

KIC 006285545

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})
006285545-01	OBS	No	5.244394	132.611057	40.1	7.226	9.3	7.1	1.15	6401	0.84	509.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006285545-01	OBS	FP	0.00	1	0	1	0	LPP_DV—HALO_GHOST

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

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

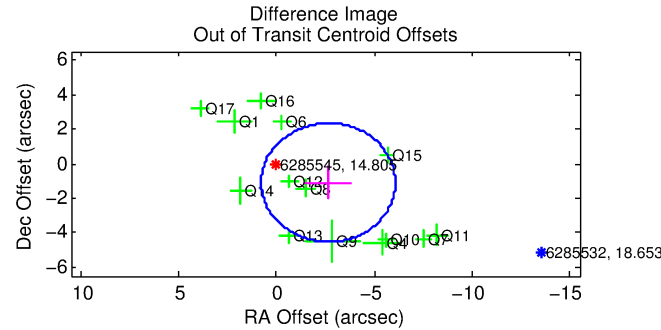
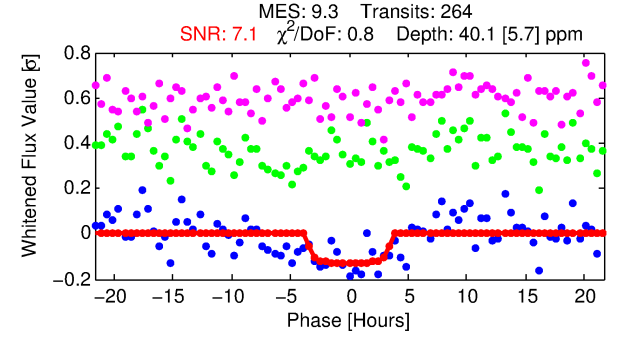
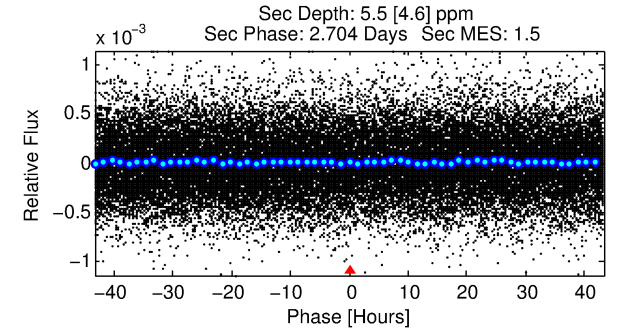
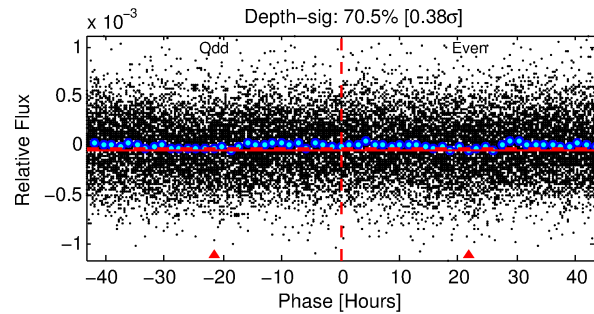
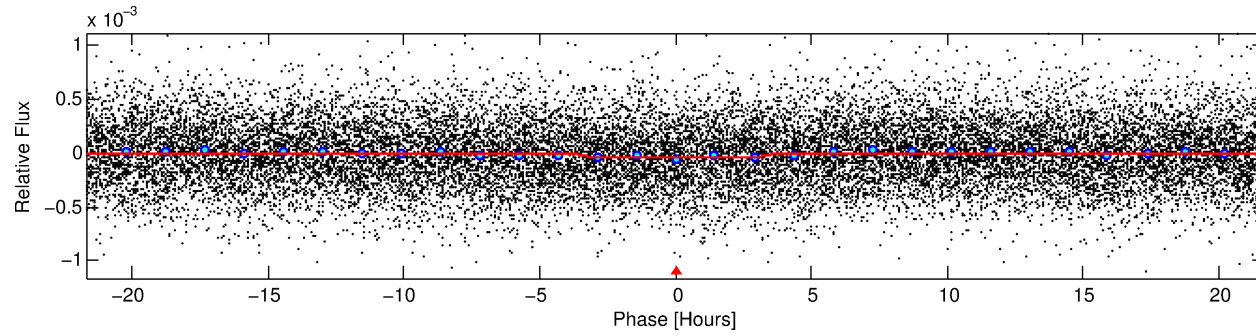
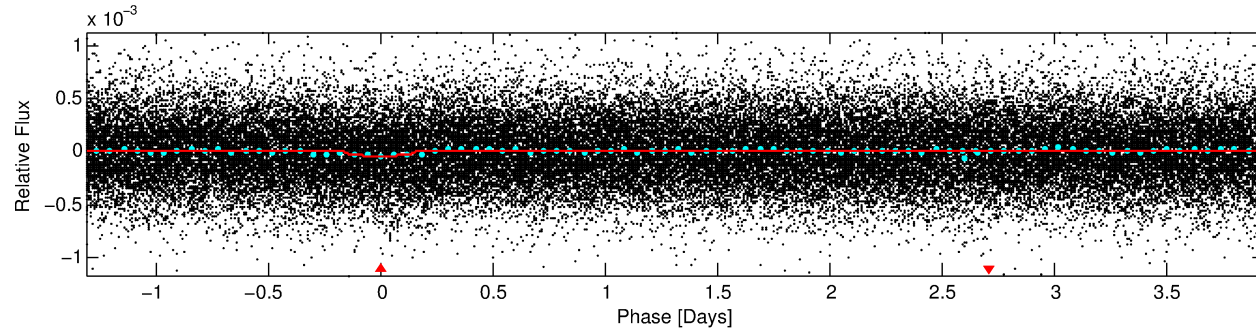
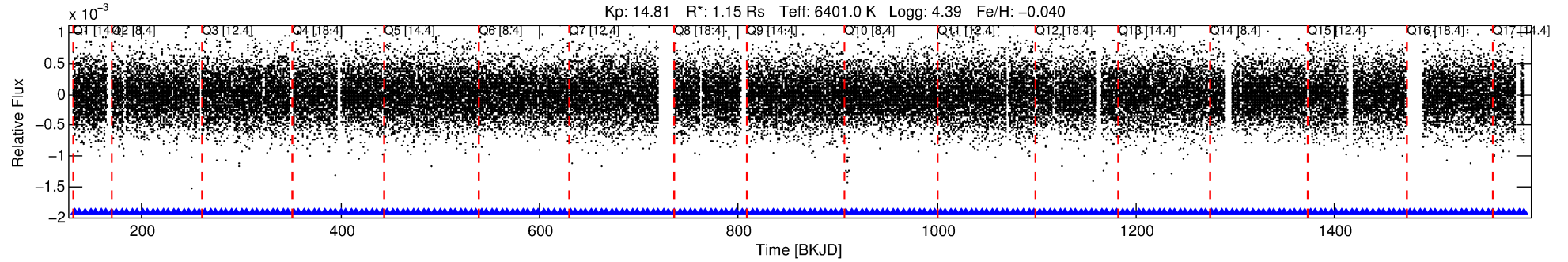
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006285545-01

No Significant Match Found

DV One-Page Summary

KIC: 6285545 Candidate: 1 of 1 Period: 5.244 d



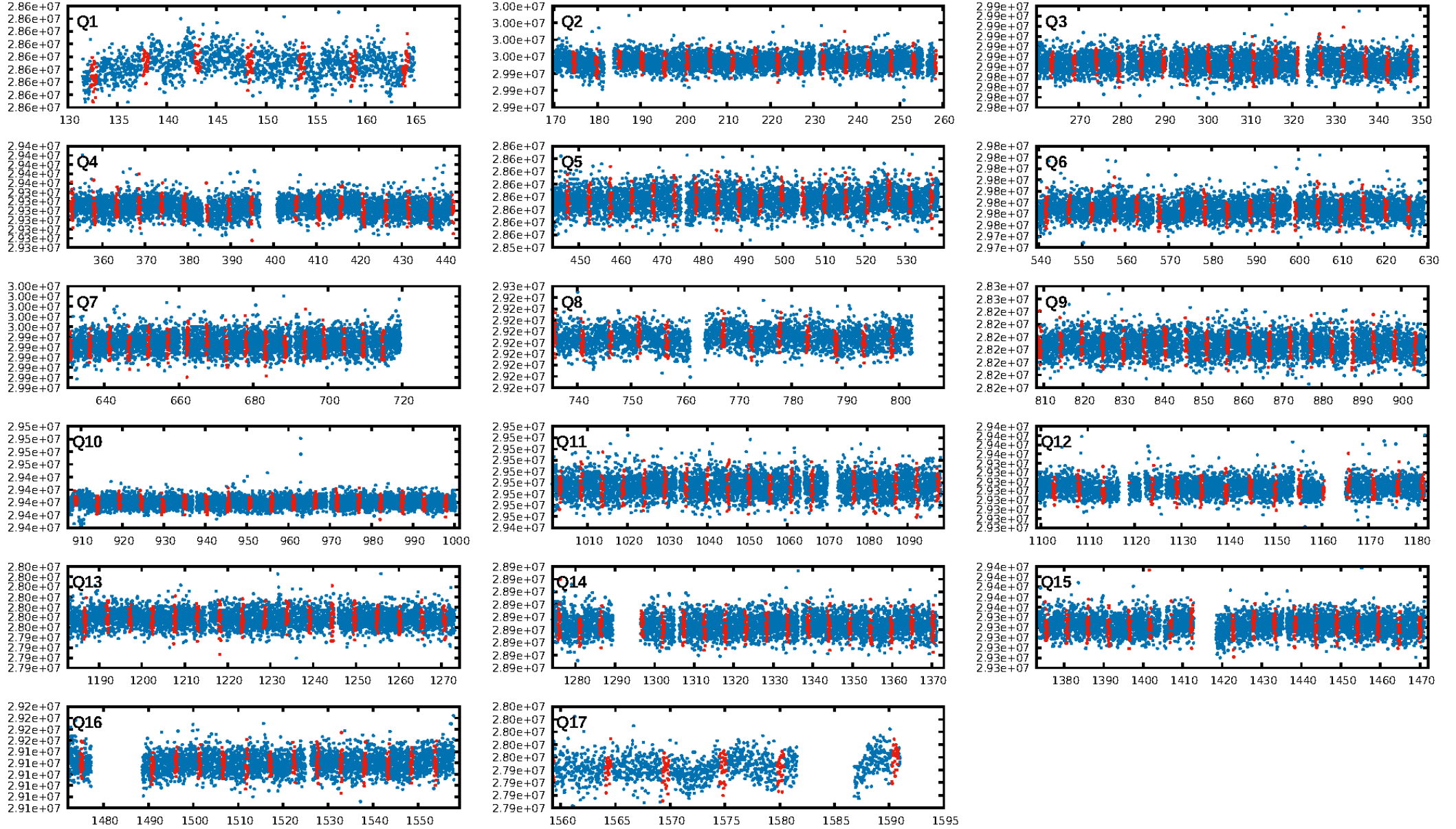
DV Fit Results:

Period = 5.24439 [0.00010] d
Epoch = 132.6111 [0.0141] BKJD
Rp/R* = 0.0067 [0.0036]
a/R* = 2.90 [7.64]
b = 0.88 [0.80]
Seff = 509.83 [205.72]
Teff = 1212 [122] K
Rp = 0.84 [0.53] Re
a = 0.0625 [0.0165] AU
Ag = 16.77 [23.69] [0.67 σ]
Teffp = 3791 [1297] K [1.98 σ]

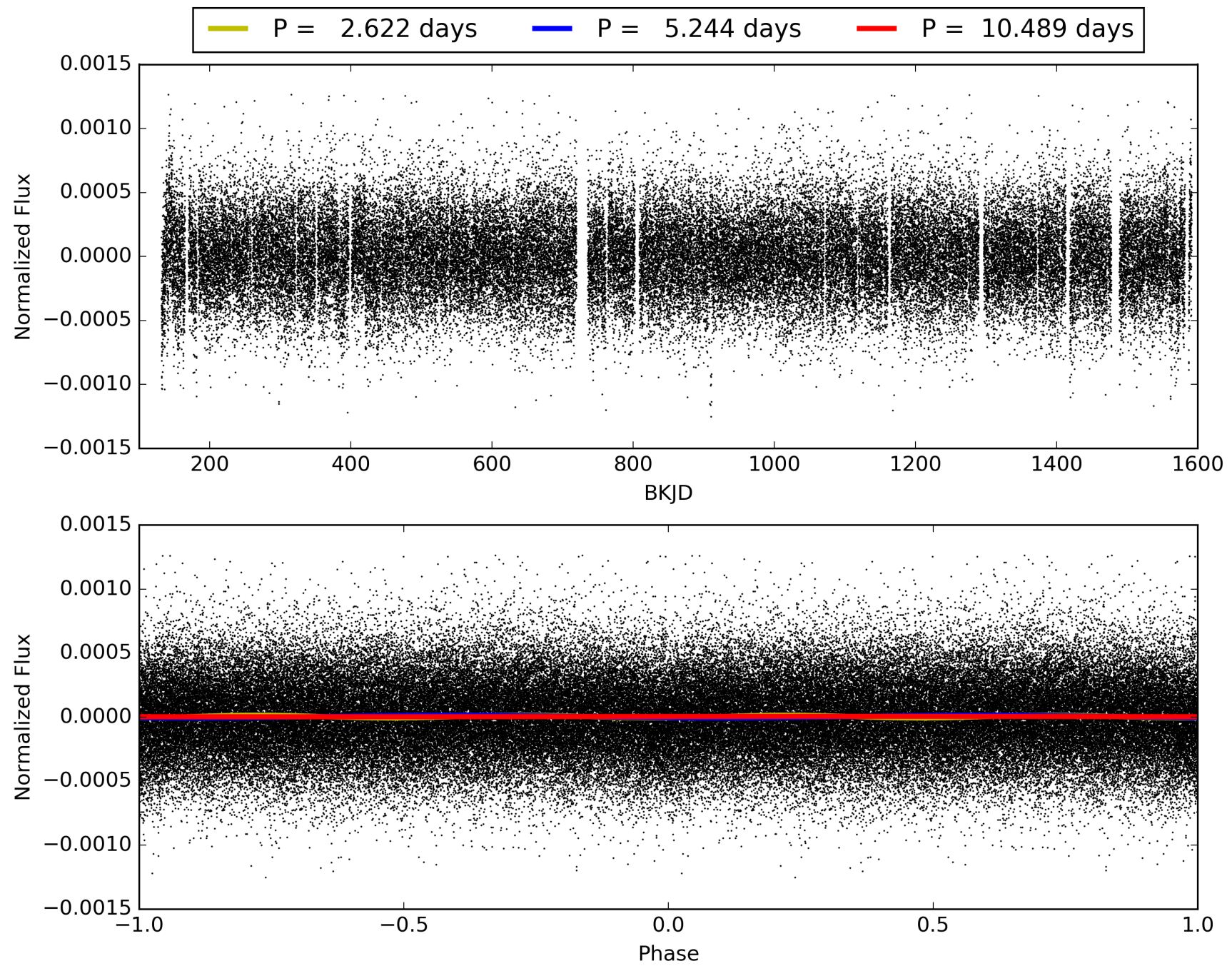
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.50e-22
RollingBand-fgt: 1.00 [251/251]
GhostDiagnostic-chr: 0.02644
Centroid-sig: 17.6%
Centroid-so: 1.907 arcsec [0.88 σ]
OotOffset-rm: 2.859 arcsec [2.50 σ]
KicOffset-rm: 2.933 arcsec [2.58 σ]
OotOffset-st: 3/3/4/4 [14]
KicOffset-st: 3/3/4/4 [14]
DiffImageQuality-fgm: 0.07 [1/14]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006285545-01, PDC Light Curves

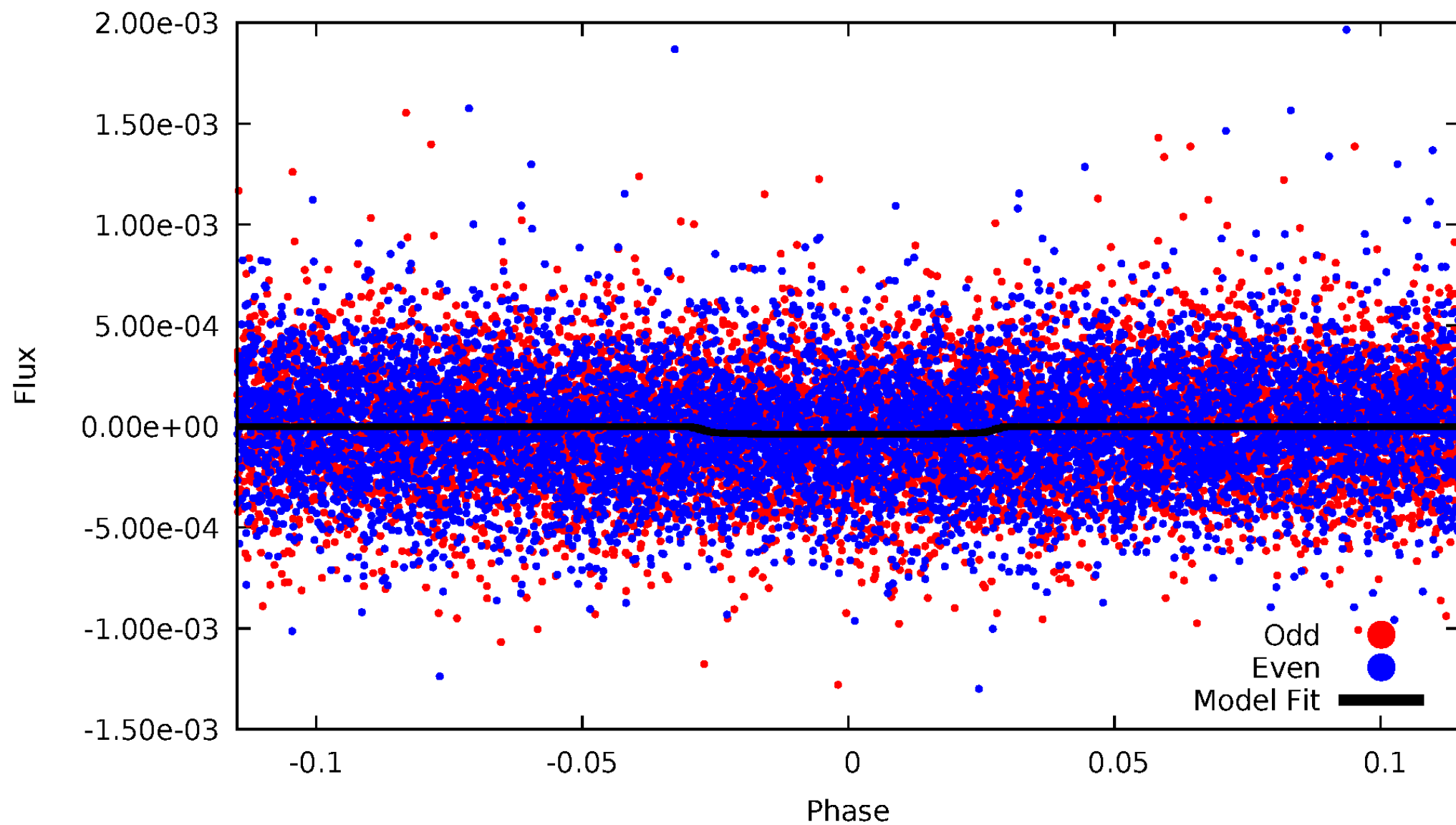


TCE 006285545-01



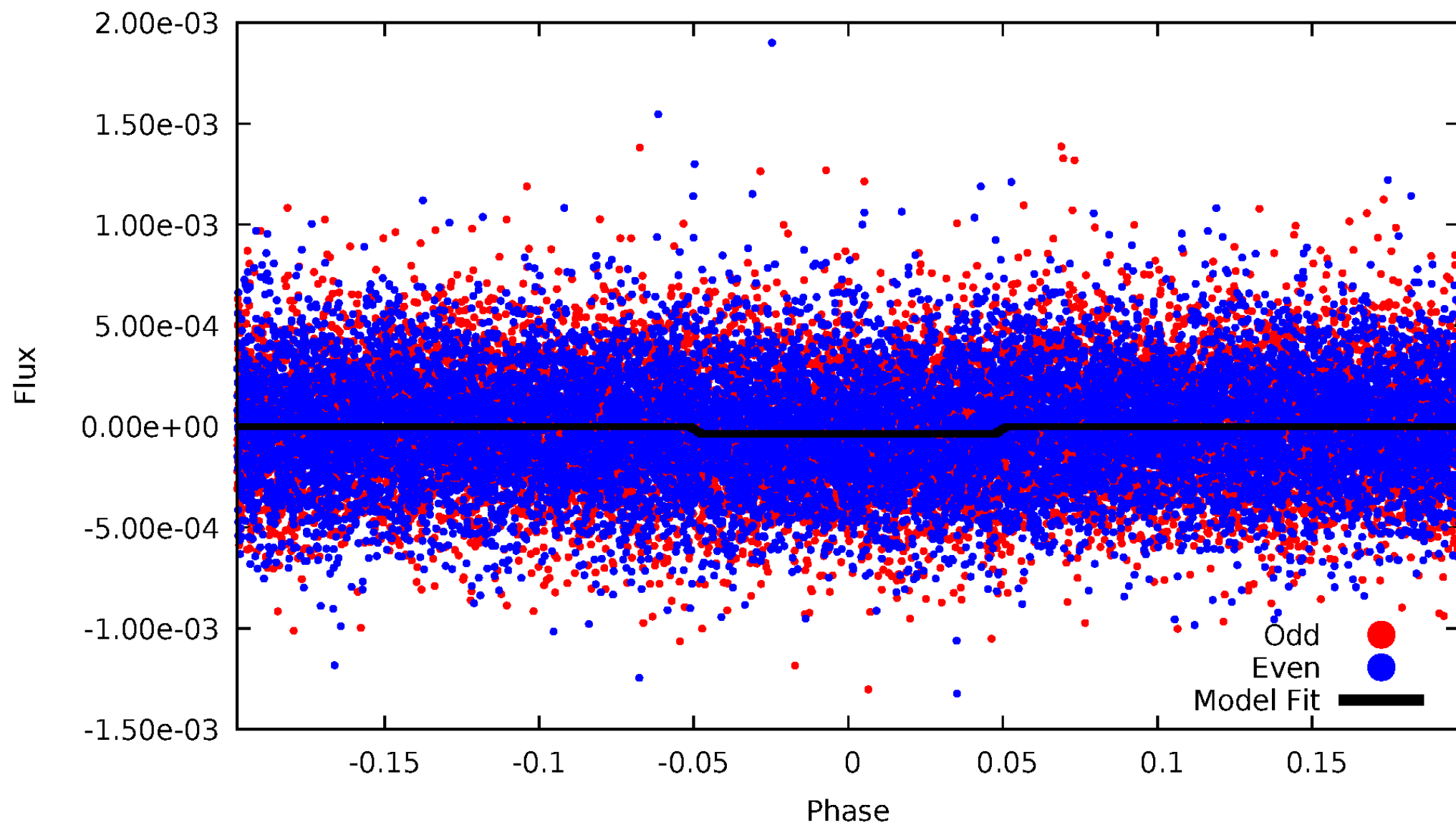
DV Odd/Even

TCE 006285545-01



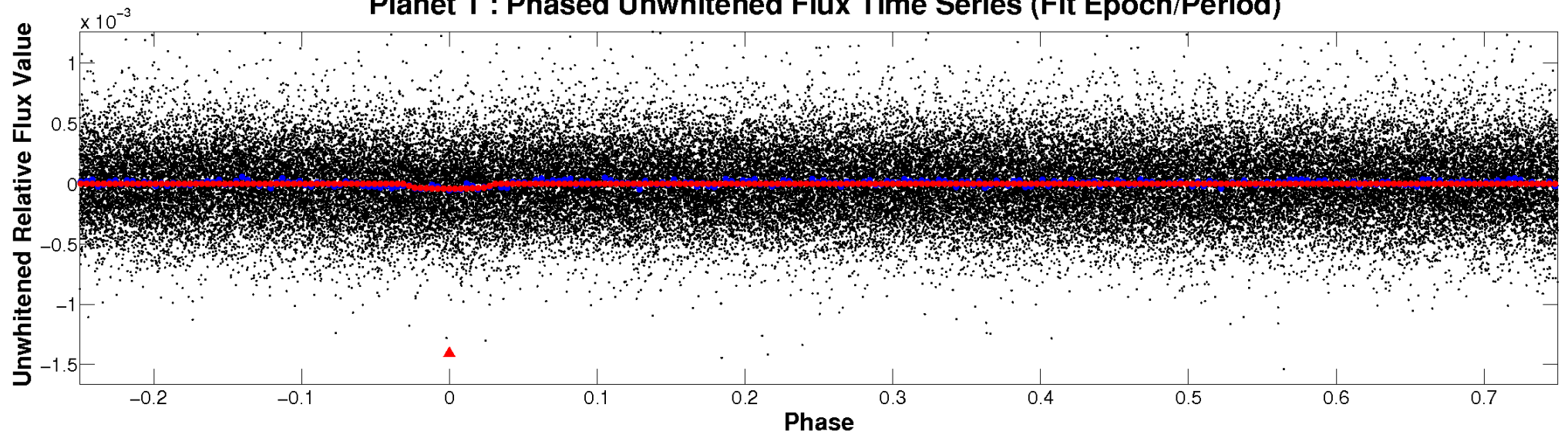
ALT Odd/Even

TCE 006285545-01

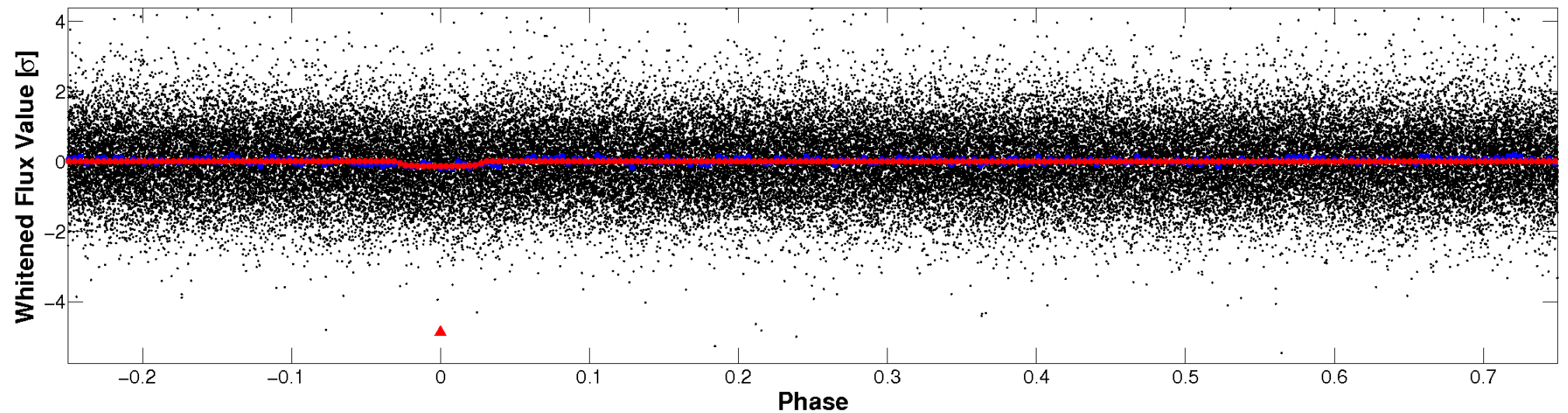


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

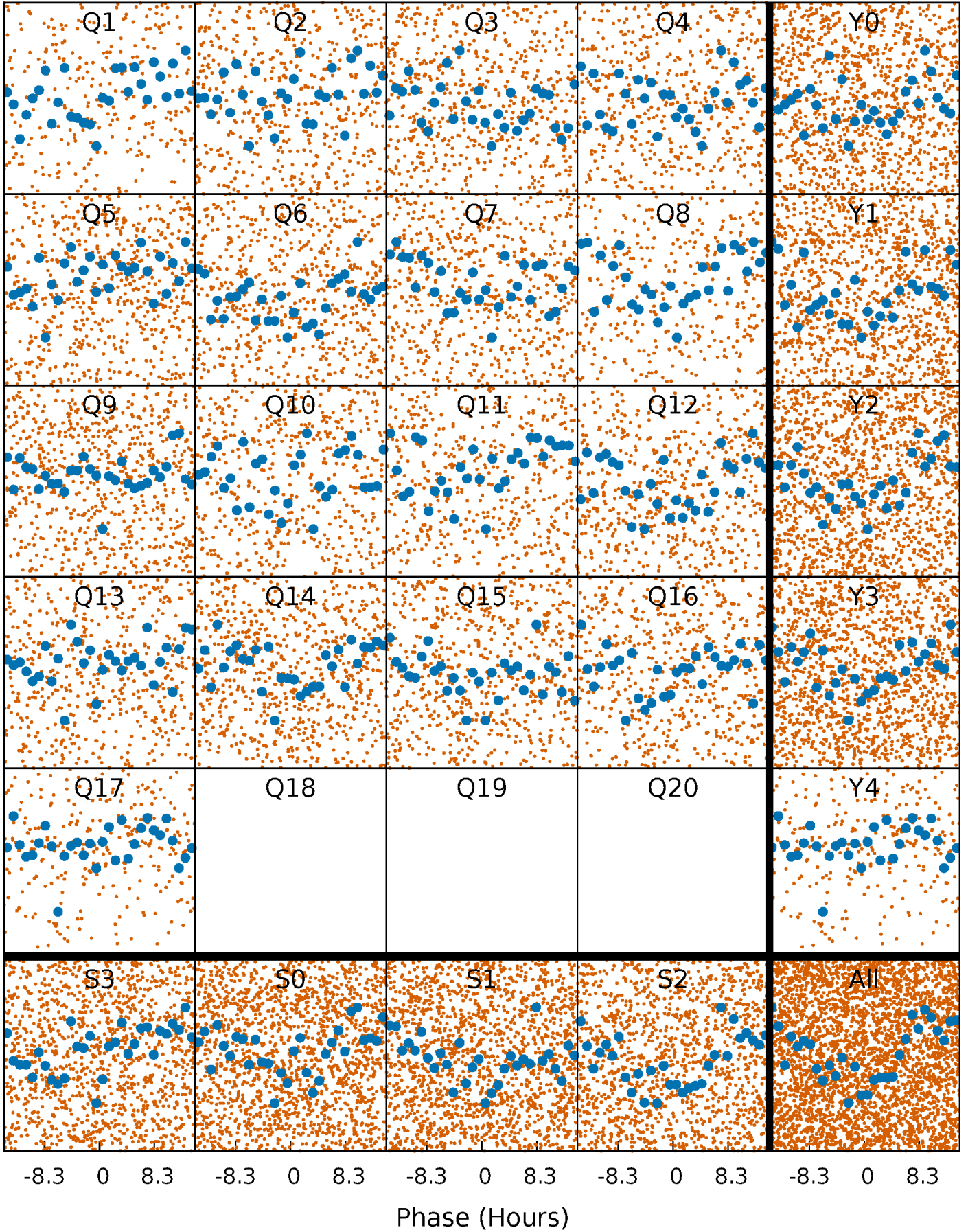


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



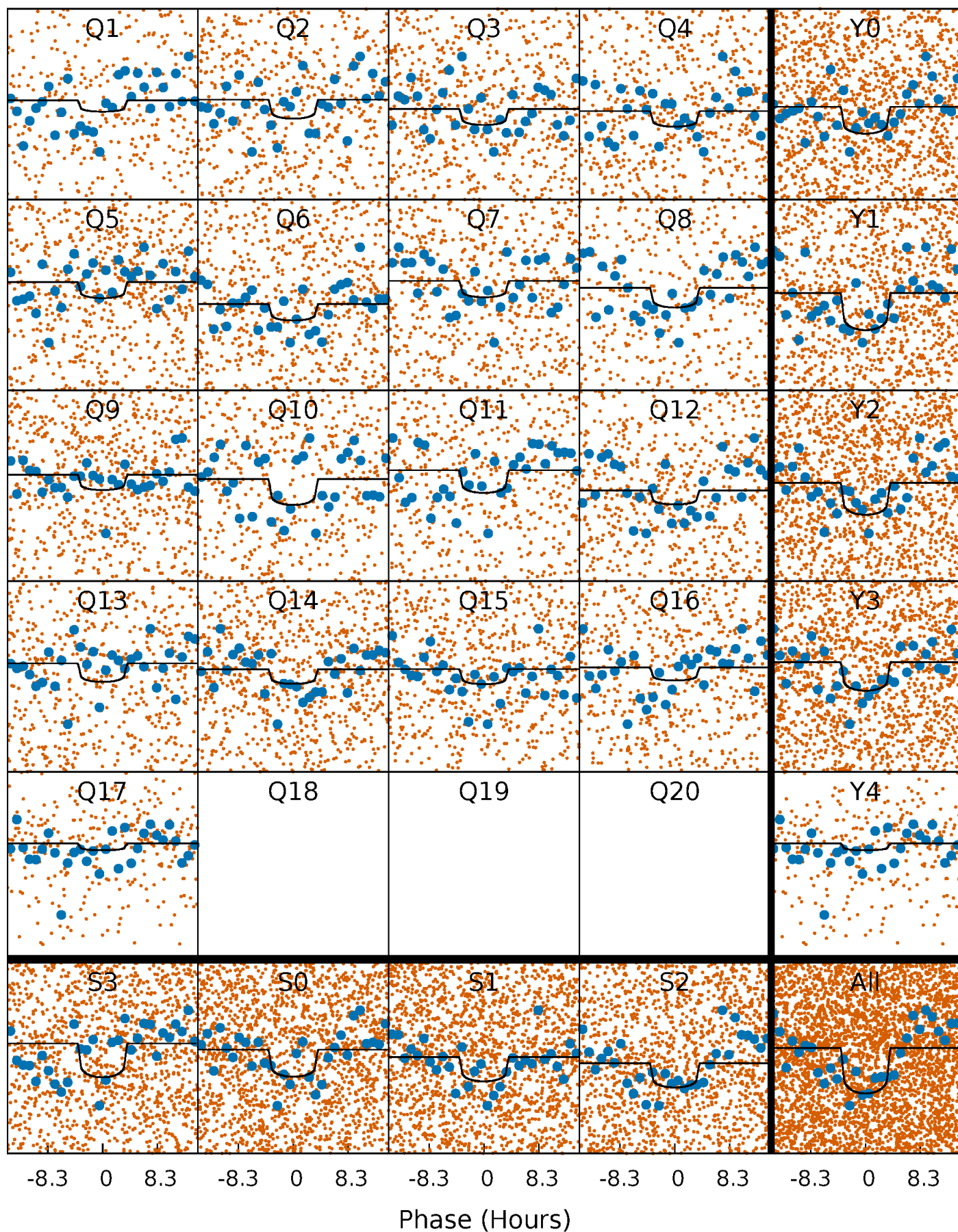
PDC Quarter-Phased Transit Curves

TCE 006285545-01 P= 5.244394 Days $T_0=132.611057$ (BKJD)



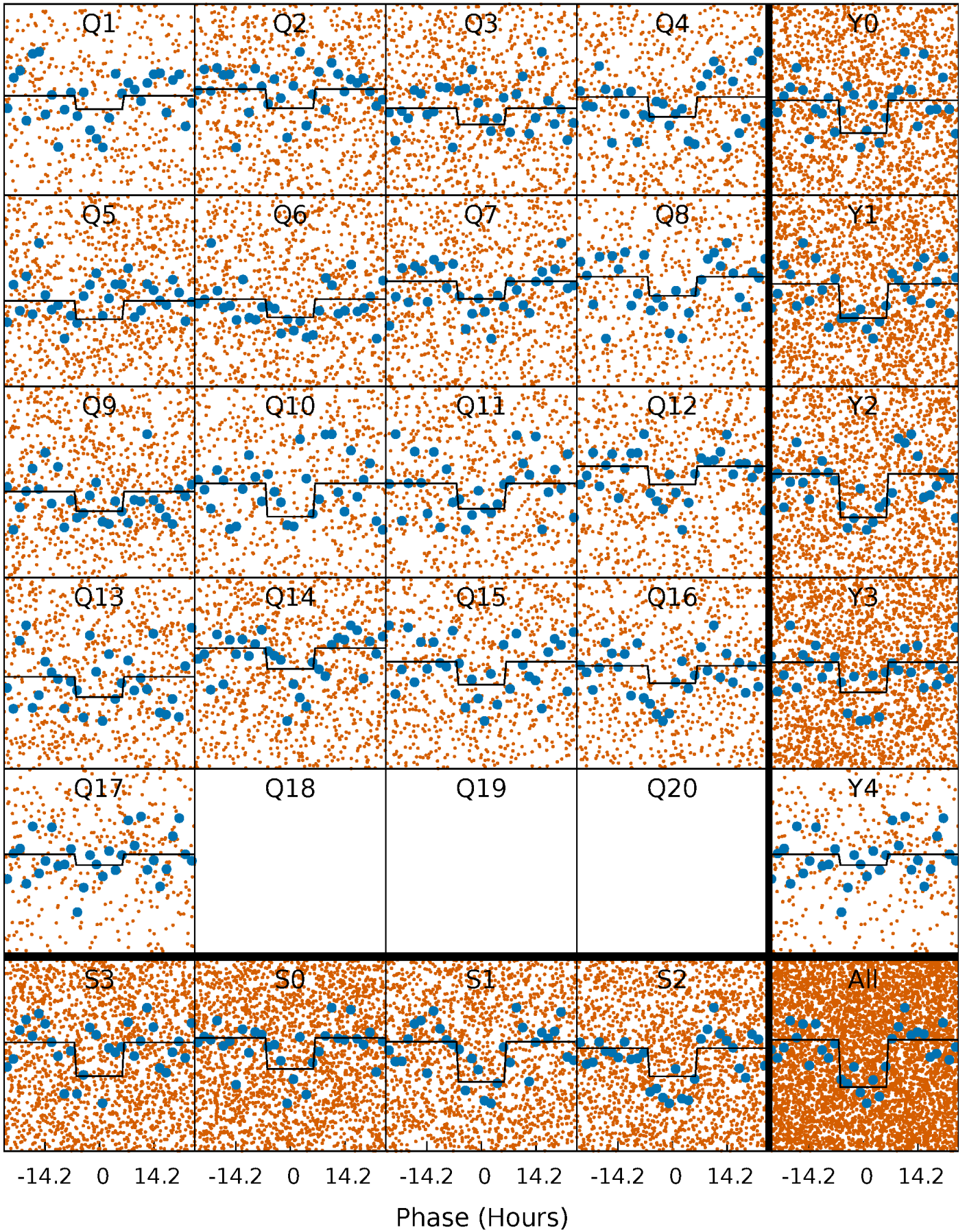
DV Quarter-Phased Transit Curves

TCE 006285545-01 P= 5.244394 Days $T_0=132.611057$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

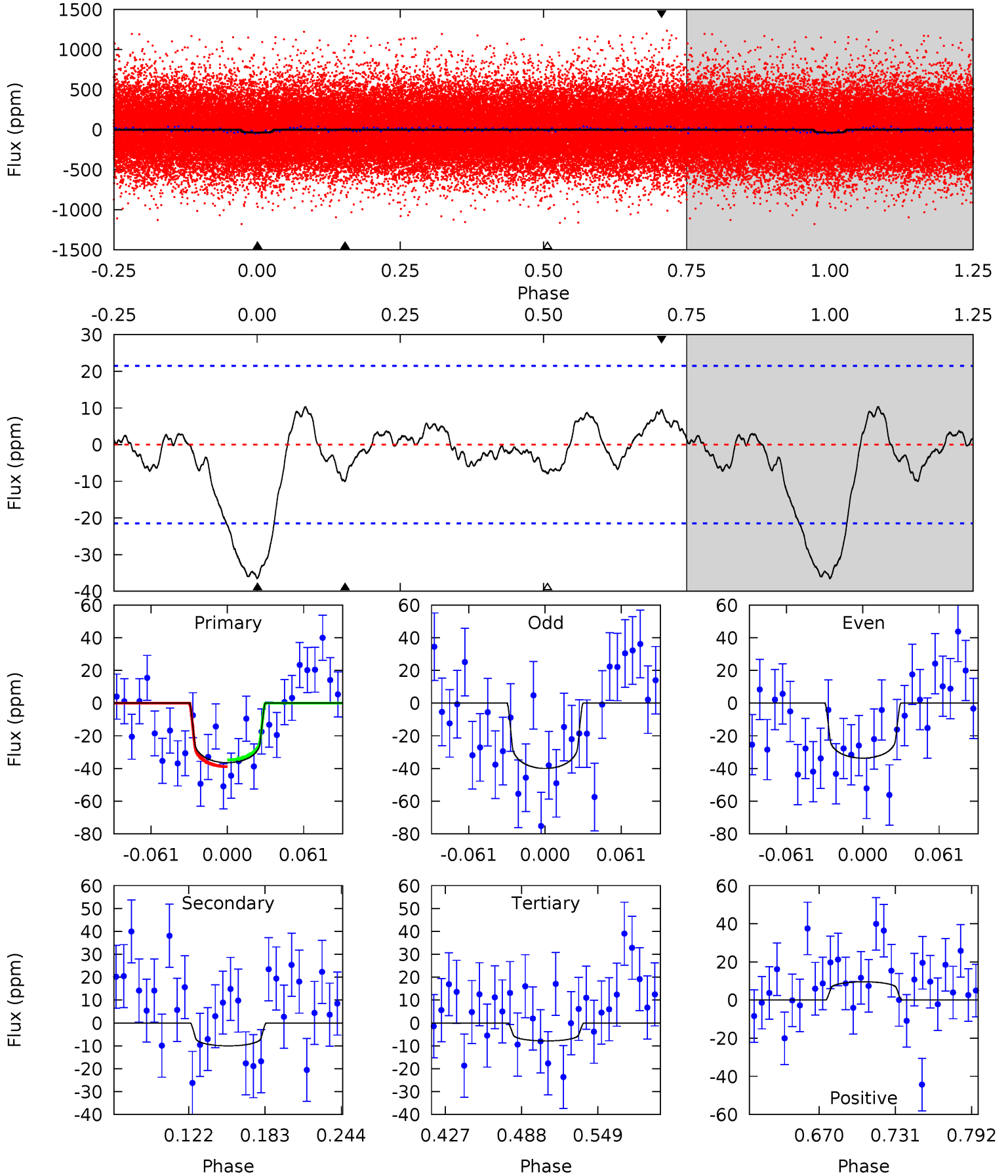
TCE 006285545-01 P= 5.244466 Days $T_0=132.552030$ (BKJD)



DV Model-Shift Uniqueness Test

006285545-01, P = 5.244394 Days, E = 127.366663 Days

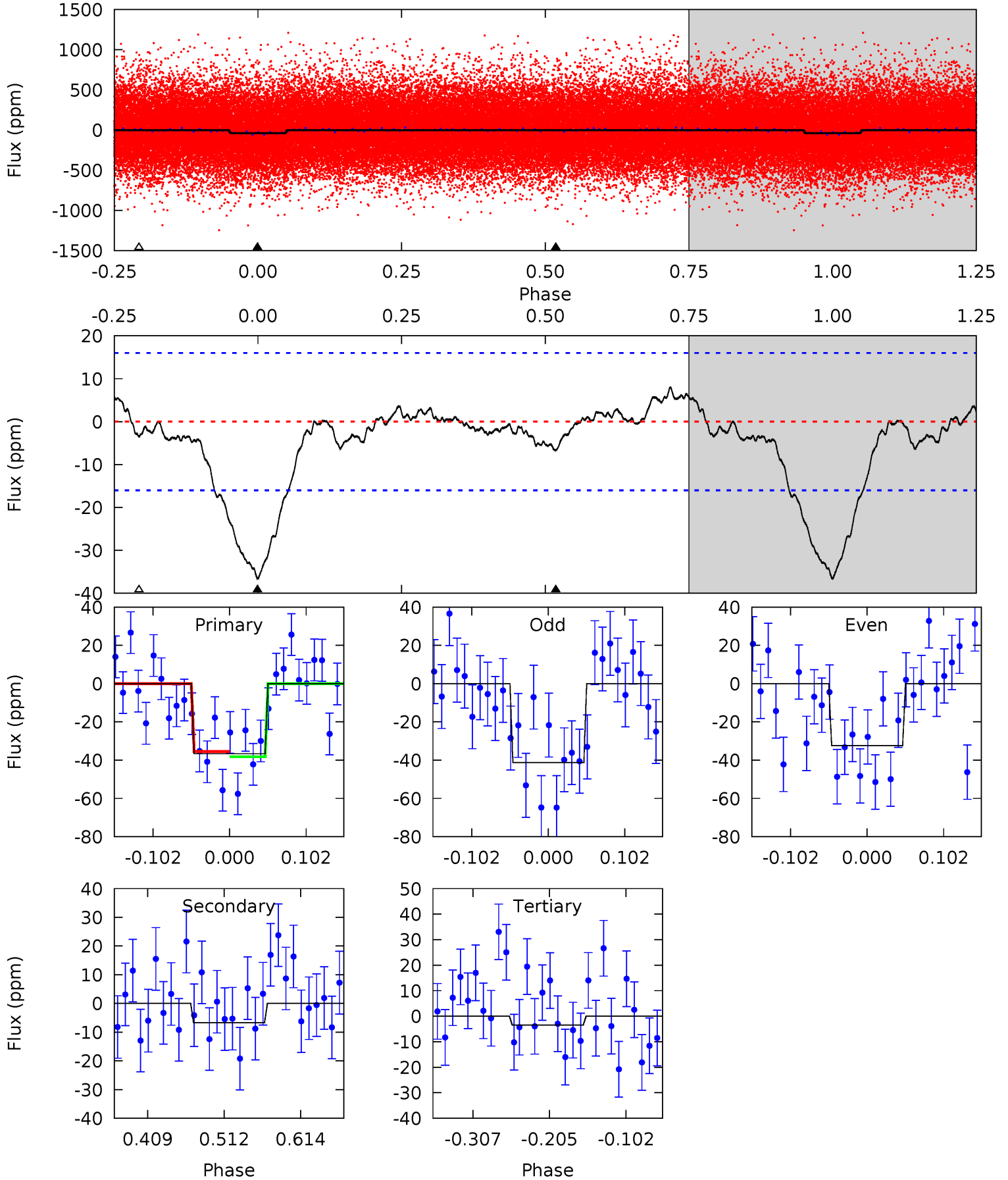
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.93	2.18	1.71	2.07	4.67	1.87	1.12	6.21	5.85	0.47	0.10	0.69	1.02	0.22	0.45



Alt Model-Shift Uniqueness Test

006285545-01, P = 5.244466 Days, E = 127.307564 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	1.92	0.99	0	4.56	1.63	0.90	9.45	10.4	0.93	1.92	1.25	0.95	0.18	0.39



Stellar Parameters For KIC 006285545

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6401^{+153}_{-230}	$4.389^{+0.067}_{-0.202}$	$-0.040^{+0.250}_{-0.300}$	$1.150^{+0.370}_{-0.148}$	$1.183^{+0.169}_{-0.169}$	$1.096^{+0.380}_{-0.543}$
	+2%/-4%	+2%/-5%	+625%/-750%	+32%/-13%	+14%/-14%	+35%/-50%
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 006285545-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-10 ± 5	$0.88^{+0.48}_{-0.41}$	1722^{+123}_{-93}	4516^{+1507}_{-801}	26^{+72}_{-17}
Alt.	-7 ± 4	$0.76^{+0.48}_{-0.38}$	1718^{+114}_{-91}	4348^{+1580}_{-861}	22^{+75}_{-16}

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 $A_{obs} \gg 1.0$

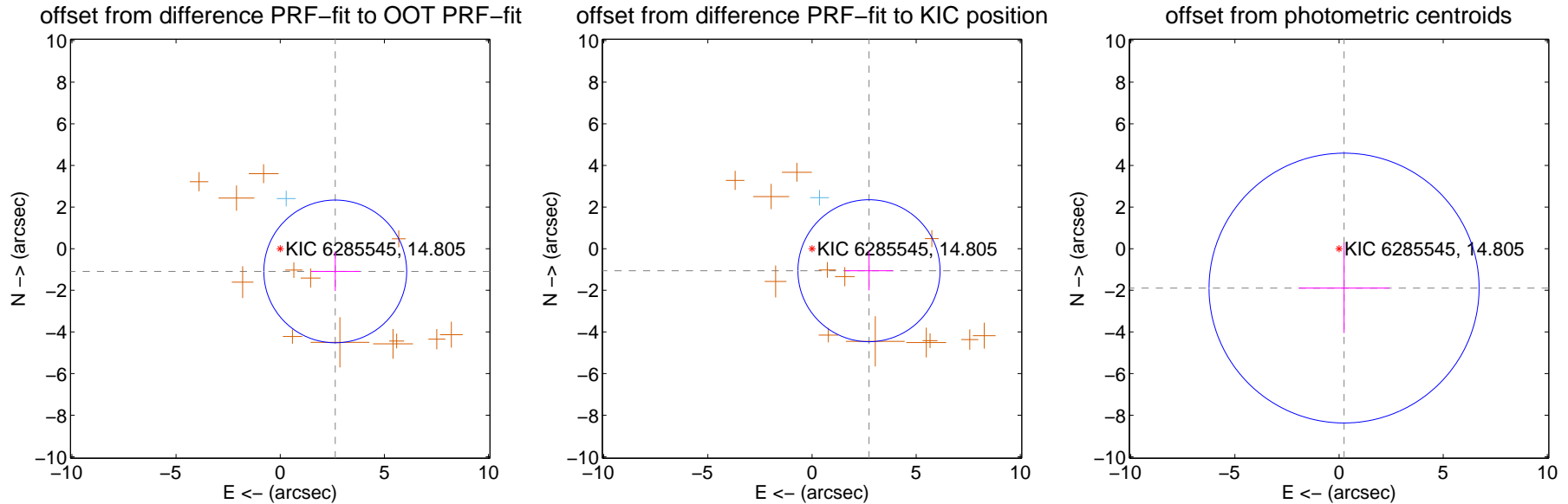
DV Centroid Data

Supplemental centroid analysis for 006285545-01. Kepler magnitude: 14.80. Transit SNR 7.07

There are 1 quarters with good PRF difference image offsets

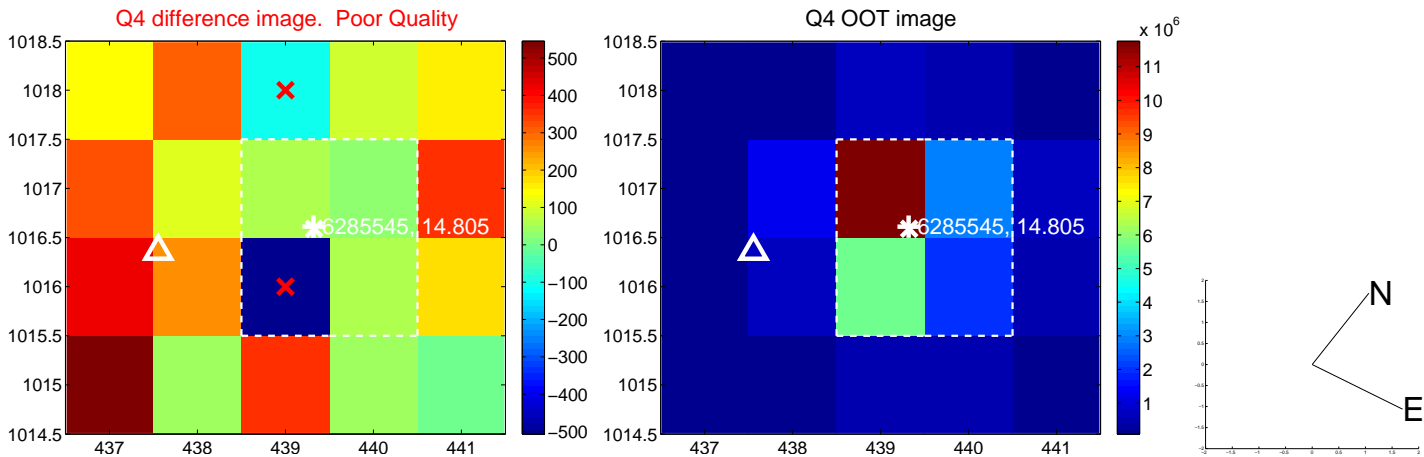
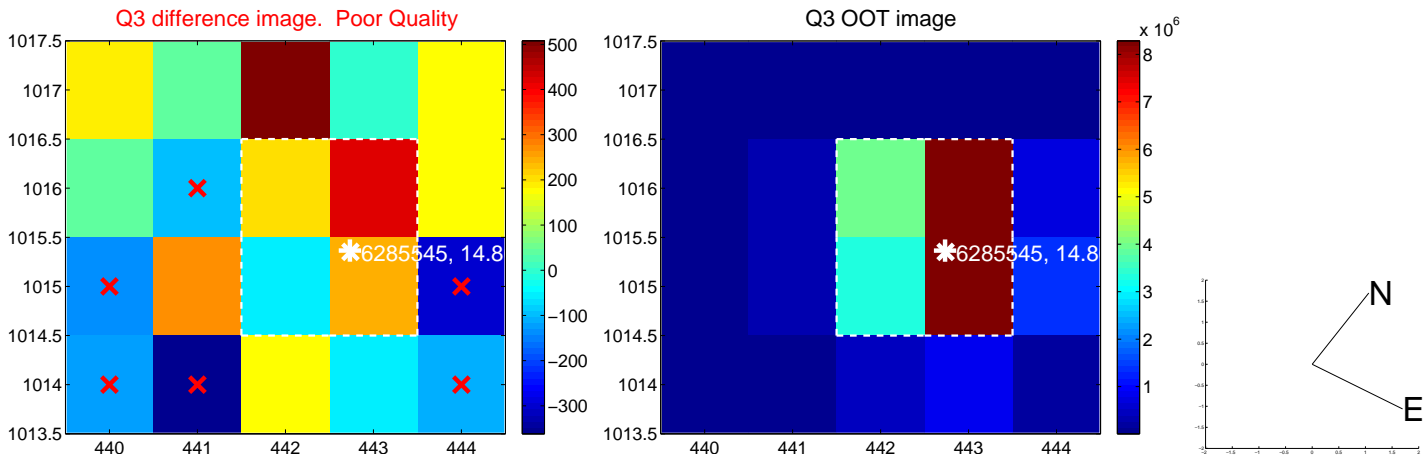
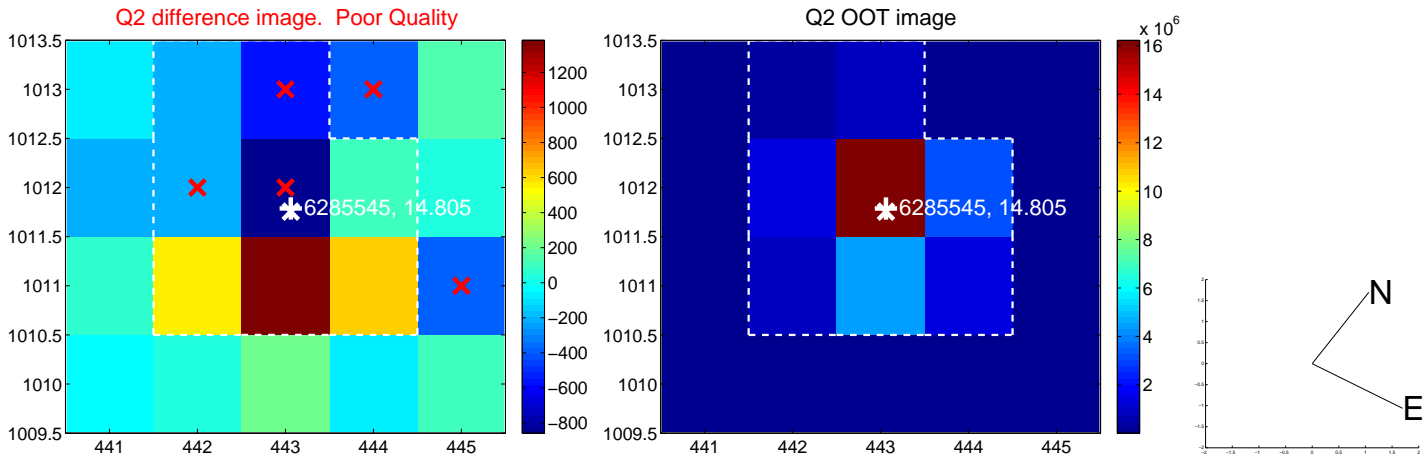
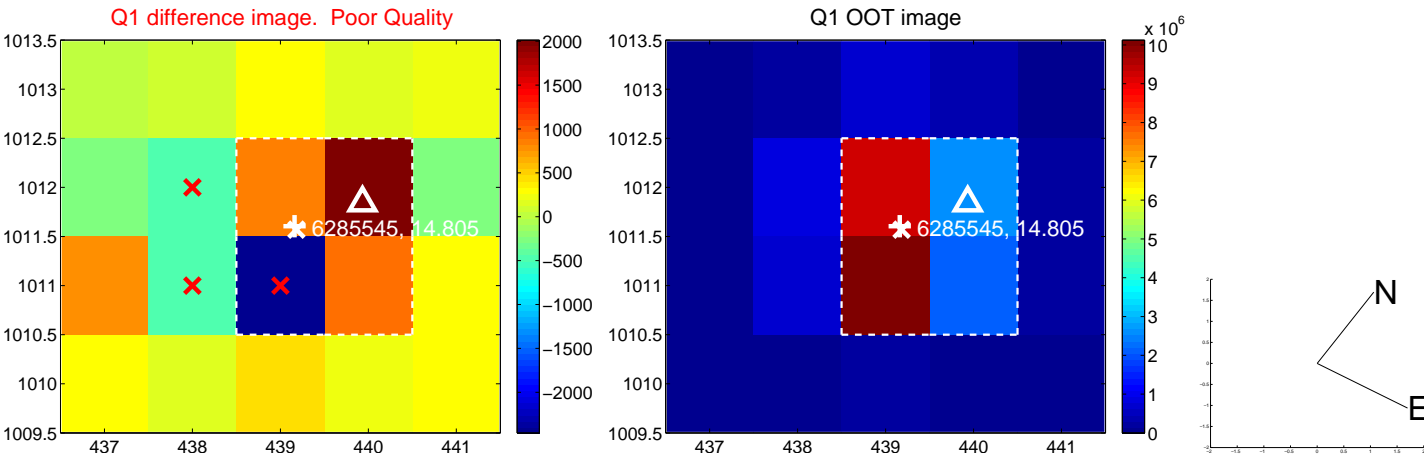
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.859 ± 1.143	2.50	-2.643 ± 1.174	-1.092 ± 0.942
PRF-fit source offset from KIC position	2.933 ± 1.137	2.58	-2.735 ± 1.163	-1.059 ± 0.943
photometric centroid source offset	1.91 ± 2.16	0.88	-0.24 ± 2.17	-1.89 ± 2.16

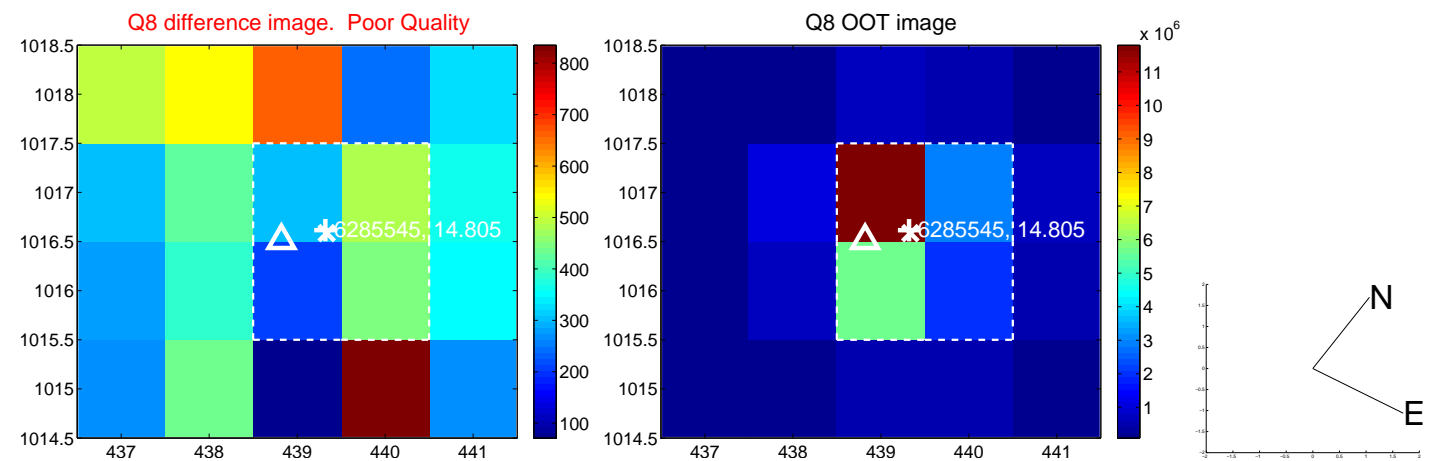
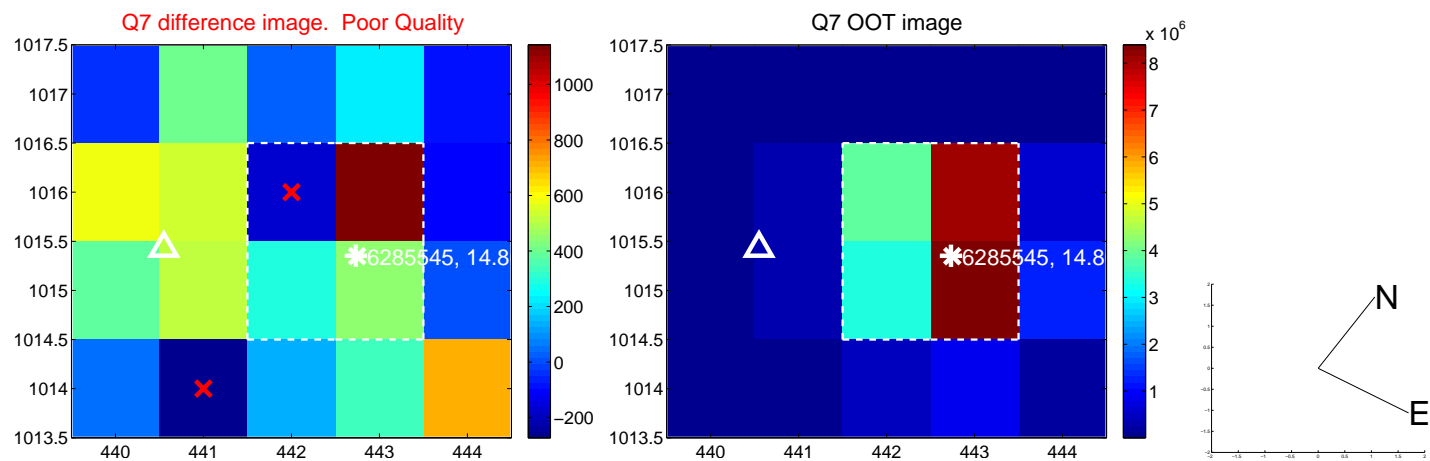
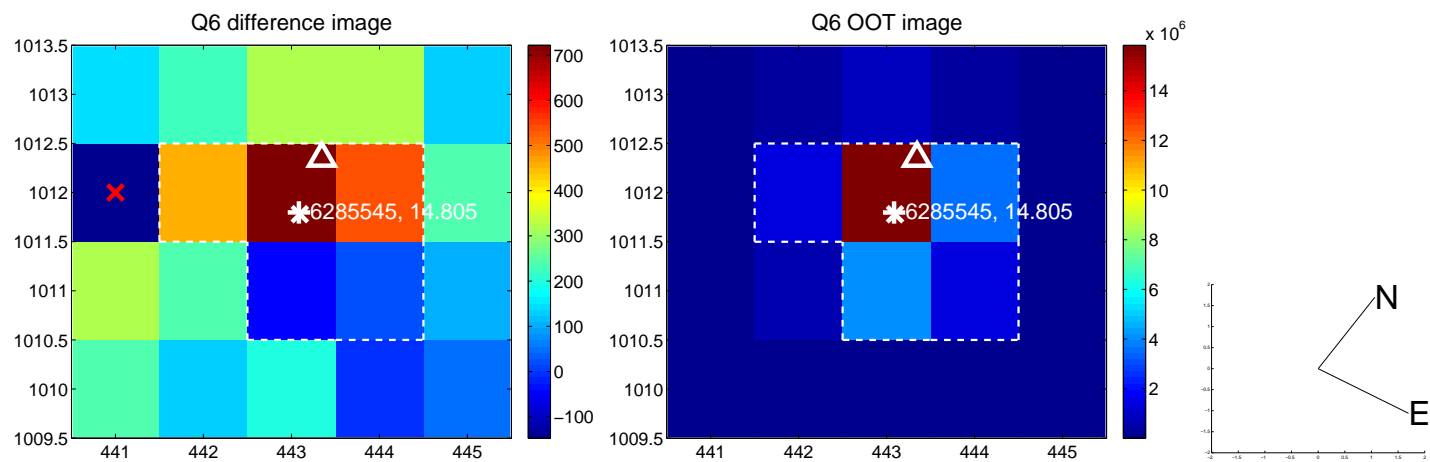
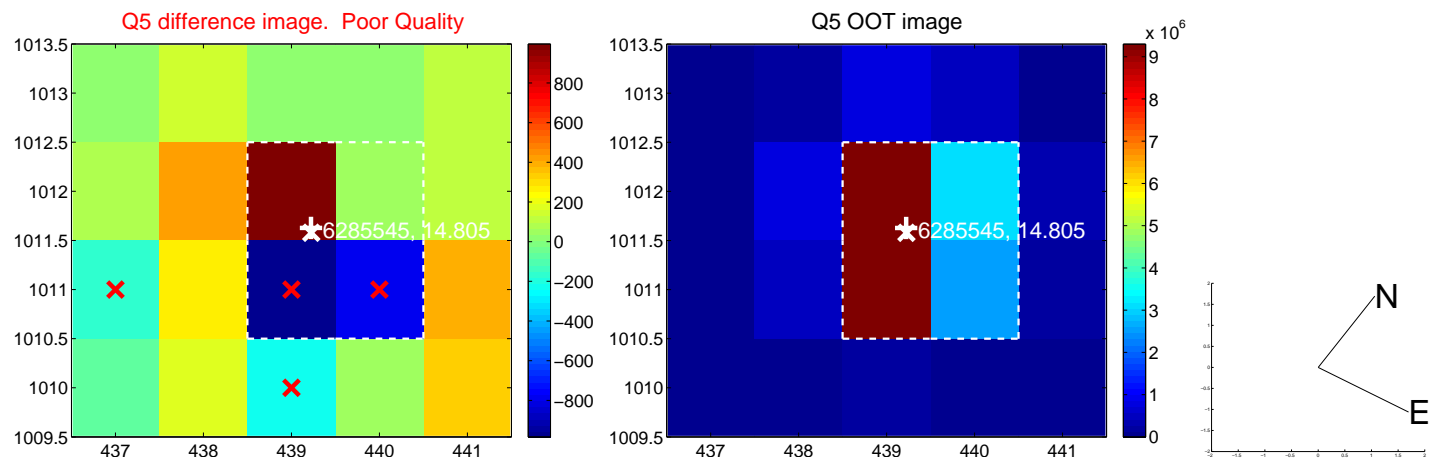


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

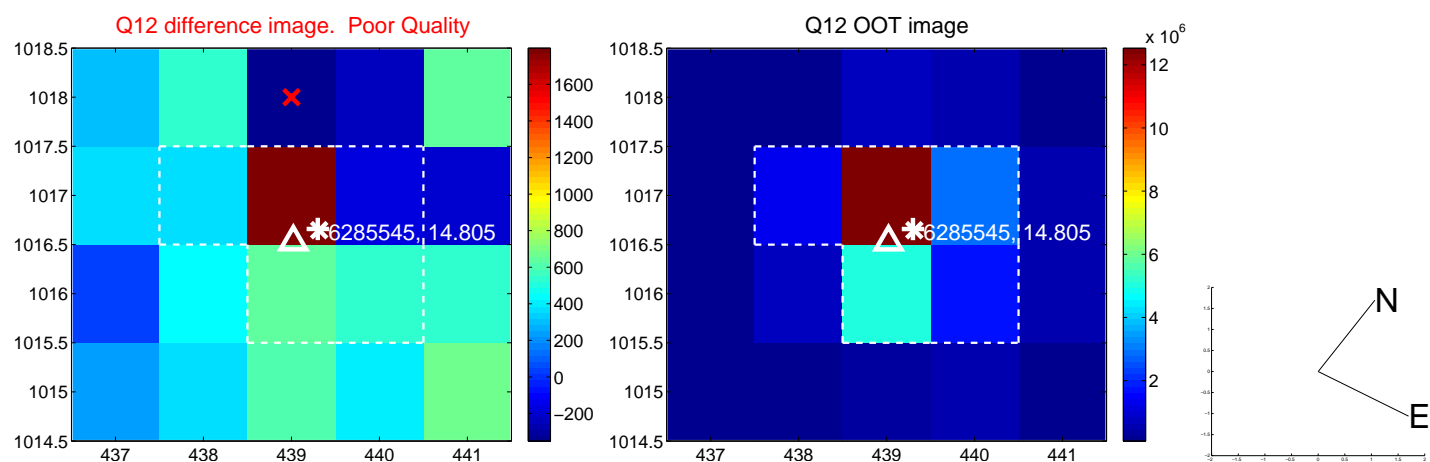
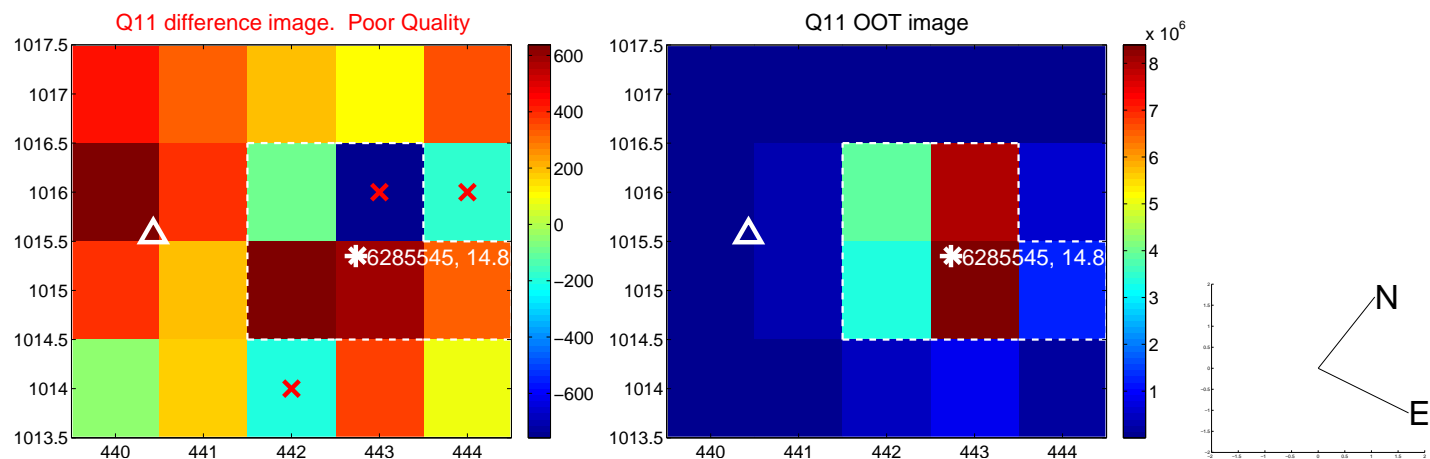
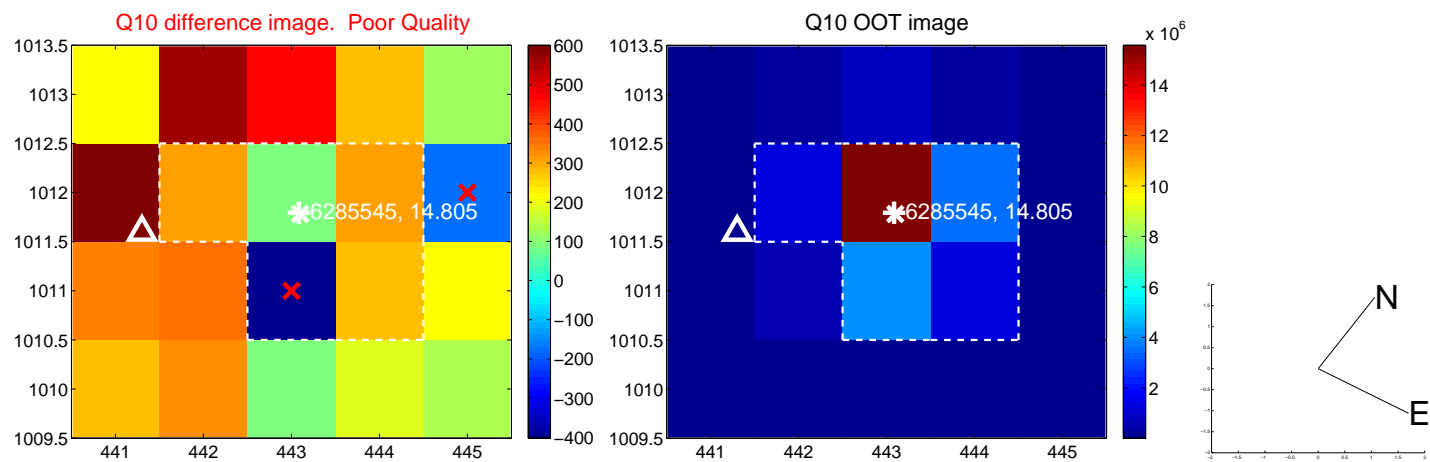
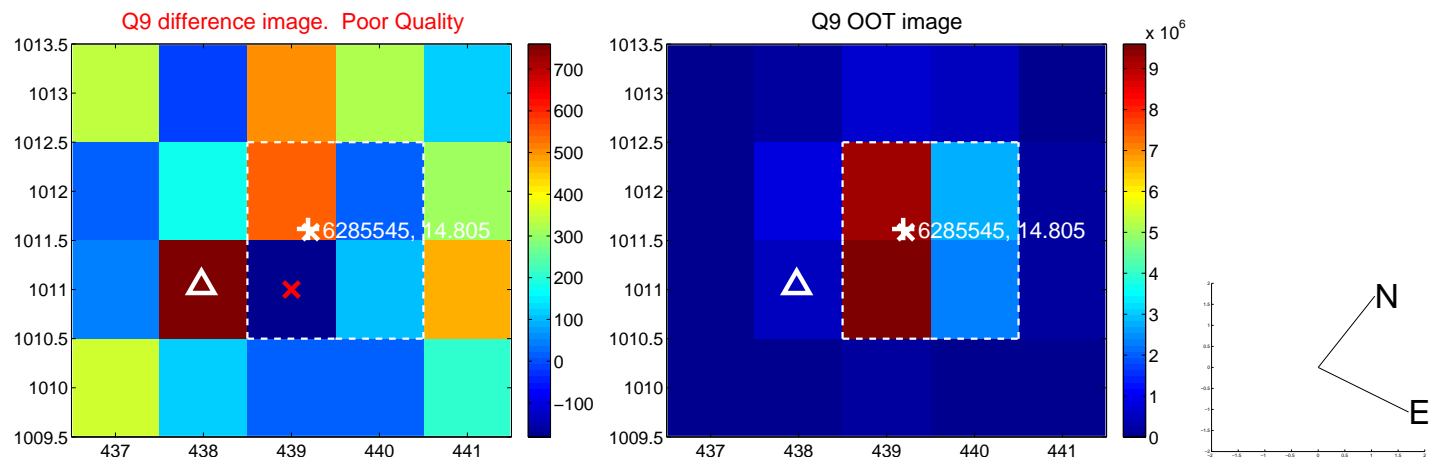
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



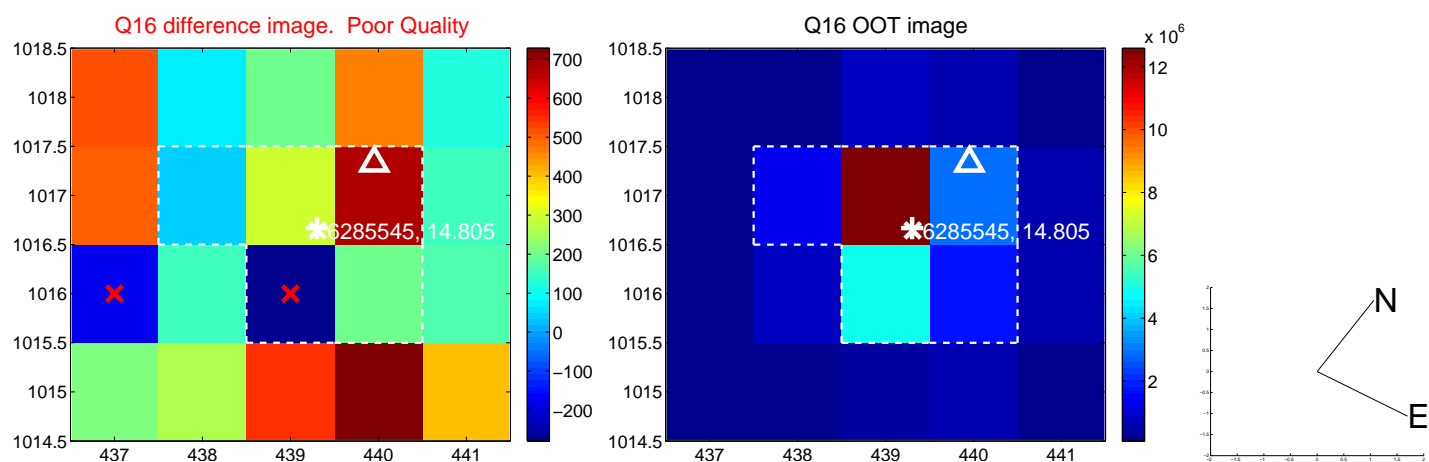
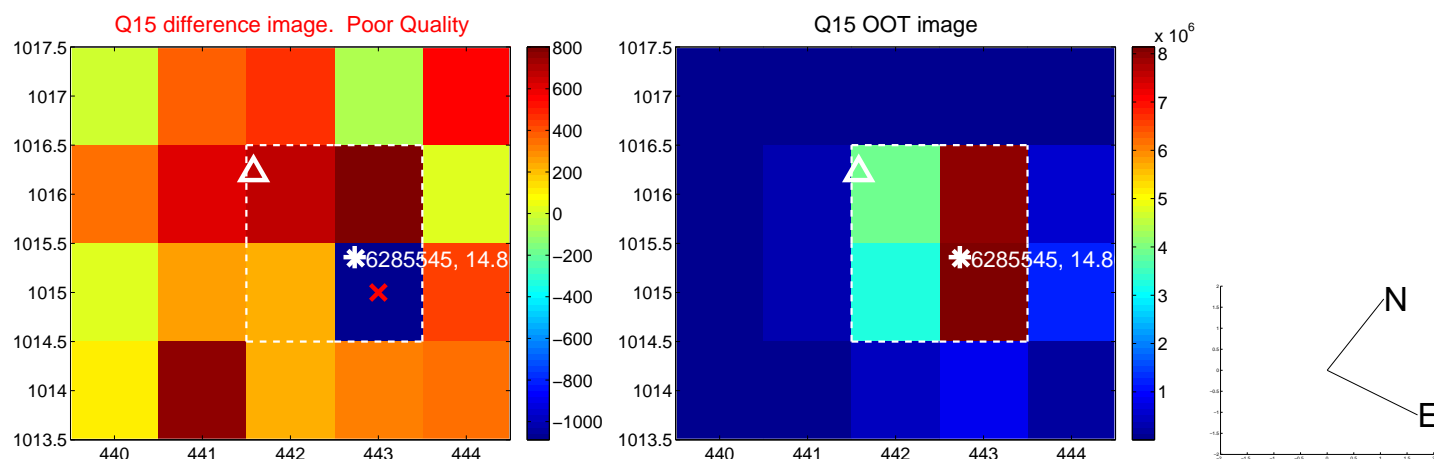
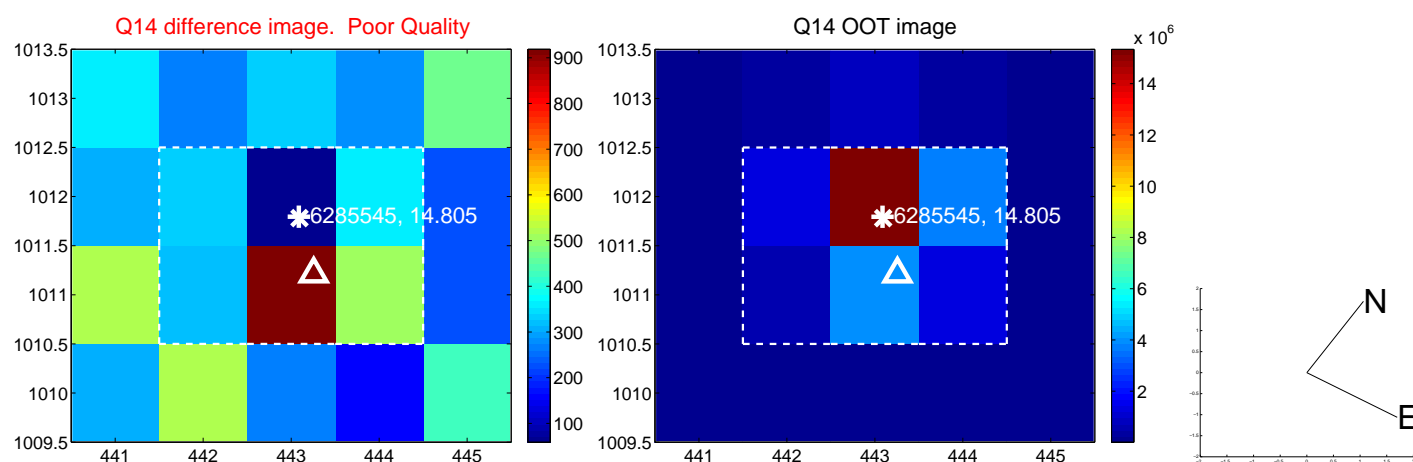
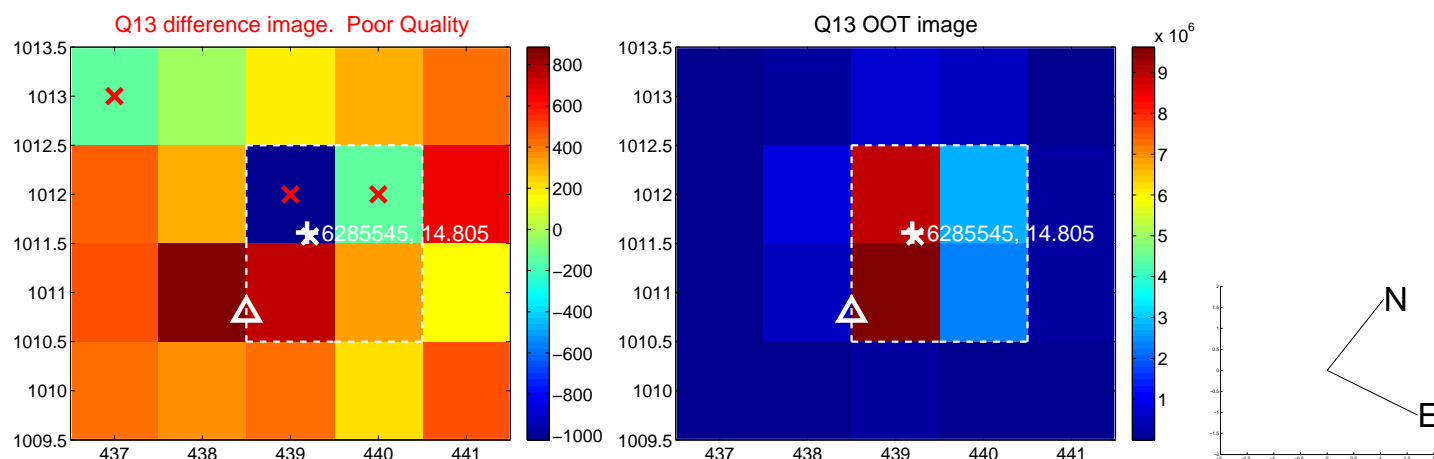
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



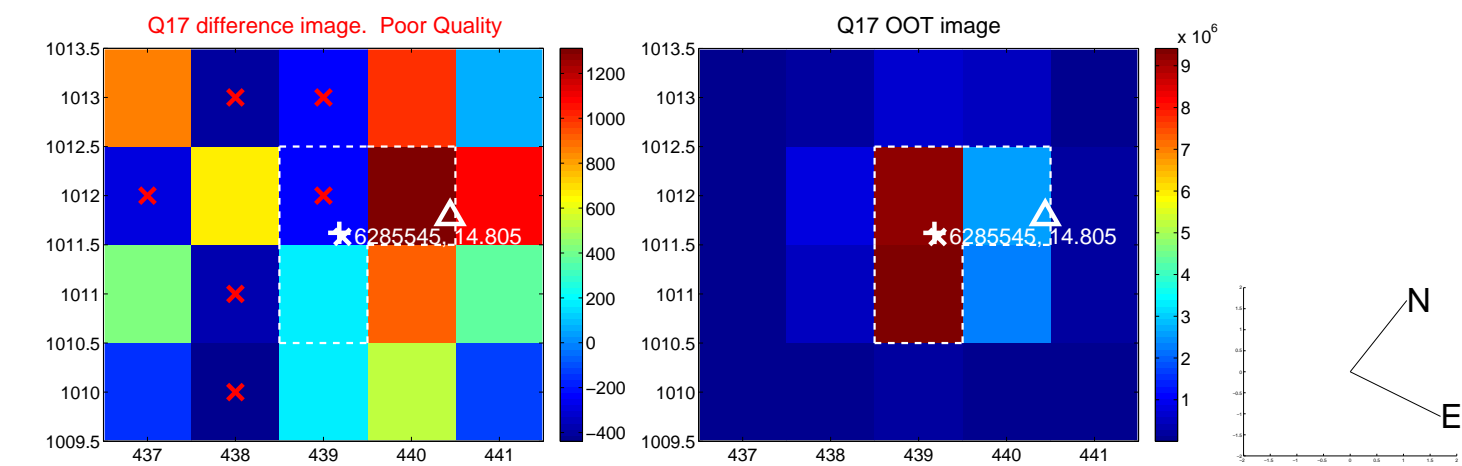
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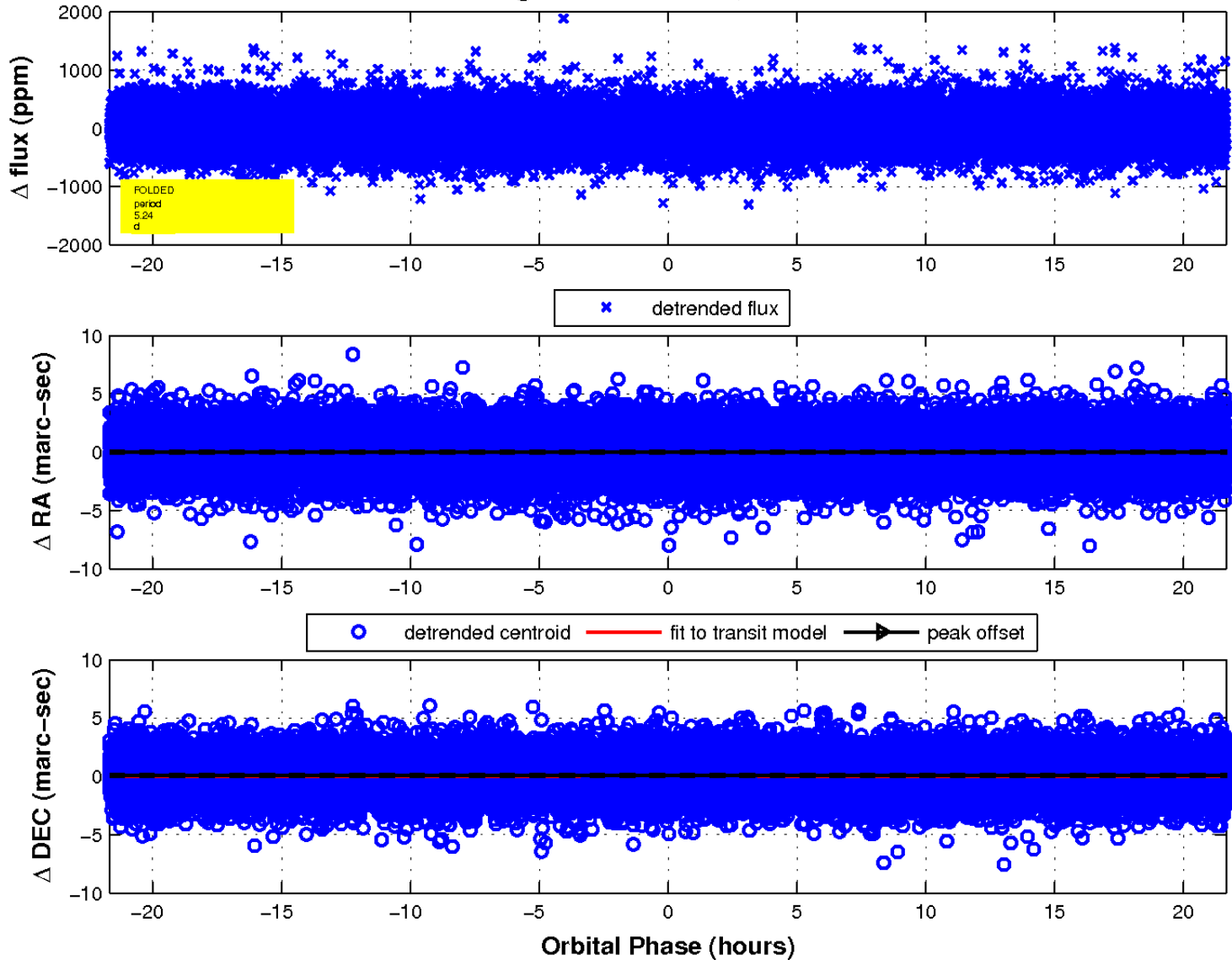
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

