

KIC 011809145

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})
011809145-01	OBS	No	1.518886	132.792182	0.0	12.799	8.1	0.0	2.99	7118	0.00	22356.65

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011809145-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

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

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

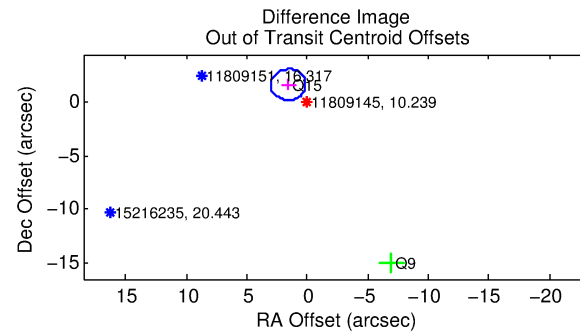
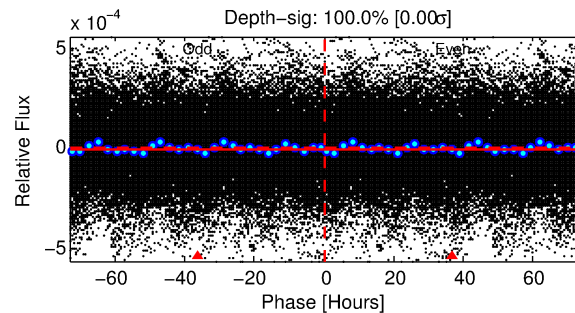
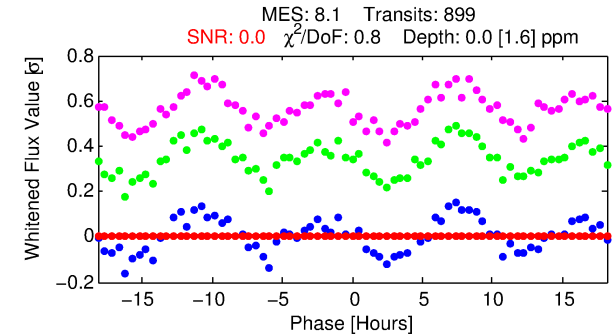
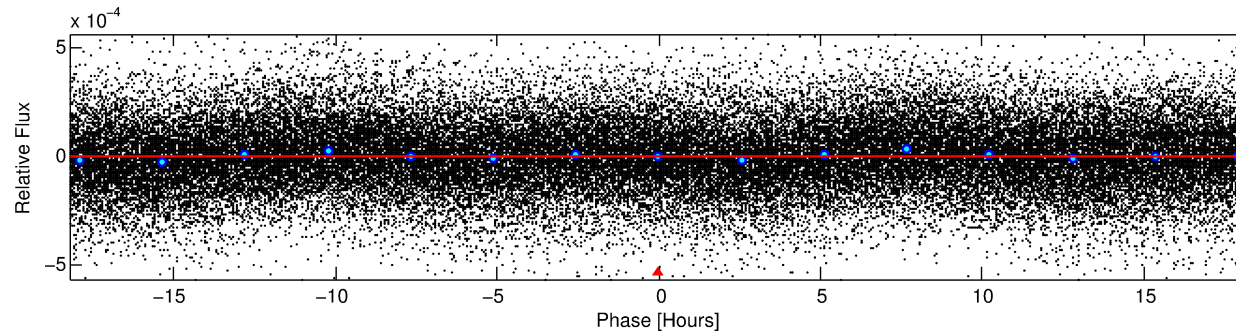
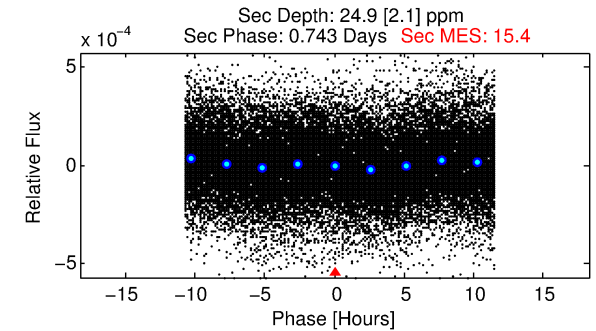
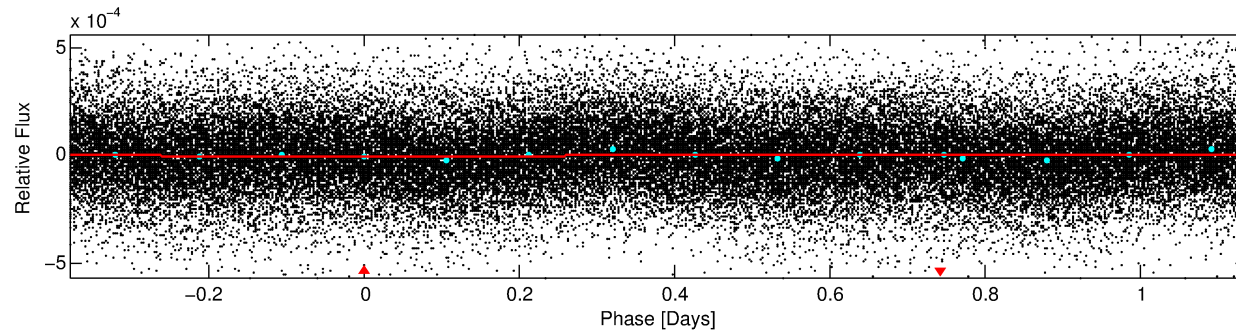
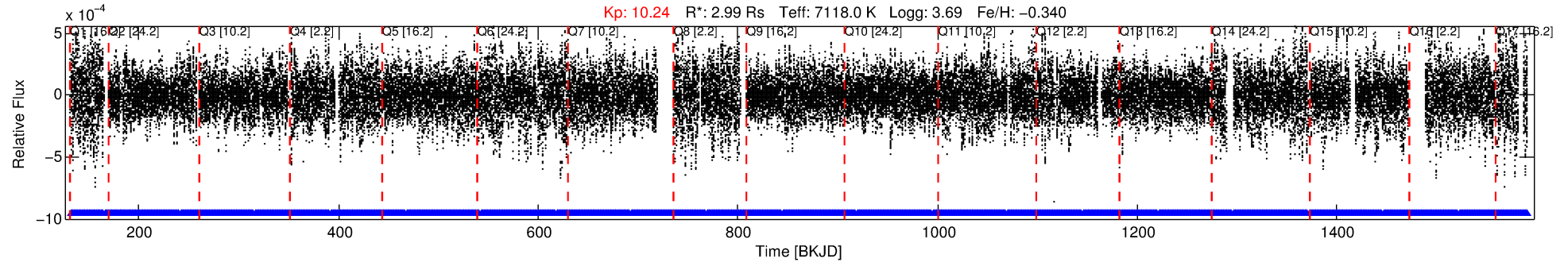
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011809145-01

No Significant Match Found

DV One-Page Summary

KIC: 11809145 Candidate: 1 of 1 Period: 1.519 d



DV Fit Results:

Period = 1.51889 [2.28459] d
Epoch = 132.7922 [420.5084] BKJD
 $R_p/R^* = 0.0000$ [0.0749]
 $a/R^* = 1.10$ [128.11]
 $b = 0.41$ [1517.49]
 $S_{\text{eff}} = 22356.65$ [46524.29]
 $T_{\text{eq}} = 3118$ [1622] K
 $R_p = 0.00$ [24.44] R_e
 $a = 0.0303$ [0.0322] AU
 $A_g = 1311700.68$ [20685989520.90] [0.00σ]
 $T_{\text{effp}} = 163146$ [643247134] K [0.00σ]

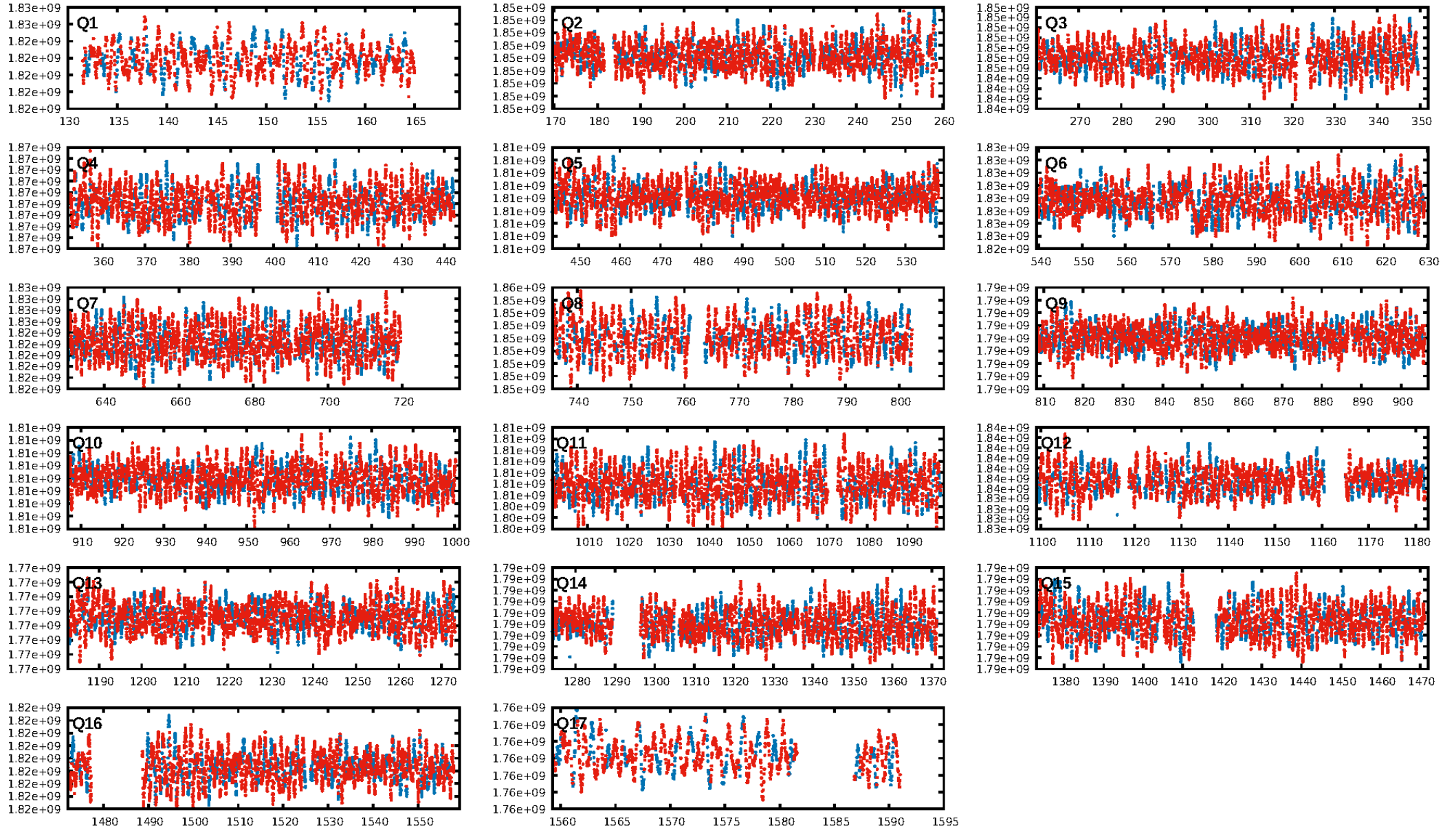
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [857/857]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OutOffset-rm: 2.300 arcsec [4.78σ]
KicOffset-rm: 2.643 arcsec [0.57σ]
OutOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [17/17]

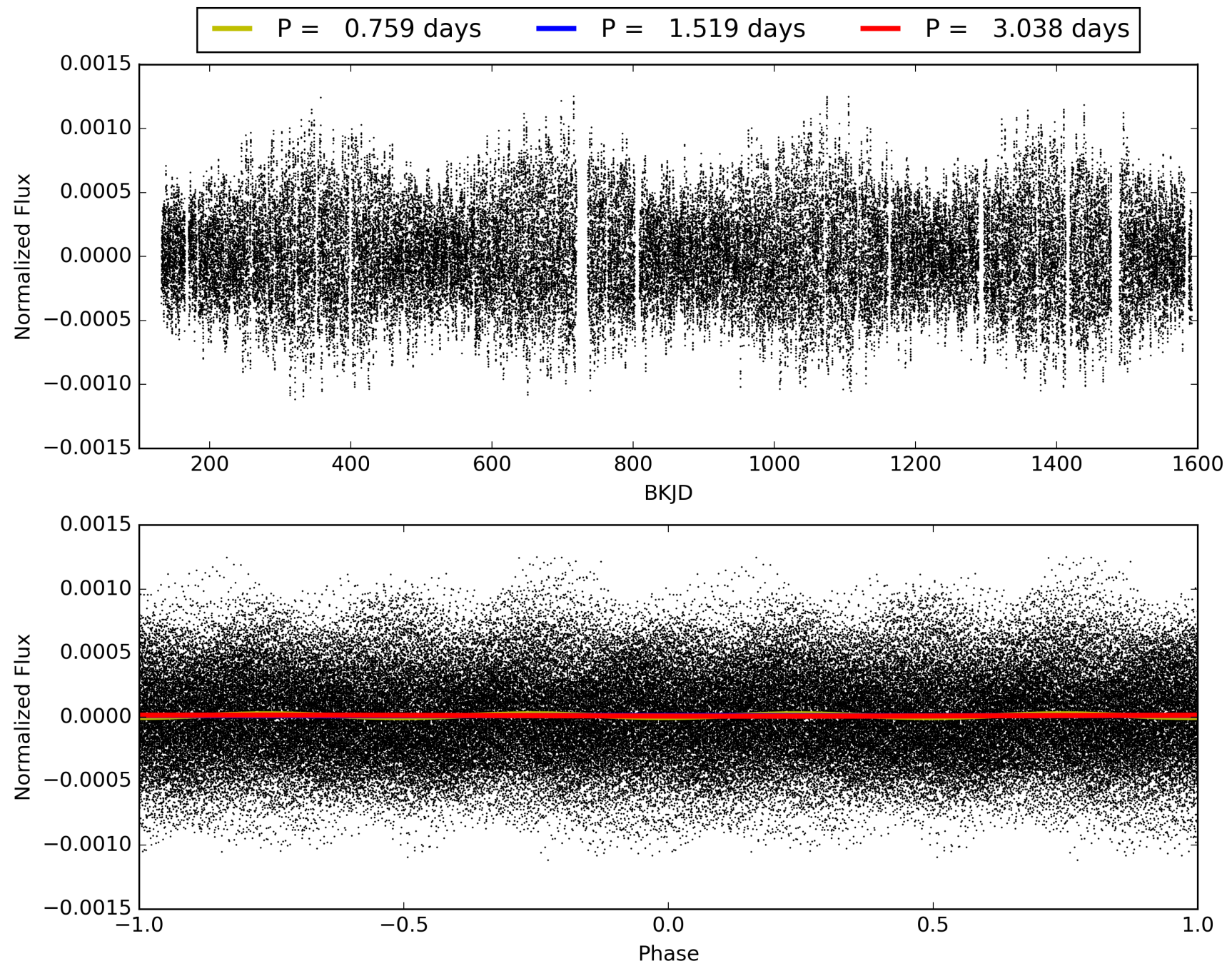
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:08:40 Z

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

TCE 011809145-01, PDC Light Curves

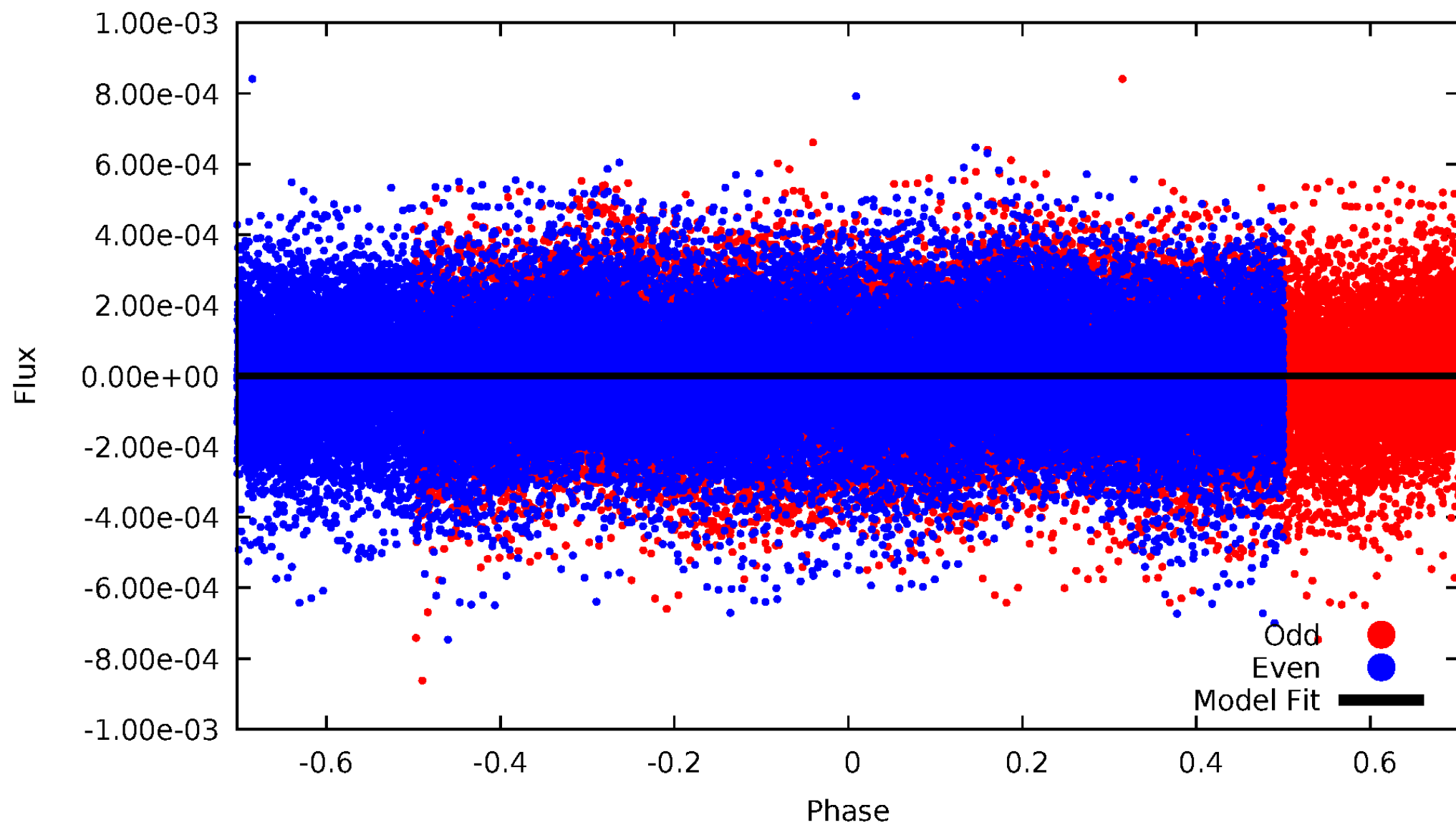


TCE 011809145-01



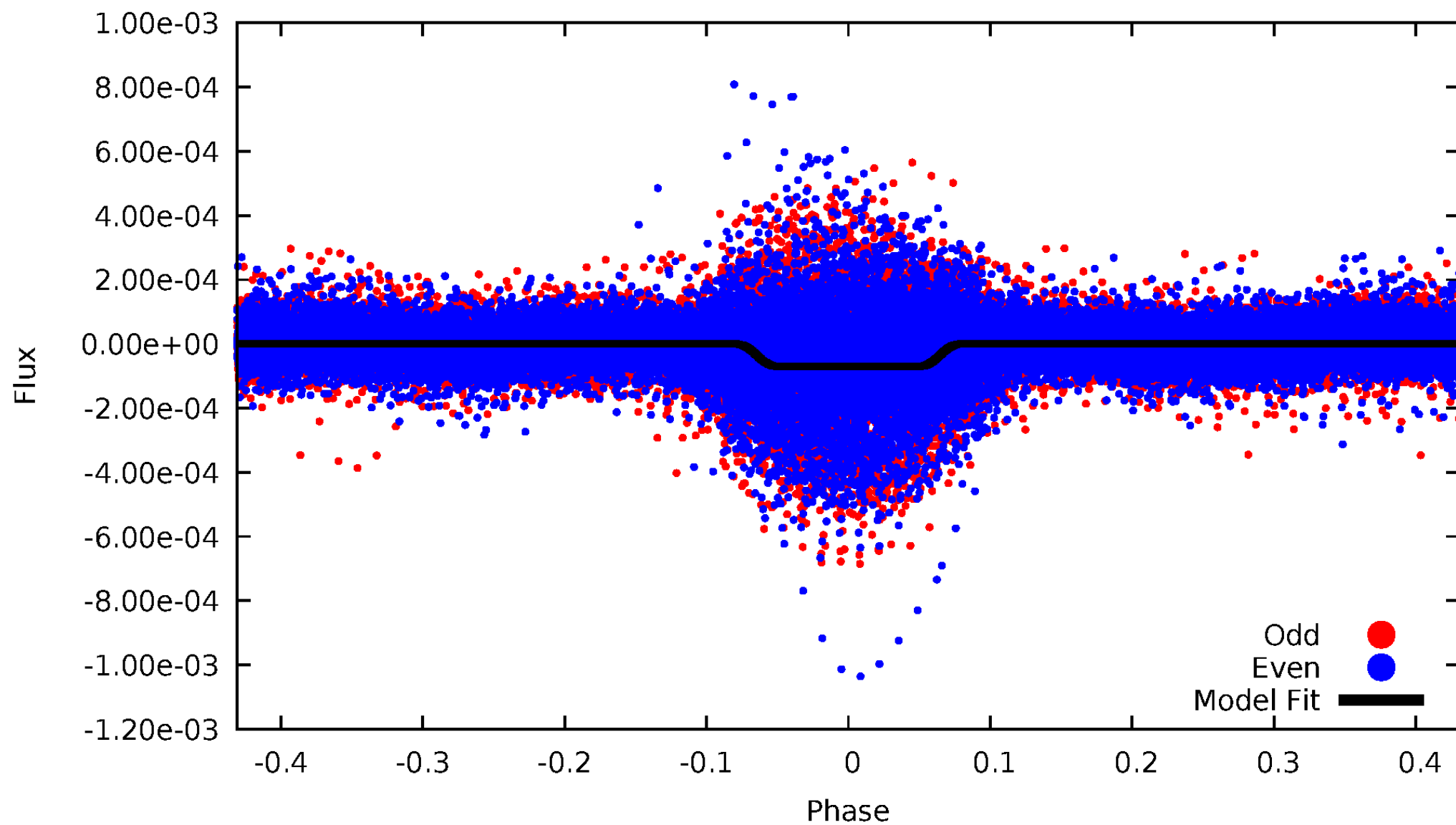
DV Odd/Even

TCE 011809145-01



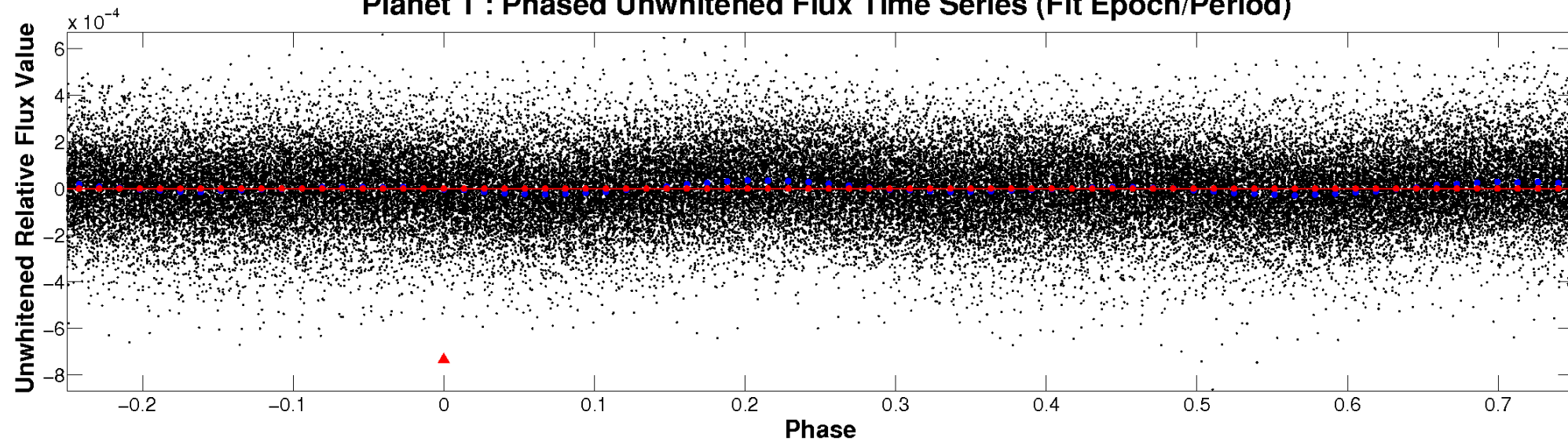
ALT Odd/Even

TCE 011809145-01

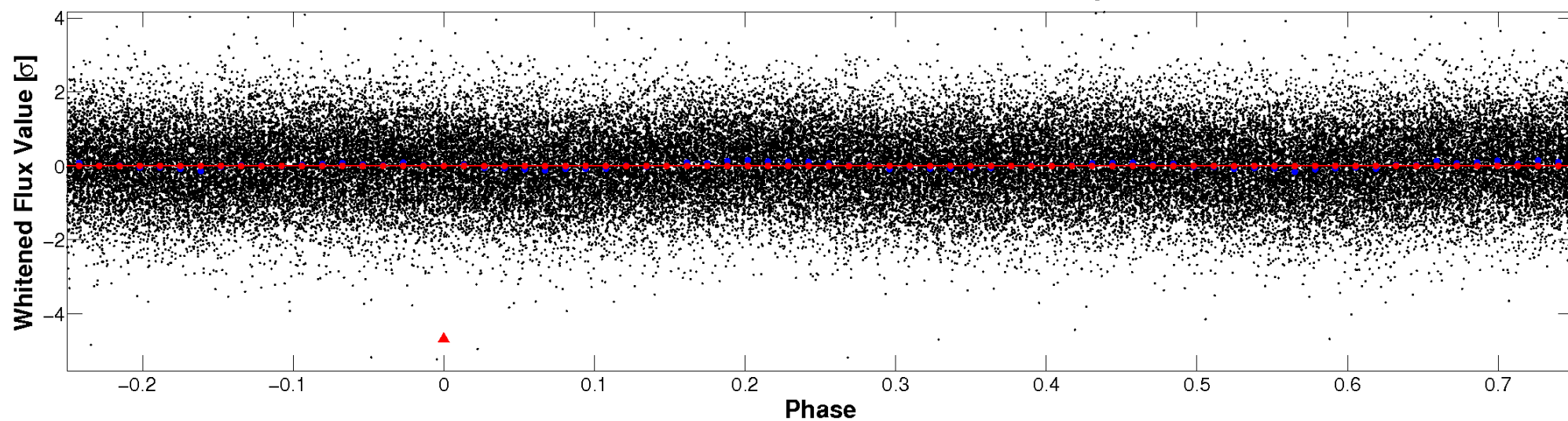


Non-Whitened Vs. Whitened Light Curve

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

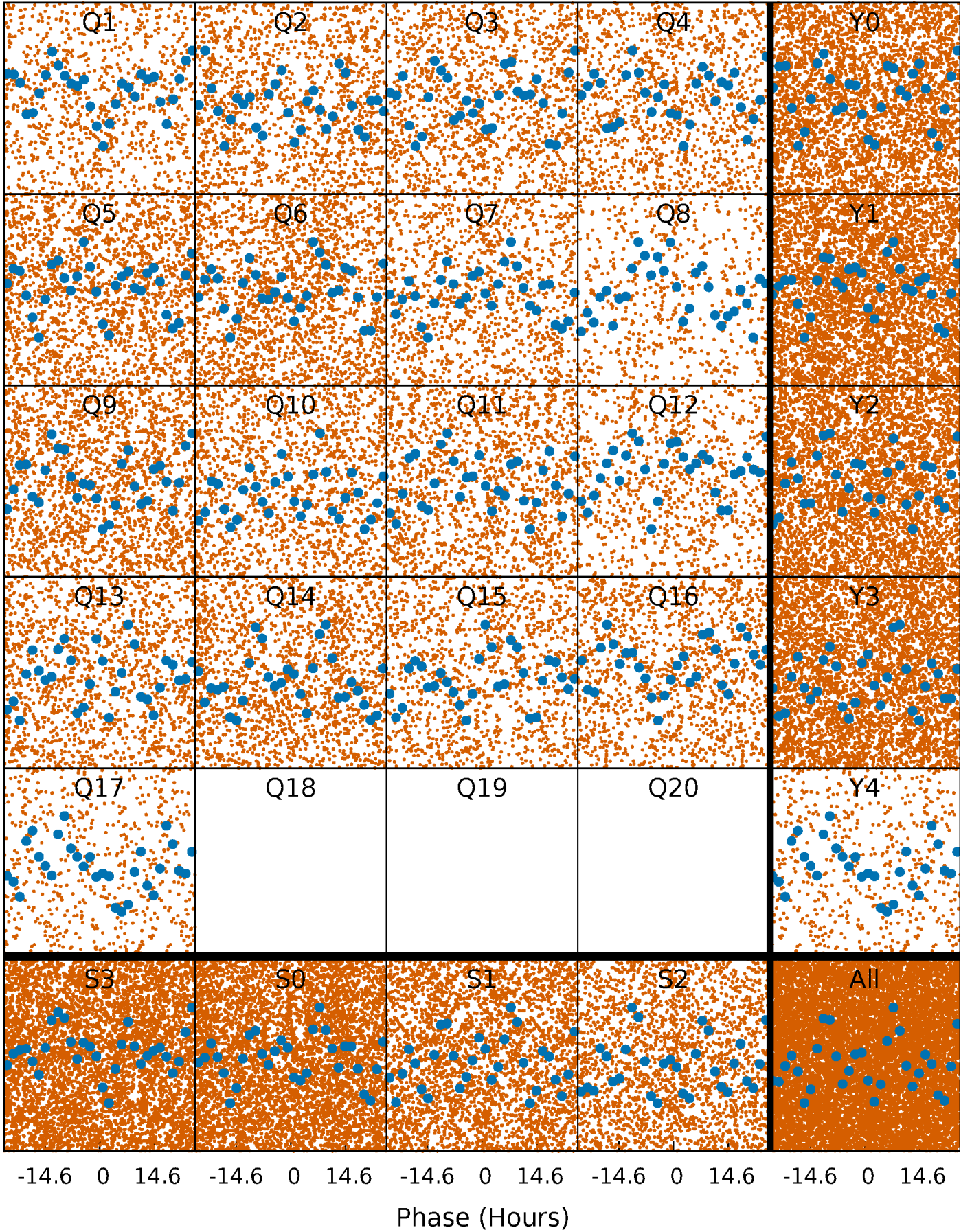


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



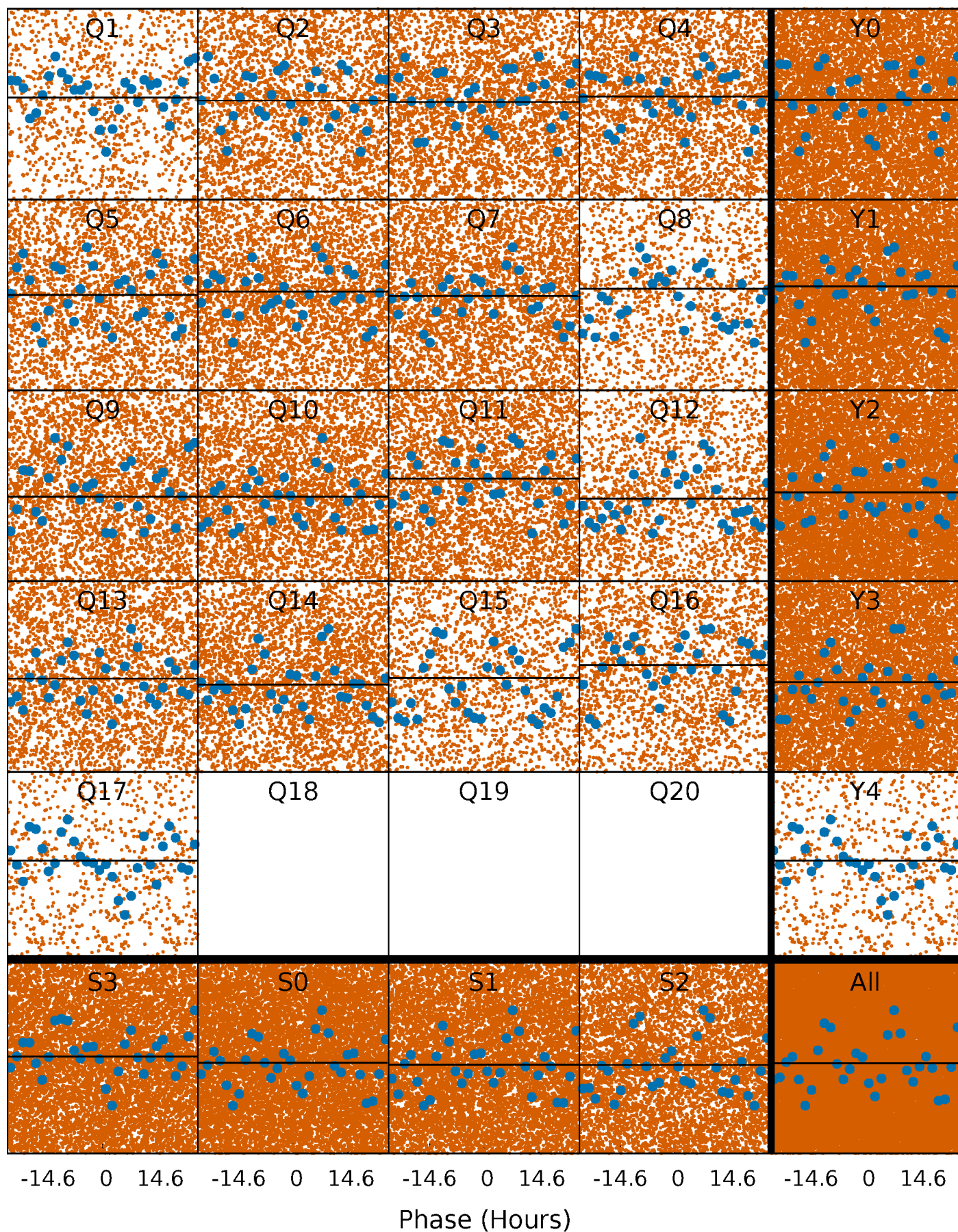
PDC Quarter-Phased Transit Curves

TCE 011809145-01 P= 1.518886 Days $T_0=132.792182$ (BKJD)



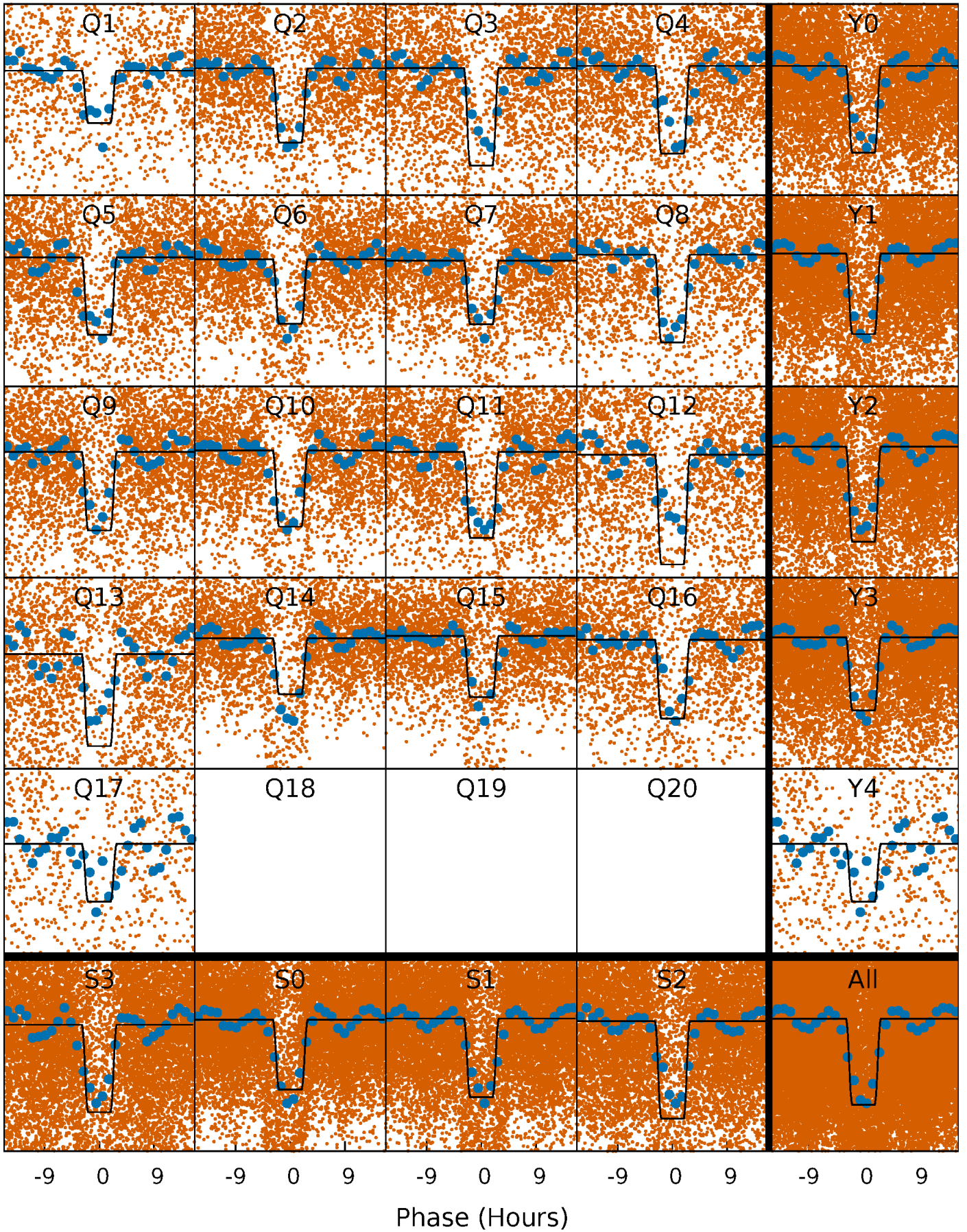
DV Quarter-Phased Transit Curves

TCE 011809145-01 P= 1.518886 Days $T_0=132.792182$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

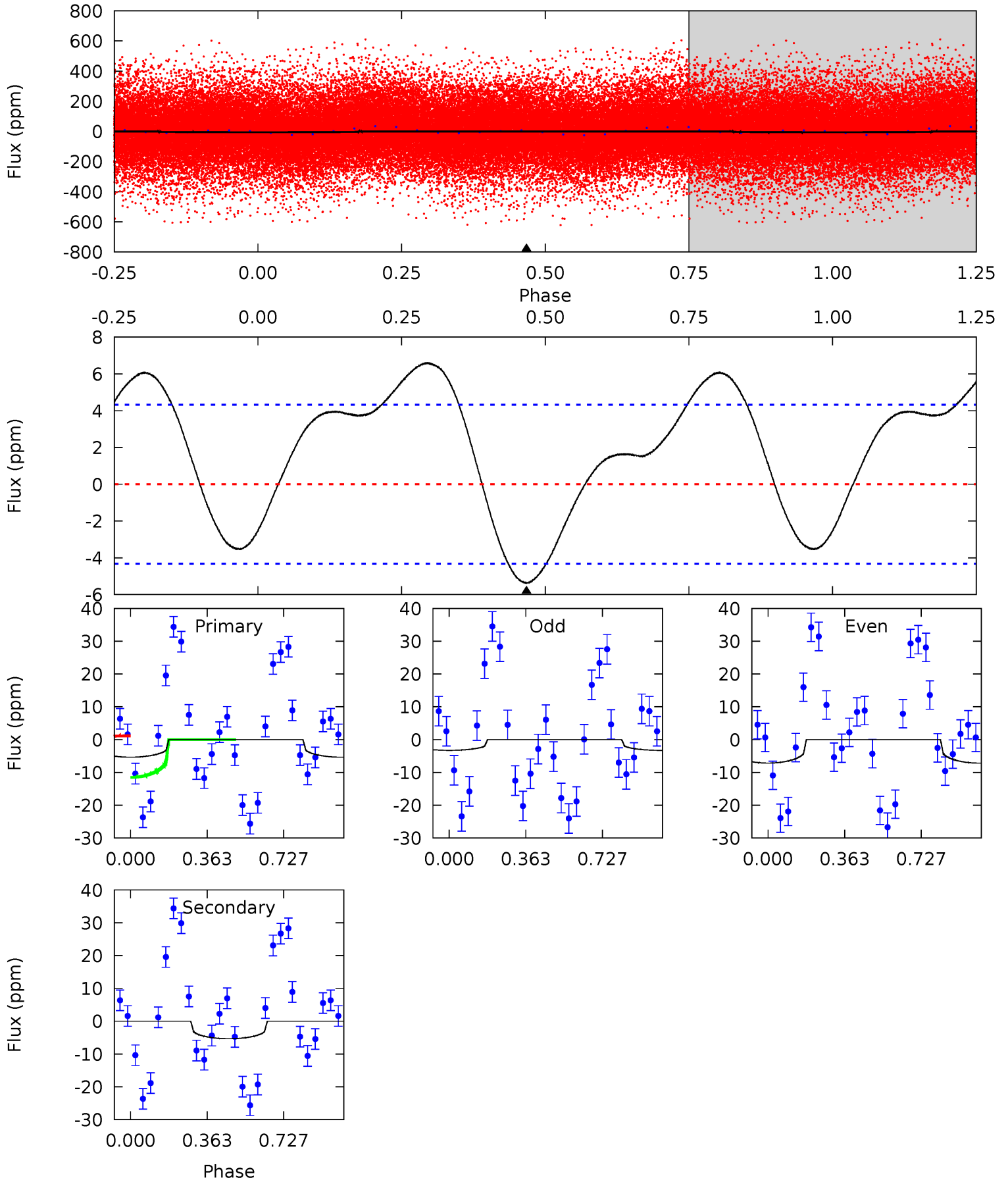
TCE 011809145-01 P= 1.519059 Days $T_0=132.836295$ (BKJD)



DV Model-Shift Uniqueness Test

011809145-01, P = 1.518886 Days, E = 131.273296 Days

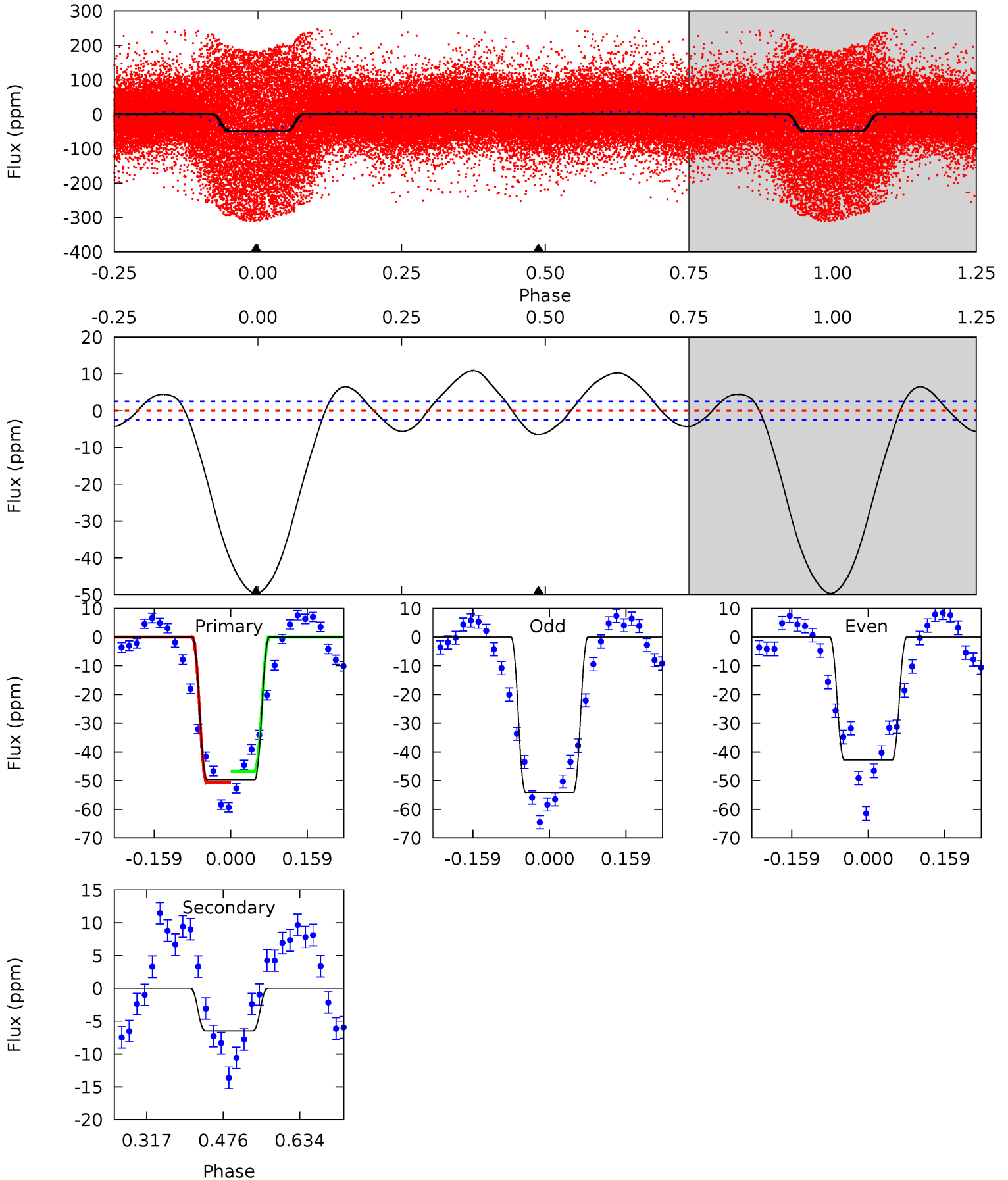
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.32	5.32	0	0	4.29	0.91	2.72	5.32	5.32	5.32	5.32	1.92	0.94	0.55	5.19



Alt Model-Shift Uniqueness Test

011809145-01, P = 1.519059 Days, E = 131.317236 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
86.8	11.3	0	0	4.47	1.41	6.95	86.8	86.8	11.3	11.3	9.83	1.06	0.18	3.37



Stellar Parameters For KIC 011809145

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7118^{+193}_{-214}	$3.694^{+0.312}_{-0.059}$	$-0.340^{+0.300}_{-0.250}$	$2.990^{+0.357}_{-1.141}$	$1.612^{+0.229}_{-0.306}$	$0.085^{+0.200}_{-0.021}$
	+3%/-3%	+8%/-2%	+88%/-74%	+12%/-38%	+14%/-19%	+235%/-24%
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 011809145-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 1	$15.30^{+16.99}_{-10.51}$	3674^{+1741}_{-723}	-3320^{+785}_{-1167}	$0.017^{+0.199}_{-0.015}$
Alt.	-6 ± 1	$15.68^{+17.84}_{-11.15}$	3610^{+1780}_{-710}	-3310^{+1031}_{-1116}	$0.021^{+0.250}_{-0.018}$

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 $A_{obs} \gg 1.0$

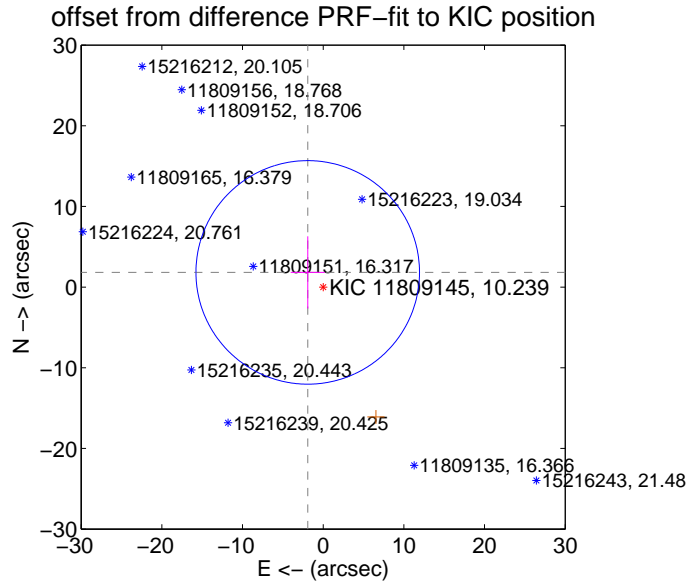
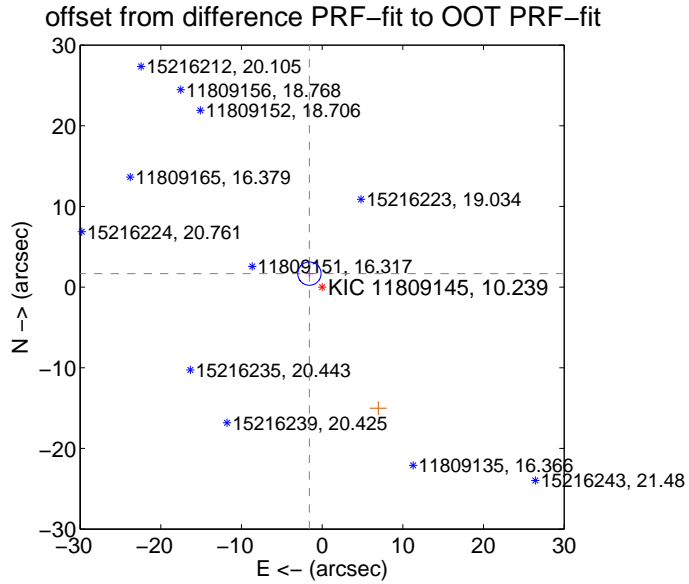
DV Centroid Data

Supplemental centroid analysis for 011809145-01. **Kepler magnitude: 10.24.** Transit SNR 0.00

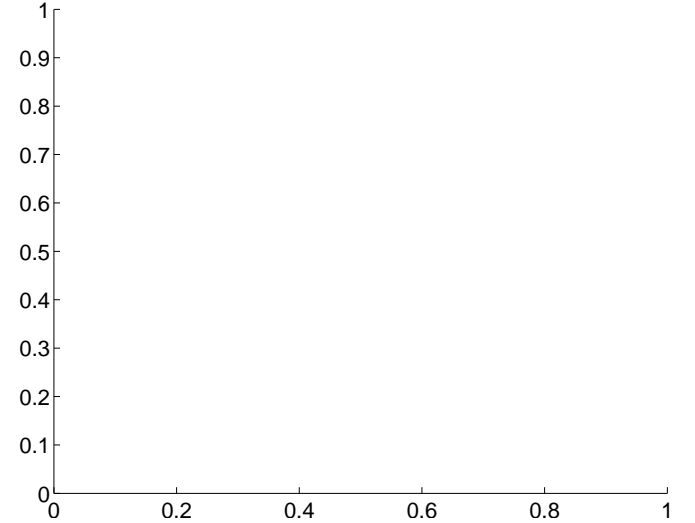
There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.300 \pm 0.481	4.78	1.579 \pm 0.535	1.673 \pm 0.428
PRF-fit source offset from KIC position	2.643 \pm 4.619	0.57	1.915 \pm 2.115	1.821 \pm 4.480
photometric centroid source offset	—	—	—	—

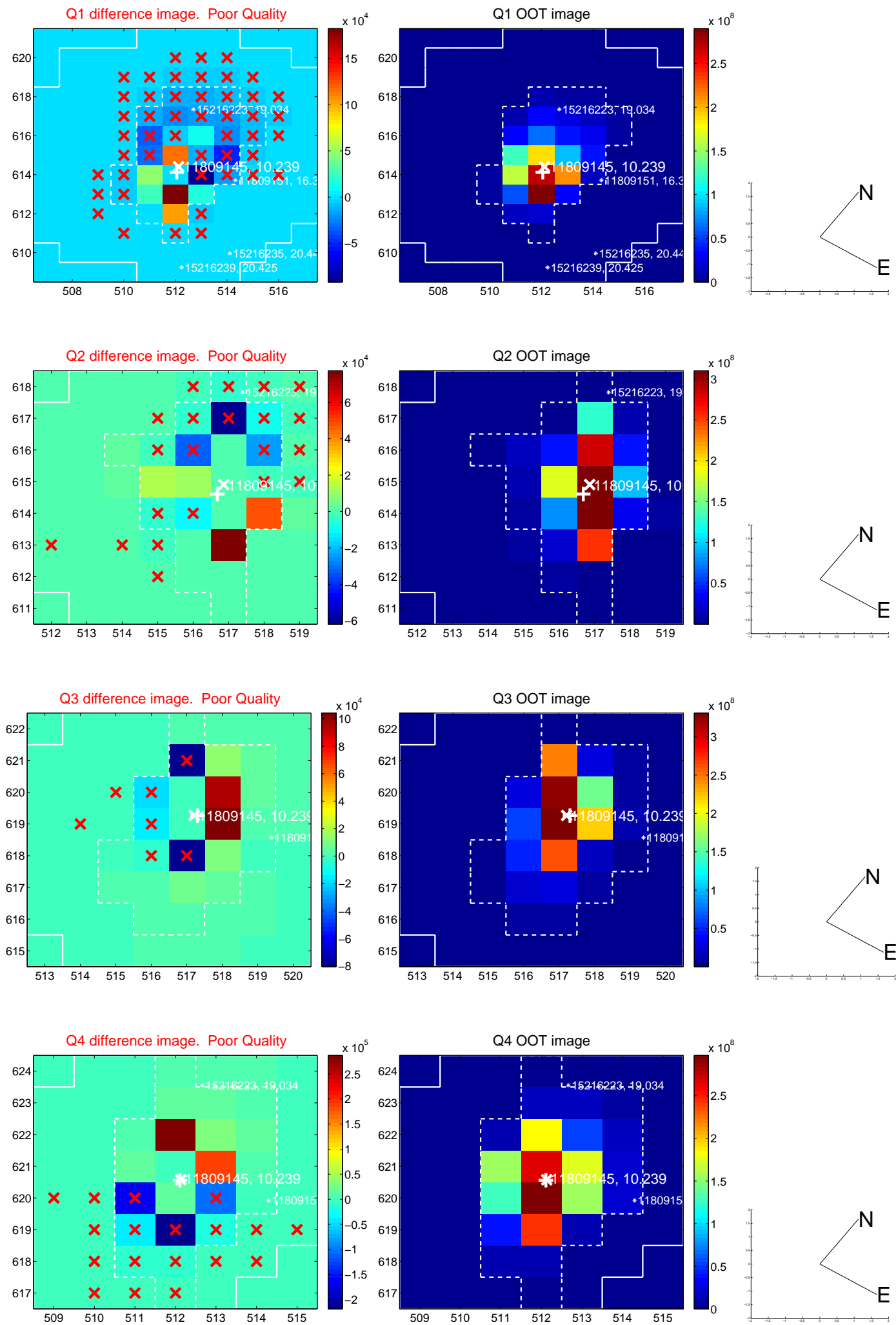


There are no photometric centroids

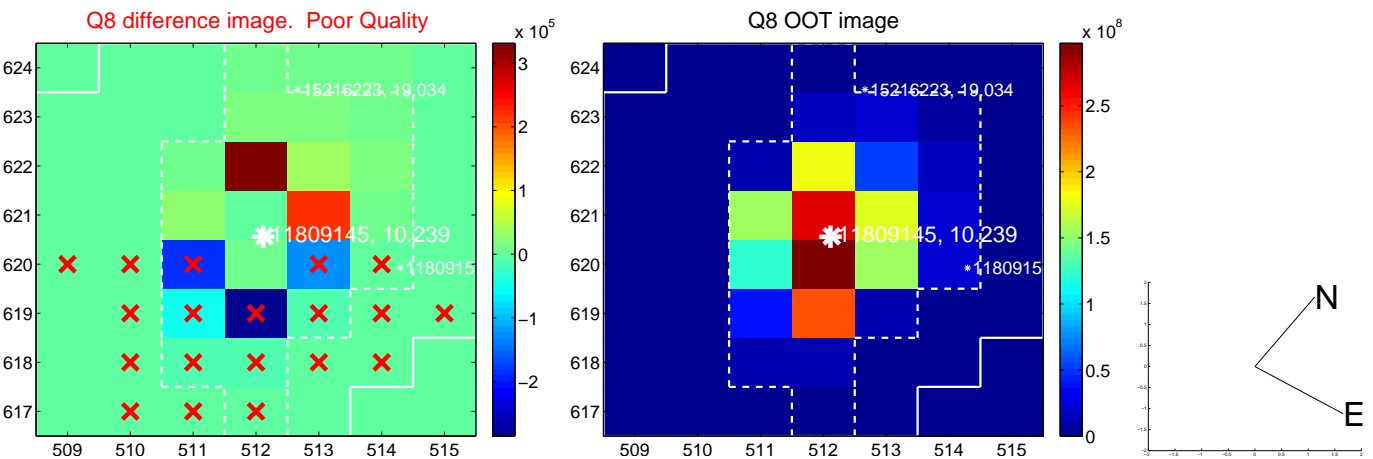
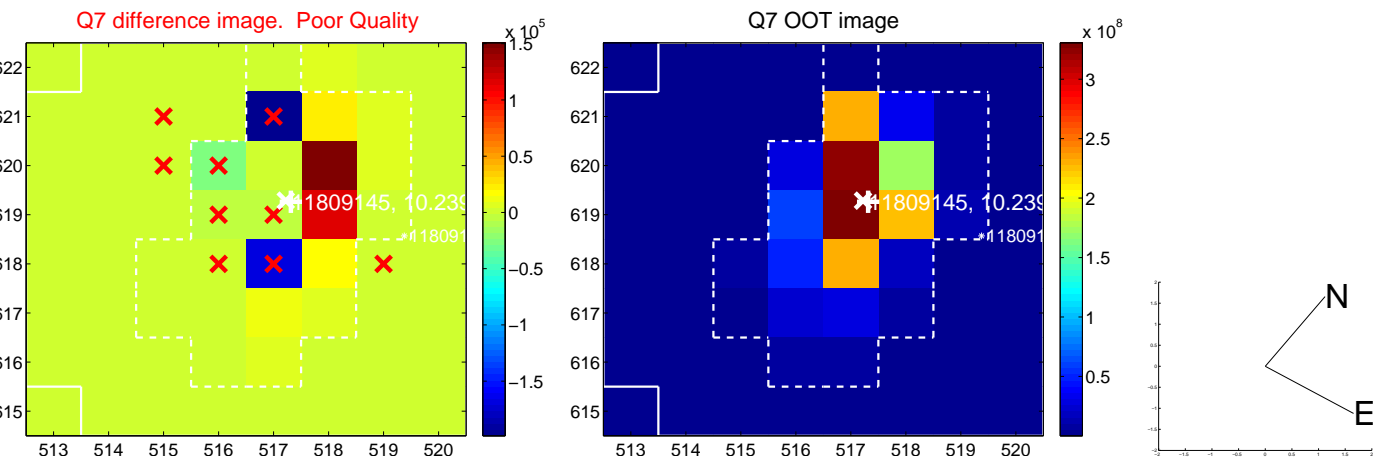
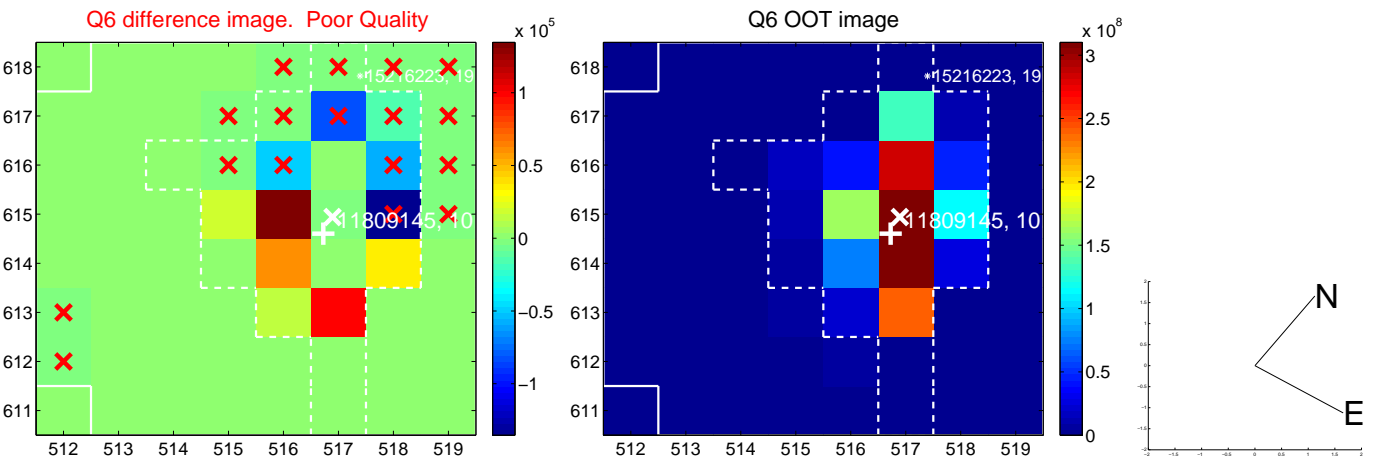
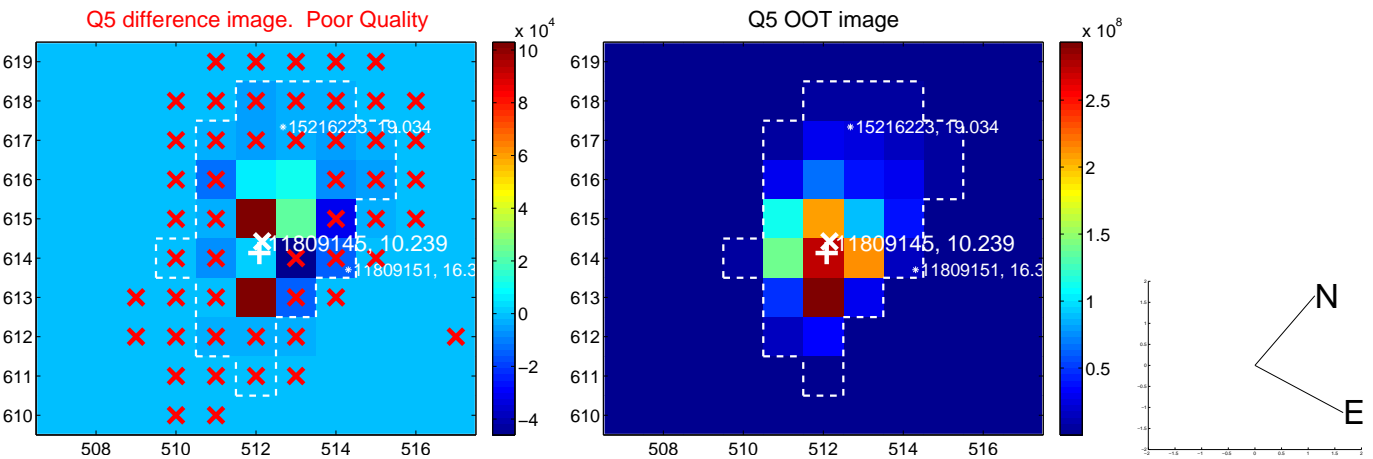


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

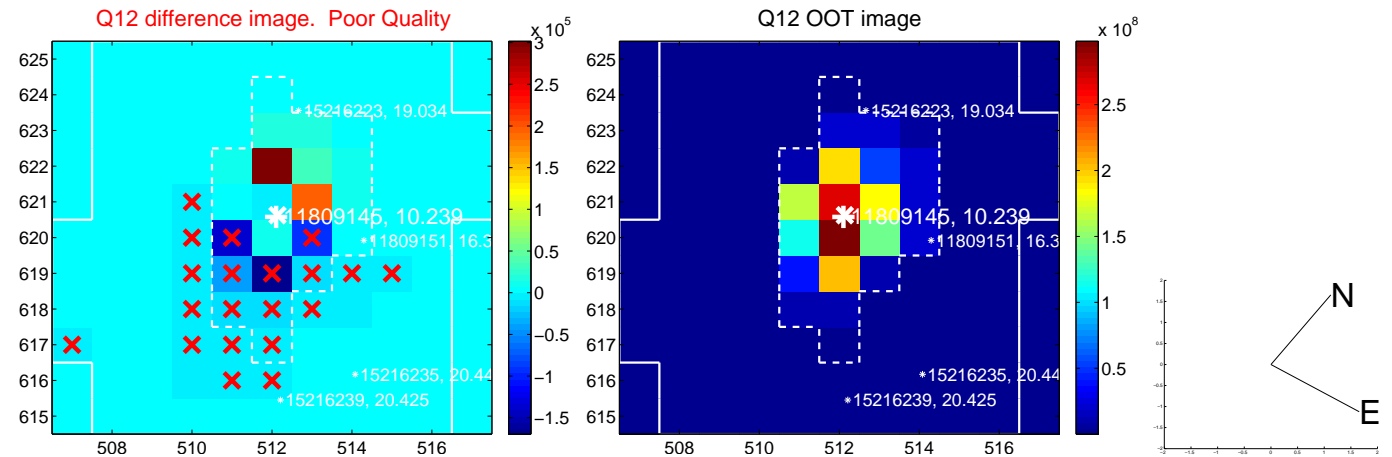
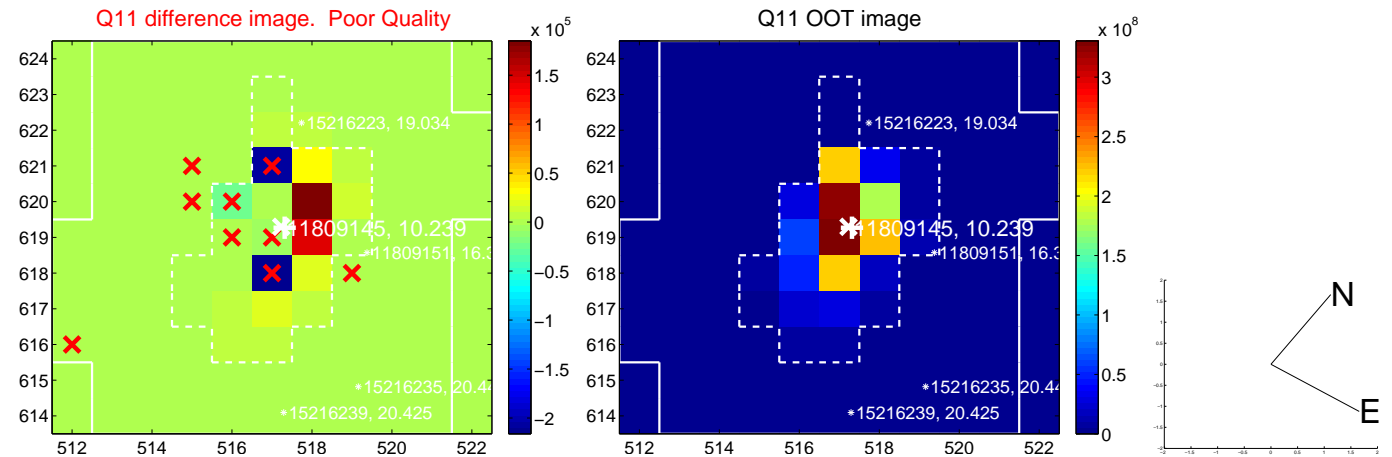
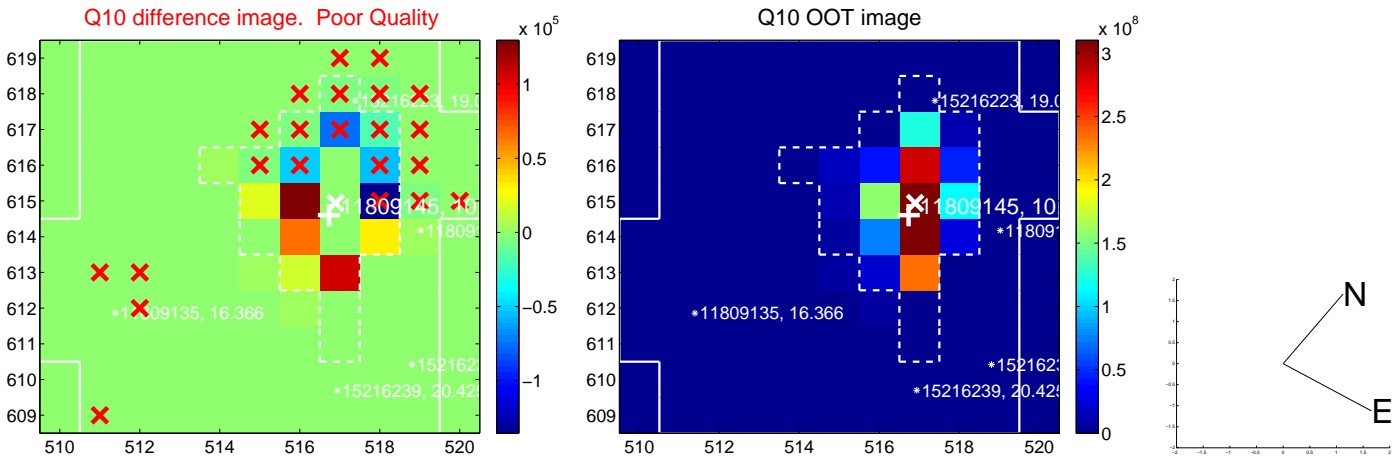
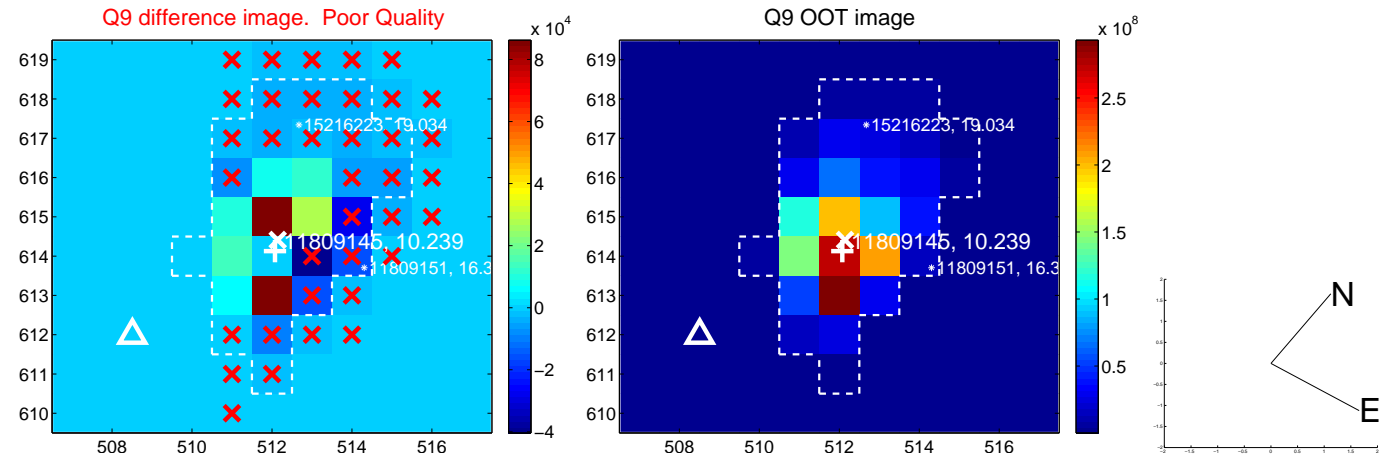
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



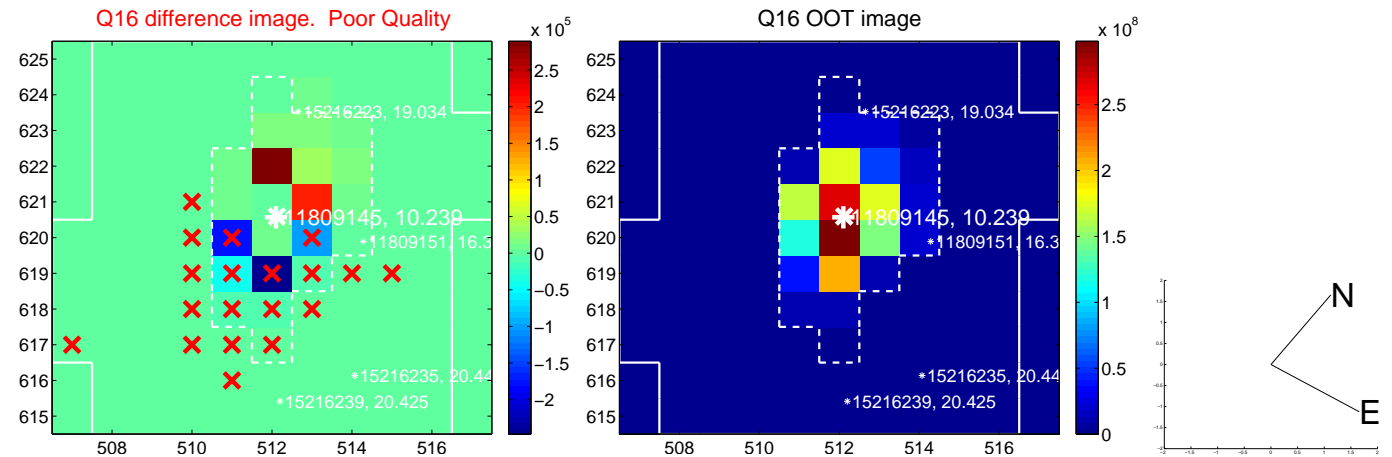
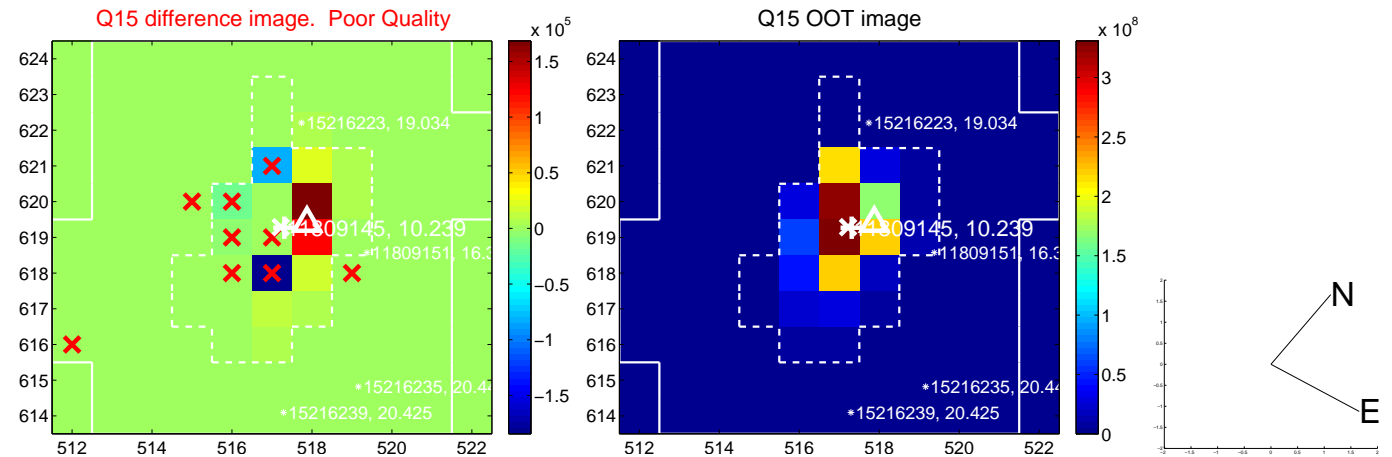
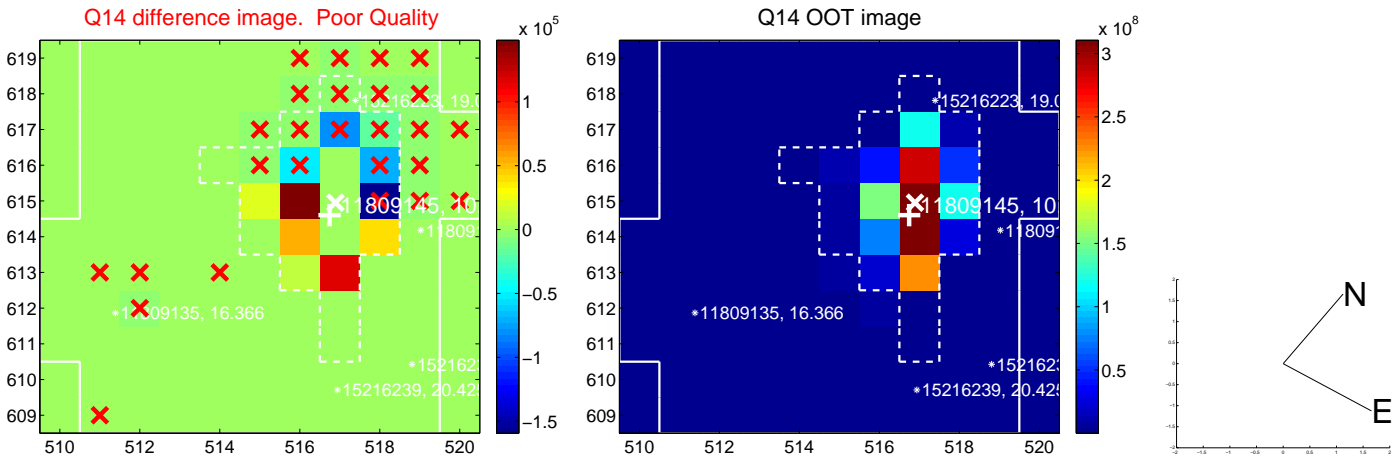
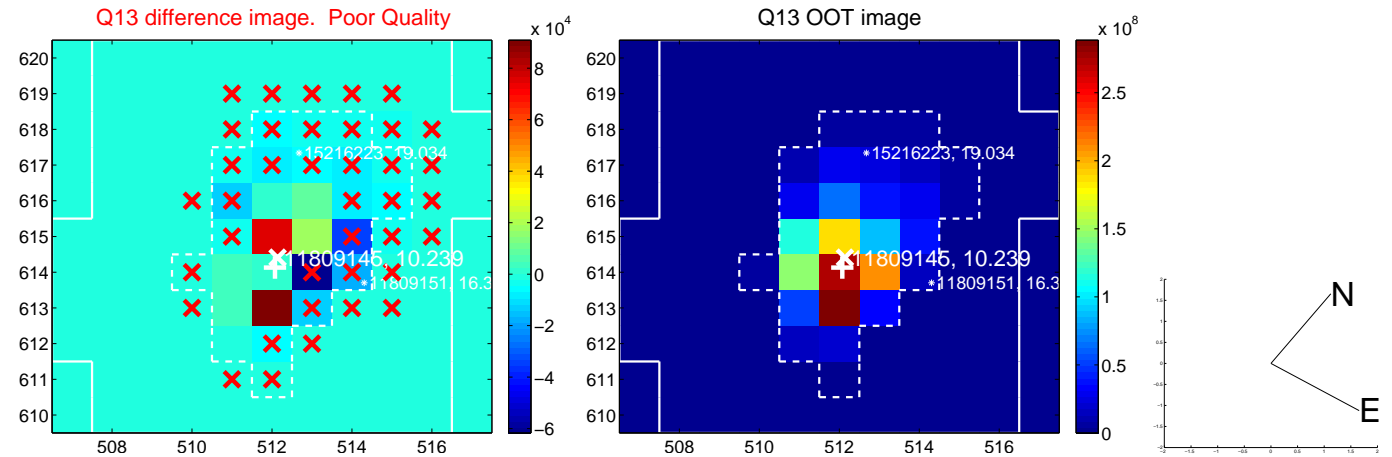
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



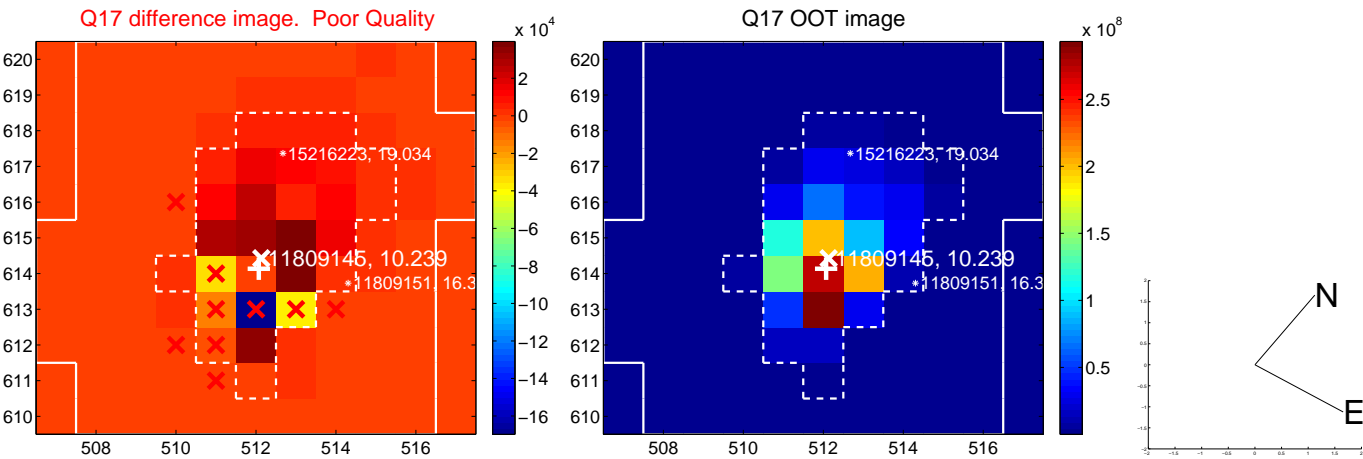
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

