

# KIC 003119604

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
003119604-01	OBS	No	1.574688	132.526195	18.6	17.268	9.4	11.5	1.95	8383	0.87	16475.77

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003119604-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

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

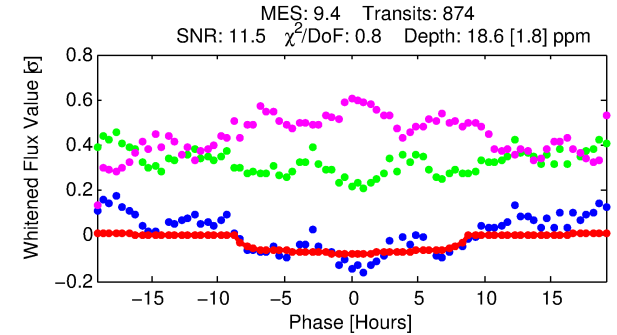
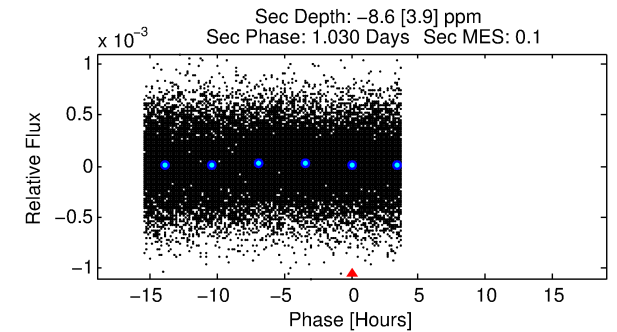
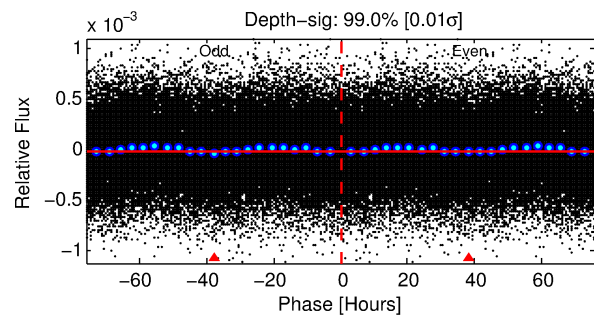
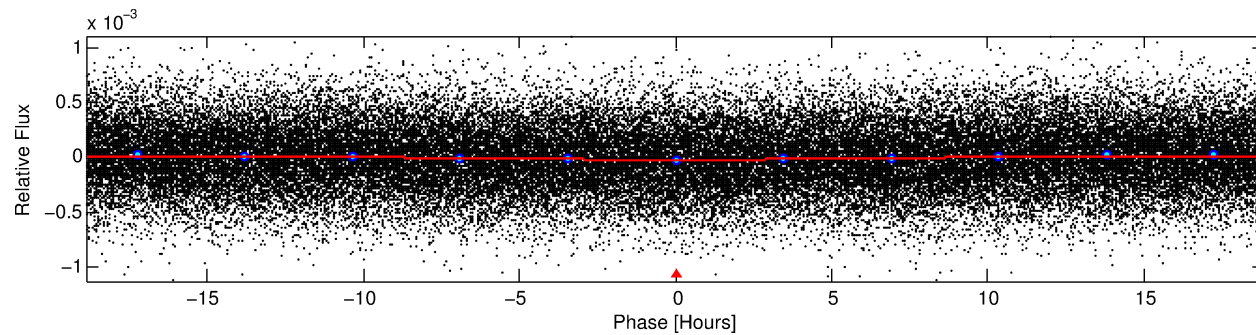
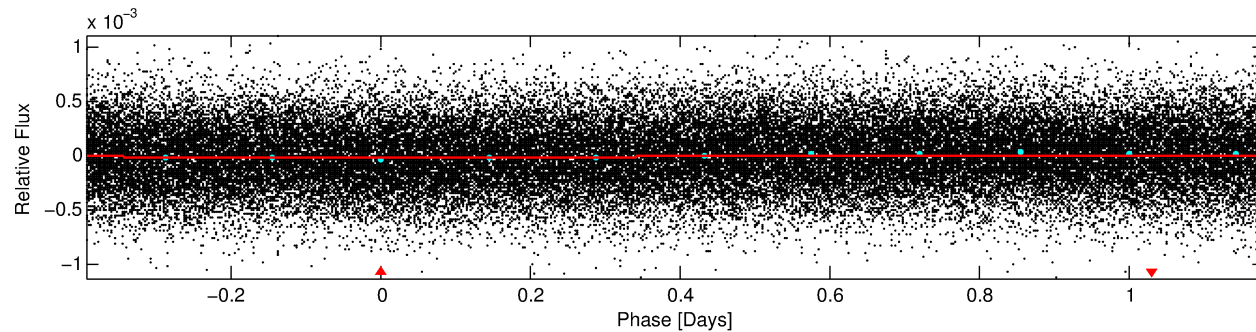
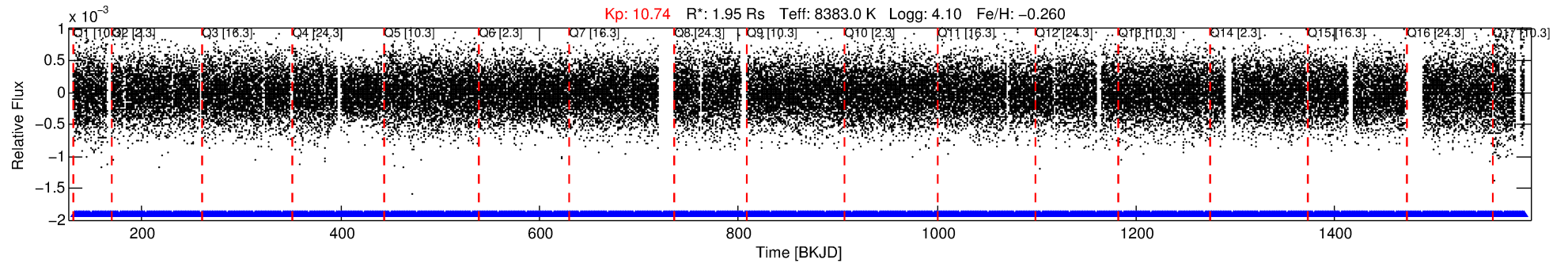
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 003119604-01

No Significant Match Found

# DV One-Page Summary

KIC: 3119604 Candidate: 1 of 1 Period: 1.575 d



## DV Fit Results:

Period = 1.57469 [0.00004] d  
Epoch = 132.5262 [0.0143] BKJD  
Rp/R\* = 0.0041 [0.0024]  
a/R\* = 1.01 [0.07]  
b = 0.50 [5.42]  
Seff = 16475.77 [5380.33]  
Teff = 2889 [236] K  
Rp = 0.87 [0.55] Re  
a = 0.0319 [0.0063] AU  
Ag = N/A  
Teffp = N/A

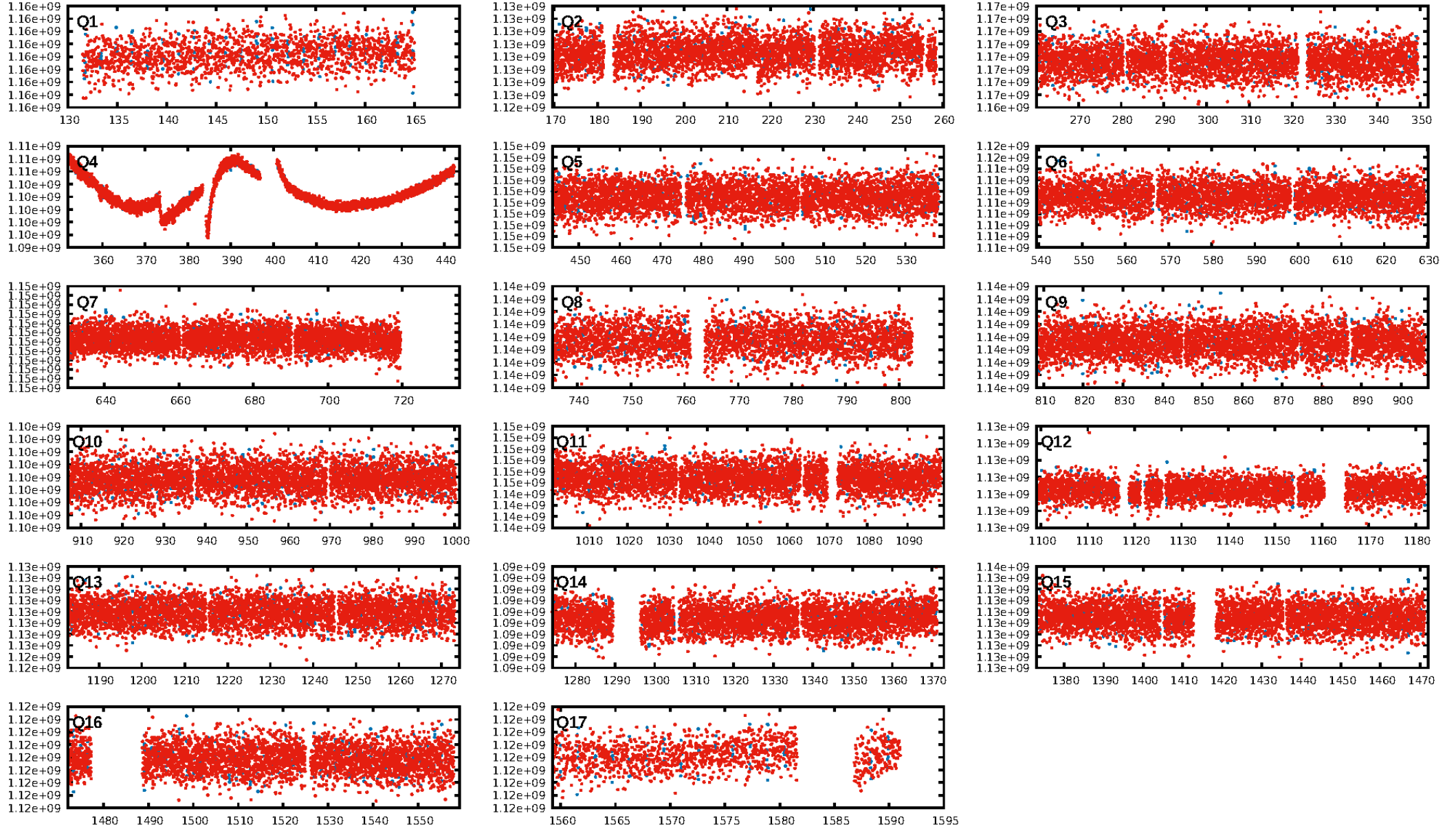
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [835/835]  
GhostDiagnostic-chr: N/A  
Centroid-sig: 67.8%  
Centroid-so: 0.276 arcsec [0.52 $\sigma$ ]  
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 [17/17]

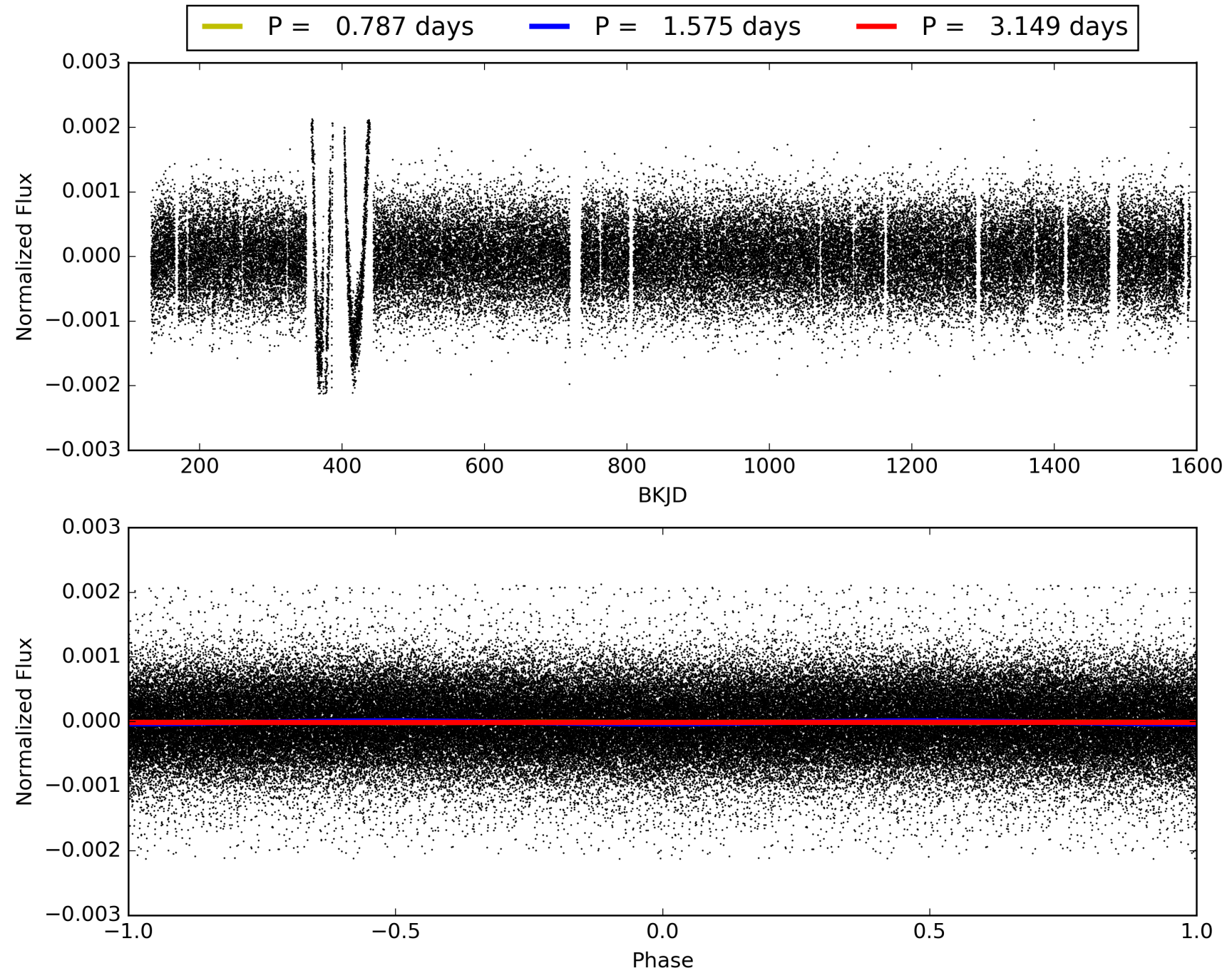
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:29:12 Z

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

# TCE 003119604-01, PDC Light Curves

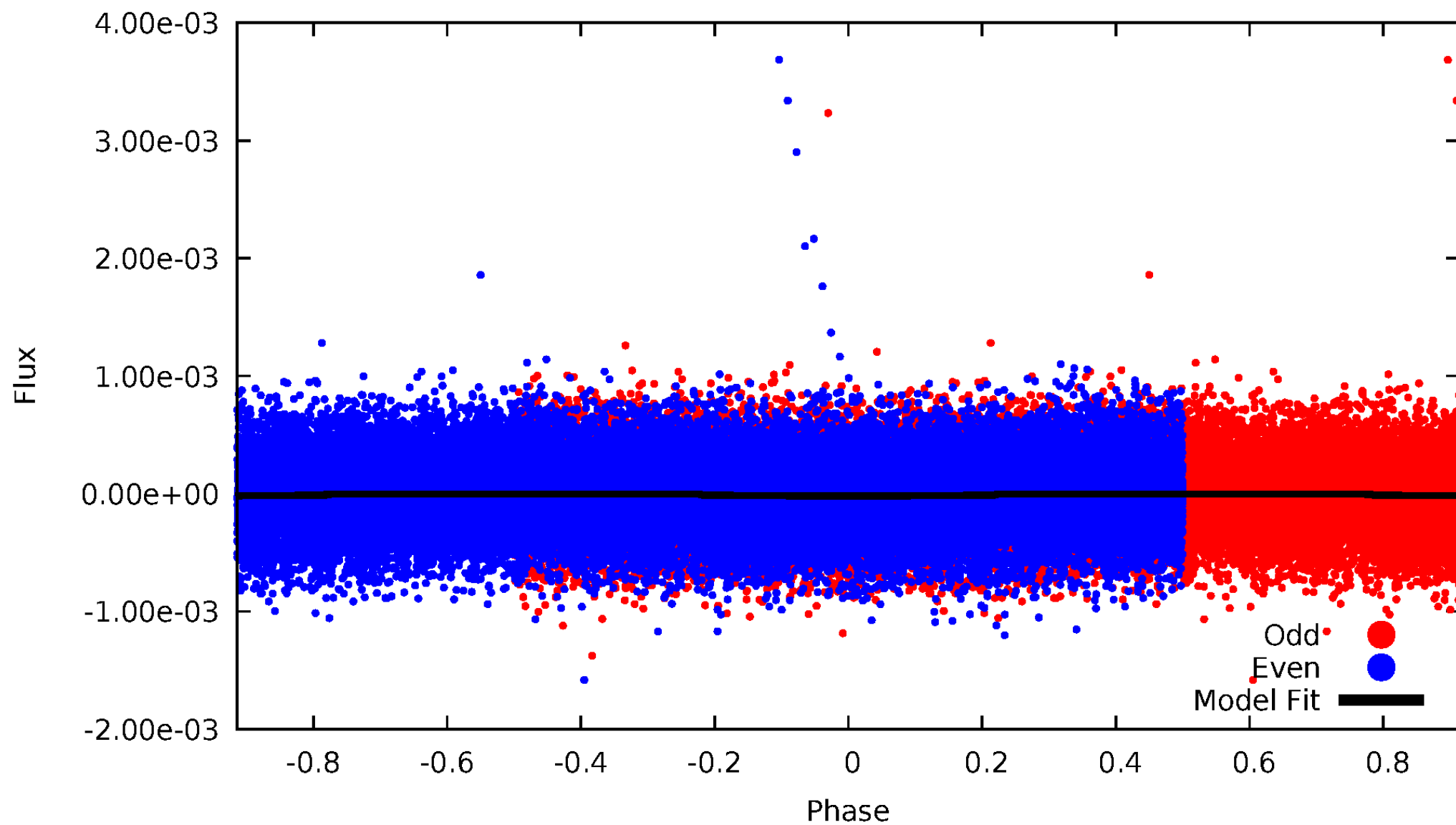


TCE 003119604-01



# DV Odd/Even

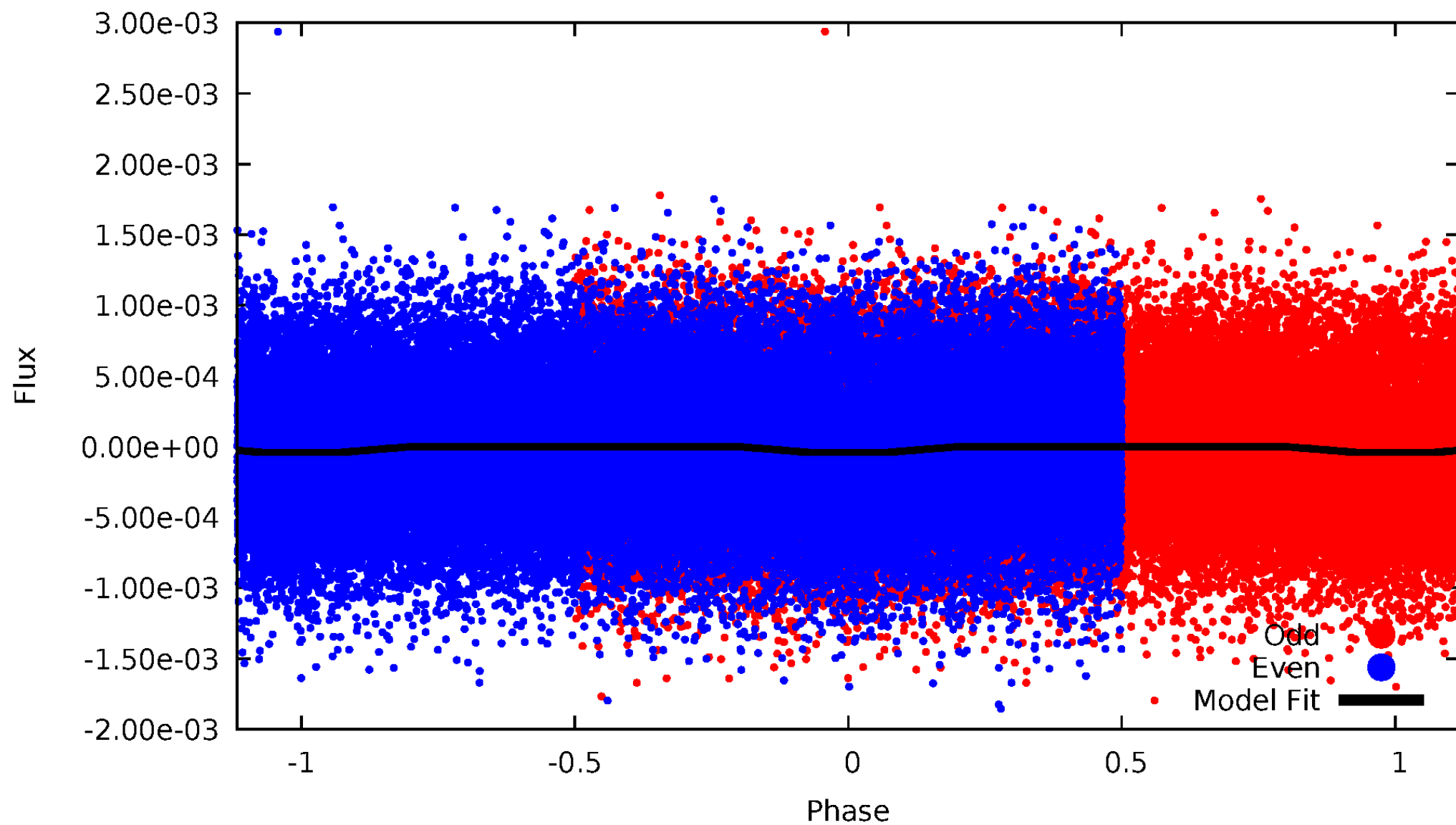
TCE 003119604-01



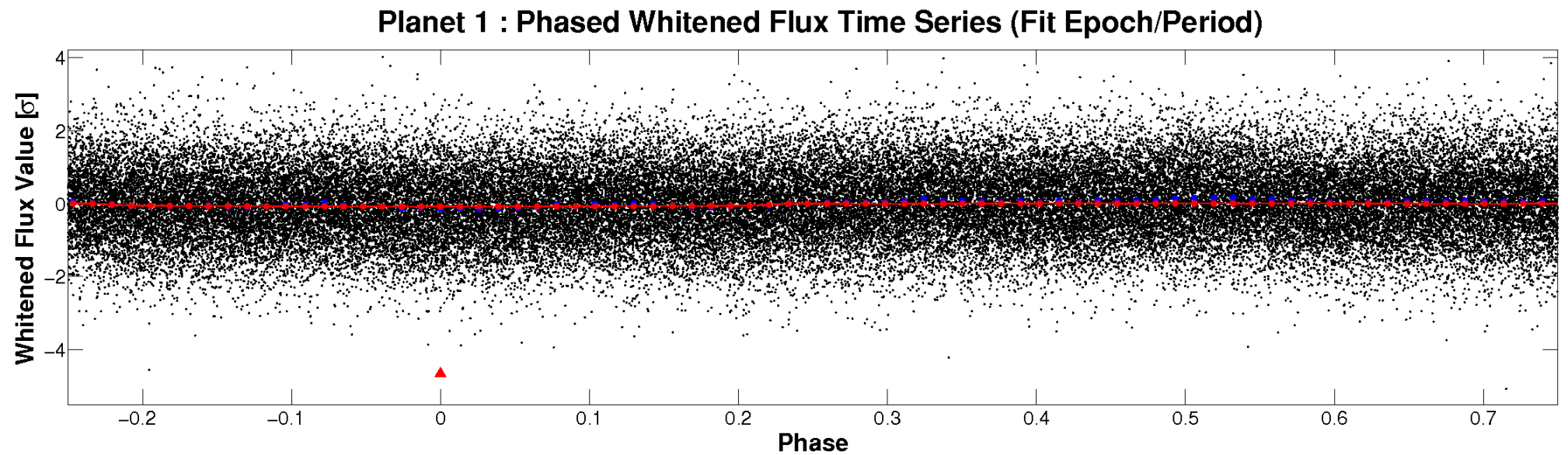
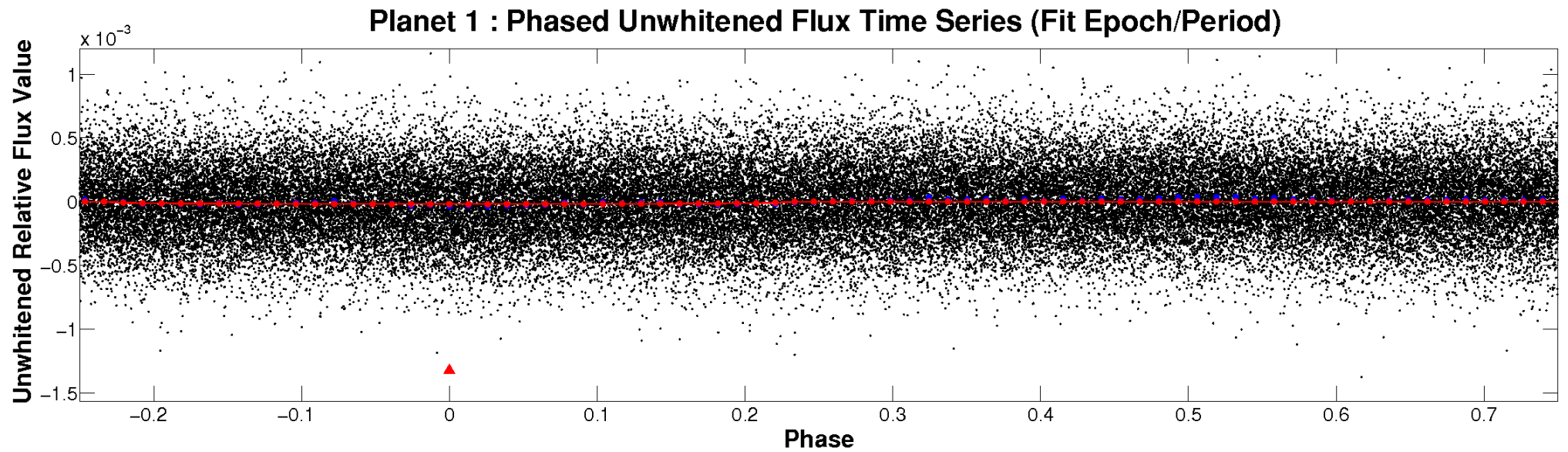


# ALT Odd/Even

TCE 003119604-01

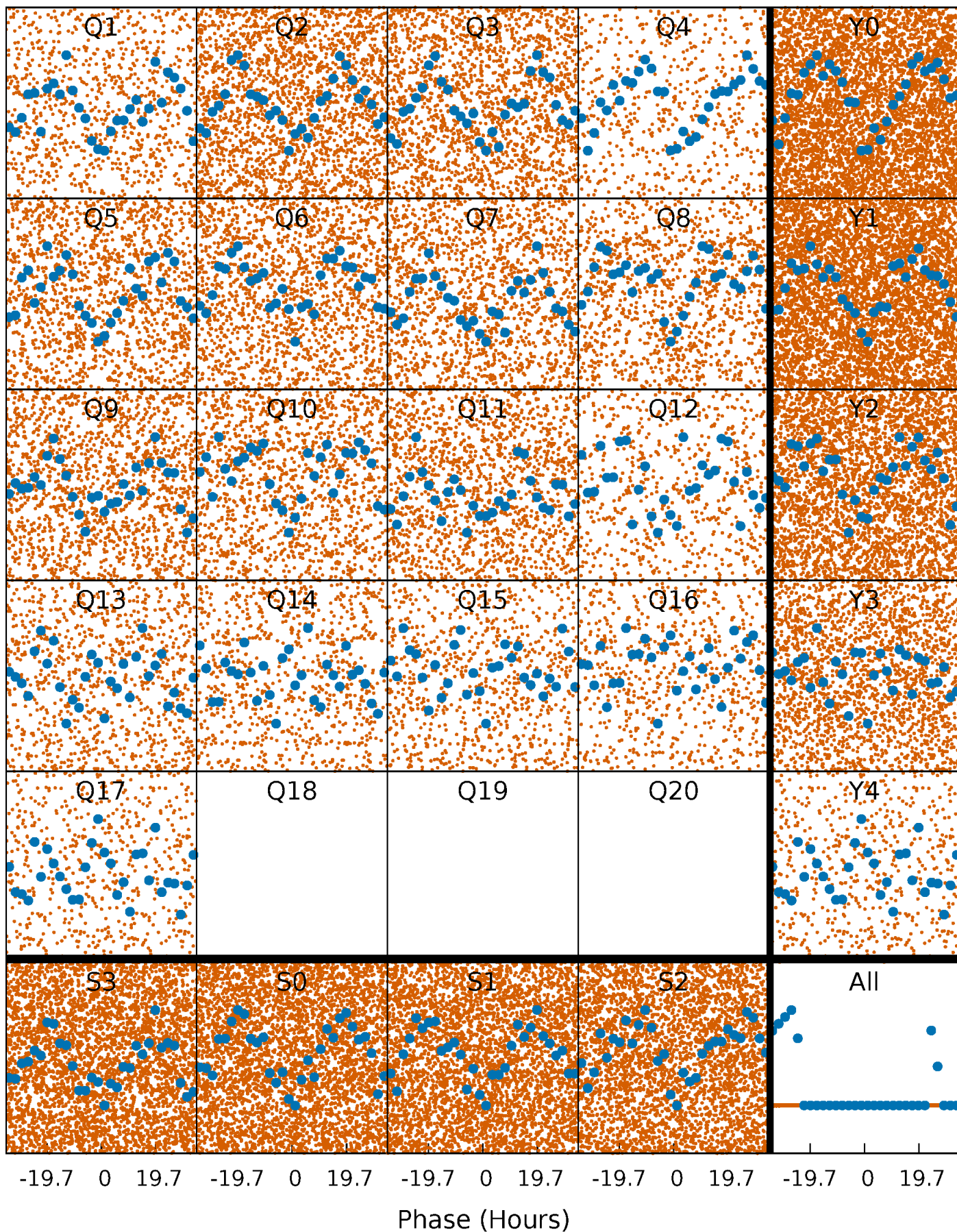


# Non-Whitened Vs. Whitened Light Curve



# PDC Quarter-Phased Transit Curves

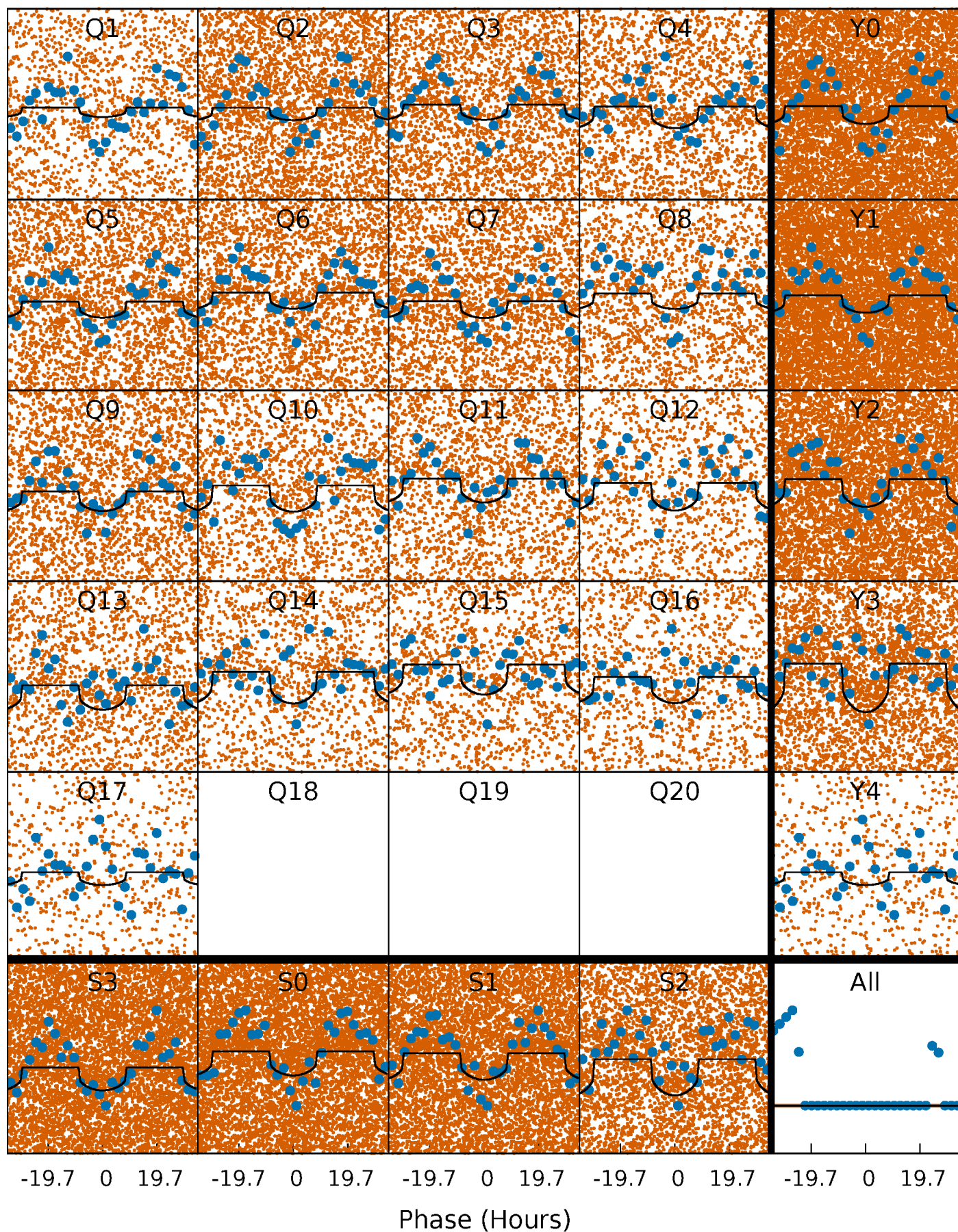
TCE 003119604-01 P= 1.574688 Days  $T_0=132.526195$  (BKJD)





# DV Quarter-Phased Transit Curves

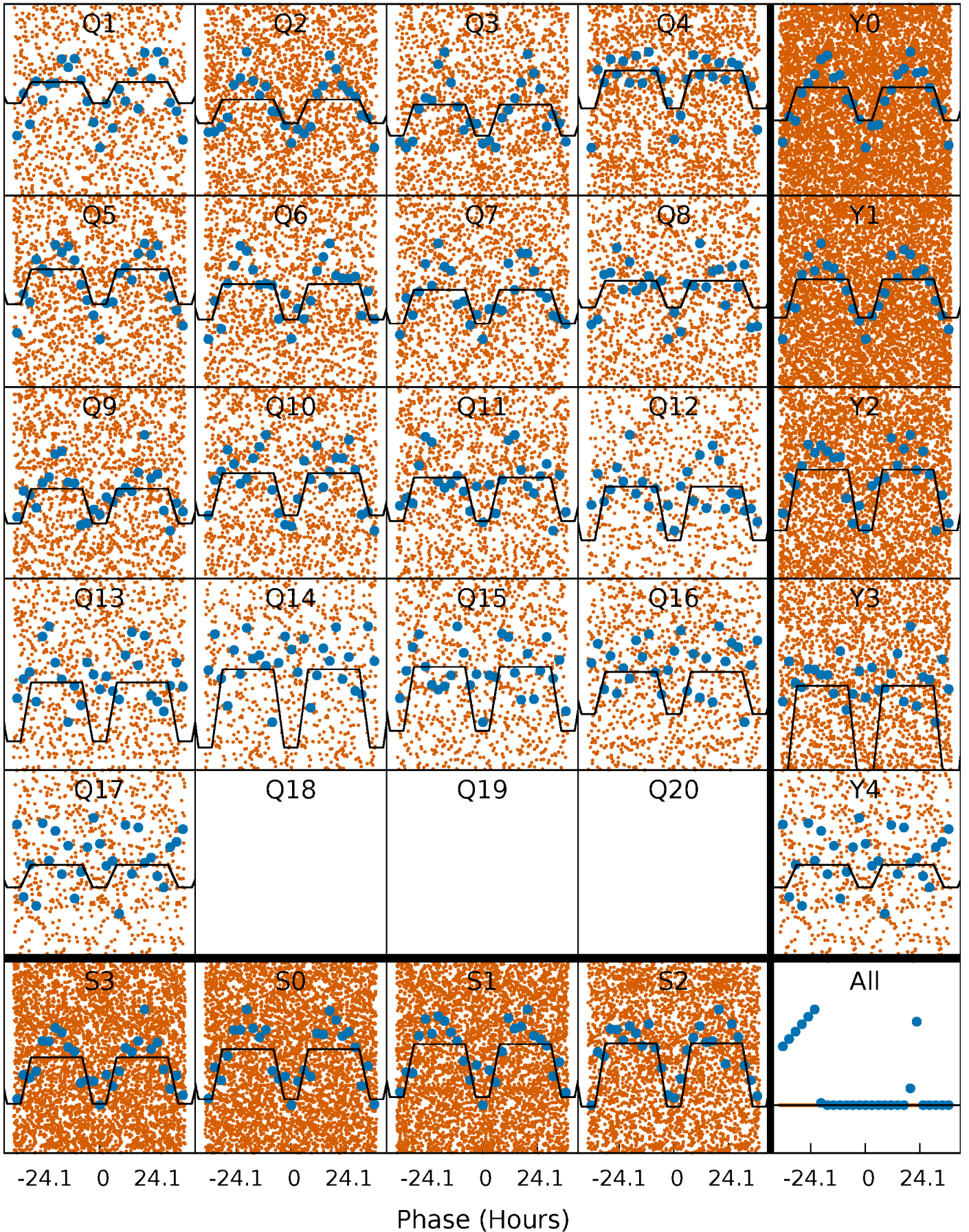
TCE 003119604-01 P= 1.574688 Days  $T_0=132.526195$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

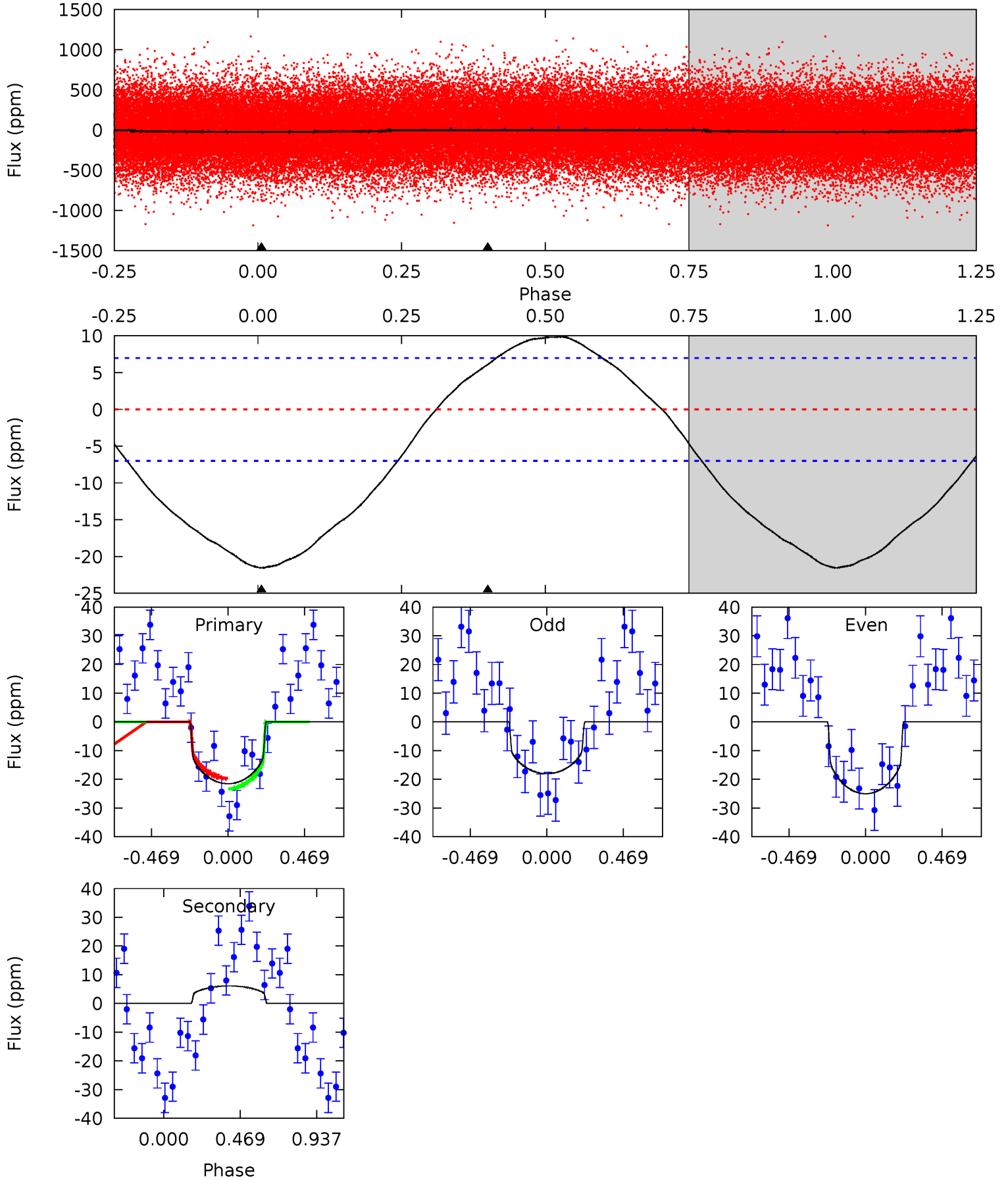
TCE 003119604-01     $P = 1.574736$  Days     $T_0 = 132.516408$  (BKJD)



# DV Model-Shift Uniqueness Test

003119604-01, P = 1.574688 Days, E = 130.951507 Days

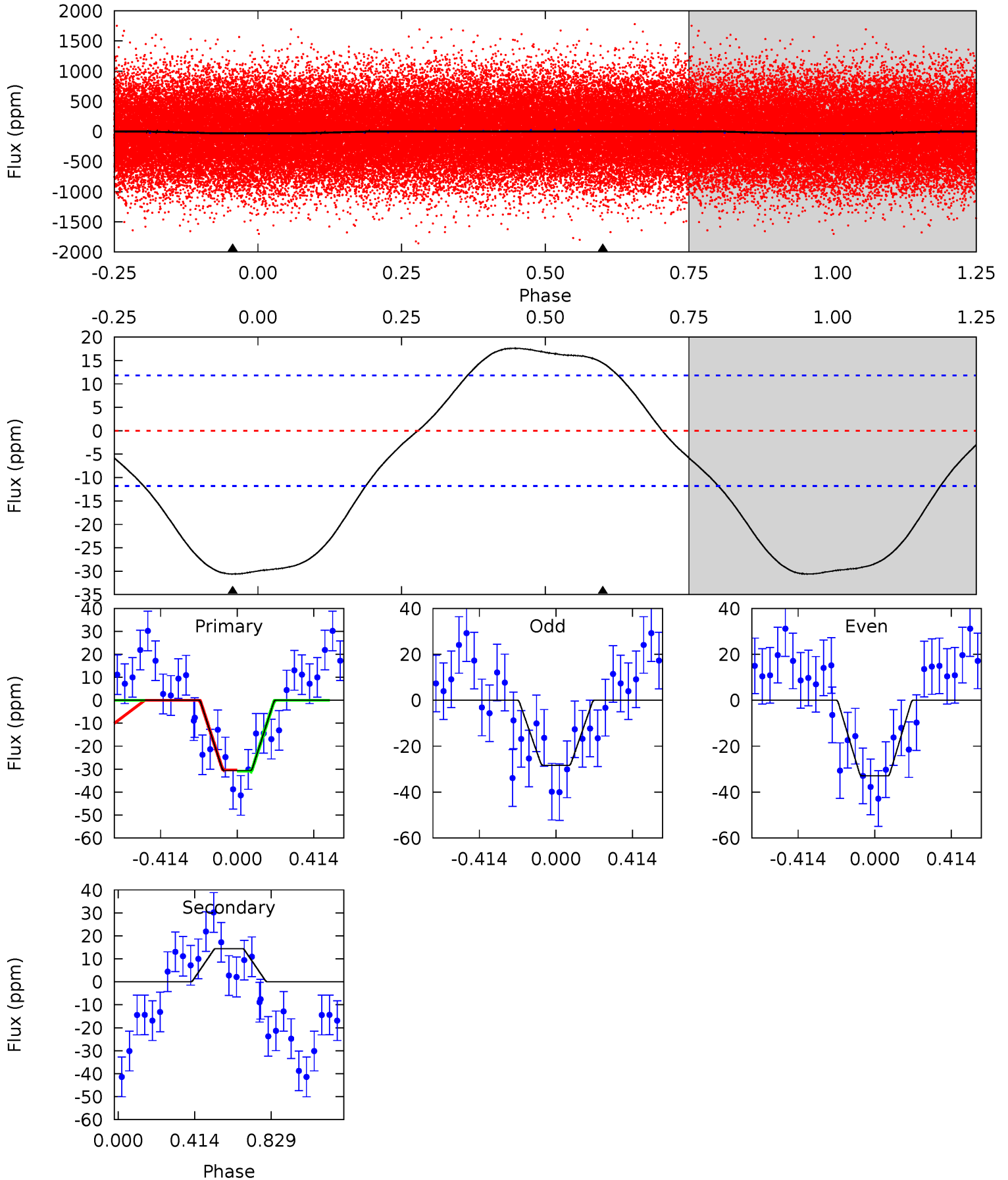
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	-3.70	0	0	4.23	0.72	1.48	13.0	13.0	-3.70	-3.70	2.12	0.96	0.31	1.13



# Alt Model-Shift Uniqueness Test

003119604-01, P = 1.574736 Days, E = 130.941672 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
11.0	-5.22	0	0	4.26	0.82	1.23	11.0	11.0	-5.22	-5.22	0.83	0.88	0.37	0.09





### Stellar Parameters For KIC 003119604

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$8383^{+233}_{-350}$	$4.101^{+0.135}_{-0.150}$	$-0.260^{+0.300}_{-0.300}$	$1.945^{+0.468}_{-0.426}$	$1.740^{+0.167}_{-0.250}$	$0.333^{+0.252}_{-0.145}$
	+3%/-4%	+3%/-4%	+115%/-115%	+24%/-22%	+10%/-14%	+76%/-44%
Source	KIC0	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 003119604-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$6 \pm 2$	$0.94^{+0.47}_{-0.49}$	$4049^{+270}_{-277}$	$-6186^{+1054}_{-2834}$	$-3.900^{+2.326}_{-12.888}$
Alt.	$14 \pm 3$	$1.31^{+0.56}_{-0.54}$	$4035^{+271}_{-273}$	$-6406^{+961}_{-2370}$	$-4.578^{+2.334}_{-9.734}$

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

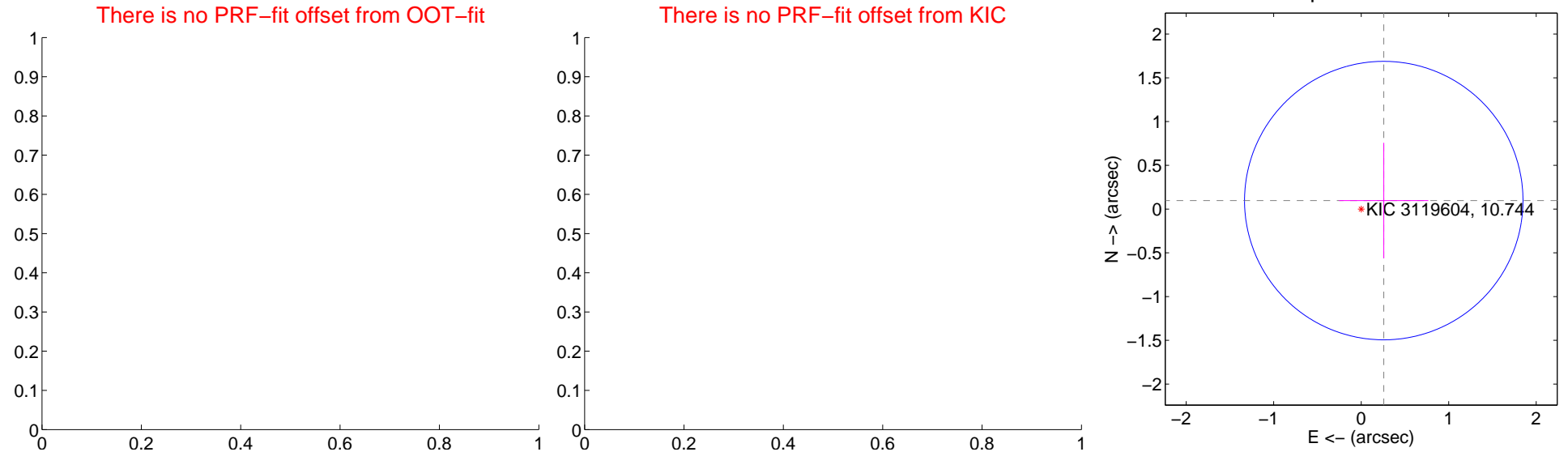
## DV Centroid Data

Supplemental centroid analysis for 003119604-01. **Kepler magnitude: 10.74.** Transit SNR 11.55

**There are 0 quarters with good PRF difference image offsets**

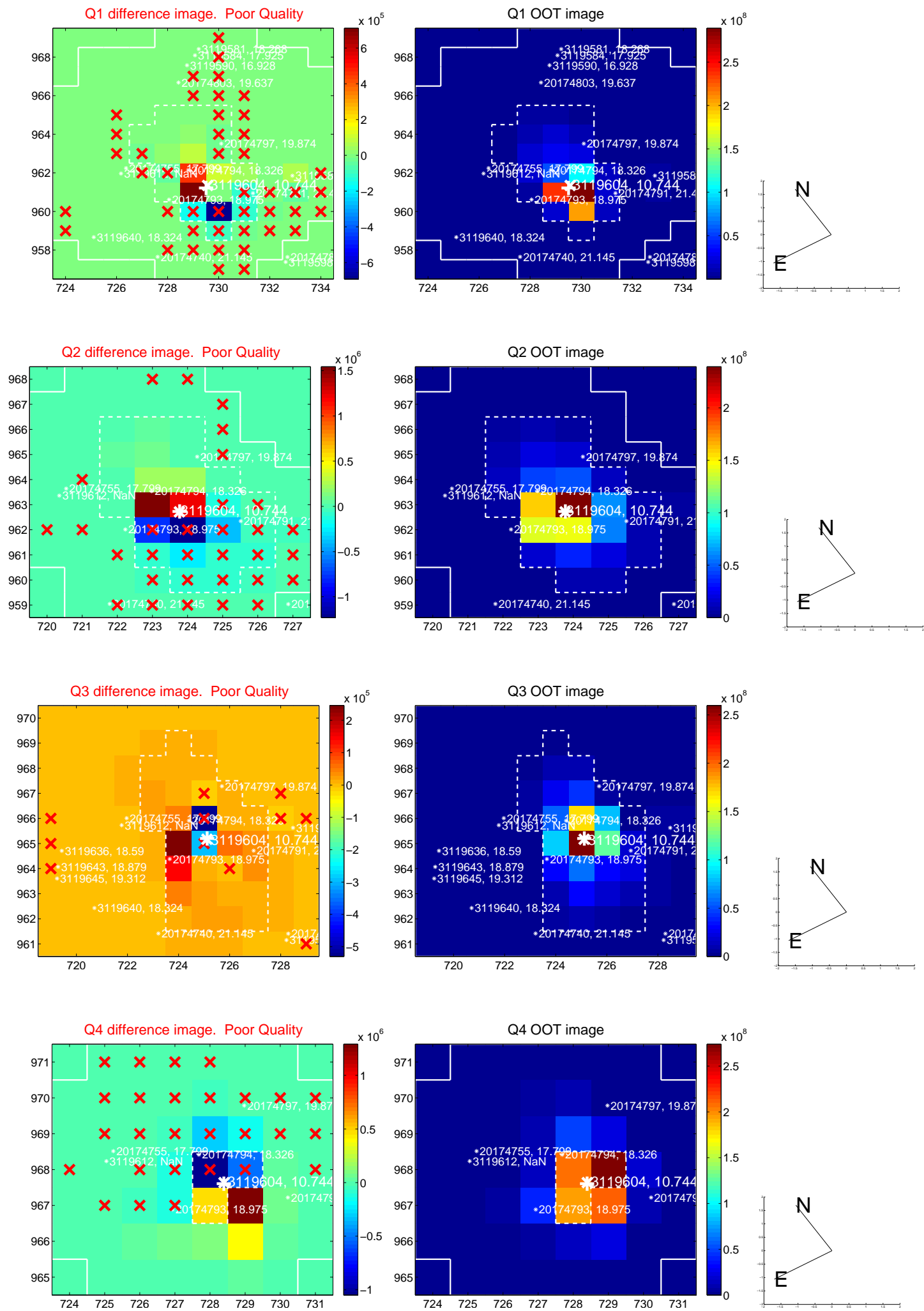
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	$0.28 \pm 0.53$	0.52	$-0.26 \pm 0.51$	$0.10 \pm 0.66$



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.

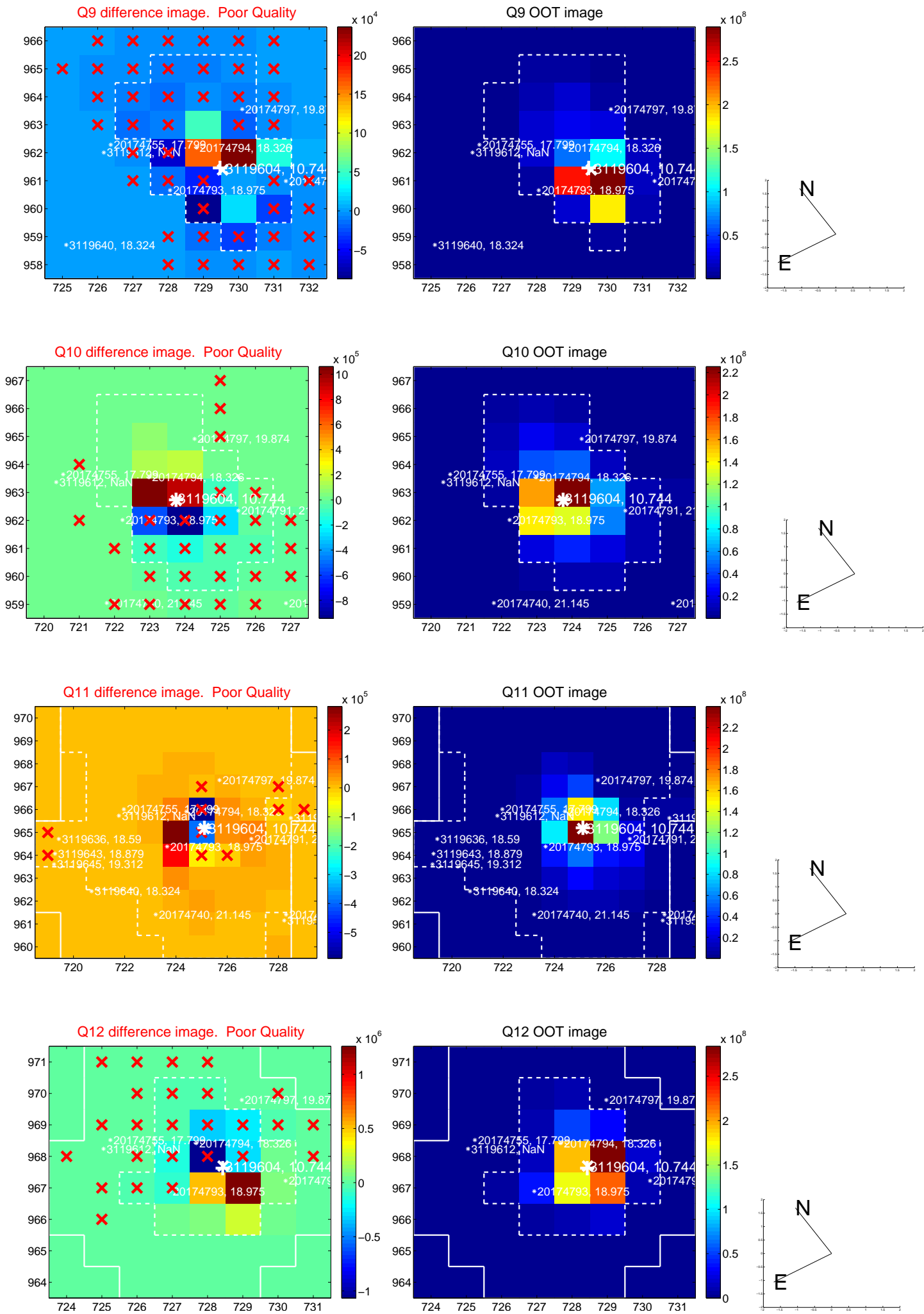
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



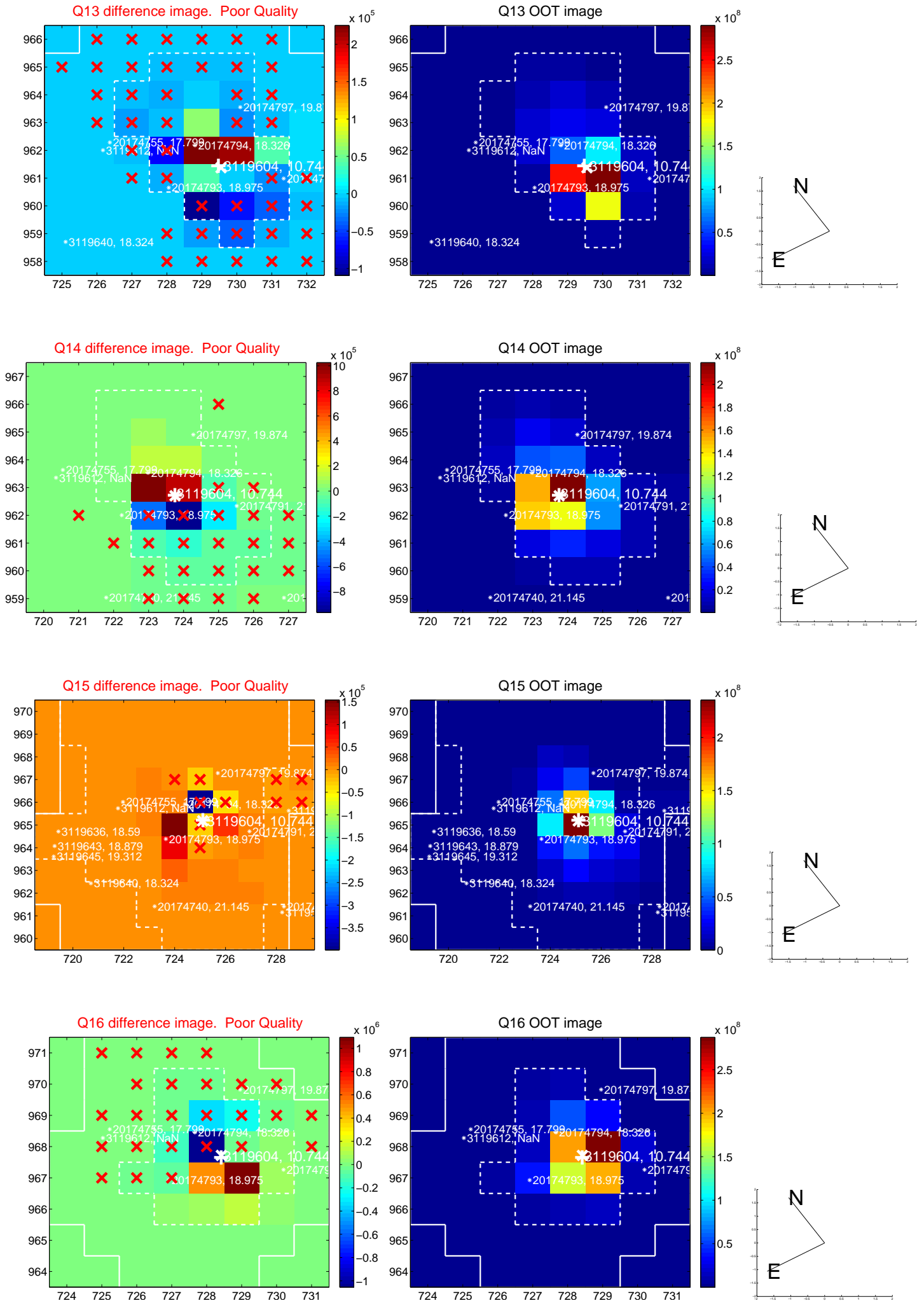




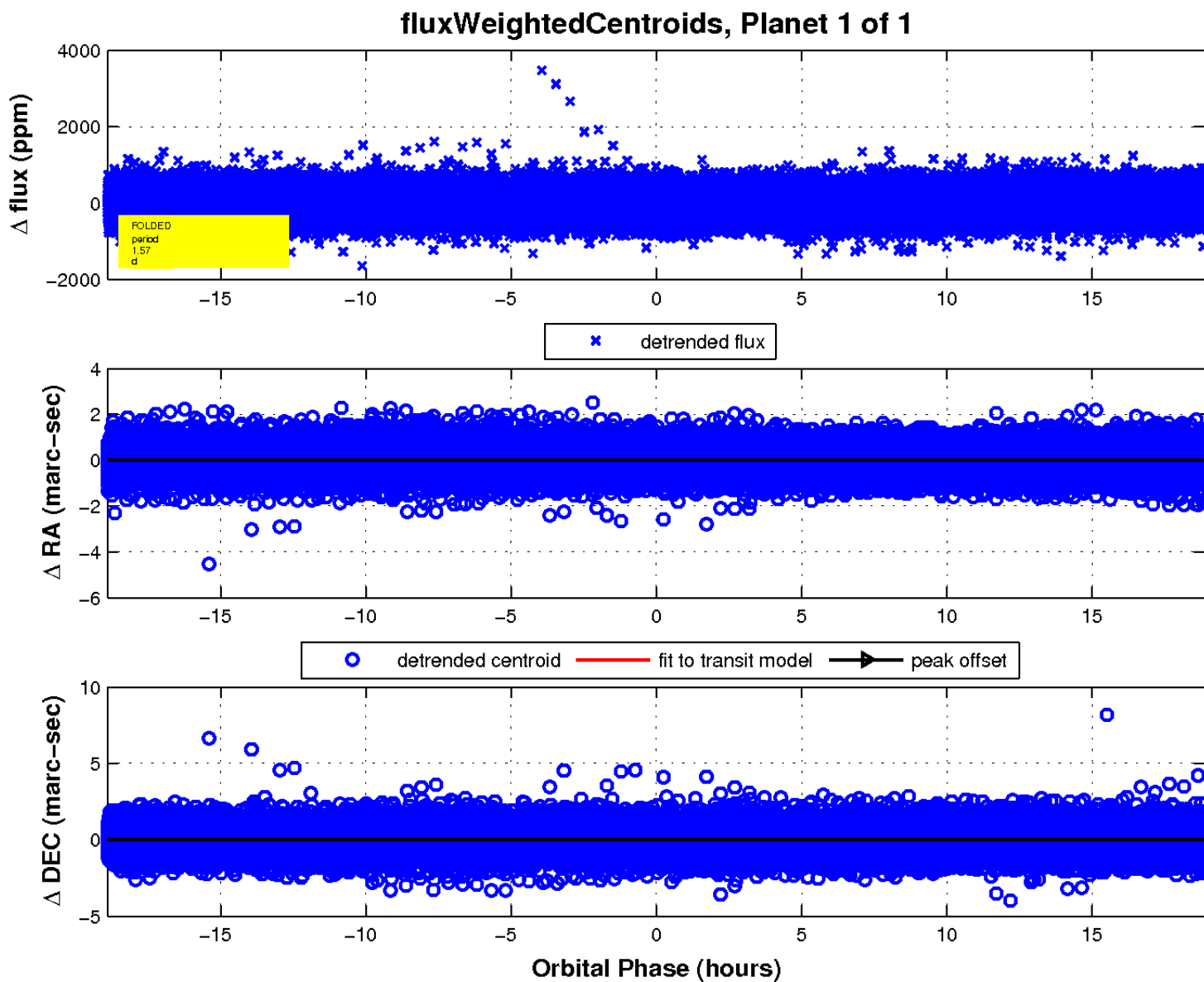
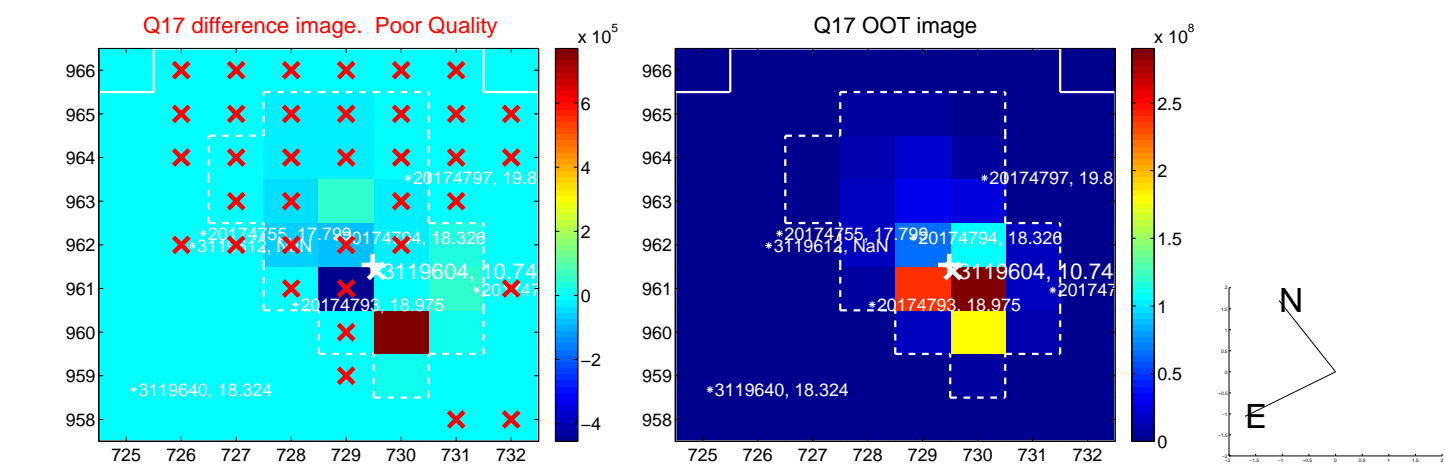
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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.



UKIRT Image

