

KIC 005622759

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})
005622759-01	OBS	No	1.868196	131.835621	4.3	18.993	10.8	3.4	3.19	6544	0.77	13993.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005622759-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—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.

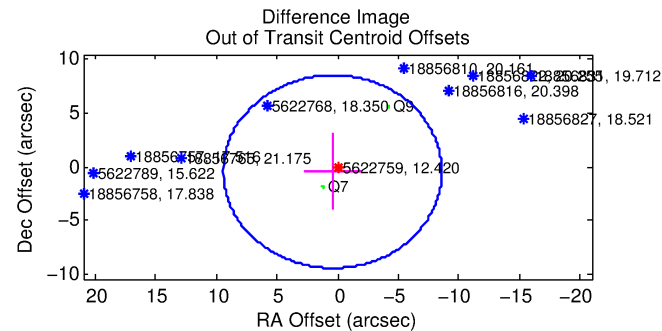
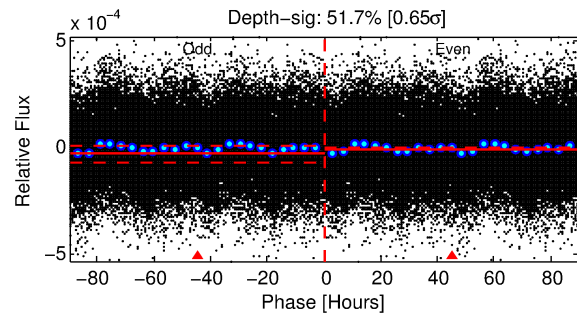
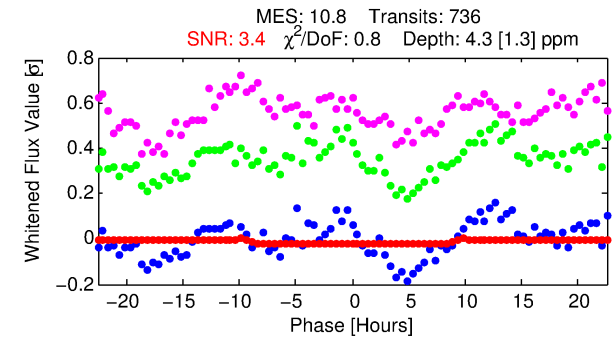
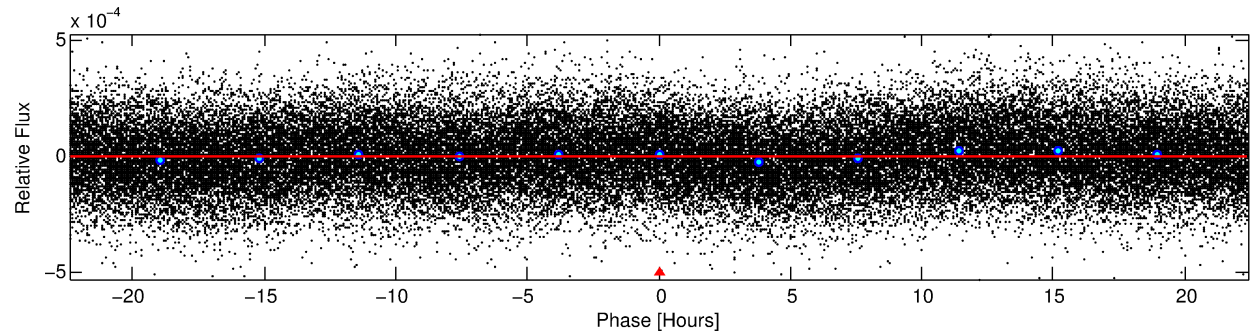
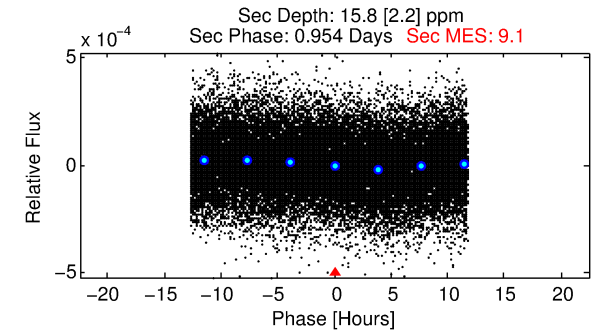
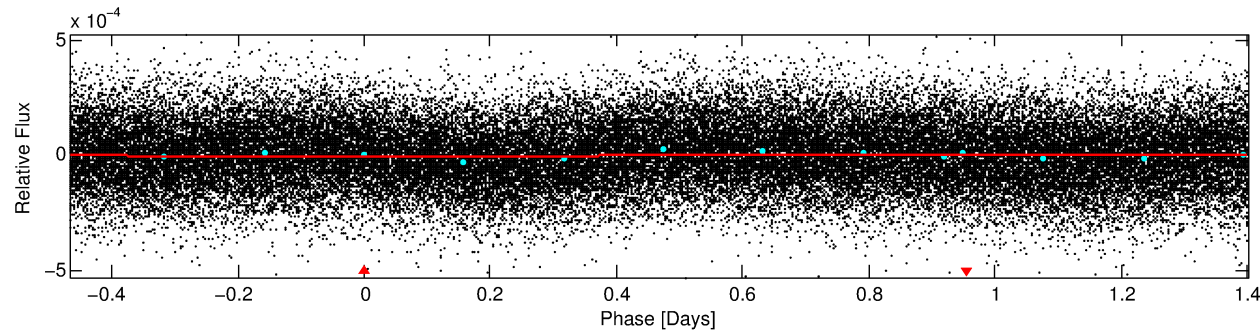
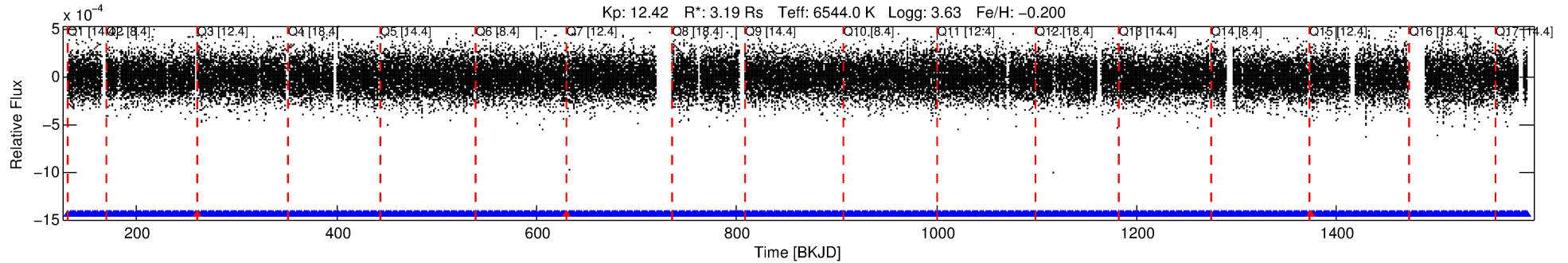
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005622759-01

No Significant Match Found

DV One-Page Summary

KIC: 5622759 Candidate: 1 of 1 Period: 1.868 d



DV Fit Results:

Period = 1.86820 [0.00013] d
Epoch = 131.8356 [0.0355] BKJD
Rp/R* = 0.0022 [0.0016]
a/R* = 1.01 [0.07]
b = 0.90 [0.94]
Seff = 13993.54 [14006.03]
Teq = 2773 [694] K
Rp = 0.77 [0.72] Re
a = 0.0346 [0.0207] AU
Ag = 17.48 [30.81] [0.53σ]
Teffp = 8768 [3209] K [1.83σ]

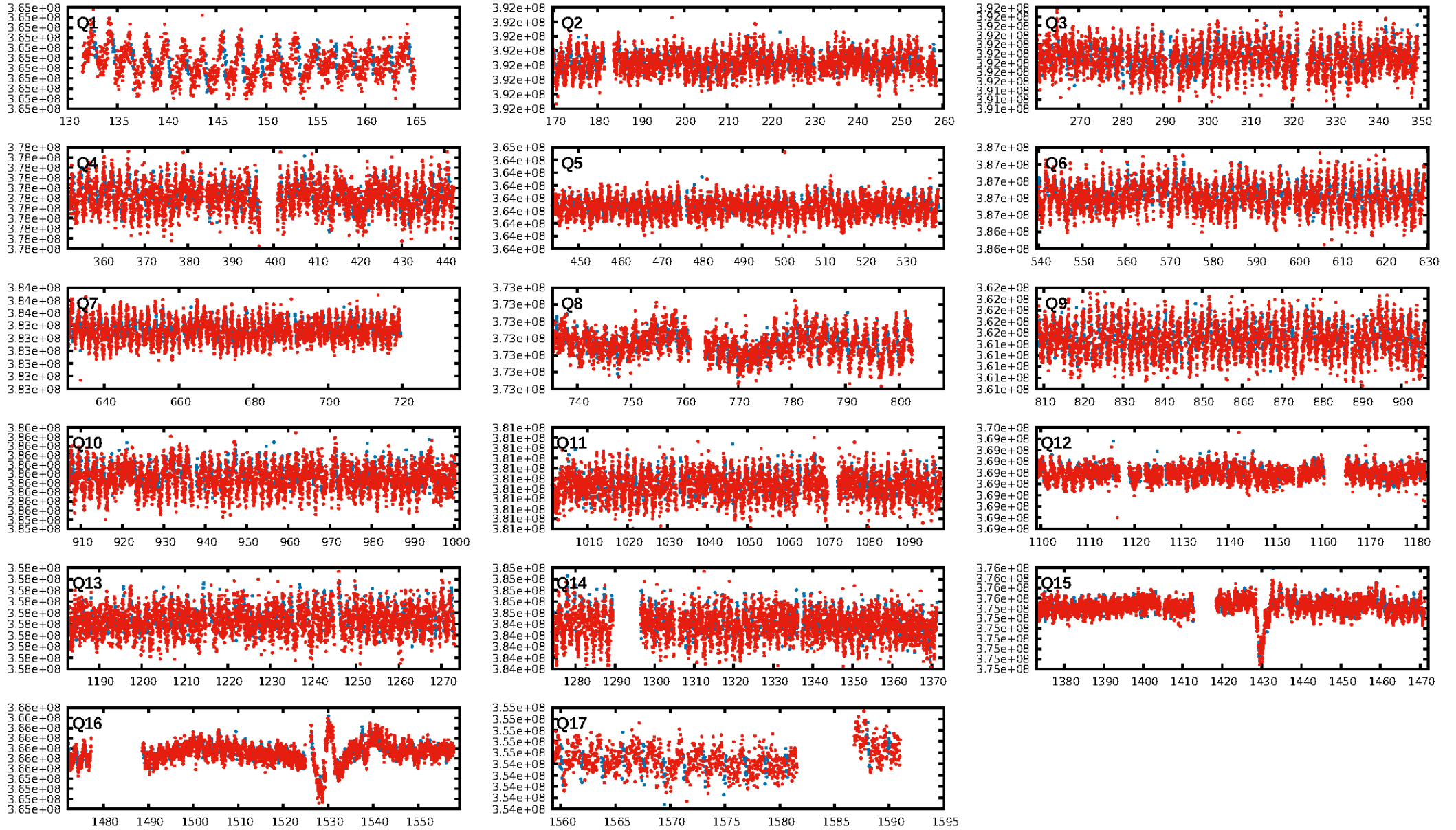
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [699/702]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.626 arcsec [0.21σ]
KicOffset-rm: 0.621 arcsec [0.14σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [17/17]

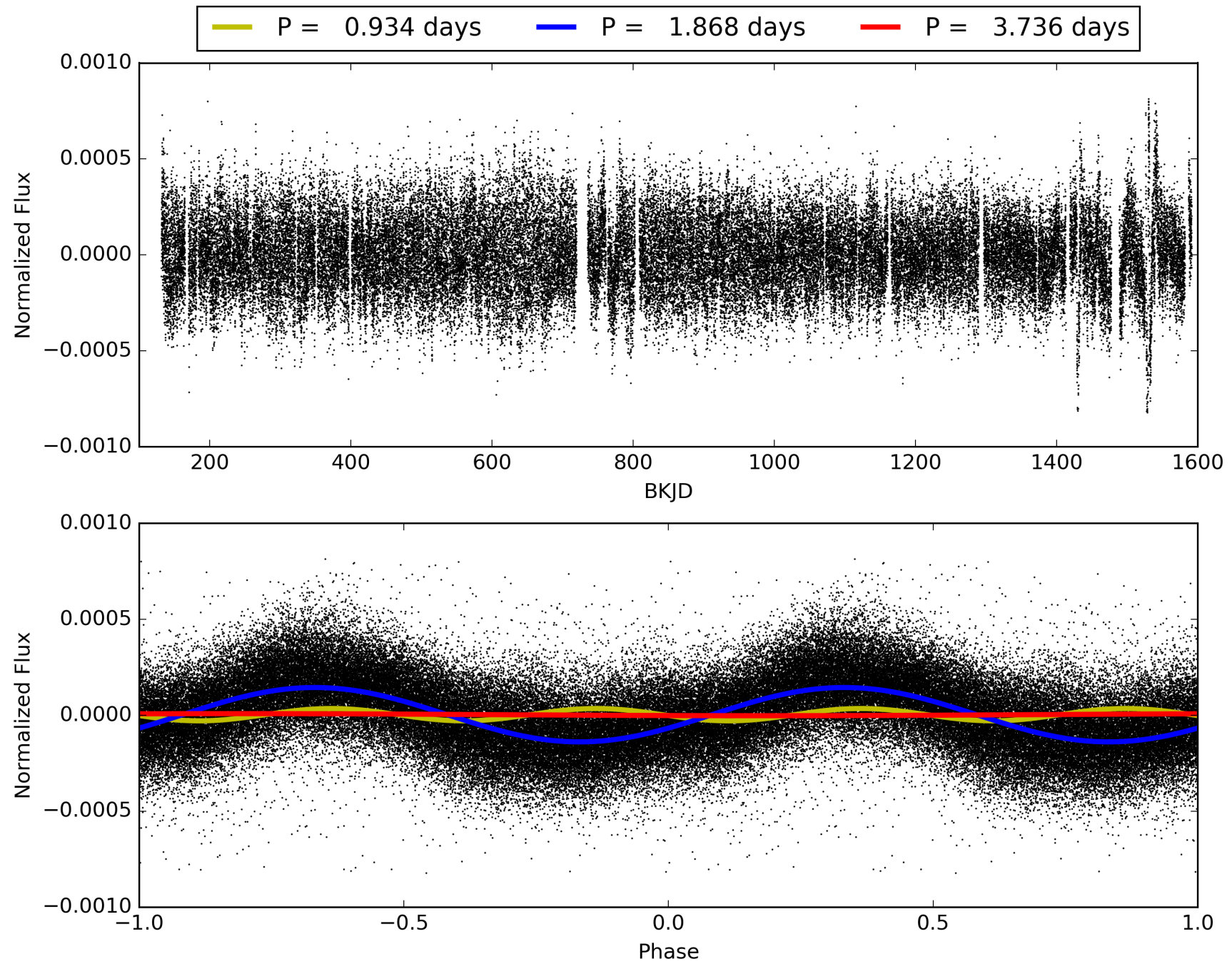
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:57:21 Z

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

TCE 005622759-01, PDC Light Curves

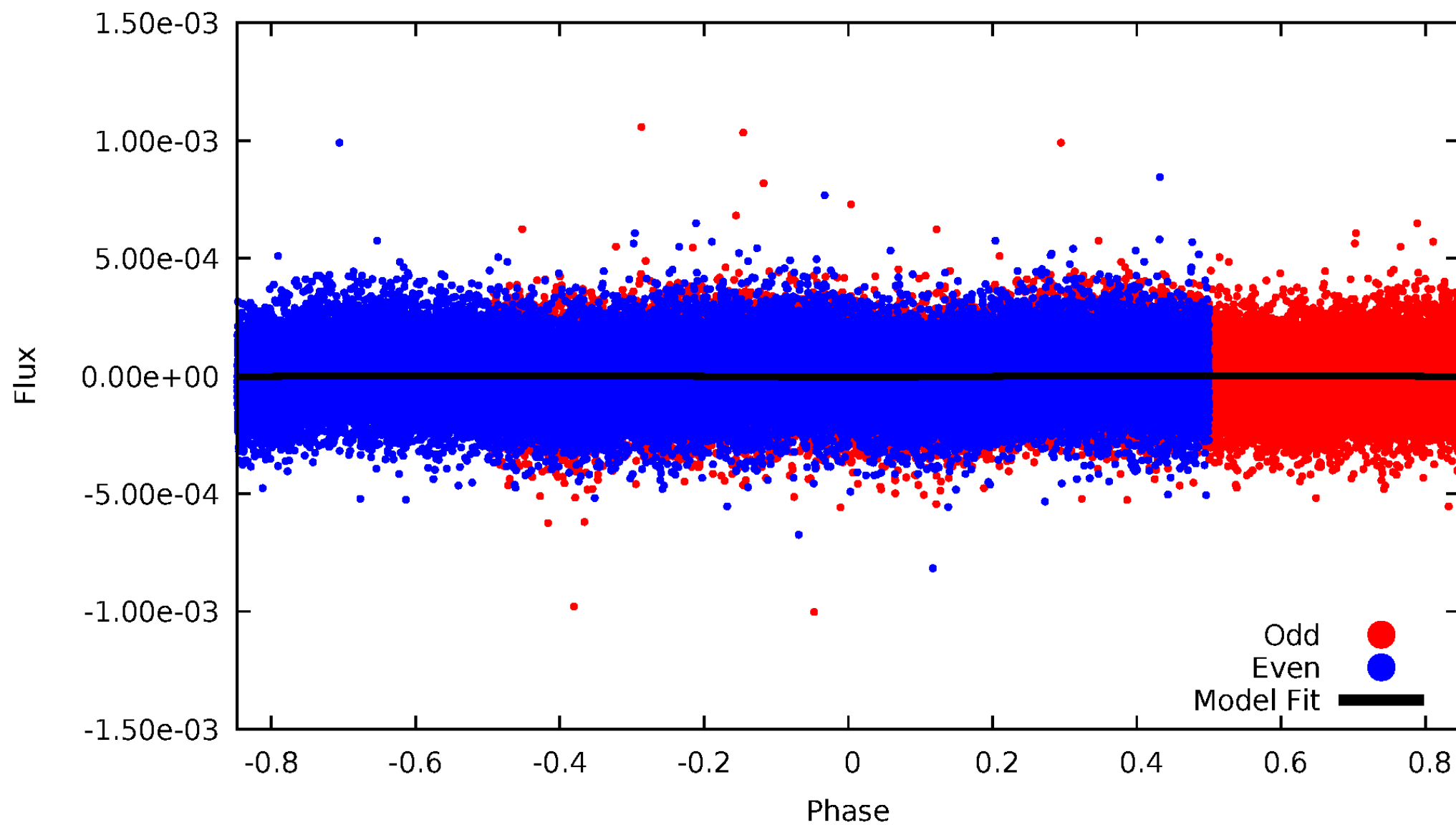


TCE 005622759-01



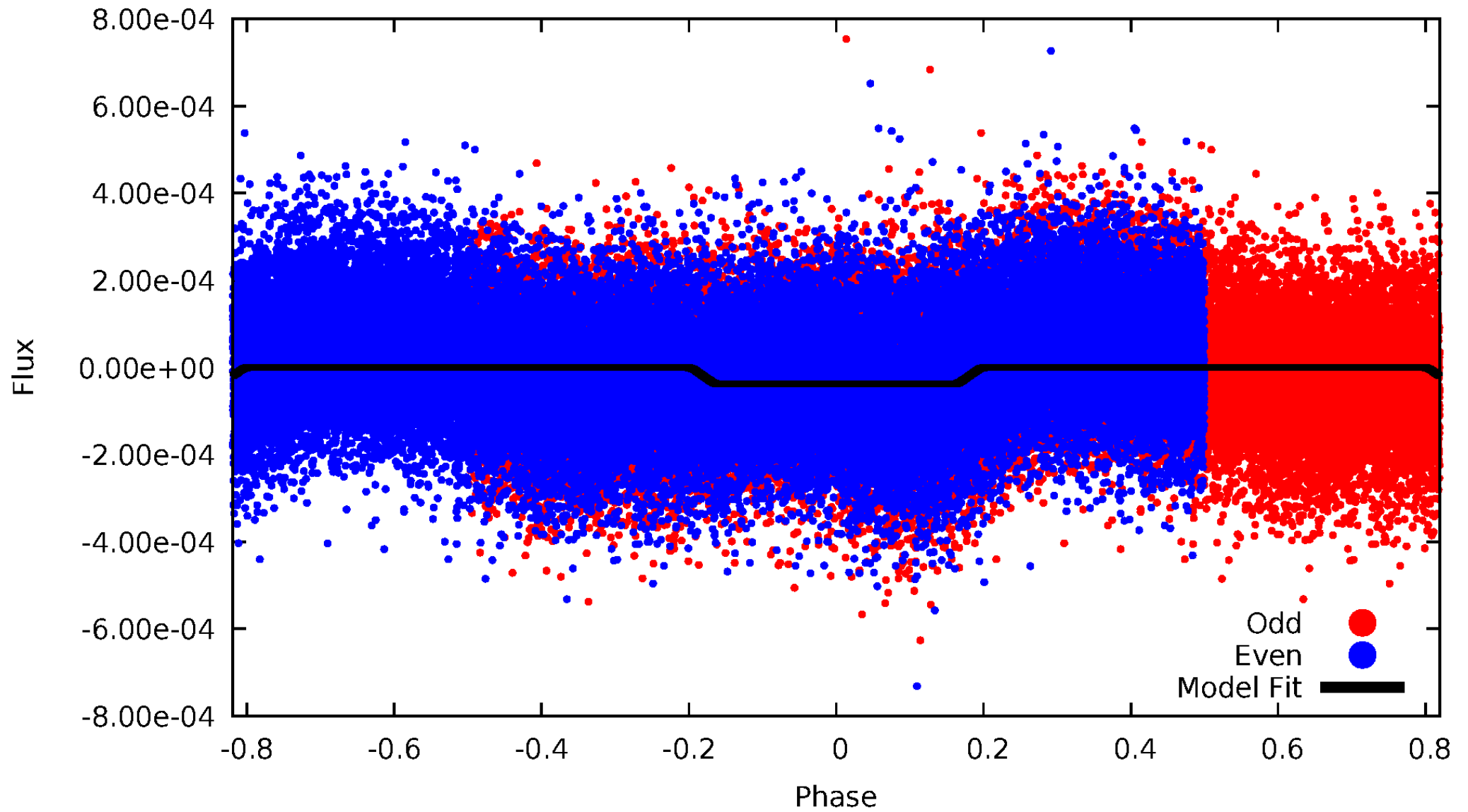
DV Odd/Even

TCE 005622759-01



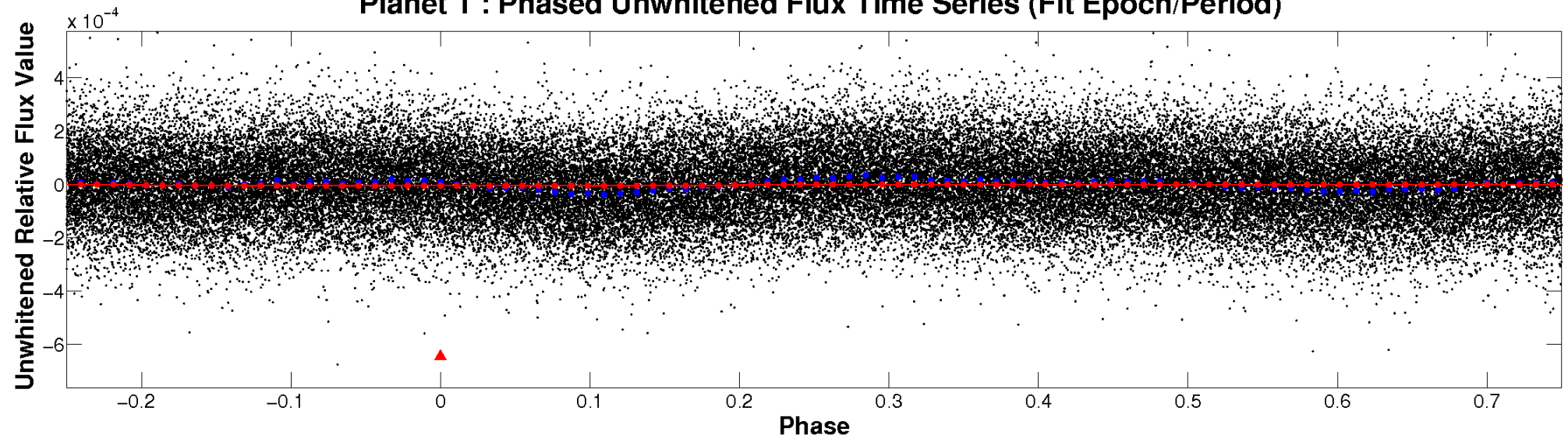
ALT Odd/Even

TCE 005622759-01

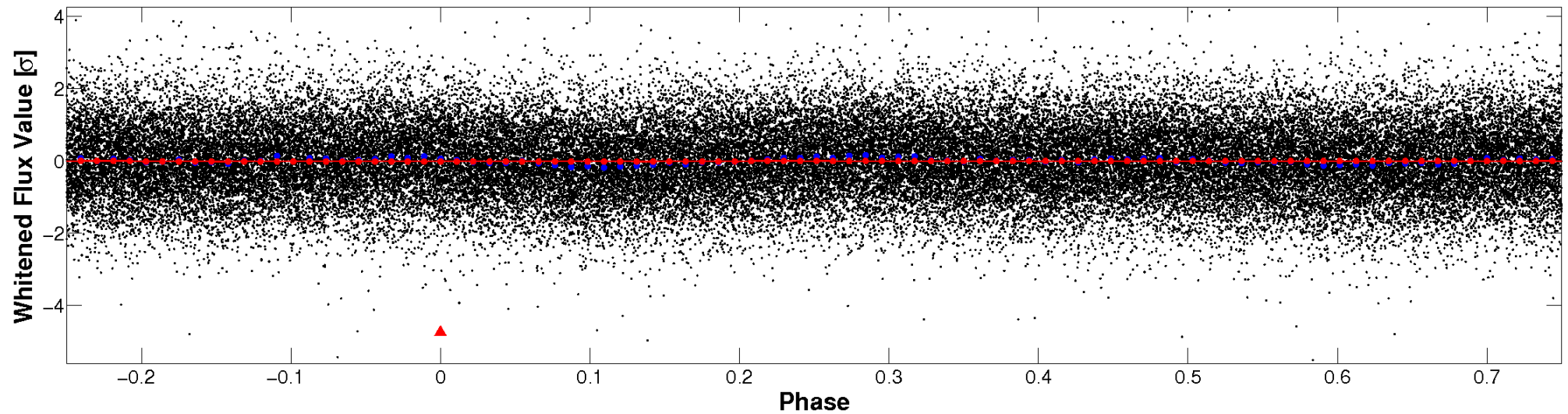


Non-Whitened Vs. Whitened Light Curve

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

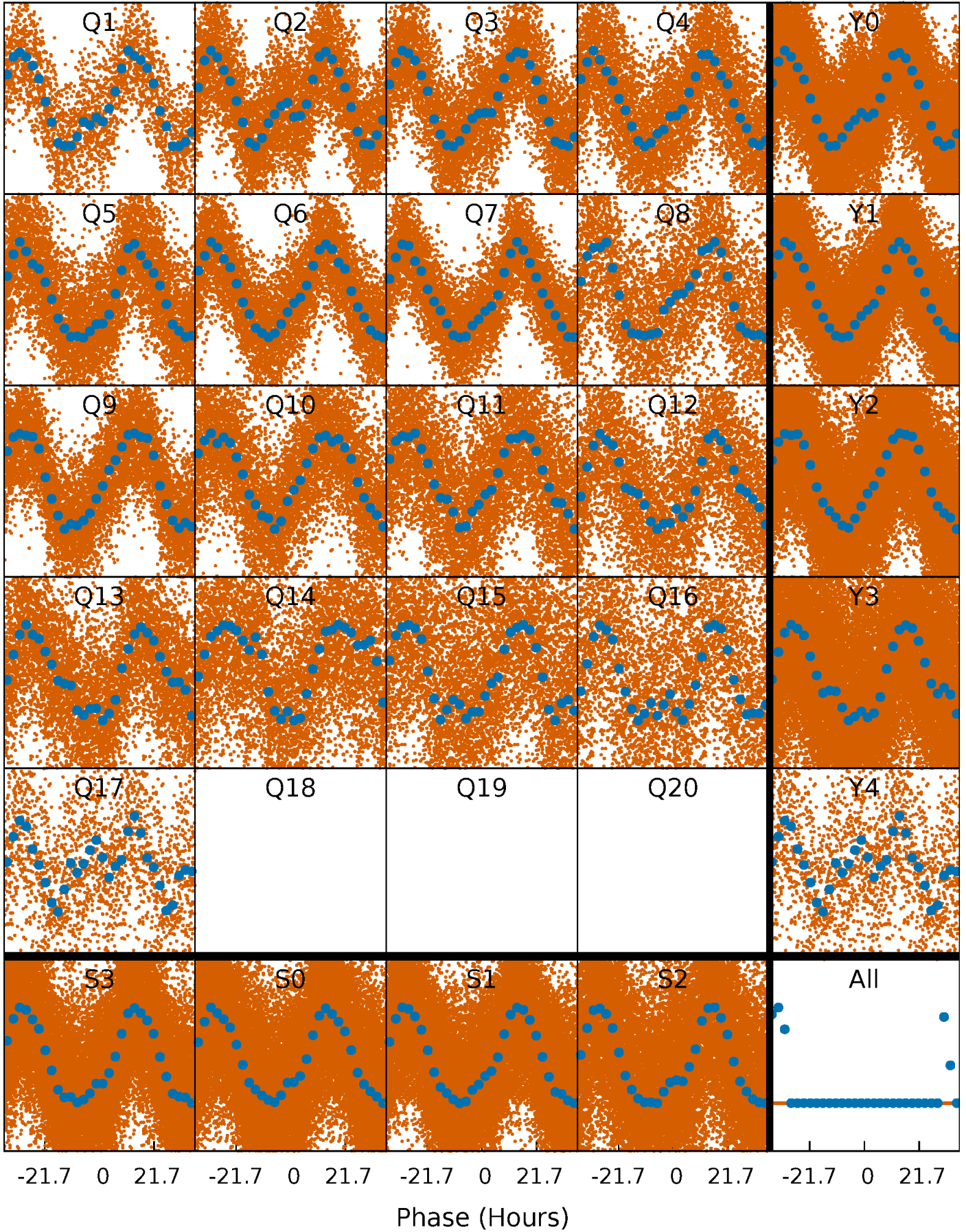


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



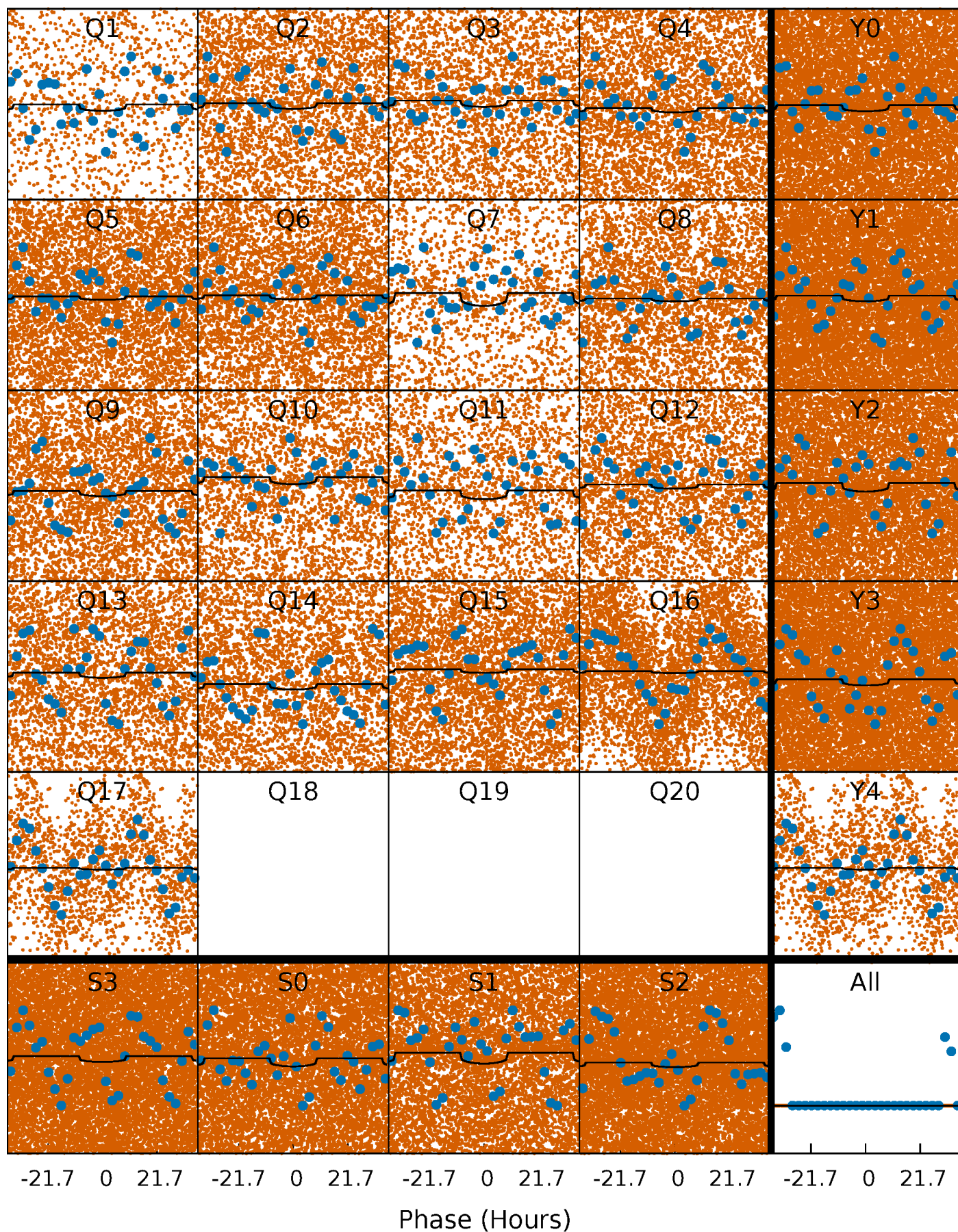
PDC Quarter-Phased Transit Curves

TCE 005622759-01 P= 1.868196 Days $T_0=131.835621$ (BKJD)



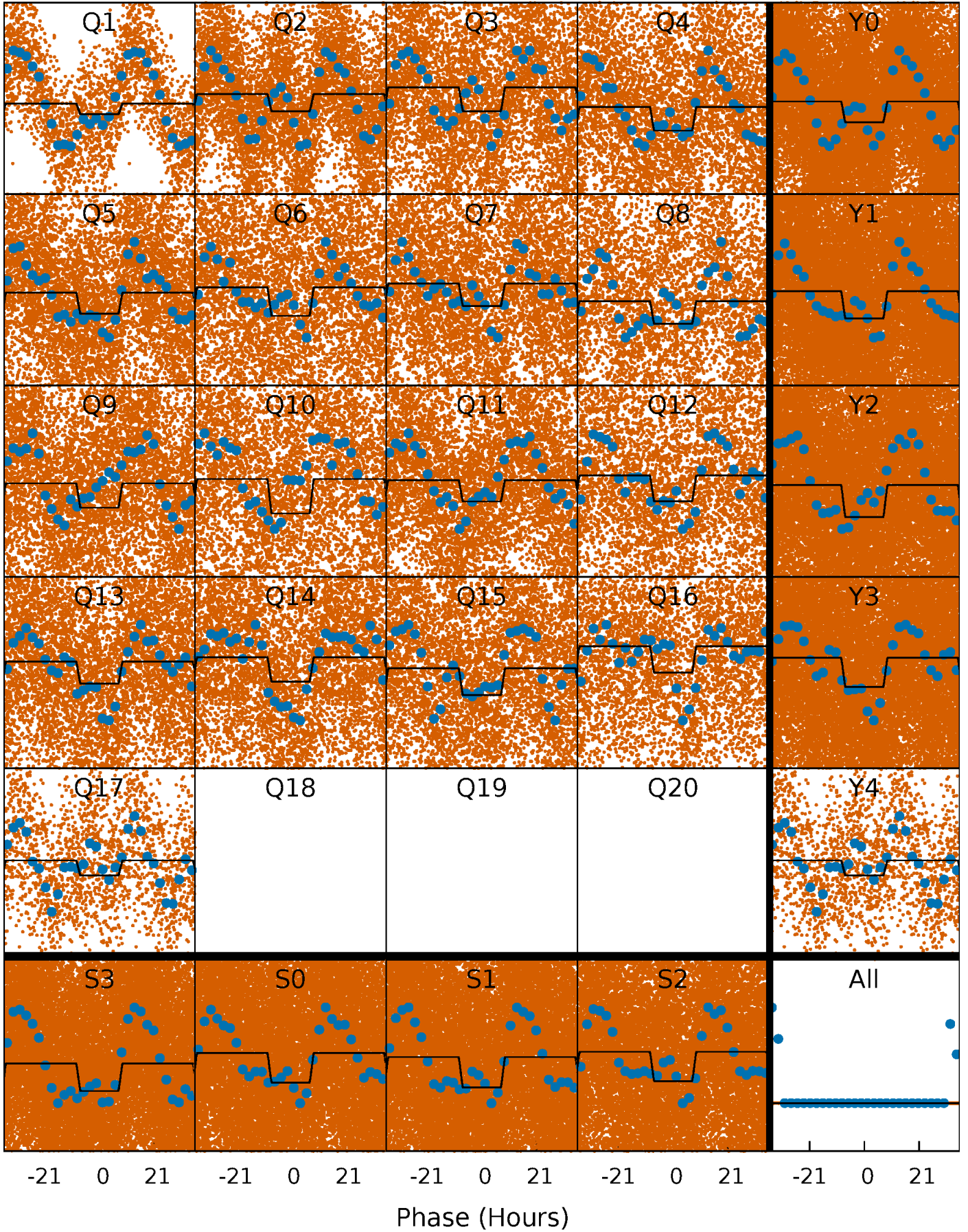
DV Quarter-Phased Transit Curves

TCE 005622759-01 P= 1.868196 Days $T_0=131.835621$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

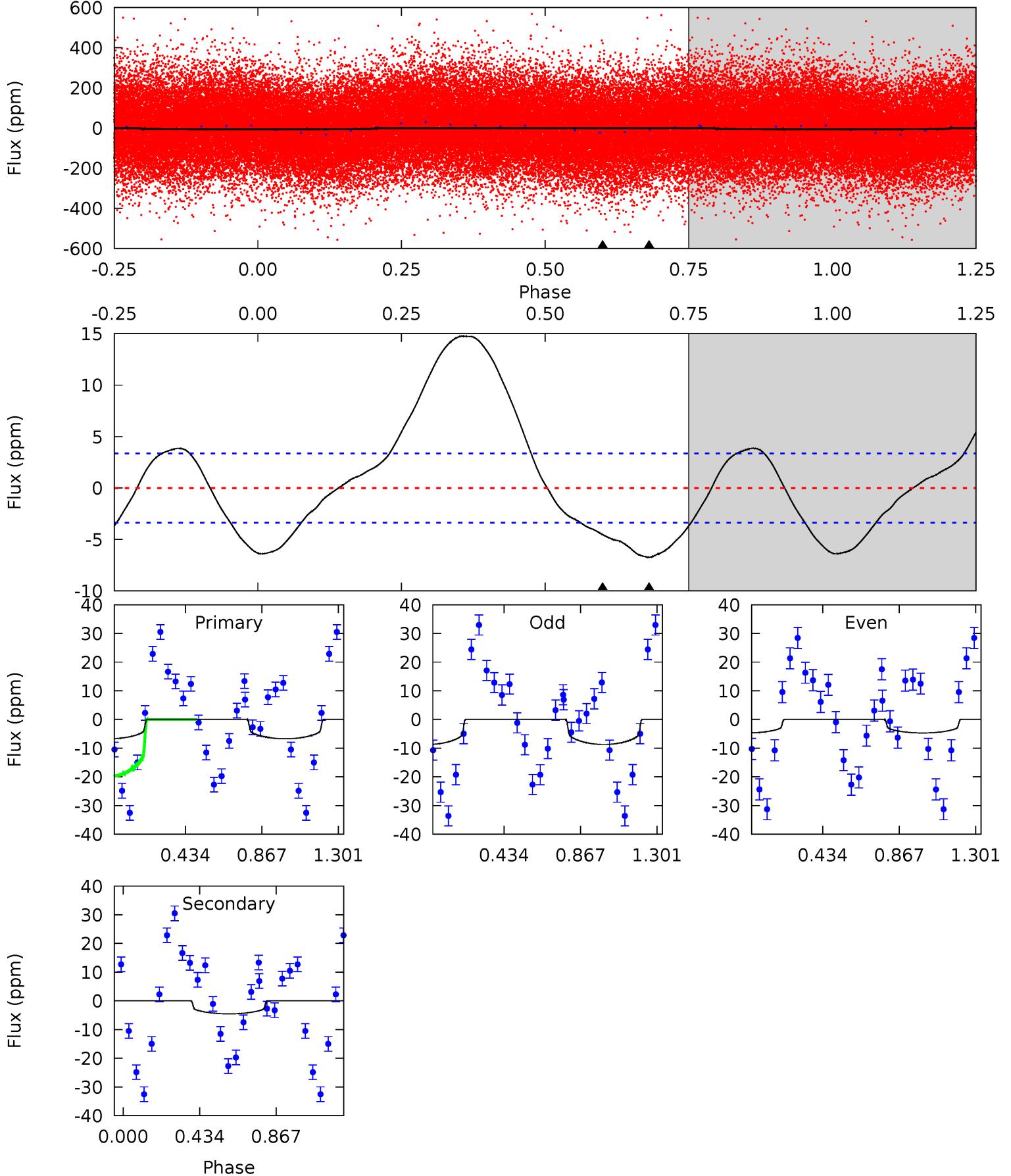
TCE 005622759-01 P= 1.868259 Days $T_0=131.814413$ (BKJD)



DV Model-Shift Uniqueness Test

005622759-01, P = 1.868196 Days, E = 129.967425 Days

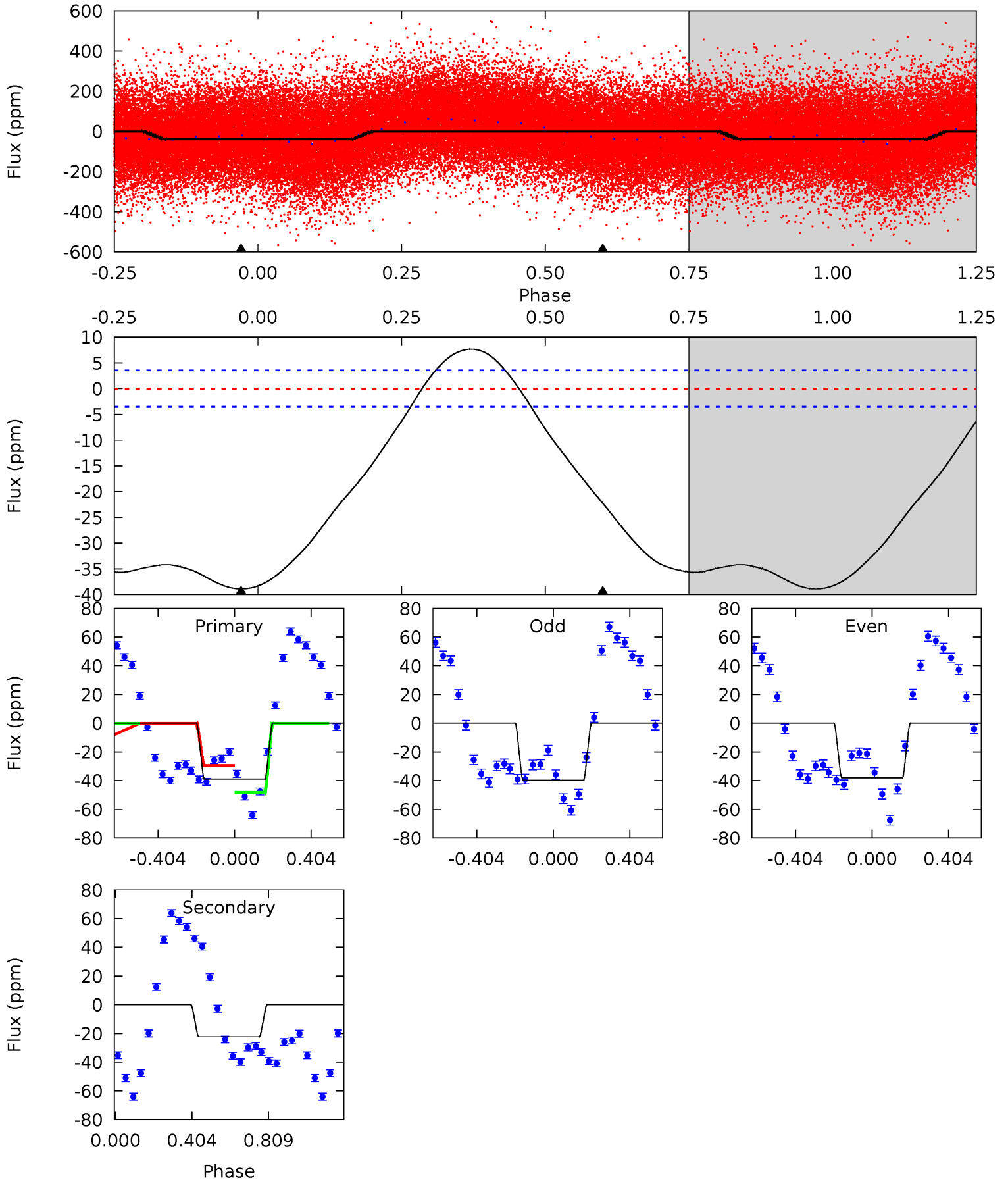
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.49	5.71	0	0	4.25	0.78	1.54	8.49	8.49	5.71	5.71	2.47	1.27	0.69	8.44



Alt Model-Shift Uniqueness Test

005622759-01, P = 1.868259 Days, E = 129.946154 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.9	26.8	0	0	4.26	0.83	5.65	46.9	46.9	26.8	26.8	1.00	1.03	0.16	11.6



Stellar Parameters For KIC 005622759

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6544^{+182}_{-228}	$3.629^{+0.595}_{-0.105}$	$-0.200^{+0.250}_{-0.300}$	$3.194^{+0.461}_{-1.844}$	$1.584^{+0.198}_{-0.461}$	$0.068^{+0.595}_{-0.015}$
	+3%/-3%	+16%/-3%	+125%/-150%	+14%/-58%	+12%/-29%	+870%/-22%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005622759-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 1	$0.72^{+0.58}_{-0.41}$	3770^{+262}_{-527}	5973^{+3925}_{-1262}	$5.579^{+26.475}_{-3.837}$
Alt.	-22 ± 1	$1.96^{+0.69}_{-0.72}$	3764^{+278}_{-549}	5602^{+1012}_{-613}	$3.851^{+5.344}_{-1.728}$

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

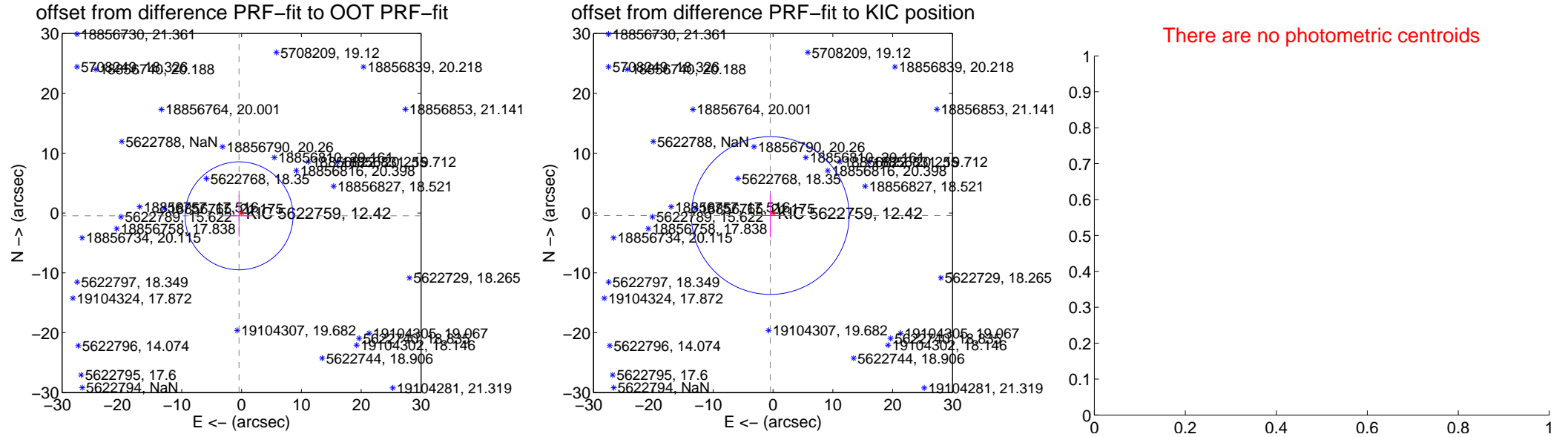
DV Centroid Data

Supplemental centroid analysis for 005622759-01. Kepler magnitude: 12.42. Transit SNR 3.36

There are 1 quarters with good PRF difference image offsets

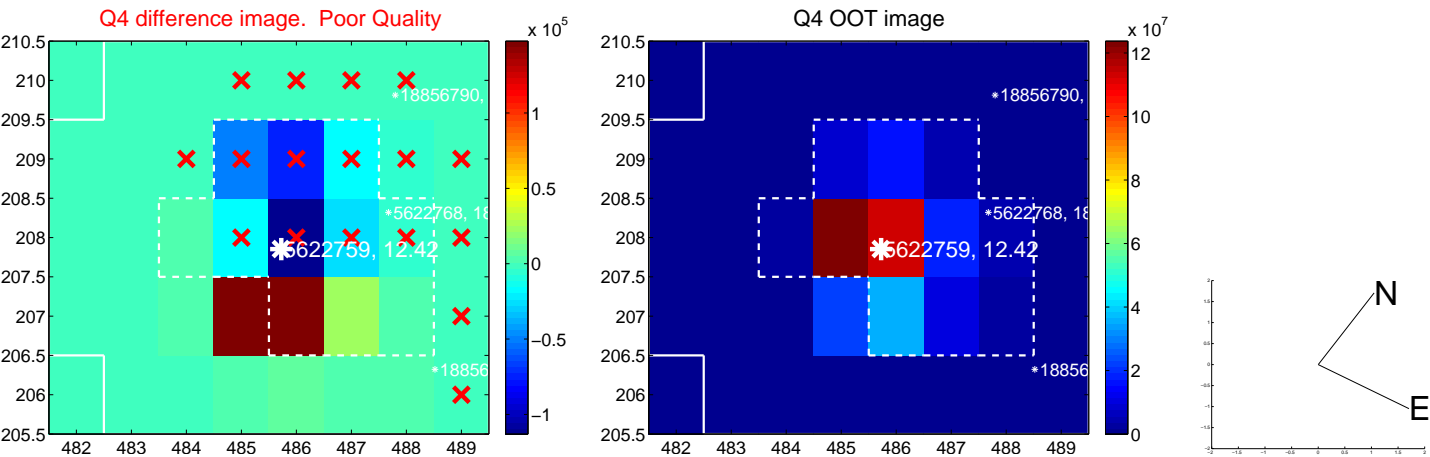
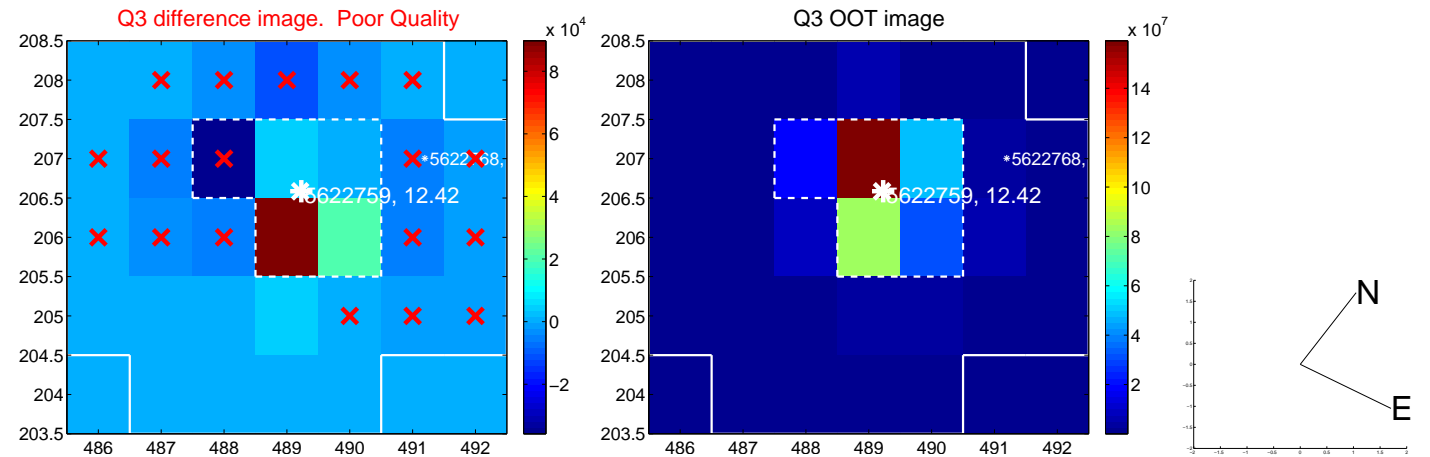
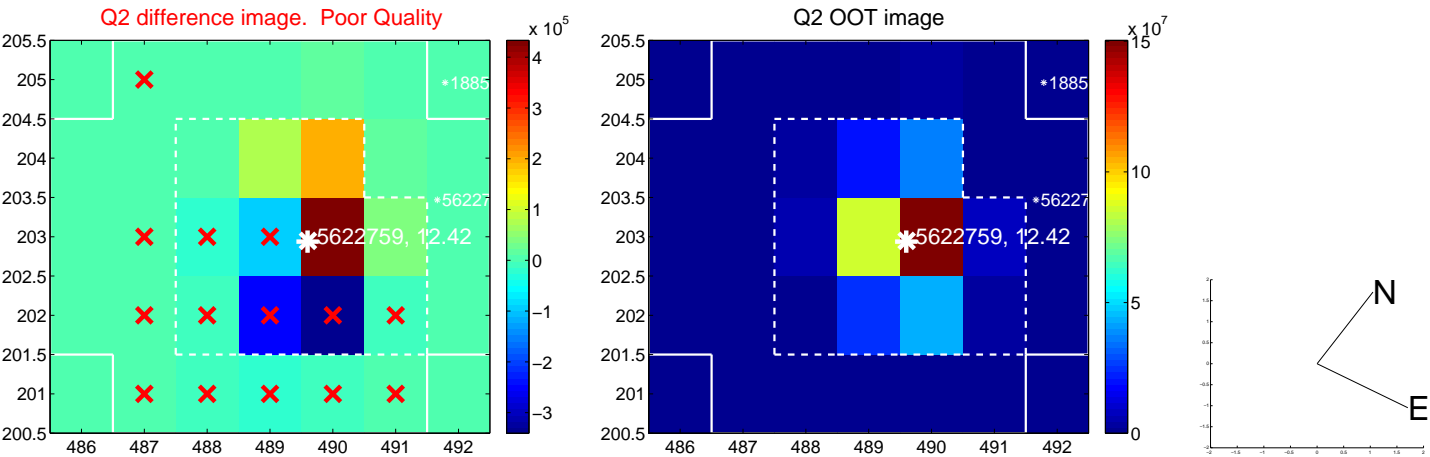
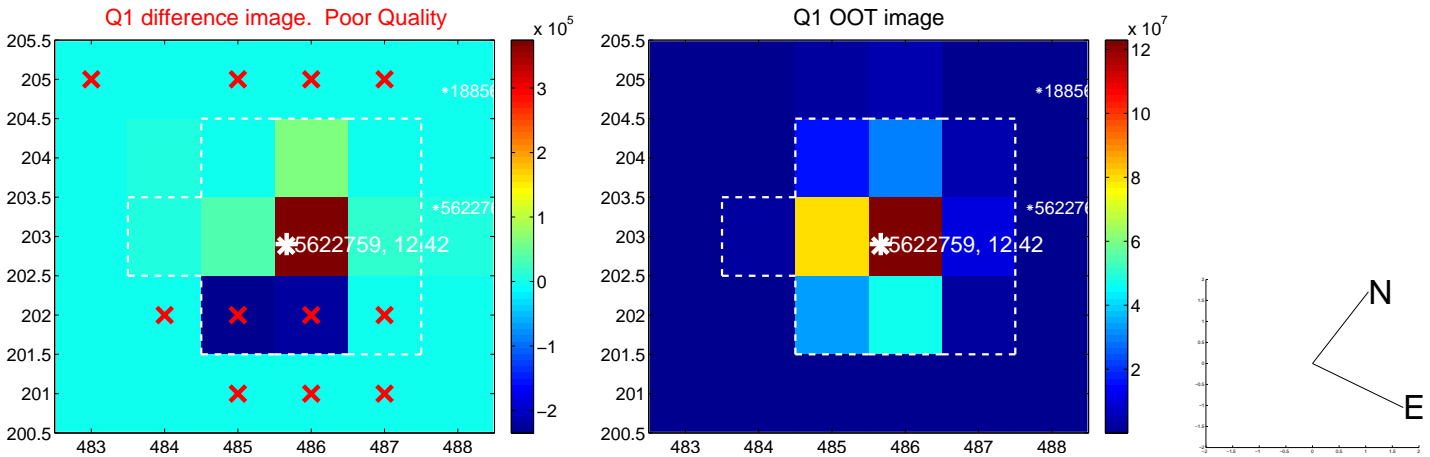
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.626 ± 3.007	0.21	0.415 ± 2.280	-0.468 ± 3.472
PRF-fit source offset from KIC position	0.621 ± 4.394	0.14	0.456 ± 2.642	-0.422 ± 3.615
photometric centroid source offset	—	—	—	—

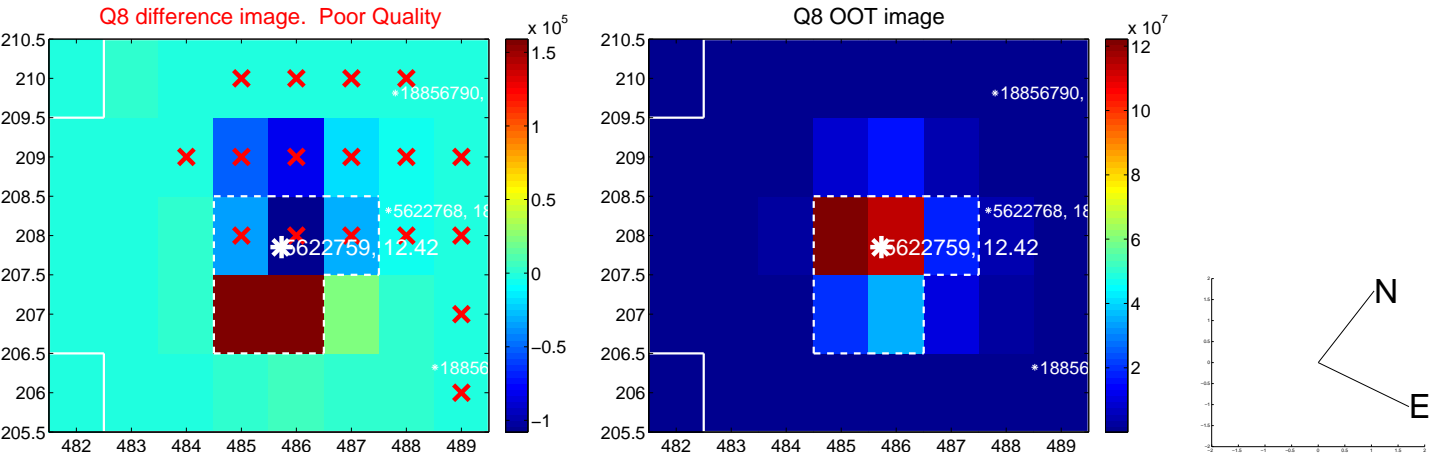
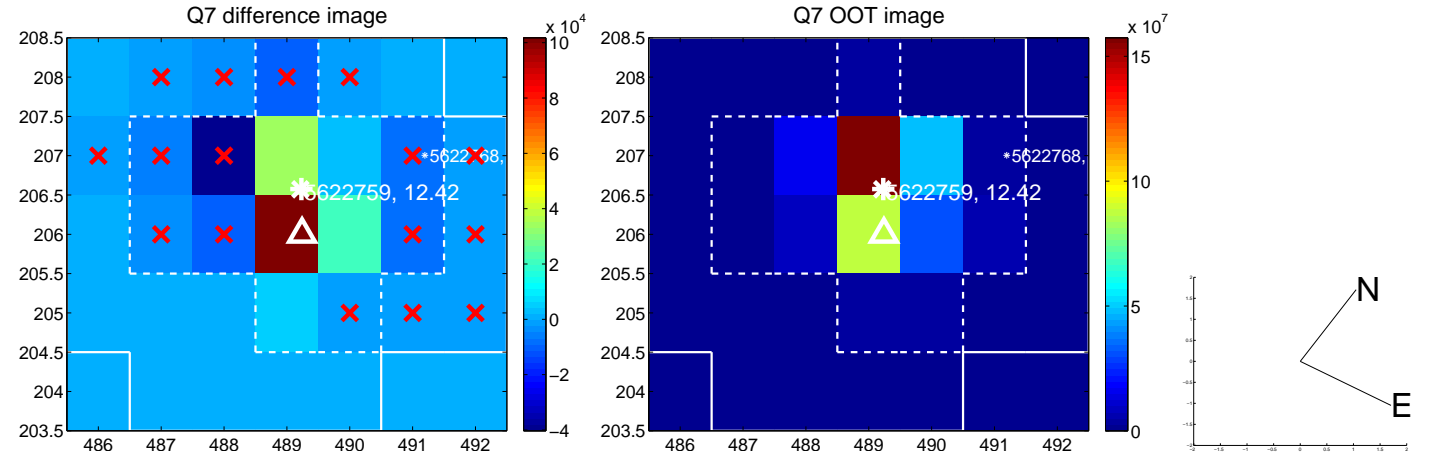
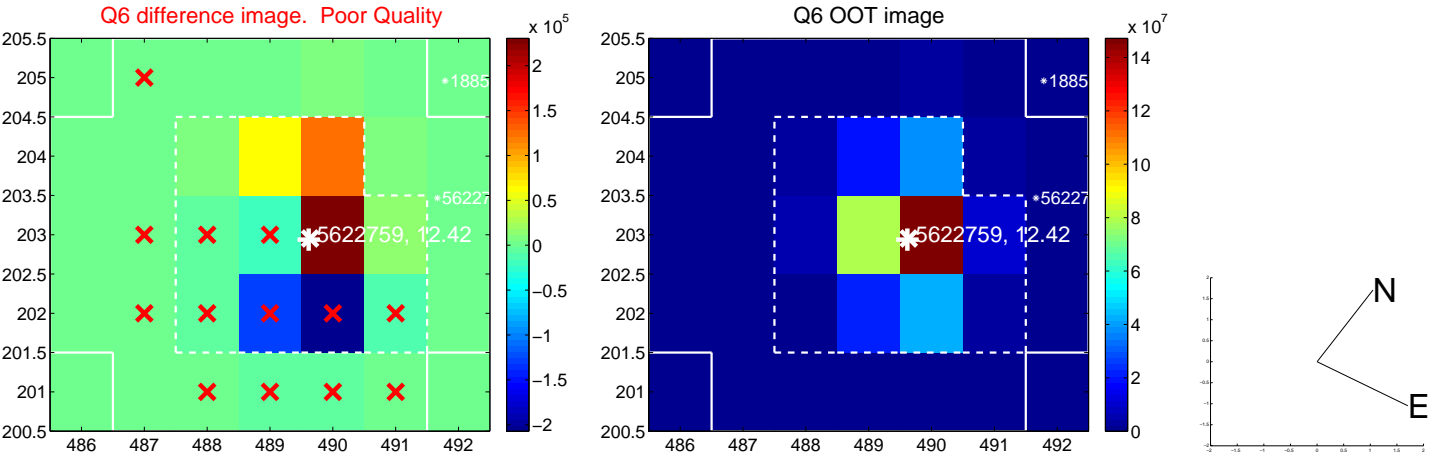
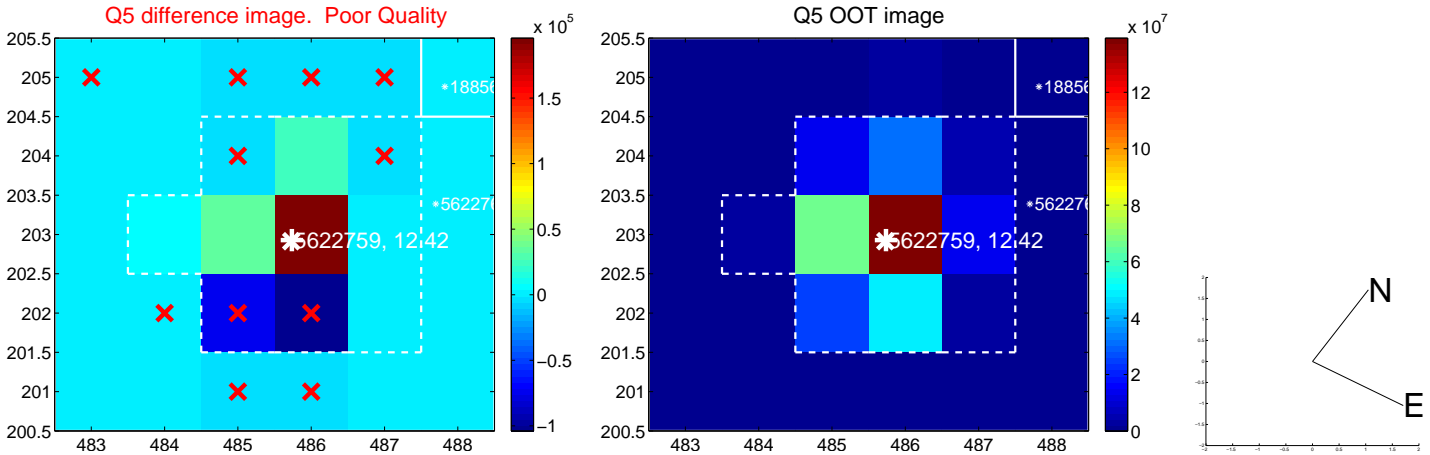


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

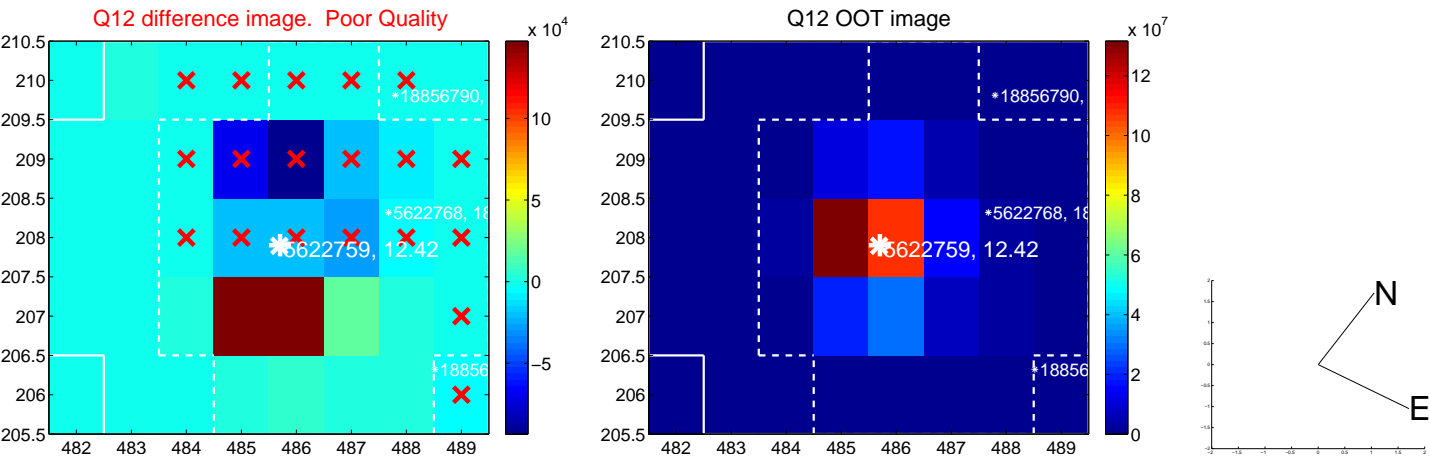
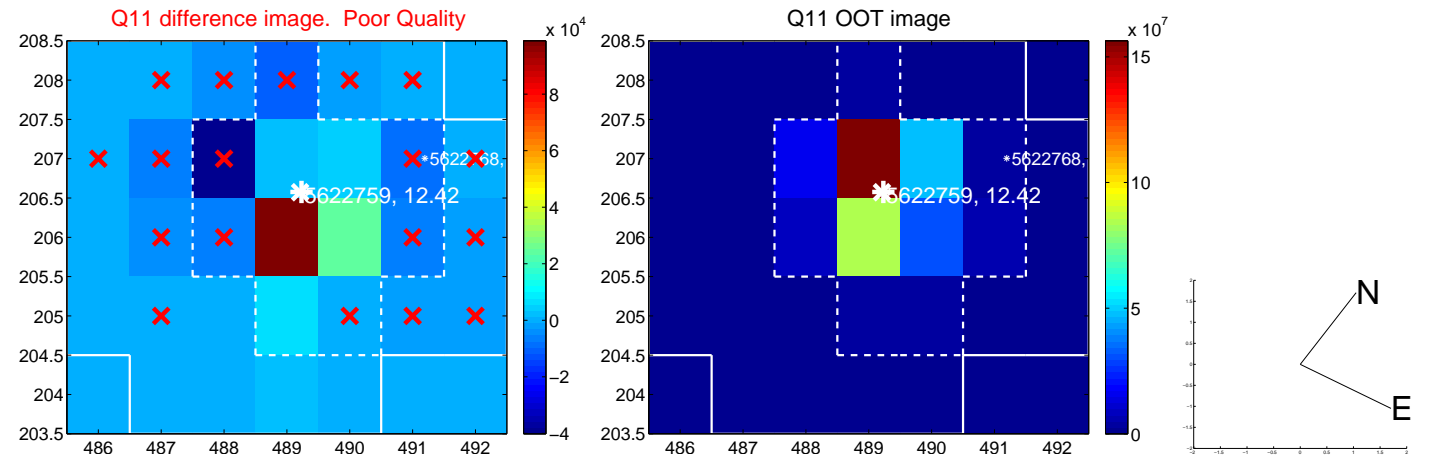
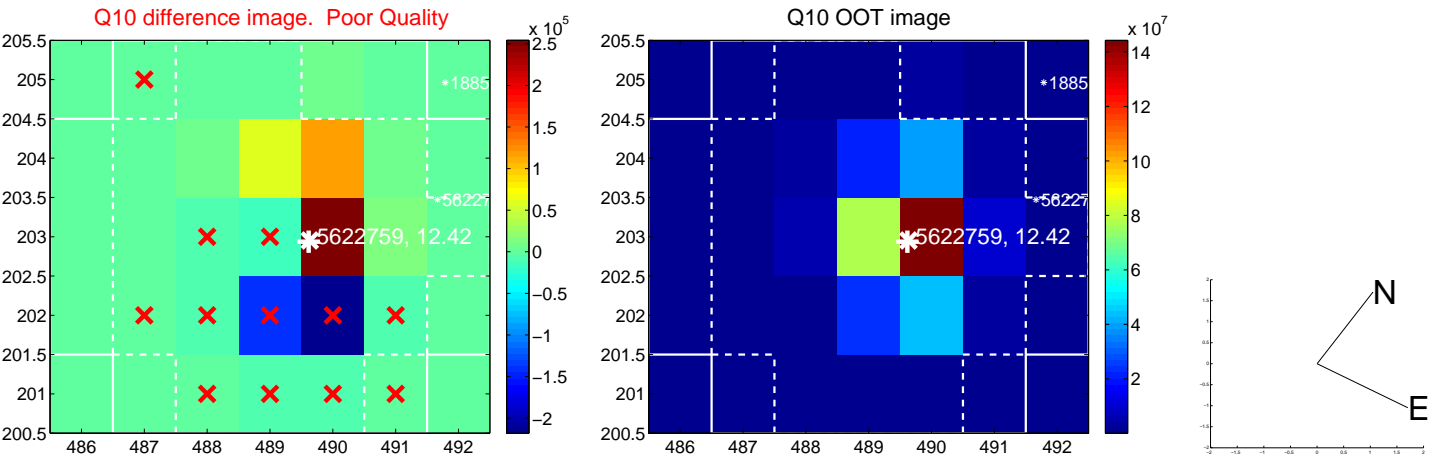
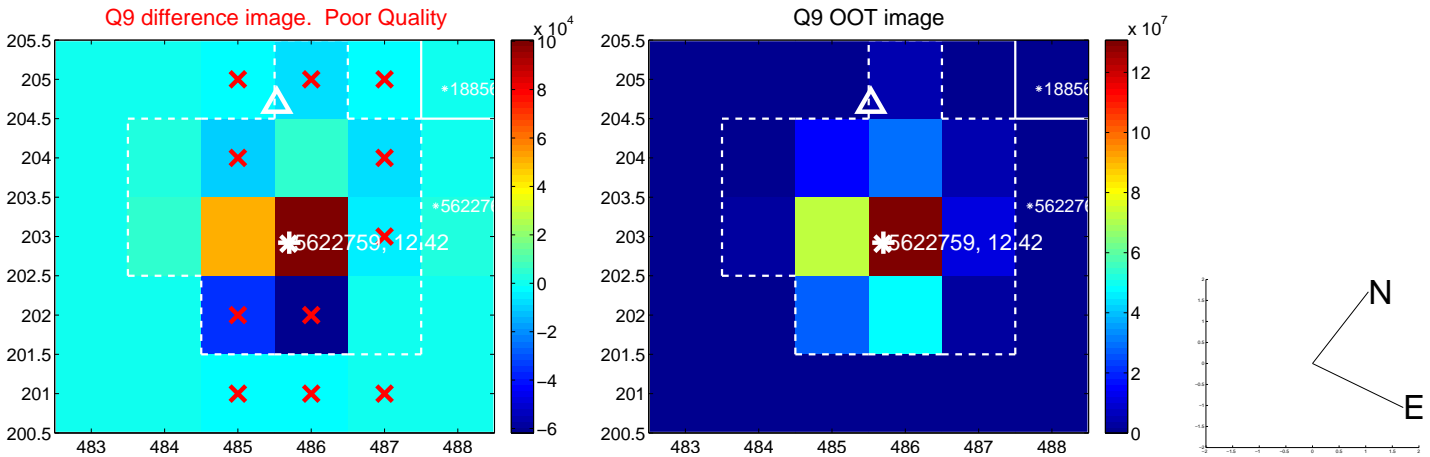
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



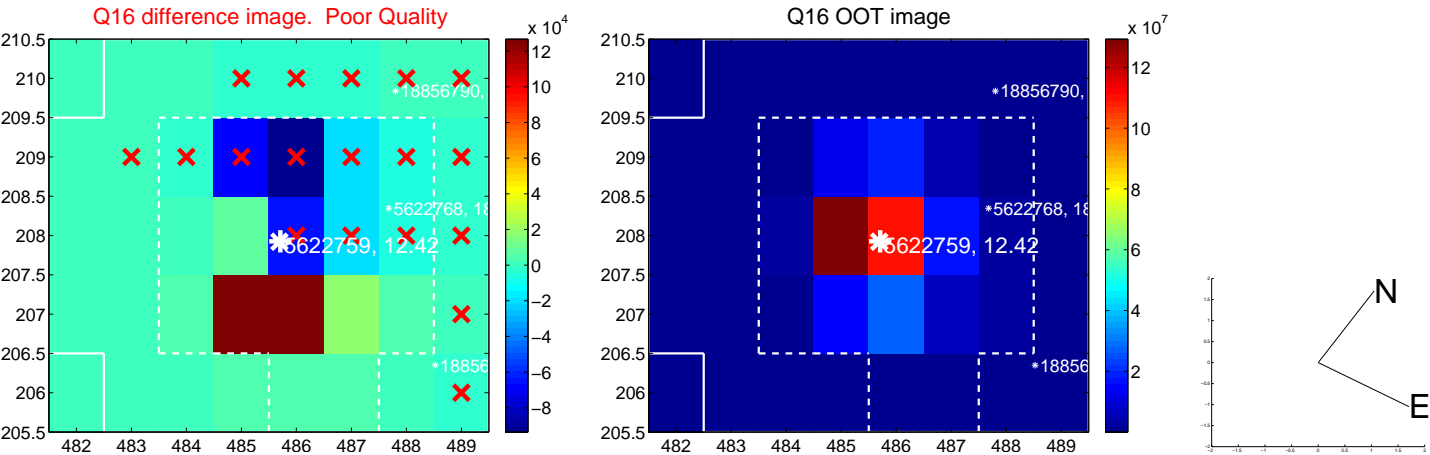
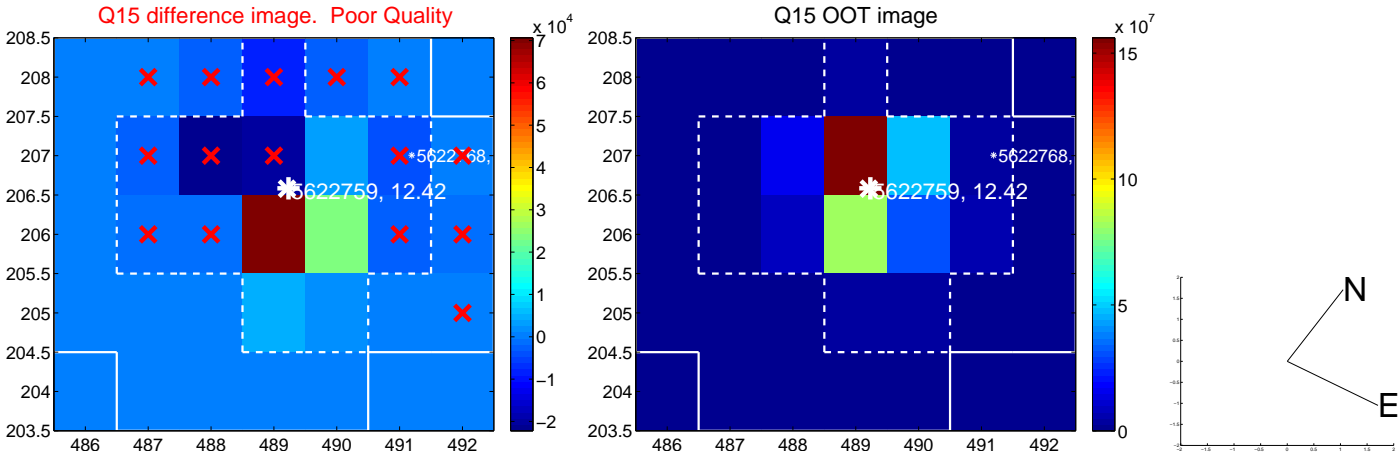
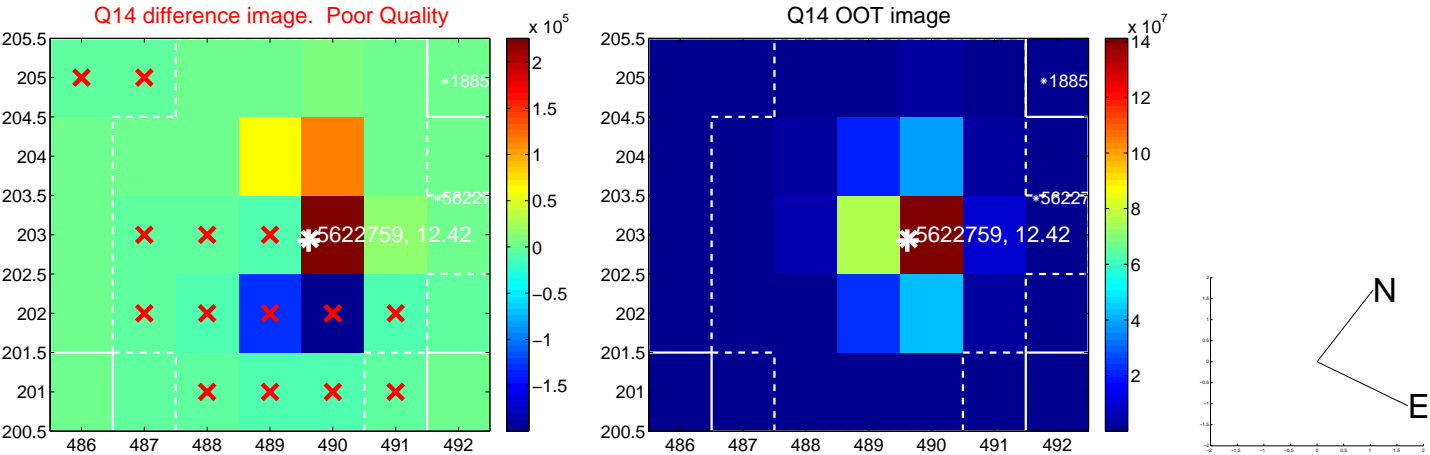
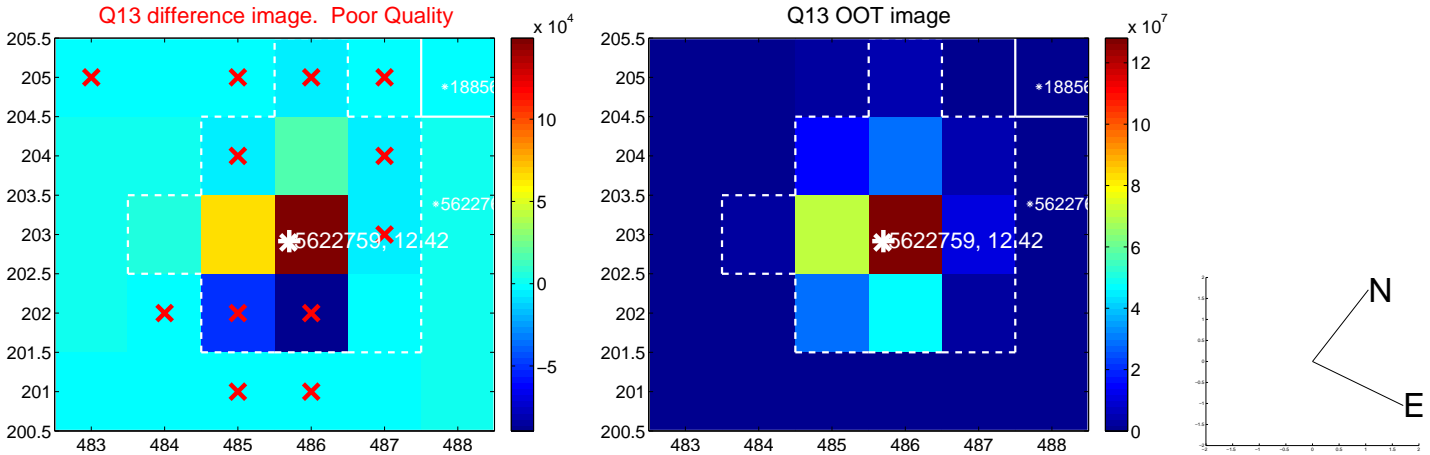
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



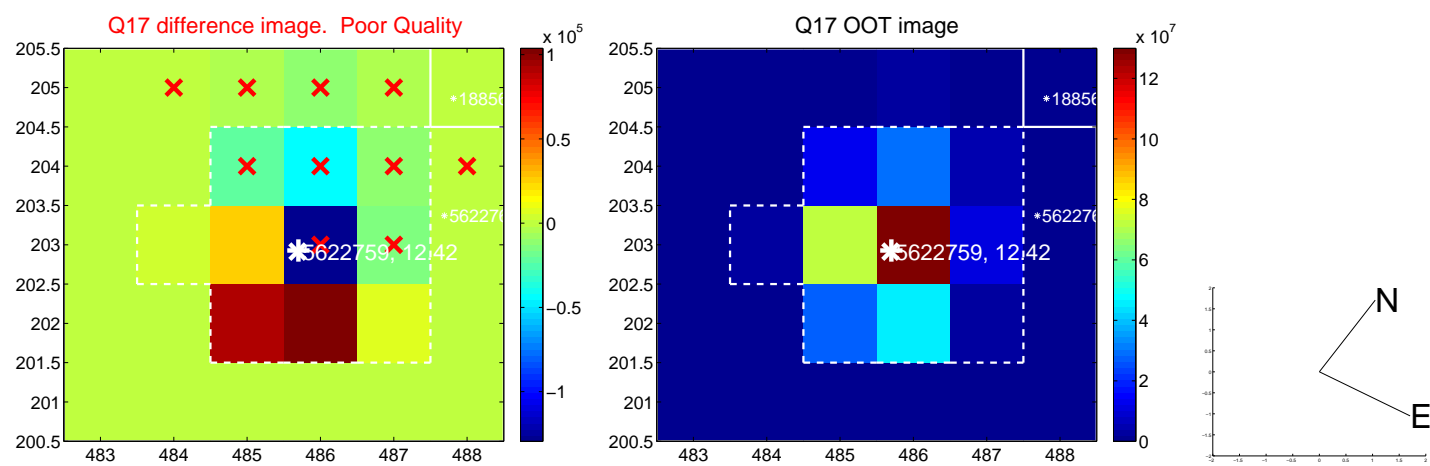
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

