

KIC 006205460

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})
006205460-01	OBS	6673.01	3.722973	134.586245	11167.5	9.000	2794.7	-1.0	2.59	5425	27.04	2126.82

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006205460-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_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.

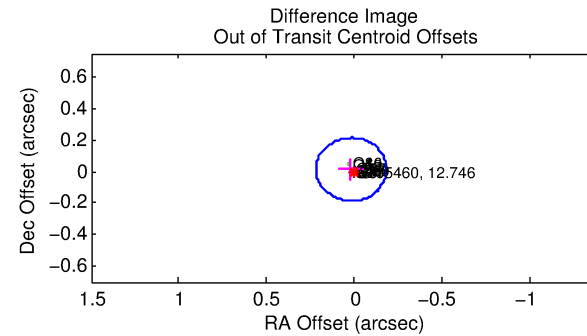
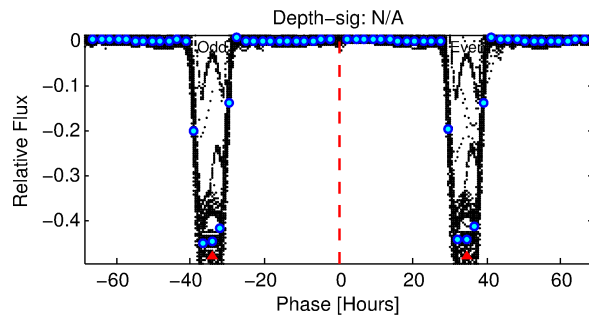
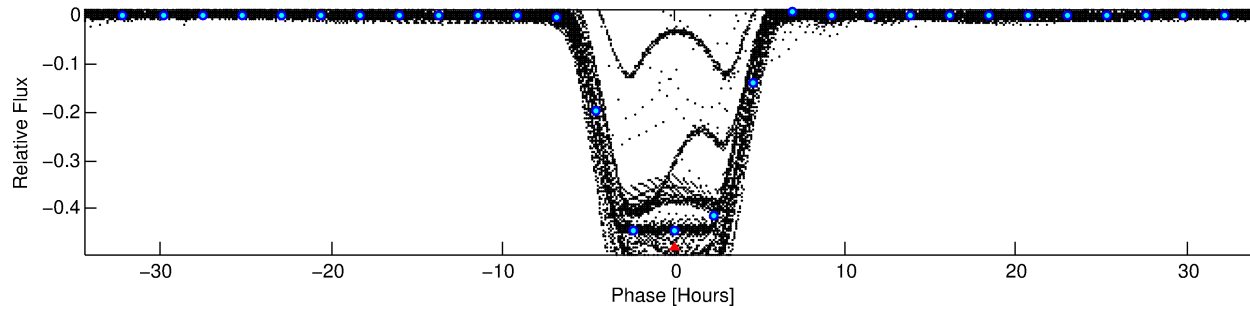
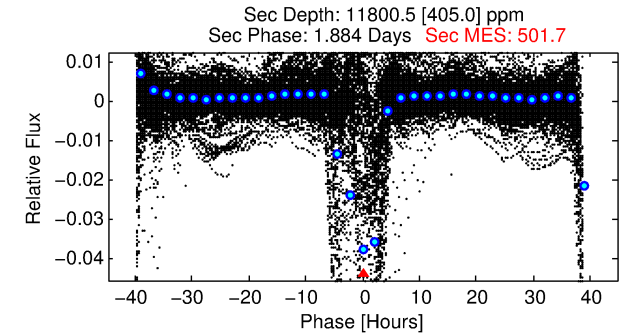
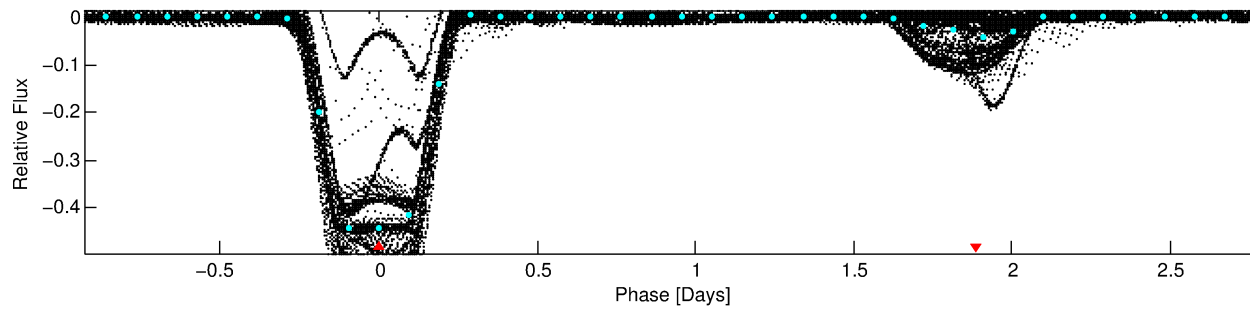
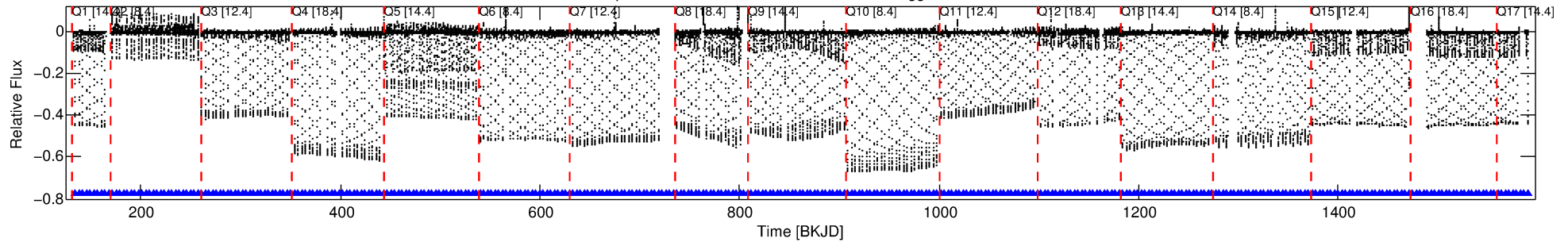
Ephemeris Match Information For 006205460-01

No Significant Match Found

DV One-Page Summary

KIC: 6205460 Candidate: 1 of 1 Period: 3.723 d
KOI: K06673 Corr: No Ephemeris Match

Kp: 12.75 R*: 2.59 Rs Teff: 5425.0 K Logg: 3.68 Fe/H: -0.380



TPS TCE Results:

Period = 3.72297 d
Epoch = 134.5862 BKJD

DV fit results are unavailable

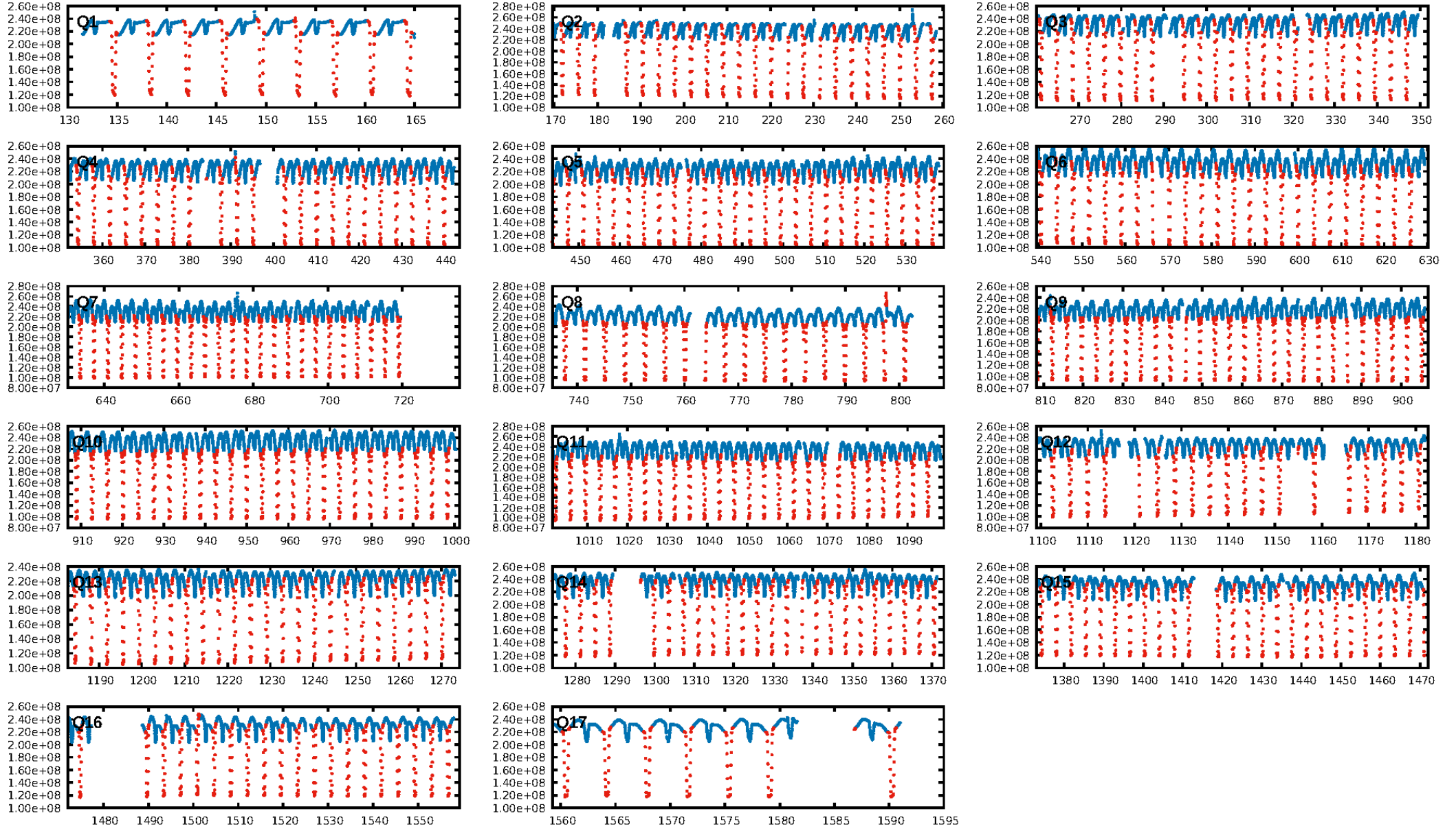
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [352/352]
GhostDiagnostic-chr: 1.036
Centroid-sig: 0.0%
Centroid-so: 0.223 arcsec [1289.39σ]
OotOffset-rm: 0.024 arcsec [0.36σ]
KicOffset-rm: 0.241 arcsec [3.54σ]
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]

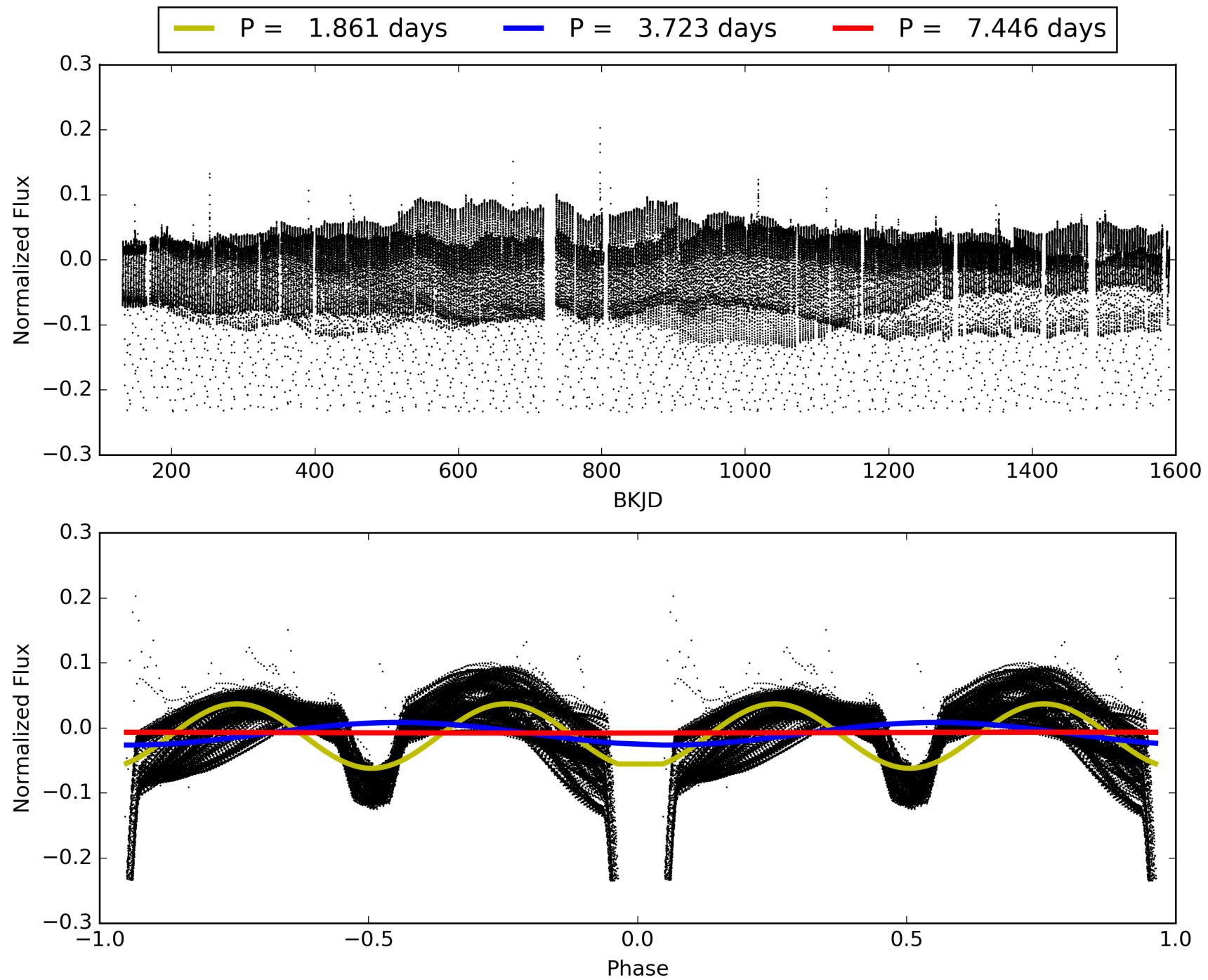
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:32:53 Z

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

TCE 006205460-01, PDC Light Curves

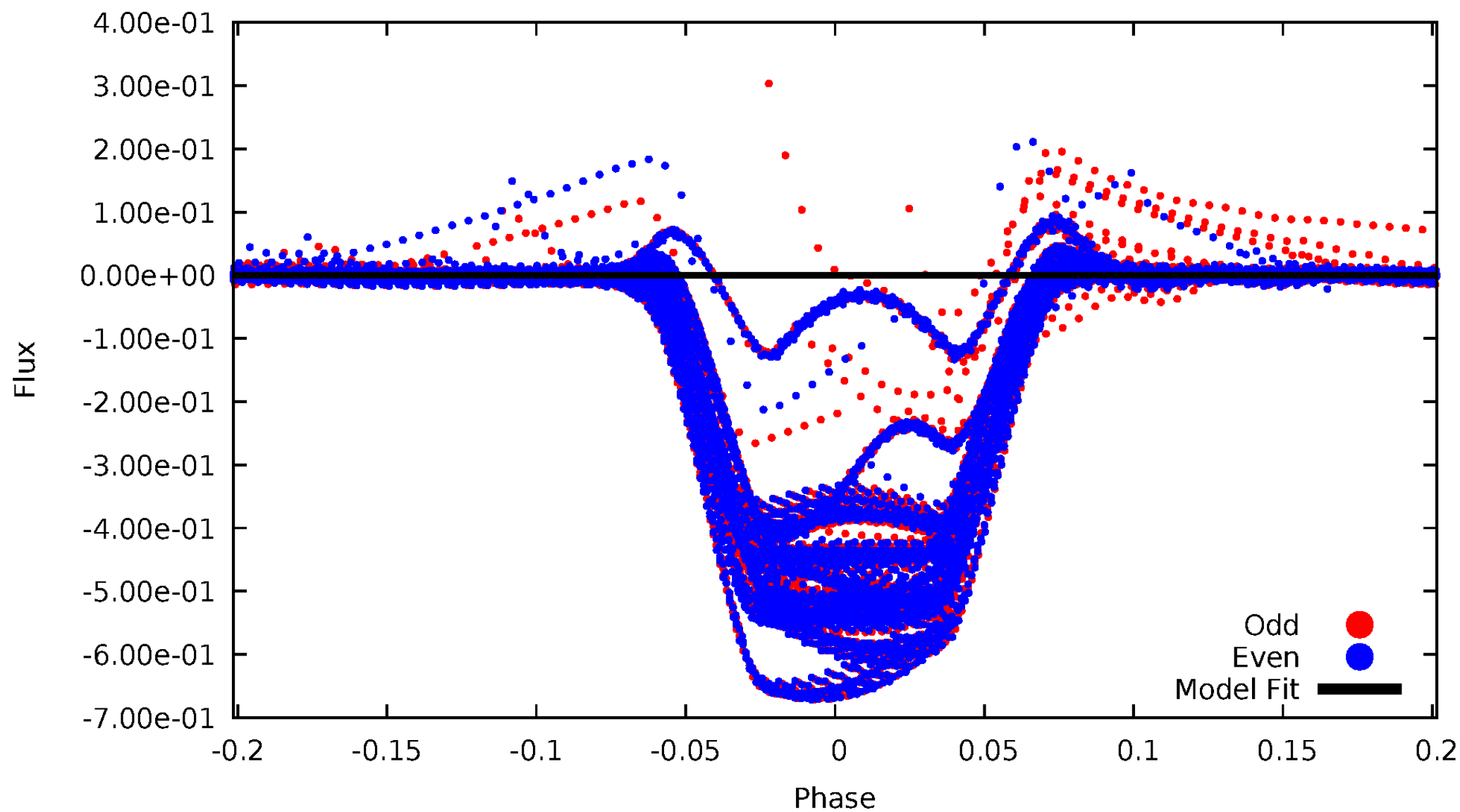


TCE 006205460-01



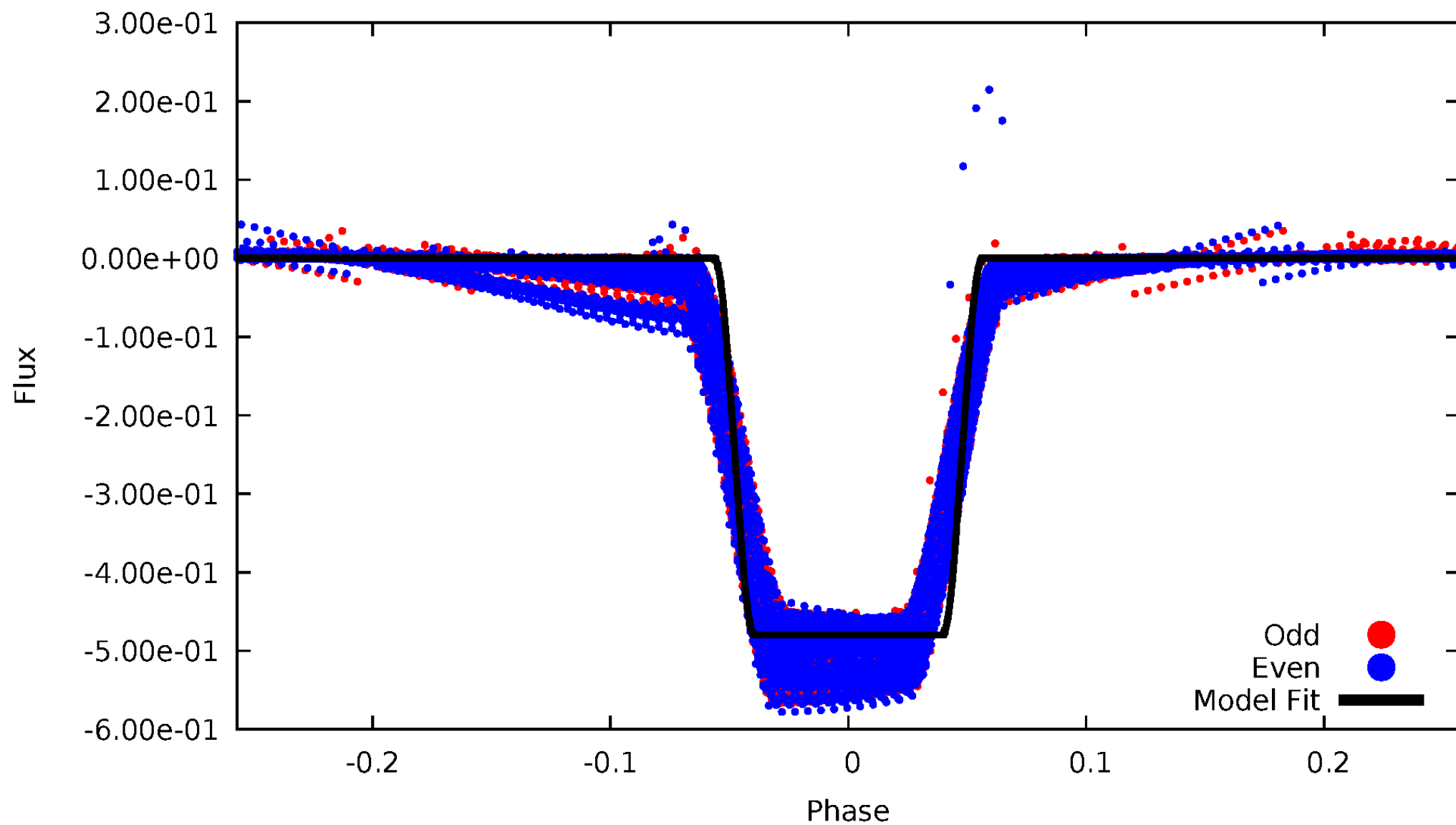
DV Odd/Even

TCE 006205460-01



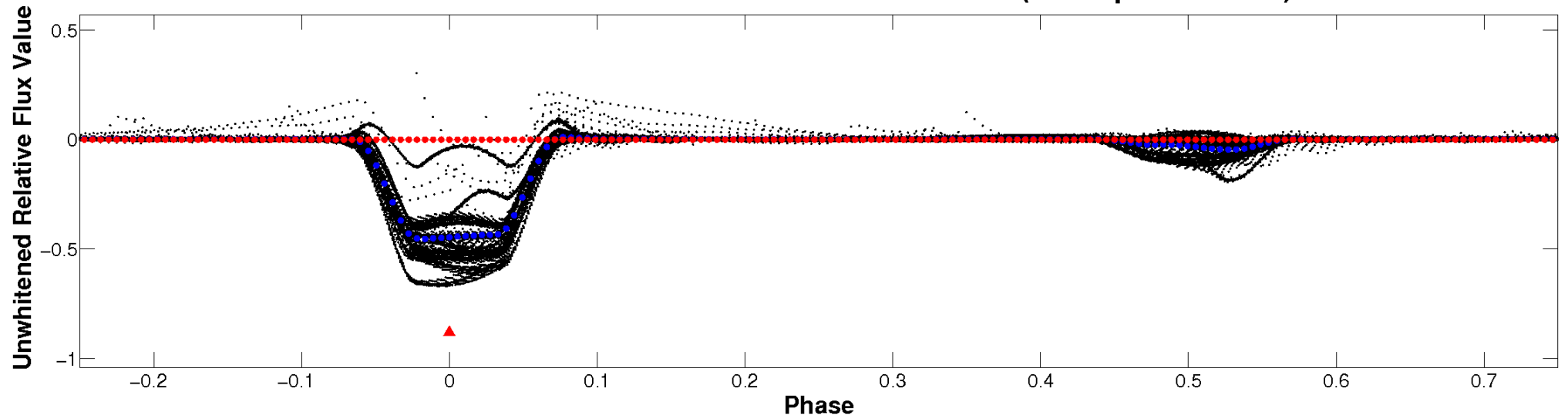
ALT Odd/Even

TCE 006205460-01



Non-Whitened Vs. Whitened Light Curve

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

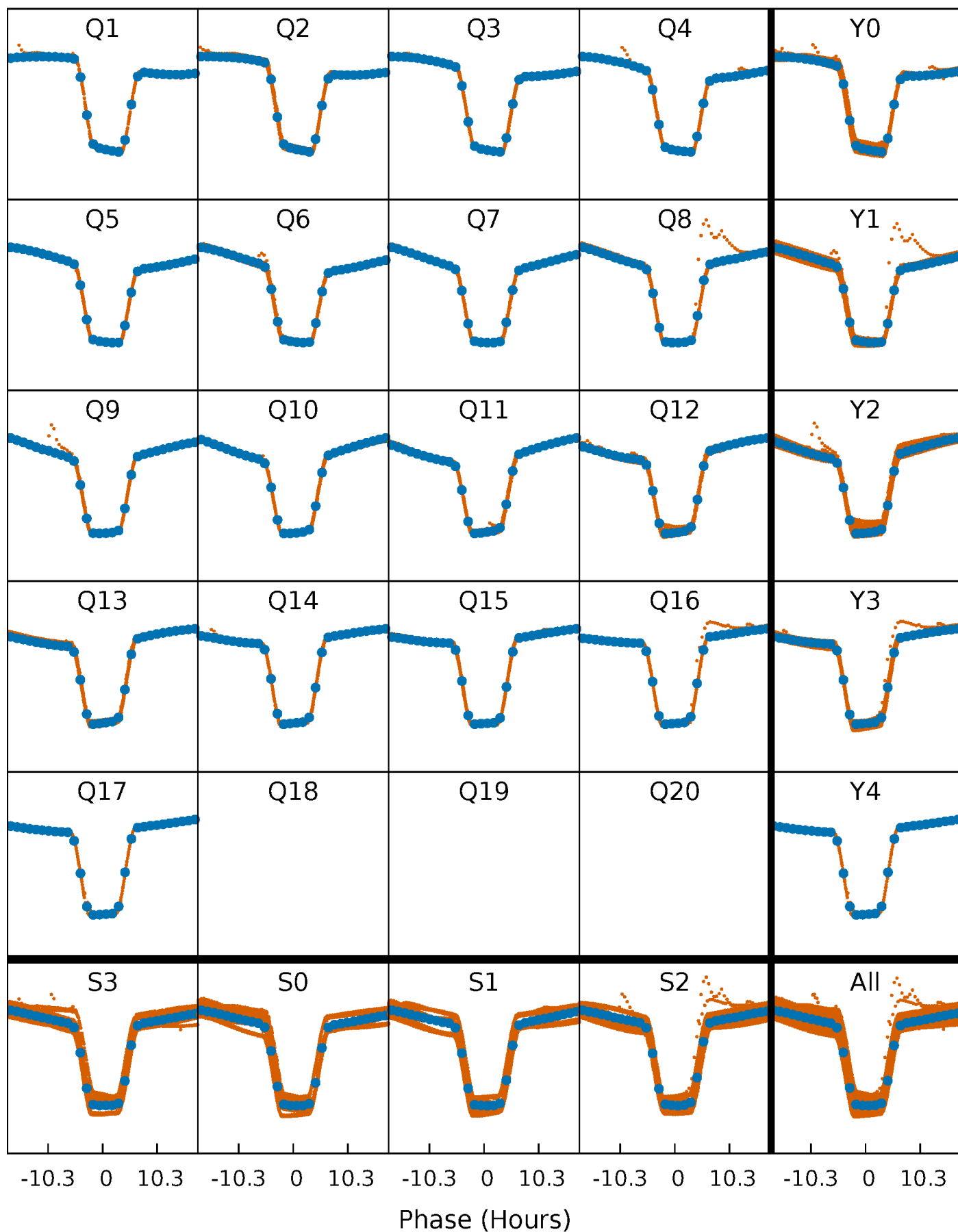


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



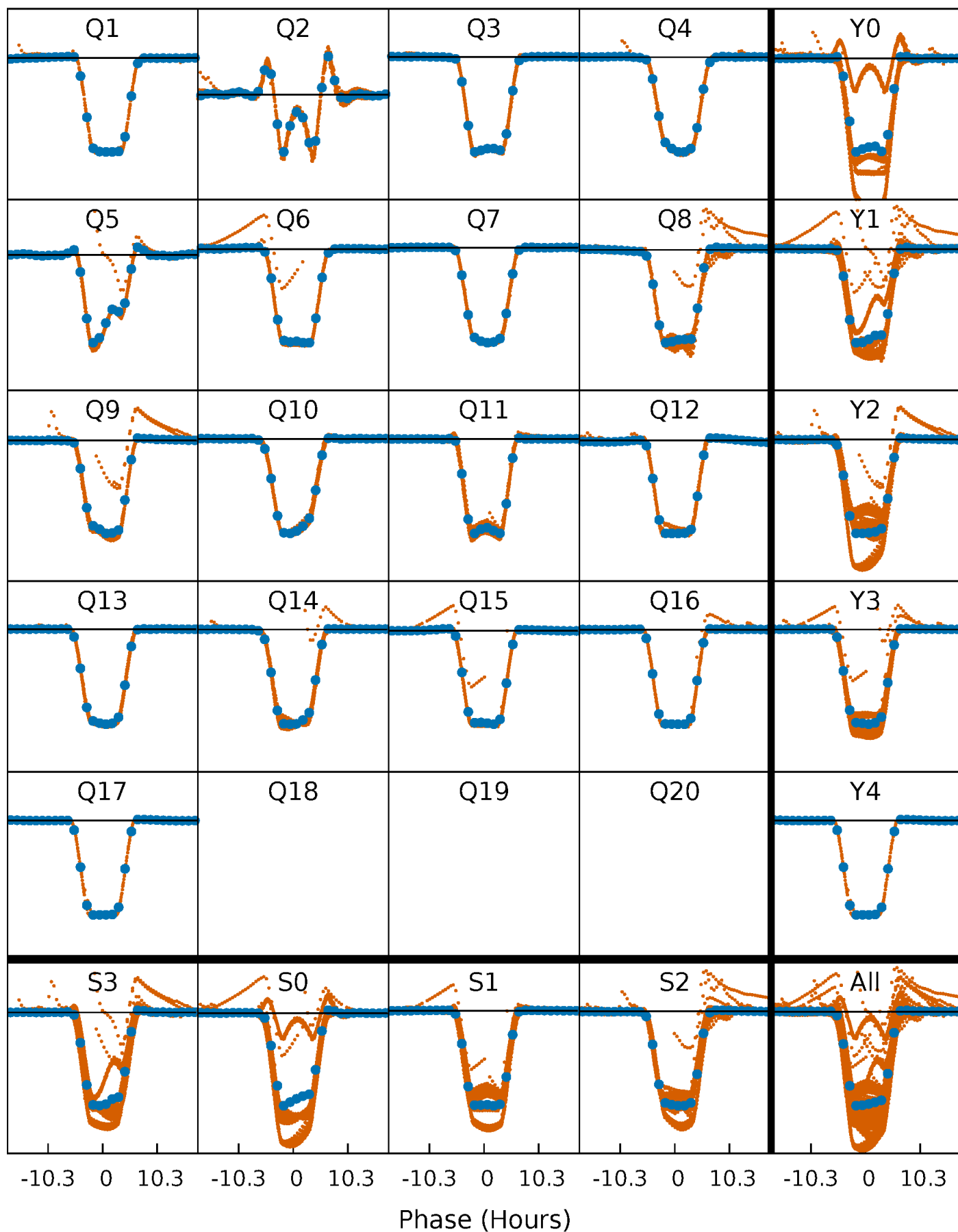
PDC Quarter-Phased Transit Curves

TCE 006205460-01 P= 3.722973 Days $T_0=134.586245$ (BKJD)



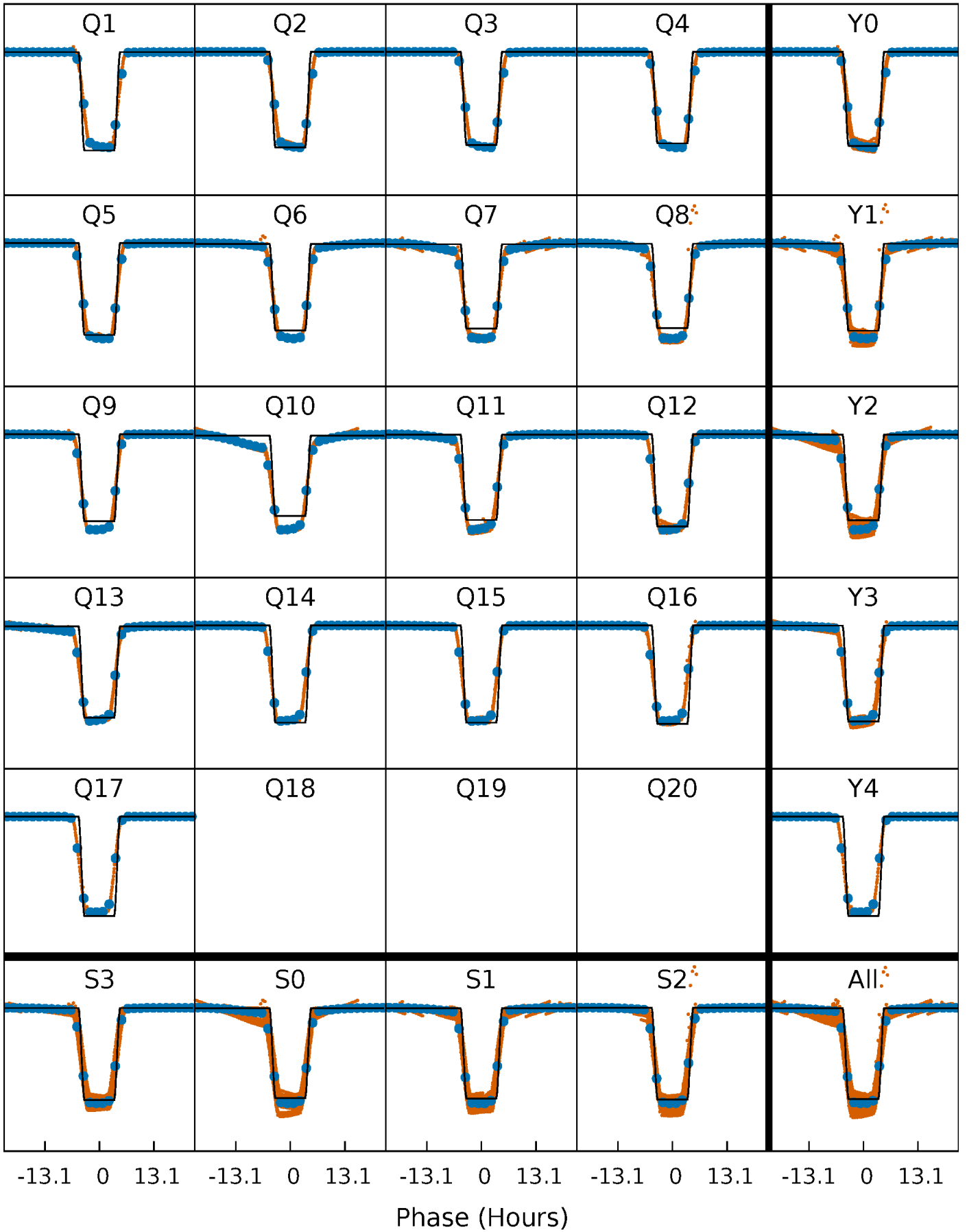
DV Quarter-Phased Transit Curves

TCE 006205460-01 P= 3.722973 Days $T_0=134.586245$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

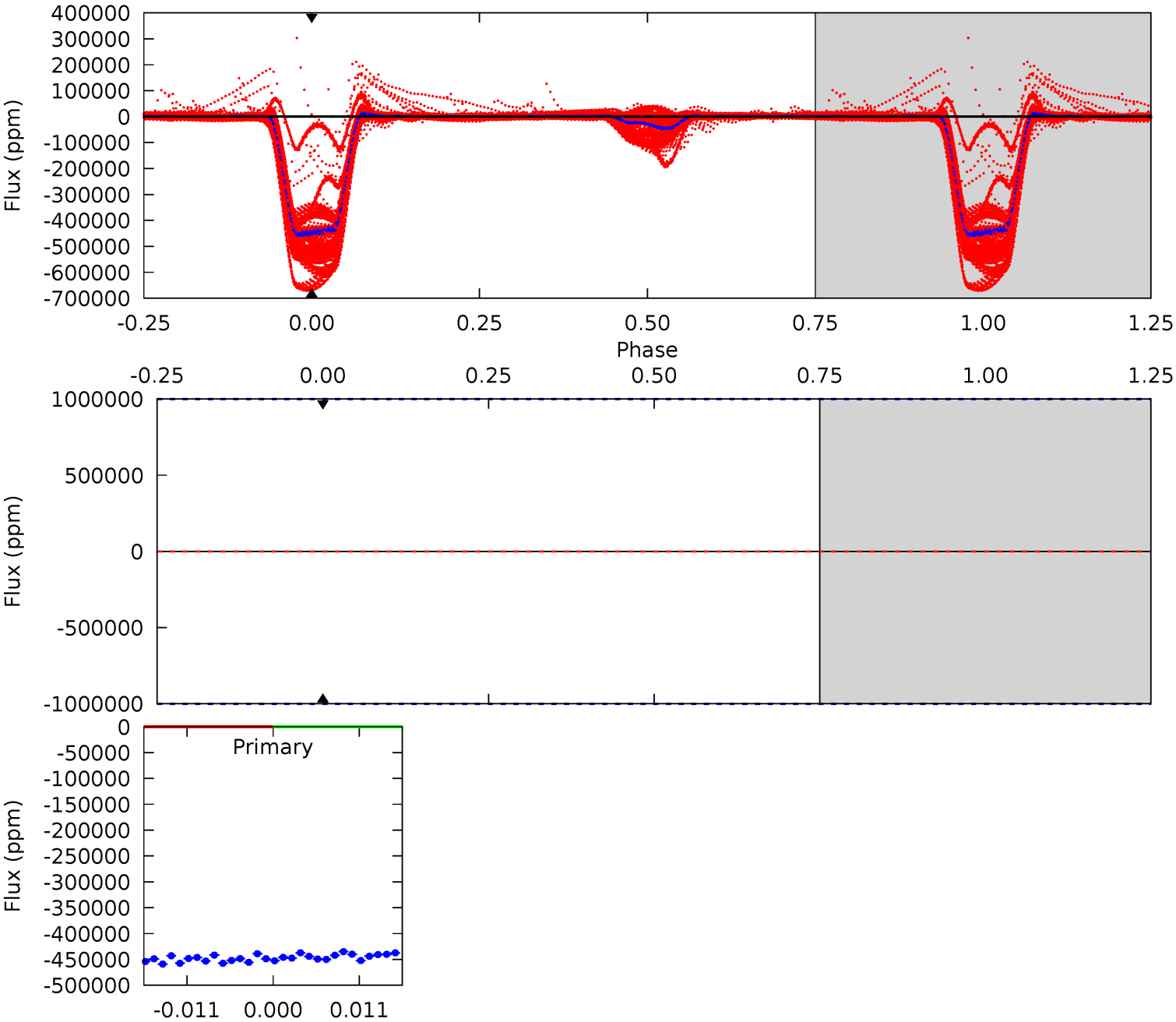
TCE 006205460-01 P= 3.722973 Days $T_0=134.612270$ (BKJD)



DV Model-Shift Uniqueness Test

006205460-01, P = 3.722973 Days, E = 130.863272 Days

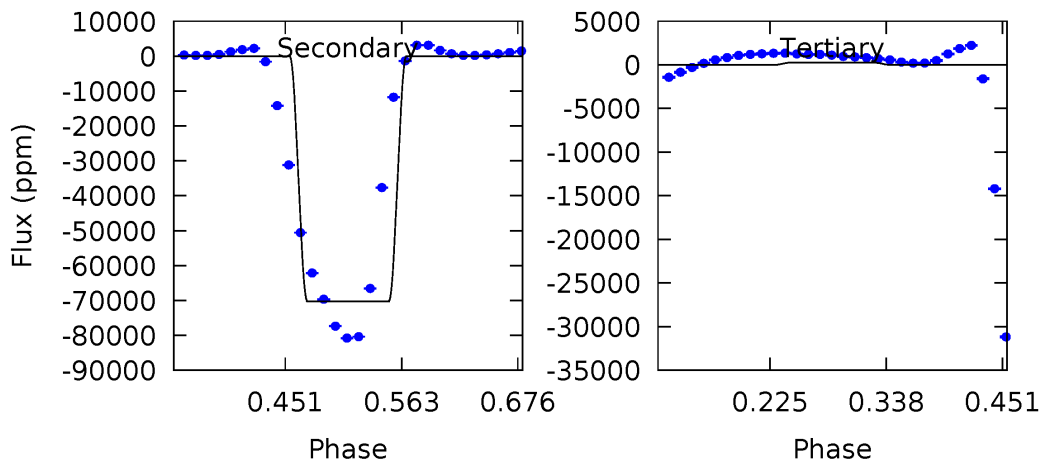
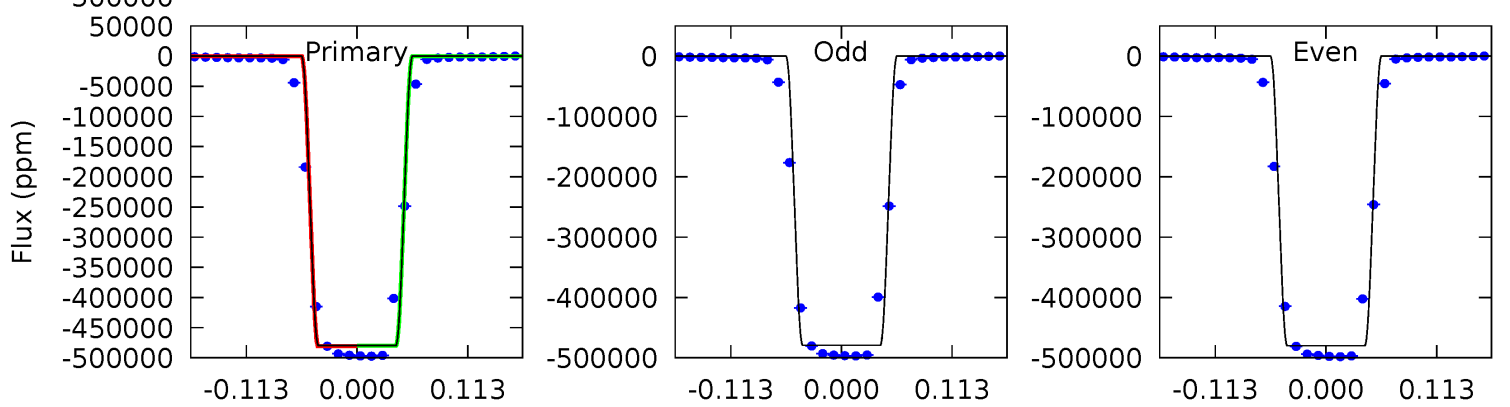
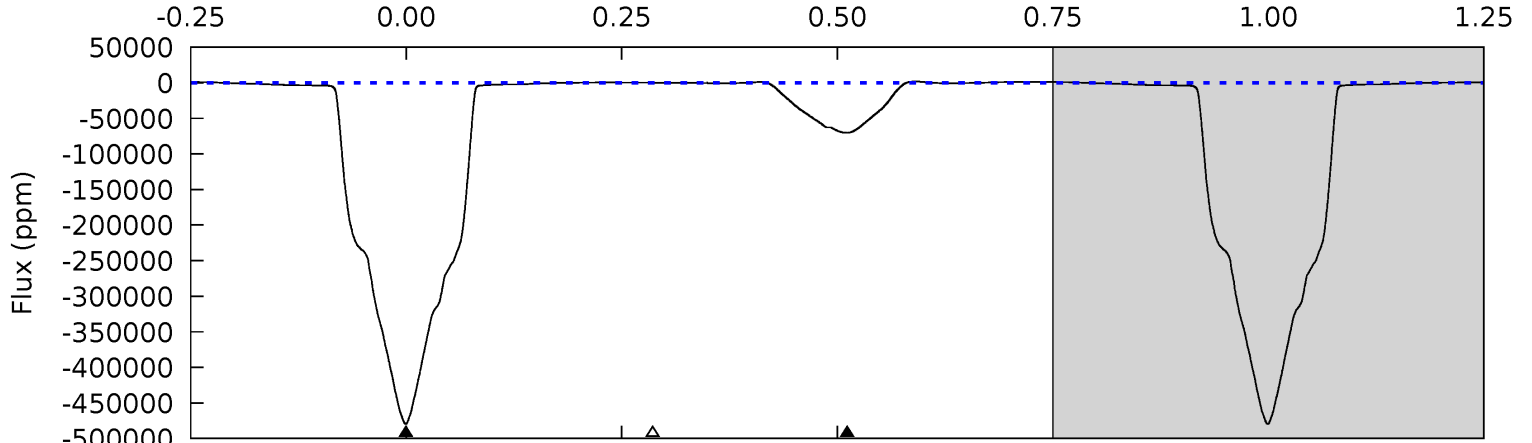
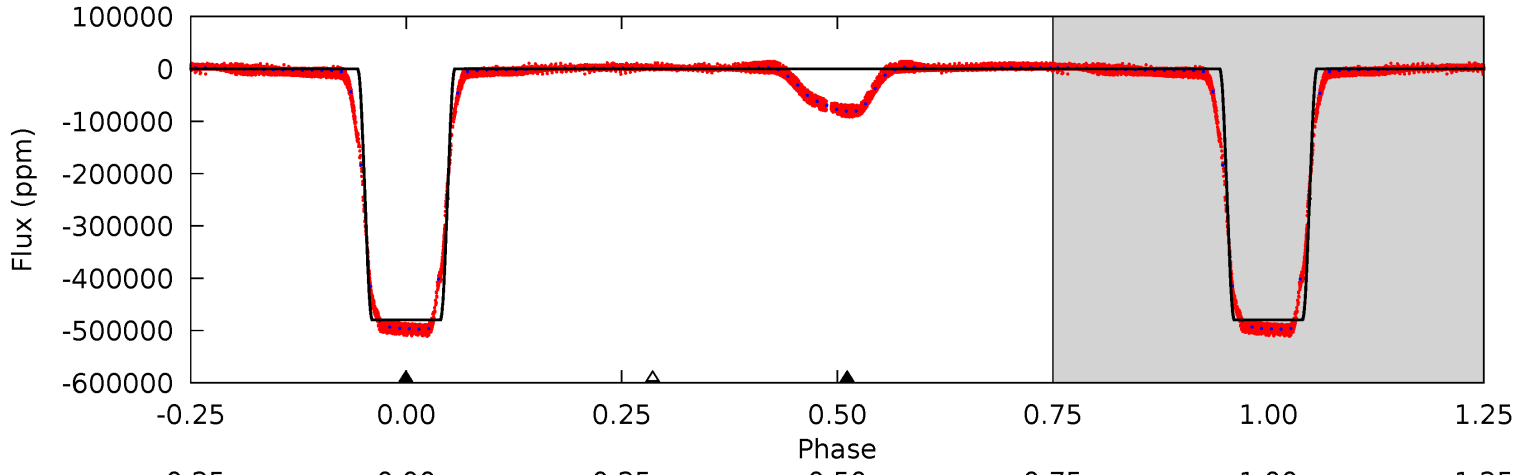
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006205460-01, P = 3.722973 Days, E = 130.889297 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7284	1067	-4.03	0	4.54	1.59	17.4	7288	7284	1071	1067	5.66	1.01	0.00	0



Stellar Parameters For KIC 006205460

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5425^{+296}_{-242}	$3.678^{+0.817}_{-0.272}$	$-0.380^{+0.350}_{-0.250}$	$2.592^{+1.102}_{-1.652}$	$1.166^{+0.177}_{-0.354}$	$0.094^{+1.837}_{-0.062}$
	+5%/-4%	+22%/-7%	+92%/-66%	+43%/-64%	+15%/-30%	+1949%/-66%
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 006205460-01 / KOI 6673.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$28.64^{+29.53}_{-19.17}$	2376^{+348}_{-450}	-3615^{+15049}_{-7282}	$-1.987^{+269.967}_{-224.411}$
Alt.	-70245 ± 66	$181.06^{+70.08}_{-62.22}$	2378^{+344}_{-397}	3729^{+272}_{-237}	$3.065^{+3.750}_{-1.436}$

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 $A_{obs} \gg 1.0$

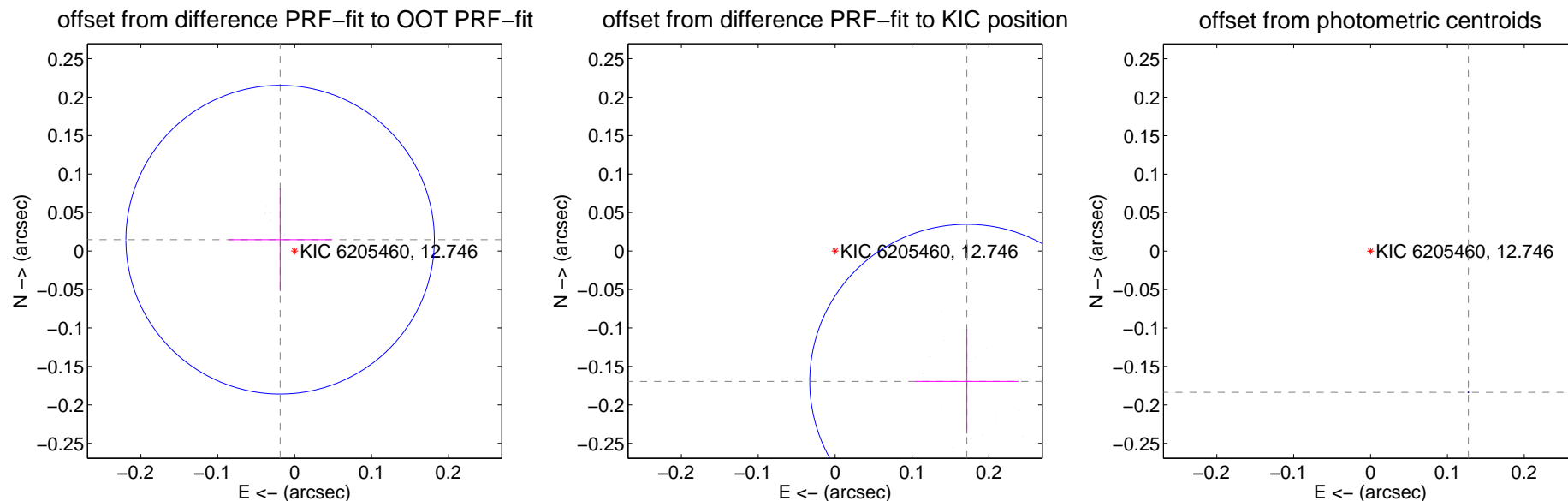
DV Centroid Data

Supplemental centroid analysis for 006205460-01. Kepler magnitude: 12.75. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

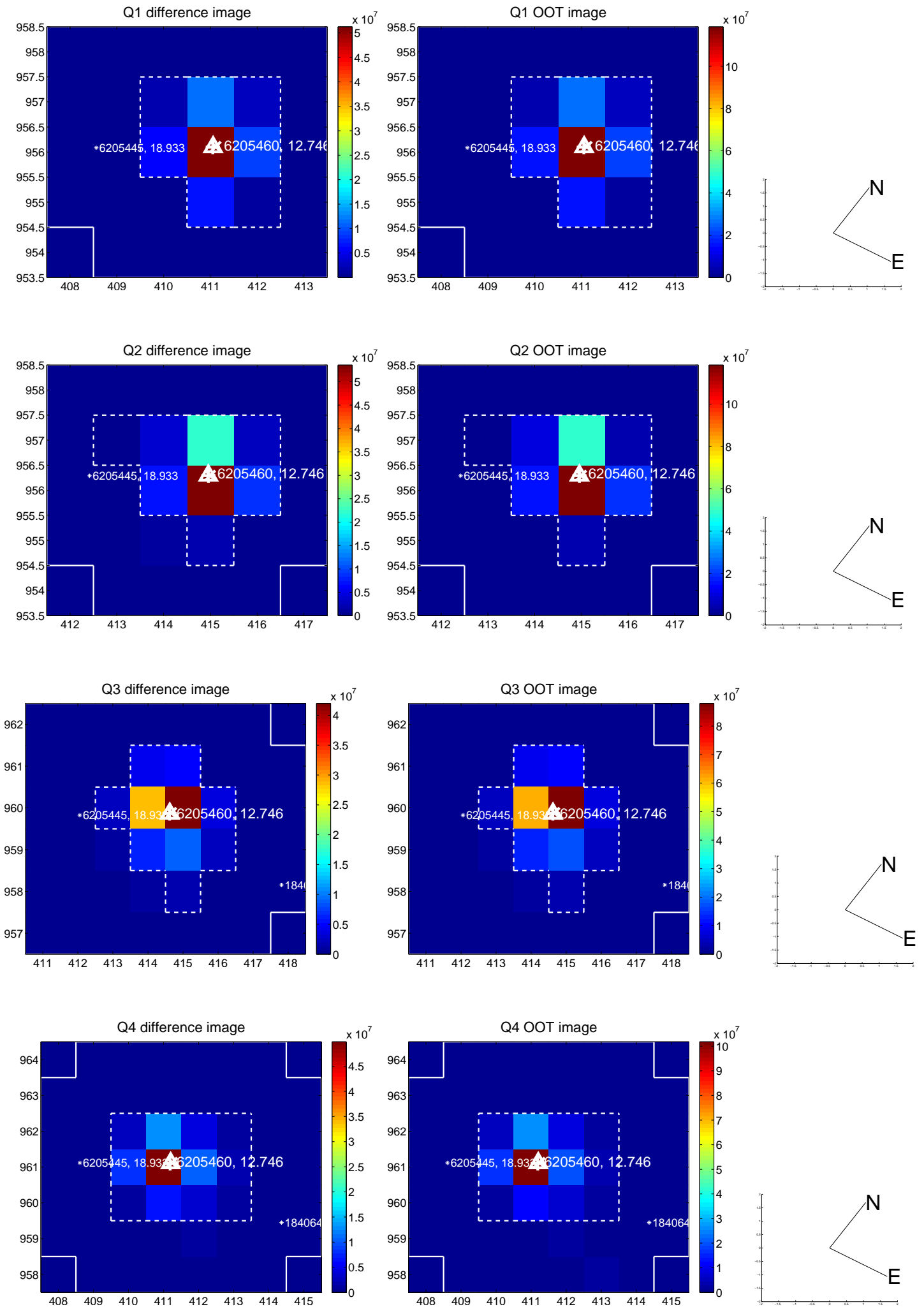
The direct PRF centroid is offset from the target star catalog position by about 0.37 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.024 ± 0.067	0.36	0.019 ± 0.067	0.015 ± 0.067
PRF-fit source offset from KIC position	0.241 ± 0.068	3.54	-0.171 ± 0.067	-0.170 ± 0.068
photometric centroid source offset	0.22 ± 0.00	1289.39	-0.13 ± 0.00	-0.18 ± 0.00

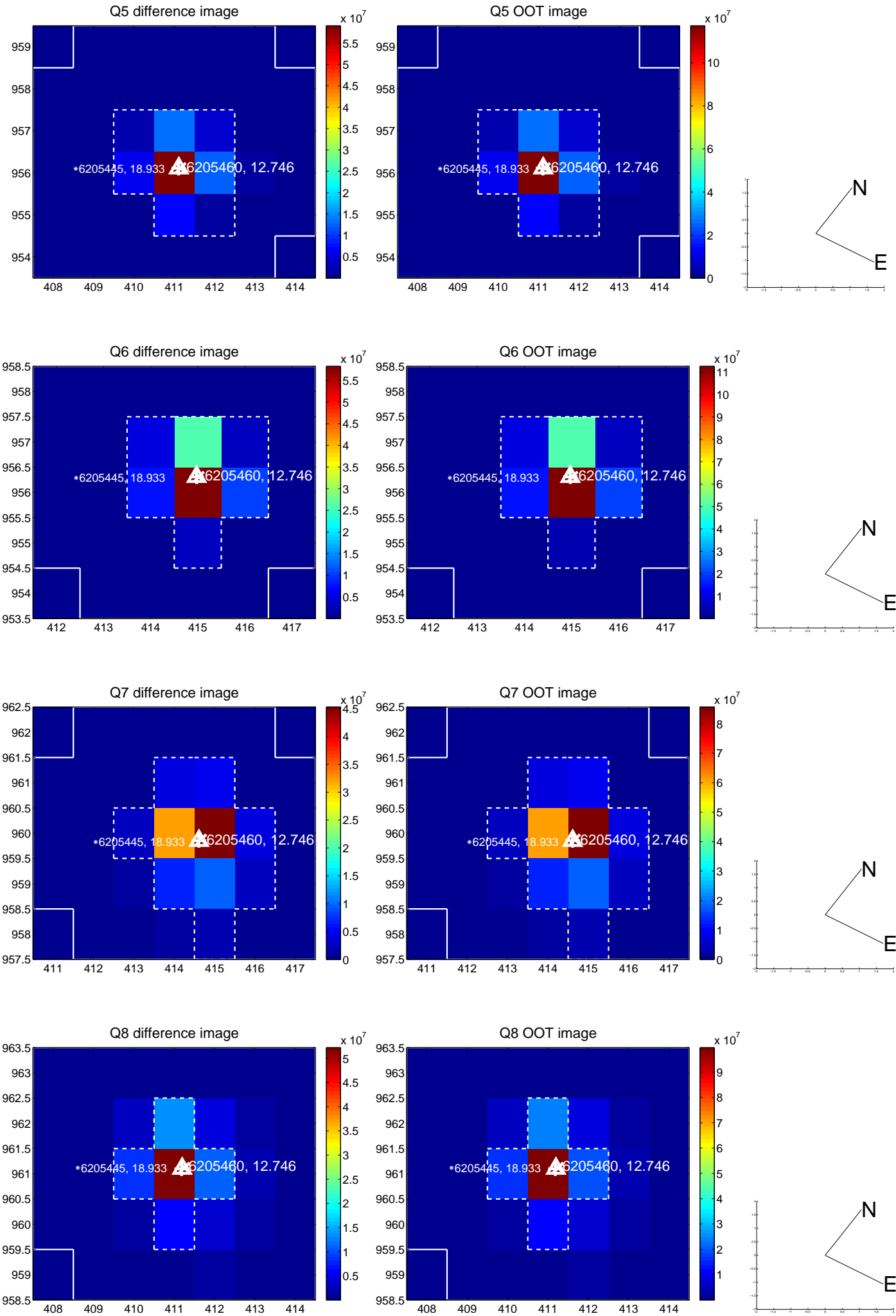


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

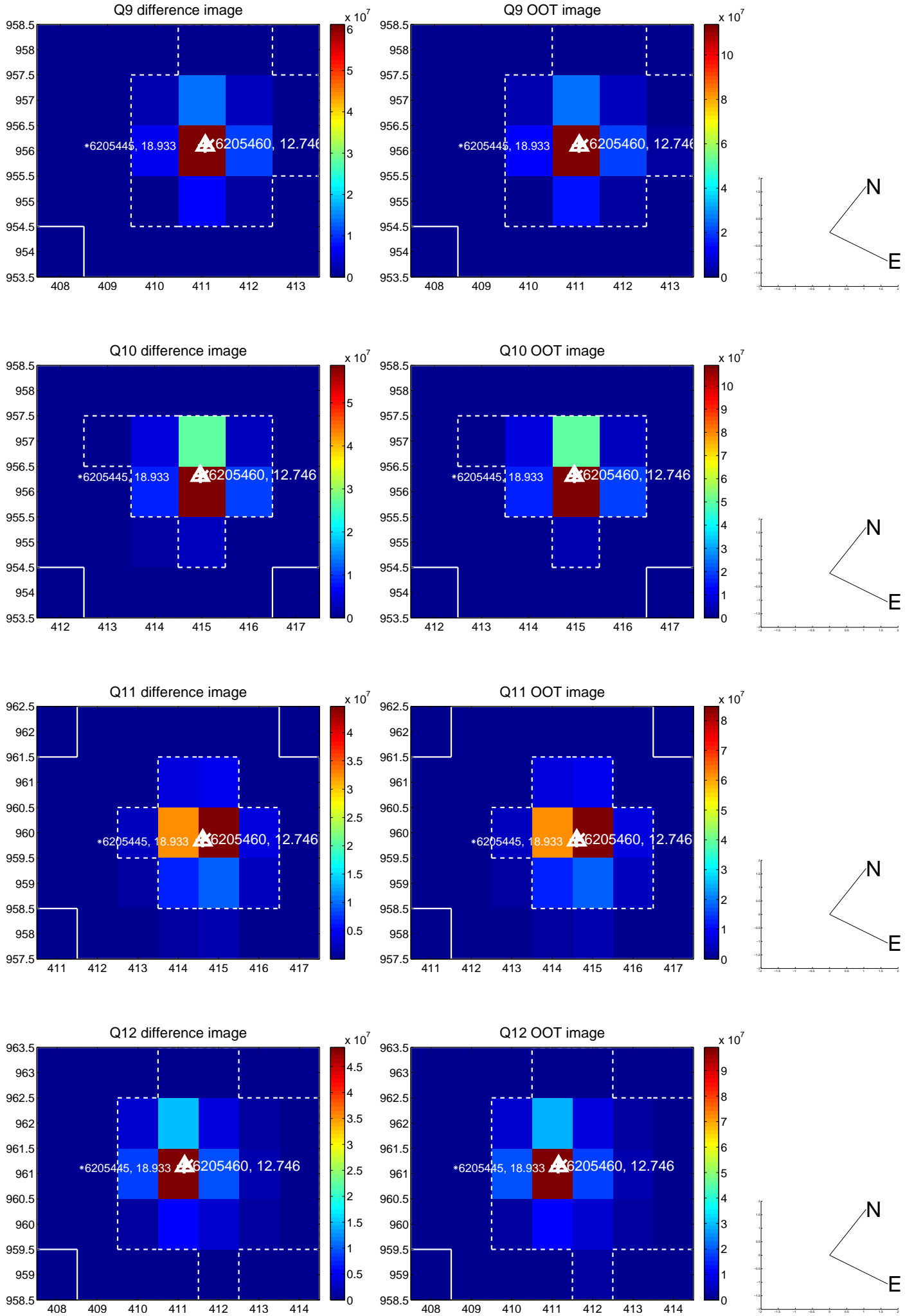
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



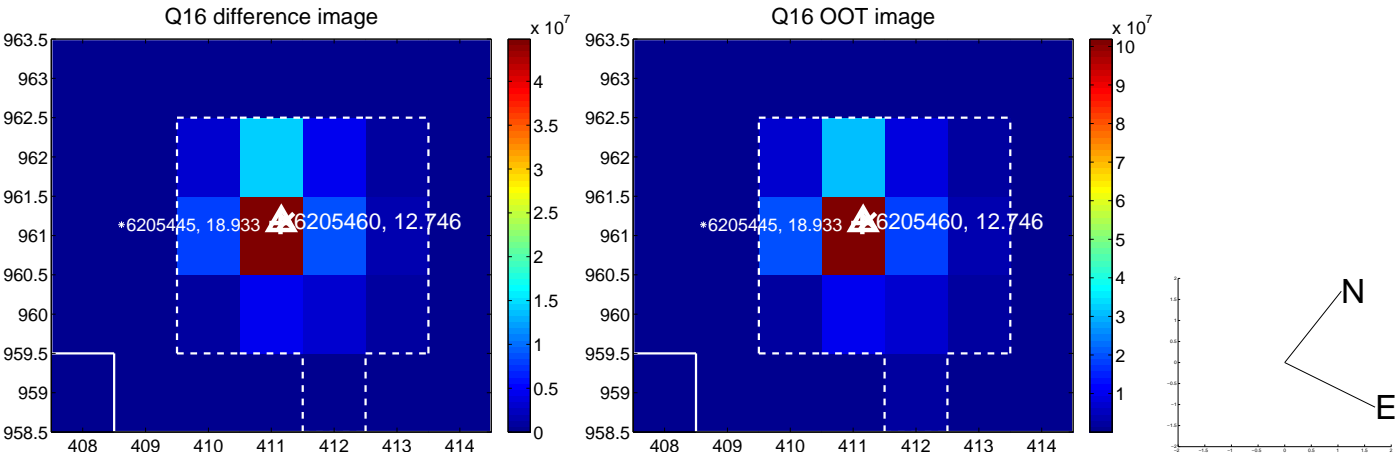
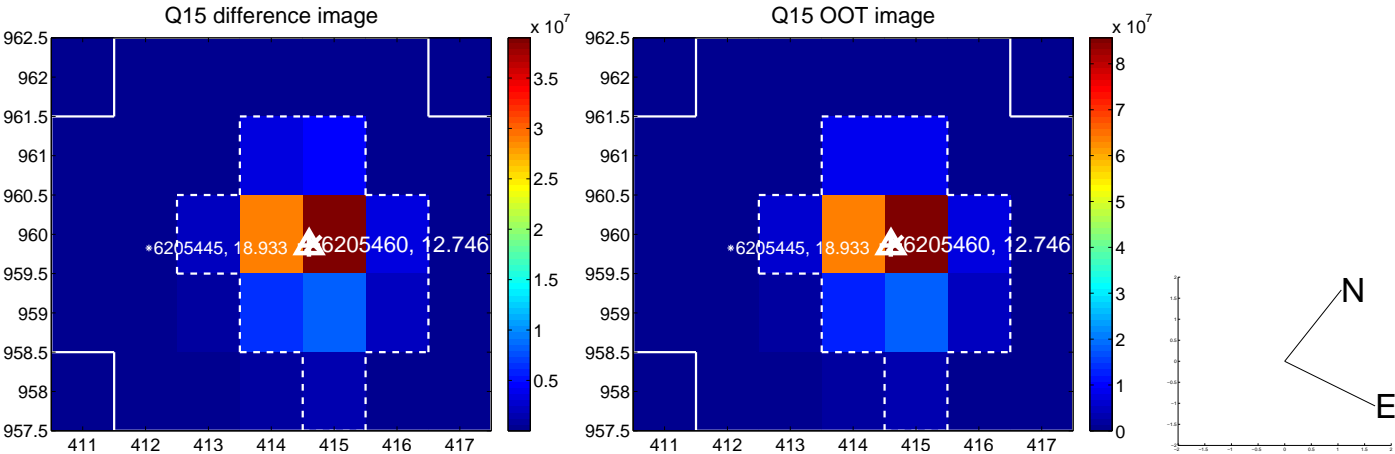
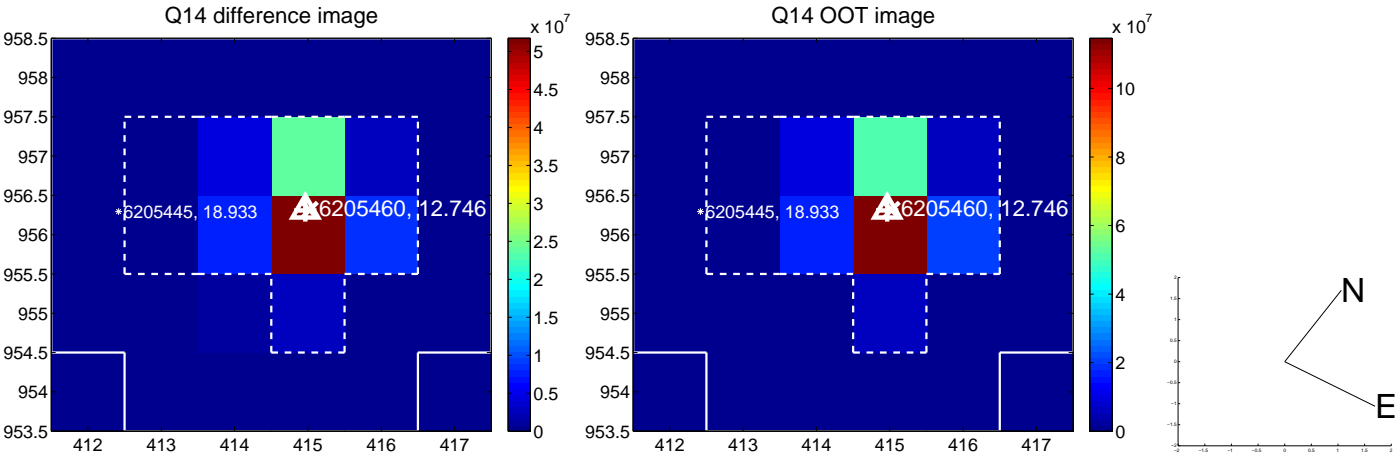
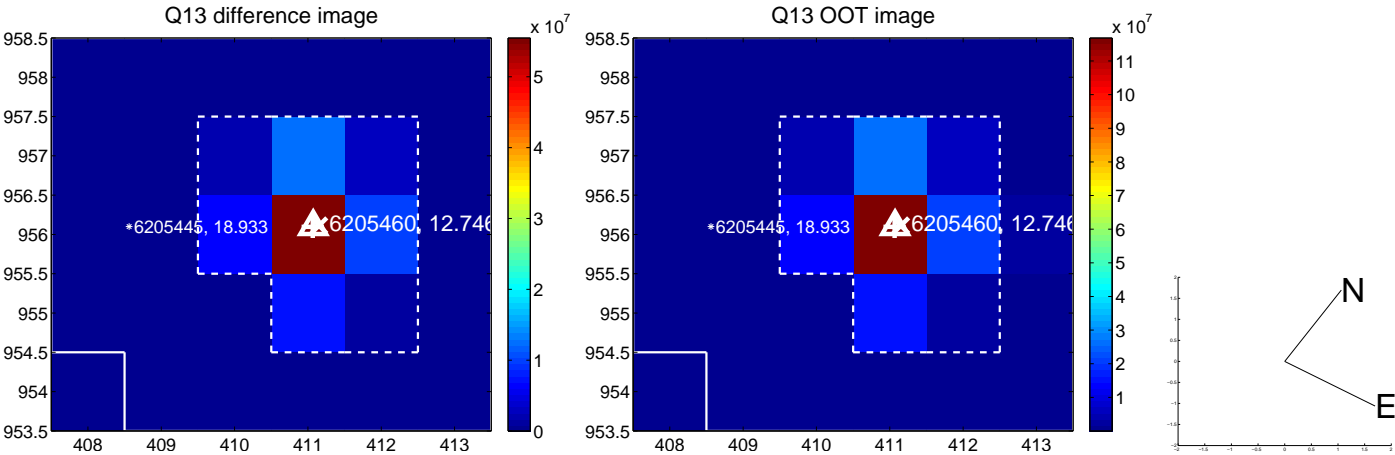
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



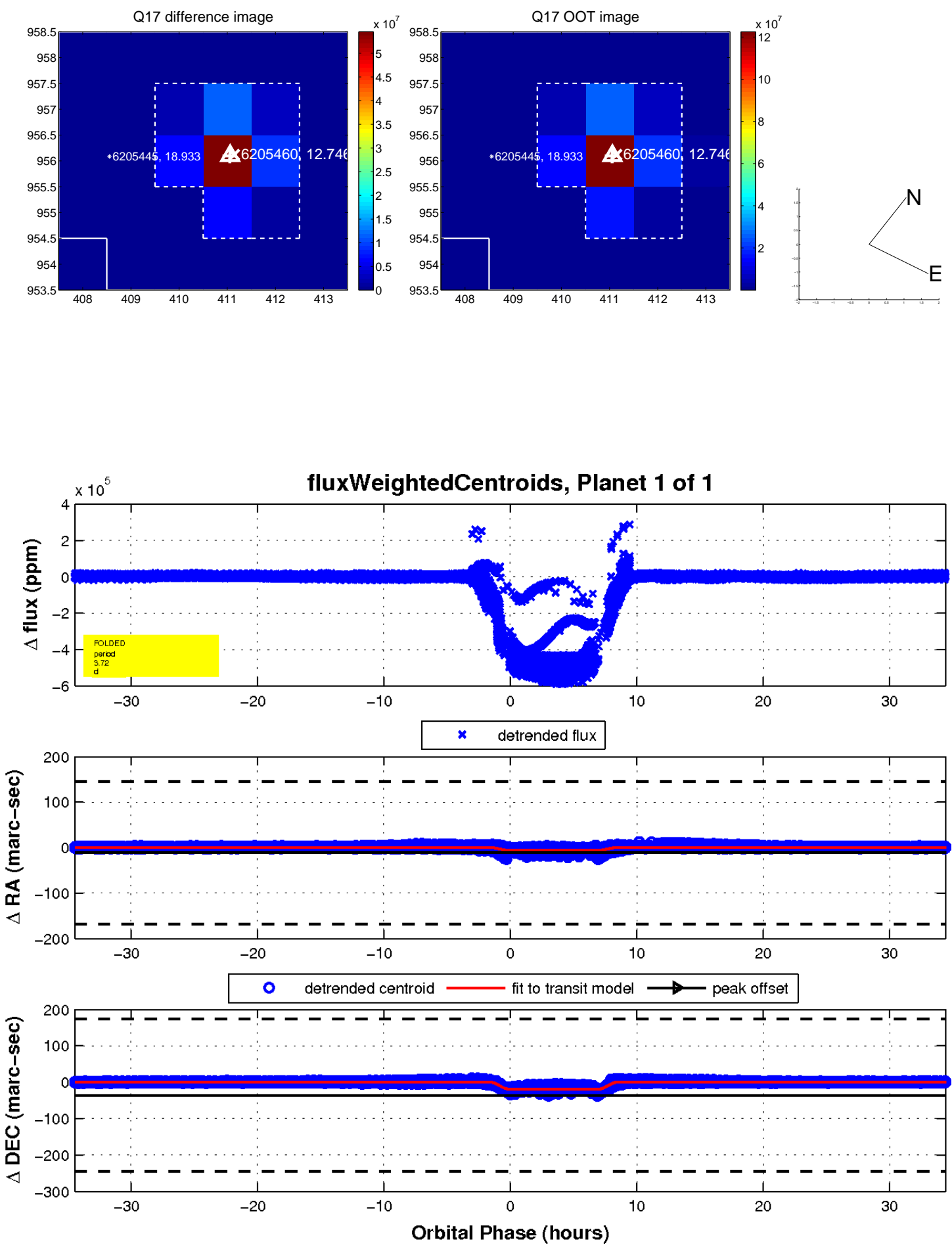
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UKIRT Image

Declination

