

KIC 005389184

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})
005389184-01	OBS	6575.01	1.069956	132.299118	37.7	1.494	8.4	7.8	1.22	5869	0.89	3725.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005389184-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET—HALO_GHOST

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

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

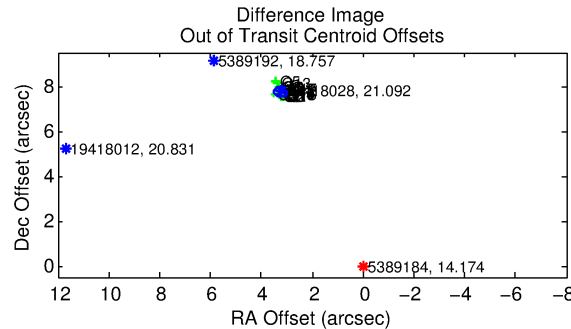
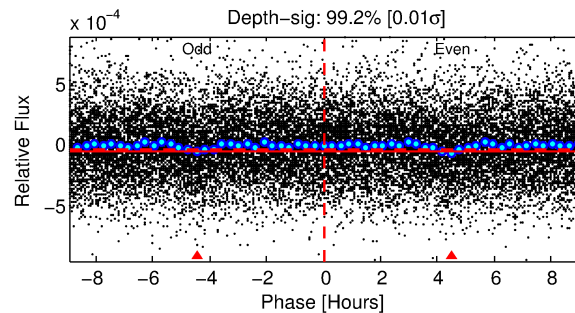
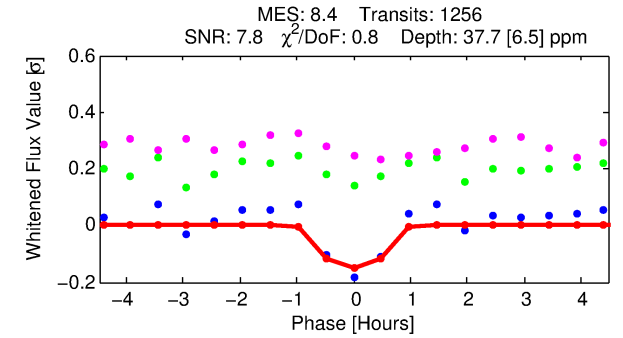
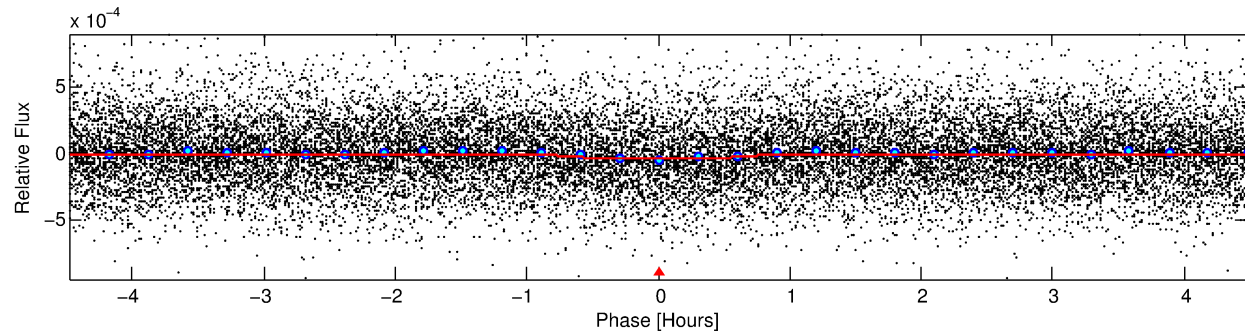
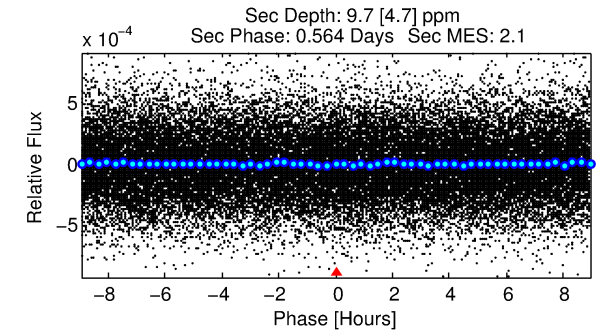
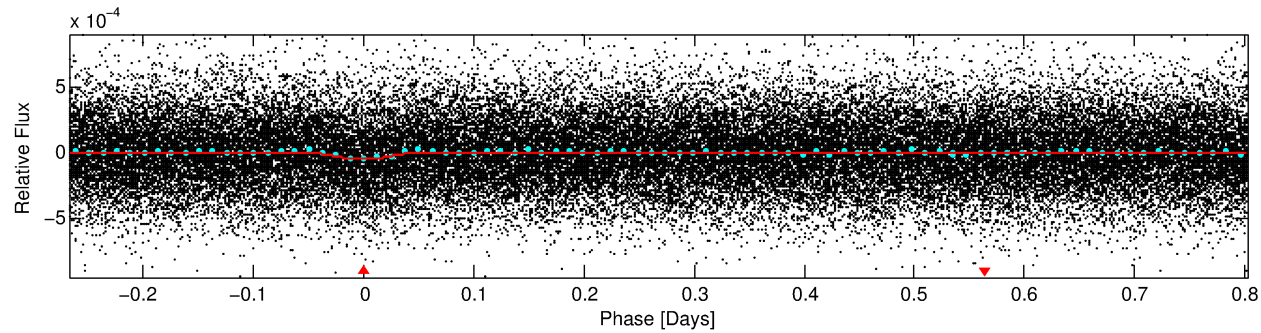
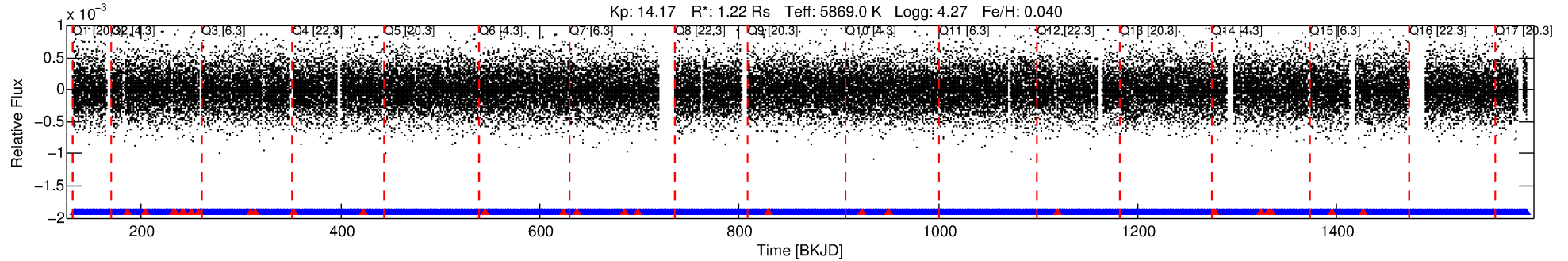
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005389184-01

No Significant Match Found

DV One-Page Summary

KIC: 5389184 Candidate: 1 of 1 Period: 1.070 d
KOI: K06575.01 Corr: 0.912



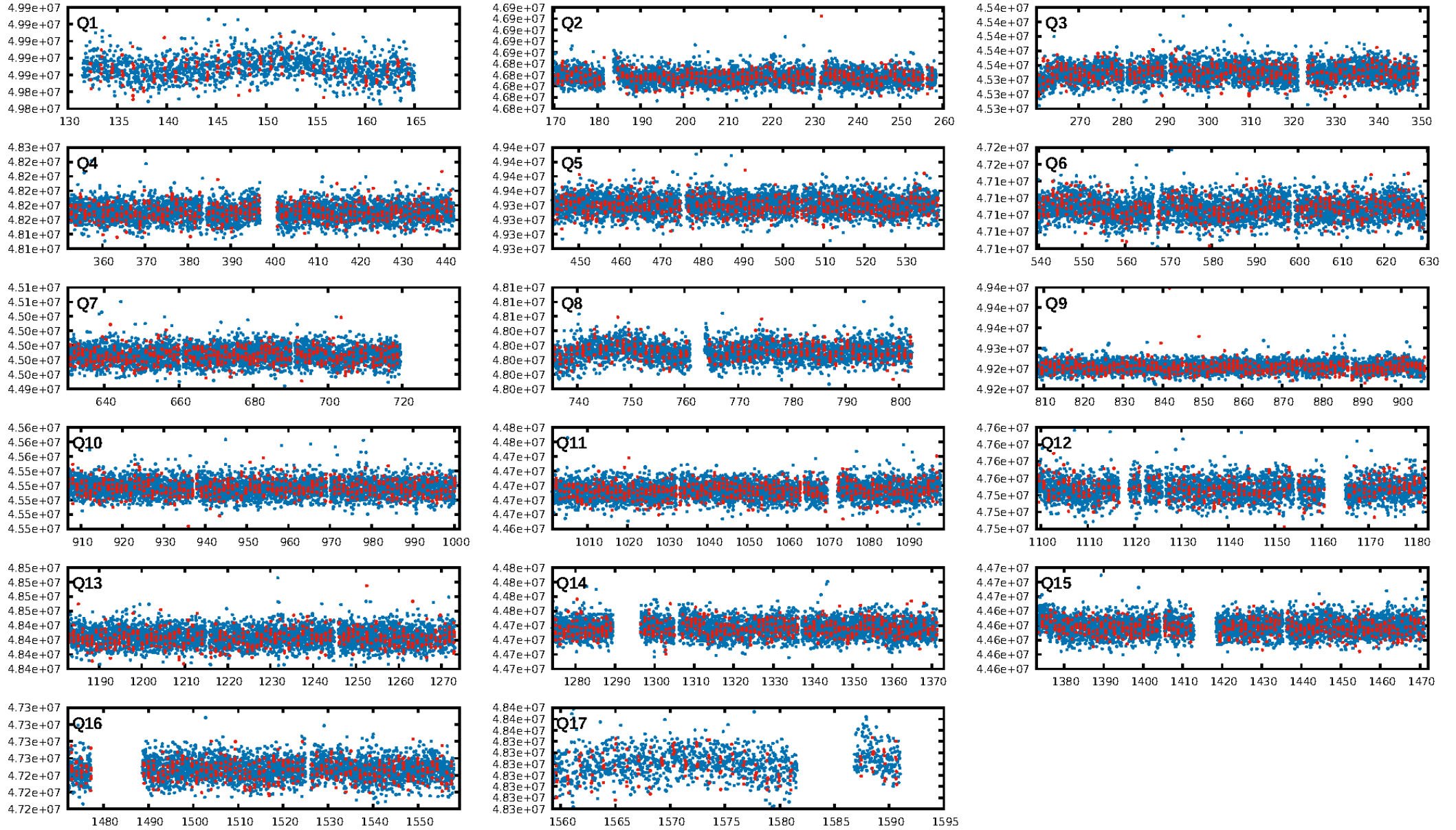
DV Fit Results:

Period = 1.06996 [0.00001] d
Epoch = 132.2991 [0.0030] BKJD
Rp/R* = 0.0067 [0.0042]
a/R* = 2.64 [6.86]
b = 0.90 [0.66]
Seff = 3725.12 [1358.68]
Teff = 1992 [182] K
Rp = 0.89 [0.62] Re
a = 0.0206 [0.0050] AU
Ag = 2.84 [3.94] [0.47σ]
Teffp = 3997 [1349] K [1.47σ]

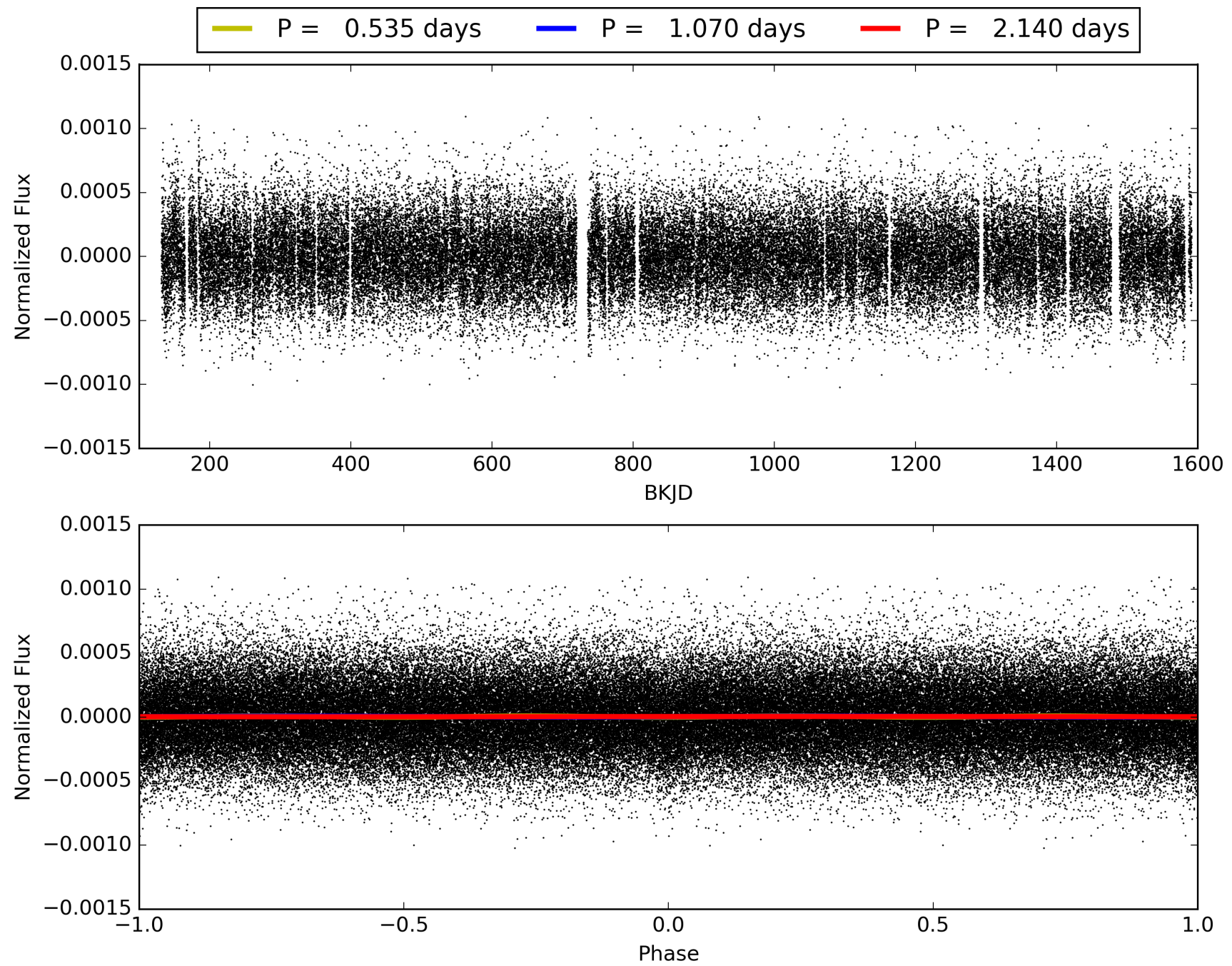
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.20e-16
RollingBand-fgt: 0.98 [1172/1200]
GhostDiagnostic-chr: -0.1456
Centroid-sig: 0.0%
Centroid-so: 36.003 arcsec [20.90σ]
OotOffset-rm: 8.408 arcsec [101.42σ]
KicOffset-rm: 8.446 arcsec [103.82σ]
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 005389184-01, PDC Light Curves

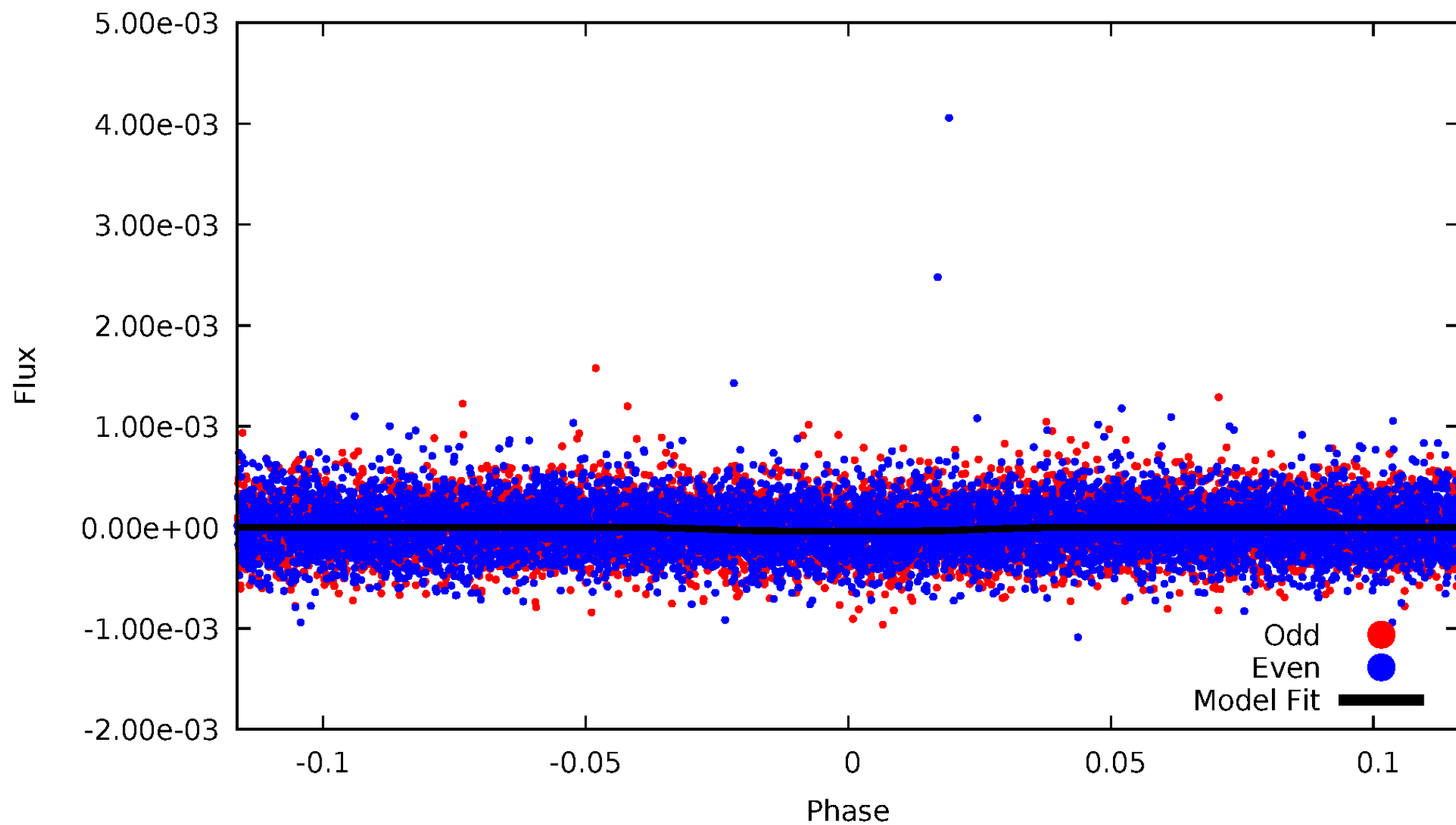


TCE 005389184-01



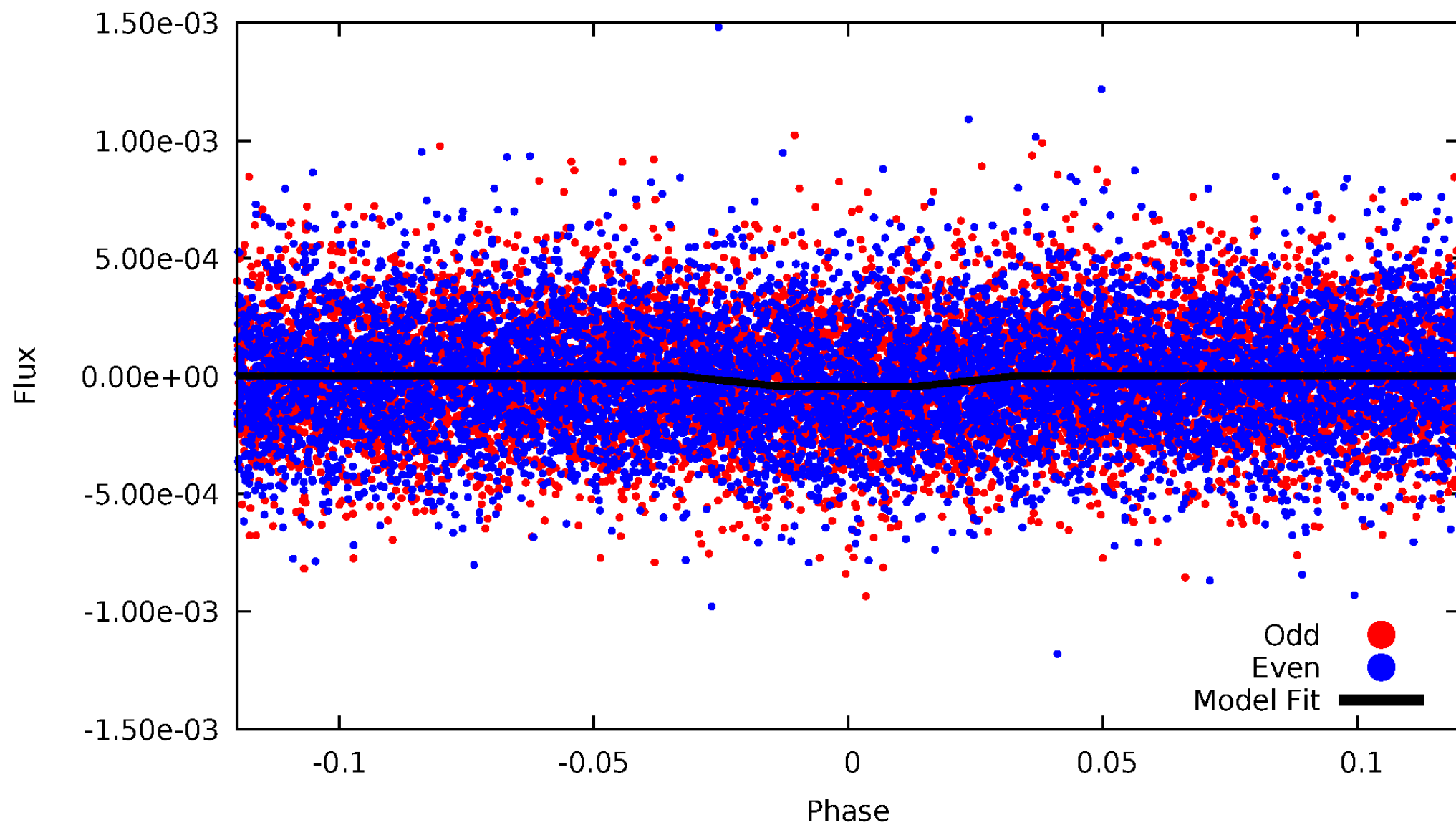
DV Odd/Even

TCE 005389184-01

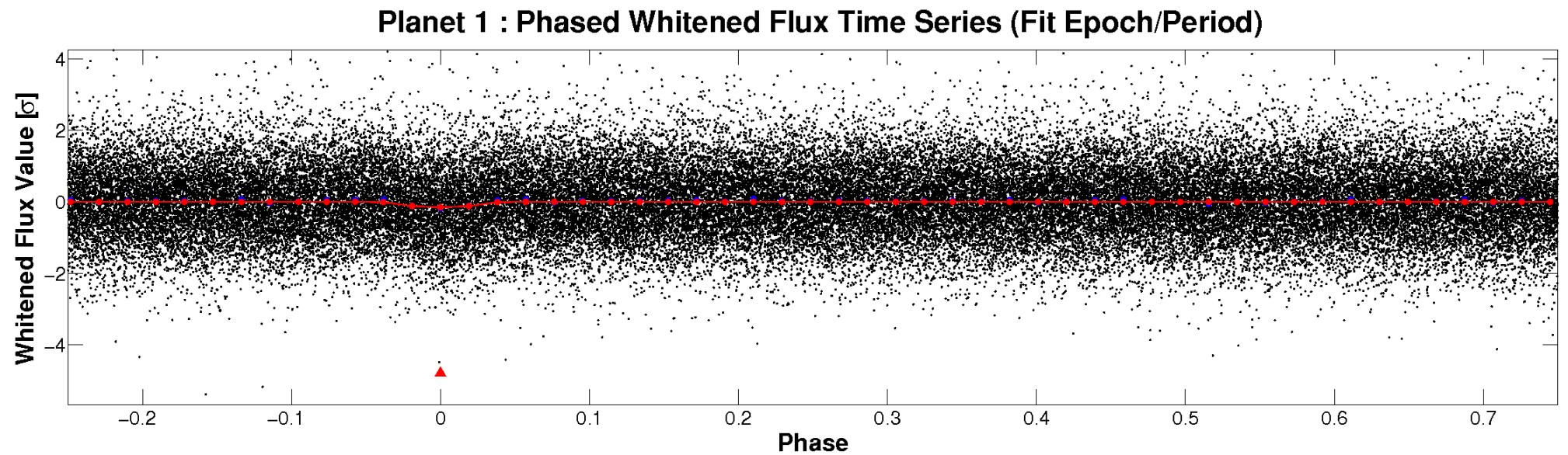
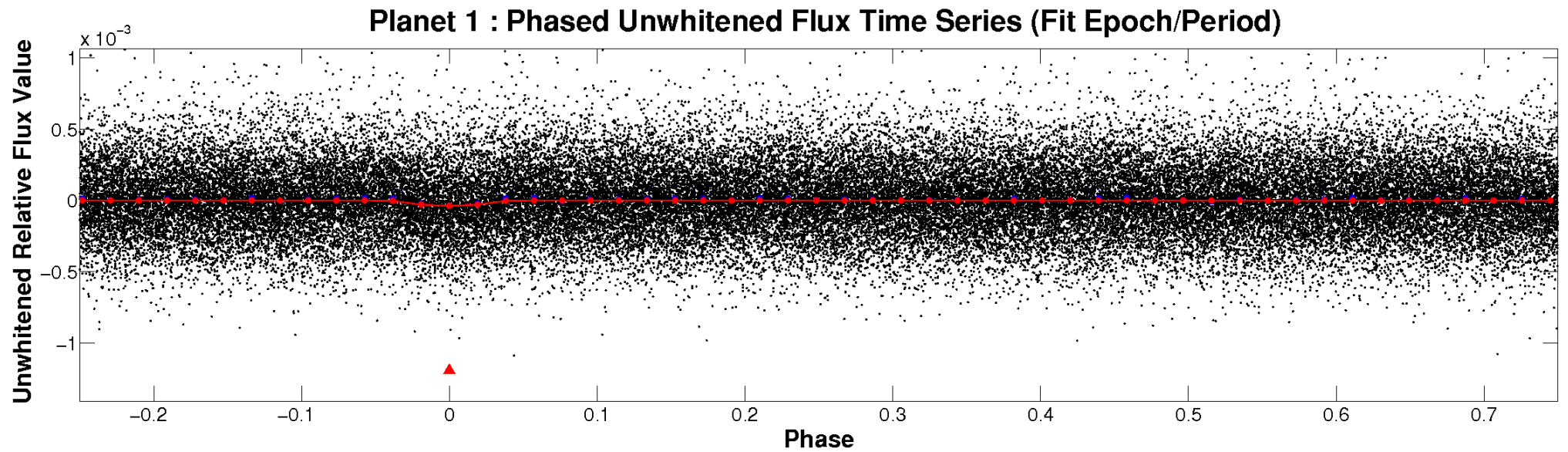


ALT Odd/Even

TCE 005389184-01

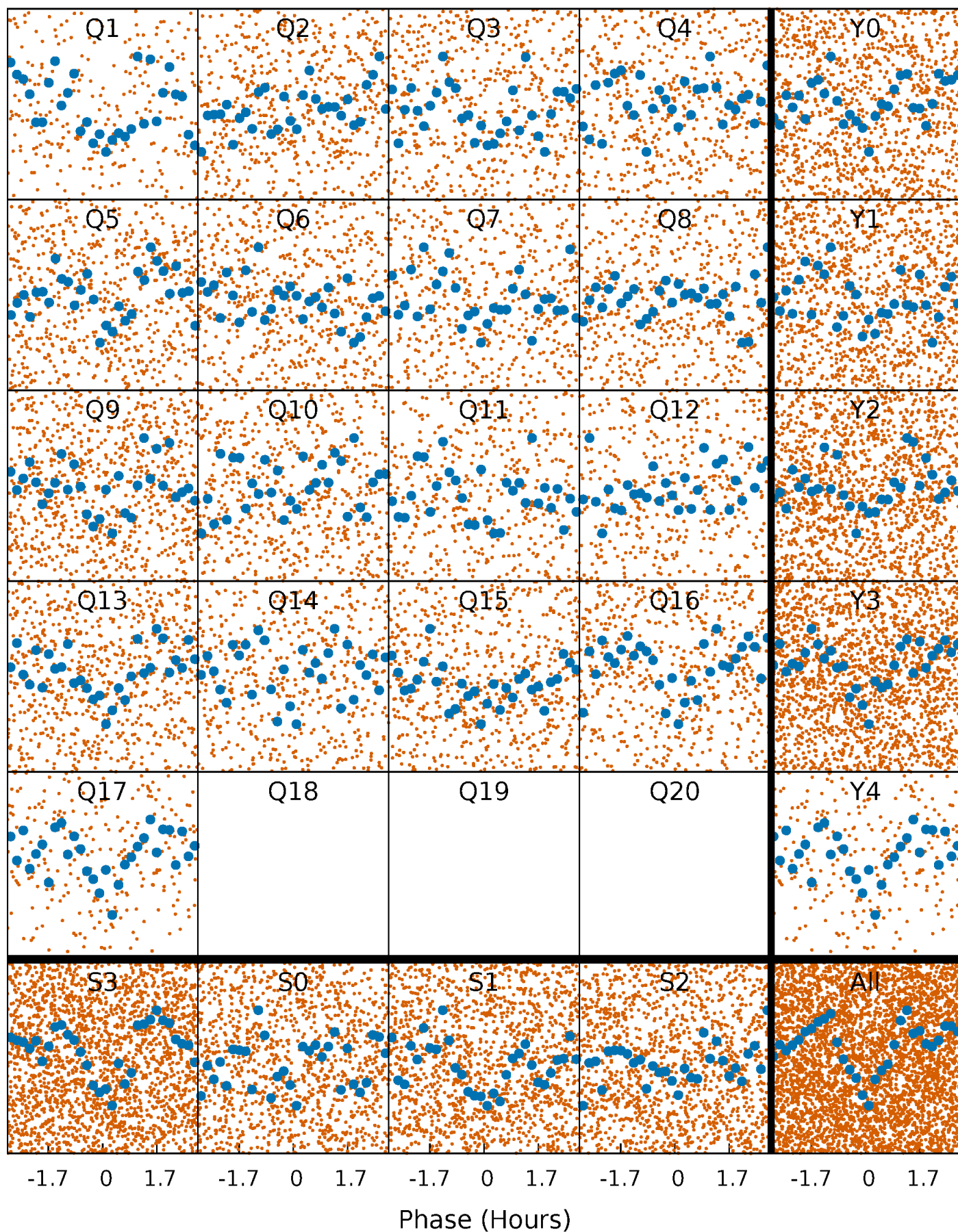


Non-Whitened Vs. Whitened Light Curve



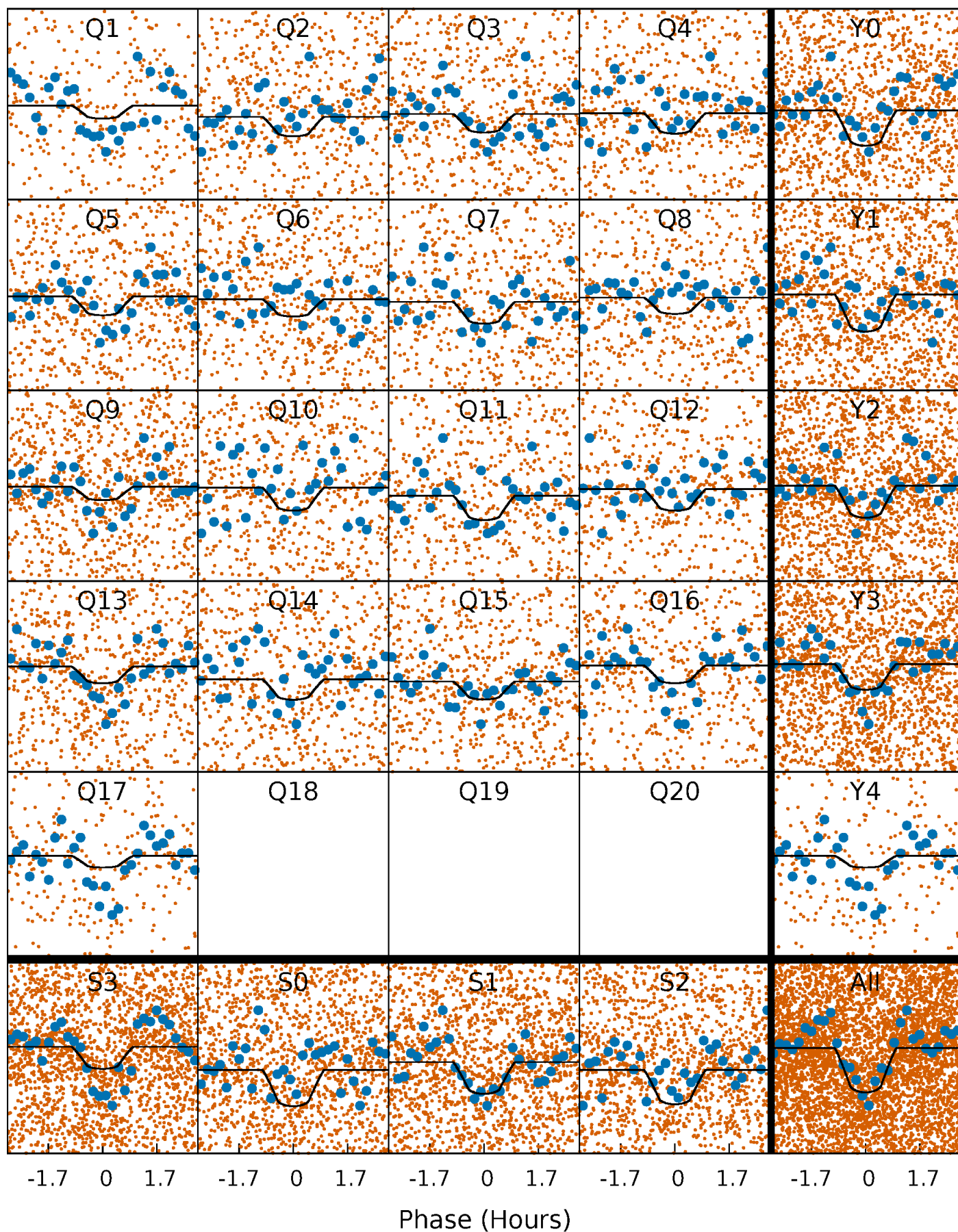
PDC Quarter-Phased Transit Curves

TCE 005389184-01 P= 1.069956 Days $T_0=132.299118$ (BKJD)



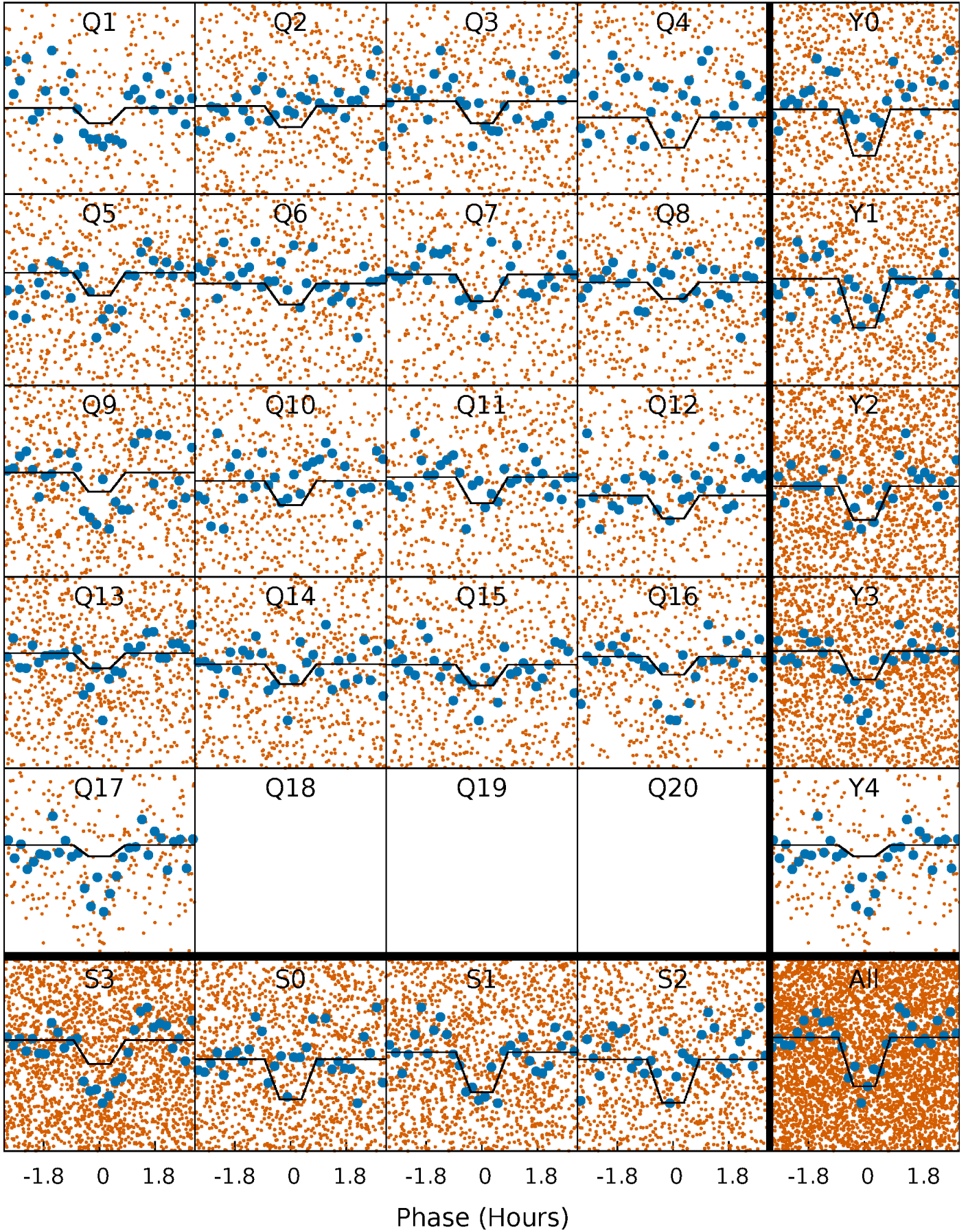
DV Quarter-Phased Transit Curves

TCE 005389184-01 P= 1.069956 Days $T_0=132.299118$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

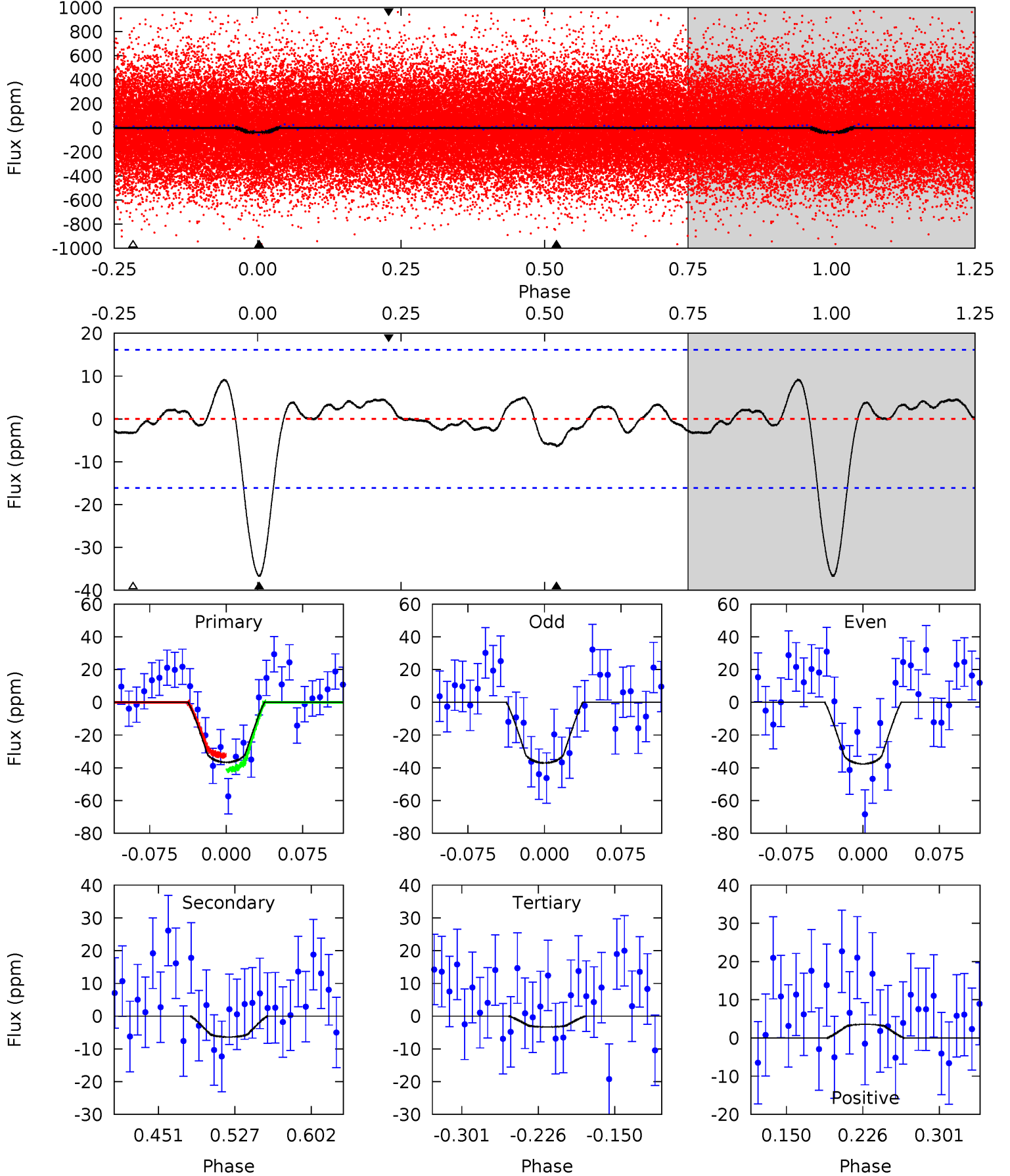
TCE 005389184-01 P= 1.069960 Days $T_0=132.298891$ (BKJD)



DV Model-Shift Uniqueness Test

005389184-01, P = 1.069956 Days, E = 131.229162 Days

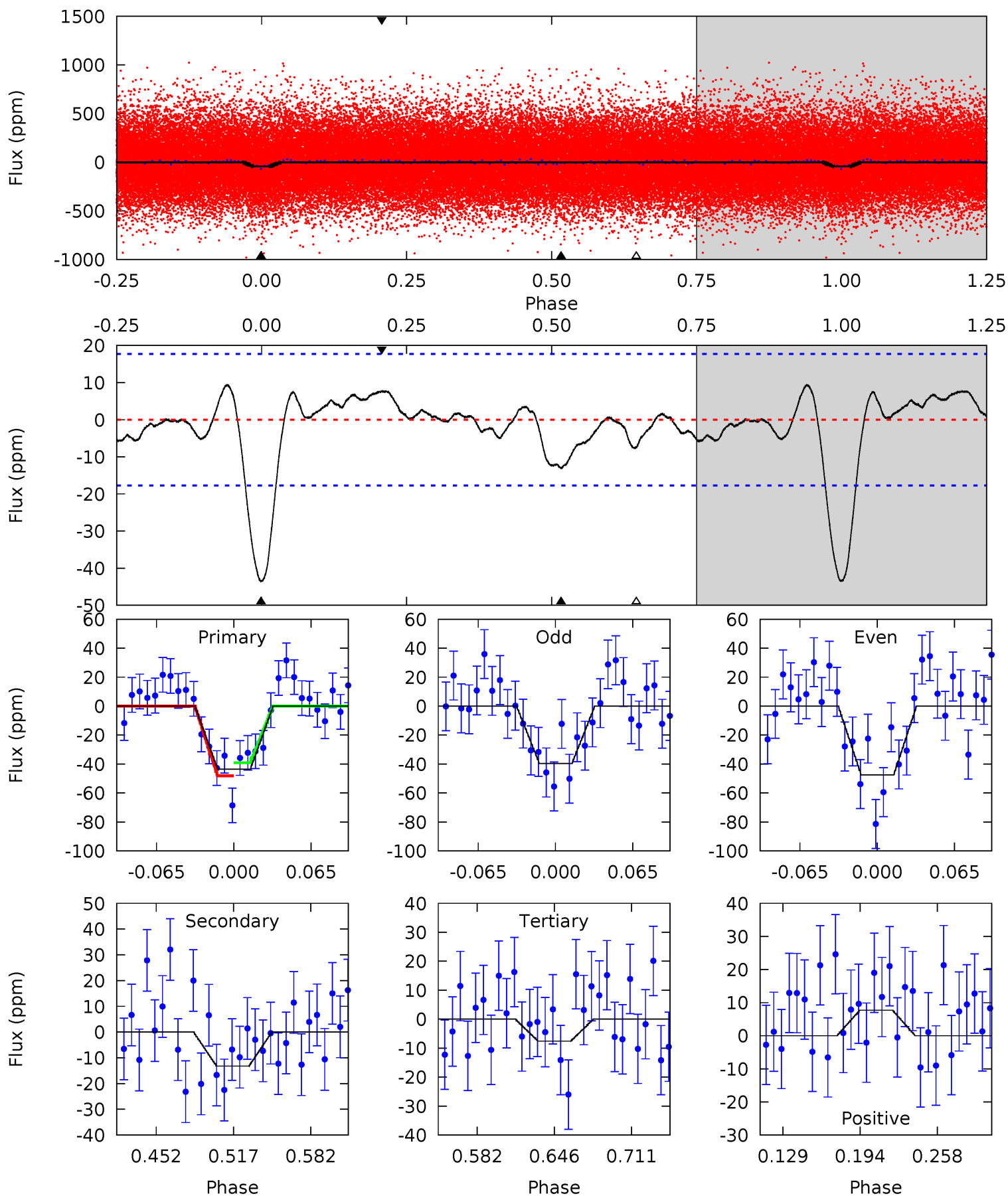
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	1.83	0.95	1.02	4.62	1.78	0.65	9.56	9.49	0.87	0.80	0.09	0.91	0.20	1.25



Alt Model-Shift Uniqueness Test

005389184-01, P = 1.069960 Days, E = 131.228931 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	3.46	1.99	2.03	4.66	1.85	0.94	9.45	9.41	1.47	1.44	1.04	1.01	0.18	1.19



Stellar Parameters For KIC 005389184

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5869^{+176}_{-176}	$4.274^{+0.185}_{-0.185}$	$0.040^{+0.250}_{-0.300}$	$1.221^{+0.357}_{-0.268}$	$1.021^{+0.138}_{-0.124}$	$0.789^{+0.725}_{-0.372}$
	+3%/-3%	+4%/-4%	+625%/-750%	+29%/-22%	+14%/-12%	+92%/-47%
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 005389184-01 / KOI 6575.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 3	$0.92^{+0.59}_{-0.49}$	2780^{+207}_{-184}	3697^{+1289}_{-1058}	$1.577^{+5.539}_{-1.153}$
Alt.	-13 ± 4	$0.96^{+0.58}_{-0.53}$	2792^{+197}_{-200}	4285^{+1853}_{-826}	$3.302^{+12.299}_{-2.118}$

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 $A_{\text{obs}} \gg 1.0$

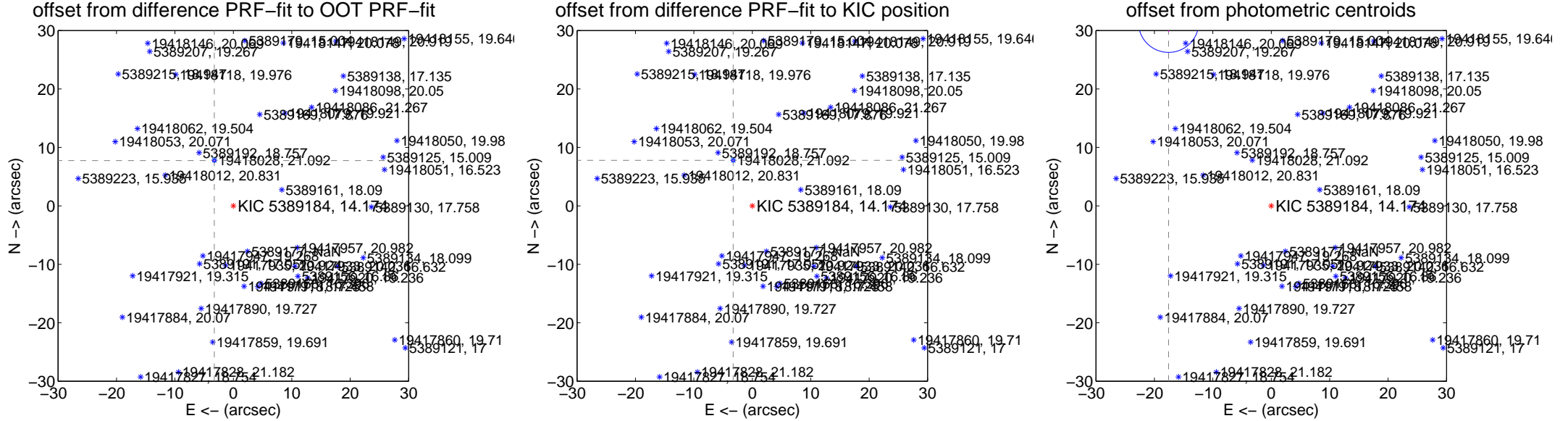
DV Centroid Data

Supplemental centroid analysis for 005389184-01. Kepler magnitude: 14.17. Transit SNR 7.78

There are 17 quarters with good PRF difference image offsets

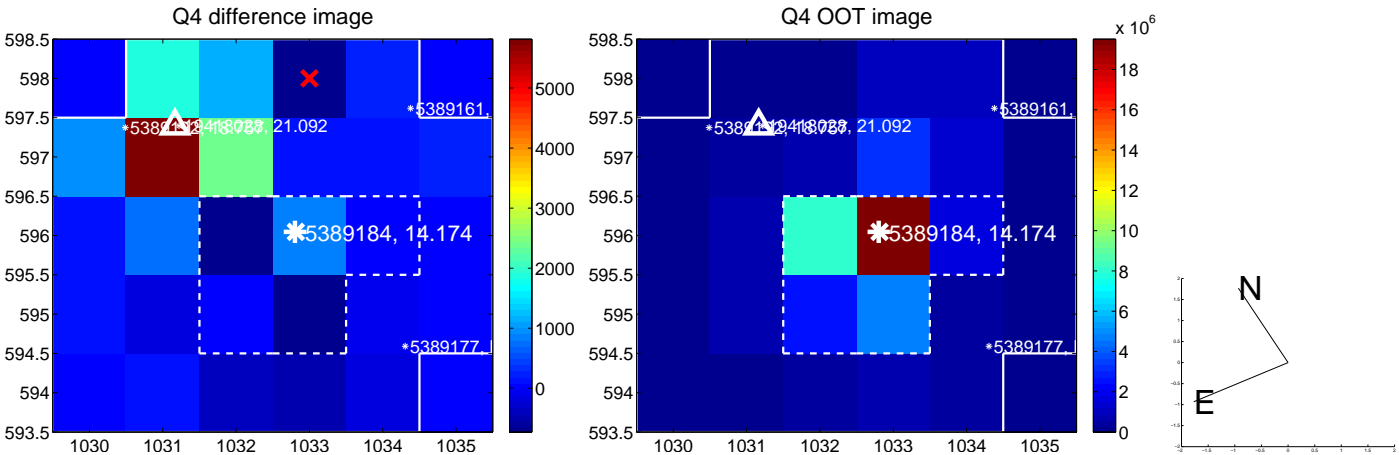
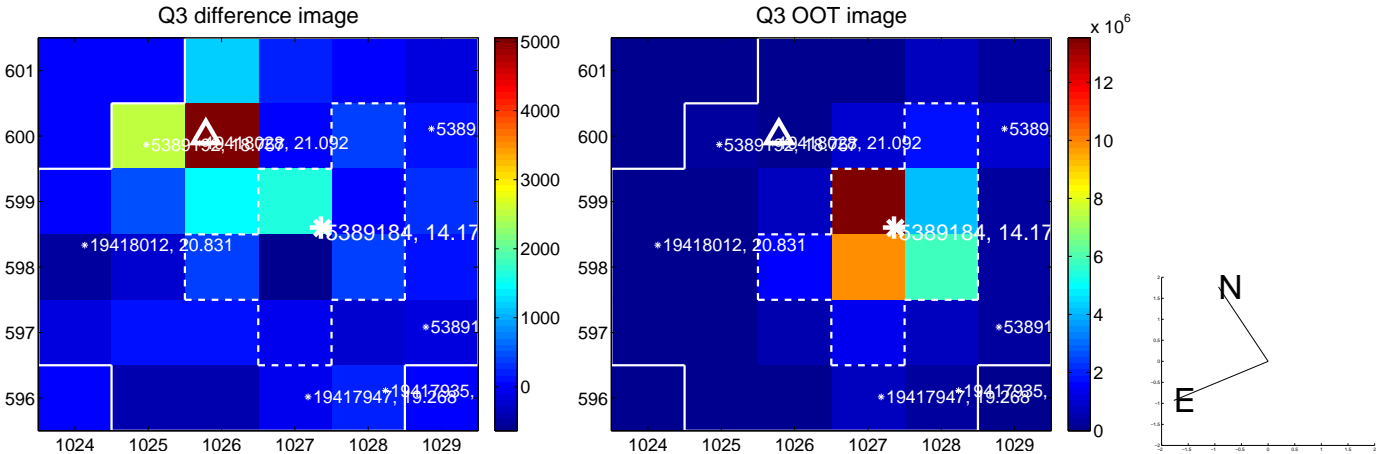
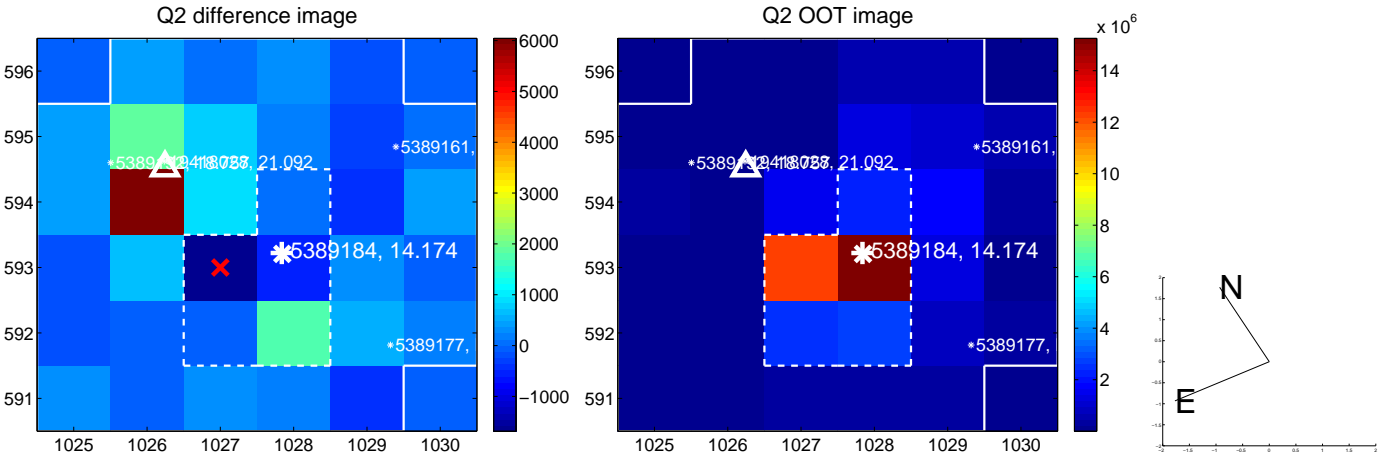
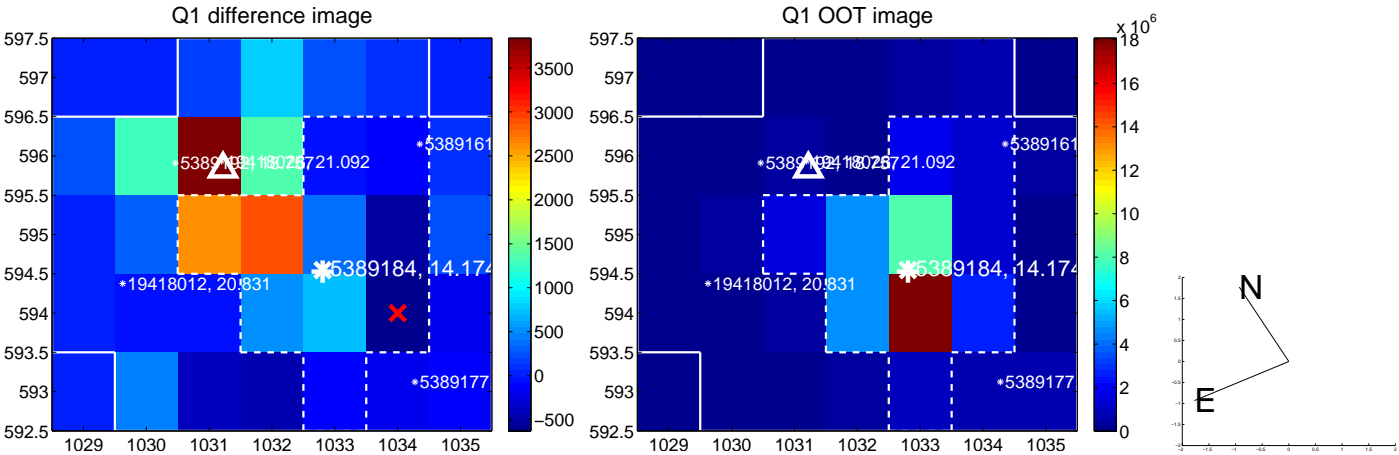
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.408 \pm 0.083	101.42	3.258 \pm 0.073	7.751 \pm 0.082
PRF-fit source offset from KIC position	8.446 \pm 0.081	103.82	3.276 \pm 0.073	7.784 \pm 0.080
photometric centroid source offset	36.00 \pm 1.72	20.90	17.57 \pm 1.88	31.42 \pm 1.67

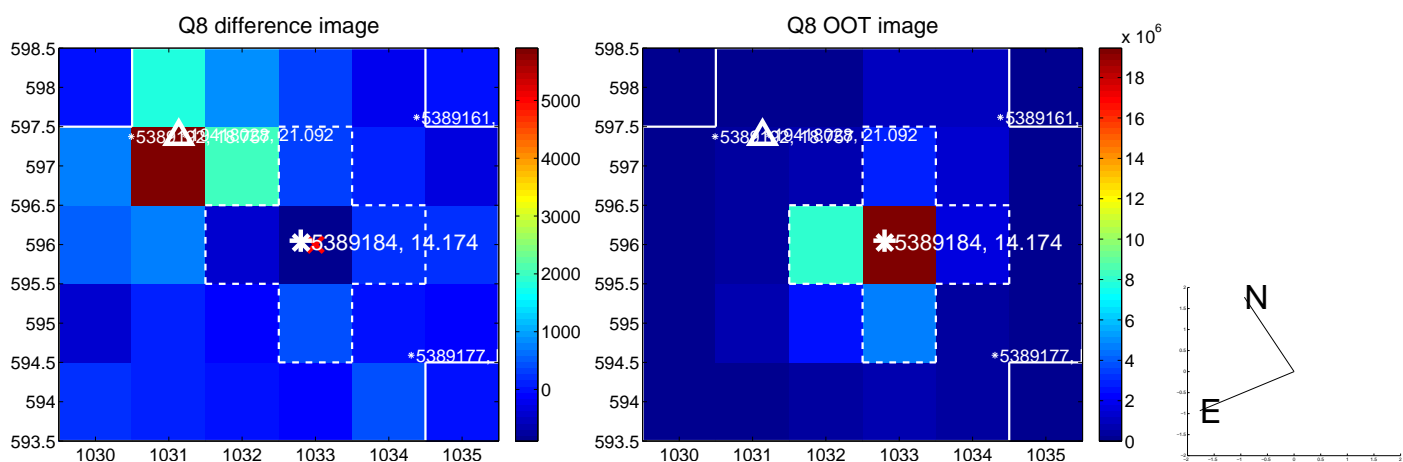
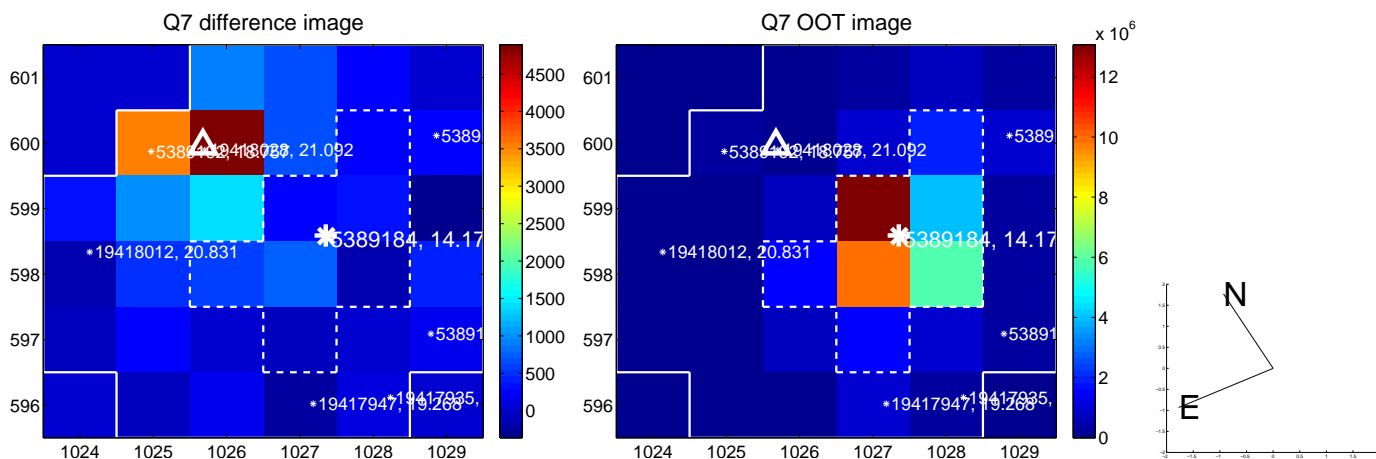
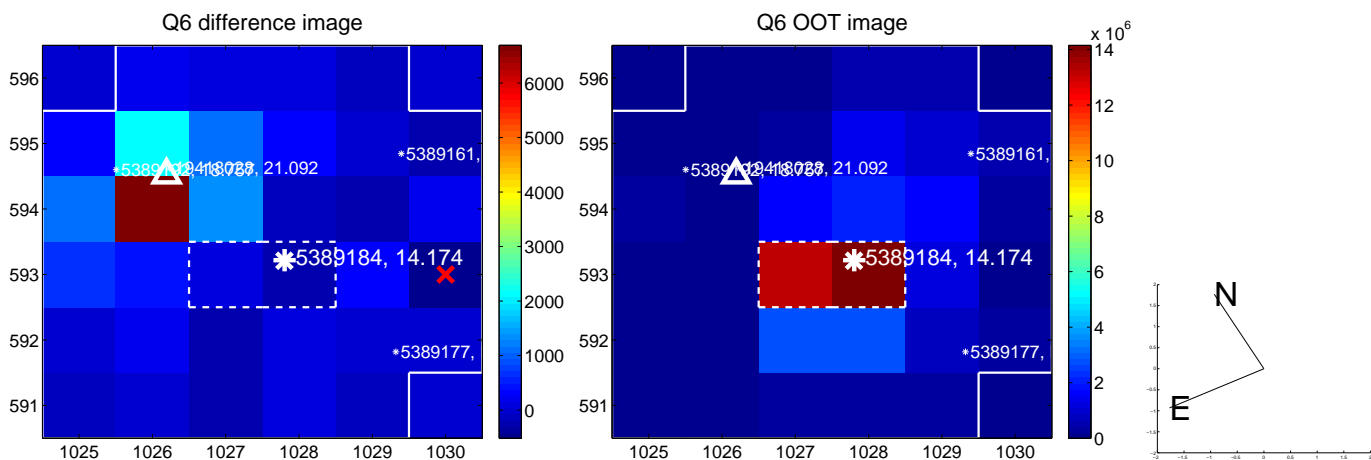
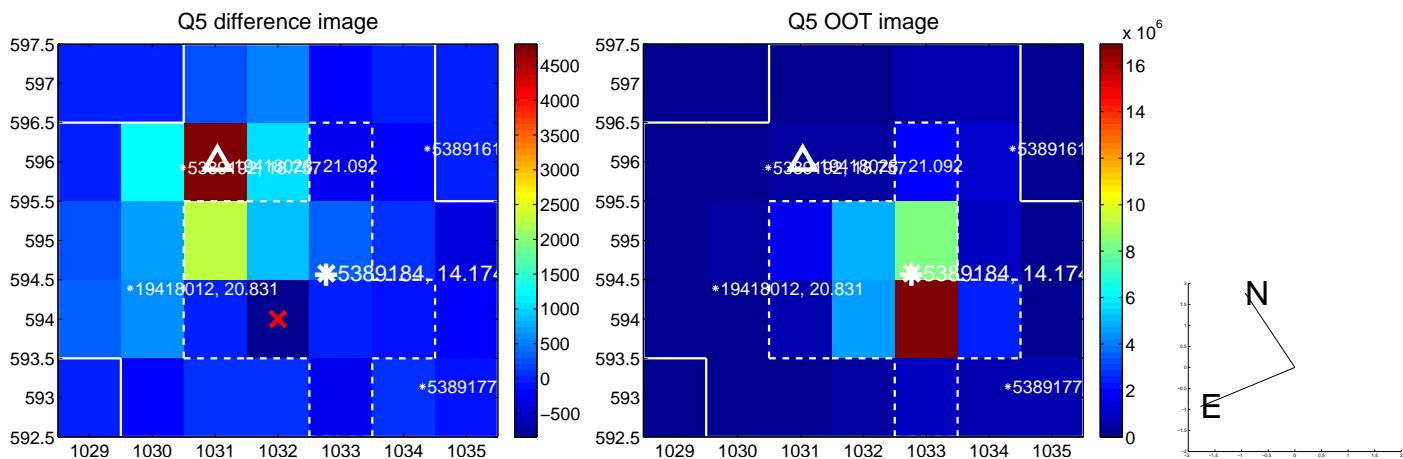


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

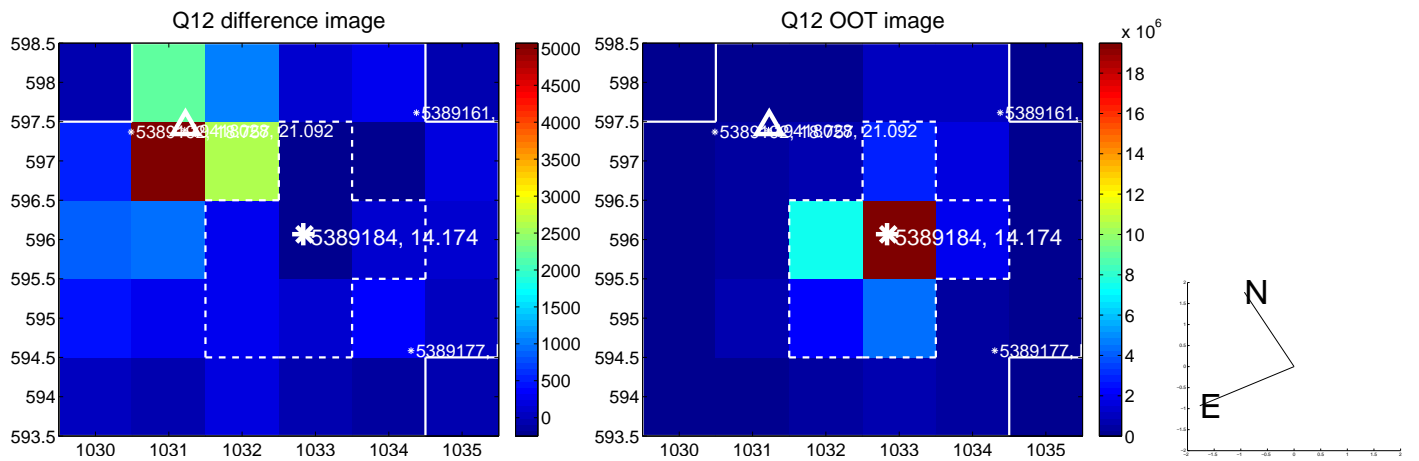
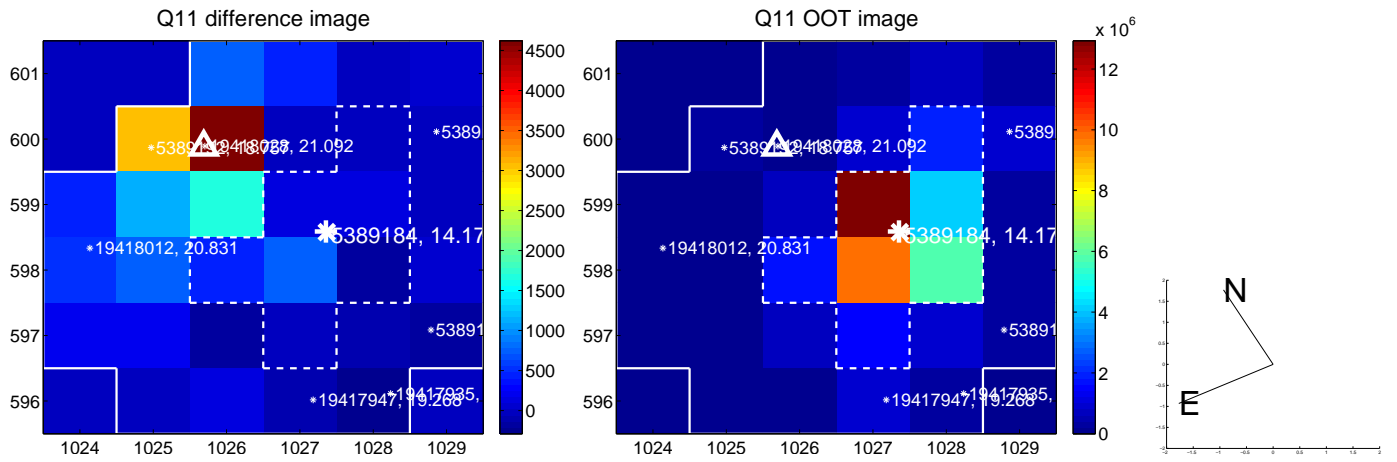
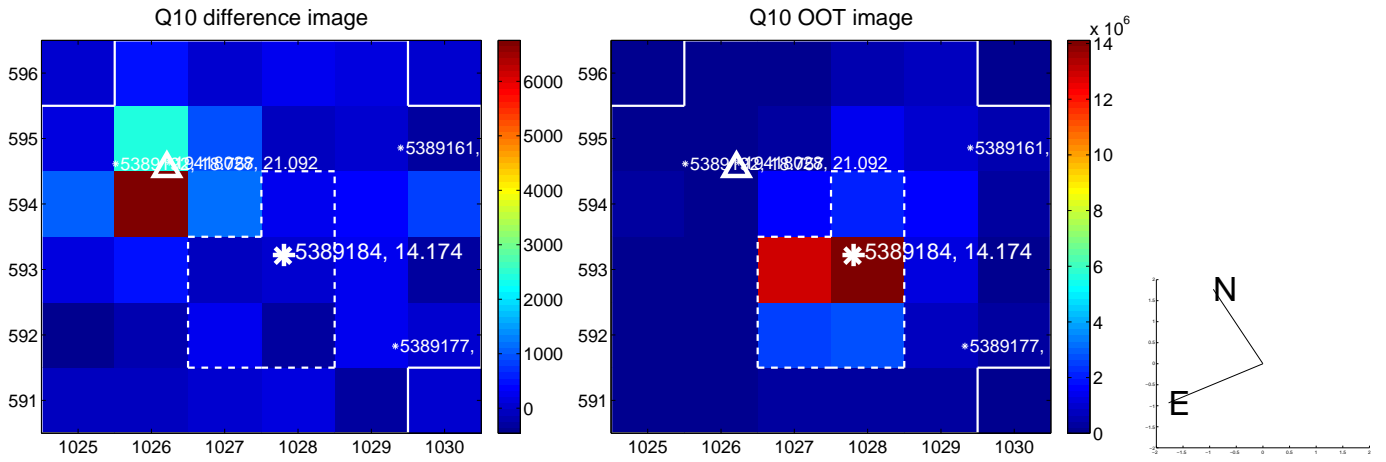
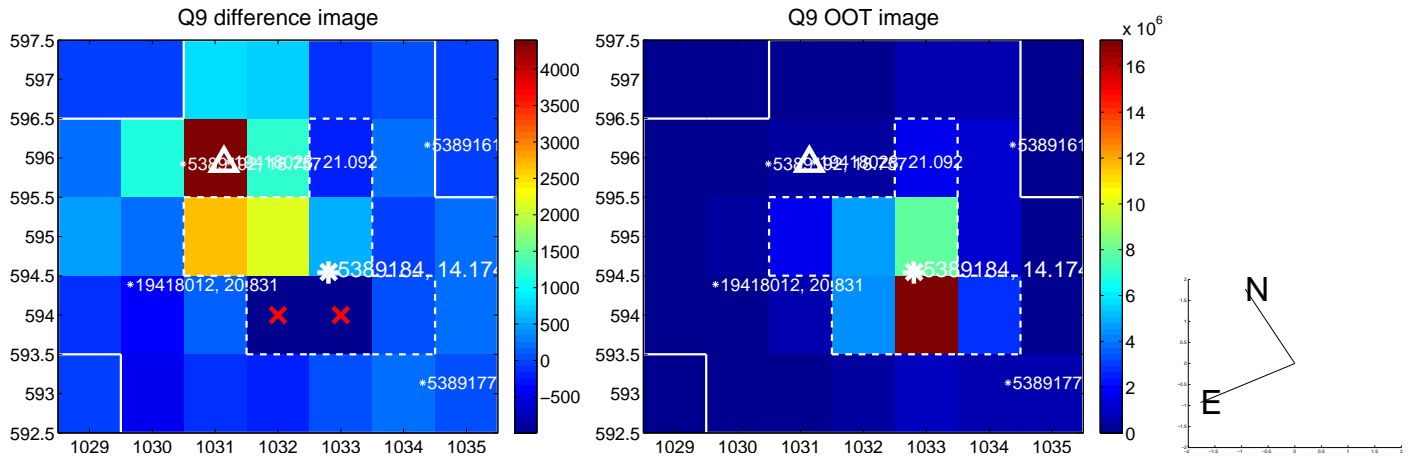
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



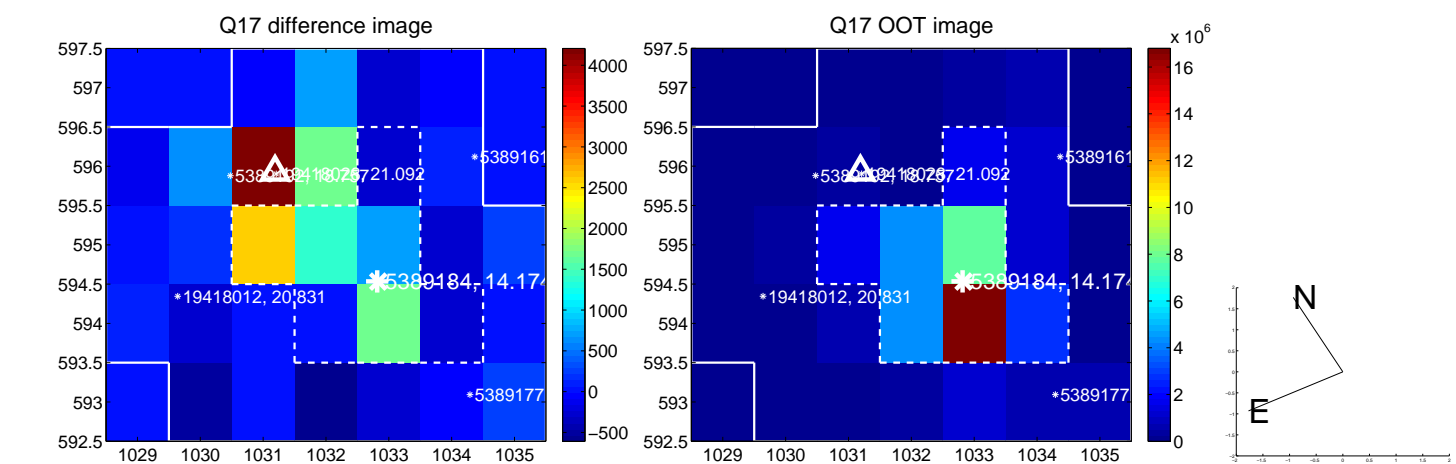
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



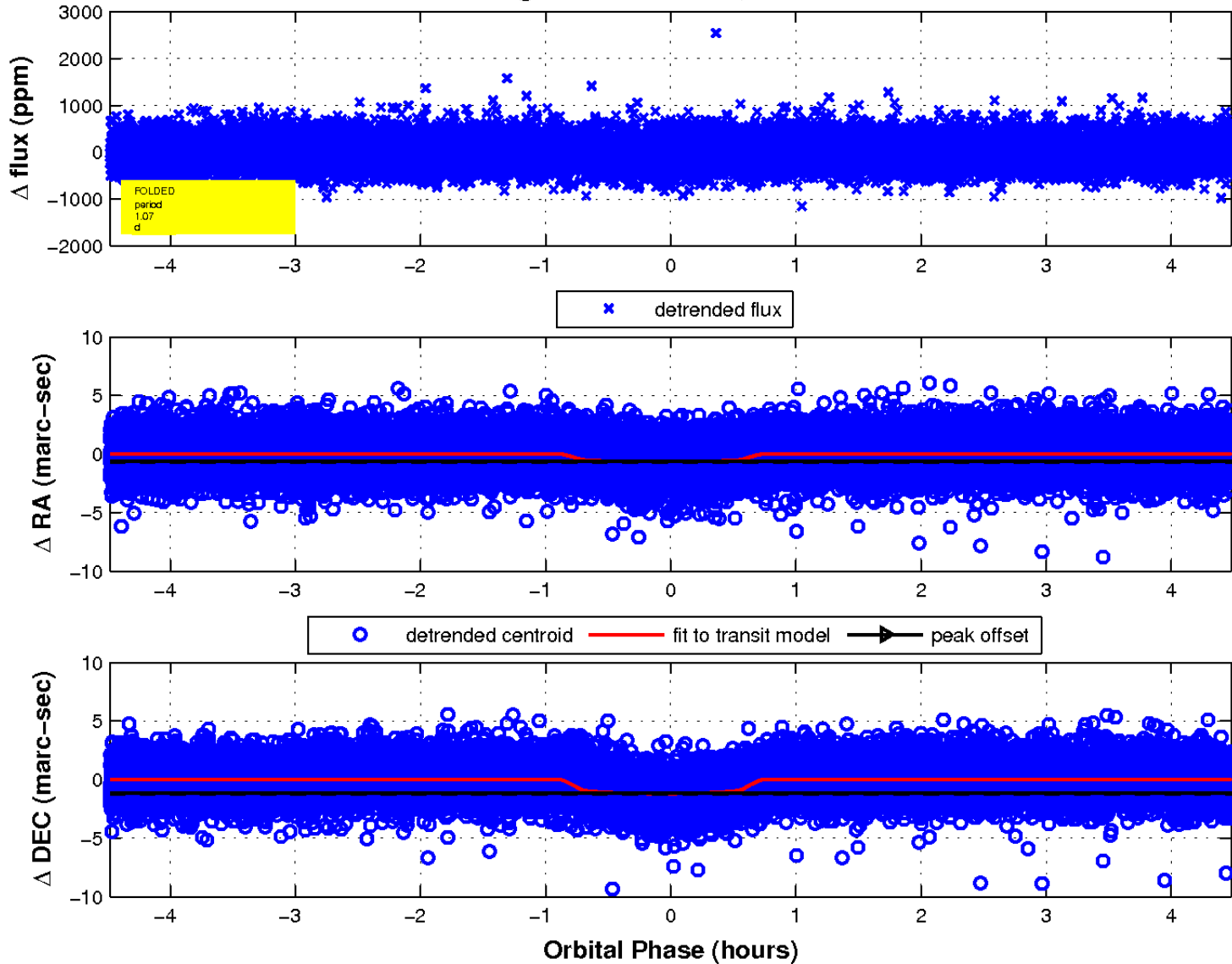
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

