

KIC 005475712

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})
005475712-01	OBS	6588.01	1.495943	132.679112	53727.8	5.000	9217.8	-1.0	1.09	6596	25.62	2911.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005475712-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_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 005475712-01

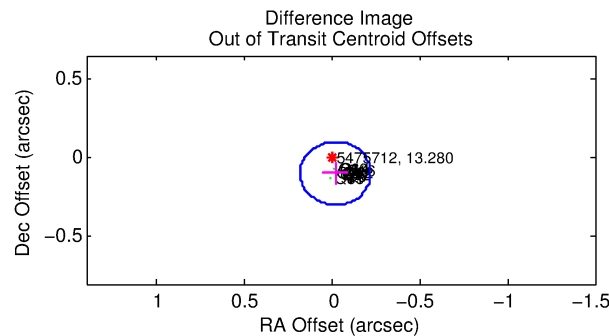
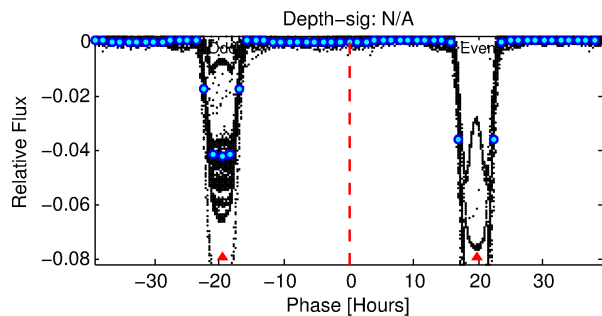
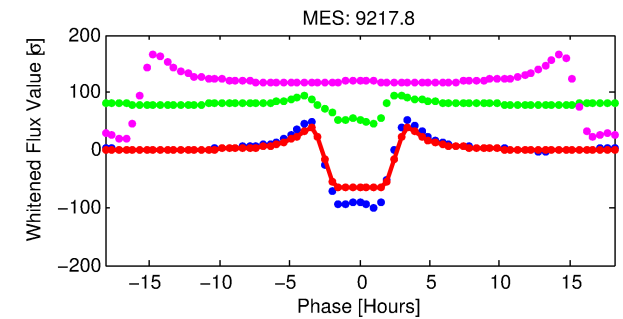
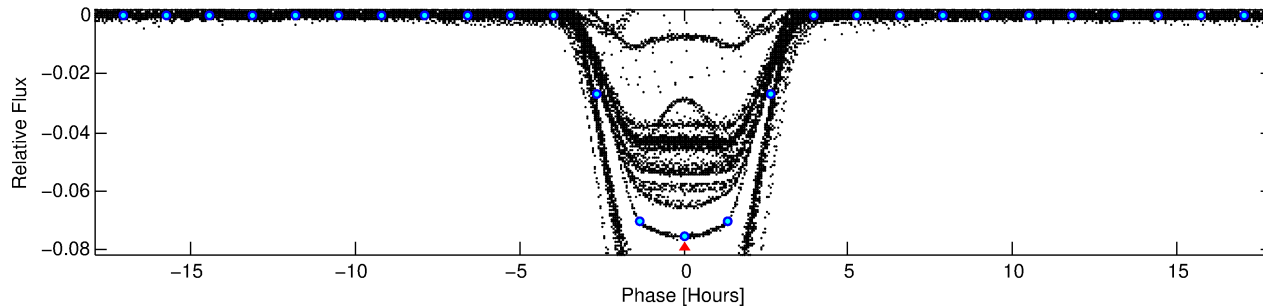
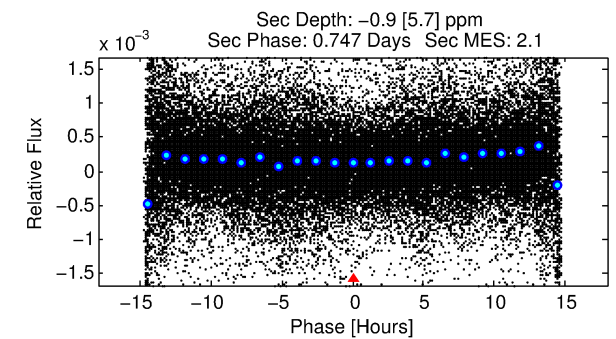
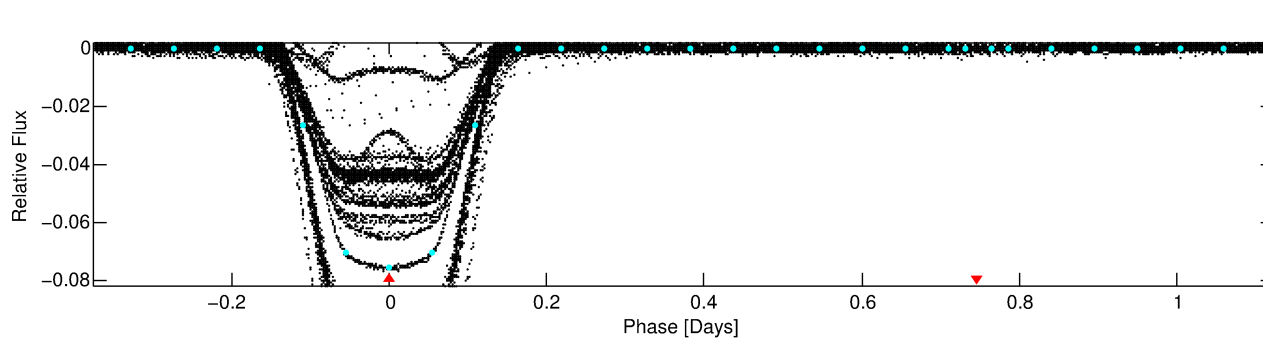
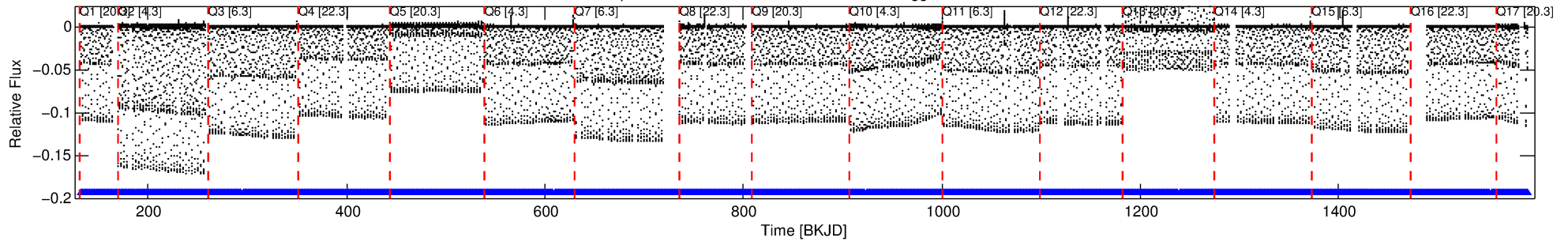
No Significant Match Found

DV One-Page Summary

KIC: 5475712 Candidate: 1 of 1 Period: 1.496 d

KOI: K06588 Corr: No Ephemeris Match

Kp: 13.28 R*: 1.09 Rs Teff: 6596.0 K Logg: 4.40 Fe/H: -0.420



TPS TCE Results:

Period = 1.49594 d
Epoch = 132.6791 BKJD

DV fit results are unavailable

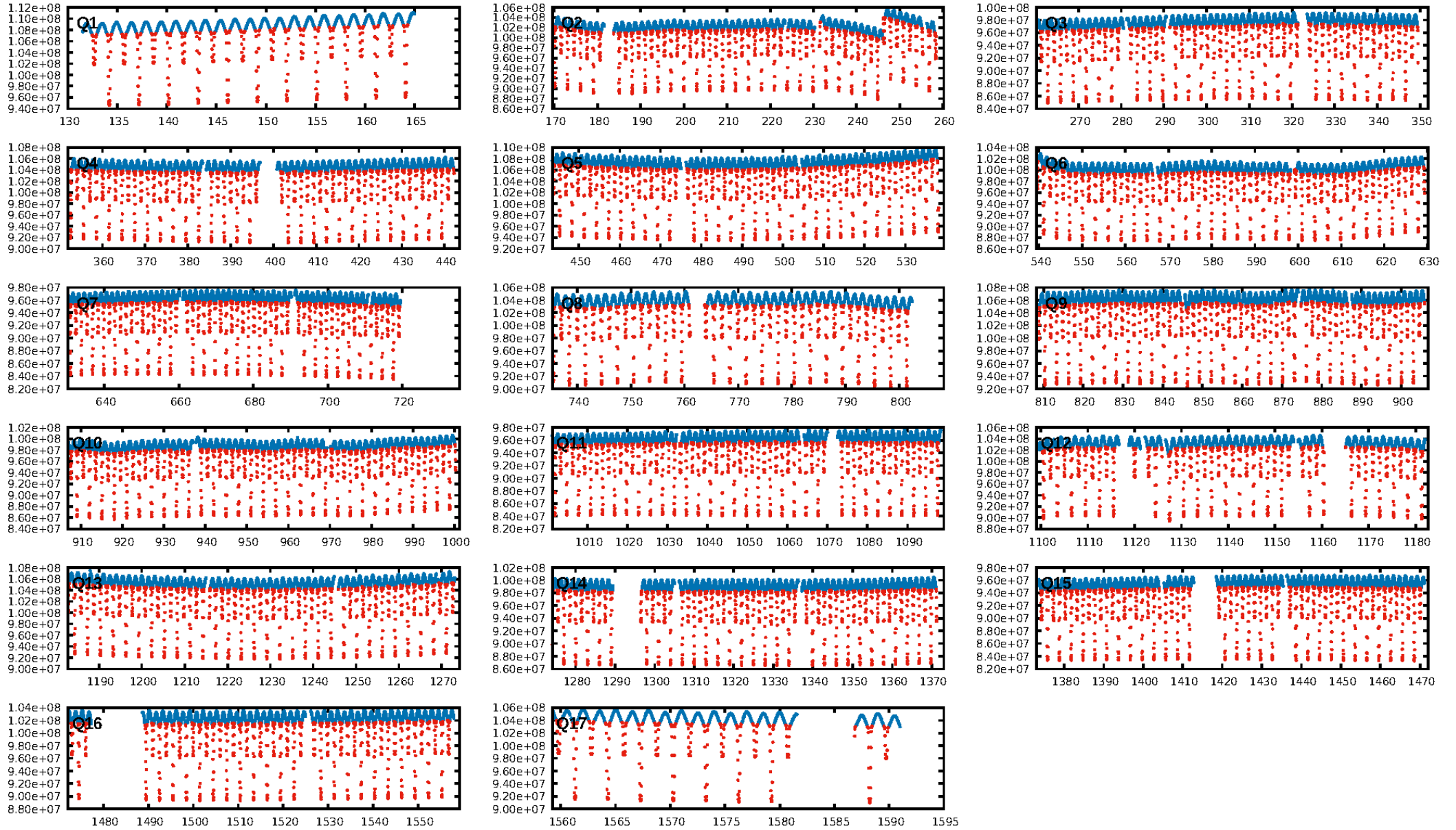
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [861/861]
GhostDiagnostic-chr: 0.9772
Centroid-sig: N/A
Centroid-so: 1.140 arcsec [1637.06σ]
OotOffset-rm: 0.100 arcsec [1.49σ]
KicOffset-rm: 0.060 arcsec [0.89σ]
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]

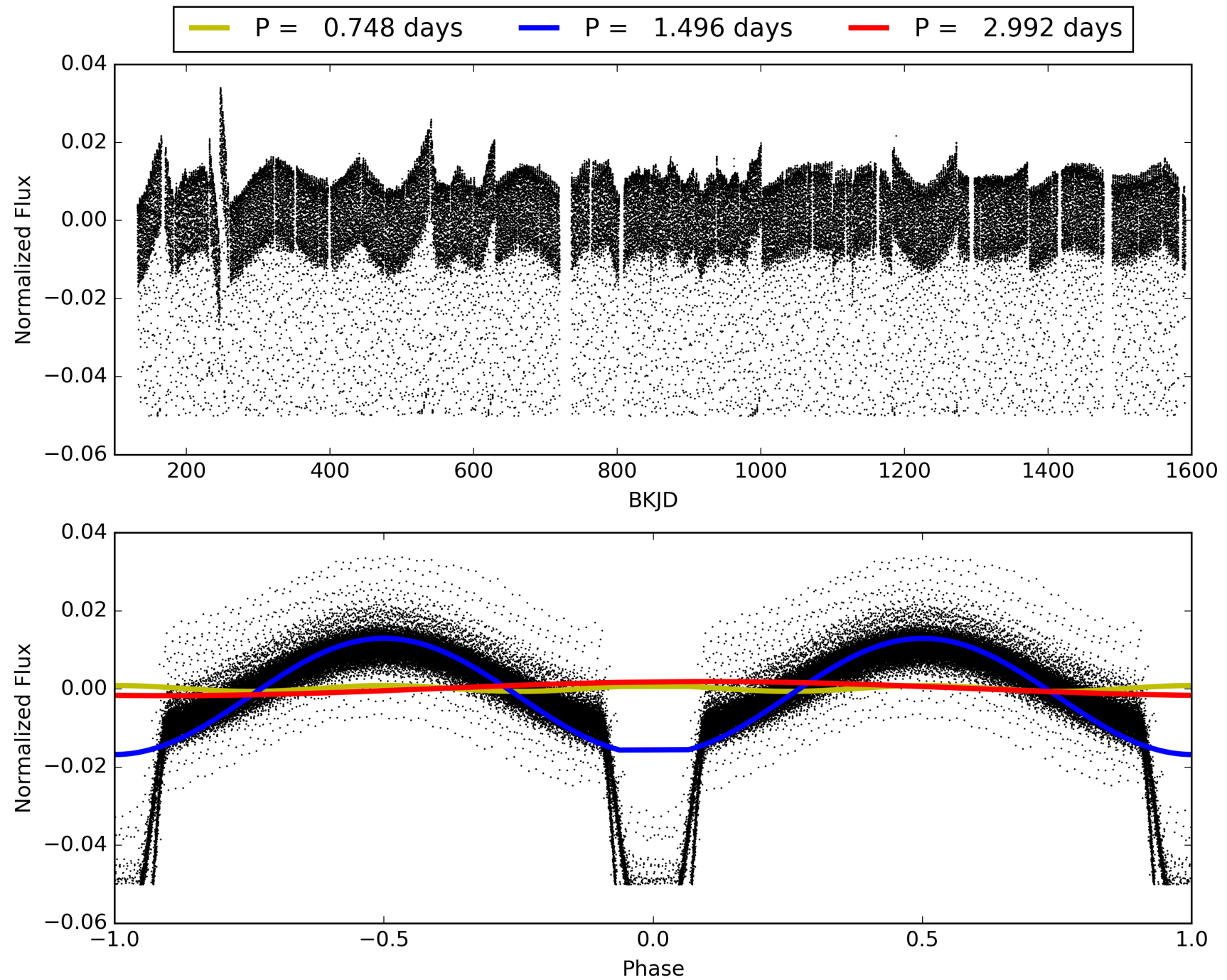
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:36:04 Z

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

TCE 005475712-01, PDC Light Curves

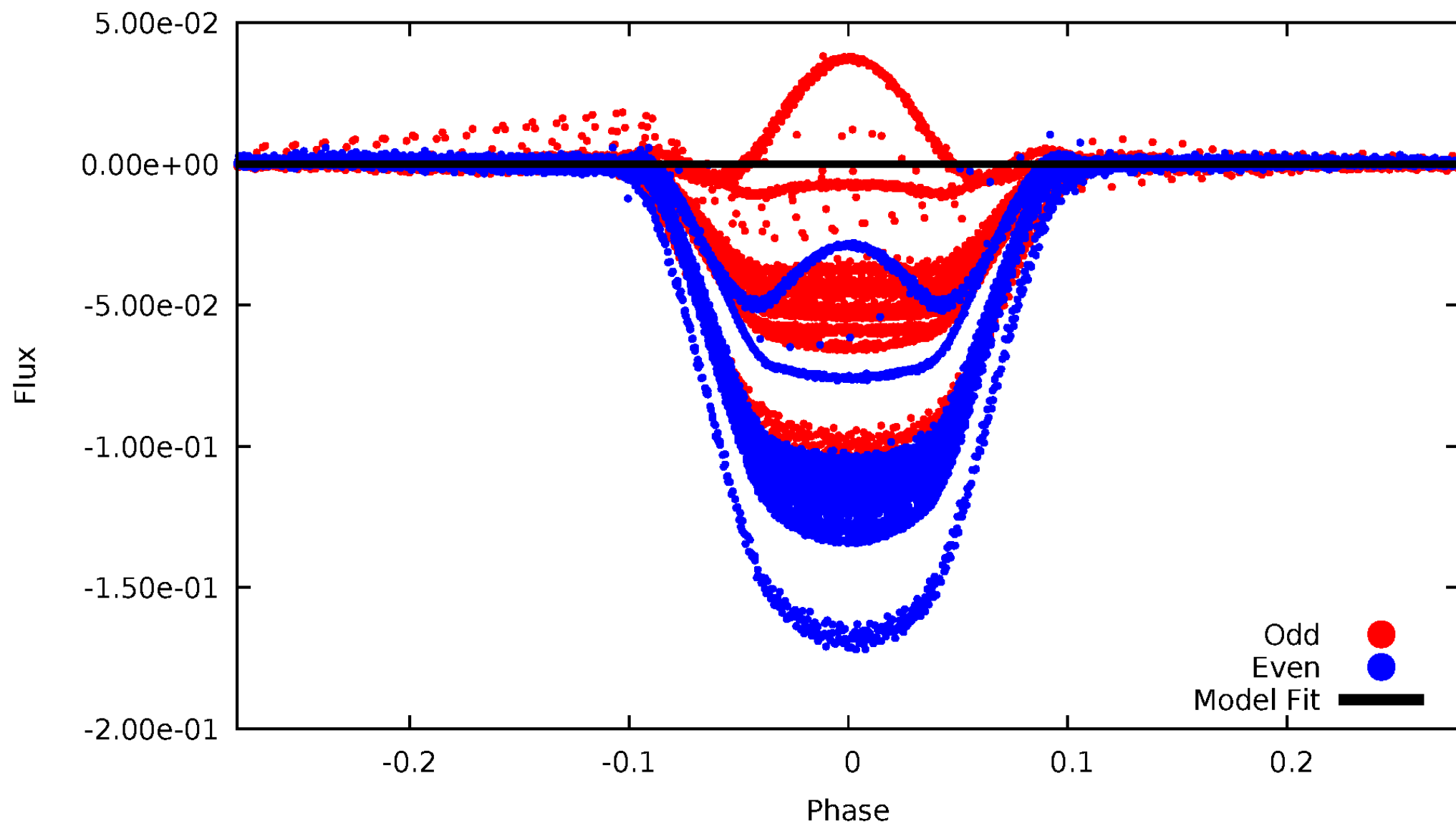


TCE 005475712-01



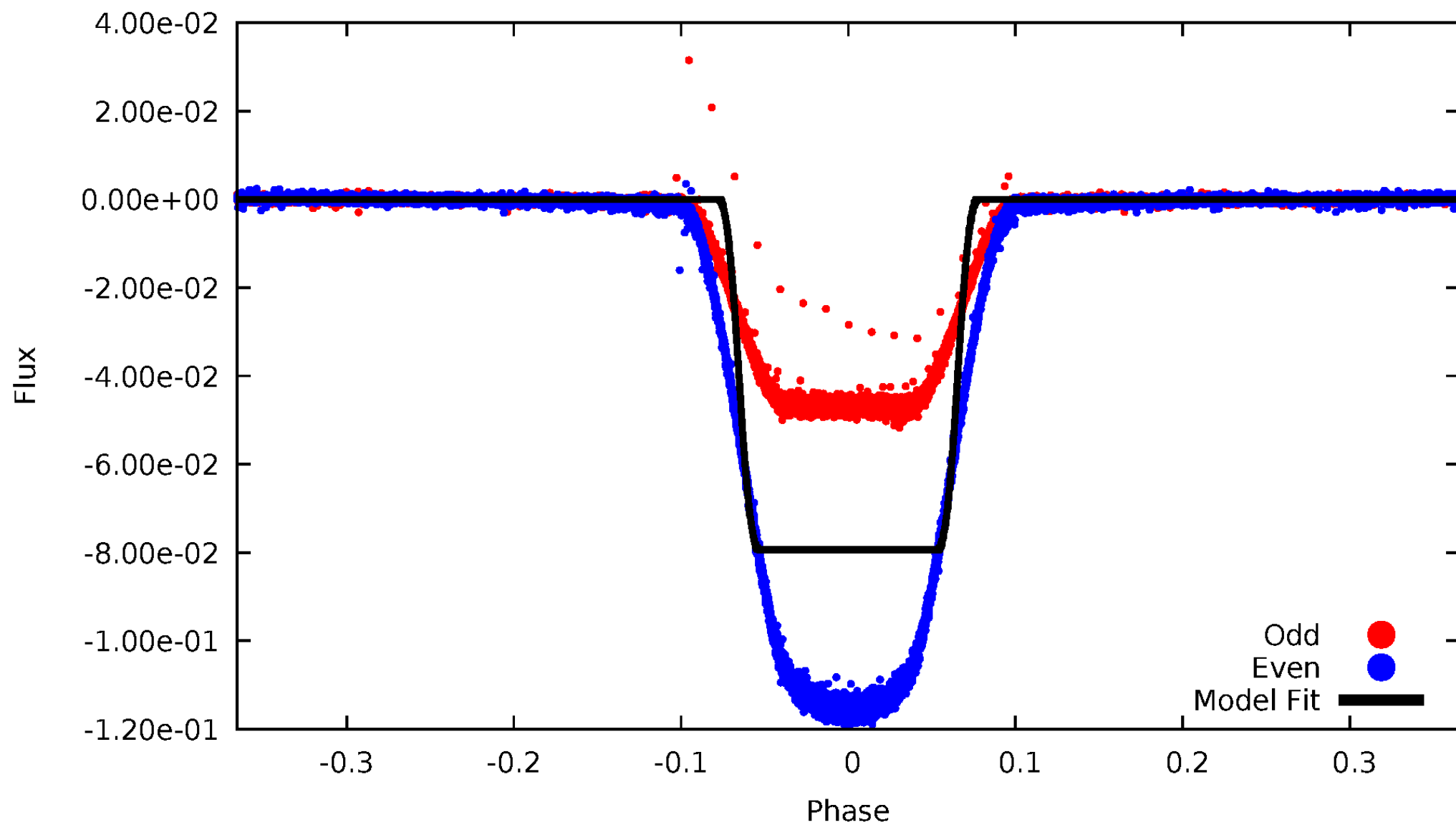
DV Odd/Even

TCE 005475712-01



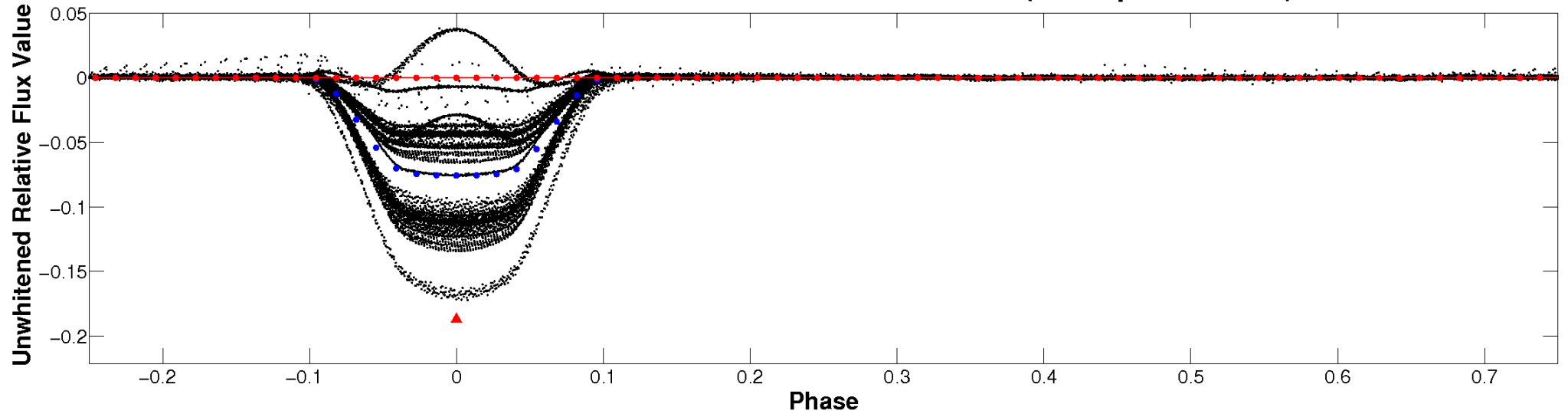
ALT Odd/Even

TCE 005475712-01



Non-Whitened Vs. Whitened Light Curve

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

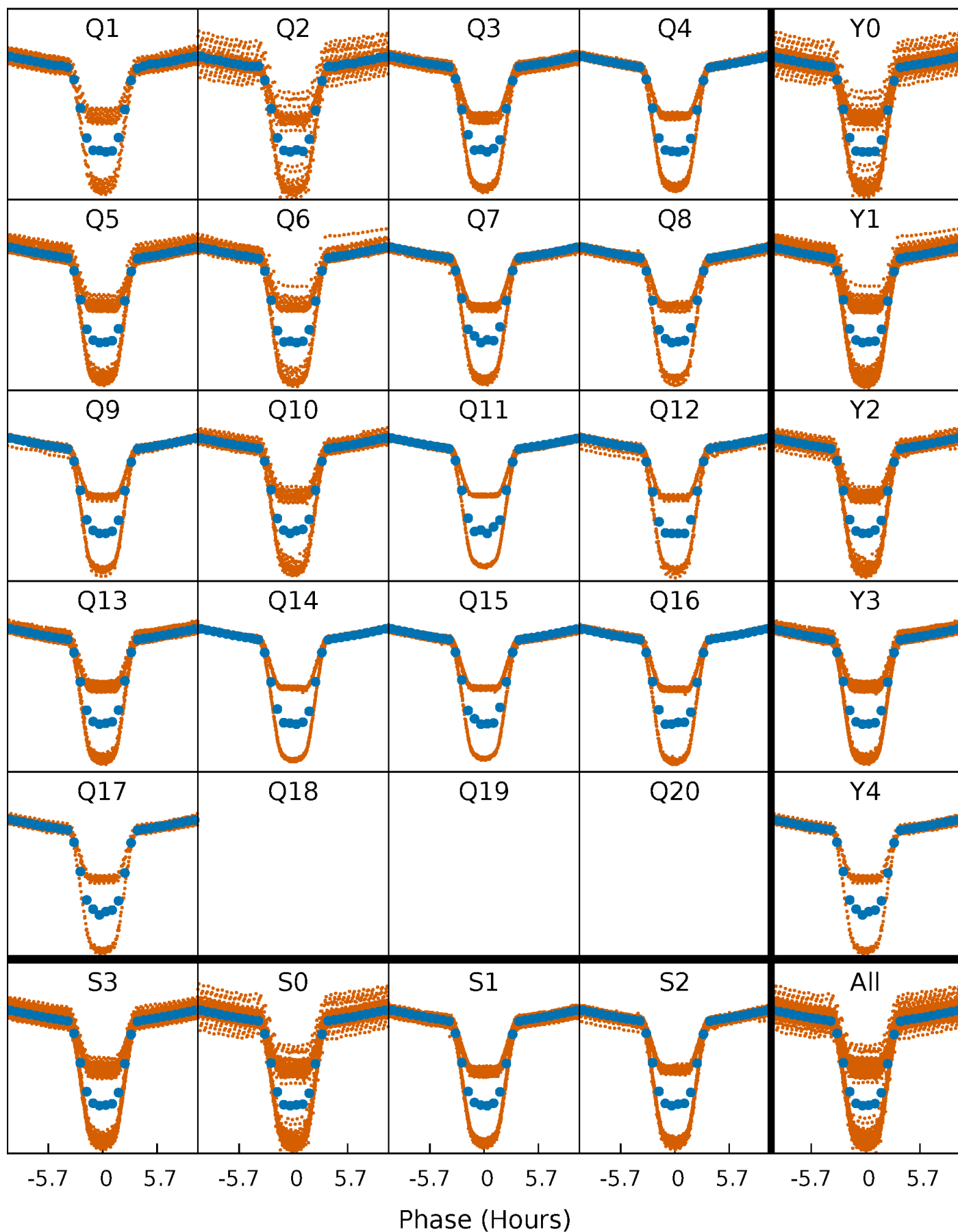


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



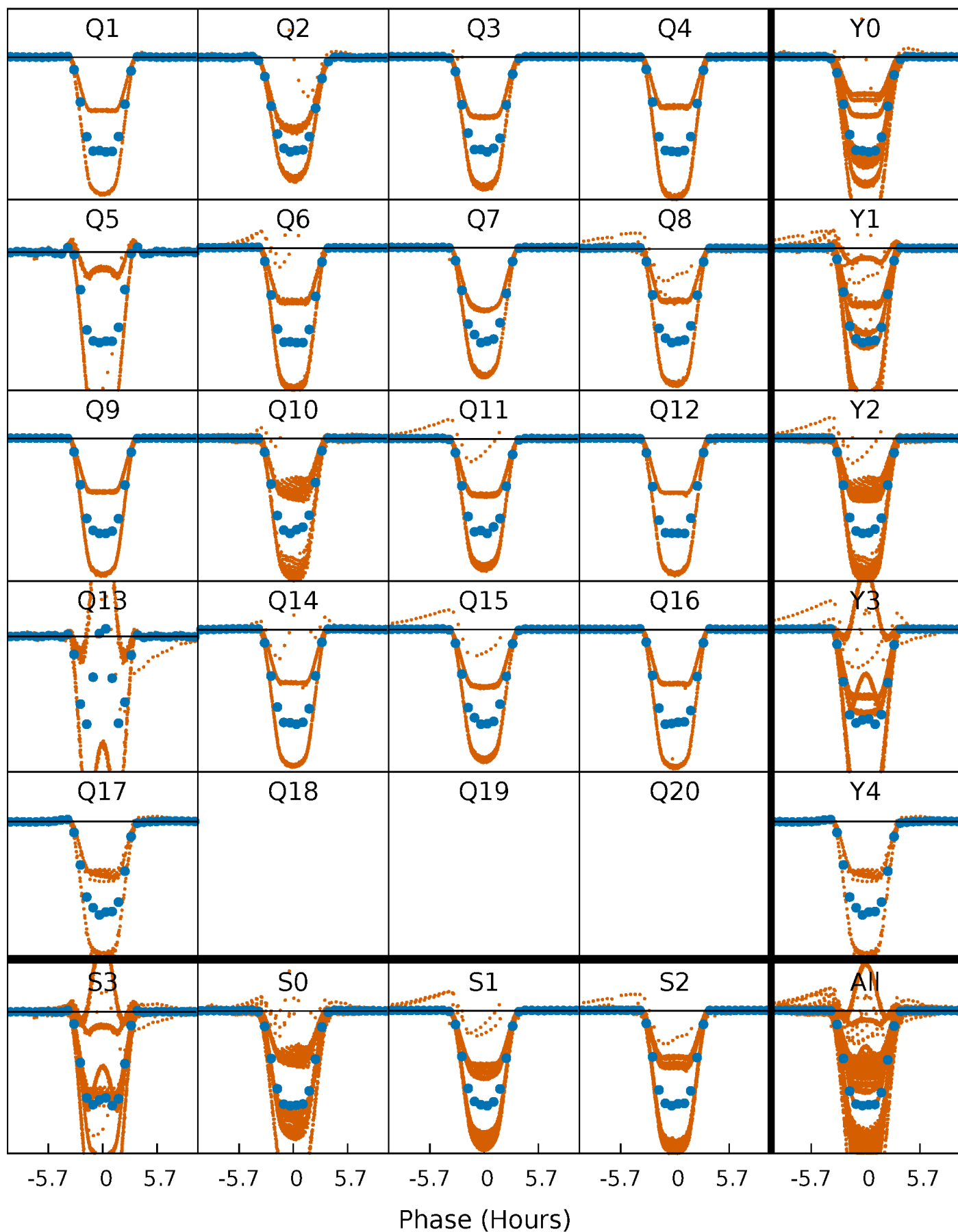
PDC Quarter-Phased Transit Curves

TCE 005475712-01 P= 1.495943 Days $T_0=132.679112$ (BKJD)



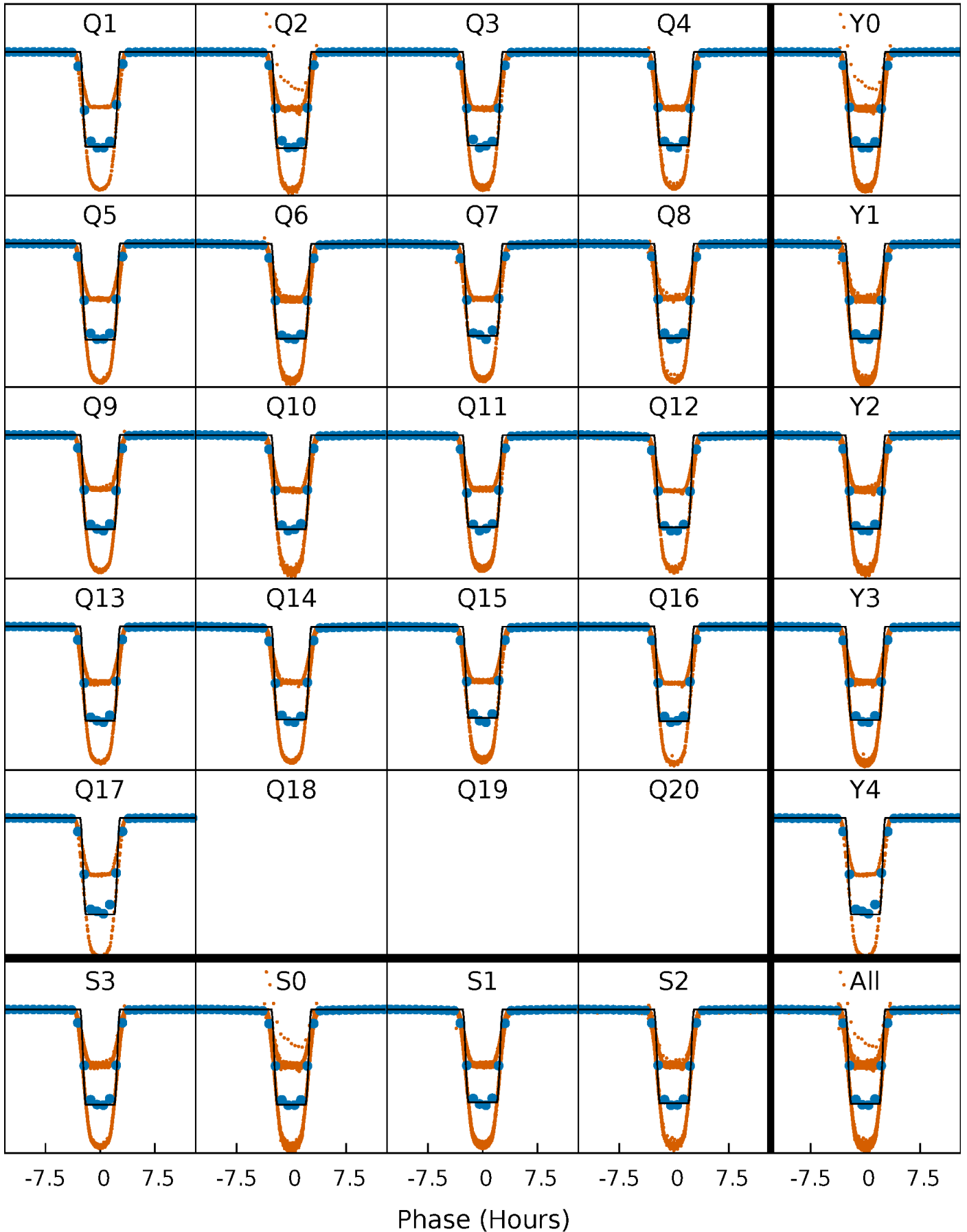
DV Quarter-Phased Transit Curves

TCE 005475712-01 P= 1.495943 Days $T_0=132.679112$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

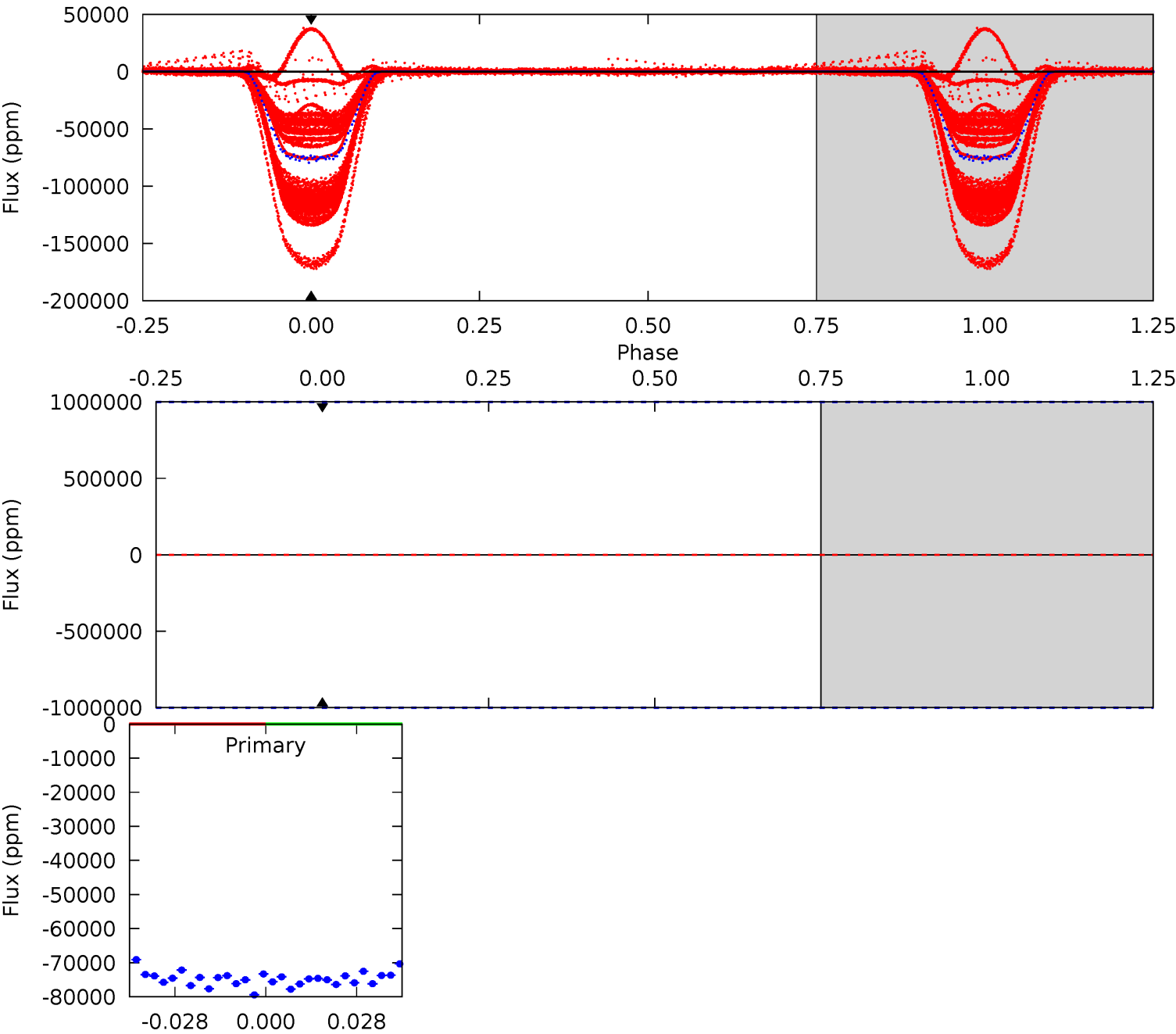
TCE 005475712-01 P= 1.495943 Days $T_0=132.679701$ (BKJD)



DV Model-Shift Uniqueness Test

005475712-01, P = 1.495943 Days, E = 131.183169 Days

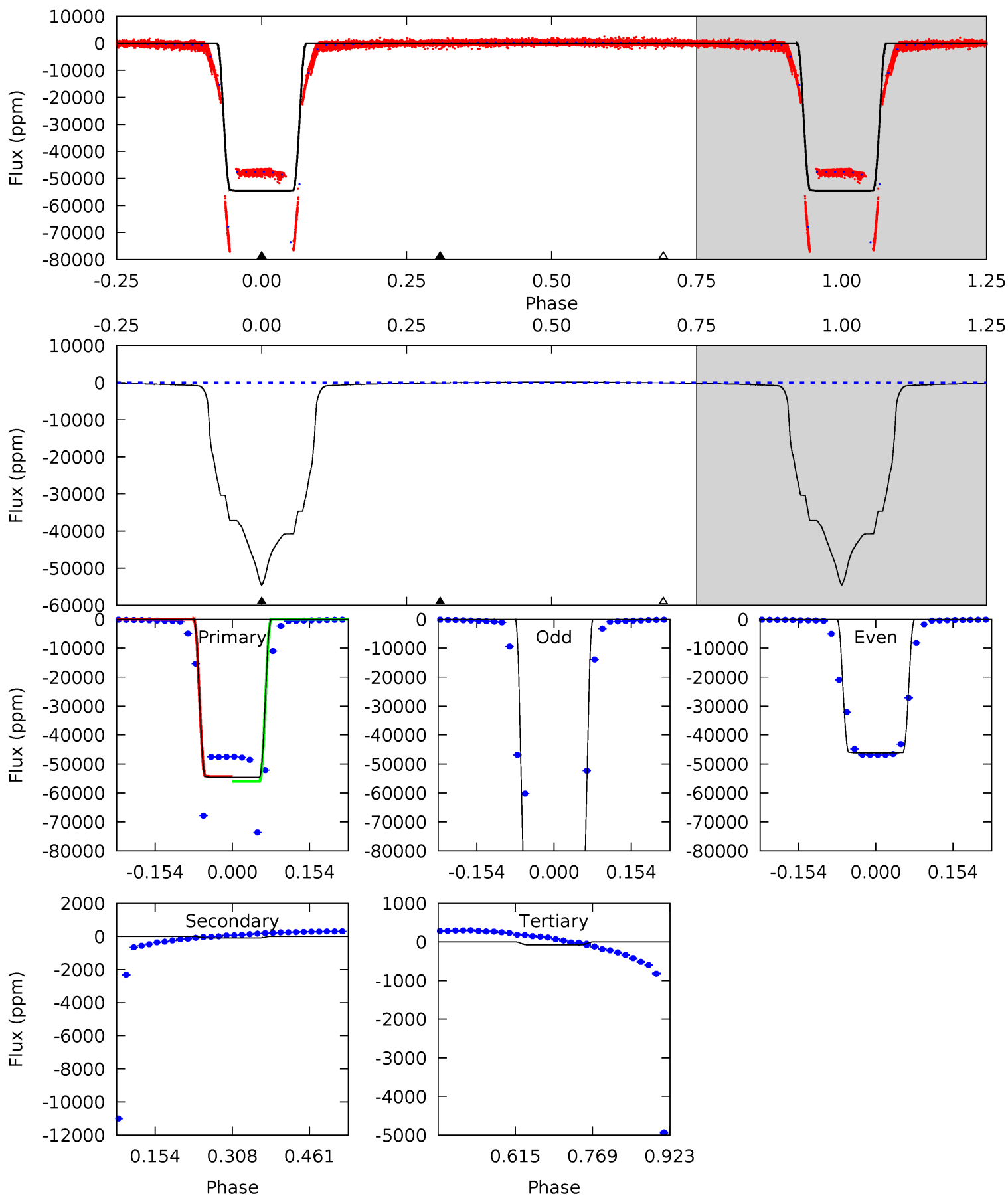
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005475712-01, P = 1.495943 Days, E = 131.183758 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5432	9.16	7.32	0	4.47	1.43	20.7	5425	5432	1.84	9.16	5841	1.56	0.00	0



Stellar Parameters For KIC 005475712

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6596^{+163}_{-212}	$4.400^{+0.067}_{-0.202}$	$-0.420^{+0.250}_{-0.300}$	$1.094^{+0.324}_{-0.139}$	$1.098^{+0.160}_{-0.131}$	$1.181^{+0.415}_{-0.593}$
	+2%/-3%	+2%/-5%	+60%/-71%	+30%/-13%	+15%/-12%	+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 005475712-01 / KOI 6588.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$26.48^{+13.36}_{-12.22}$	2665^{+188}_{-132}	-3390^{+12483}_{-5422}	$-0.328^{+75.017}_{-67.348}$
Alt.	-92 ± 10	$34.78^{+14.03}_{-11.73}$	2662^{+193}_{-126}	-2837^{+104}_{-118}	$0.029^{+0.039}_{-0.014}$

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

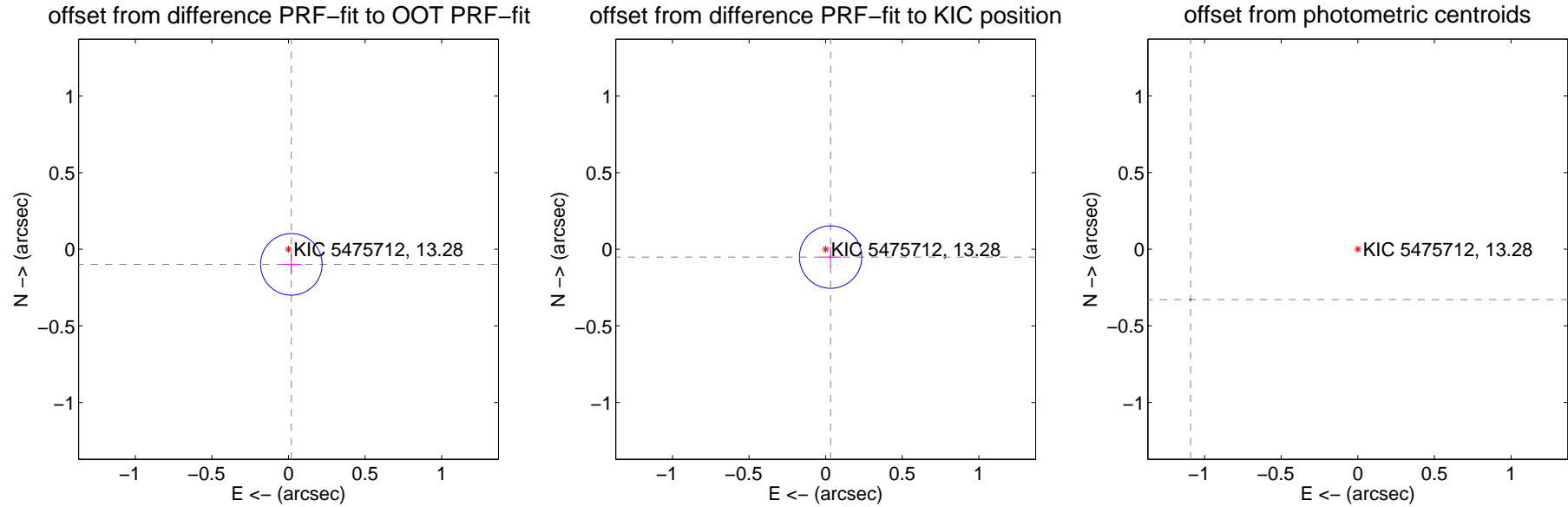
DV Centroid Data

Supplemental centroid analysis for 005475712-01. Kepler magnitude: 13.28. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

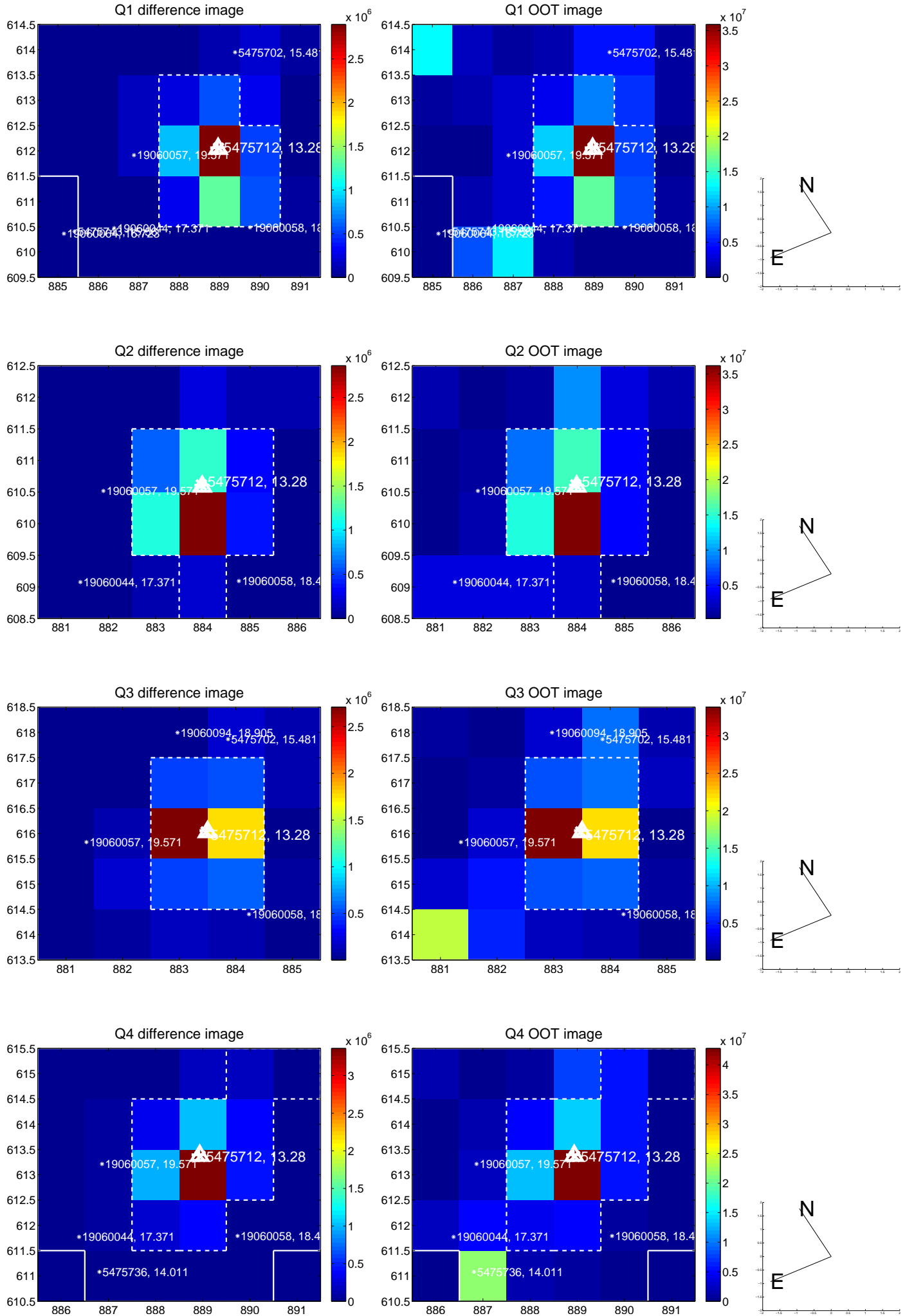
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.100 ± 0.067	1.49	-0.019 ± 0.067	-0.098 ± 0.067
PRF-fit source offset from KIC position	0.060 ± 0.068	0.89	-0.032 ± 0.068	-0.051 ± 0.068
photometric centroid source offset	1.14 ± 0.00	1637.06	1.09 ± 0.00	-0.33 ± 0.00

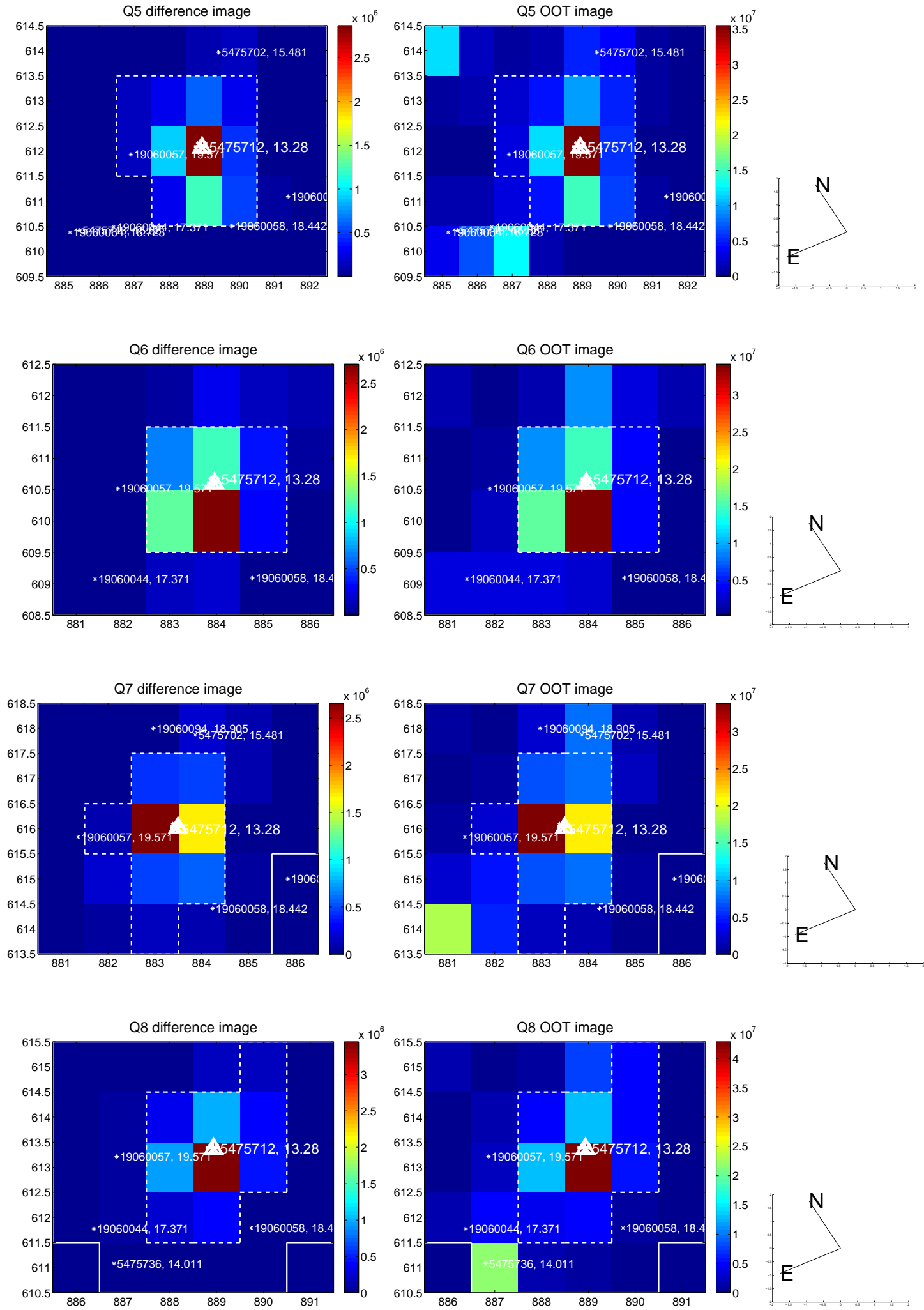


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

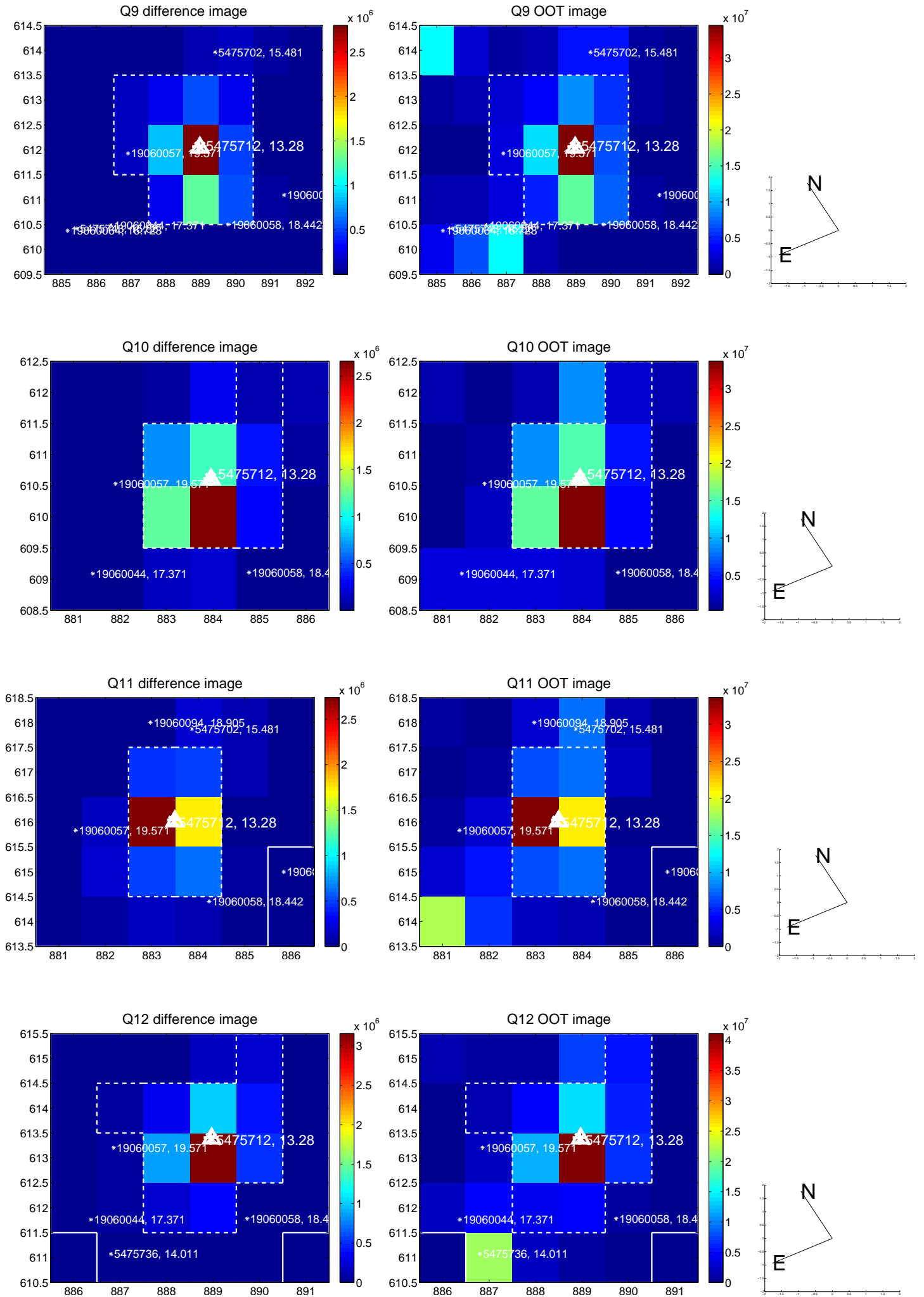
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



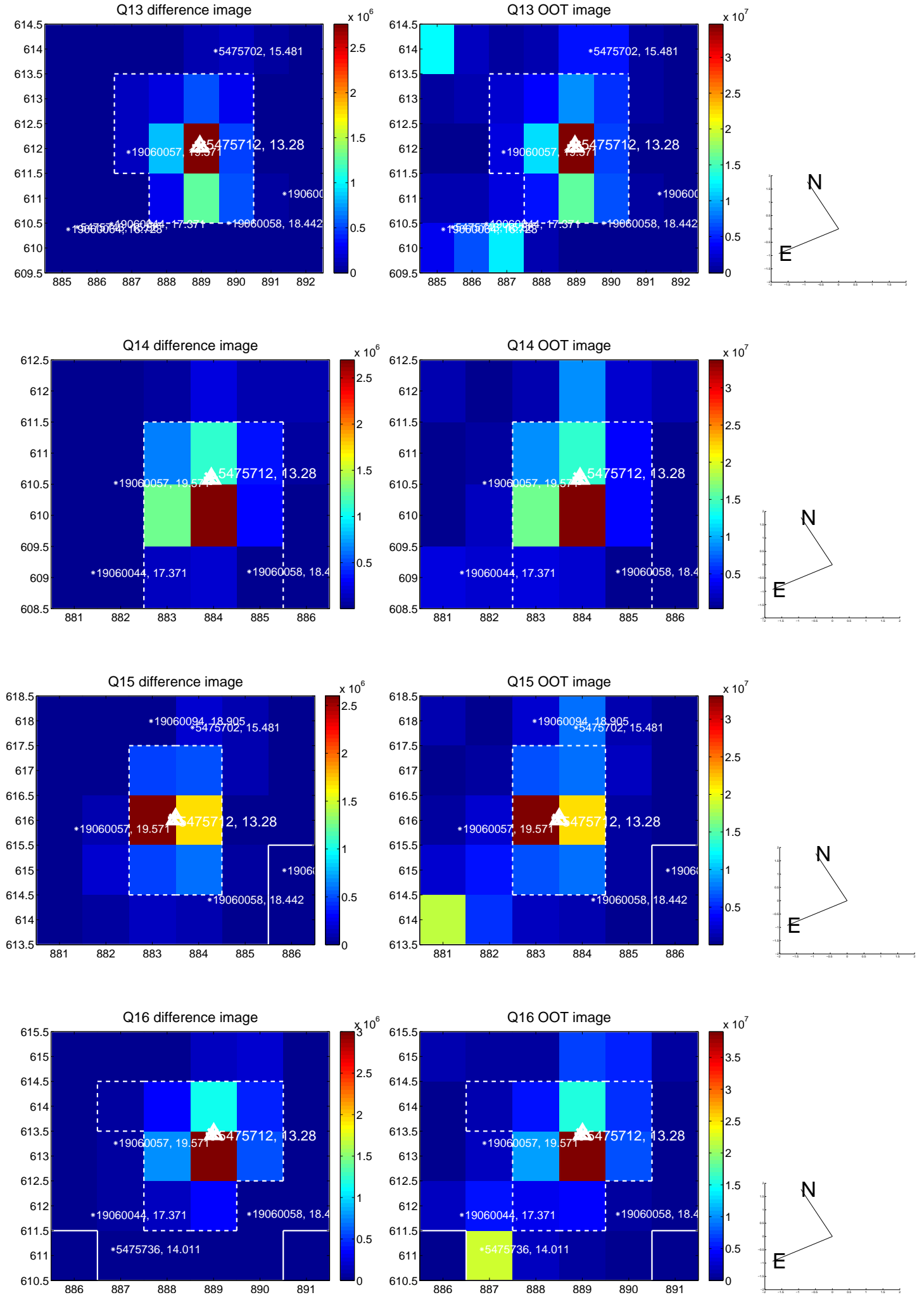
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



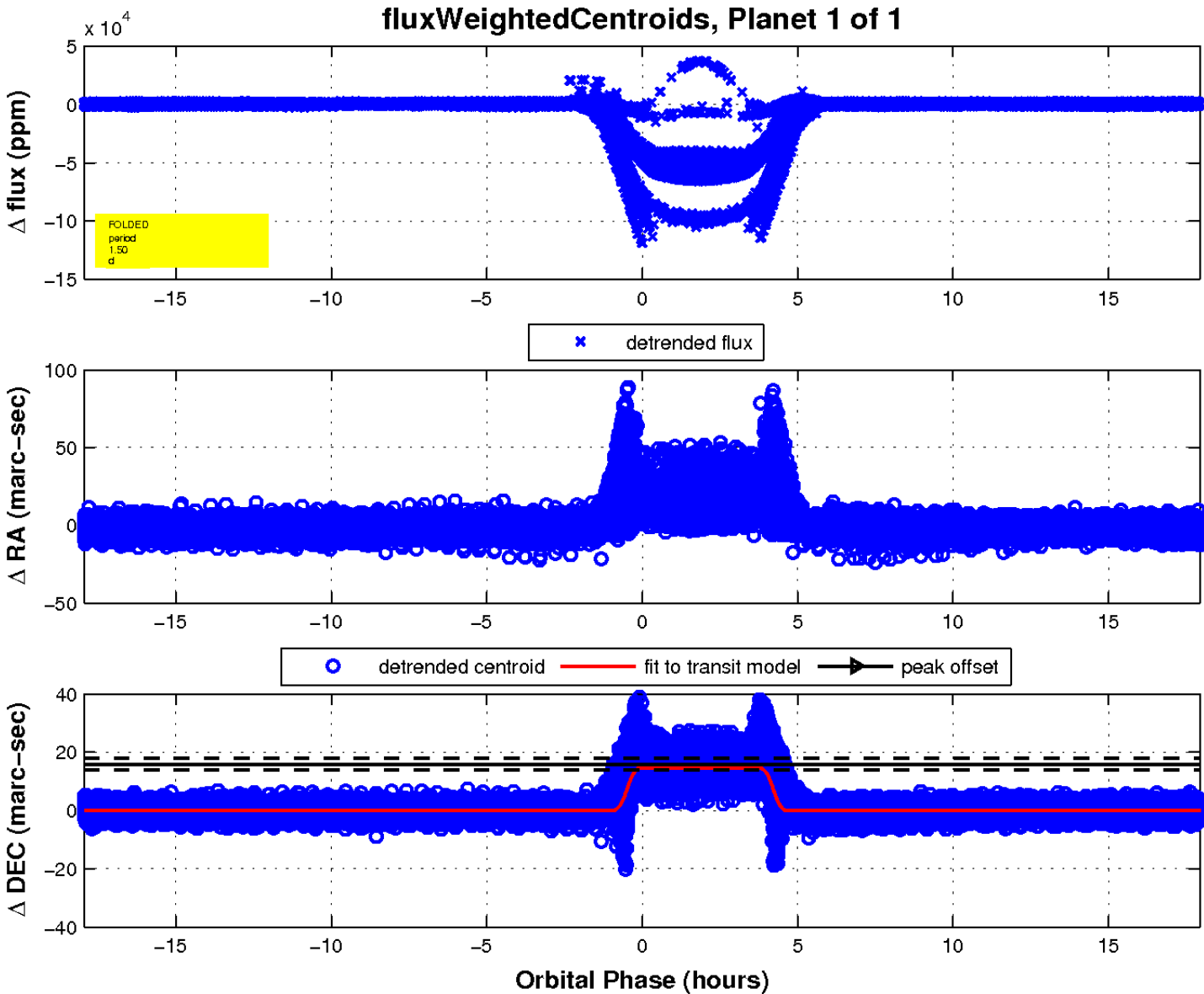
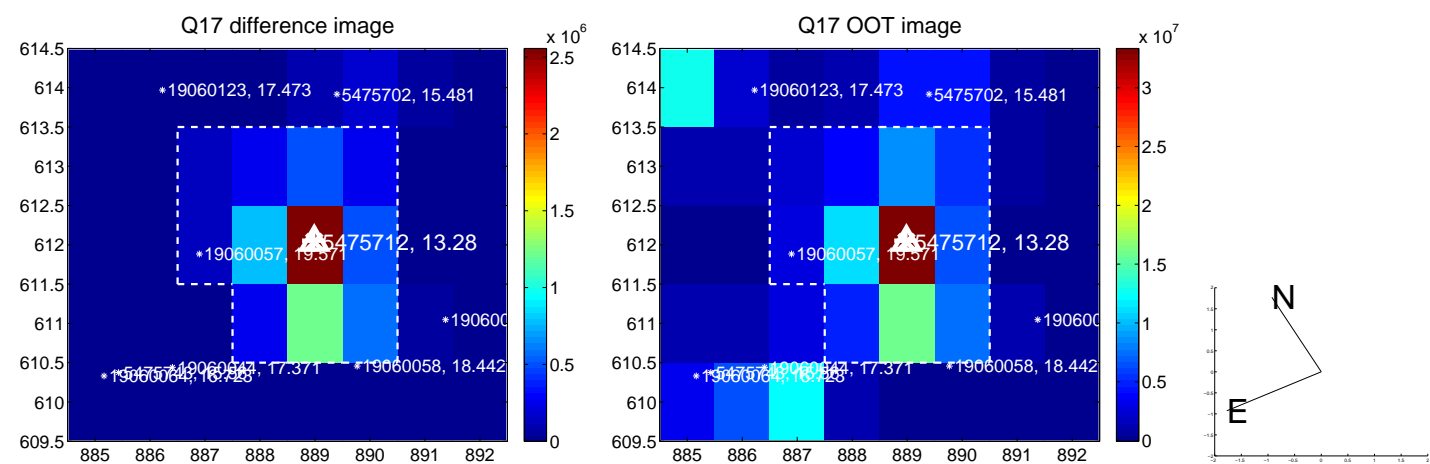
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

