

KIC 005388891

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})
005388891-01	OBS	No	1.832694	132.255786	160.2	2.500	8.9	-1.0	3.67	6728	4.70	19913.91

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005388891-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

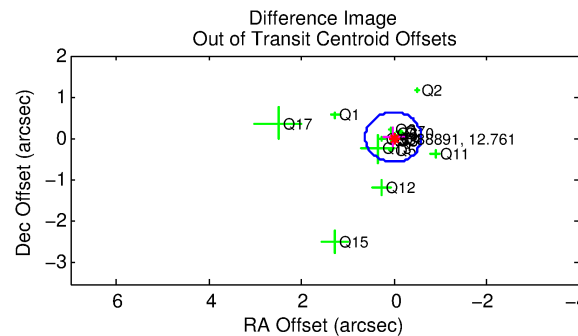
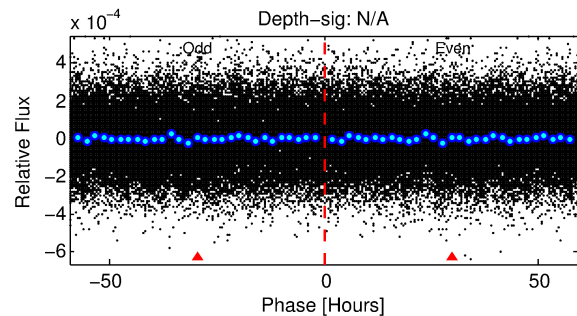
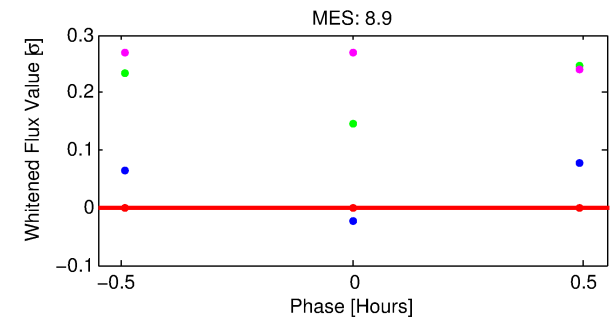
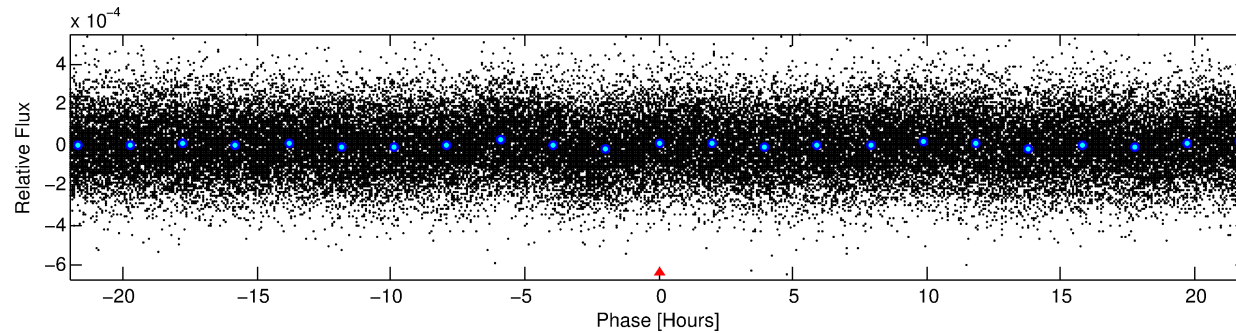
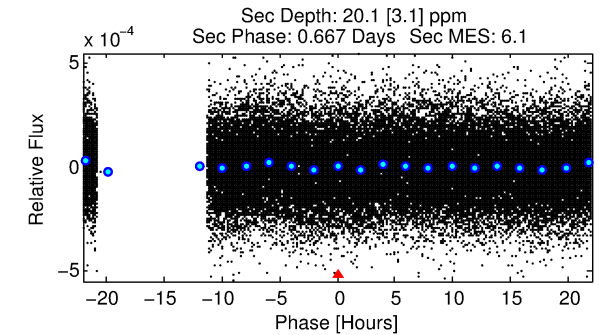
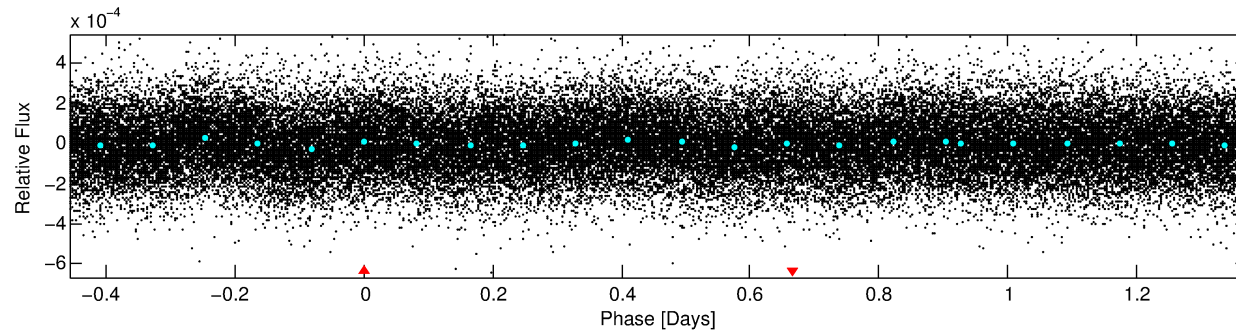
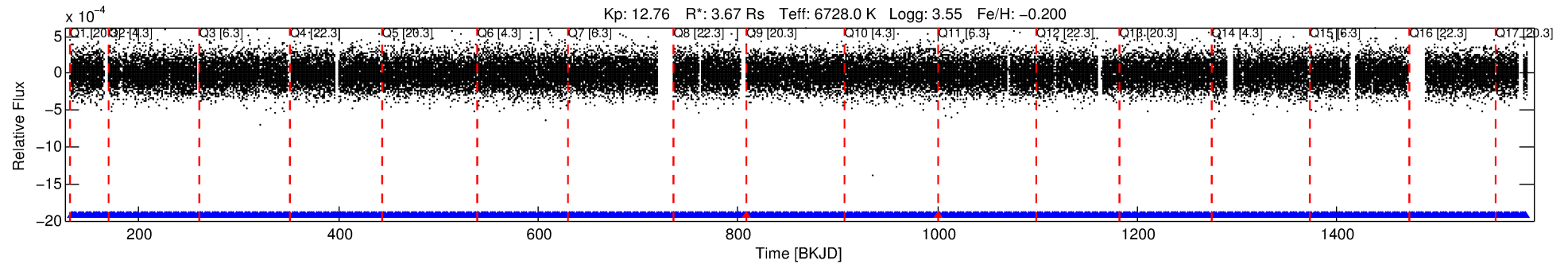
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005388891-01

No Significant Match Found

DV One-Page Summary

KIC: 5388891 Candidate: 1 of 1 Period: 1.833 d



TPS TCE Results:

Period = 1.83269 d
Epoch = 132.2558 BKJD

DV fit results are unavailable

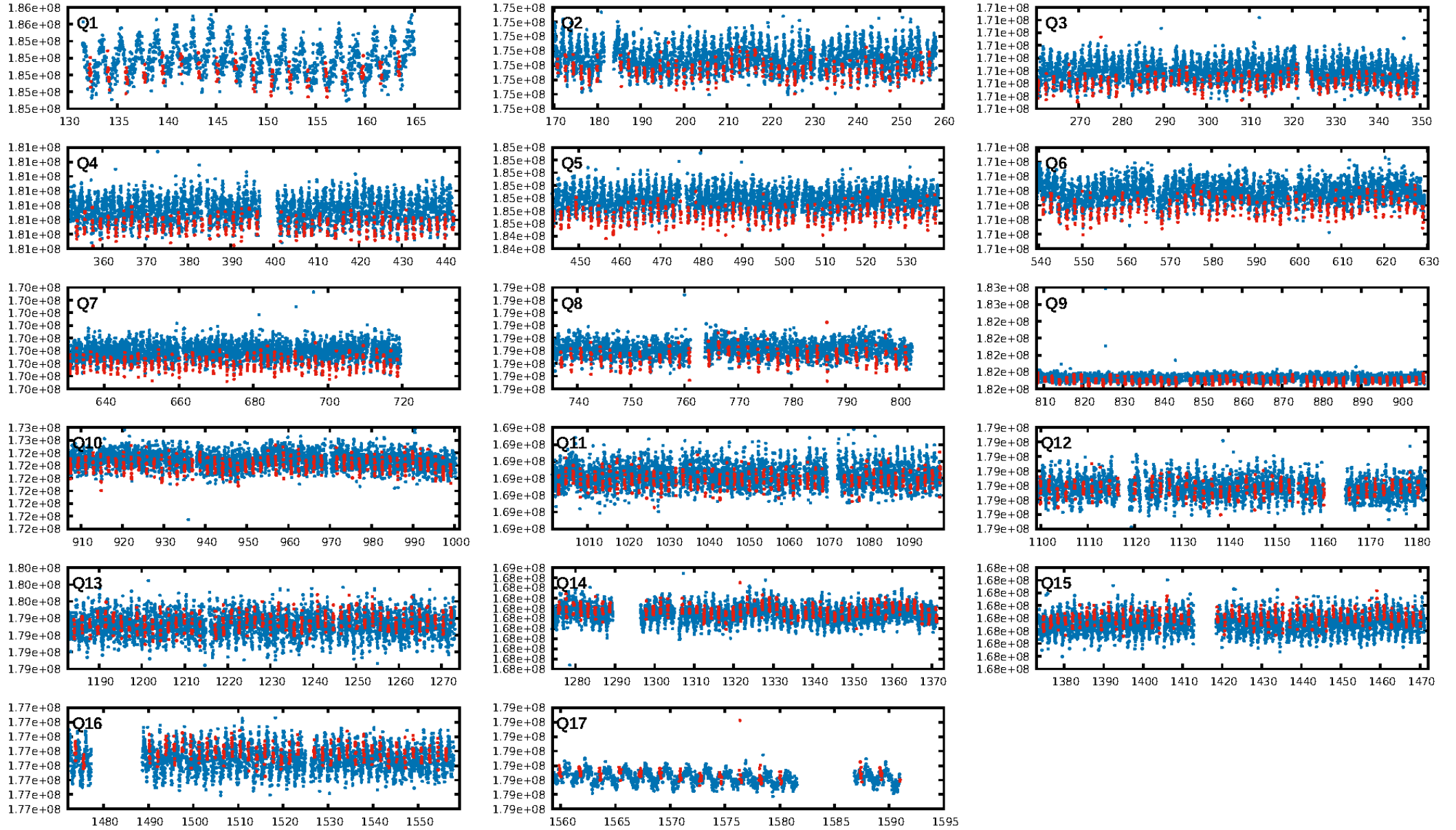
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.97e-17
RollingBand-fgt: 1.00 [708/710]
GhostDiagnostic-chr: 0.5728
Centroid-sig: 1.9%
Centroid-so: 0.289 arcsec [1.80σ]
OotOffset-rm: 0.042 arcsec [0.21σ]
KicOffset-rm: 0.102 arcsec [0.53σ]
OotOffset-st: 3/4/3/5 [15]
KicOffset-st: 3/4/3/5 [15]
DiffImageQuality-fgm: 0.93 [14/15]
DiffImageOverlap-fno: 1.00 [17/17]

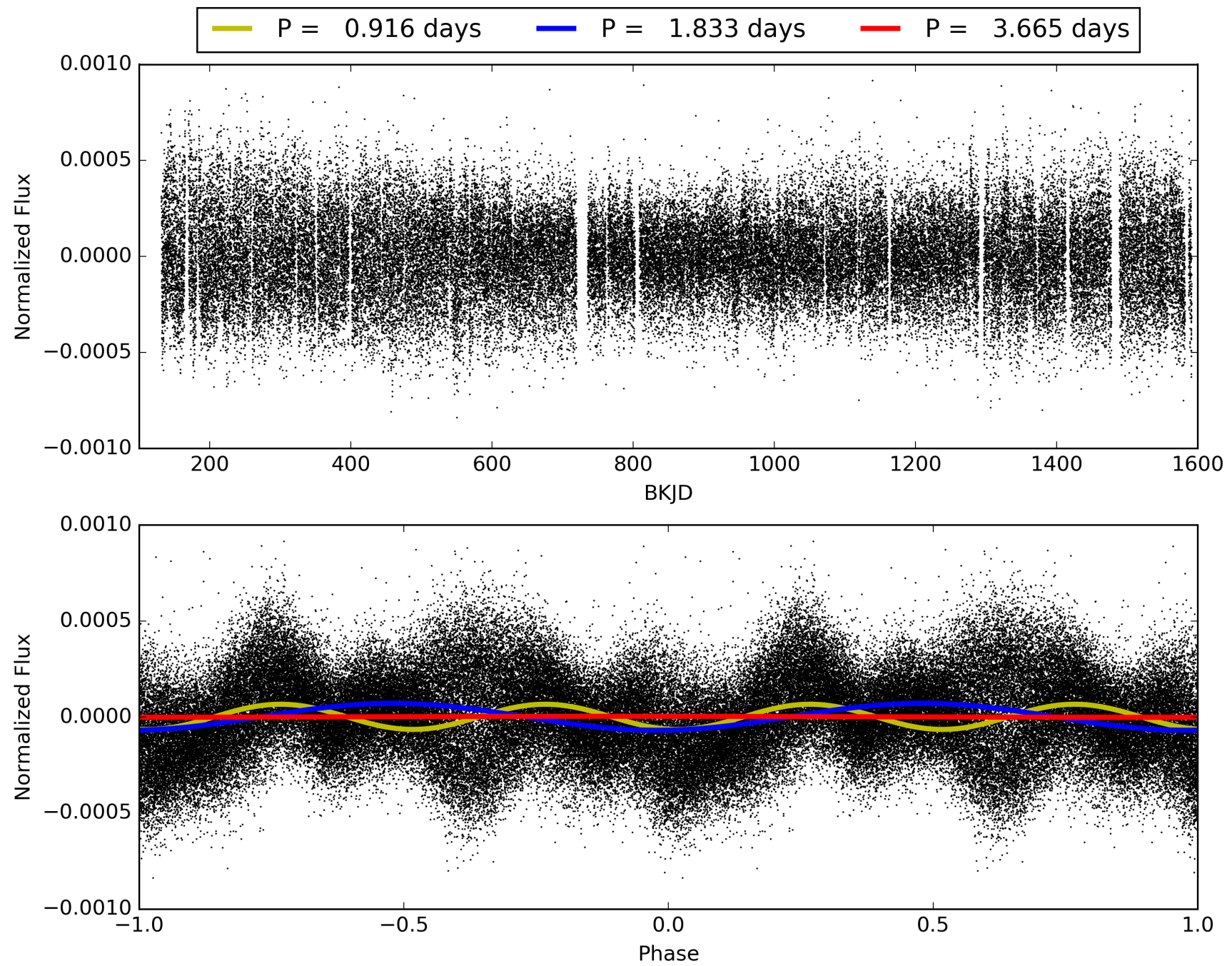
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 07:49:31 Z

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

TCE 005388891-01, PDC Light Curves

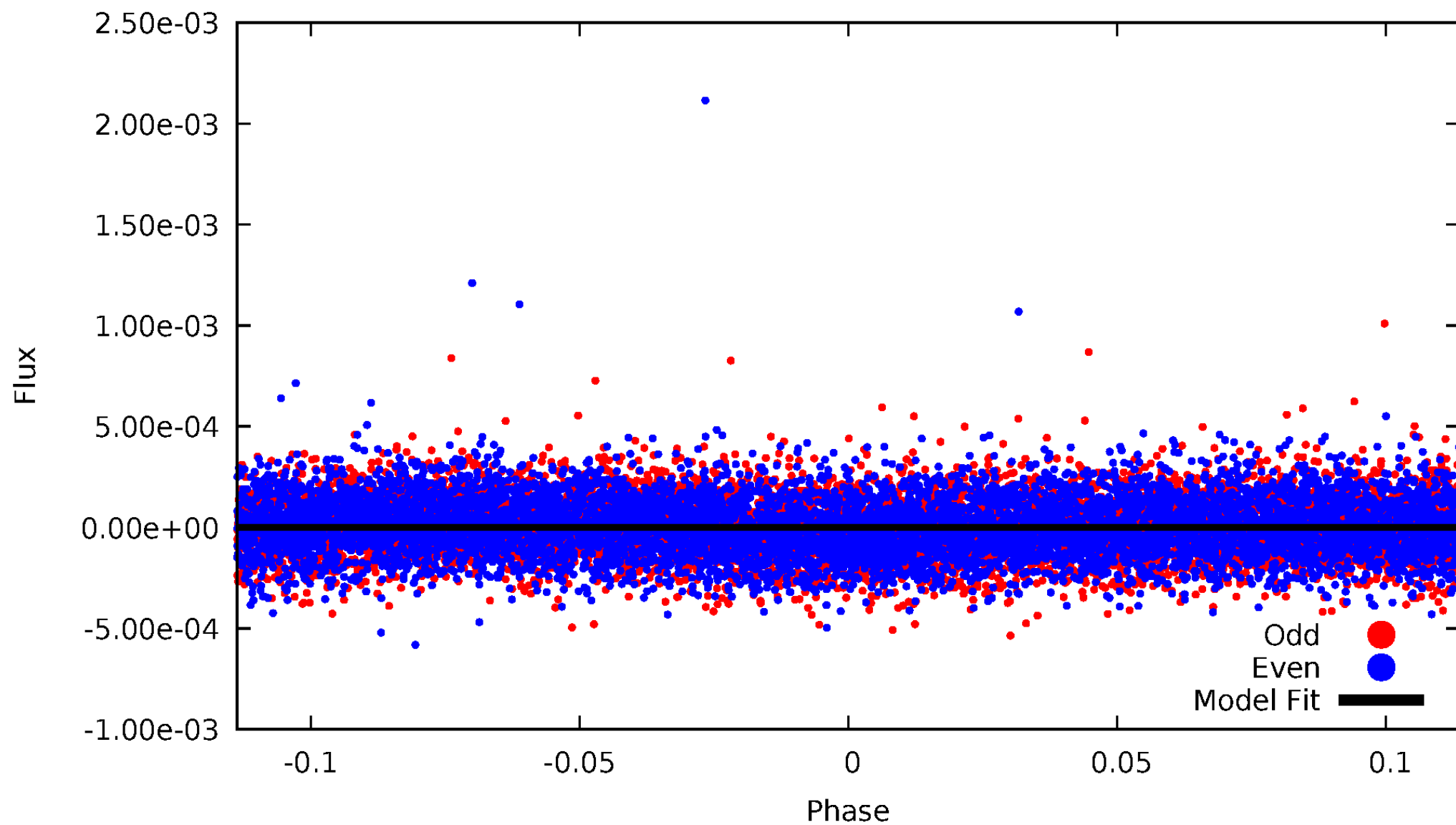


TCE 005388891-01



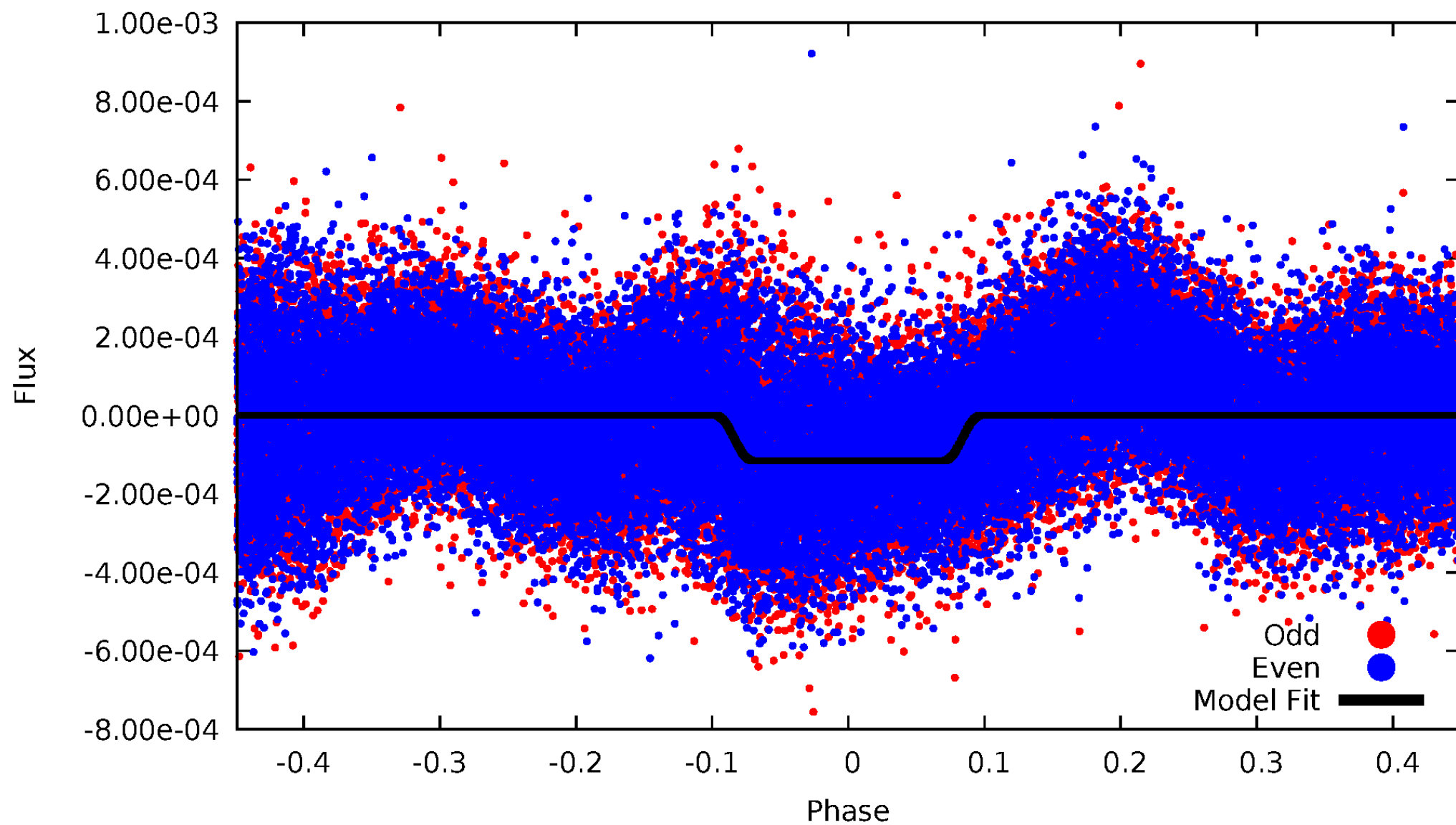
DV Odd/Even

TCE 005388891-01

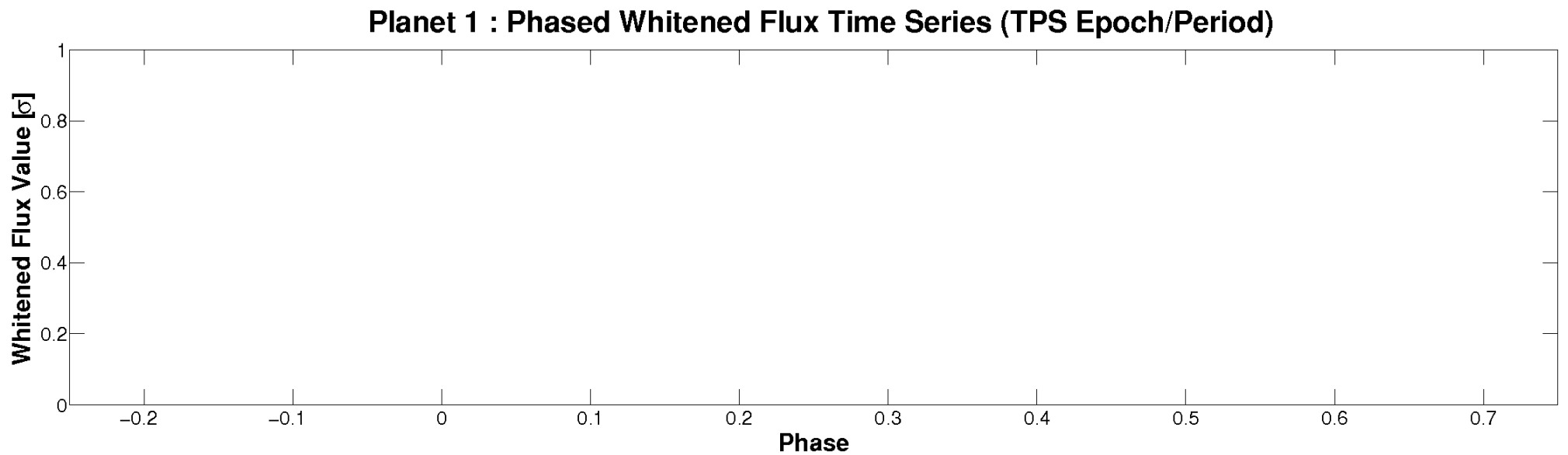
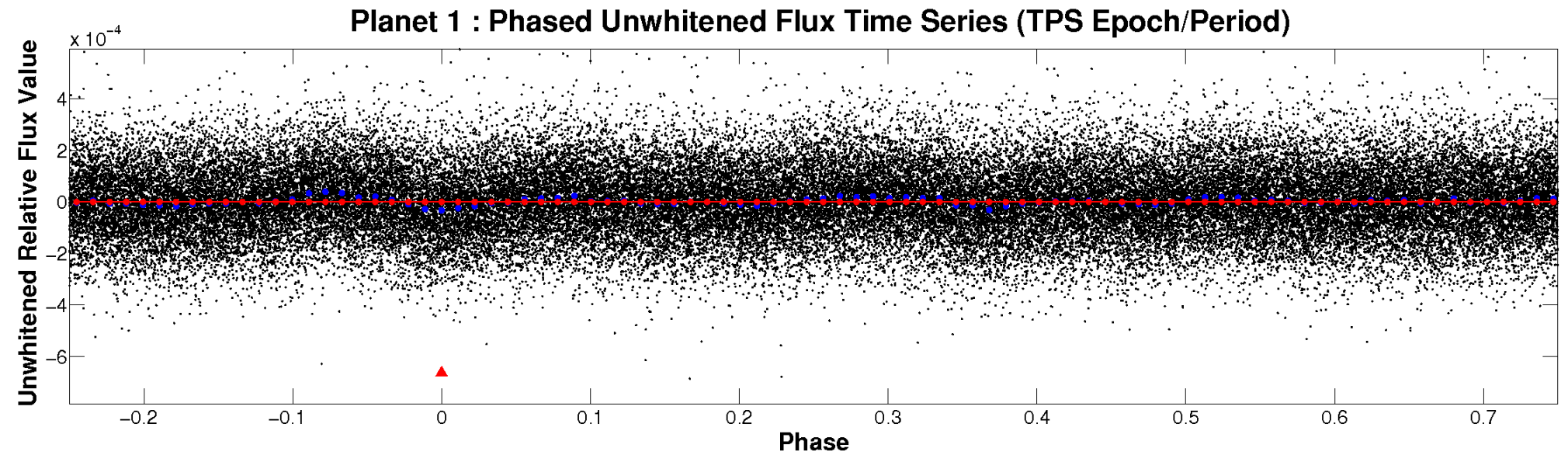


ALT Odd/Even

TCE 005388891-01

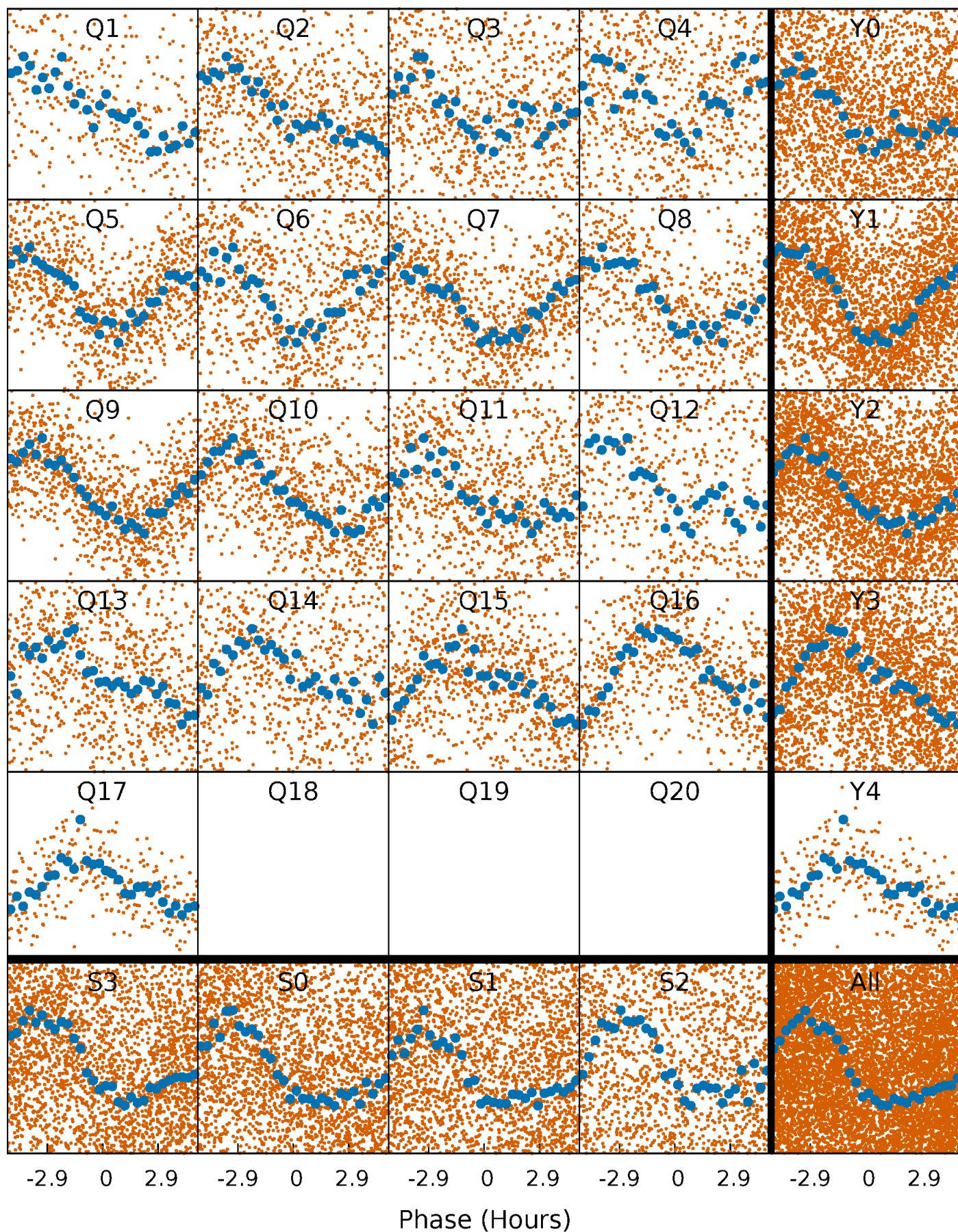


Non-Whitened Vs. Whitened Light Curve



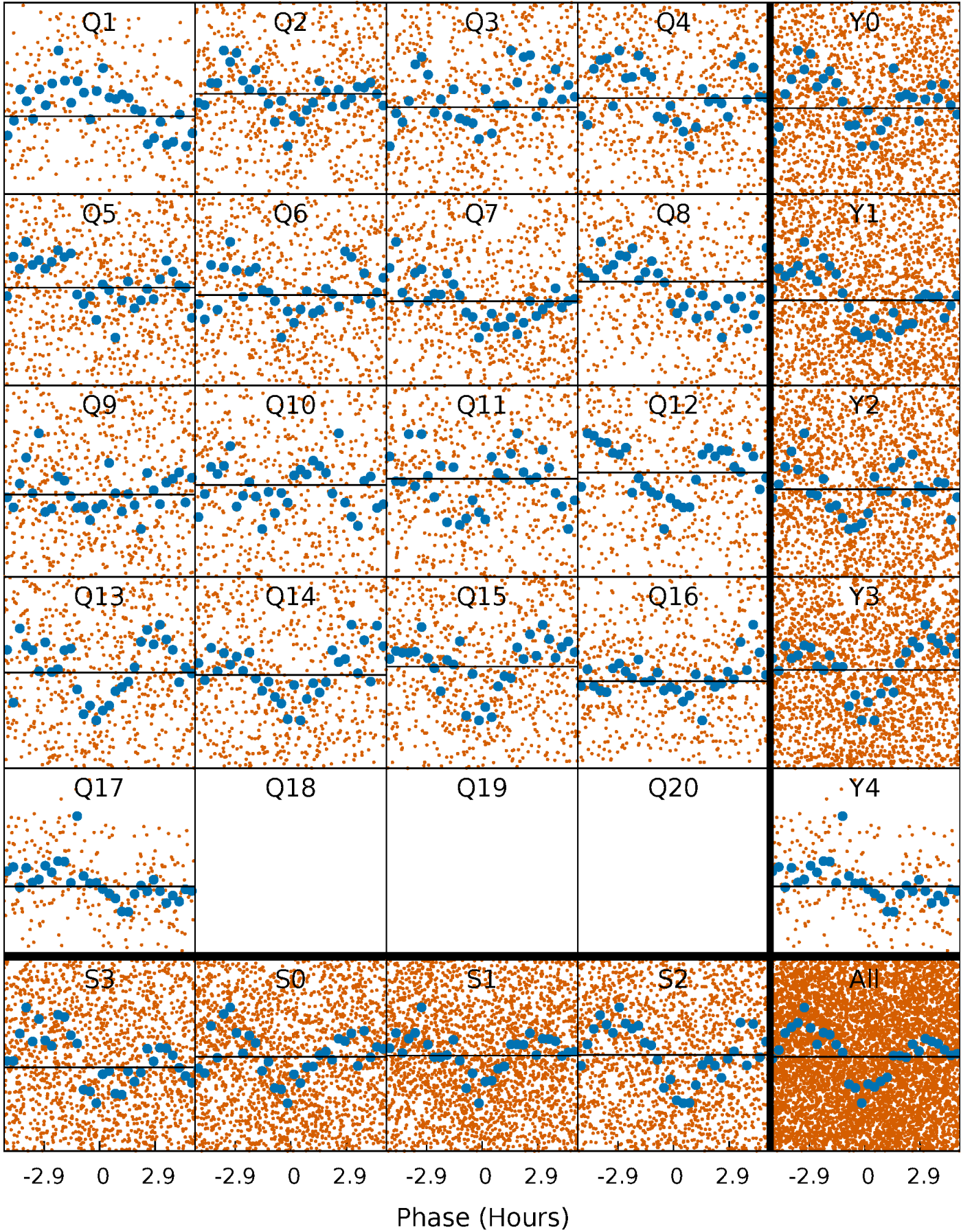
PDC Quarter-Phased Transit Curves

TCE 005388891-01 P= 1.832694 Days $T_0=132.255786$ (BKJD)



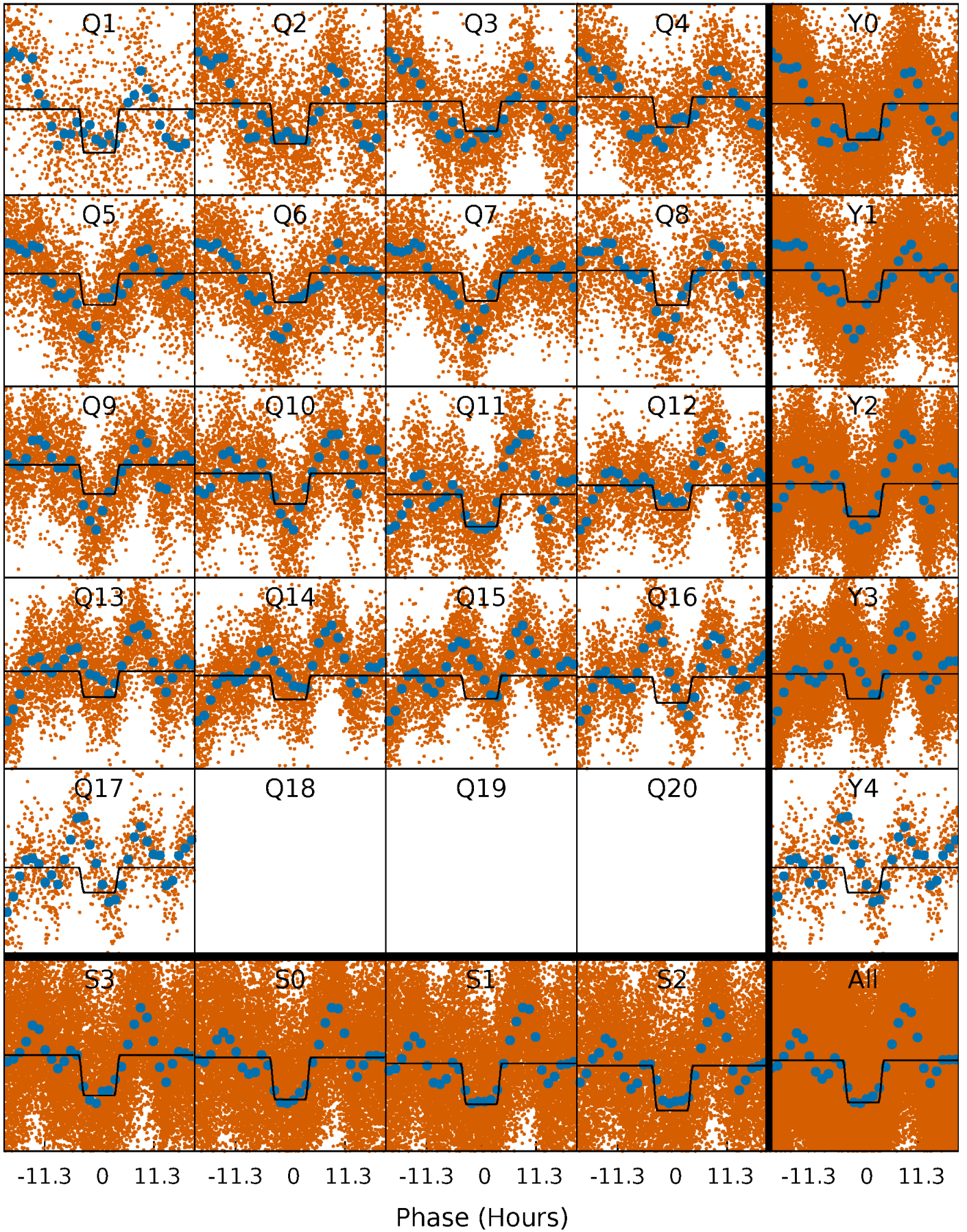
DV Quarter-Phased Transit Curves

TCE 005388891-01 P= 1.832694 Days $T_0=132.255786$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

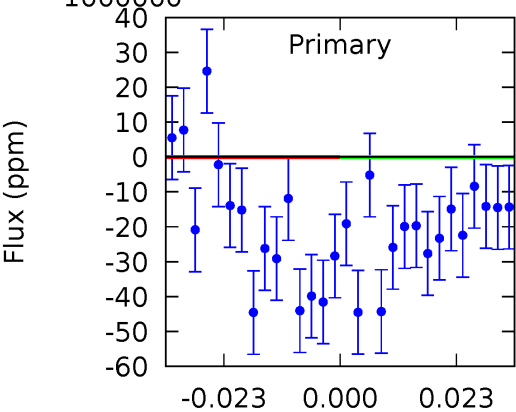
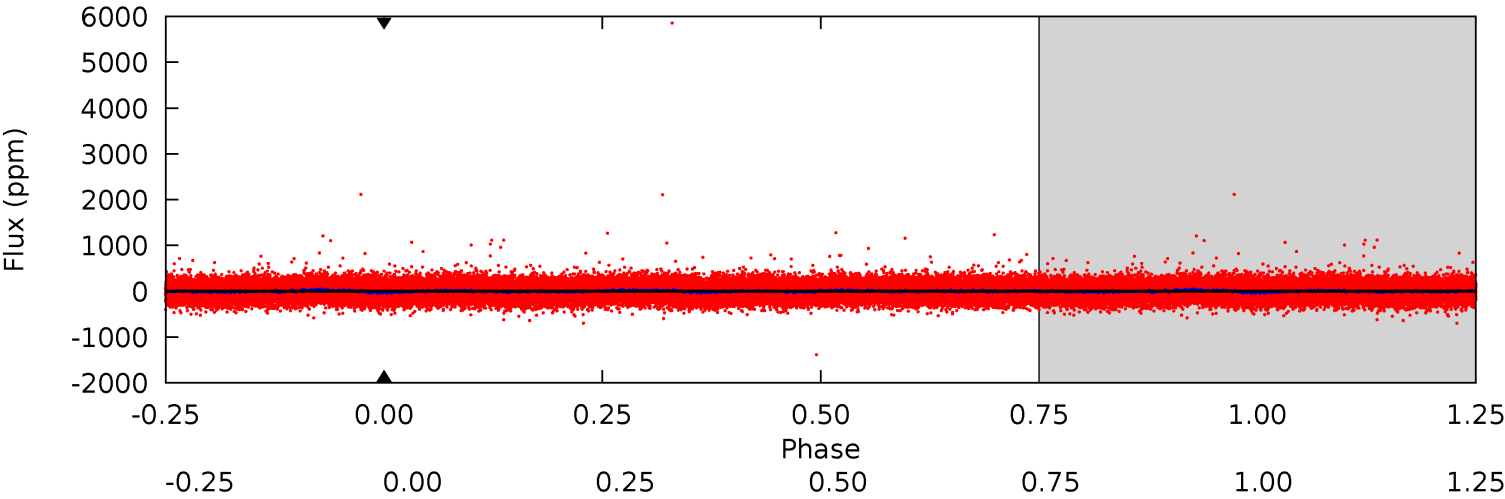
TCE 005388891-01 P= 1.832694 Days $T_0=132.363301$ (BKJD)



DV Model-Shift Uniqueness Test

005388891-01, P = 1.832694 Days, E = 130.423092 Days

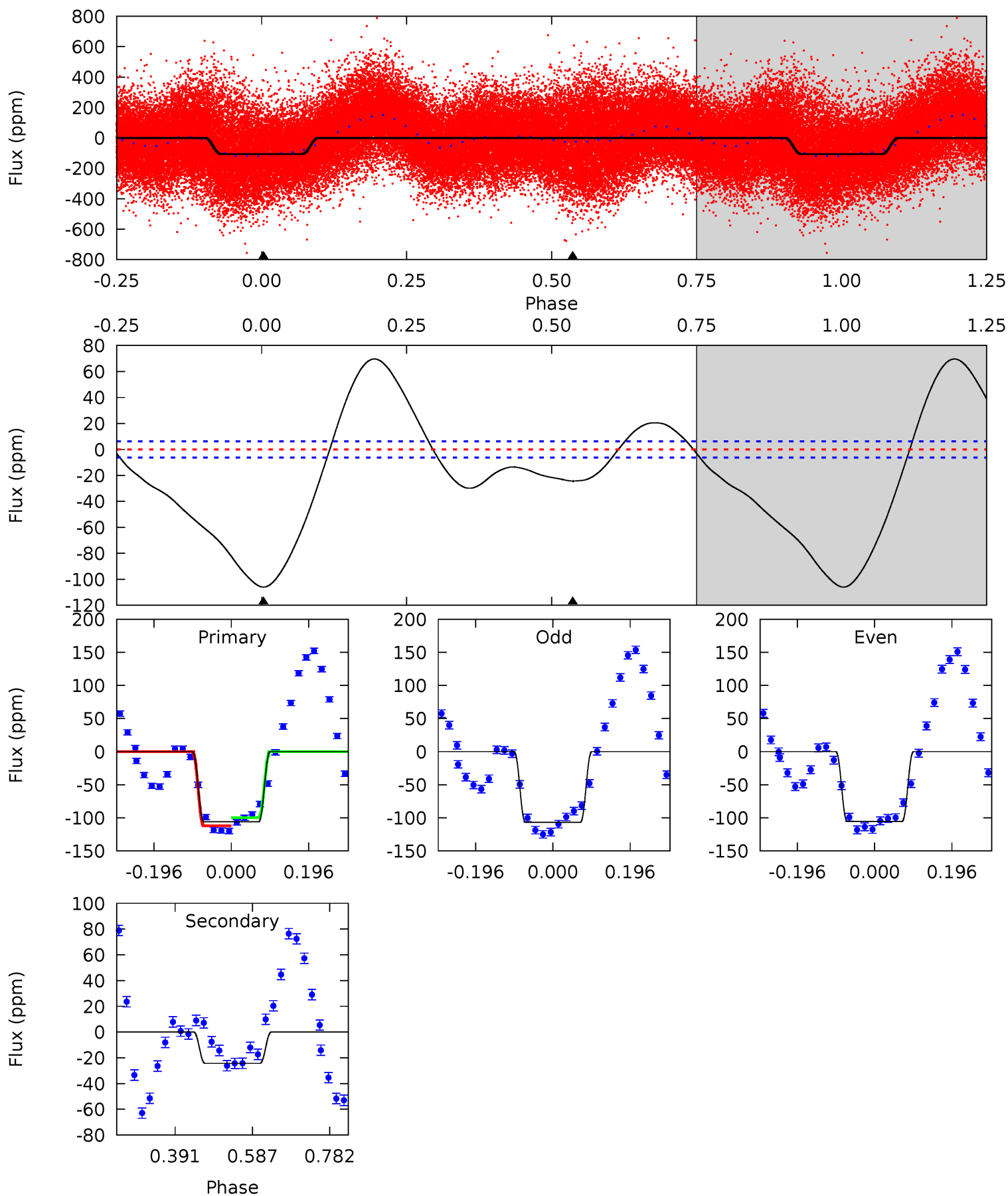
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005388891-01, P = 1.832694 Days, E = 130.530607 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
75.2	17.3	0	0	4.42	1.29	21.7	75.2	75.2	17.3	17.3	0.50	0.92	0.40	4.29



Stellar Parameters For KIC 005388891

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6728^{+182}_{-202}	$3.549^{+0.357}_{-0.084}$	$-0.200^{+0.300}_{-0.250}$	$3.675^{+0.357}_{-1.427}$	$1.743^{+0.171}_{-0.369}$	$0.049^{+0.134}_{-0.010}$
	+3%/-3%	+10%/-2%	+150%/-125%	+10%/-39%	+10%/-21%	+270%/-21%
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 005388891-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$27.29^{+29.77}_{-19.82}$	4164^{+219}_{-380}	4683^{+35381}_{-32586}	$1.819^{+233.659}_{-127.115}$
Alt.	-24 ± 1	$26.50^{+29.72}_{-19.62}$	4150^{+219}_{-399}	-3640^{+6411}_{-211}	$0.024^{+0.314}_{-0.019}$

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

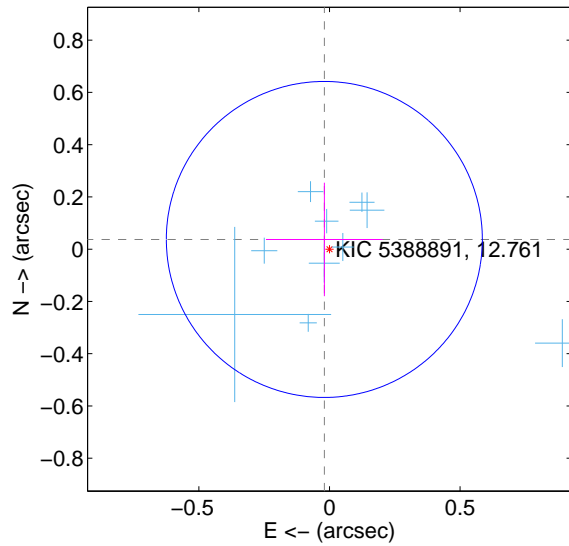
Supplemental centroid analysis for 005388891-01. Kepler magnitude: 12.76. Transit SNR -1.00

There are 14 quarters with good PRF difference image offsets

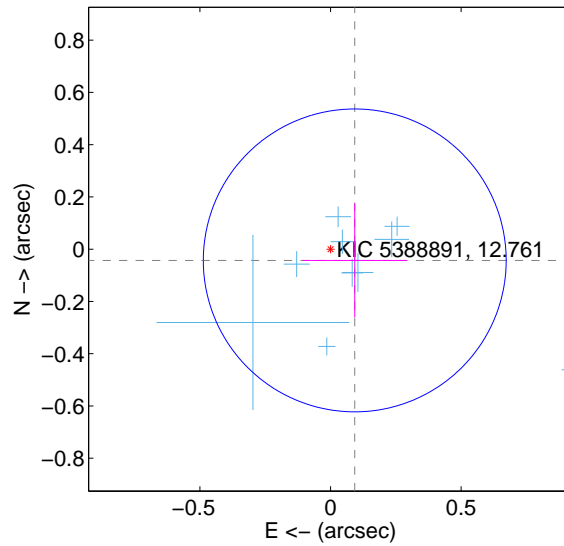
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.042 ± 0.202	0.21	0.020 ± 0.223	0.037 ± 0.217
PRF-fit source offset from KIC position	0.102 ± 0.193	0.53	-0.093 ± 0.199	-0.043 ± 0.218
photometric centroid source offset	0.29 ± 0.16	1.80	0.25 ± 0.17	-0.15 ± 0.14

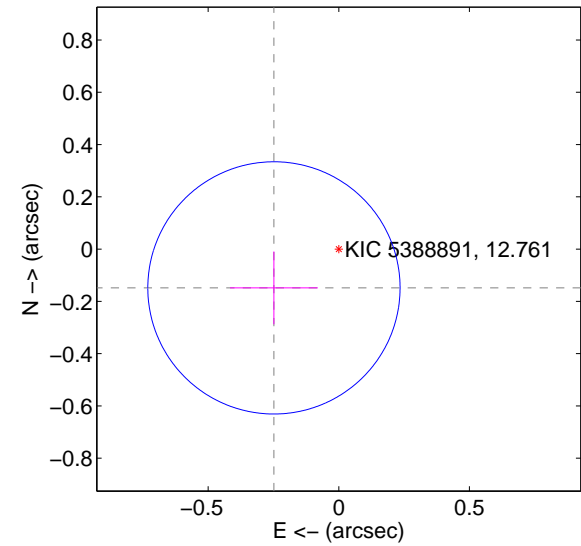
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

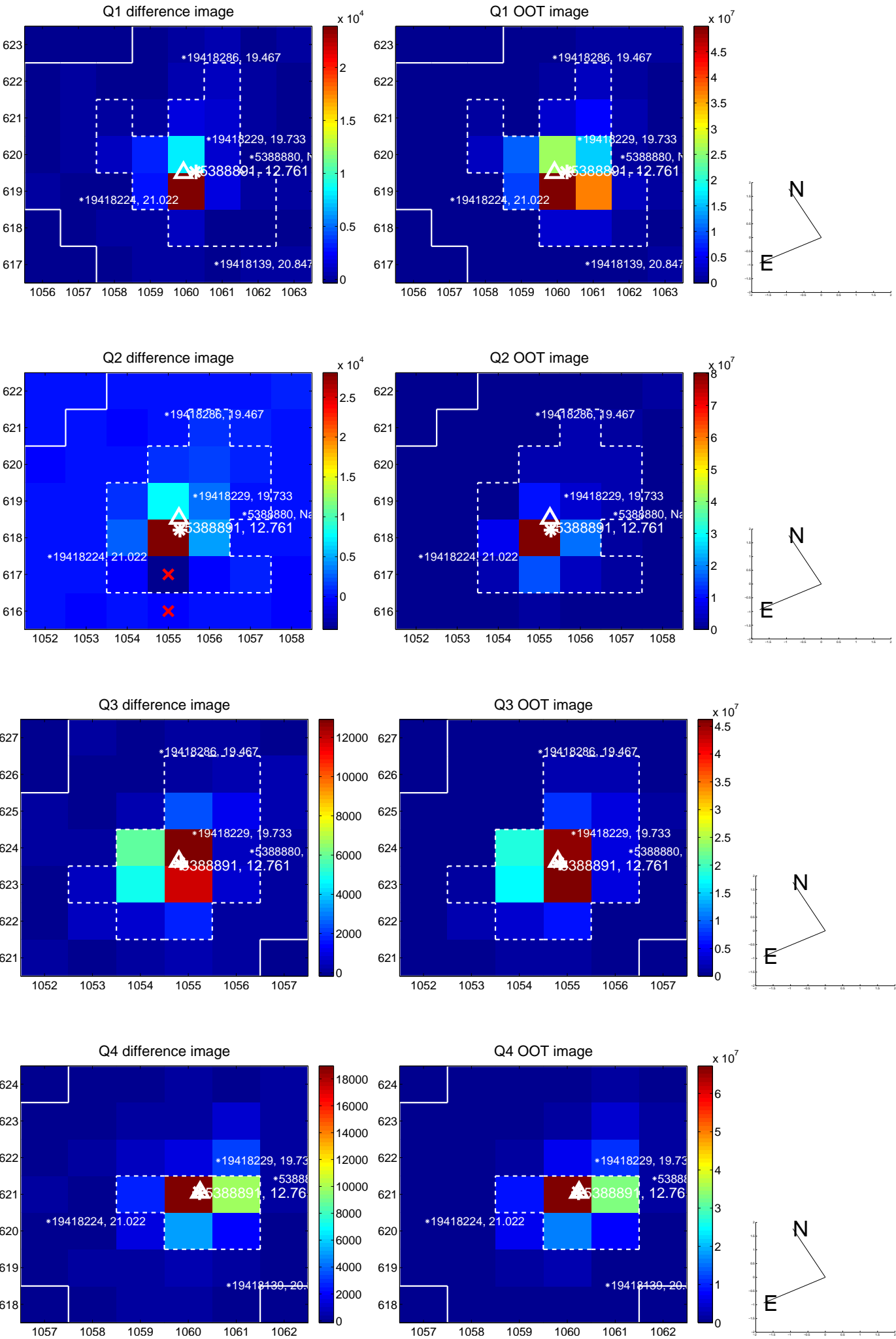


offset from photometric centroids

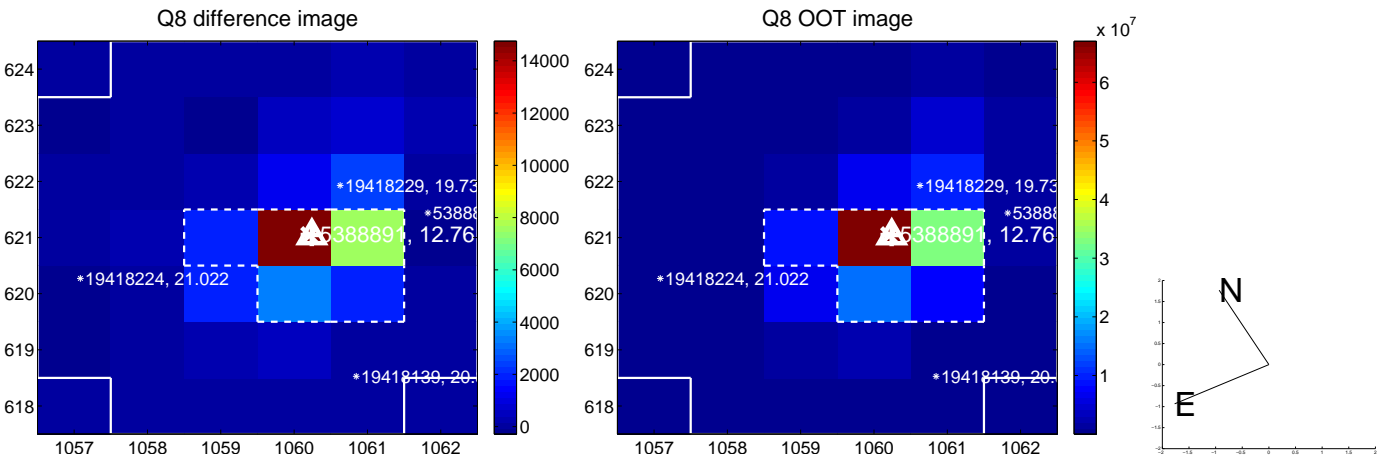
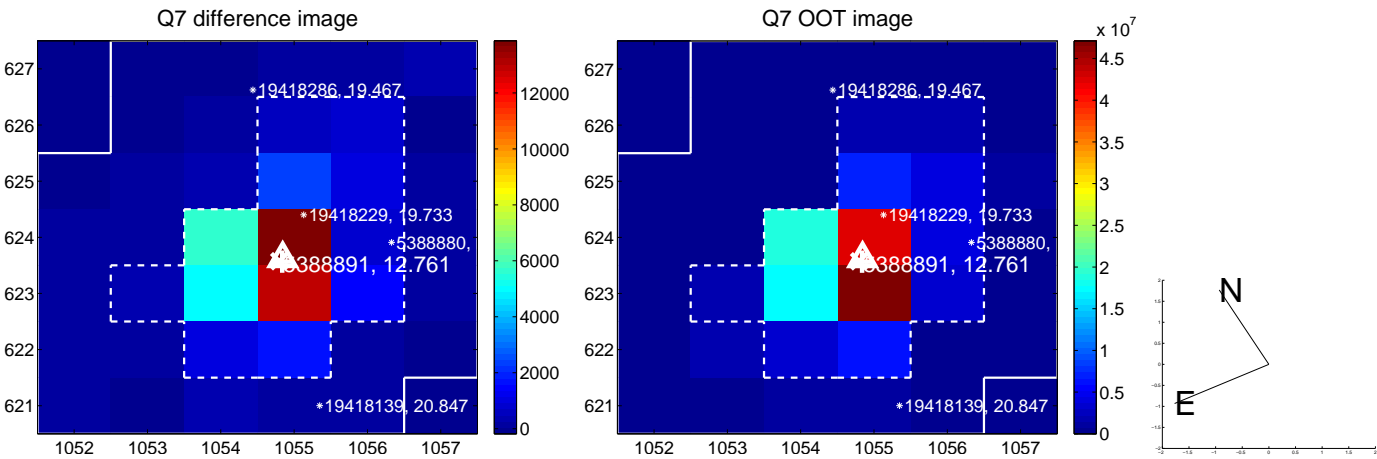
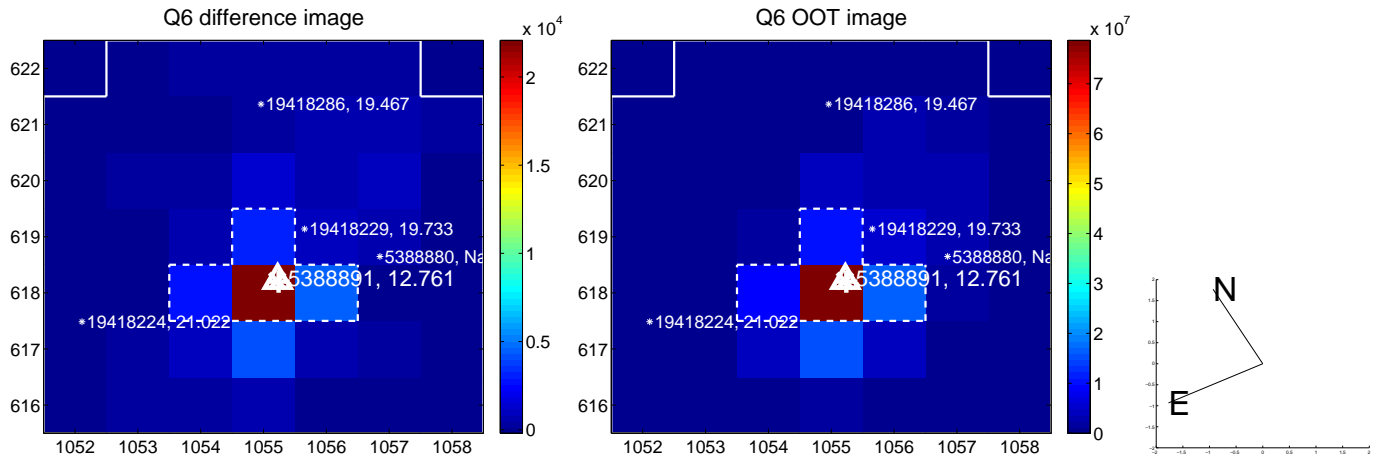
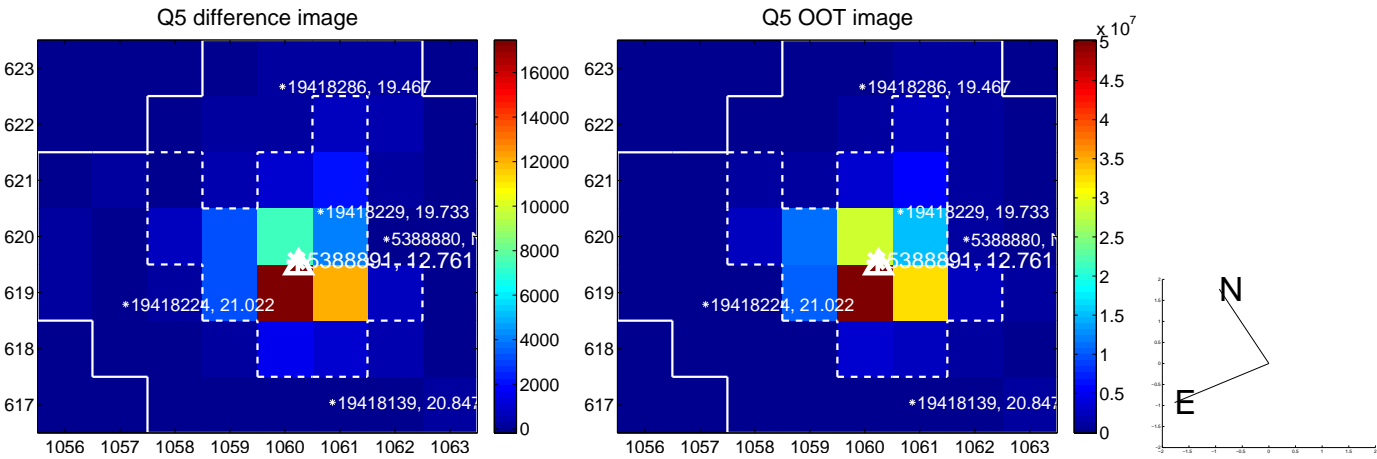


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

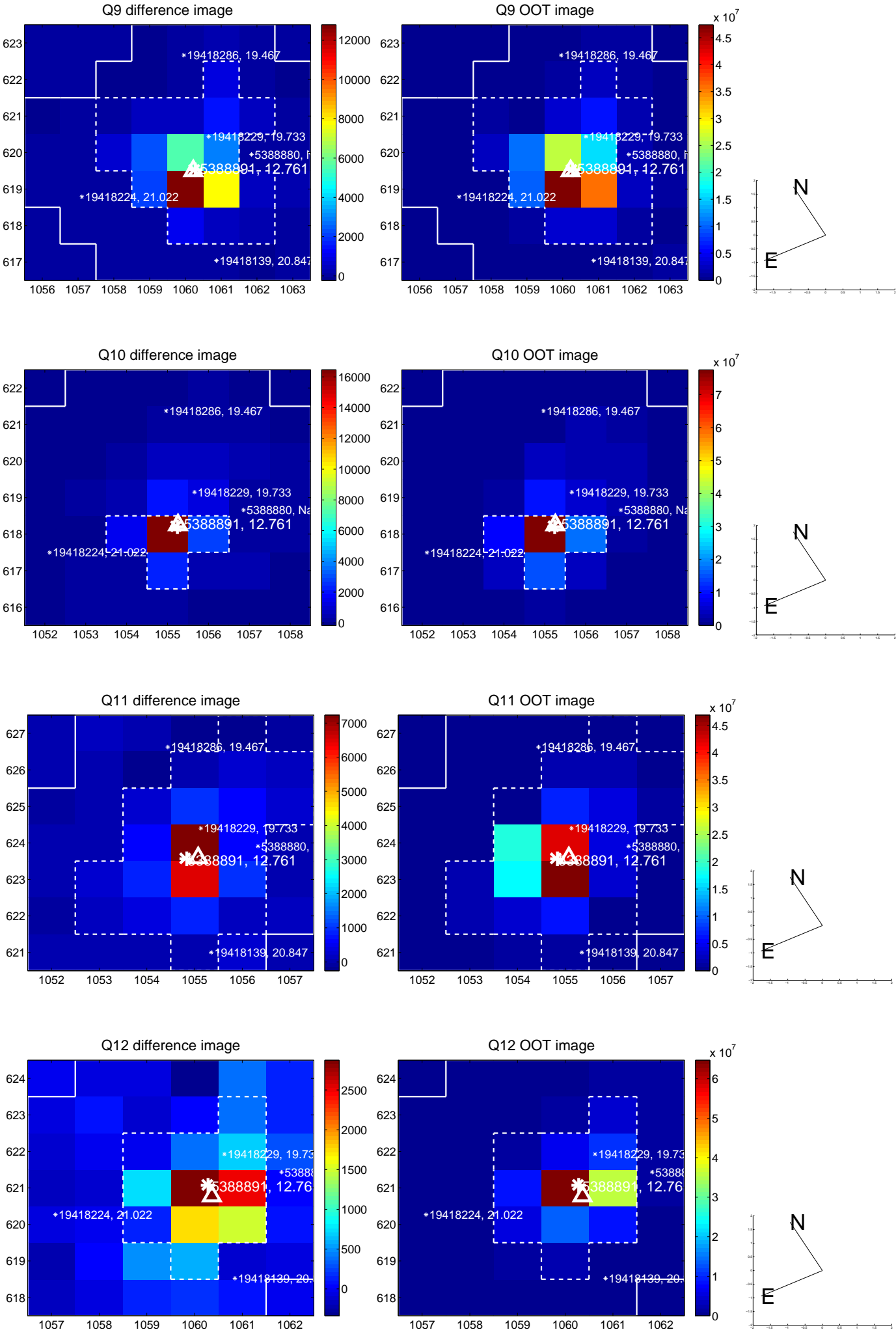
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



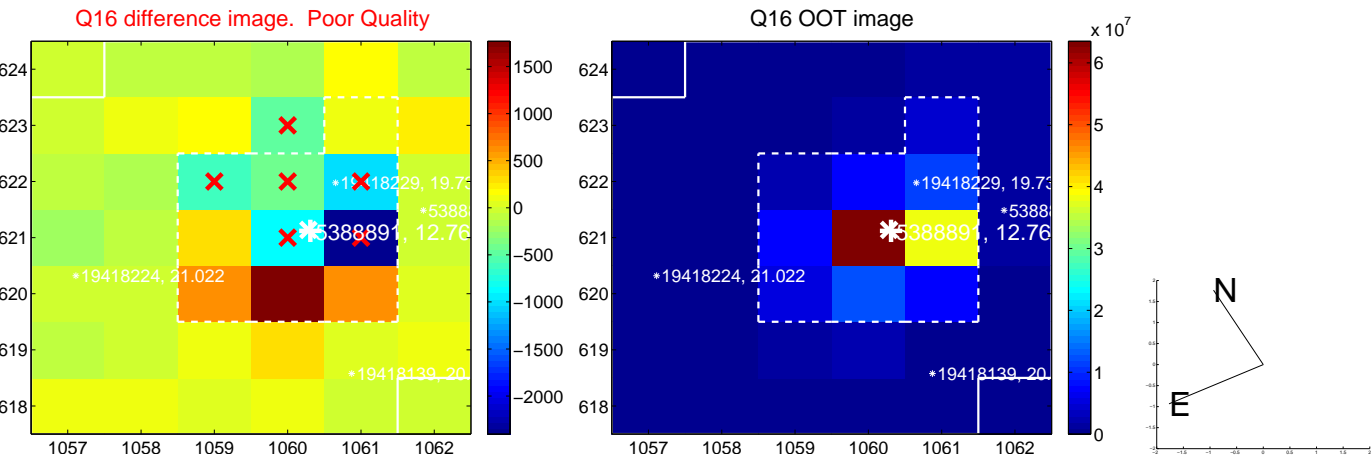
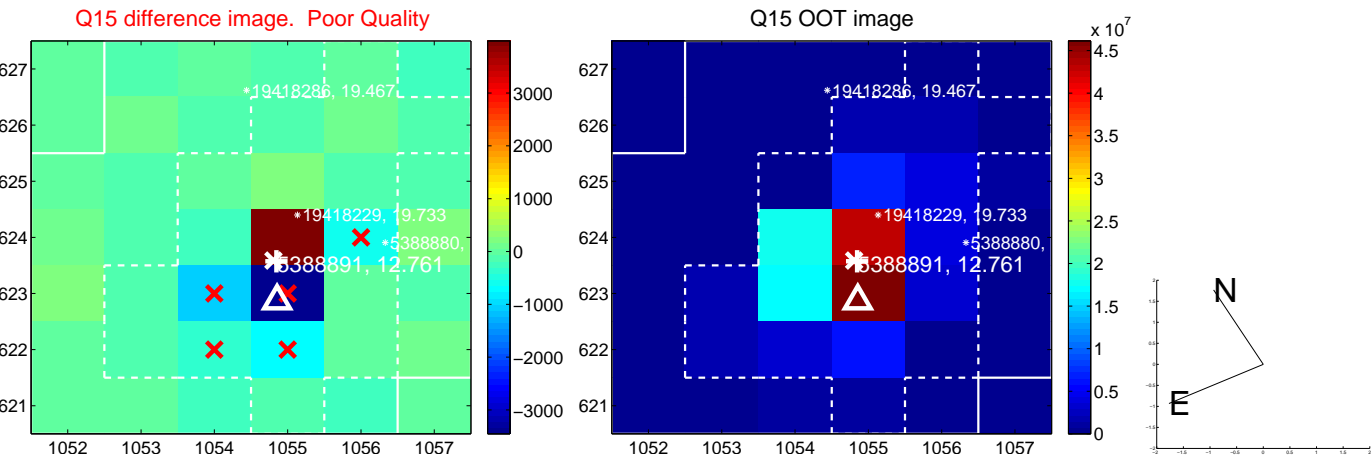
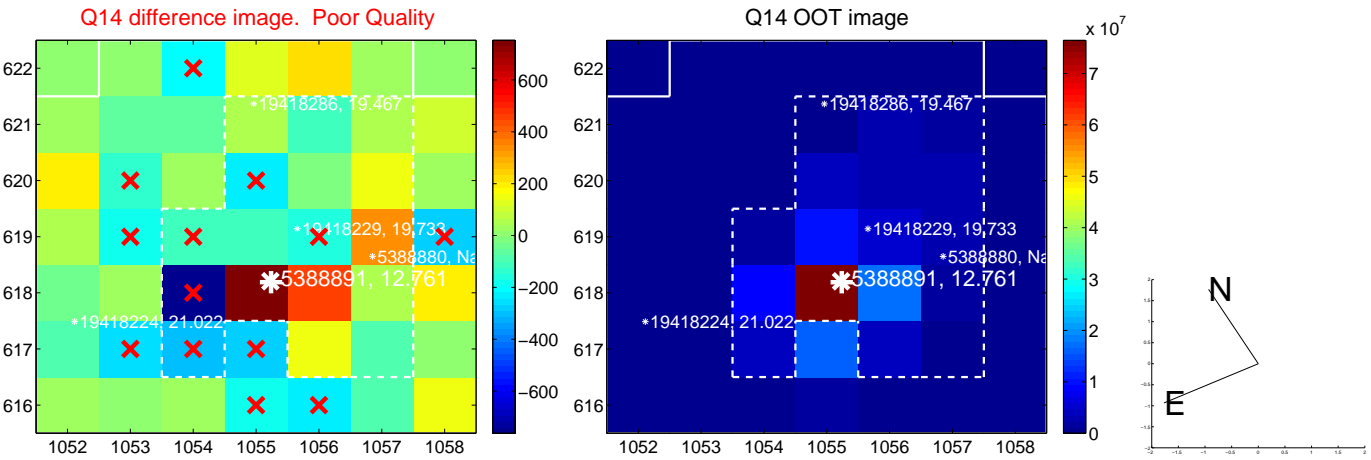
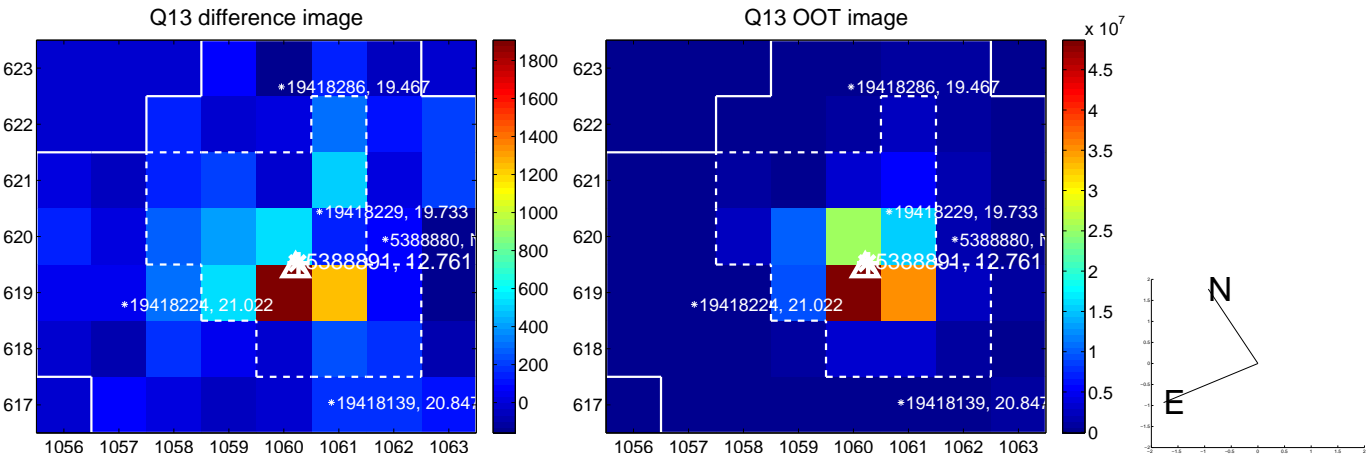
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



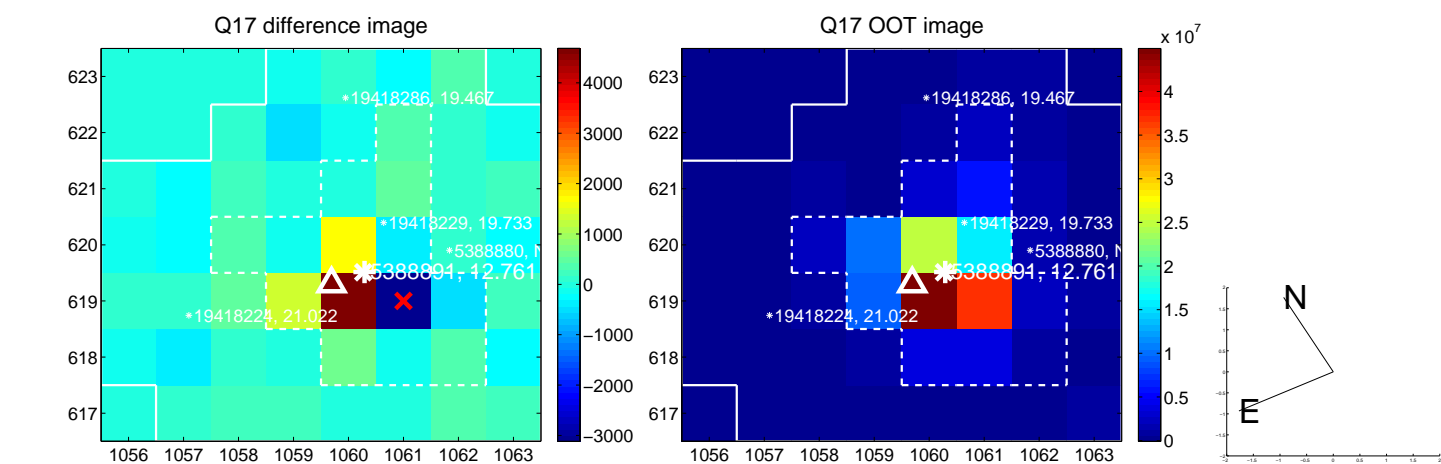
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



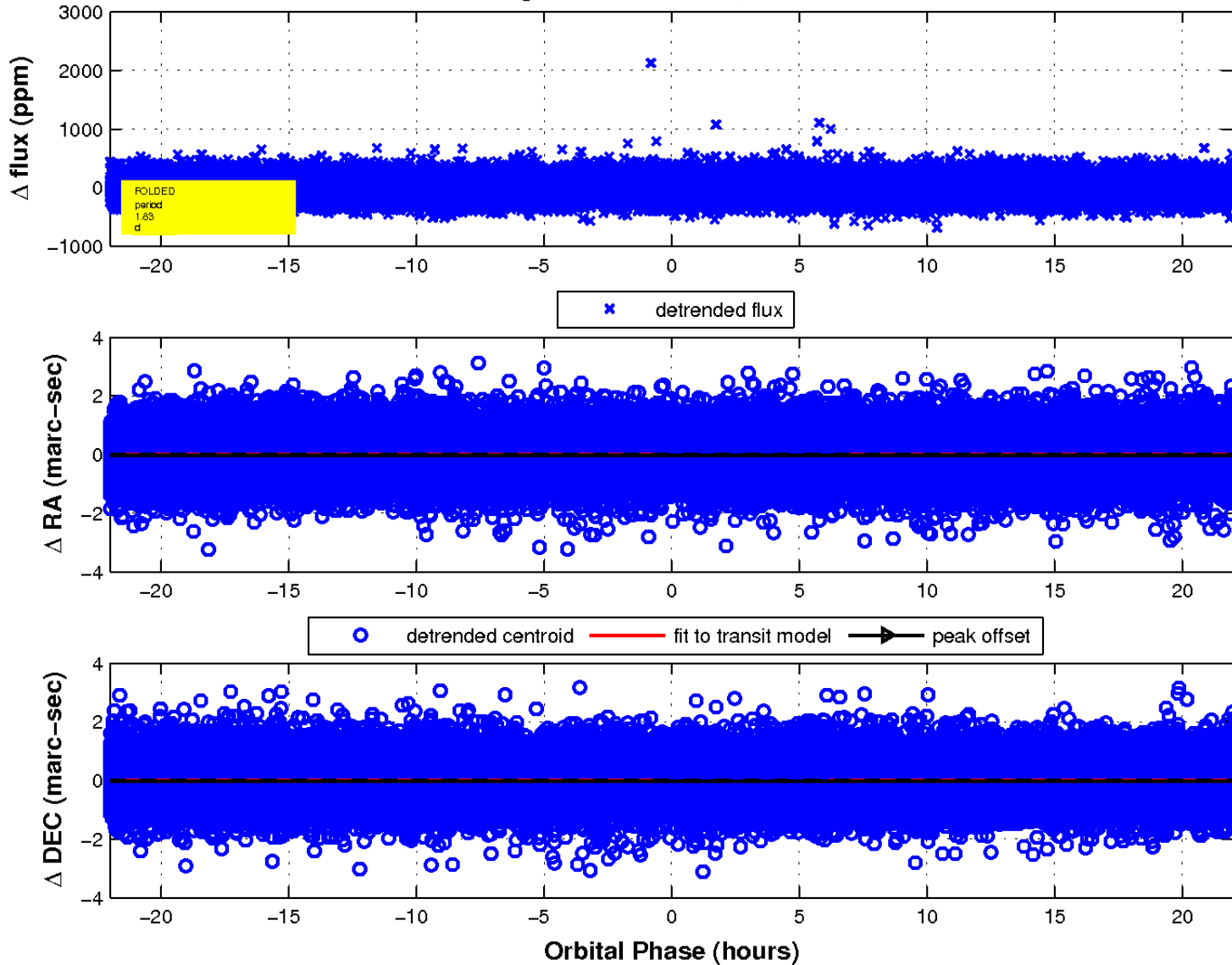
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

