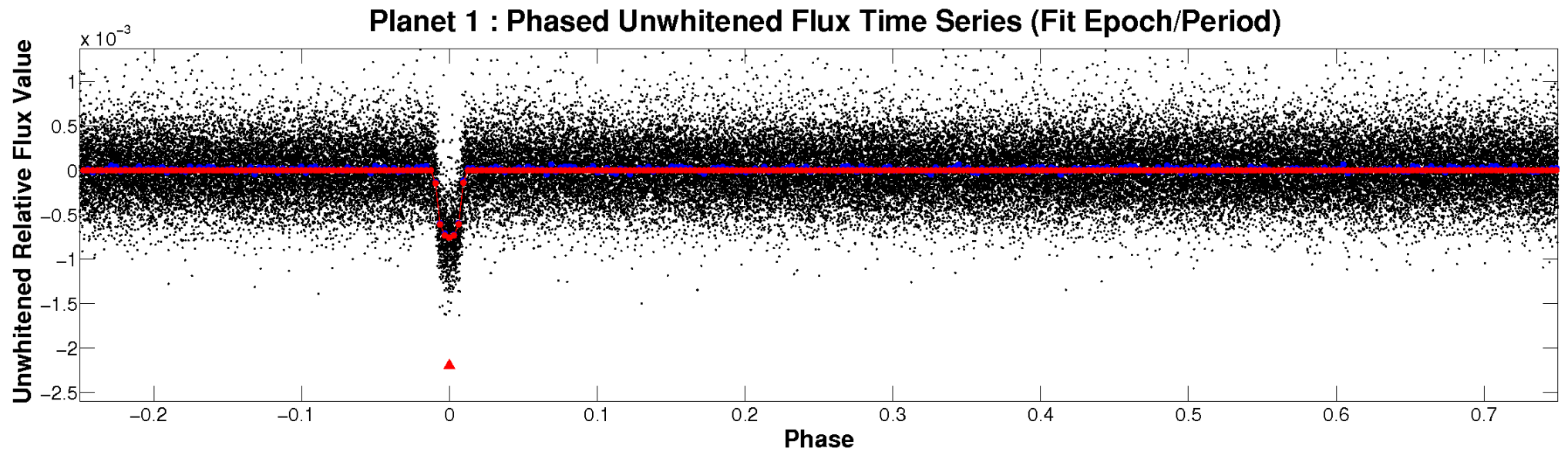


ALT Odd/Even

TCE 008625925-01

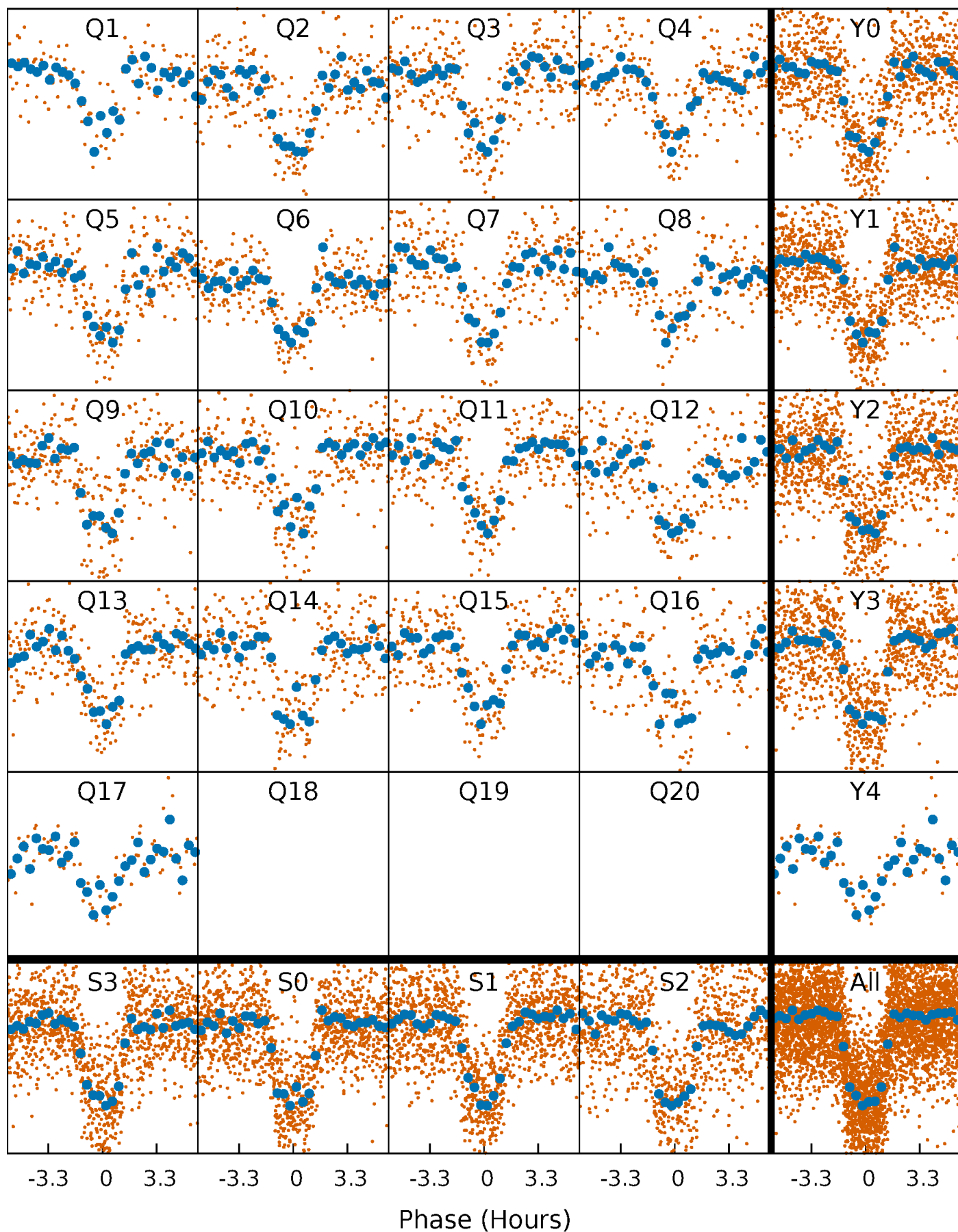


Non-Whitened Vs. Whitened Light Curve



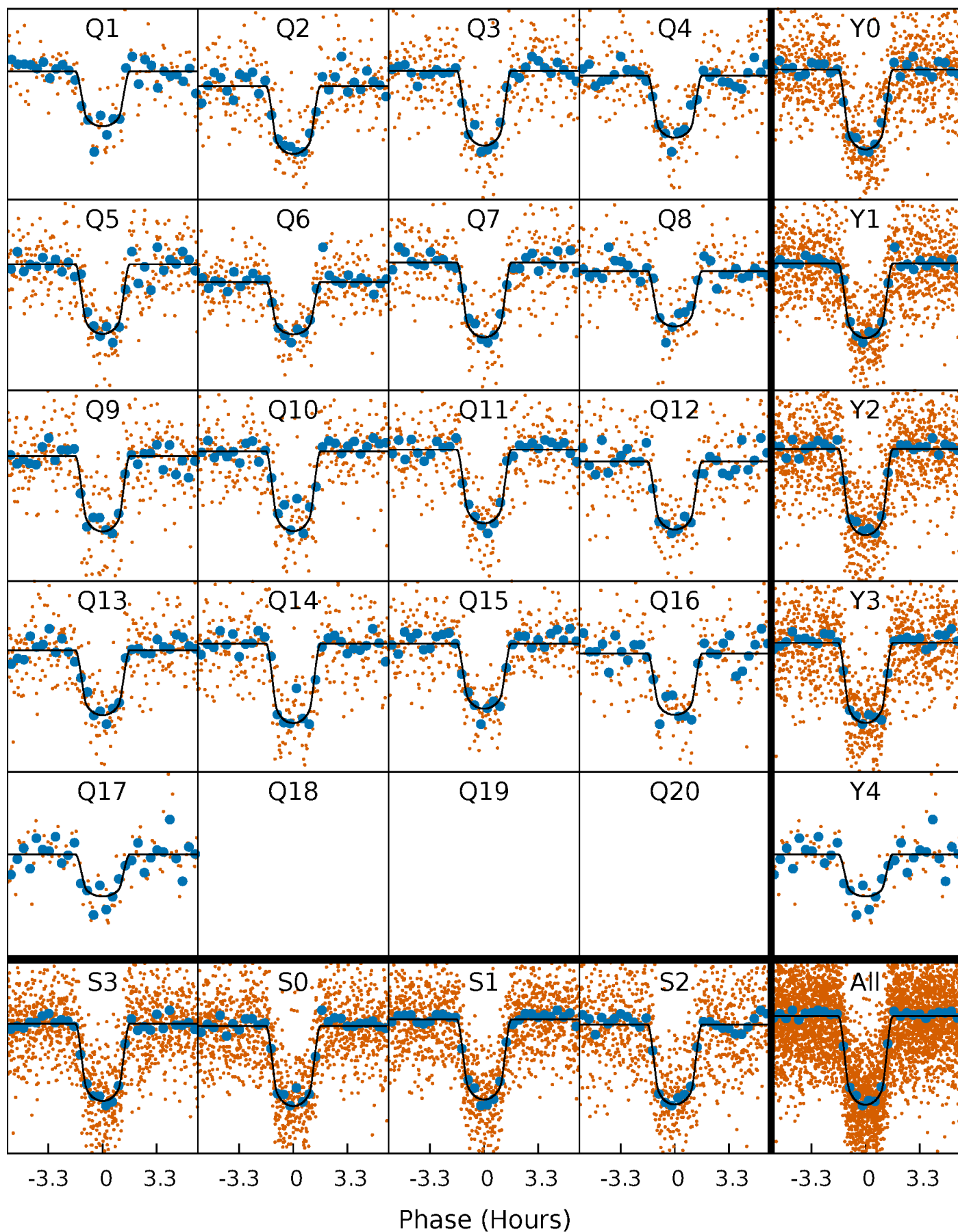
PDC Quarter-Phased Transit Curves

TCE 008625925-01 P= 6.521208 Days $T_0=136.583997$ (BKJD)



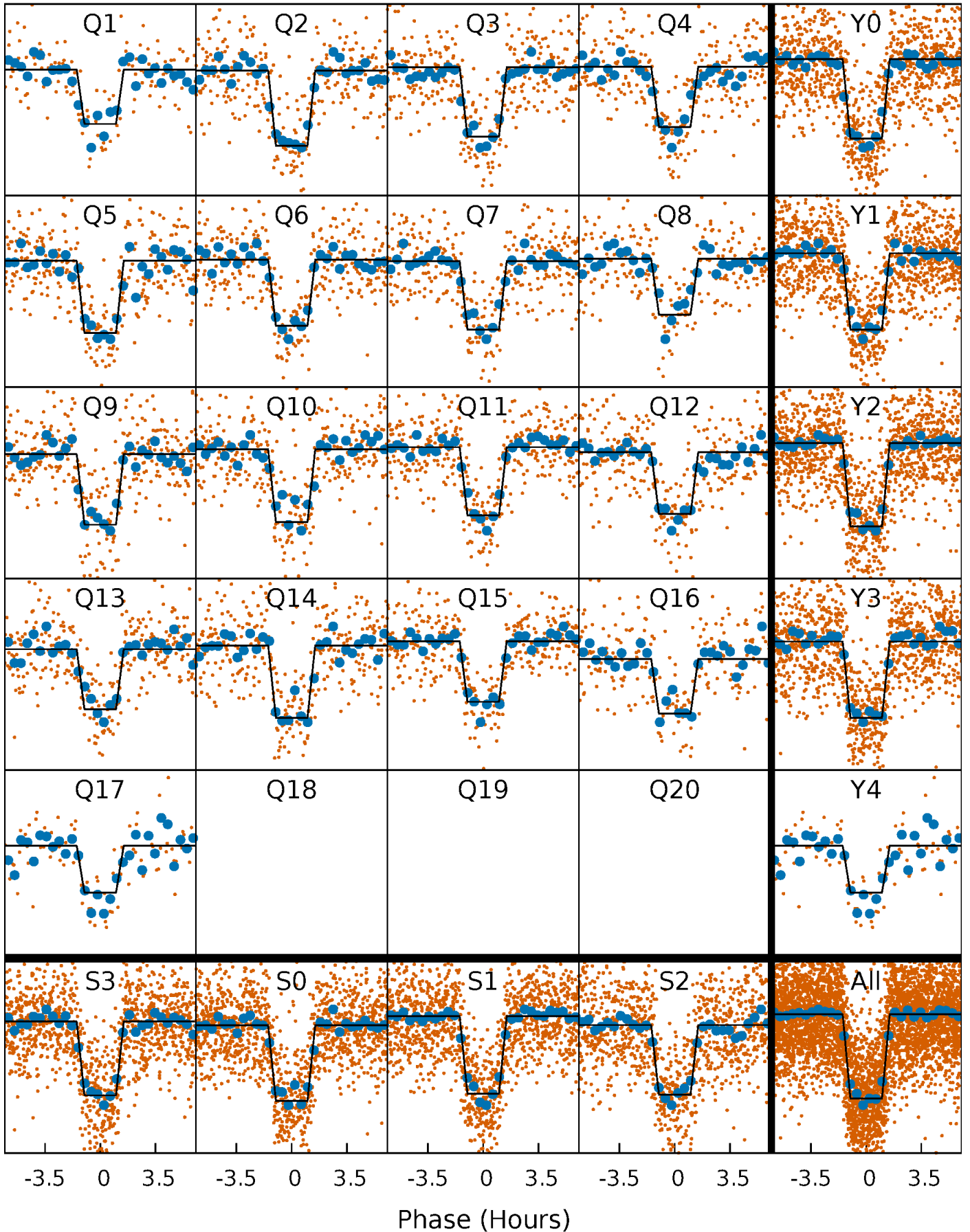
DV Quarter-Phased Transit Curves

TCE 008625925-01 P= 6.521208 Days $T_0=136.583997$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

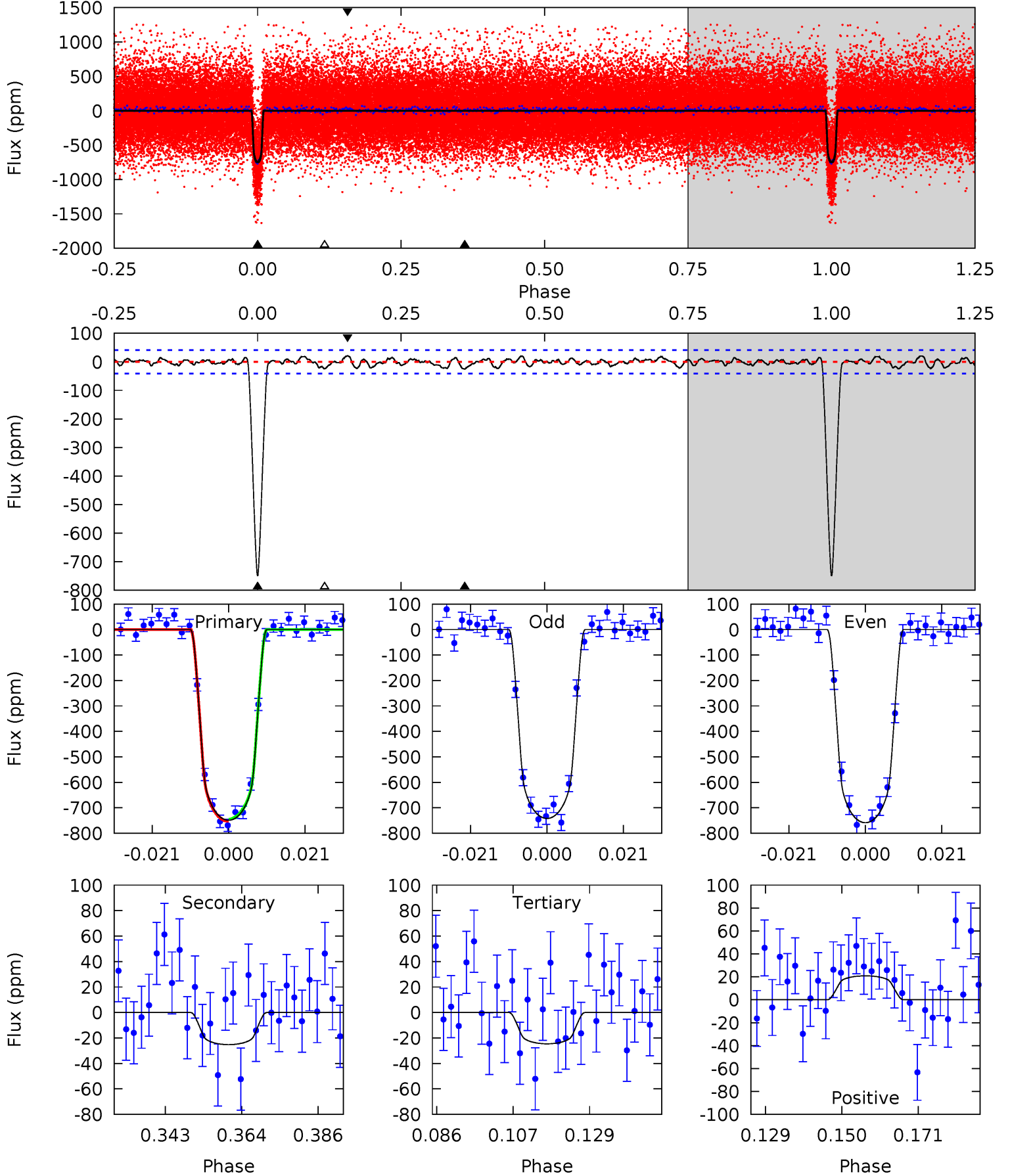
TCE 008625925-01 P= 6.521189 Days $T_0=136.586175$ (BKJD)



DV Model-Shift Uniqueness Test

008625925-01, P = 6.521208 Days, E = 130.062789 Days

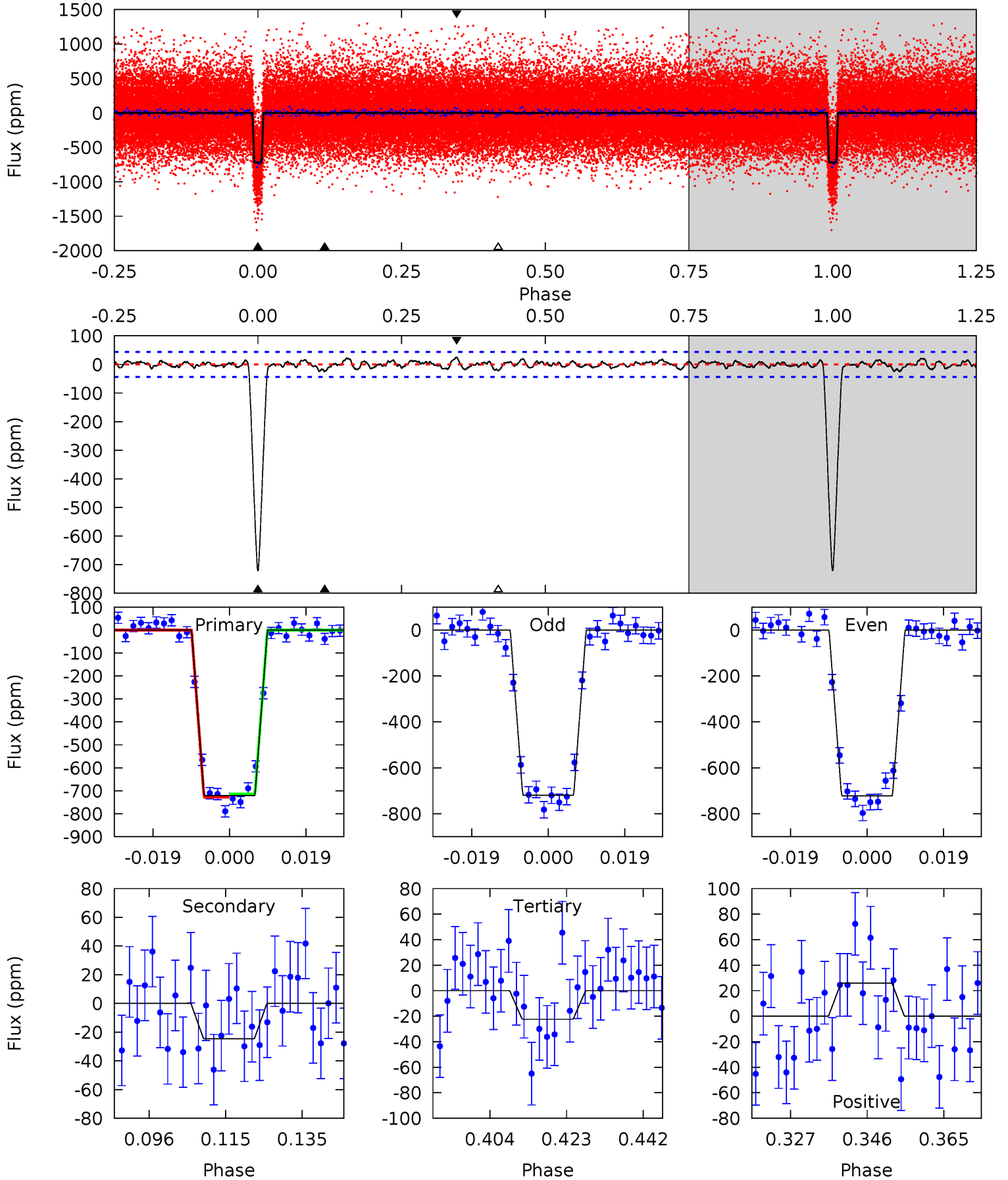
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
89.0	3.00	2.92	2.48	4.88	2.30	1.09	86.1	86.5	0.08	0.52	0.99	0.99	0.03	0.47



Alt Model-Shift Uniqueness Test

008625925-01, P = 6.521189 Days, E = 130.064986 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
81.0	2.75	2.52	2.92	4.90	2.34	0.94	78.5	78.1	0.24	-0.17	0.15	0.99	0.03	0.81



Stellar Parameters For KIC 008625925

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5822^{+140}_{-175}	$4.529^{+0.042}_{-0.168}$	$-0.060^{+0.250}_{-0.350}$	$0.898^{+0.217}_{-0.087}$	$0.994^{+0.104}_{-0.127}$	$1.933^{+0.425}_{-0.873}$
	+2%/-3%	+1%/-4%	+417%/-583%	+24%/-10%	+10%/-13%	+22%/-45%
Source	PHO1	KIC0	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 008625925-01 / KOI 0580.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-25 ± 8	$2.88^{+0.43}_{-0.33}$	1327^{+73}_{-54}	3070^{+170}_{-211}	$7.476^{+3.787}_{-2.926}$
Alt.	-25 ± 9	$2.73^{+0.42}_{-0.32}$	1329^{+75}_{-56}	3093^{+180}_{-210}	$7.992^{+3.724}_{-3.119}$

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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

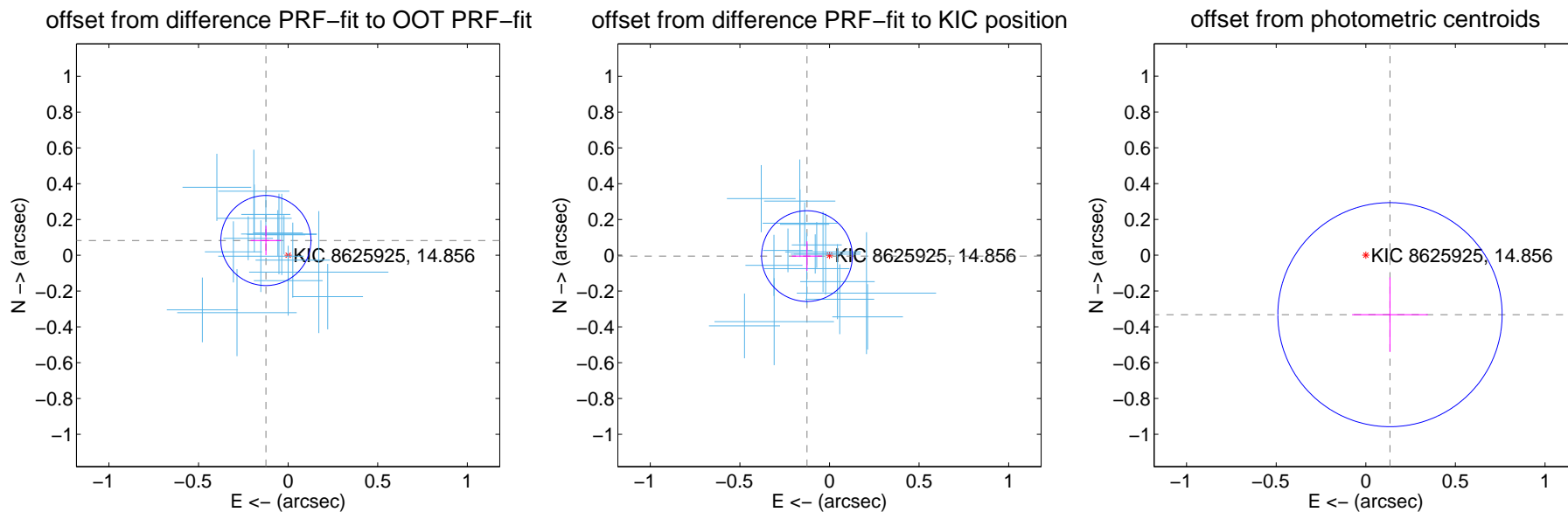
DV Centroid Data

Supplemental centroid analysis for 008625925-01. Kepler magnitude: 14.86. Transit SNR 66.81

There are 17 quarters with good PRF difference image offsets

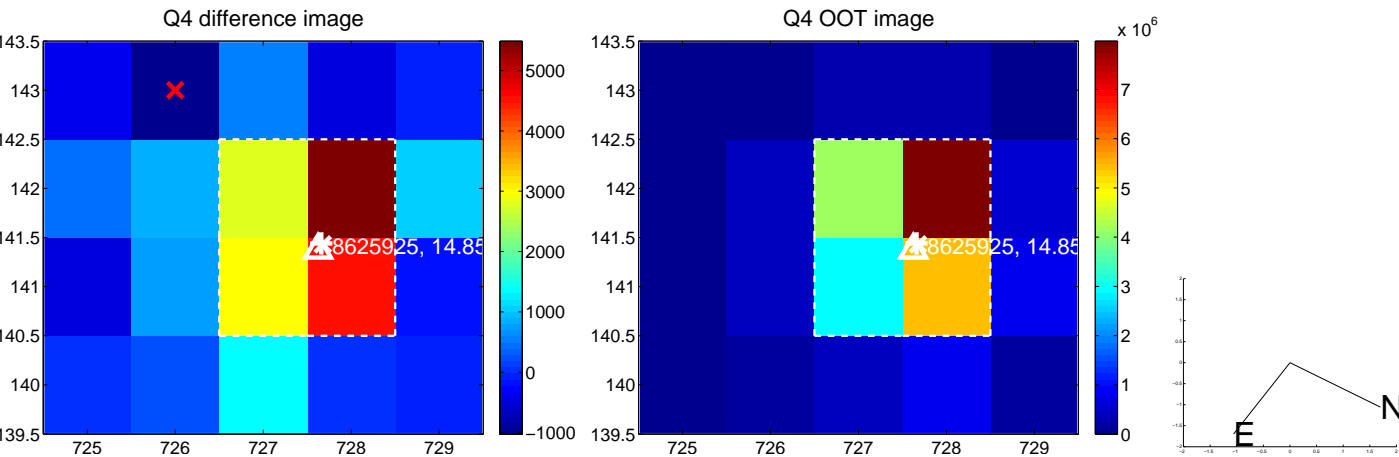
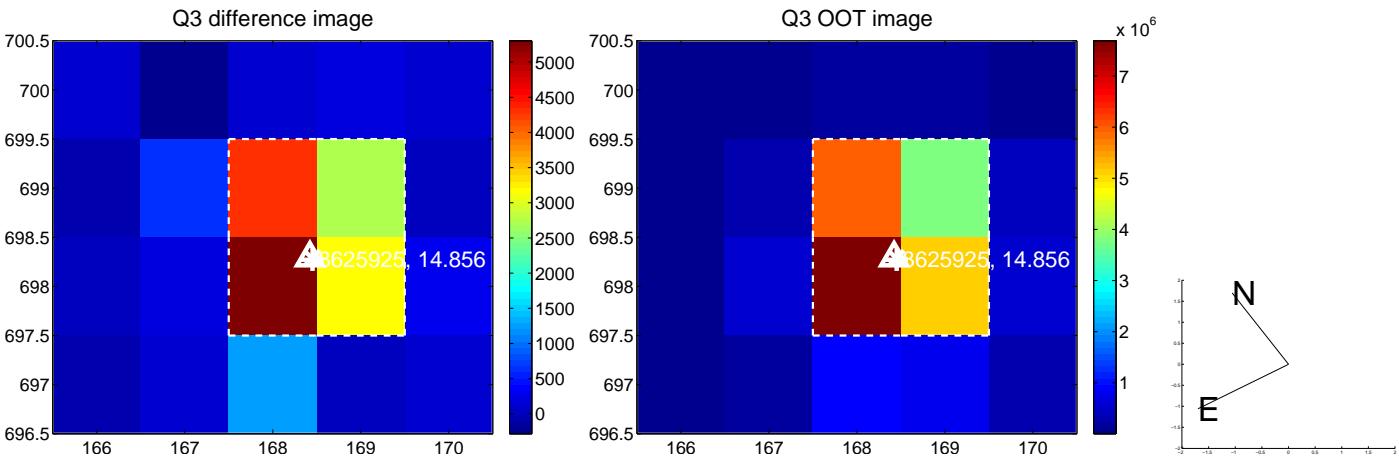
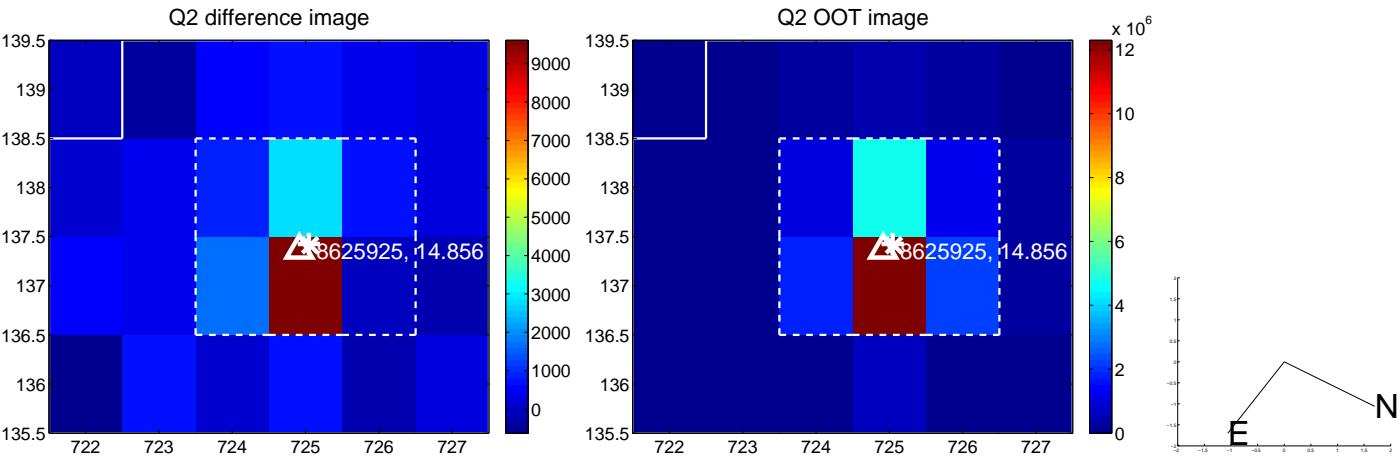
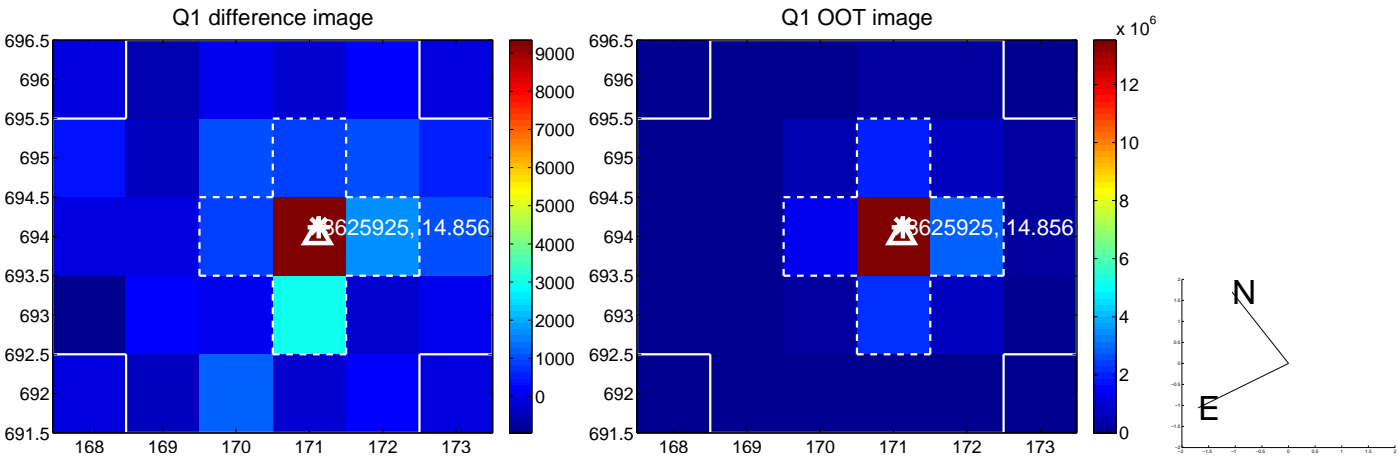
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.149 ± 0.084	1.78	0.124 ± 0.084	0.082 ± 0.082
PRF-fit source offset from KIC position	0.126 ± 0.084	1.49	0.126 ± 0.084	-0.005 ± 0.082
photometric centroid source offset	0.36 ± 0.21	1.72	-0.13 ± 0.21	-0.33 ± 0.21

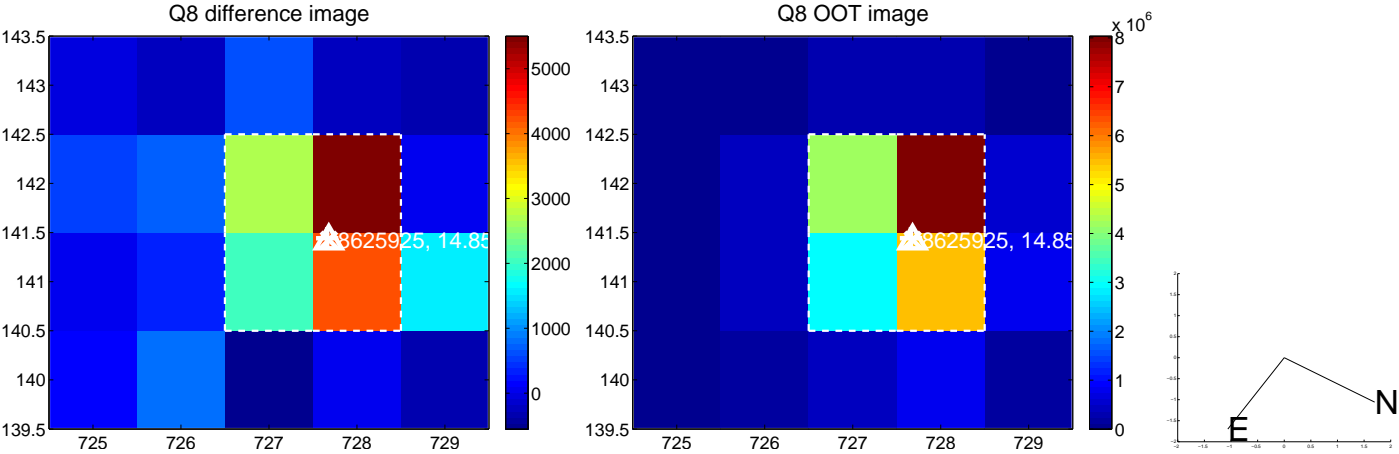
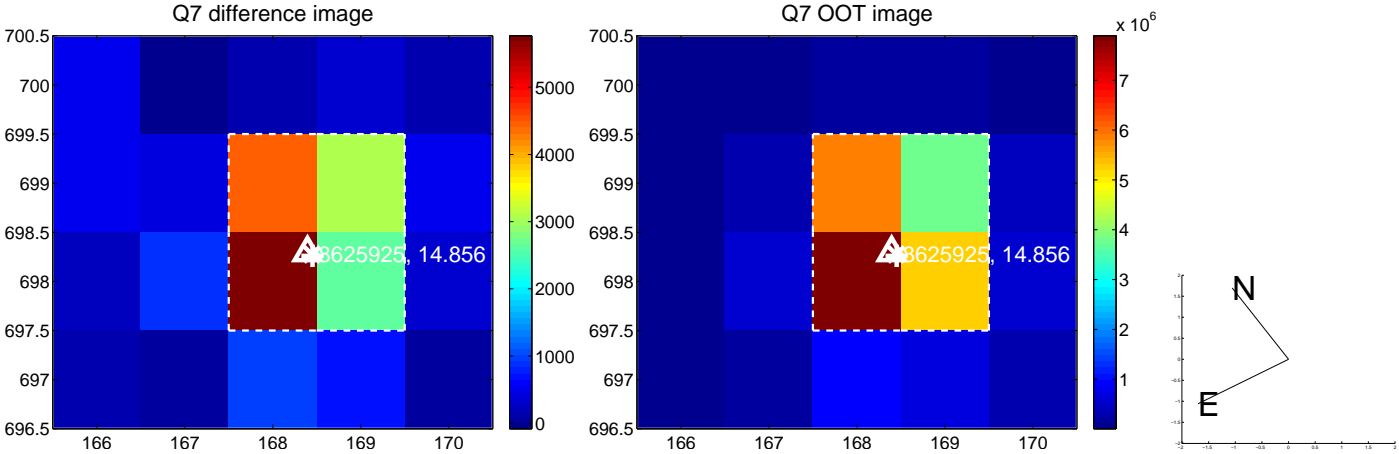
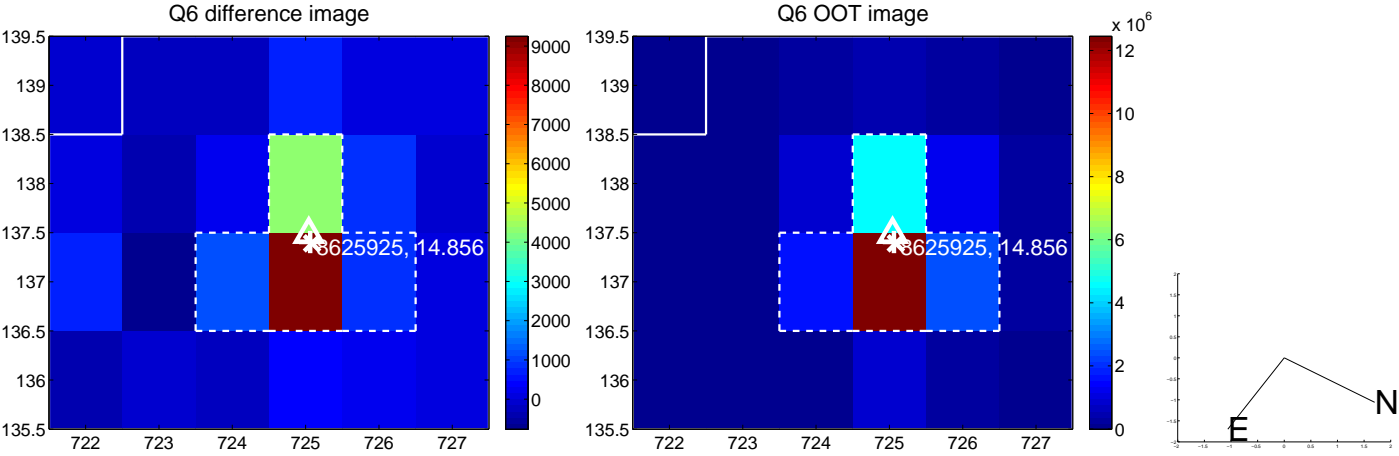
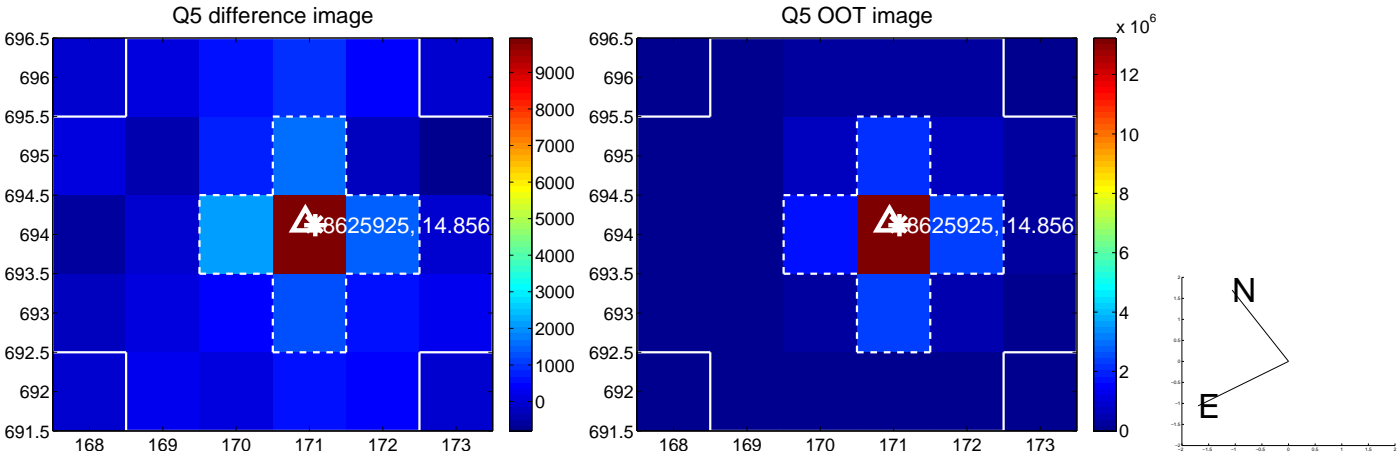


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- 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.

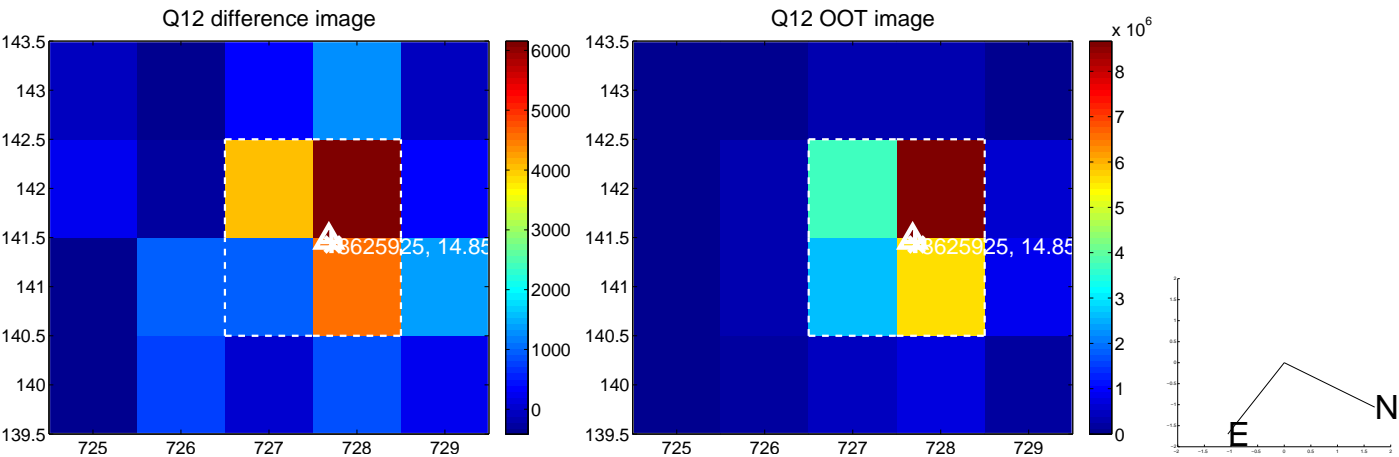
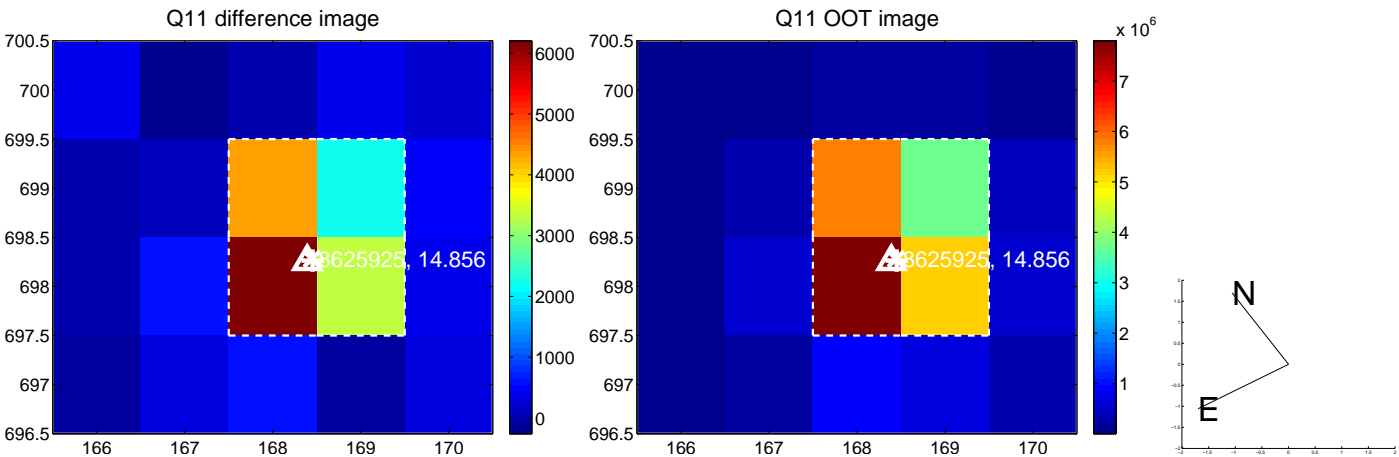
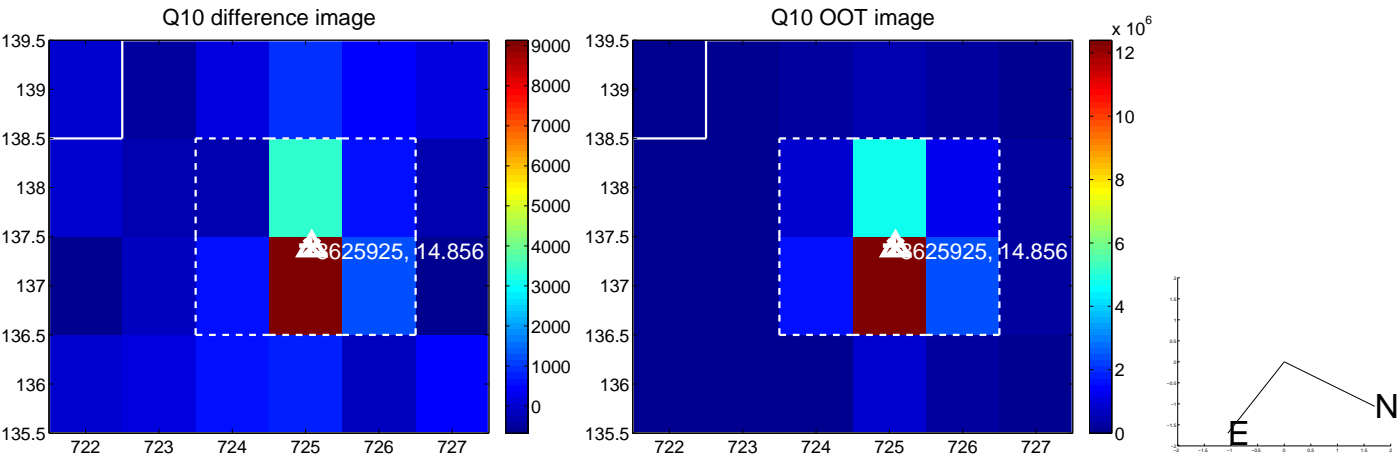
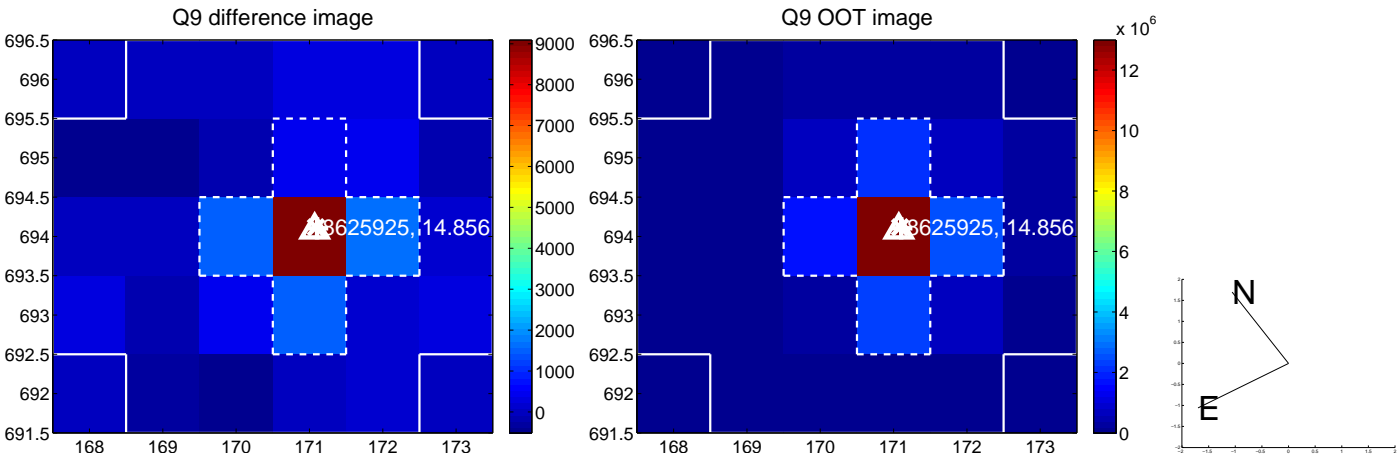
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



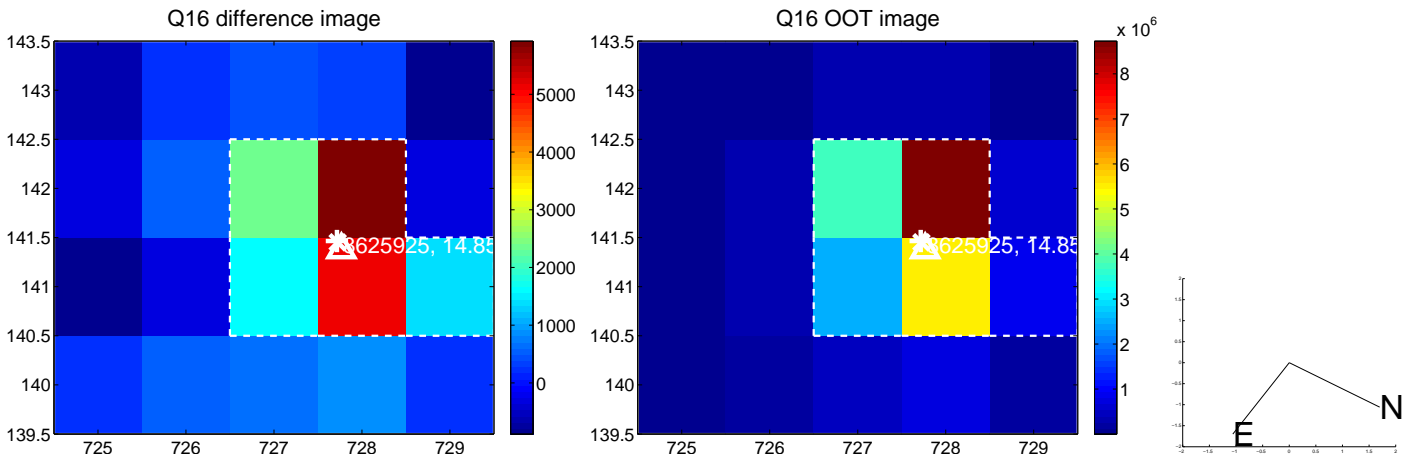
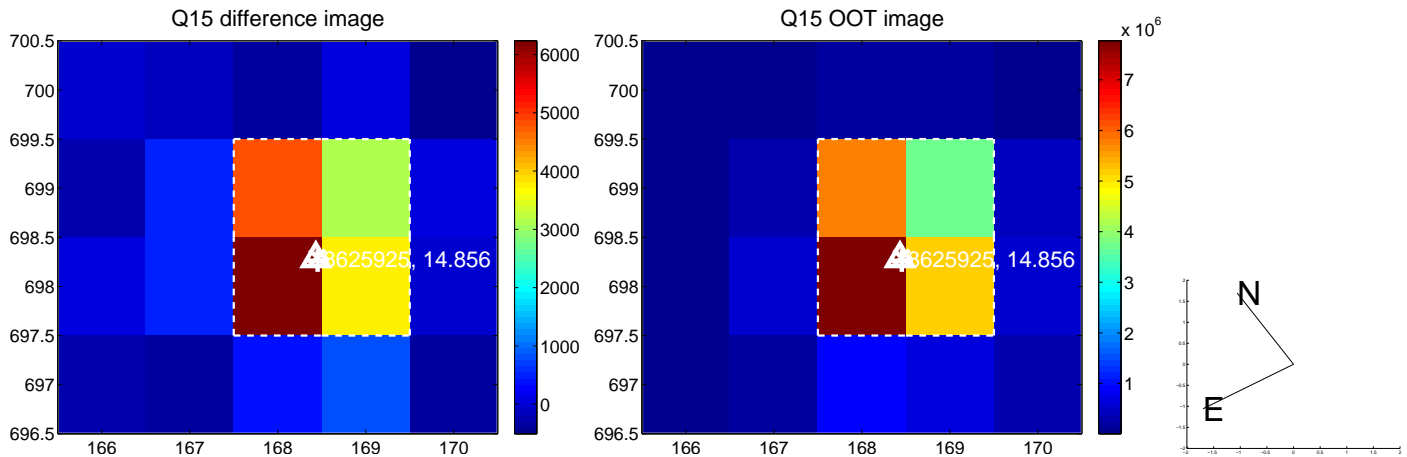
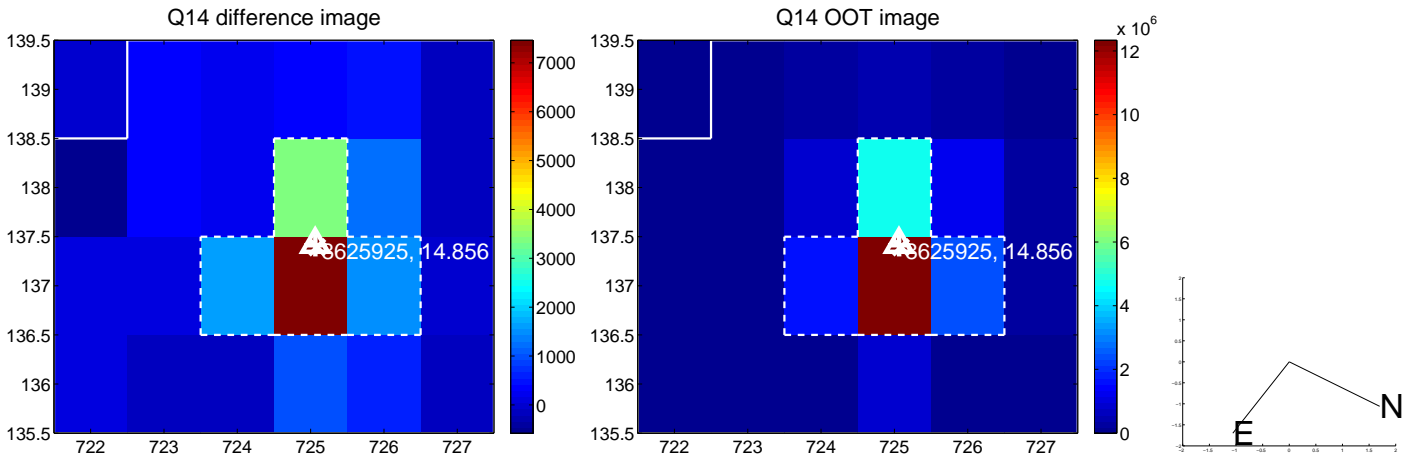
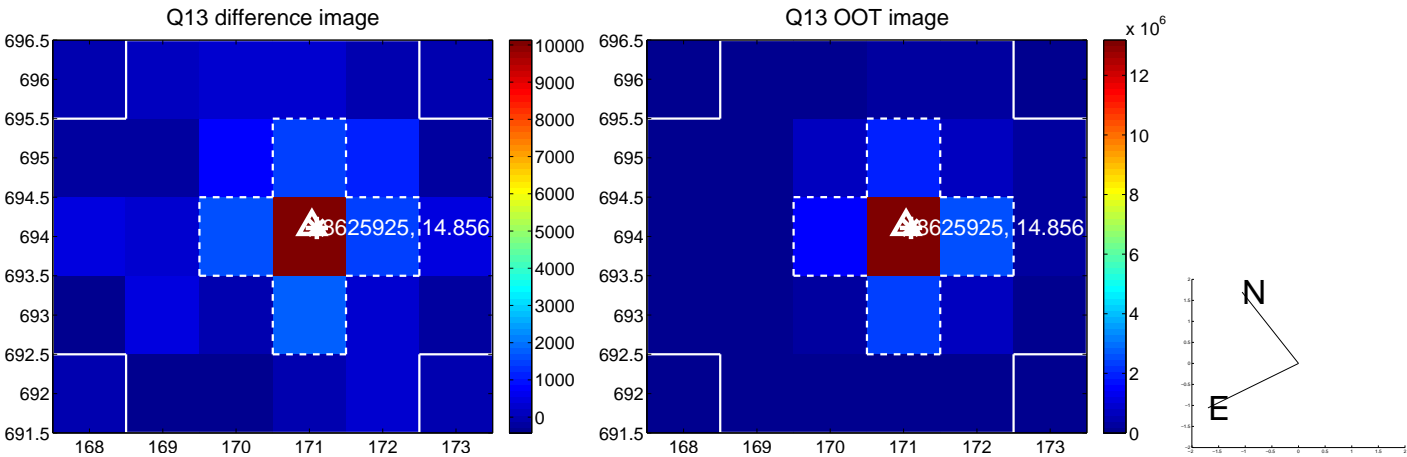
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



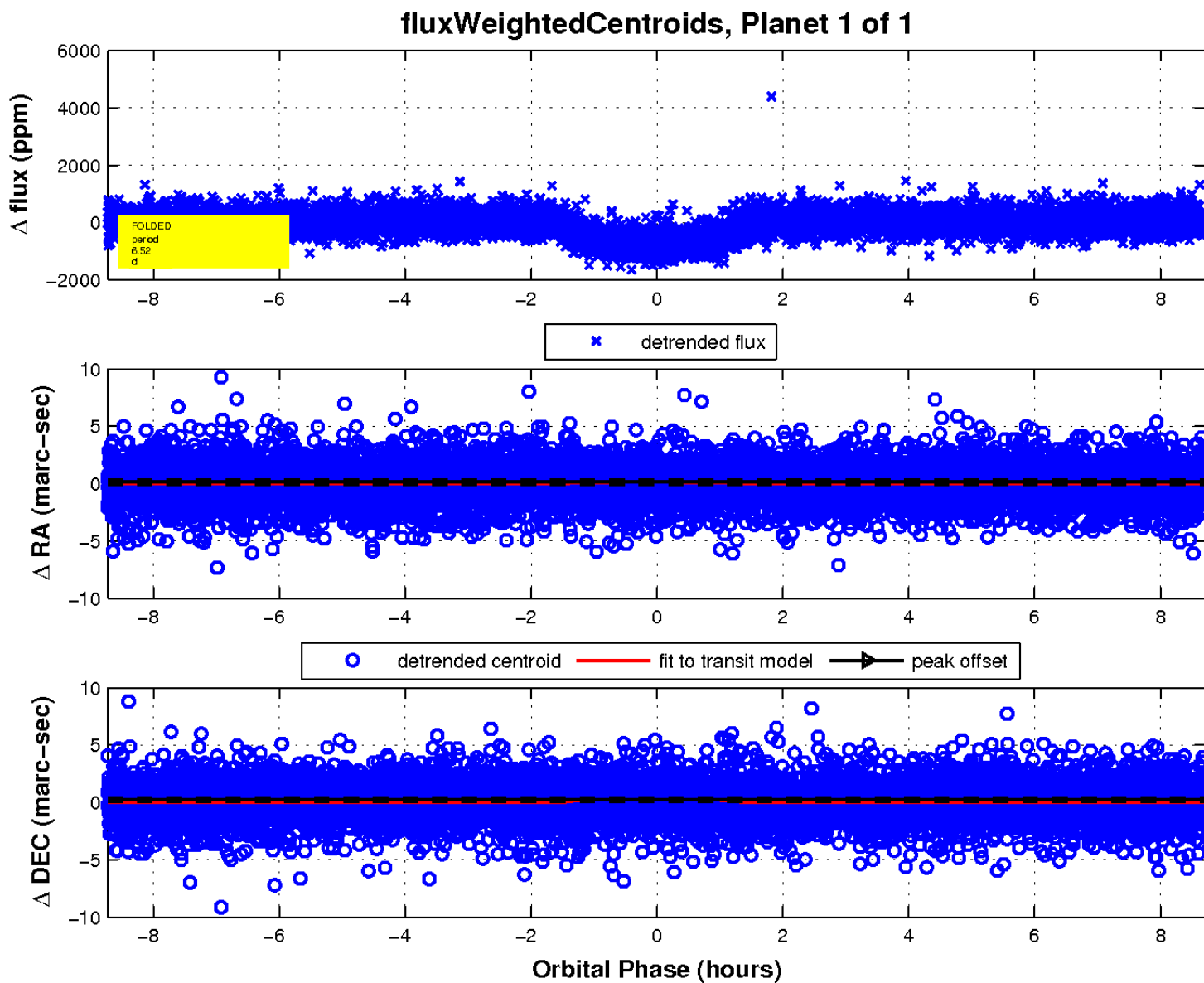
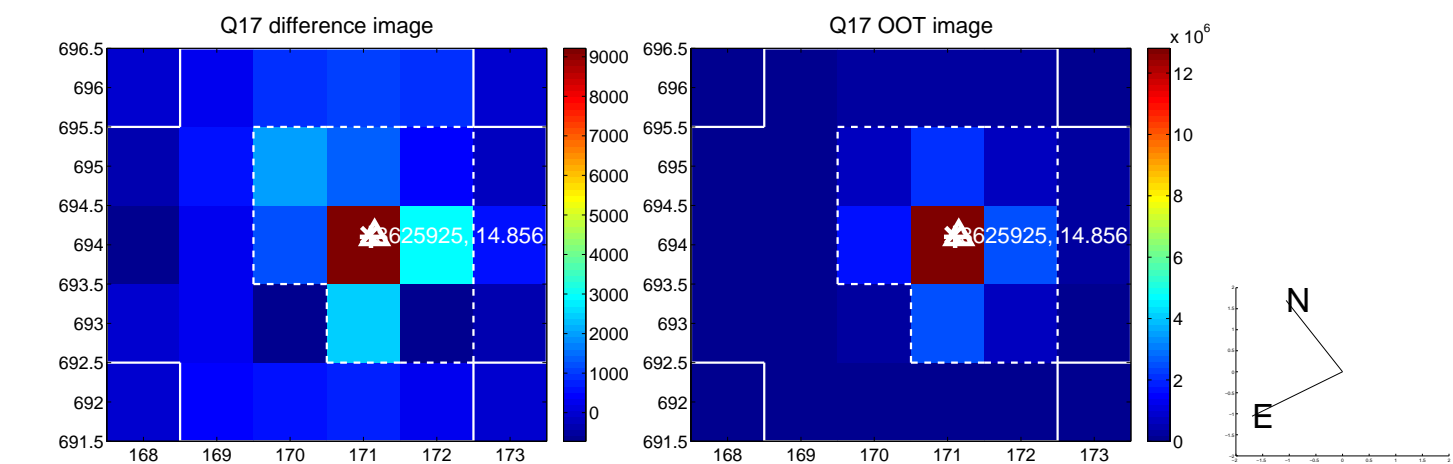
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UKIRT Image

Declination

