

KIC 011759685

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})
011759685-01	OBS	No	0.822611	132.174821	5.0	8.327	8.6	3.2	4.56	6923	1.16	89316.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011759685-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_UNCERTAIN

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

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

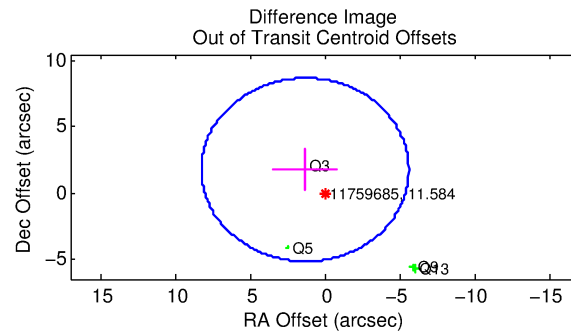
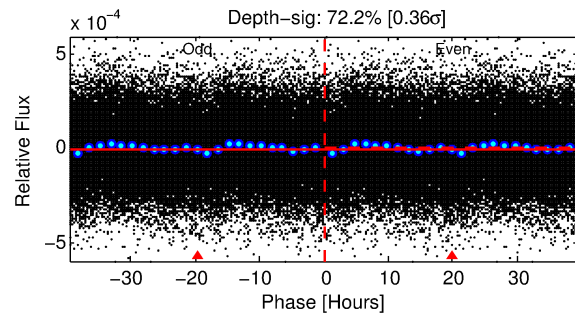
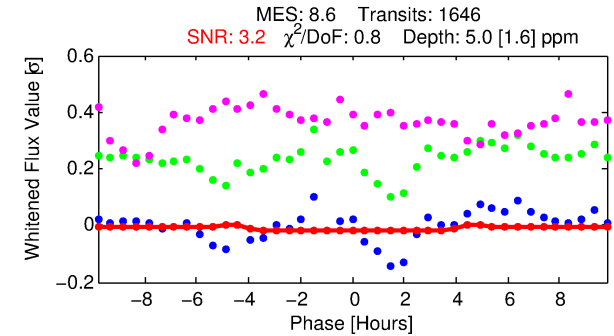
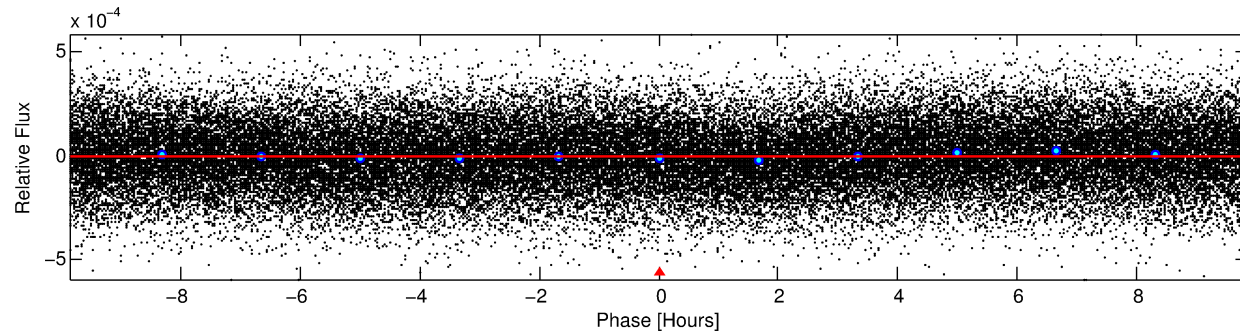
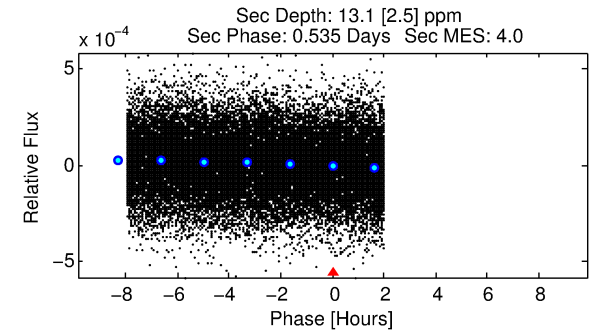
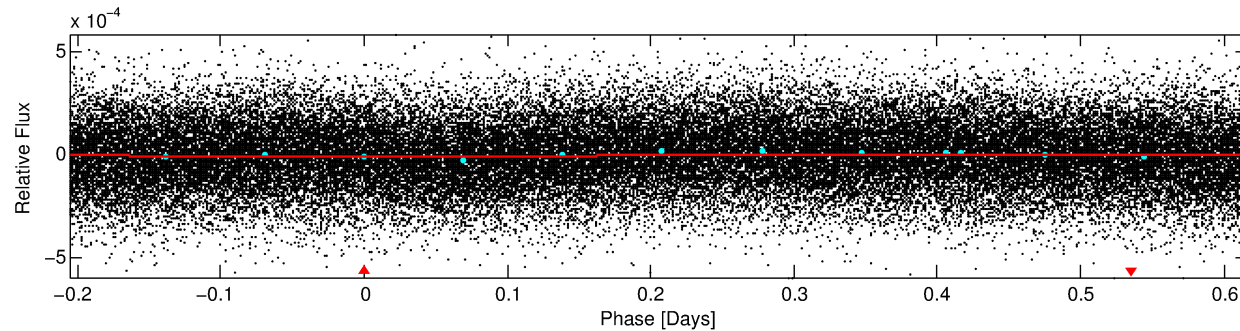
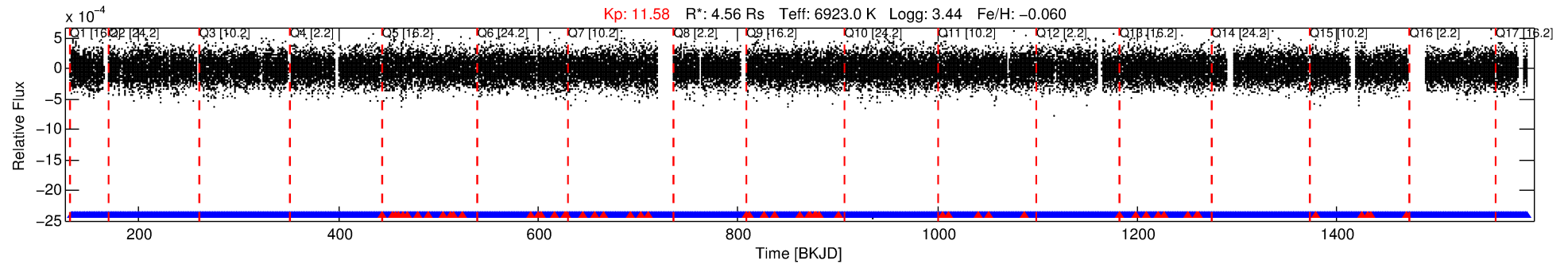
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011759685-01

No Significant Match Found

DV One-Page Summary

KIC: 11759685 Candidate: 1 of 1 Period: 0.823 d



DV Fit Results:

Period = 0.82261 [0.00005] d
Epoch = 132.1748 [0.0143] BKJD
 $R_p/R^* = 0.0023$ [0.0036]
 $a/R^* = 1.01$ [0.19]
 $b = 0.87$ [2.72]
 $S_{\text{eff}} = 89316.45$ [58971.58]
 $T_{\text{eq}} = 4408$ [728] K
 $R_p = 1.16$ [1.85] R_e
 $a = 0.0219$ [0.0089] AU
 $A_g = 2.55$ [8.01] [0.19σ]
 $T_{\text{eff}} = 8608$ [6634] K [0.63σ]

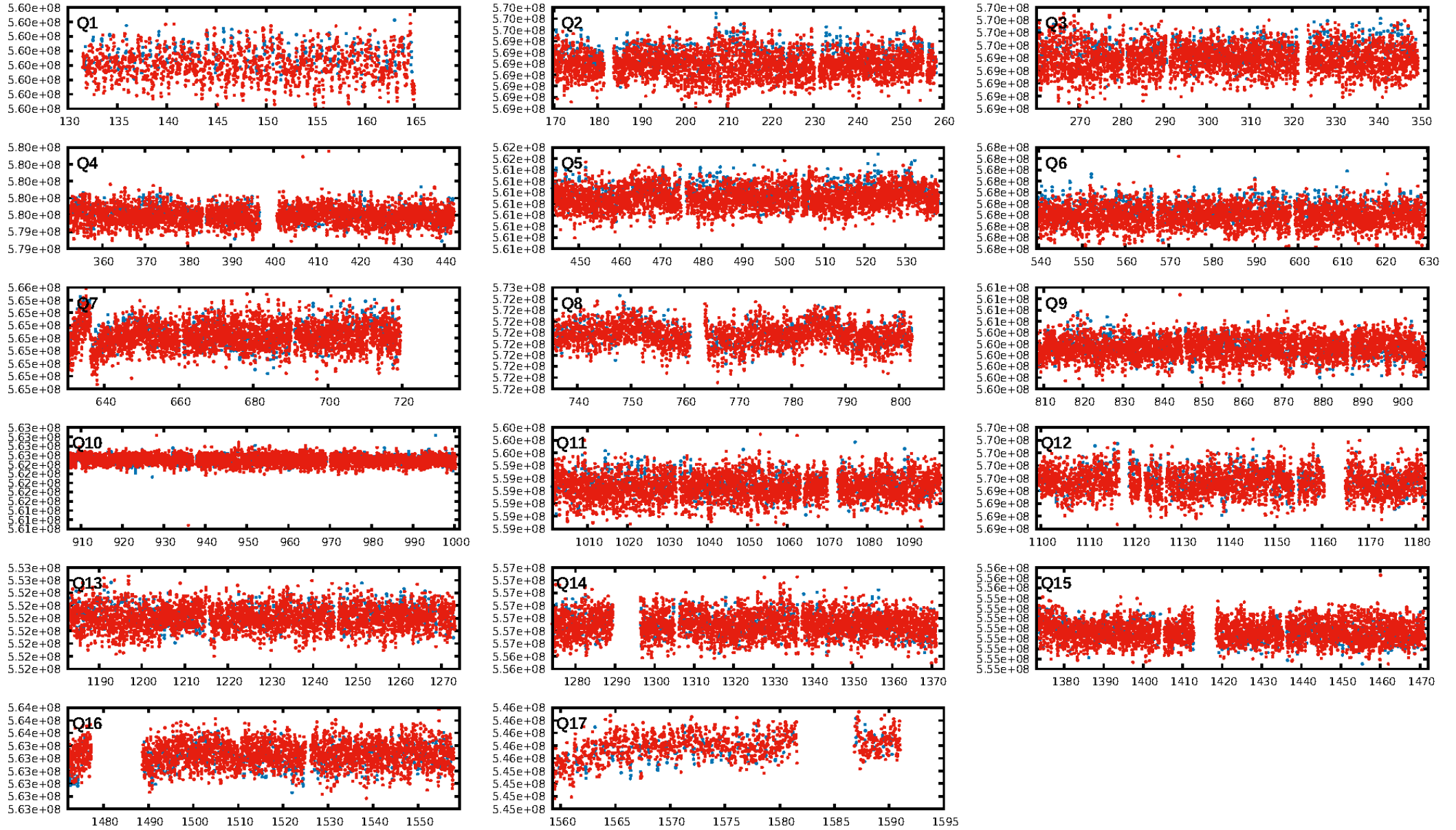
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [1517/1571]
GhostDiagnostic-chr: 1.729
Centroid-sig: 25.3%
Centroid-so: 1.312 arcsec [1.16σ]
OotOffset-rm: 2.195 arcsec [0.95σ]
OotOffset-st: 0/1/0/3 [4]
KicOffset-rm: 2.177 arcsec [1.22σ]
KicOffset-st: 0/1/0/3 [4]
DiffImageQuality-fgm: 0.00 [0/4]
DiffImageOverlap-fno: 1.00 [17/17]

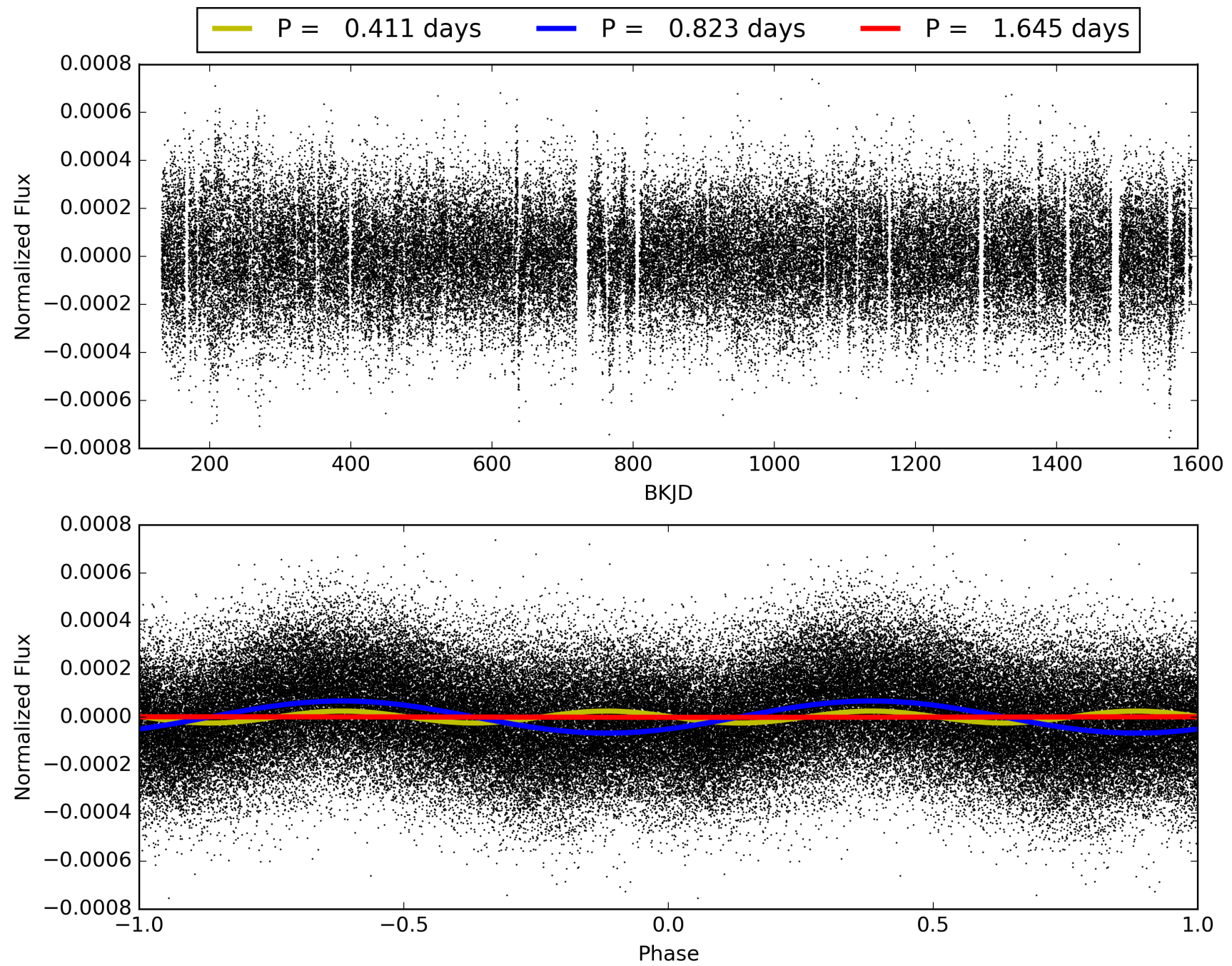
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:31:50 Z

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

TCE 011759685-01, PDC Light Curves

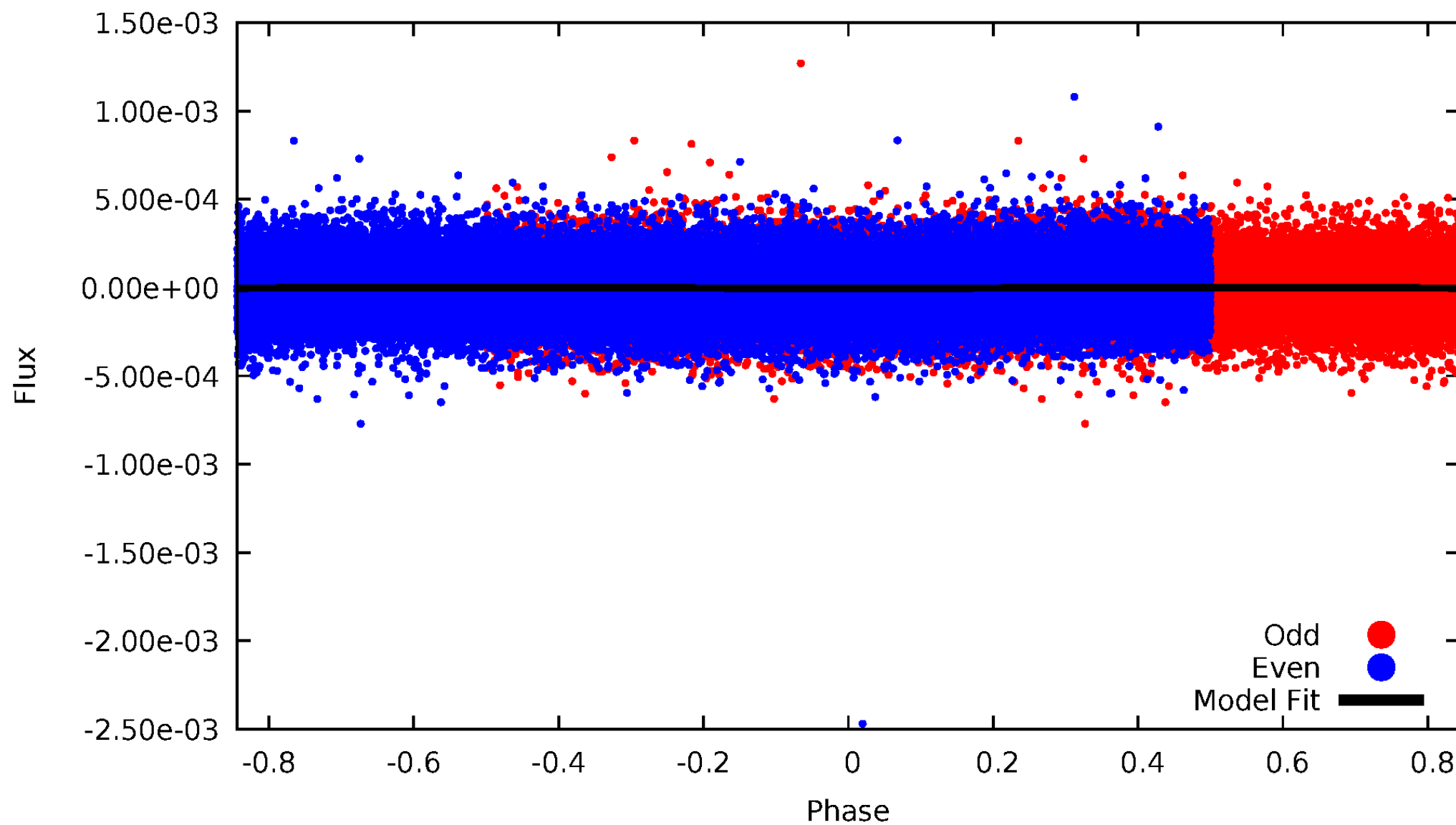


TCE 011759685-01



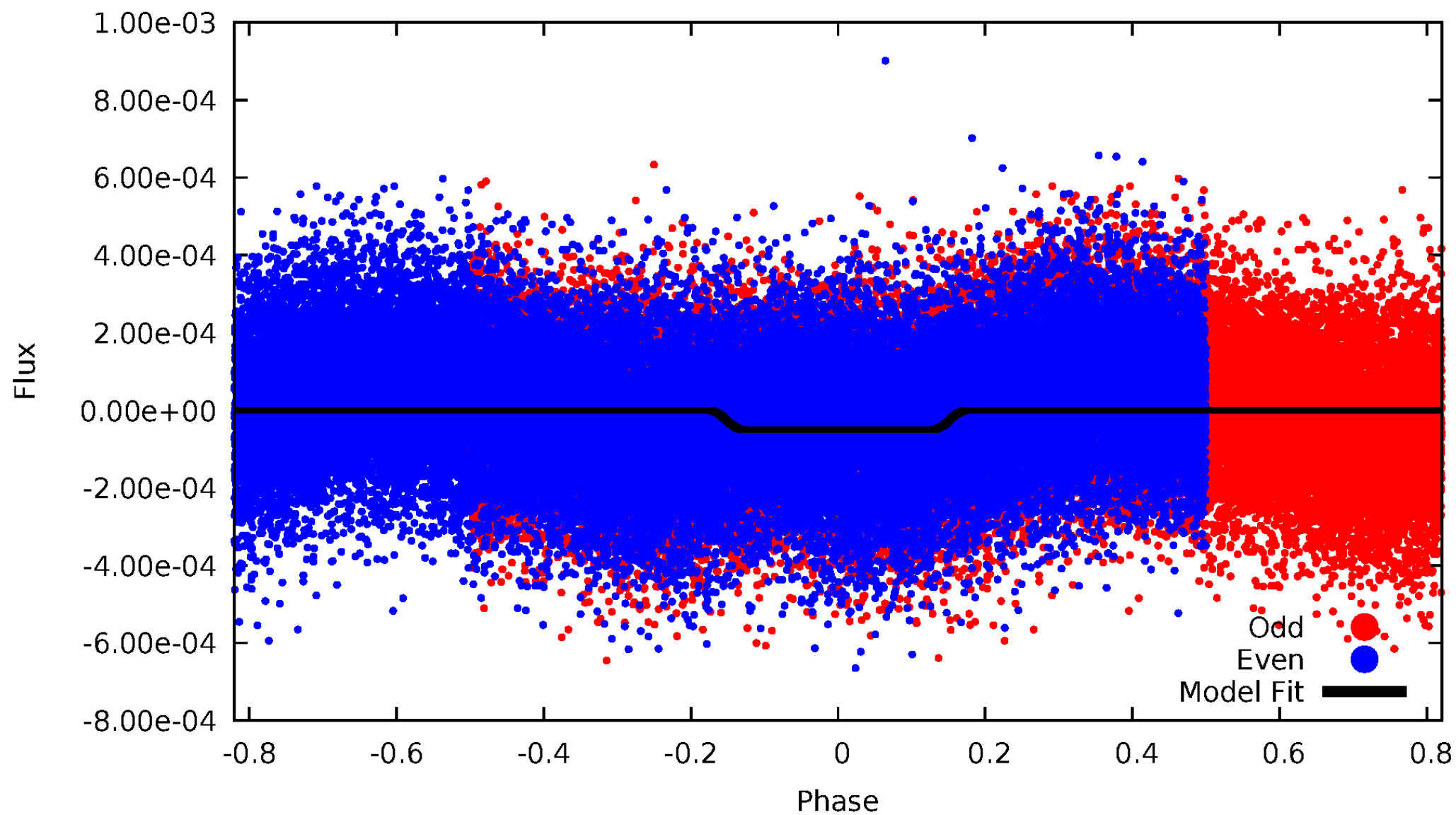
DV Odd/Even

TCE 011759685-01



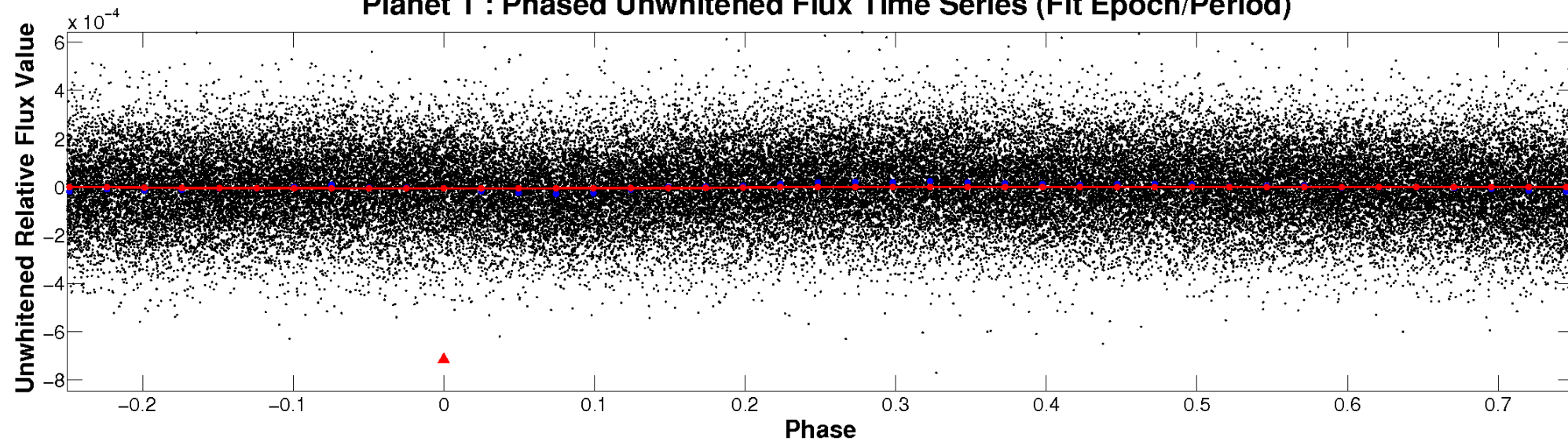
ALT Odd/Even

TCE 011759685-01

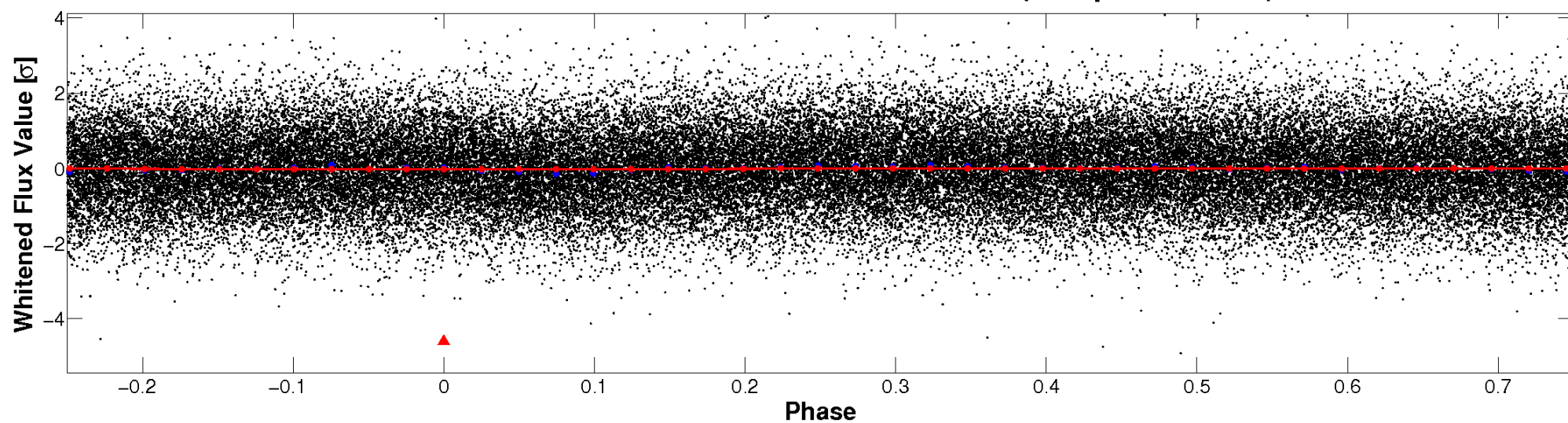


Non-Whitened Vs. Whitened Light Curve

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

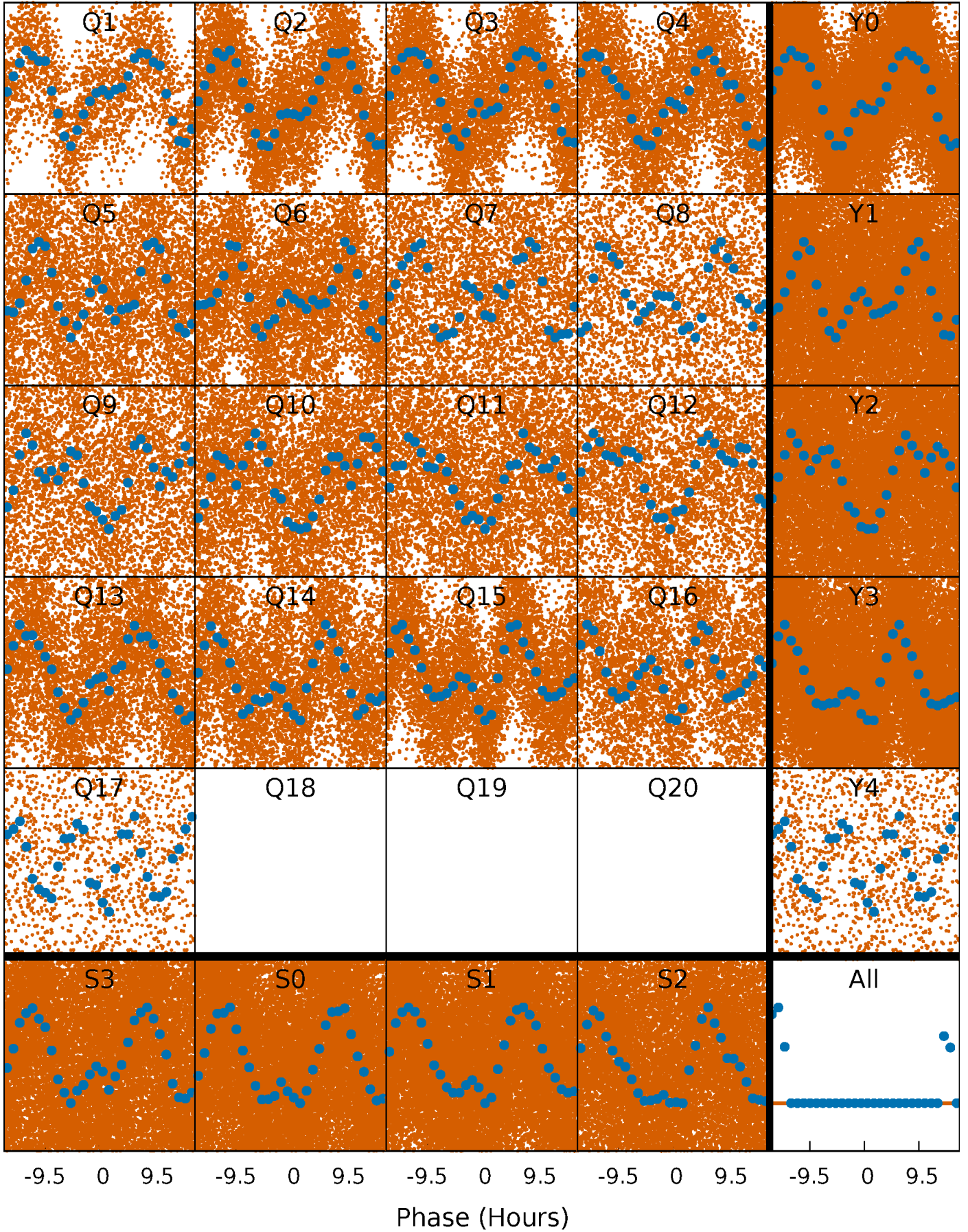


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



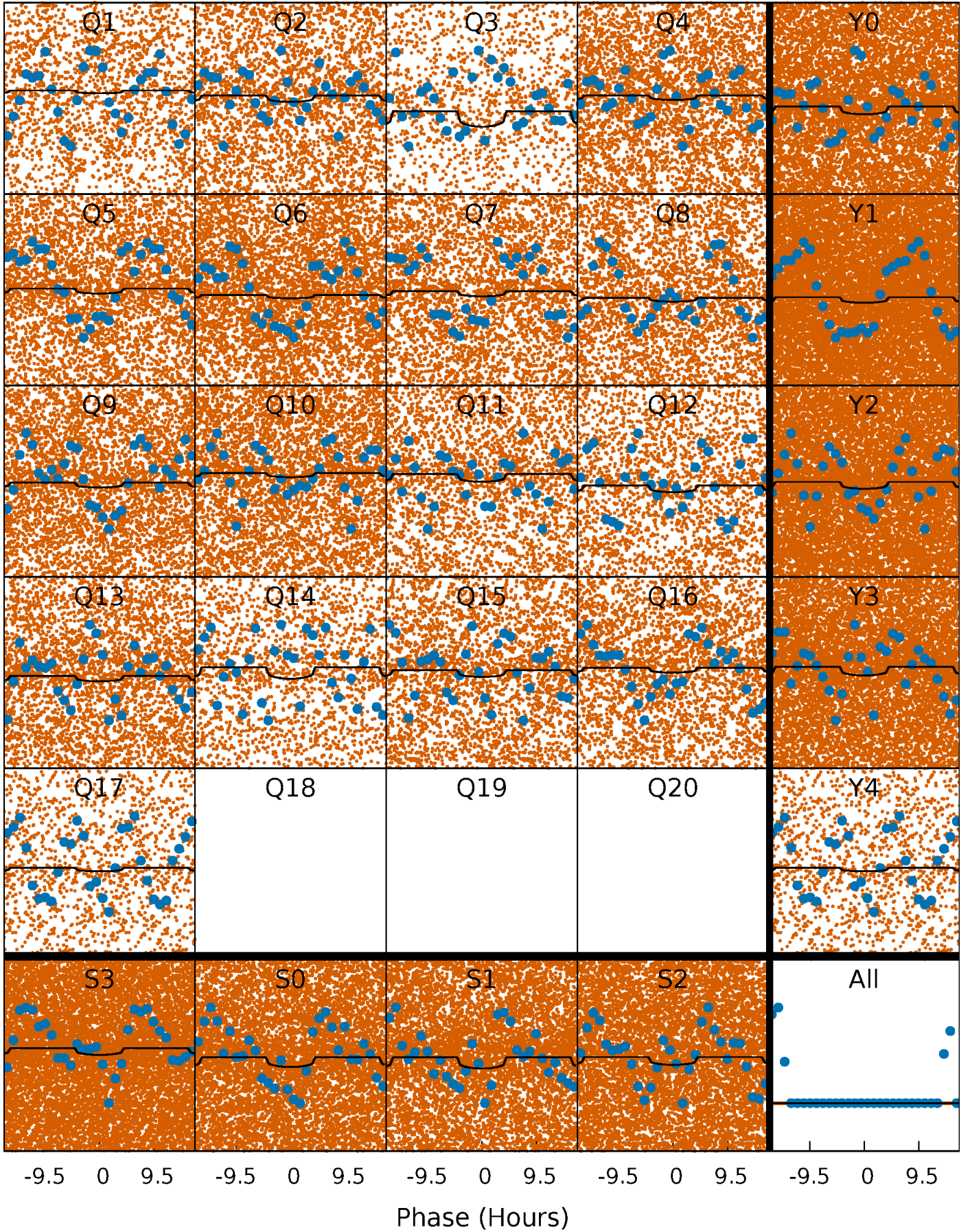
PDC Quarter-Phased Transit Curves

TCE 011759685-01 P= 0.822611 Days $T_0=132.174821$ (BKJD)



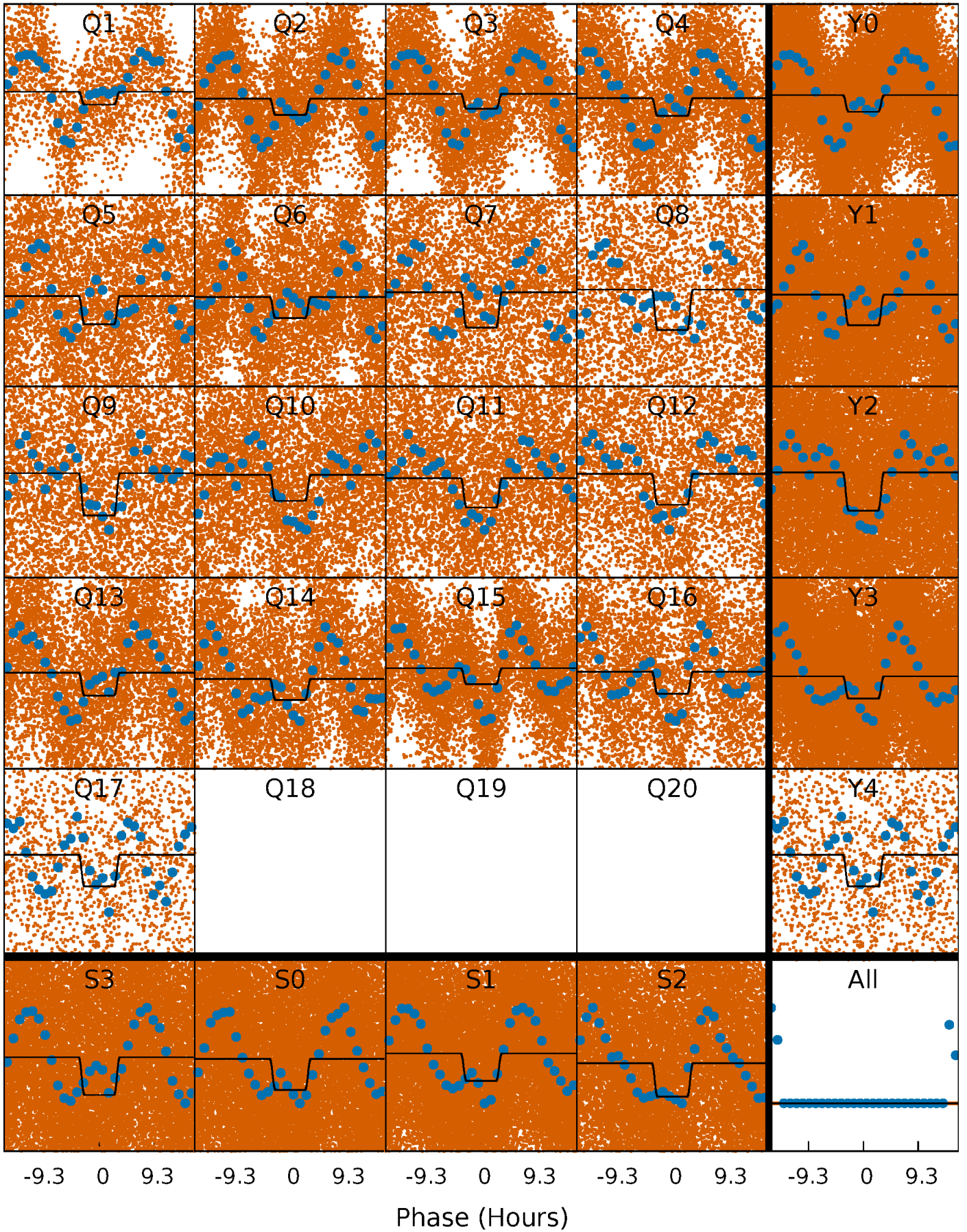
DV Quarter-Phased Transit Curves

TCE 011759685-01 P= 0.822611 Days $T_0=132.174821$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

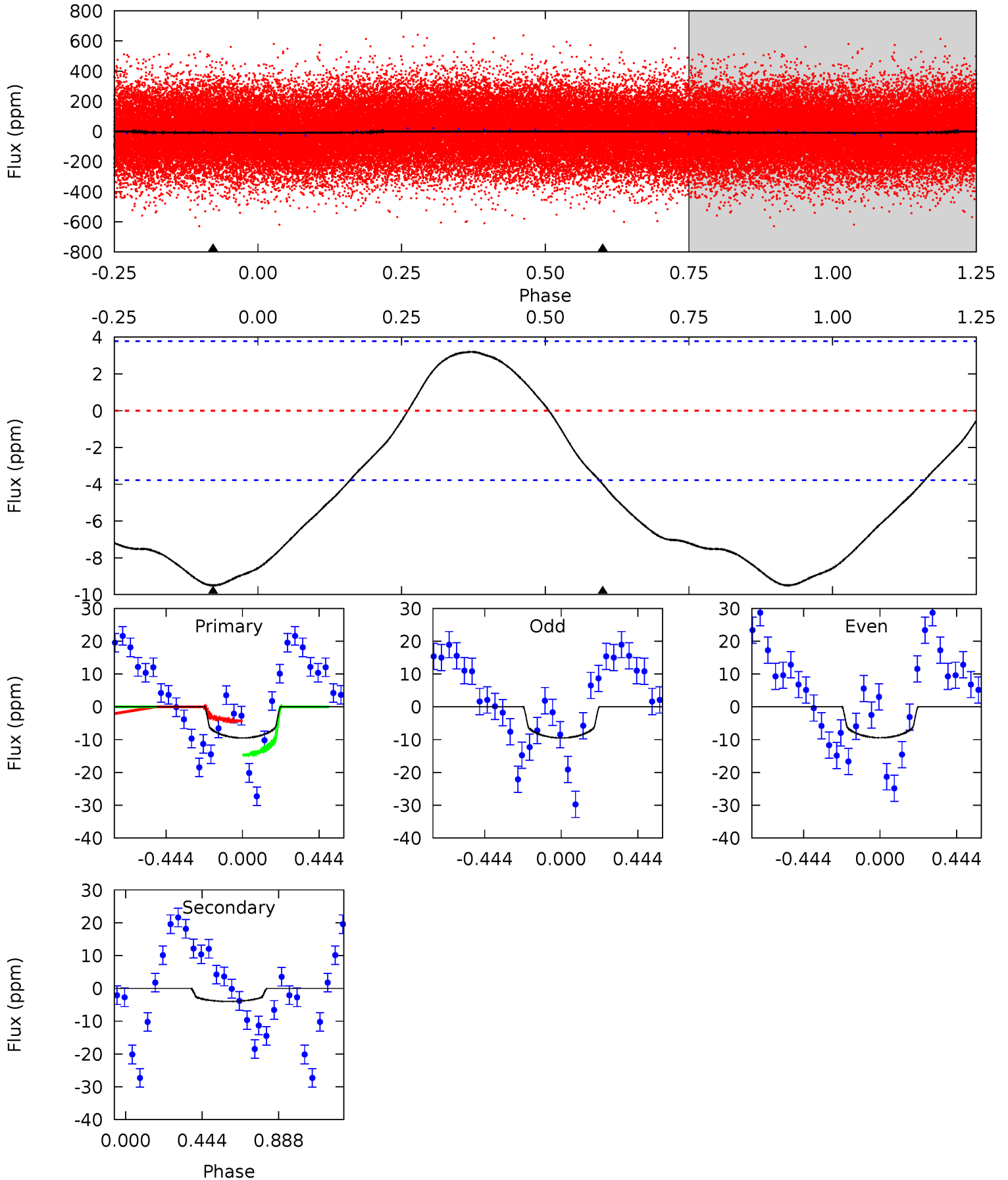
TCE 011759685-01 P= 0.822605 Days $T_0=132.181144$ (BKJD)



DV Model-Shift Uniqueness Test

011759685-01, $P = 0.822611$ Days, $E = 131.352210$ Days

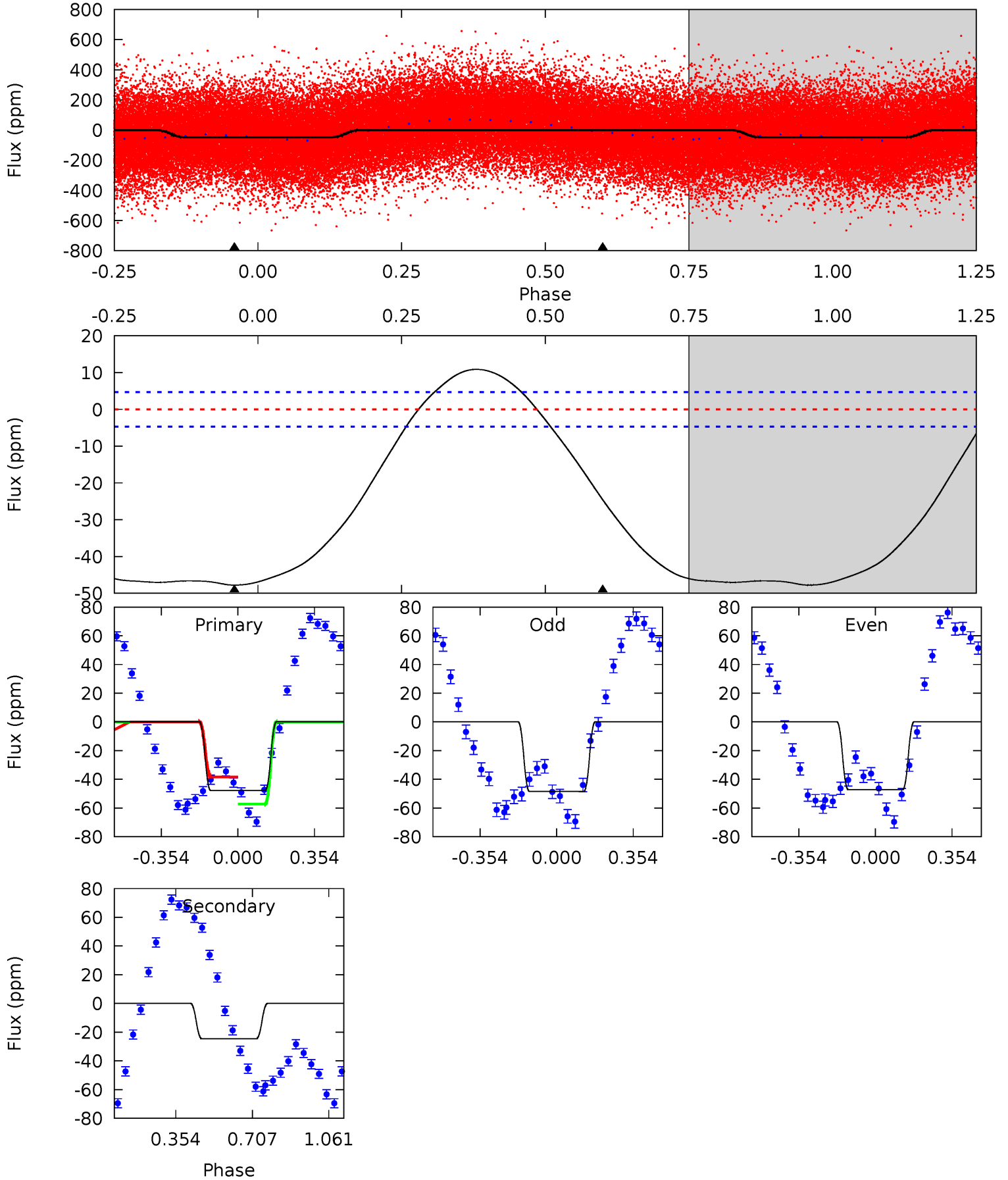
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	4.49	0	0	4.24	0.77	1.57	10.7	10.7	4.49	4.49	0.04	0.97	0.25	5.85



Alt Model-Shift Uniqueness Test

011759685-01, P = 0.822605 Days, E = 131.358539 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.8	22.5	0	0	4.29	0.93	5.37	43.8	43.8	22.5	22.5	0.56	1.00	0.19	8.87



Stellar Parameters For KIC 011759685

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6923^{+154}_{-206}	$3.435^{+0.382}_{-0.067}$	$-0.060^{+0.250}_{-0.200}$	$4.557^{+0.337}_{-1.908}$	$2.062^{+0.073}_{-0.413}$	$0.031^{+0.095}_{-0.007}$
	+2%/-3%	+11%/-2%	+417%/-333%	+7%/-42%	+4%/-20%	+308%/-22%
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 011759685-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-4 ± 1	$1.62^{+1.54}_{-1.10}$	6035^{+293}_{-618}	3756^{+5377}_{-8378}	$0.374^{+3.279}_{-0.274}$
Alt.	-25 ± 1	$3.17^{+1.80}_{-1.64}$	6035^{+295}_{-623}	5045^{+2923}_{-8491}	$0.644^{+2.042}_{-0.380}$

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

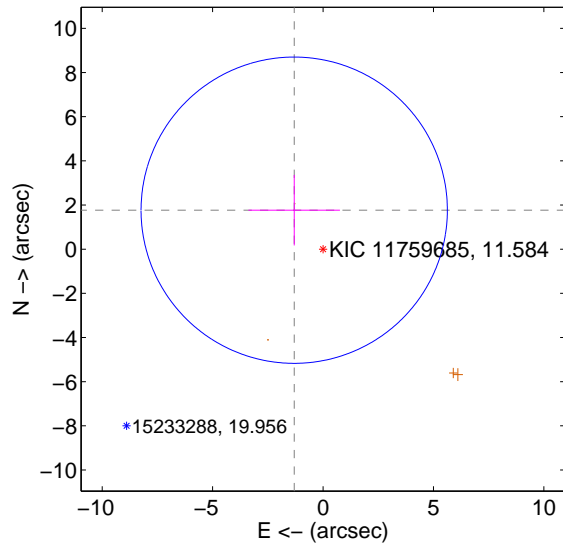
Supplemental centroid analysis for 011759685-01. **Kepler magnitude: 11.58.** Transit SNR 3.20

There are 0 quarters with good PRF difference image offsets

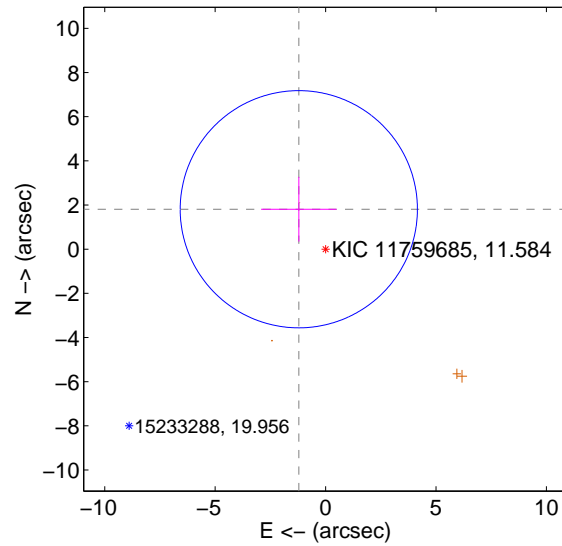
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.195 ± 2.312	0.95	1.306 ± 2.071	1.765 ± 1.598
PRF-fit source offset from KIC position	2.177 ± 1.790	1.22	1.212 ± 1.707	1.808 ± 1.465
photometric centroid source offset	1.31 ± 1.13	1.16	1.11 ± 1.05	0.71 ± 1.31

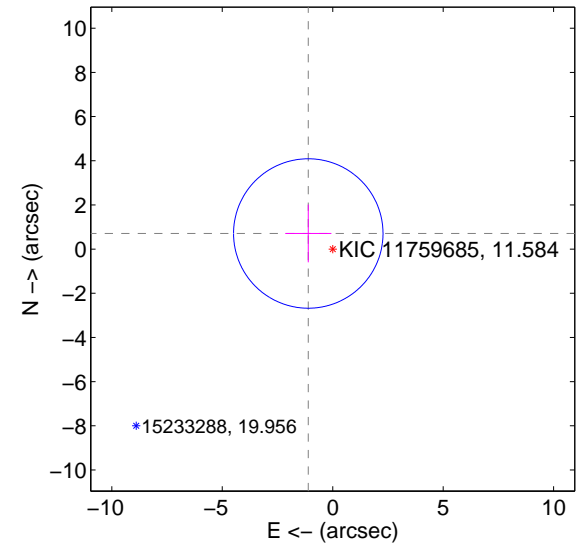
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

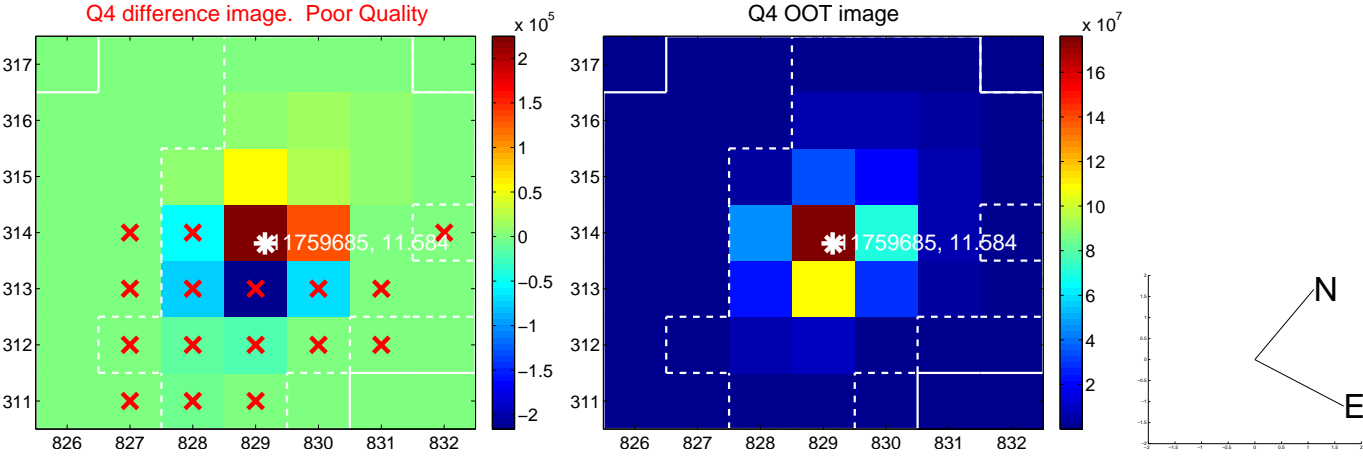
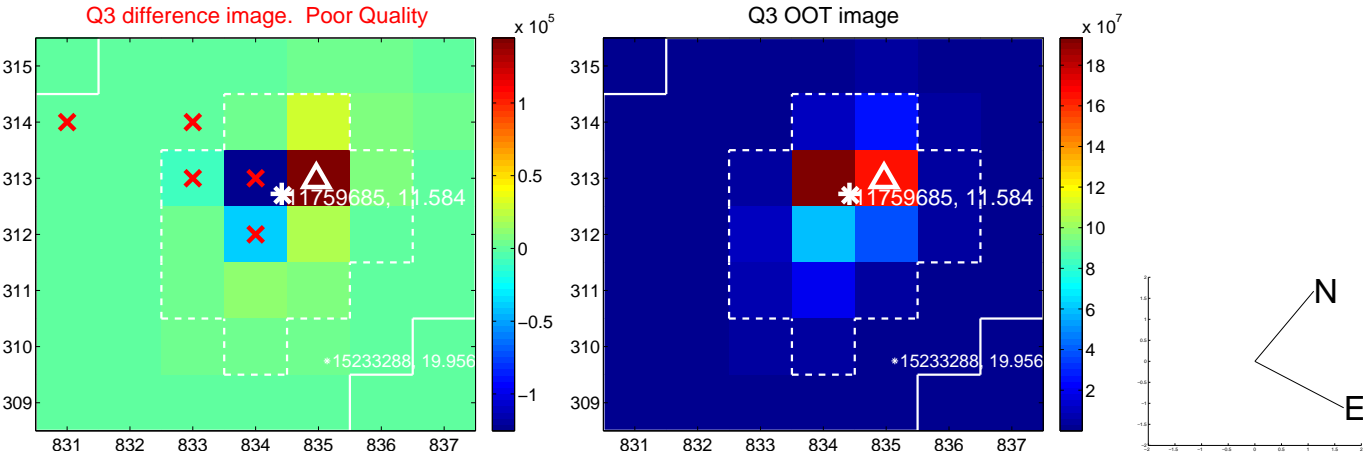
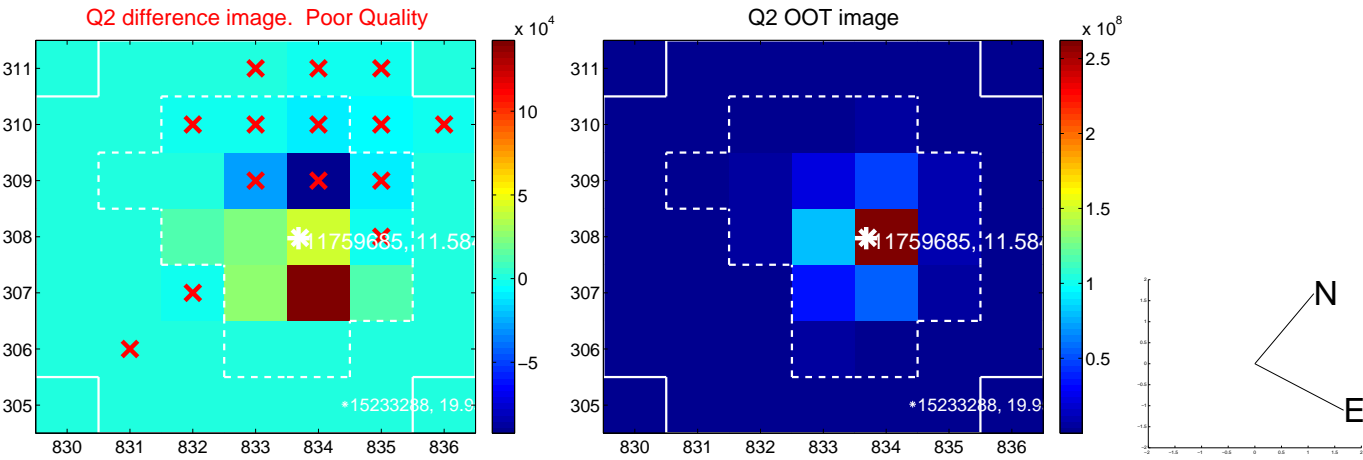
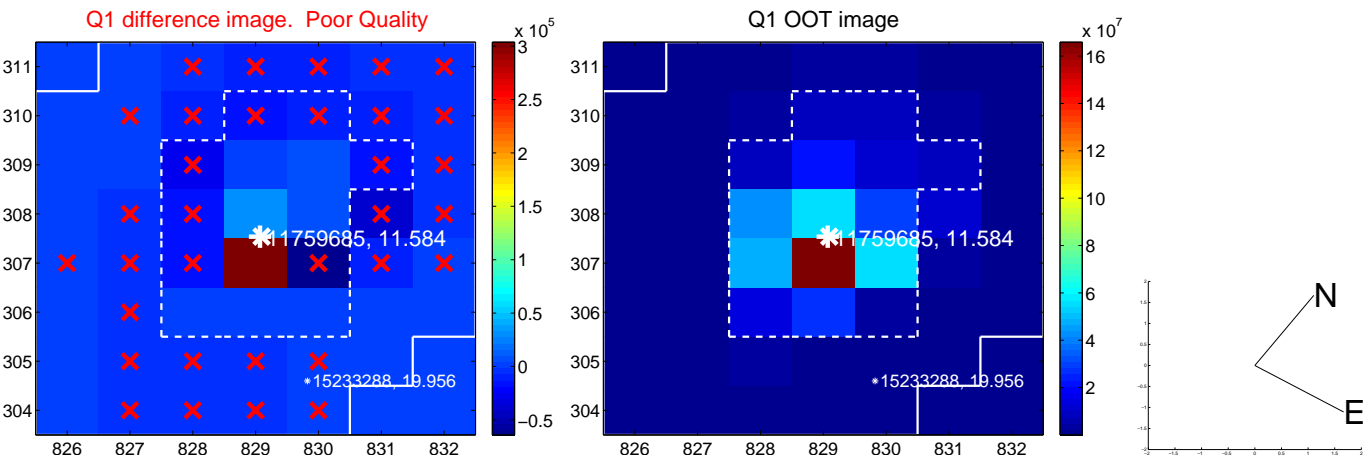


offset from photometric centroids

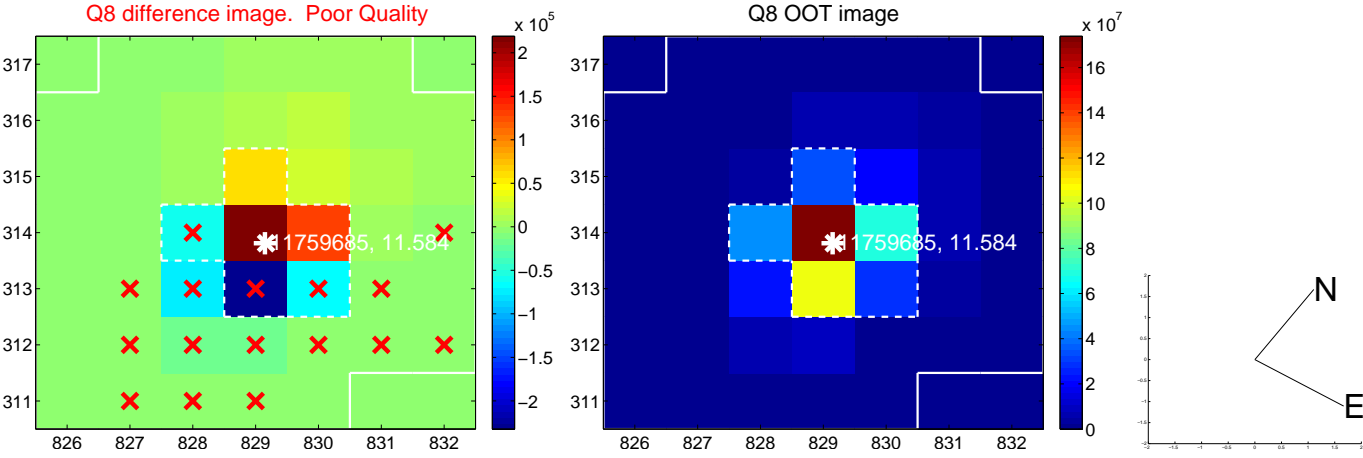
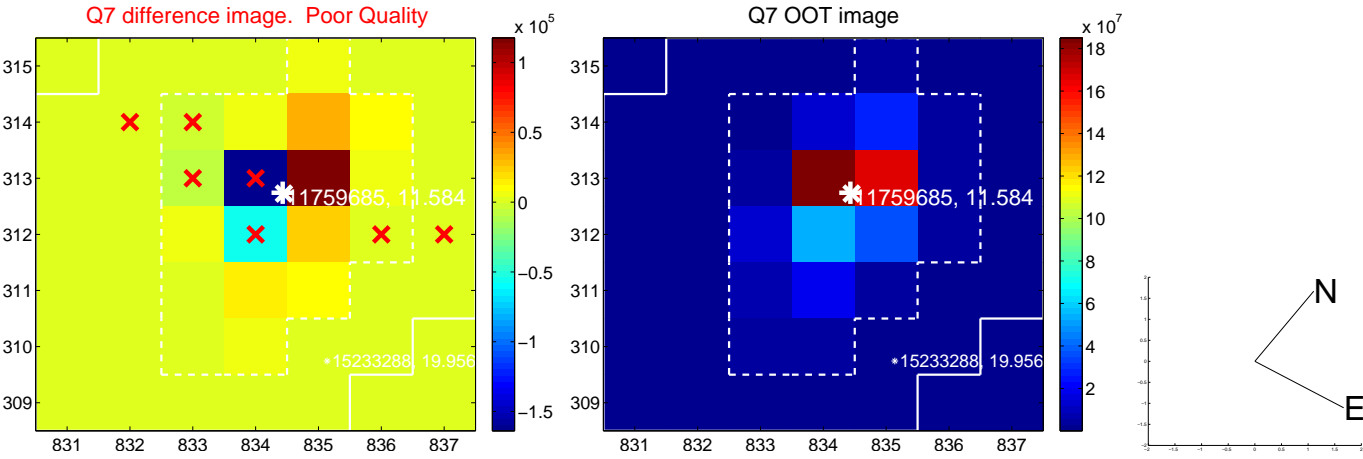
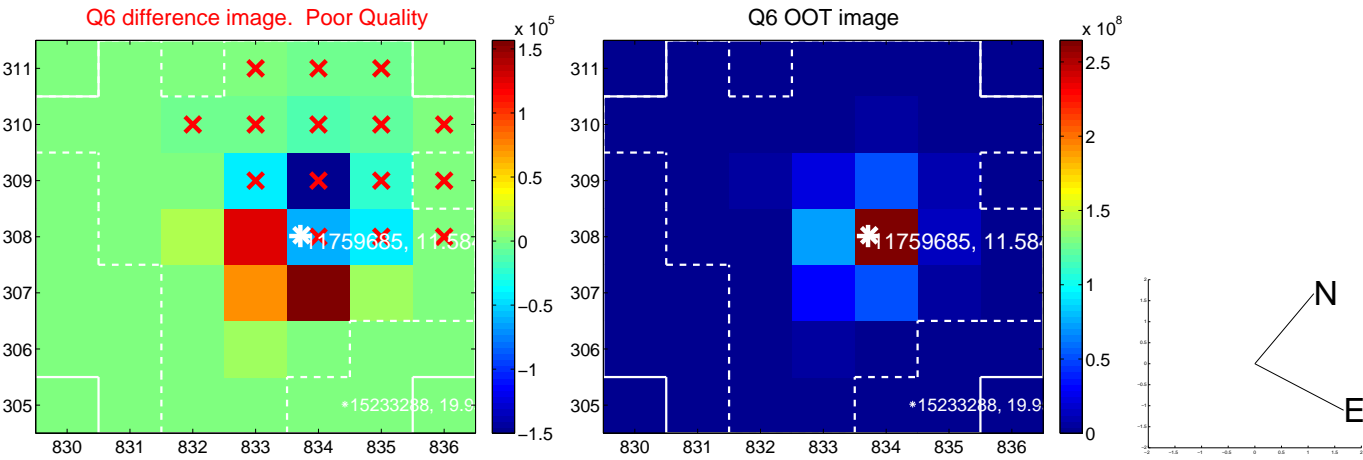
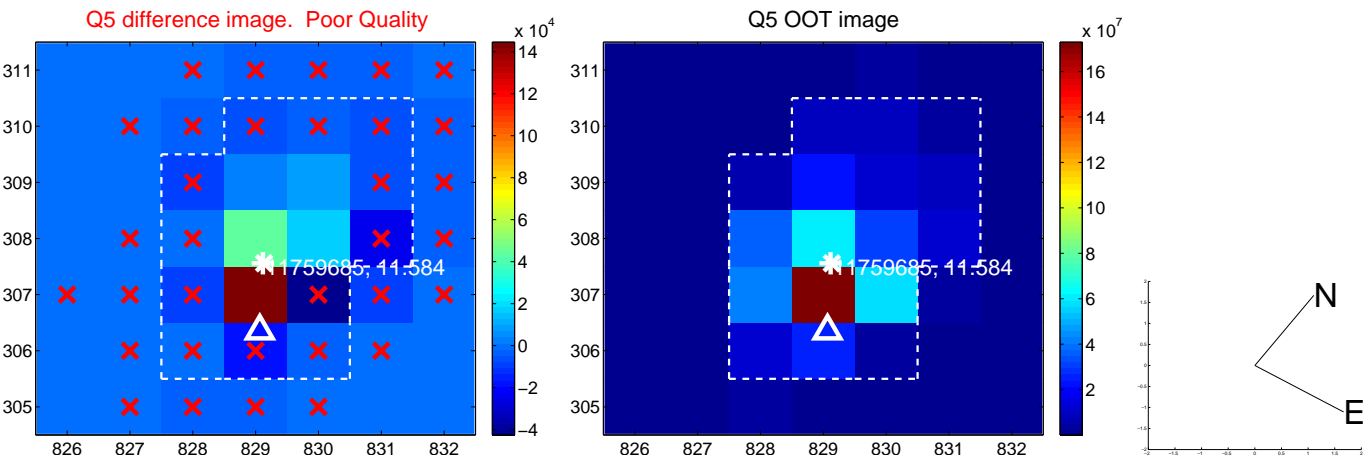


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

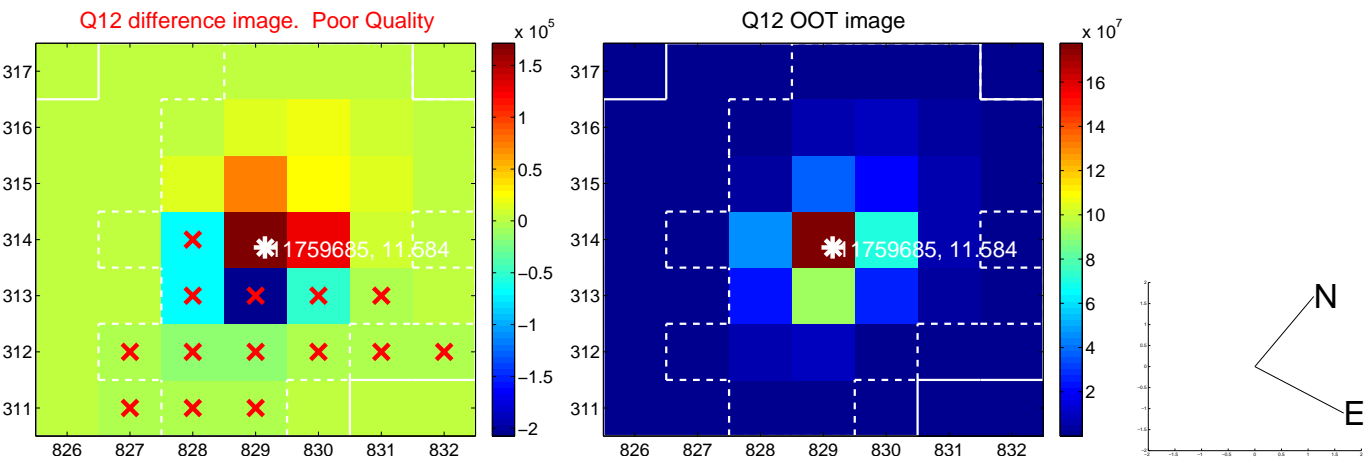
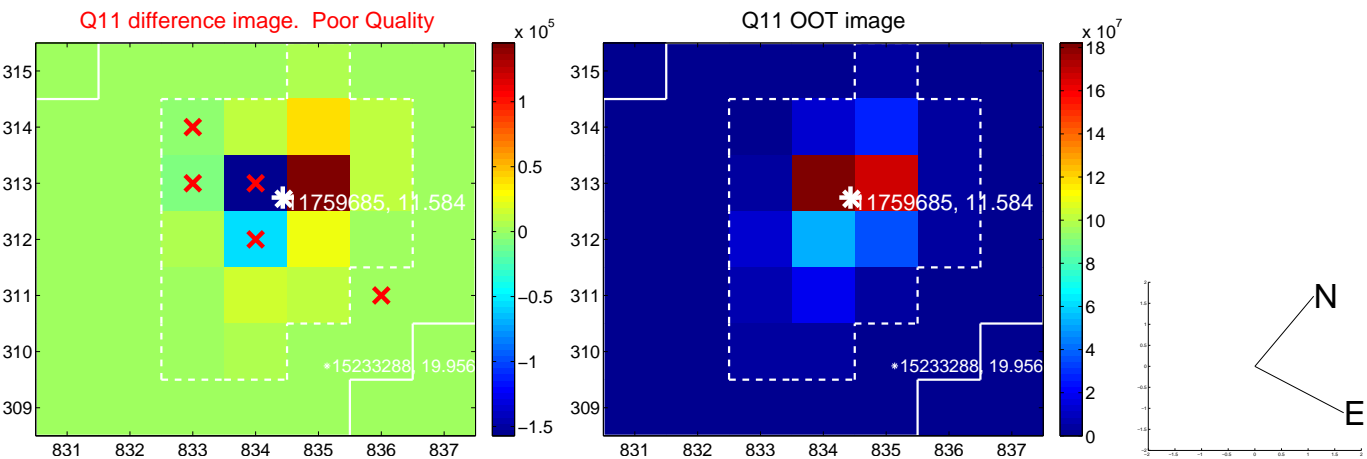
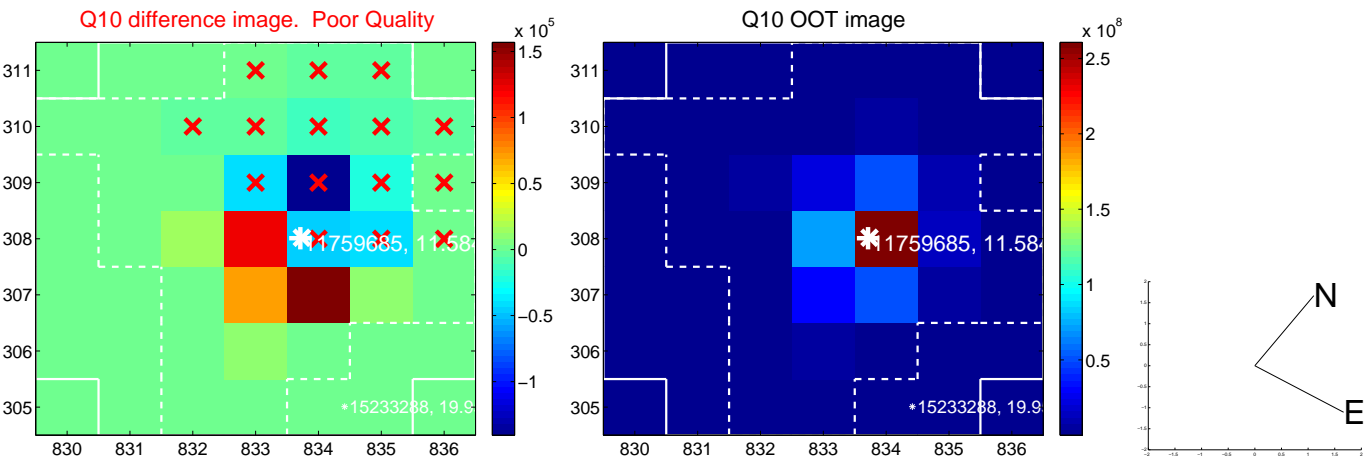
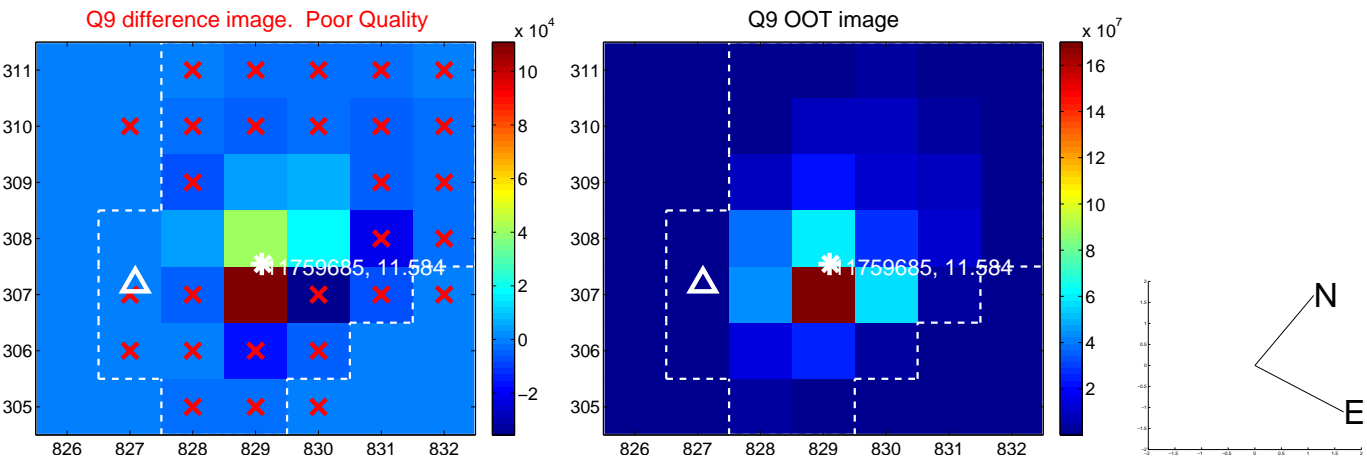
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



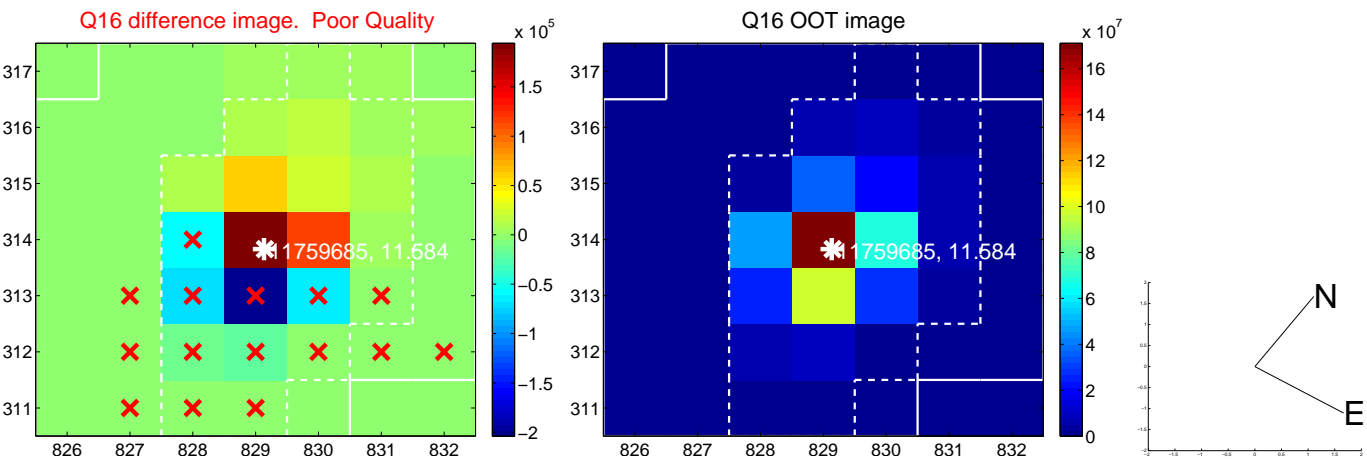
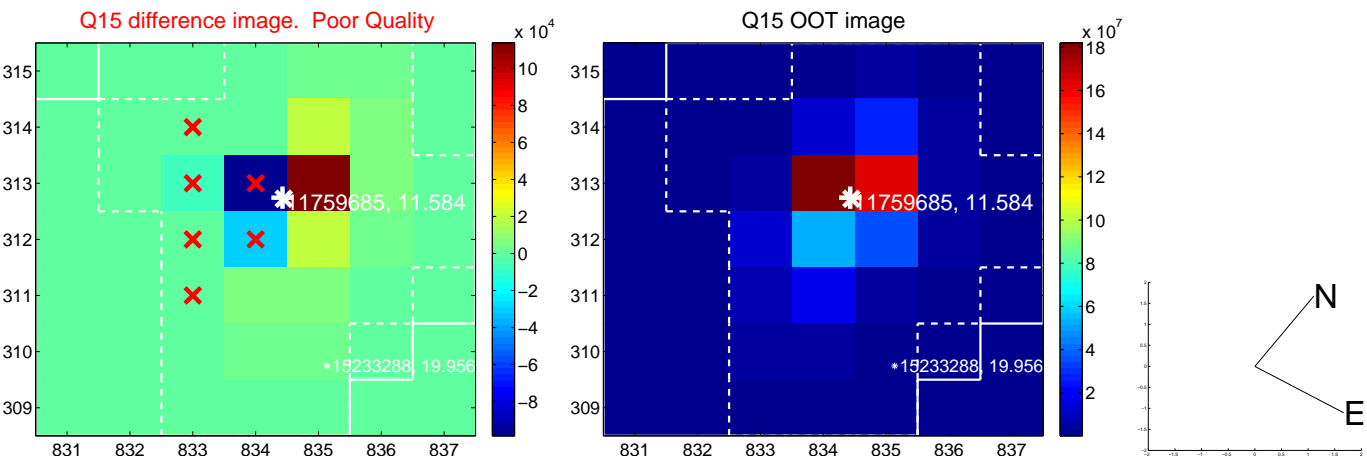
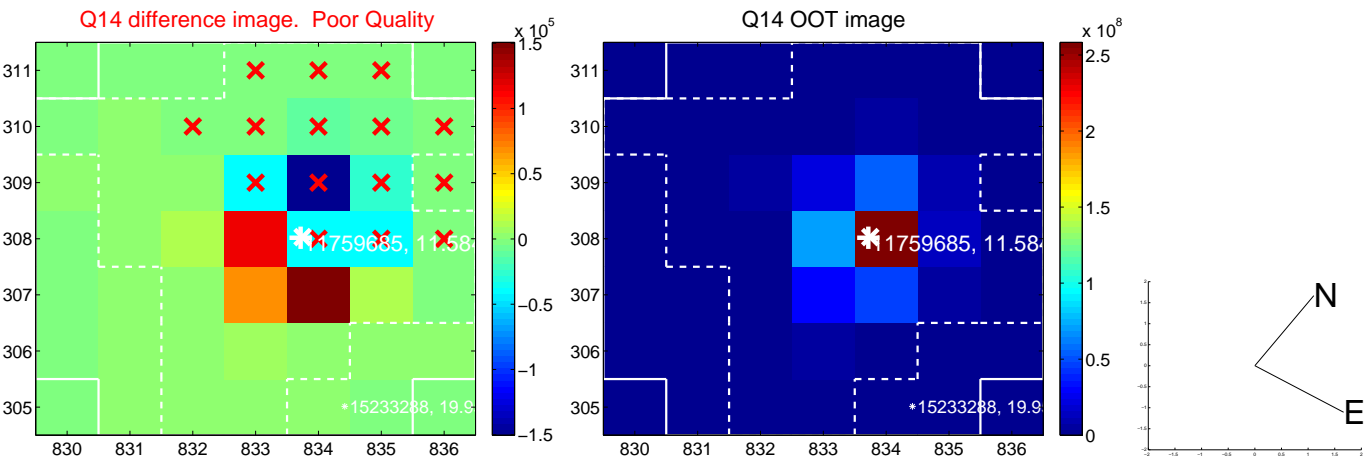
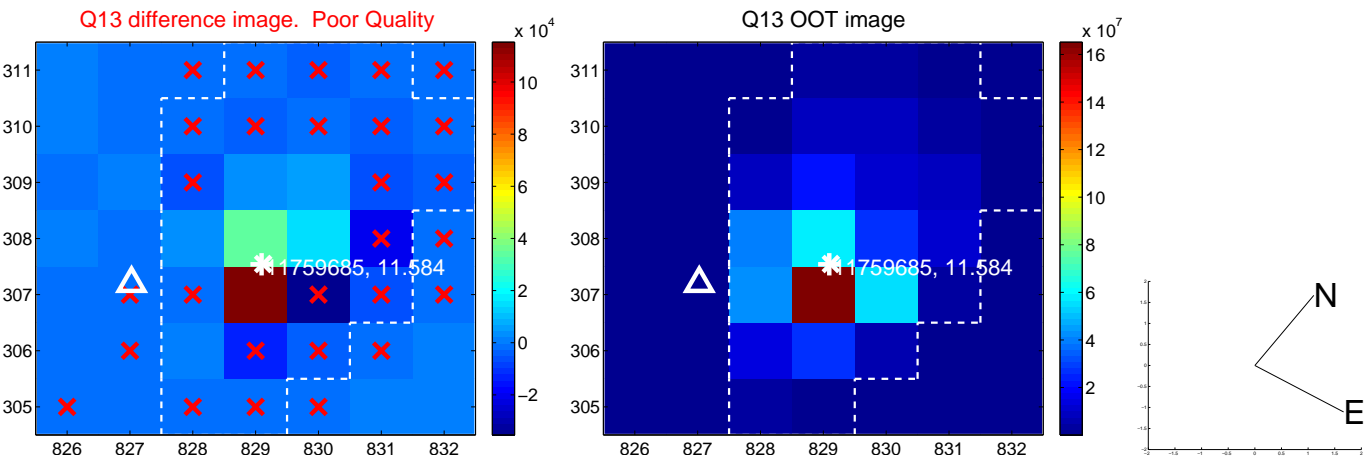
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



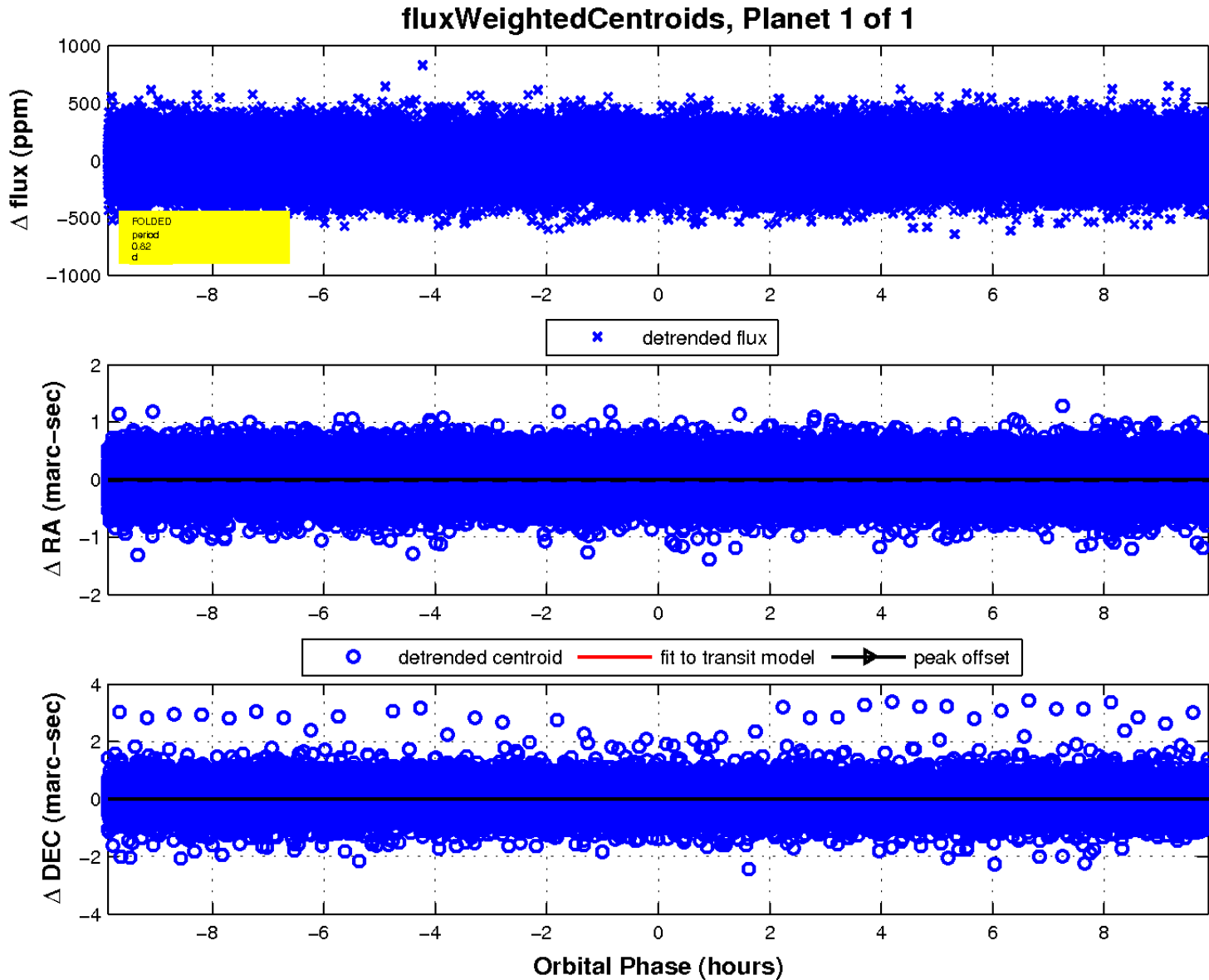
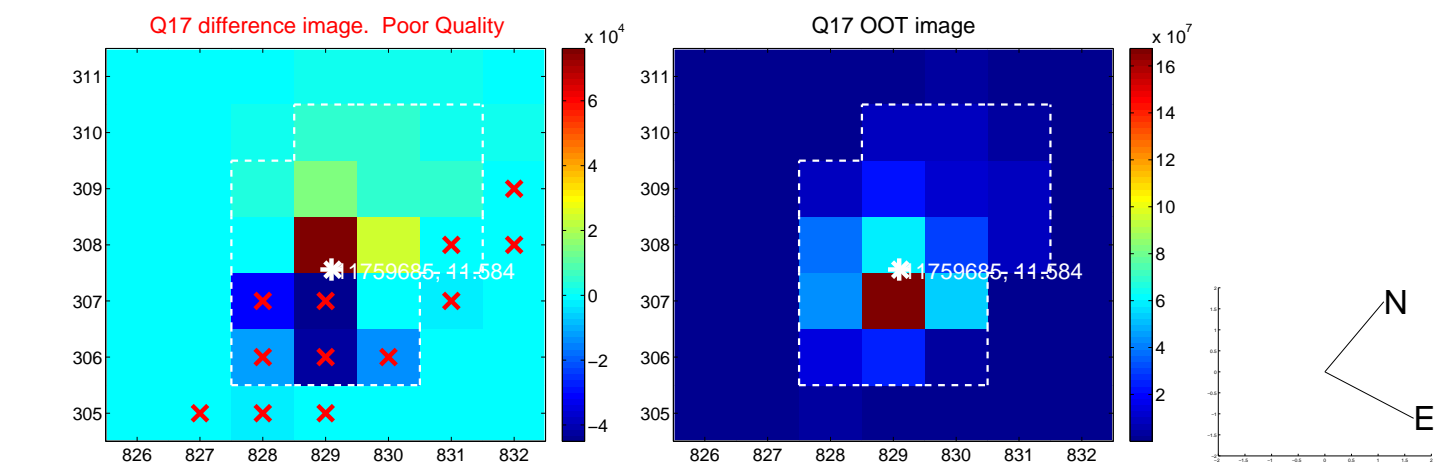
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

