

# KIC 005104194

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
005104194-01	OBS	No	2.876177	132.376812	3.0	32.553	7.5	1.4	1.21	6753	0.21	1520.82

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005104194-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_FEW_DIFFS

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

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

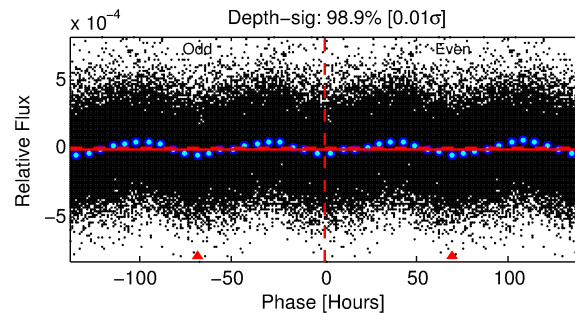
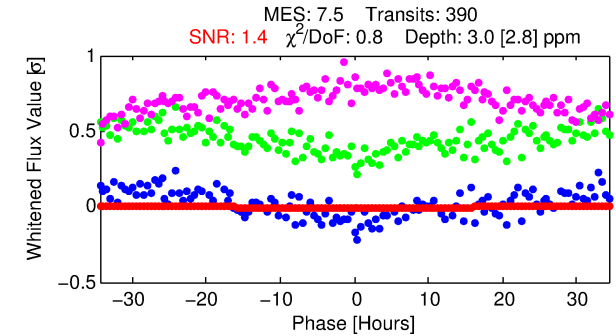
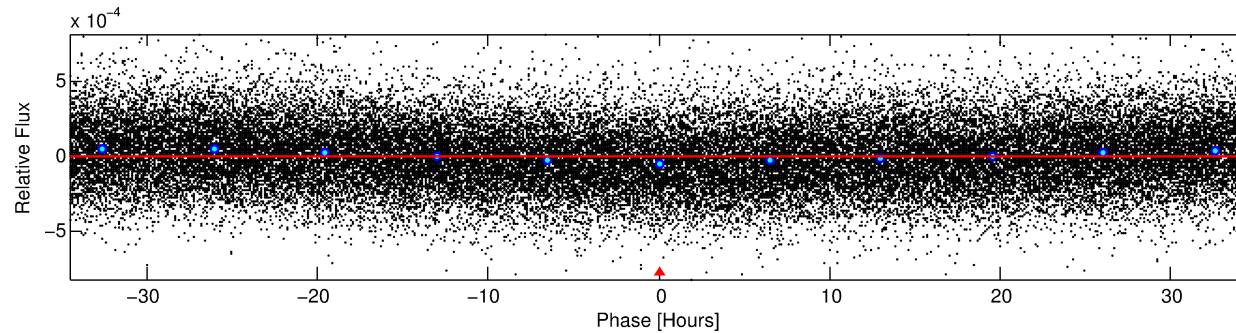
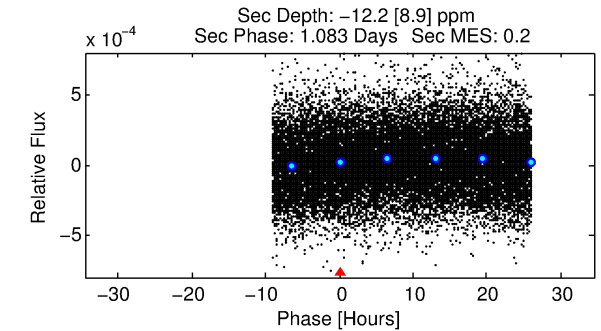
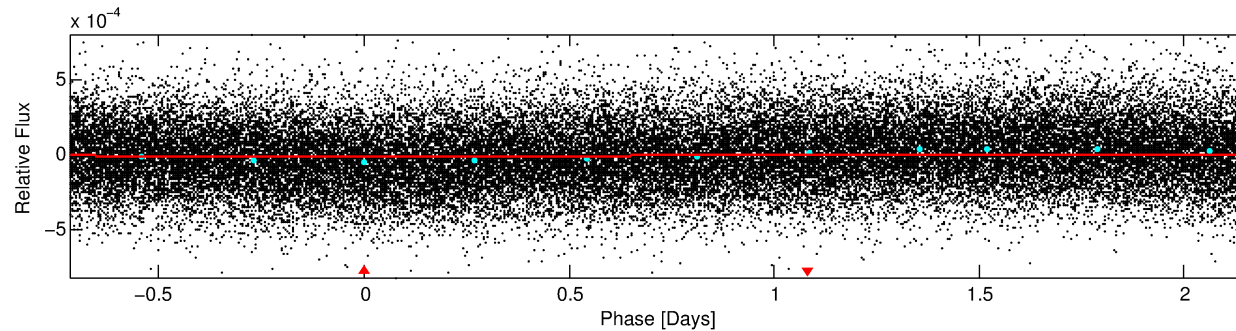
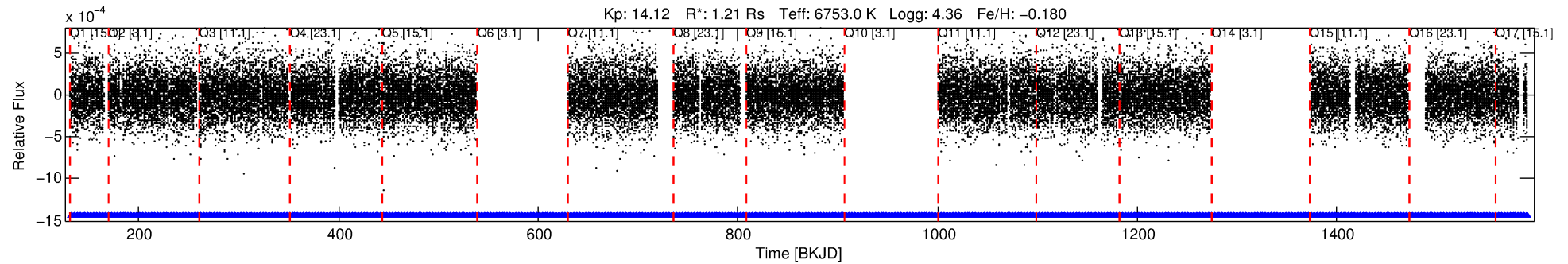
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 005104194-01

No Significant Match Found

# DV One-Page Summary

KIC: 5104194 Candidate: 1 of 1 Period: 2.876 d



## DV Fit Results:

Period = 2.87618 [0.00069] d  
Epoch = 132.3768 [0.1489] BKJD  
Rp/R\* = 0.0016 [0.0067]  
a/R\* = 1.01 [0.26]  
b = 0.00 [29658.67]  
Seff = 1520.82 [554.02]  
Teq = 1592 [145] K  
Rp = 0.21 [0.89] Re  
a = 0.0423 [0.0099] AU  
Ag = N/A  
Teffp = N/A

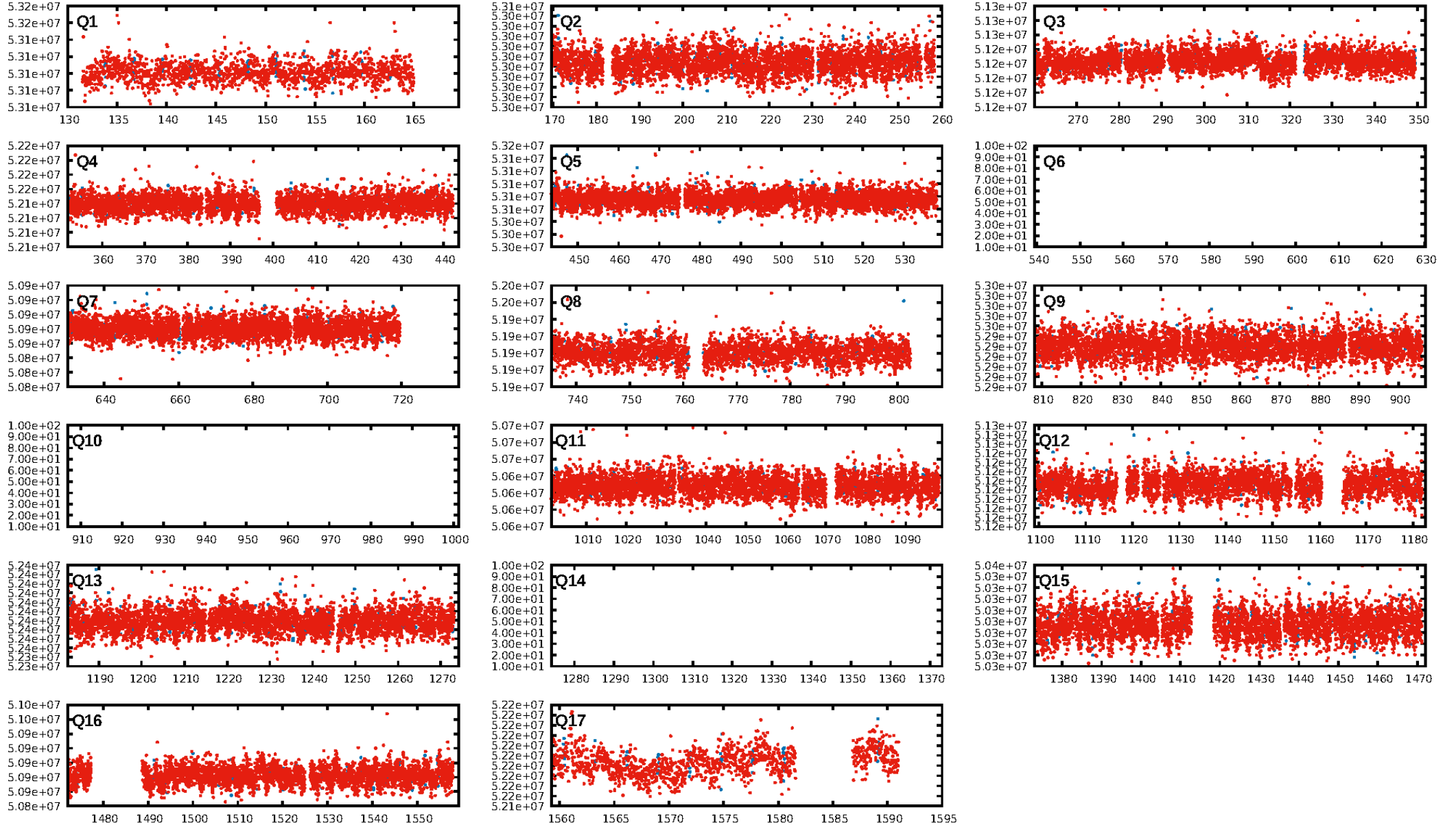
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [367/367]  
GhostDiagnostic-chr: N/A  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: N/A  
KicOffset-rm: N/A  
OotOffset-st: 0/0/0/0 [0]  
KicOffset-st: 0/0/0/0 [0]  
DiffImageQuality-fgm: N/A  
DiffImageOverlap-fno: 1.00 [14/14]

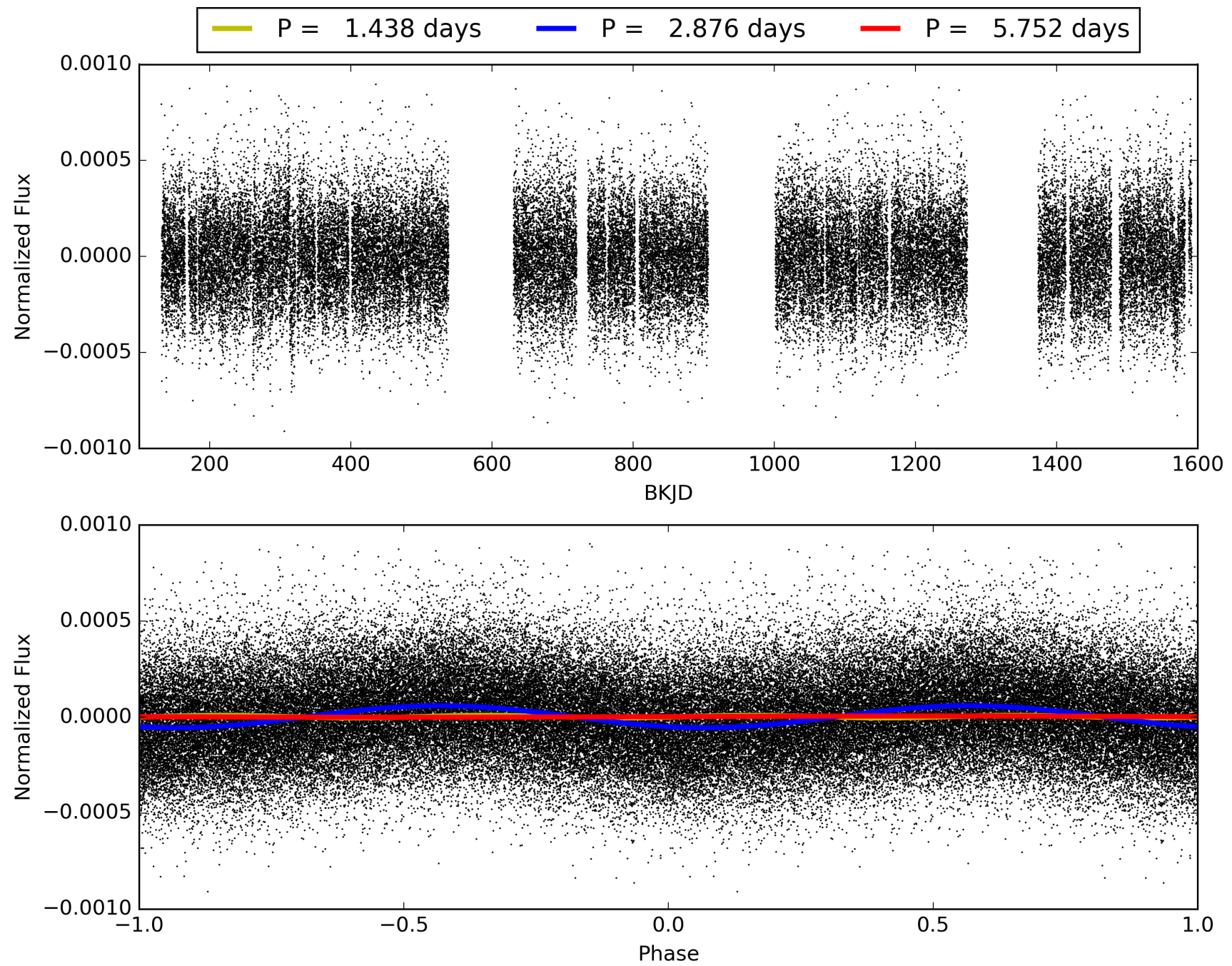
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 01:56:21 Z

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

# TCE 005104194-01, PDC Light Curves

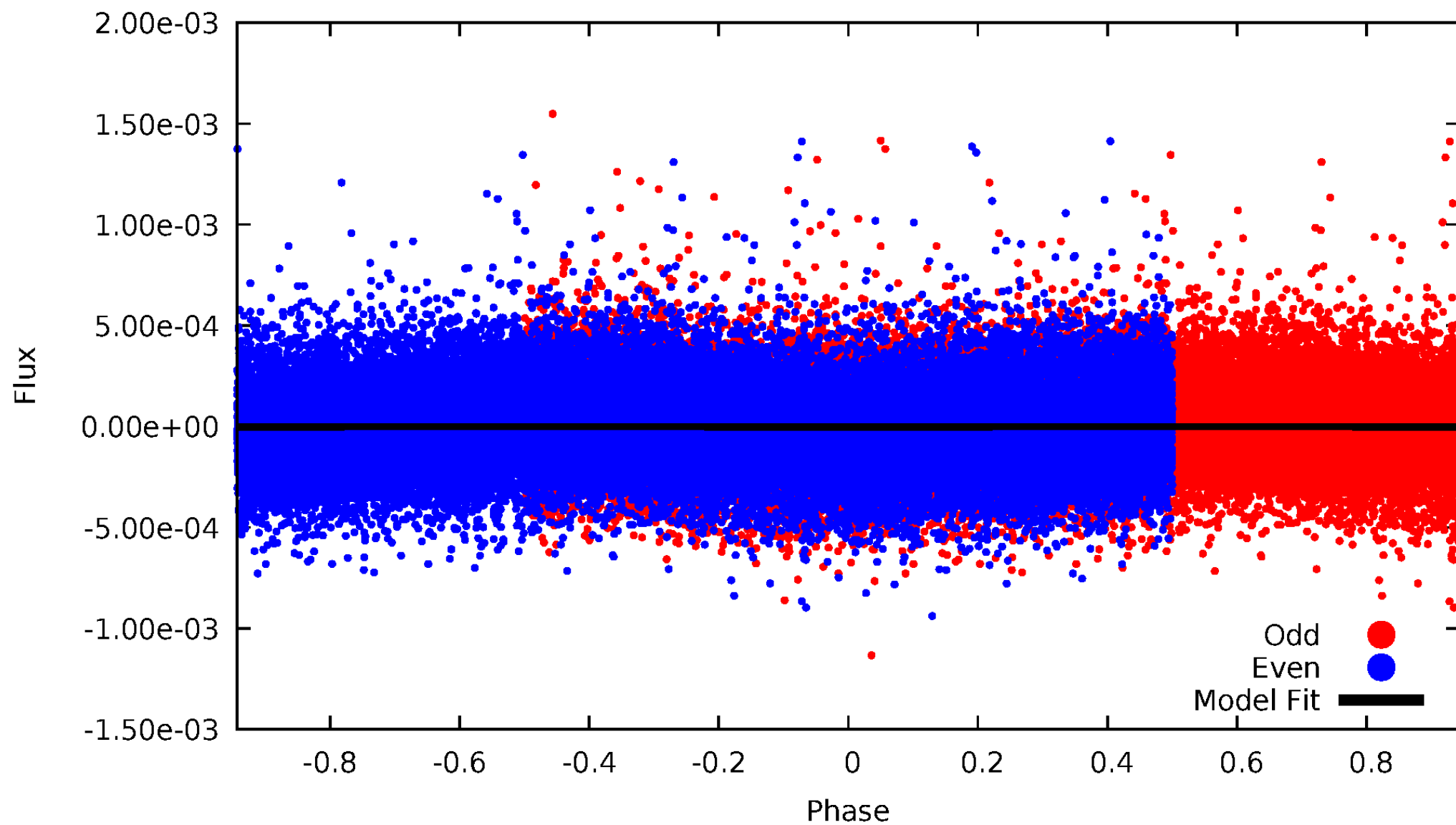


TCE 005104194-01



# DV Odd/Even

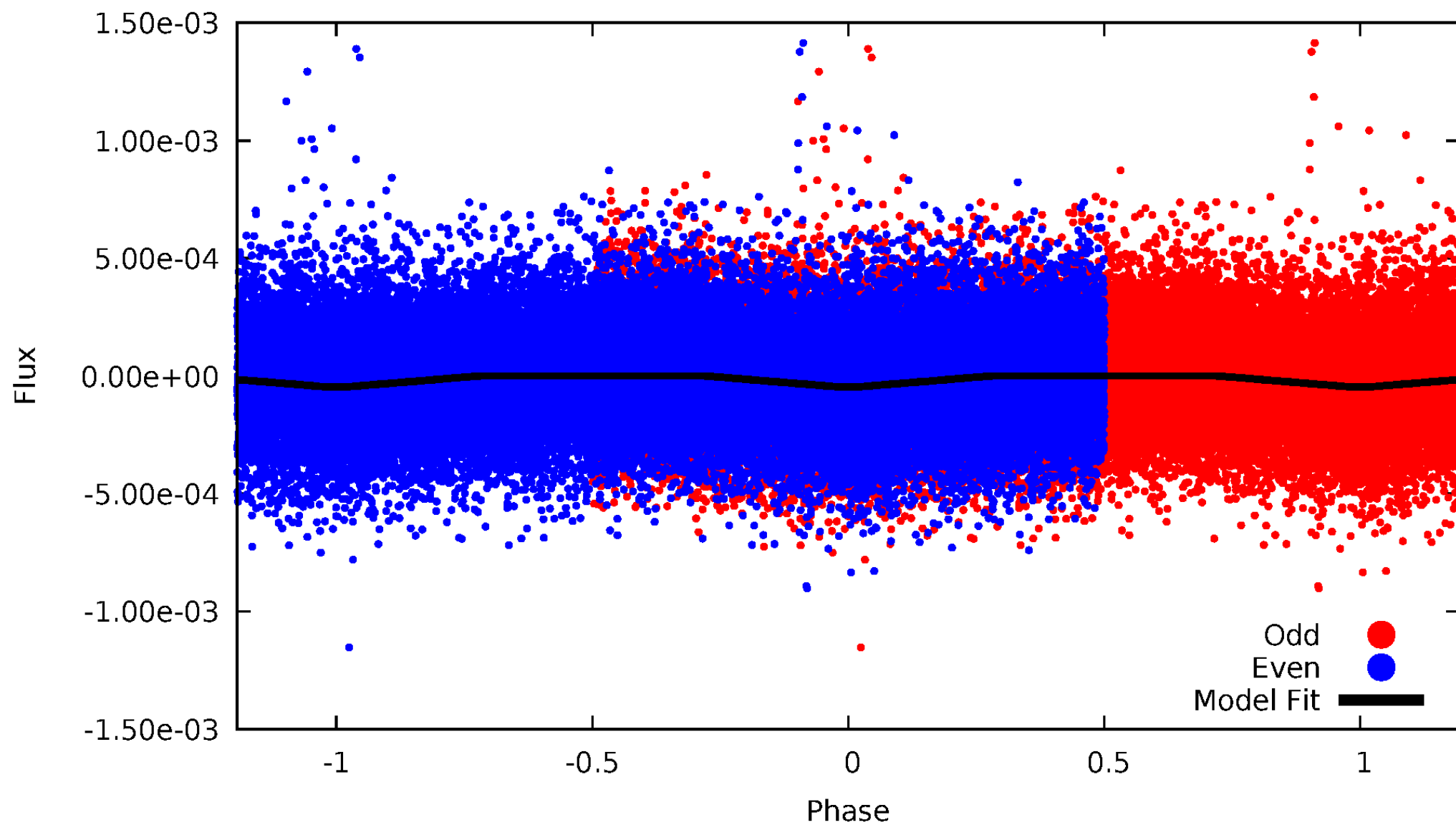
TCE 005104194-01



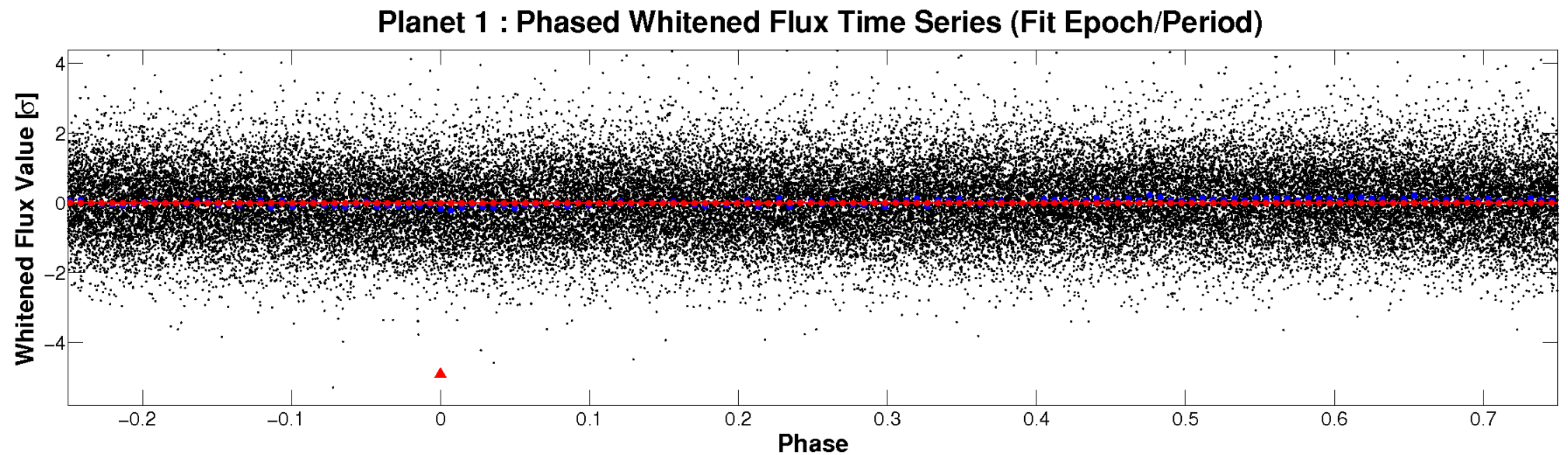
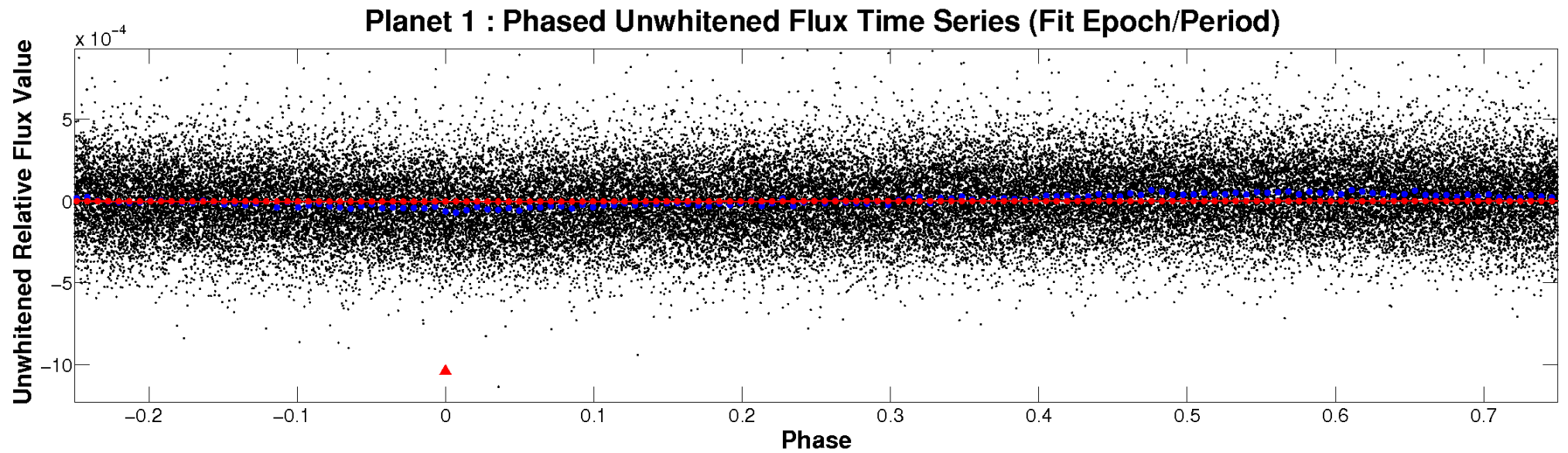


# ALT Odd/Even

TCE 005104194-01

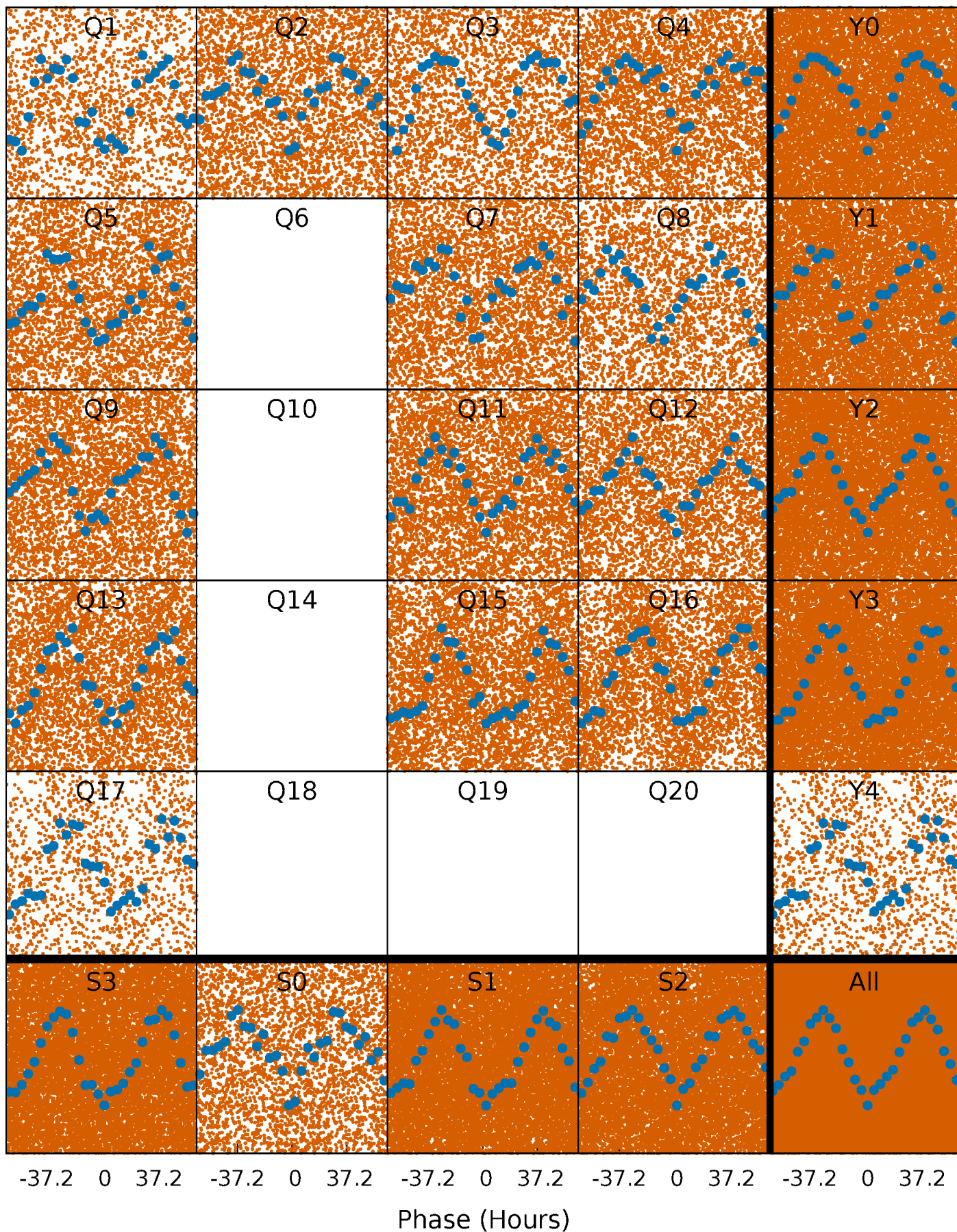


# Non-Whitened Vs. Whitened Light Curve



# PDC Quarter-Phased Transit Curves

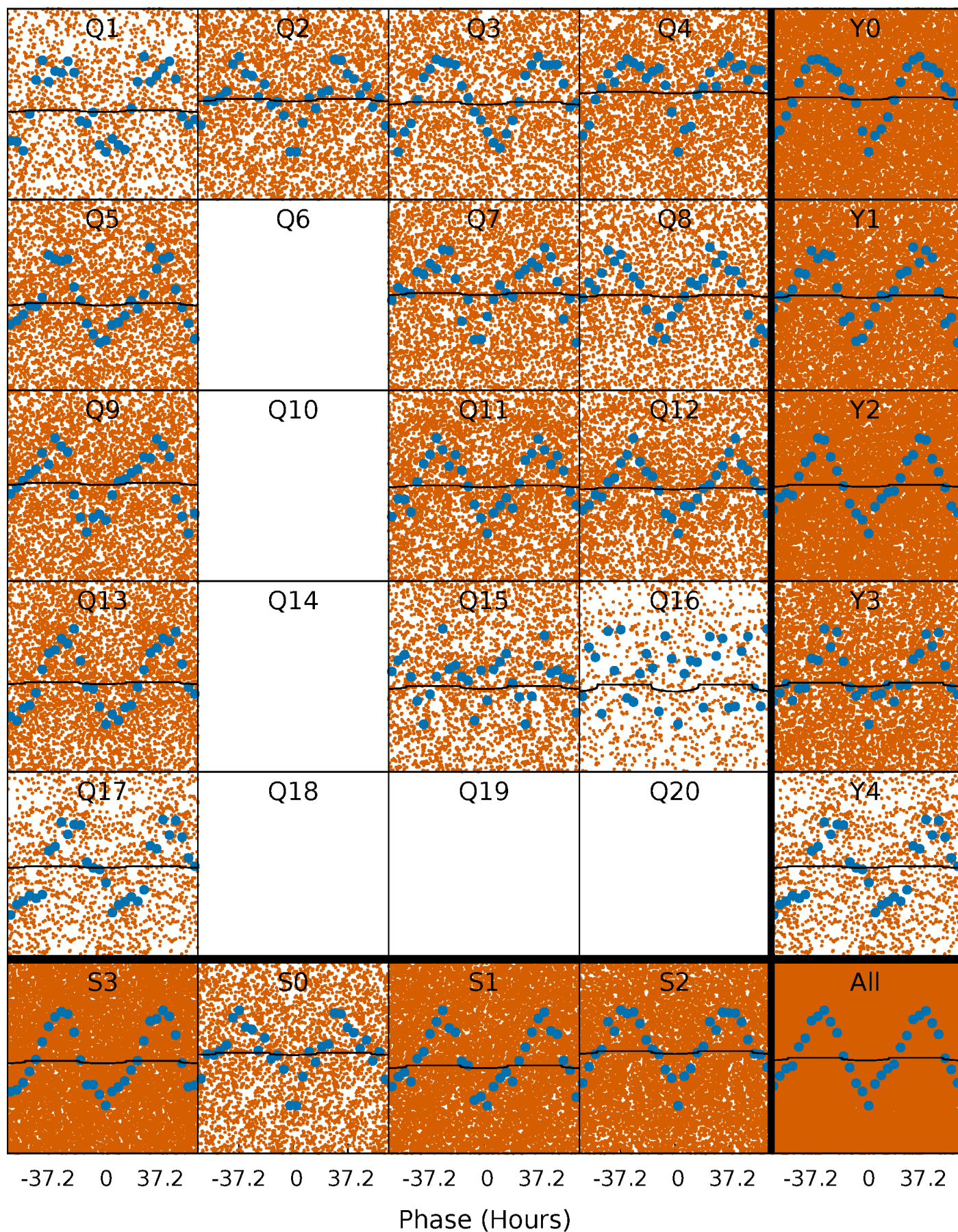
TCE 005104194-01 P= 2.876177 Days  $T_0=132.376812$  (BKJD)





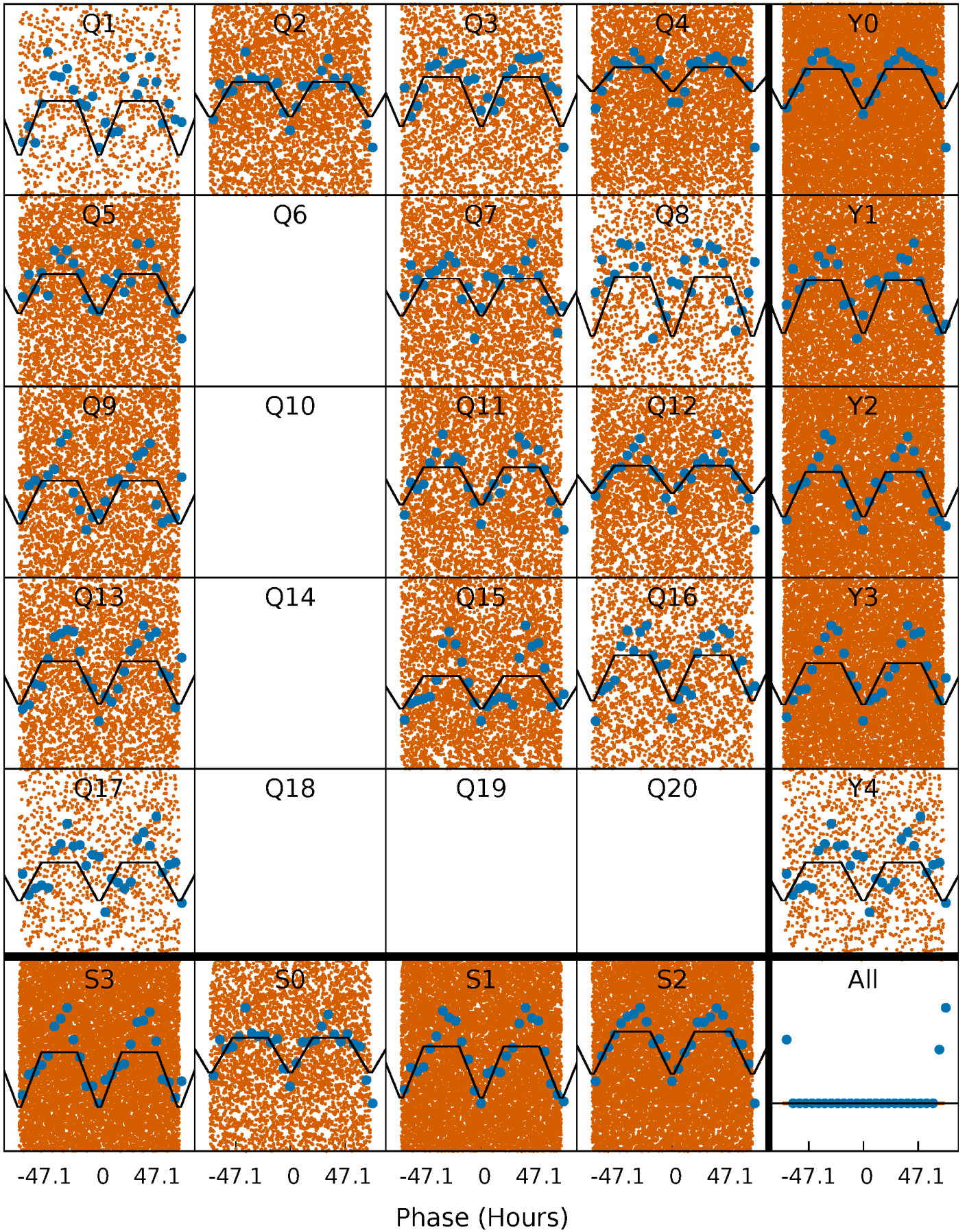
# DV Quarter-Phased Transit Curves

TCE 005104194-01 P= 2.876177 Days  $T_0=132.376812$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

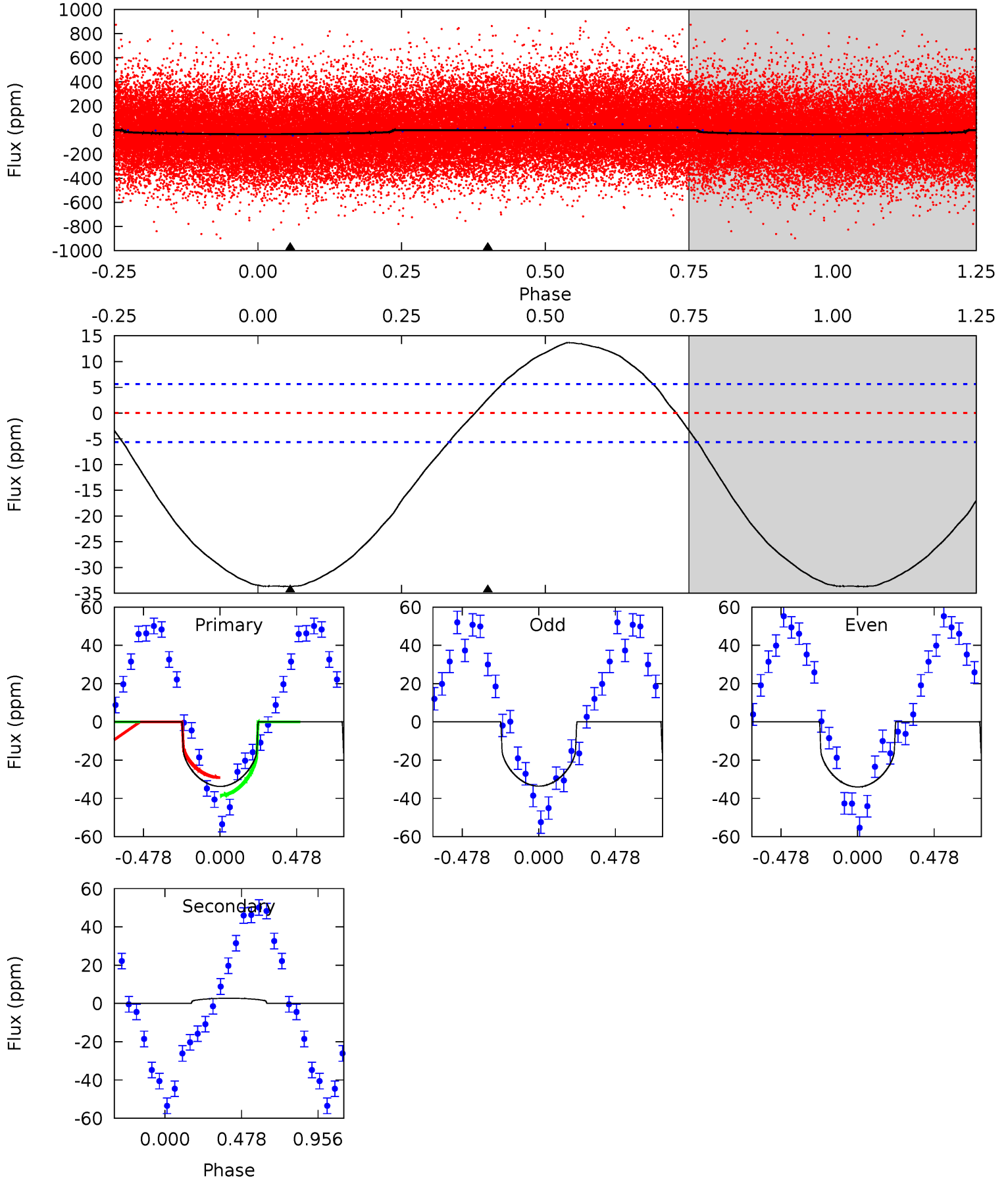
TCE 005104194-01 P= 2.876321 Days  $T_0=132.392901$  (BKJD)



# DV Model-Shift Uniqueness Test

005104194-01, P = 2.876177 Days, E = 129.500635 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.3	-2.05	0	0	4.22	0.71	3.23	25.3	25.3	-2.05	-2.05	0.16	1.00	0.29	3.54

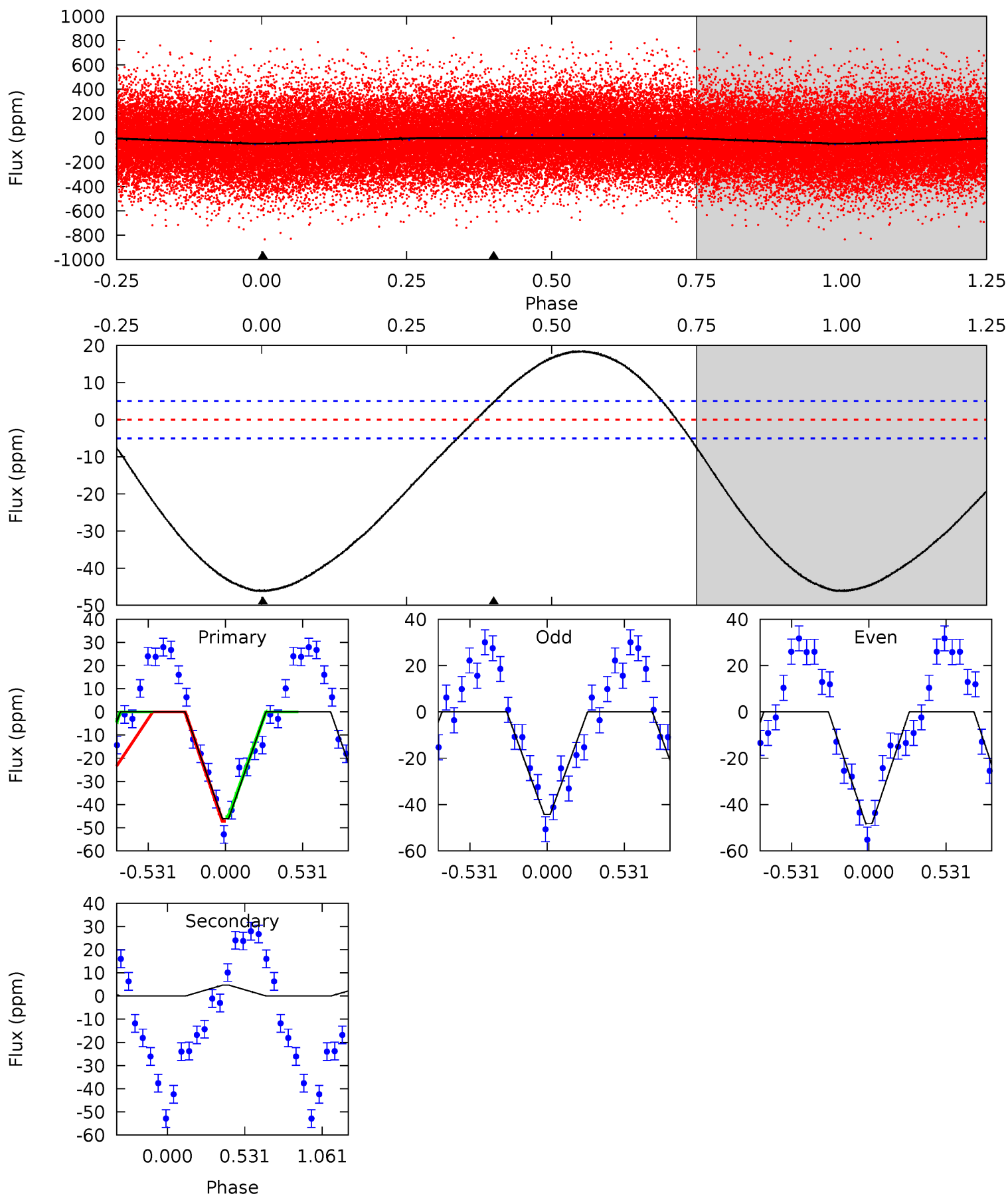




# Alt Model-Shift Uniqueness Test

005104194-01, P = 2.876321 Days, E = 129.516580 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.4	-3.91	0	0	4.20	0.63	5.11	38.4	38.4	-3.91	-3.91	1.68	0.98	0.29	0.80





### Stellar Parameters For KIC 005104194

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M$ ( $M_{\odot}$ )	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$6753^{+161}_{-241}$	$4.360^{+0.060}_{-0.180}$	$-0.180^{+0.300}_{-0.300}$	$1.209^{+0.344}_{-0.147}$	$1.231^{+0.181}_{-0.165}$	$0.983^{+0.258}_{-0.497}$
	+2%/-4%	+1%/-4%	+167%/-167%	+28%/-12%	+15%/-13%	+26%/-51%
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 005104194-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{\text{max}}$ (K)	$T_{\text{obs}}$ (K)	$A_{\text{obs}}$
DV	$3\pm 1$	$0.69^{+0.78}_{-0.46}$	$2264^{+151}_{-108}$	$-4067^{+860}_{-2616}$	$-4.874^{+4.012}_{-44.827}$
Alt.	$5\pm 1$	$1.13^{+0.86}_{-0.69}$	$2258^{+147}_{-110}$	$-3884^{+586}_{-1679}$	$-3.613^{+2.505}_{-19.431}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

$T_{\text{obs}}$  = Observed Planetary Temperature (Assuming  $A=0.3$ )

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

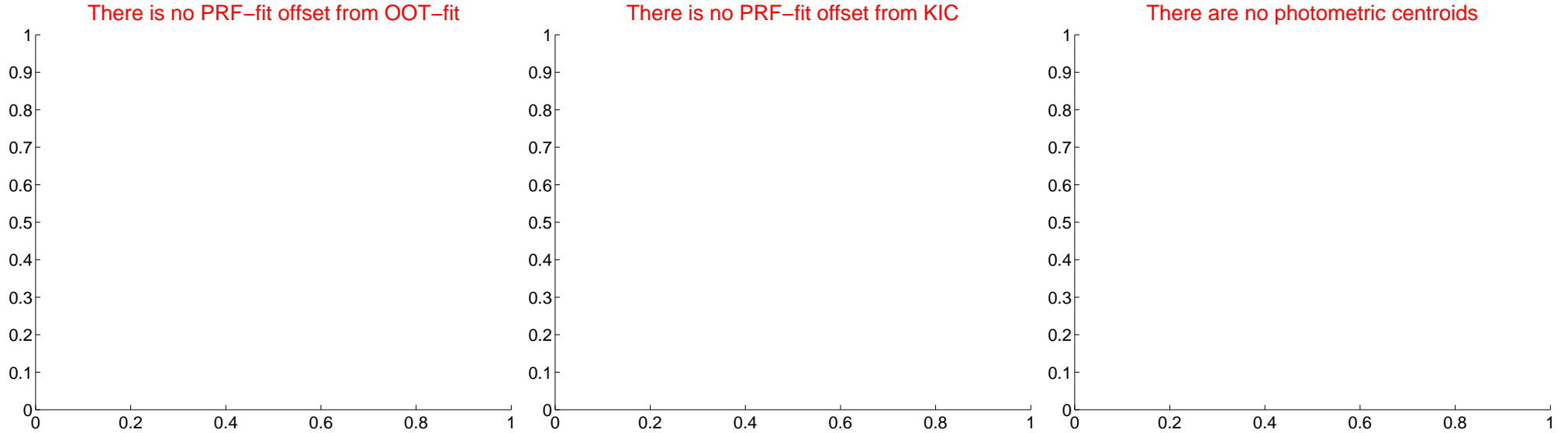
## DV Centroid Data

Supplemental centroid analysis for 005104194-01. Kepler magnitude: 14.12. Transit SNR 1.37

There are 0 quarters with good PRF difference image offsets

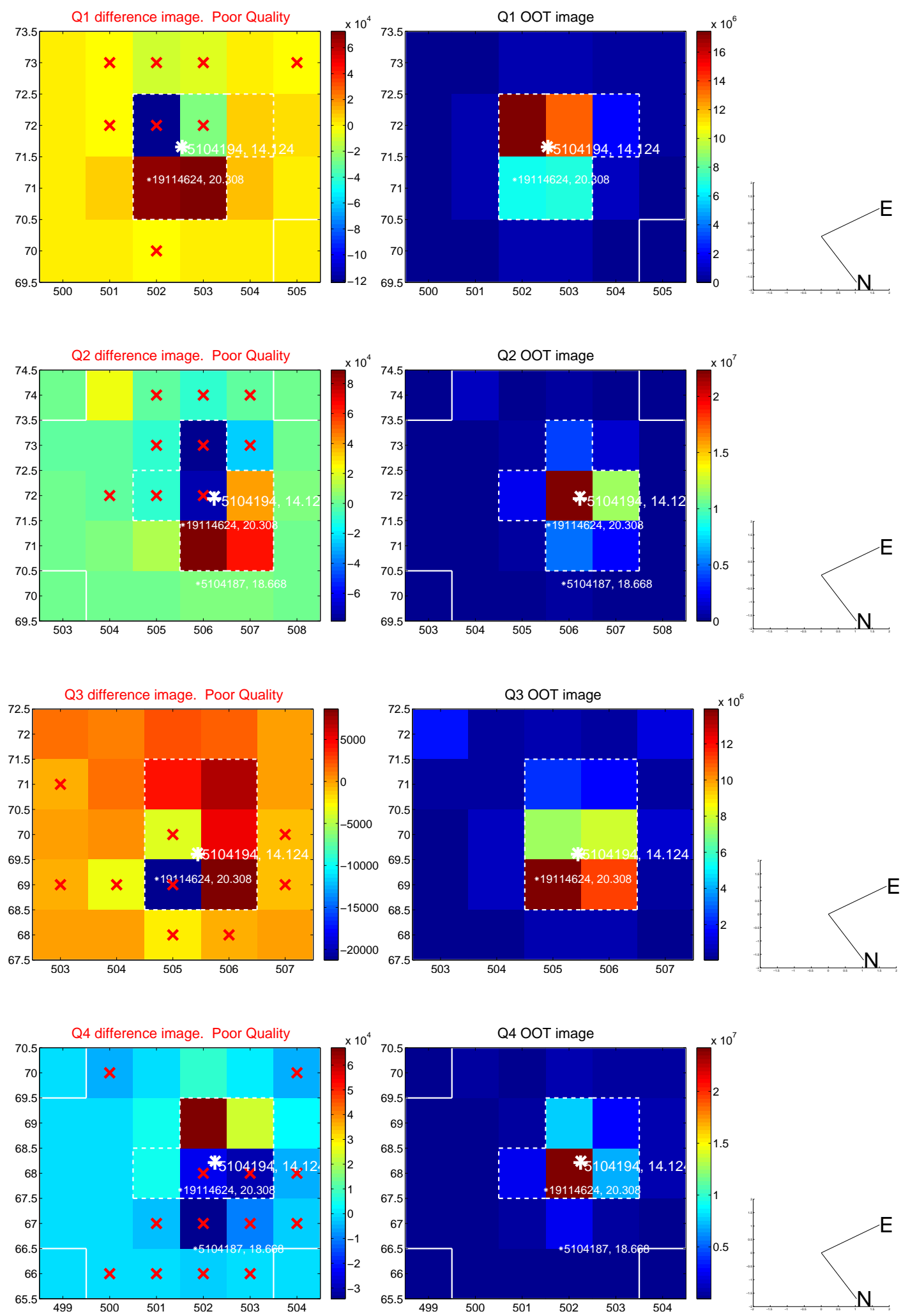
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—

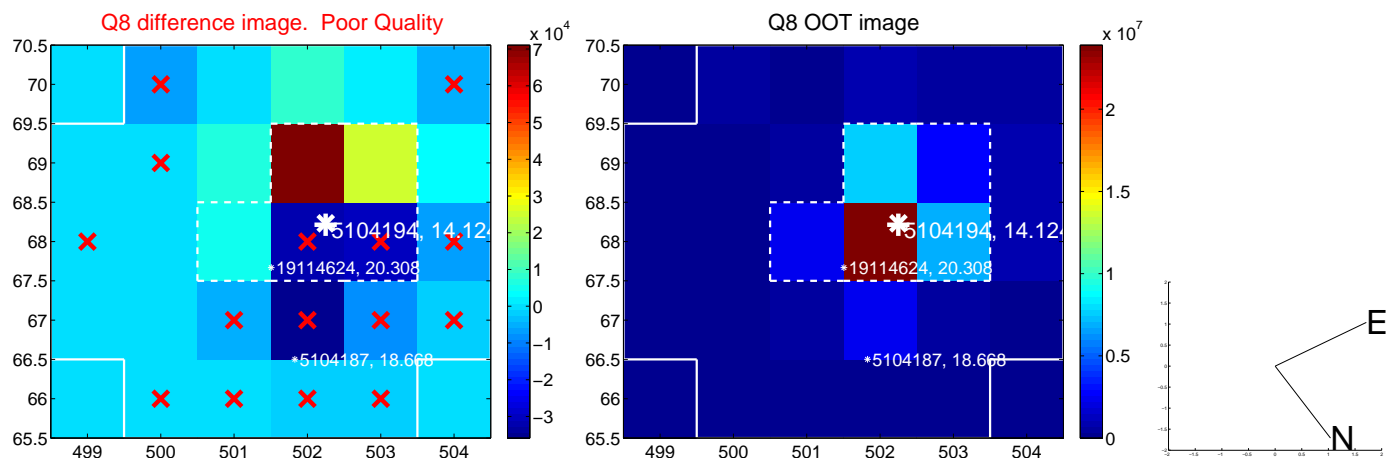
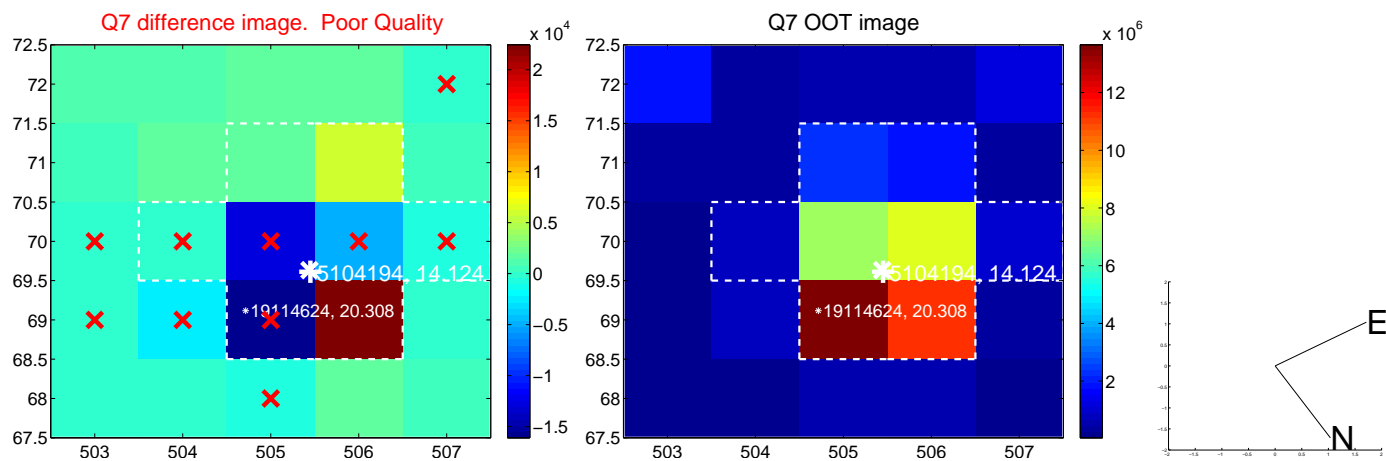
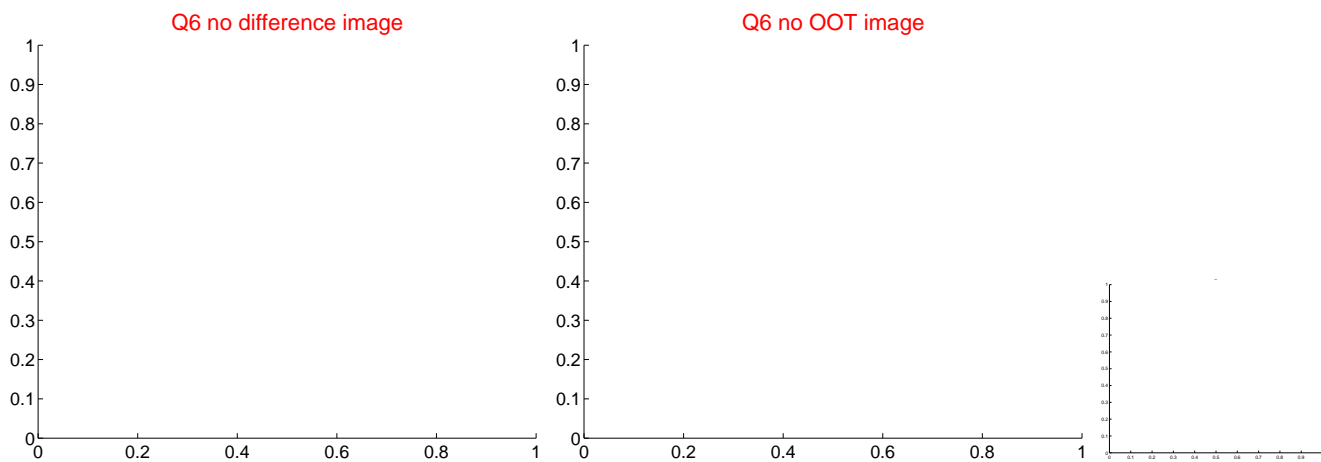
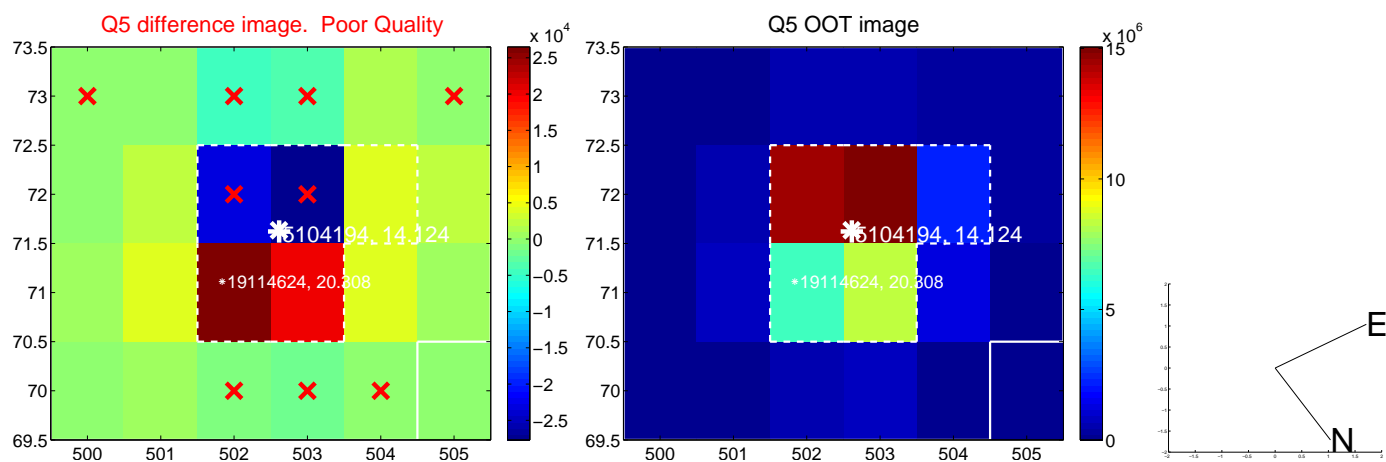


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

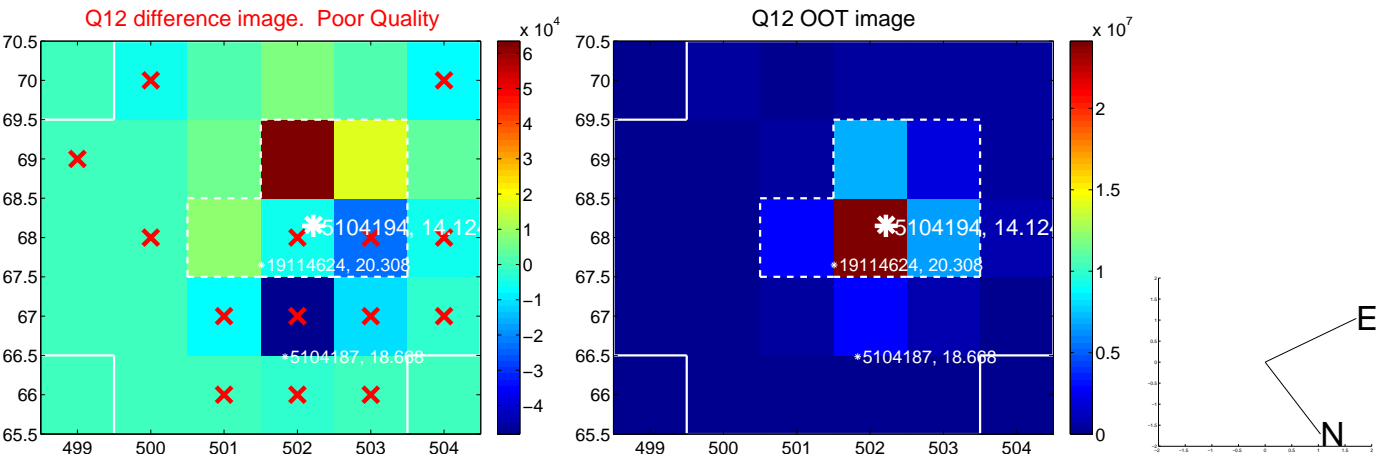
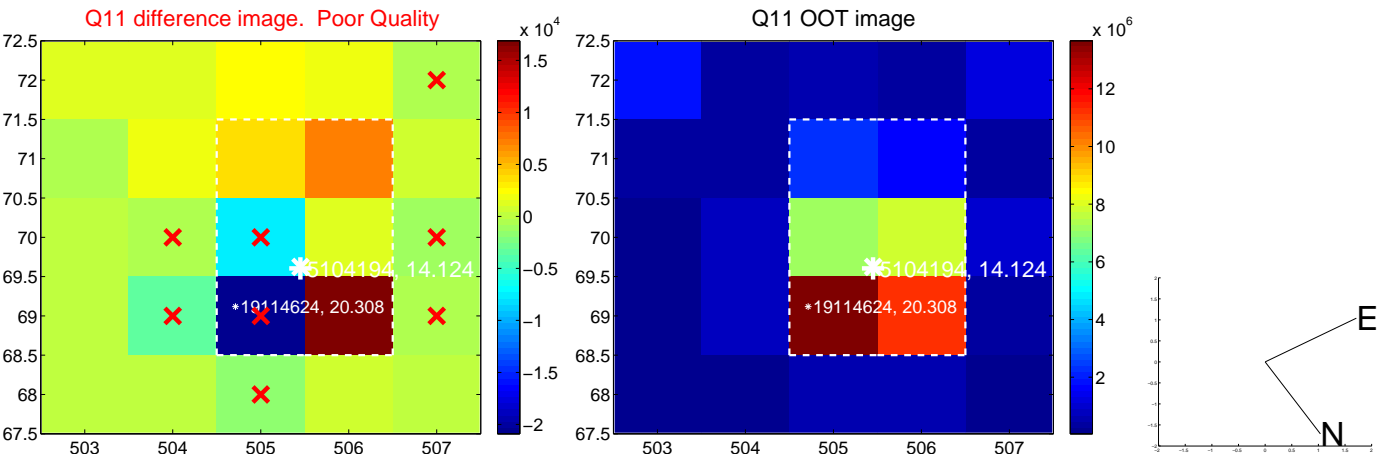
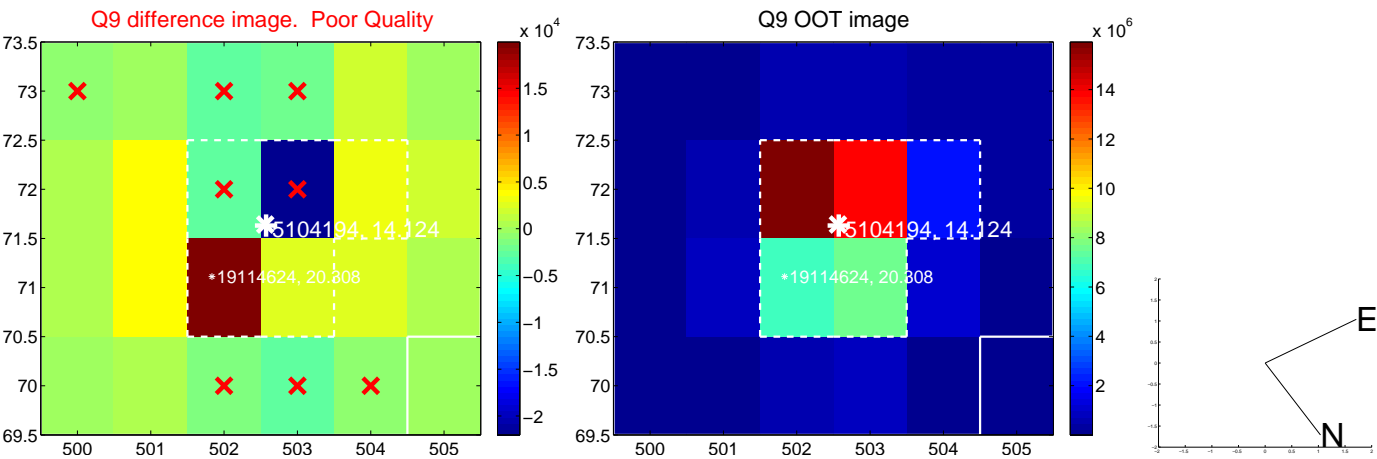


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

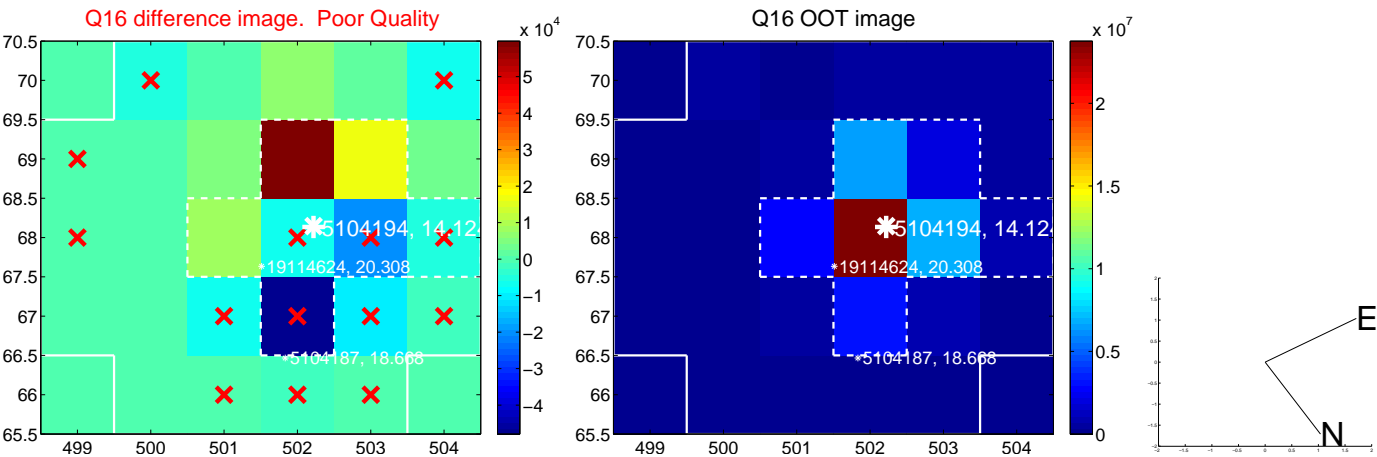
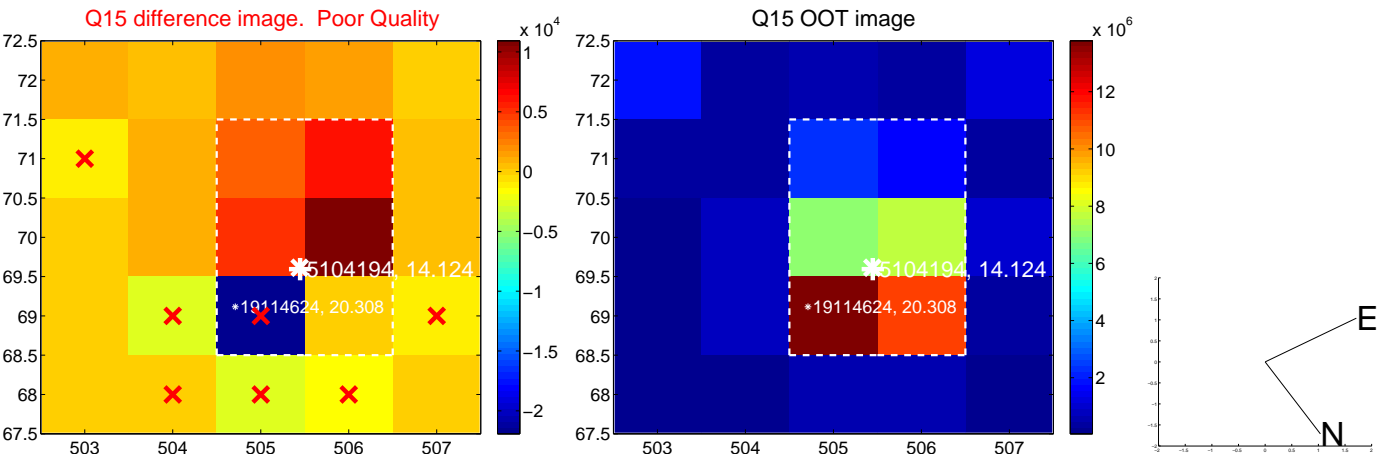
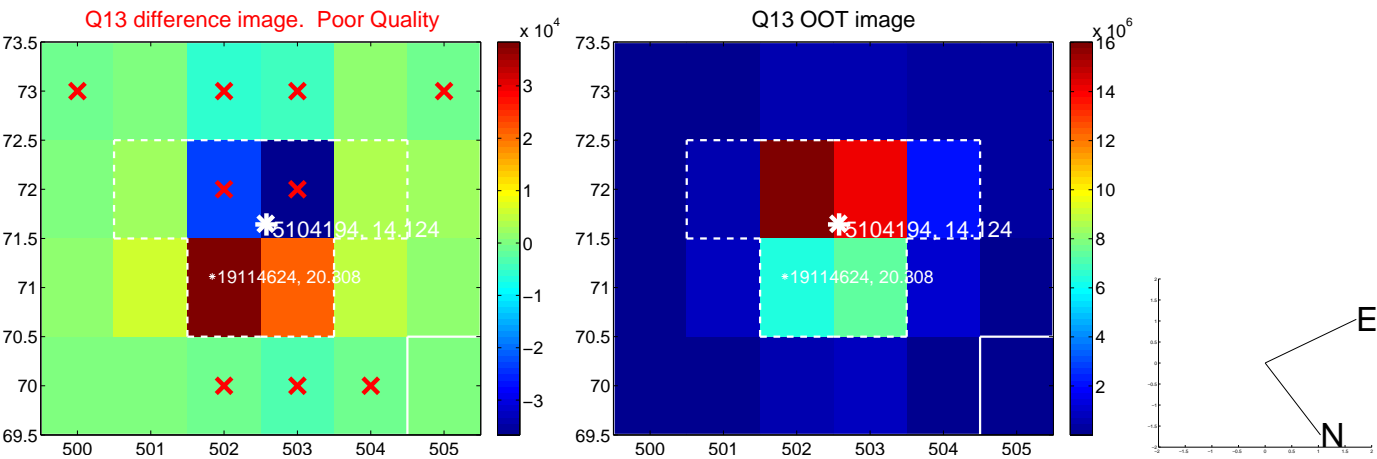




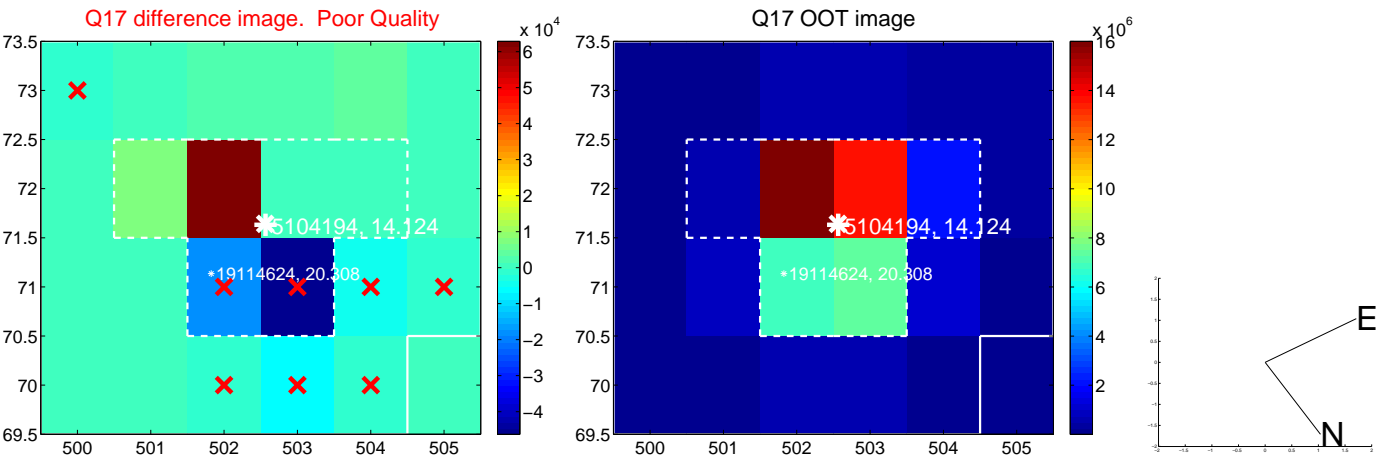
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

