

KIC 006067707

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})
006067707-01	OBS	No	0.607461	132.009503	1.9	3.120	7.8	1.3	2.91	8749	0.42	143240.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006067707-01	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.

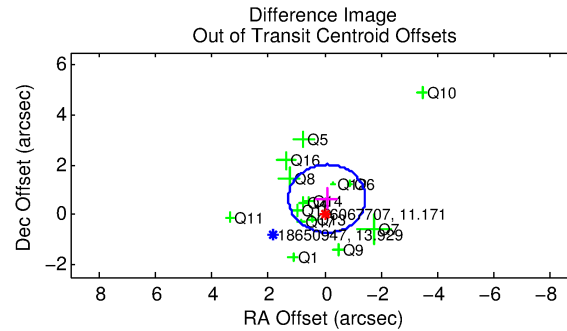
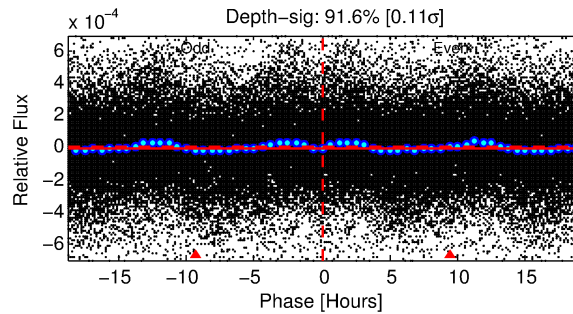
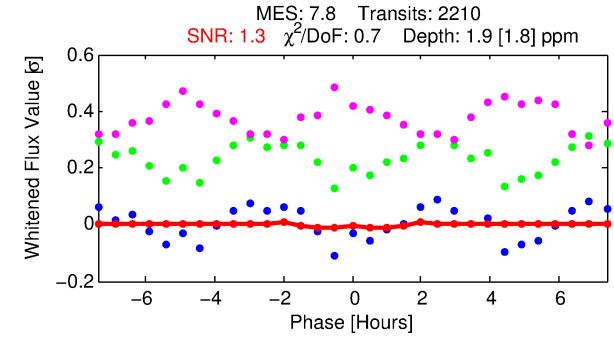
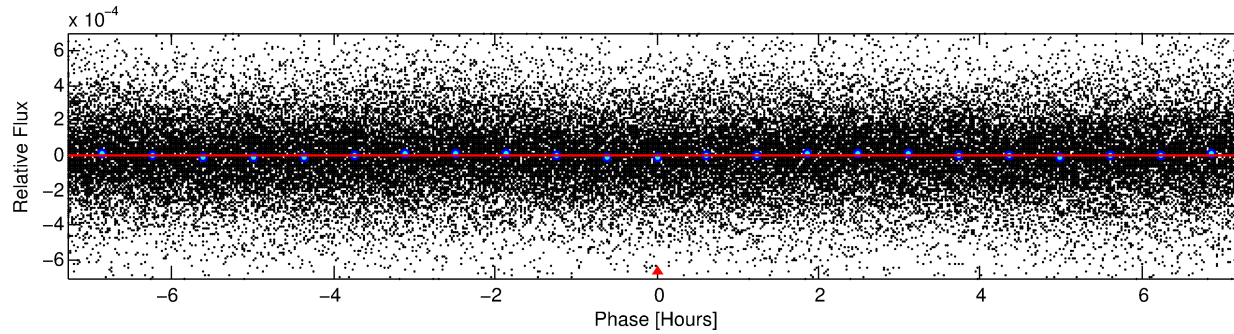
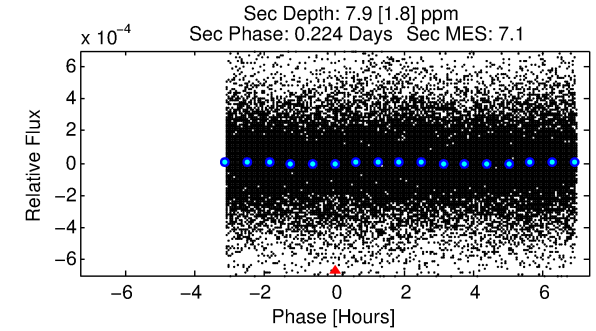
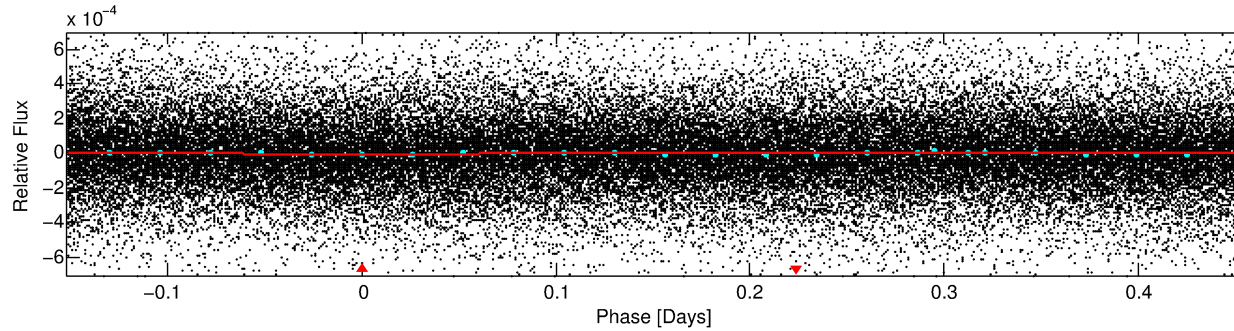
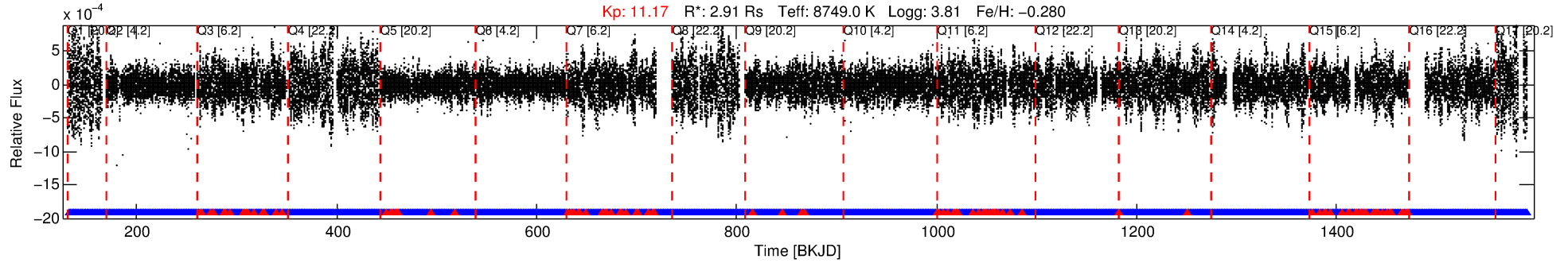
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006067707-01

No Significant Match Found

DV One-Page Summary

KIC: 6067707 Candidate: 1 of 1 Period: 0.607 d



DV Fit Results:

Period = 0.60746 [0.00007] d
Epoch = 132.0095 [0.0117] BKJD
Rp/R* = 0.0013 [0.0007]
a/R* = 1.40 [0.77]
b = 0.63 [1.10]
Seff = 143240.32 [99771.04]
Teq = 4961 [864] K
Rp = 0.42 [0.28] Re
a = 0.0176 [0.0073] AU
Ag = 7.60 [9.60] [0.69σ]
Teffp = 12733 [3462] K [2.18σ]

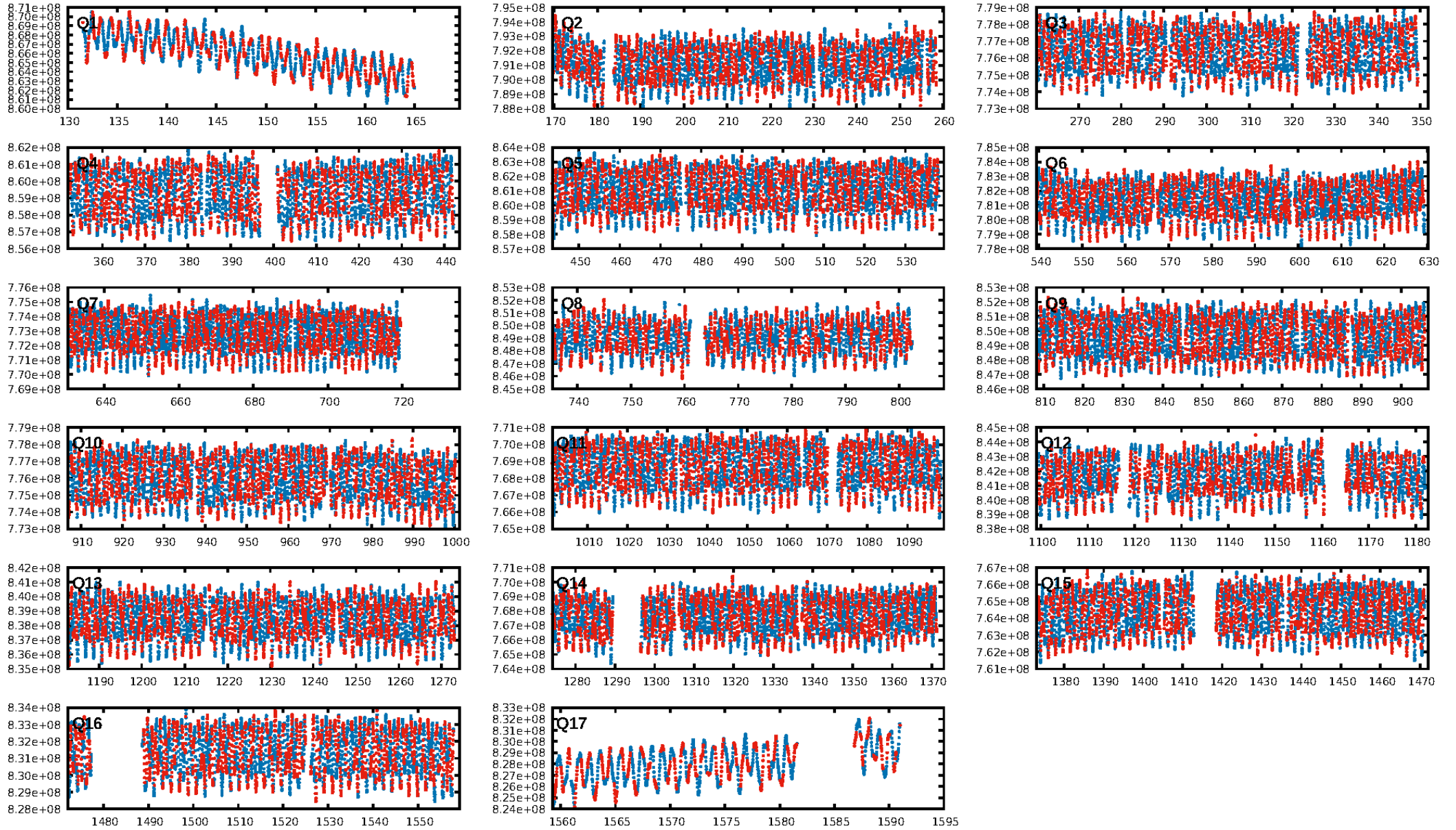
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.42e-13
RollingBand-fgt: 0.95 [1999/2111]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.645 arcsec [1.42σ]
KicOffset-rm: 0.441 arcsec [1.05σ]
OotOffset-st: 3/3/4/5 [15]
KicOffset-st: 3/3/4/5 [15]
DiffImageQuality-fgm: 0.40 [6/15]
DiffImageOverlap-fno: 1.00 [17/17]

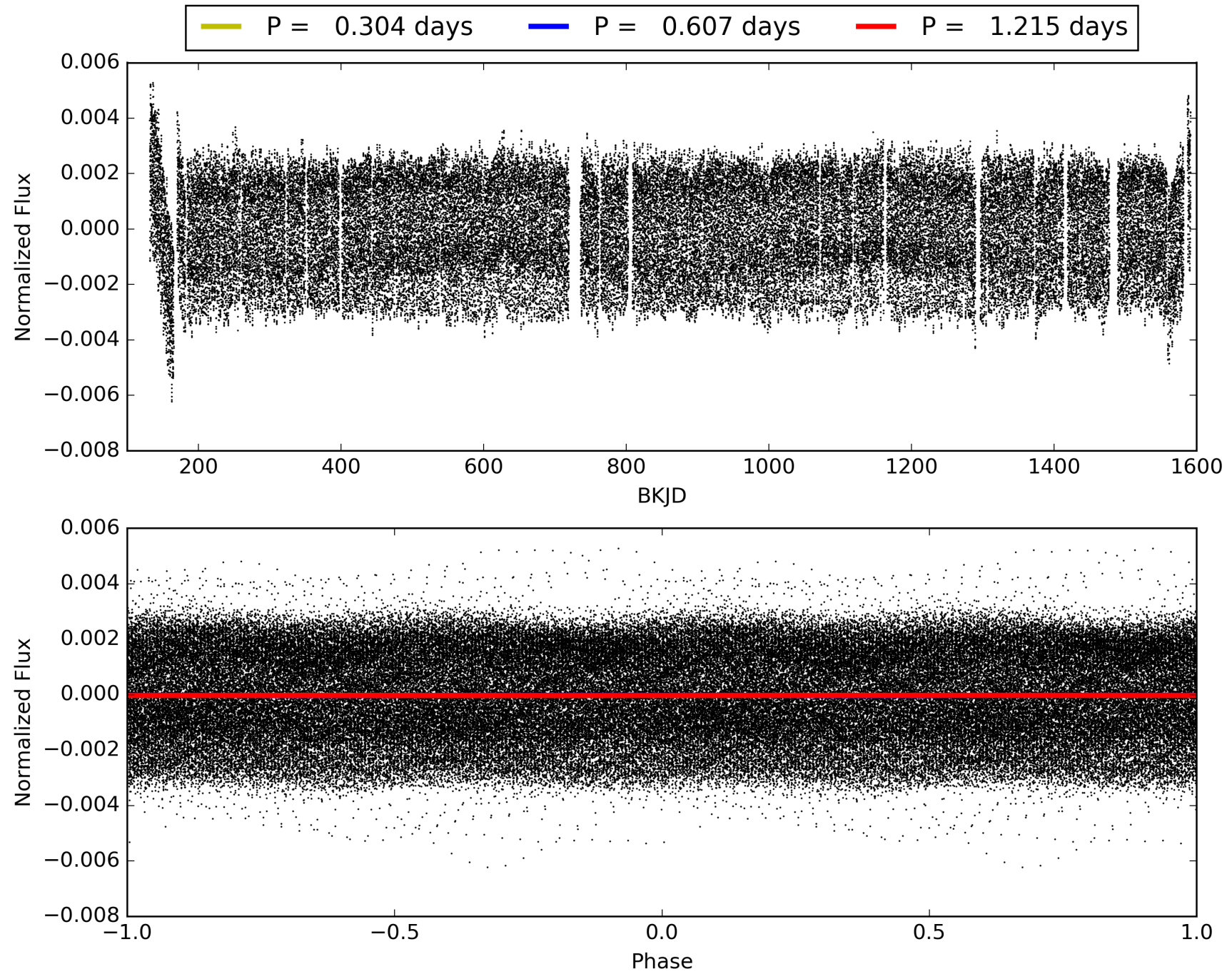
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:15:35 Z

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

TCE 006067707-01, PDC Light Curves

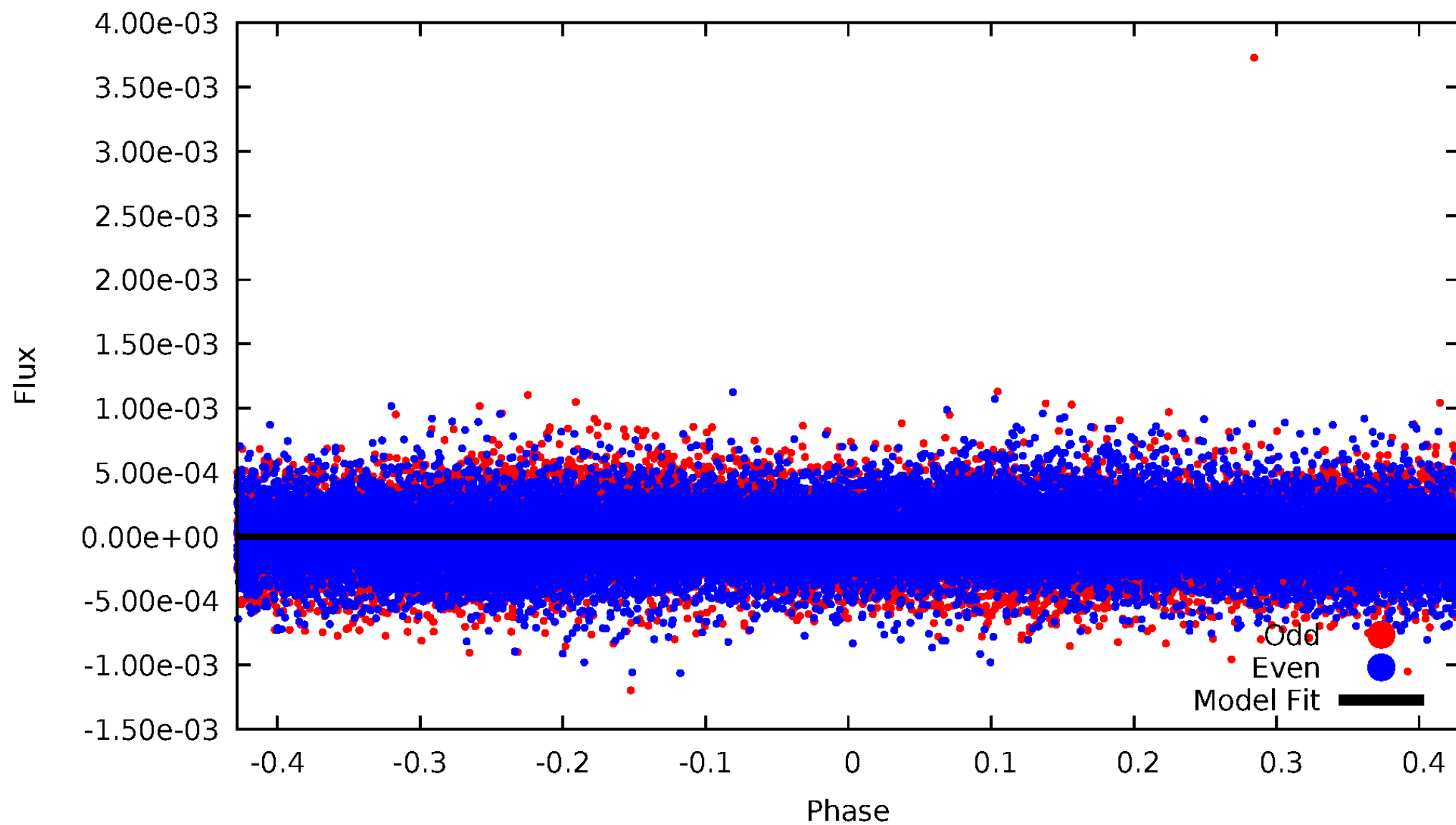


TCE 006067707-01



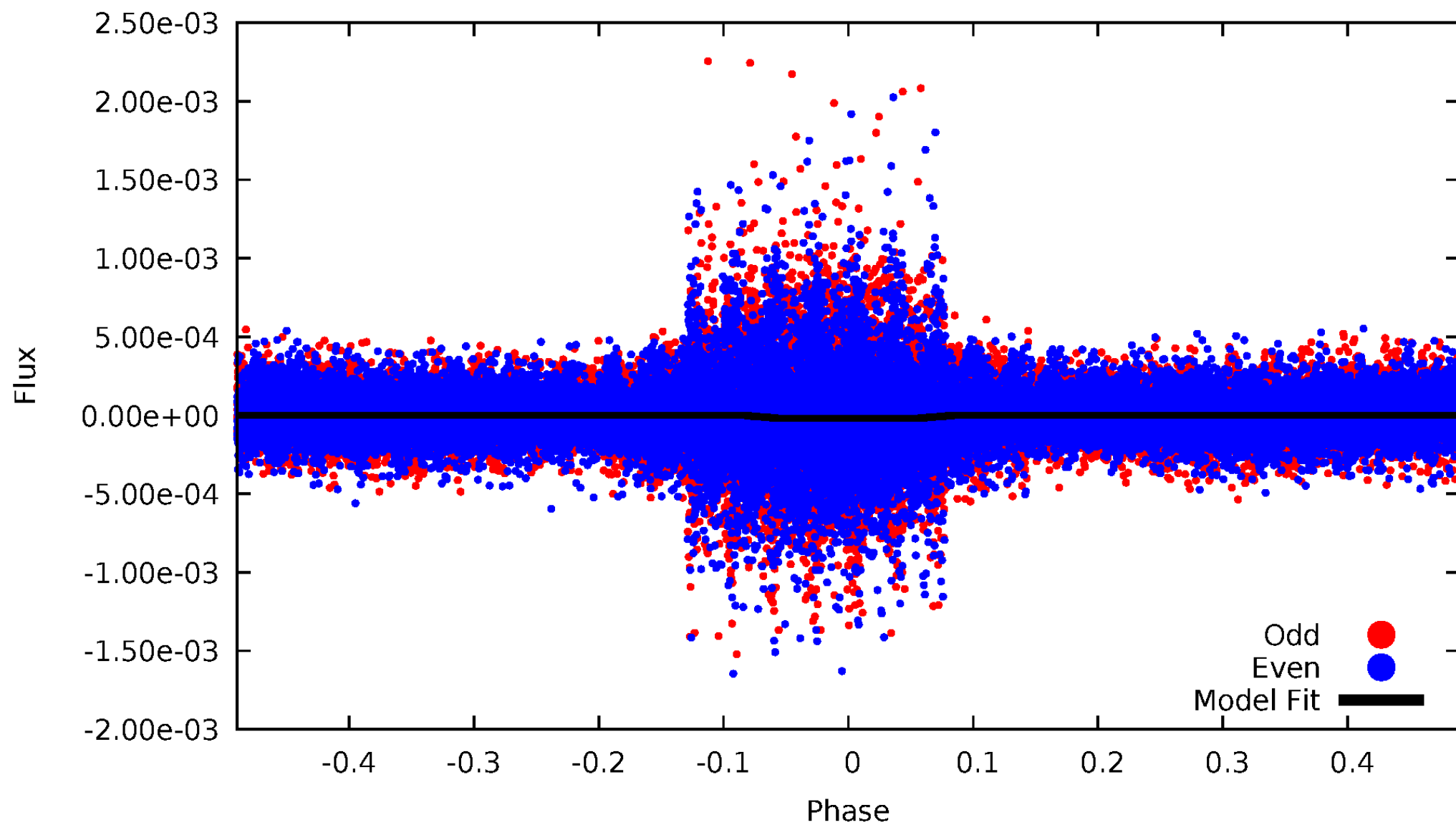
DV Odd/Even

TCE 006067707-01

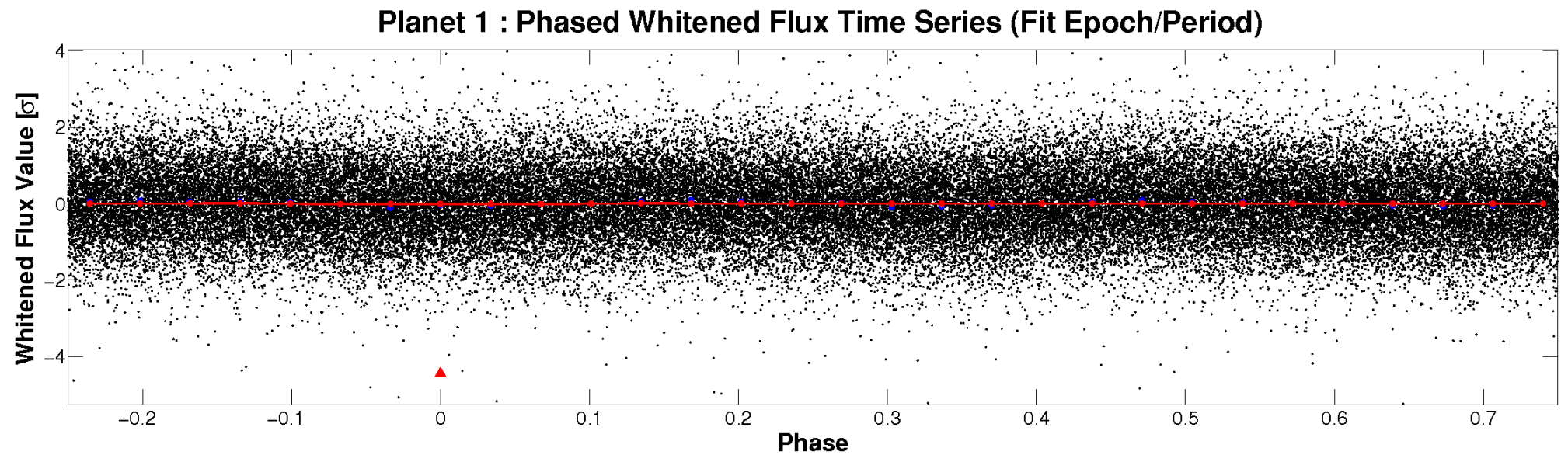
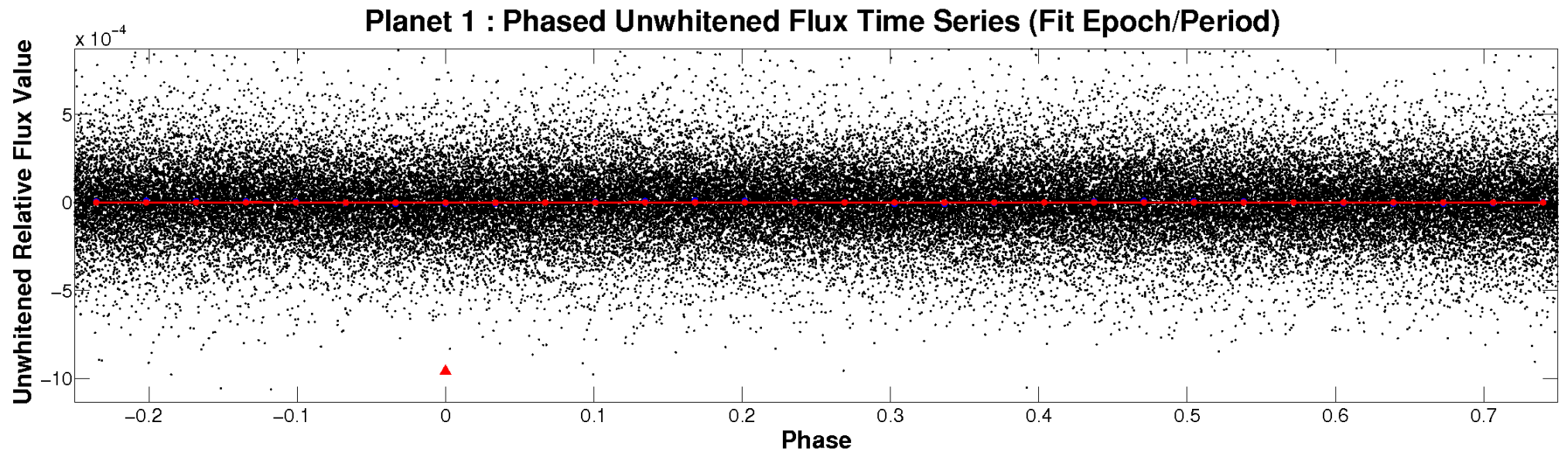


ALT Odd/Even

TCE 006067707-01

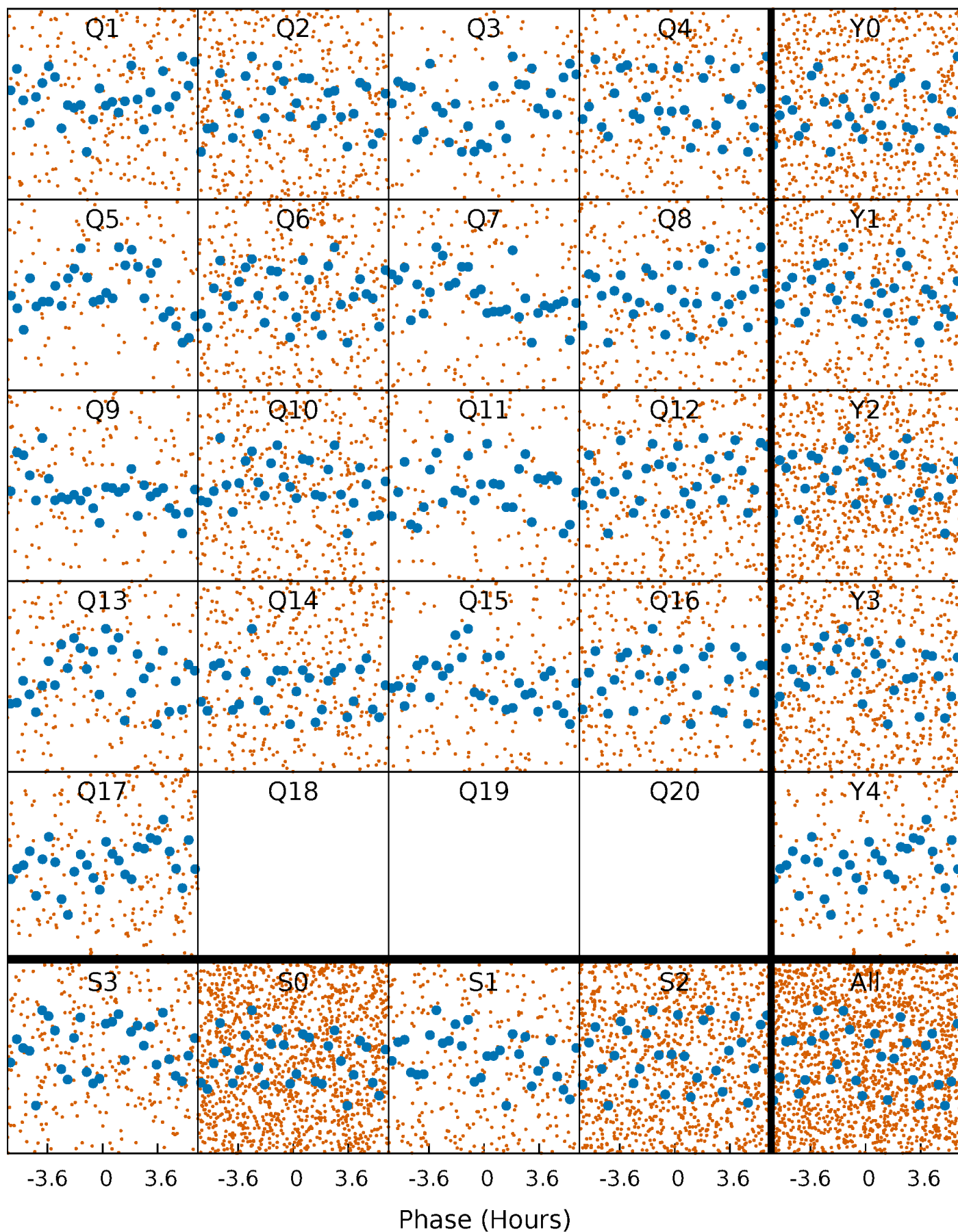


Non-Whitened Vs. Whitened Light Curve



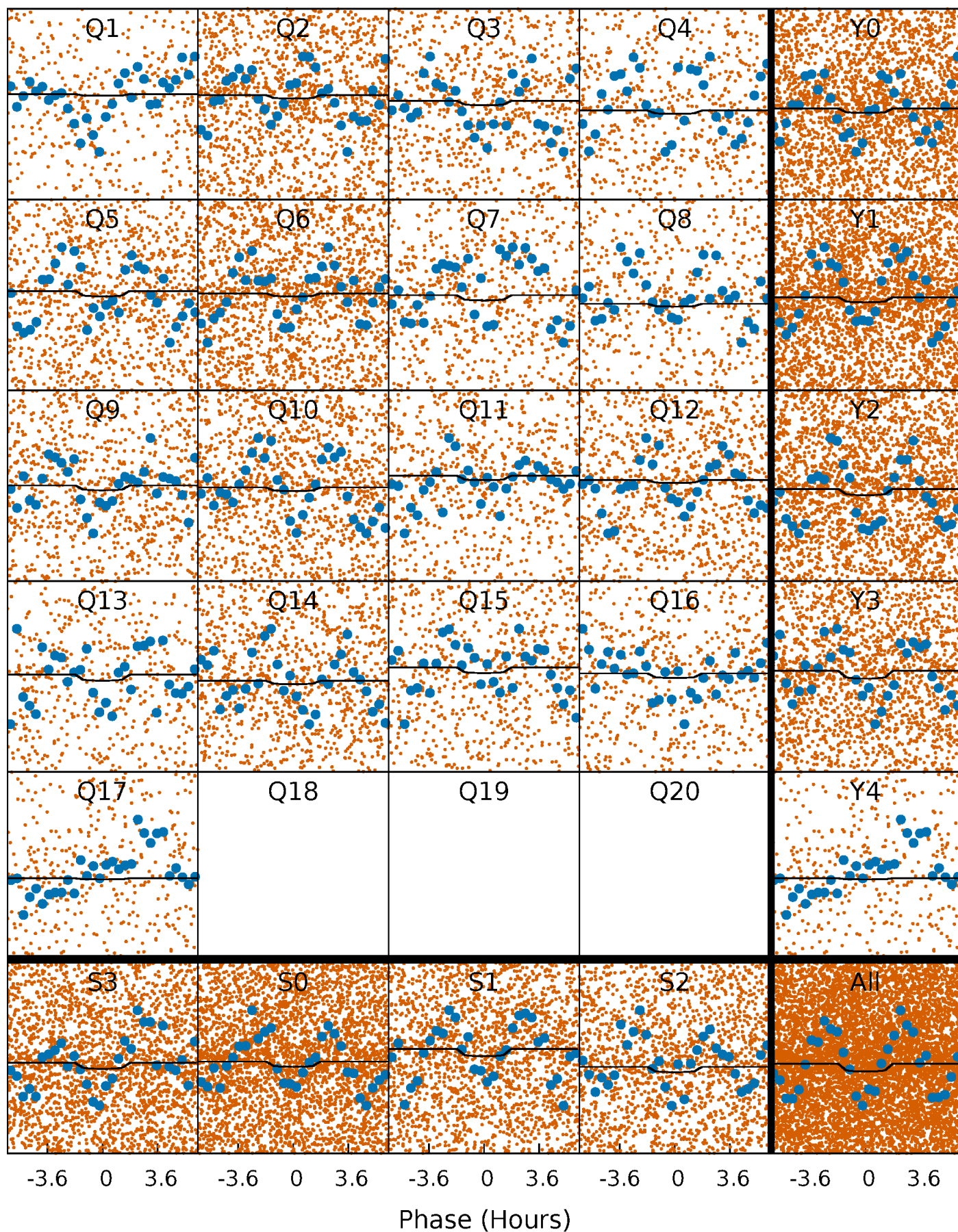
PDC Quarter-Phased Transit Curves

TCE 006067707-01 P= 0.607461 Days $T_0=132.009503$ (BKJD)



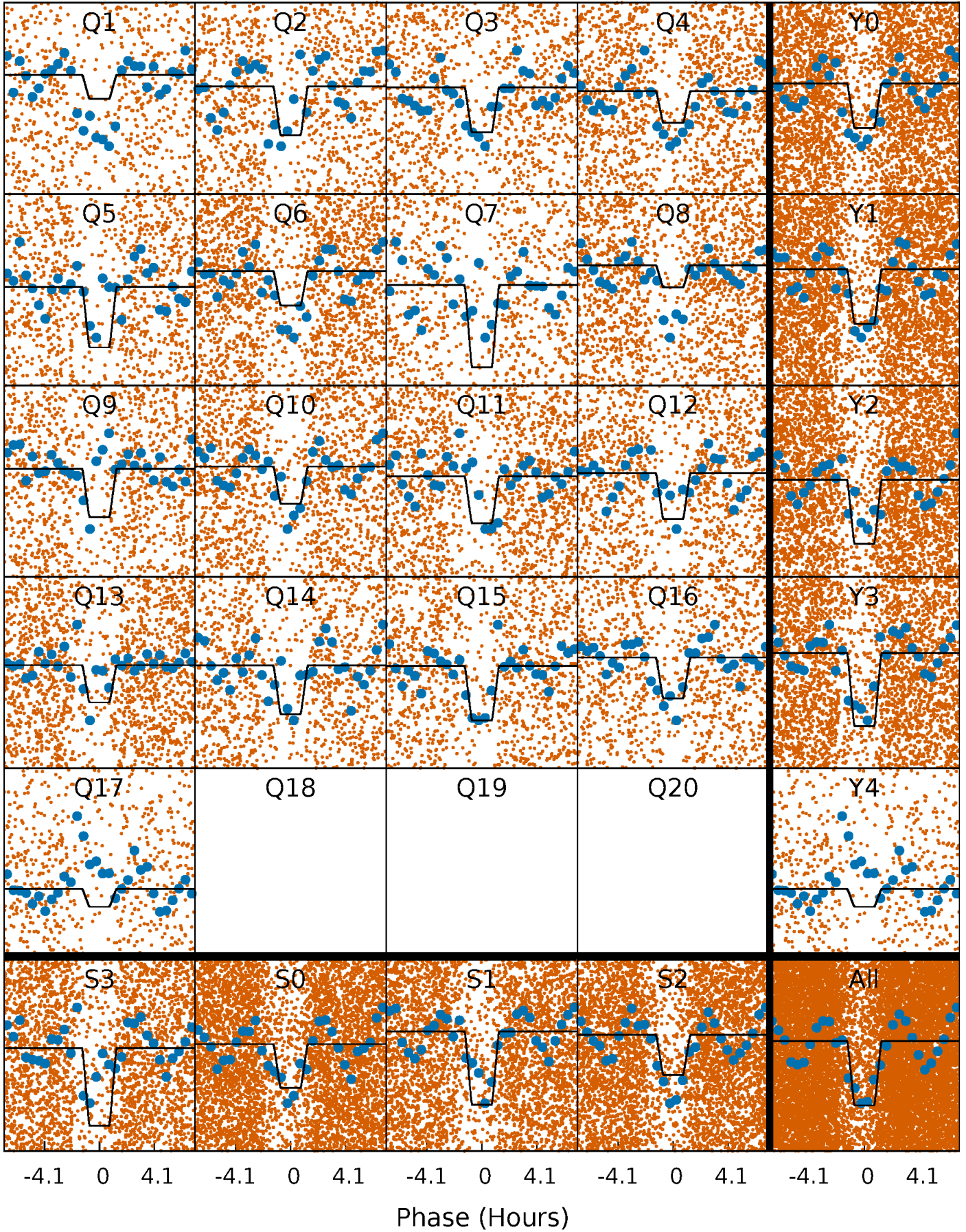
DV Quarter-Phased Transit Curves

TCE 006067707-01 P= 0.607461 Days $T_0=132.009503$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

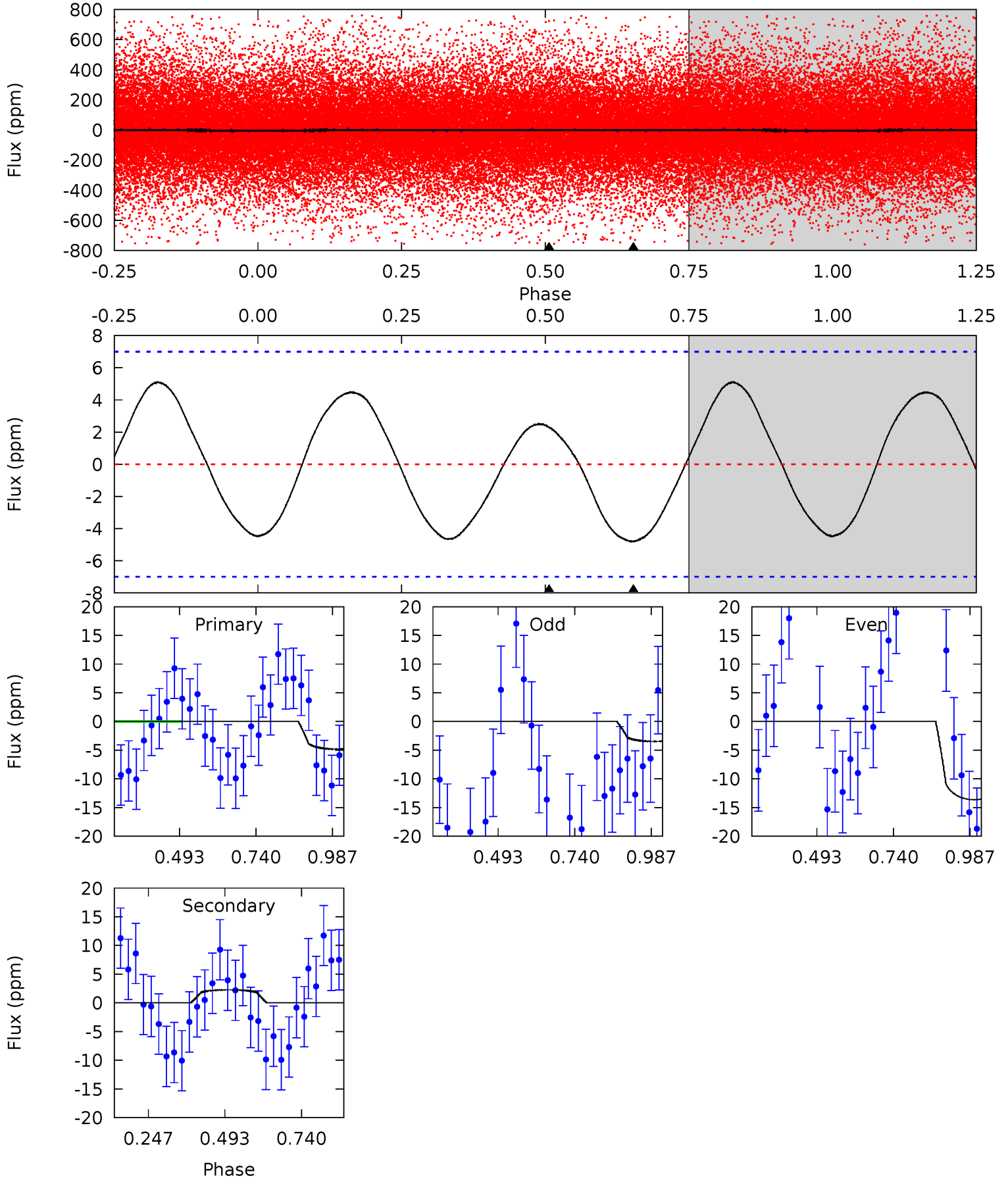
TCE 006067707-01 P= 0.607495 Days $T_0=131.977231$ (BKJD)



DV Model-Shift Uniqueness Test

006067707-01, P = 0.607461 Days, E = 131.402042 Days

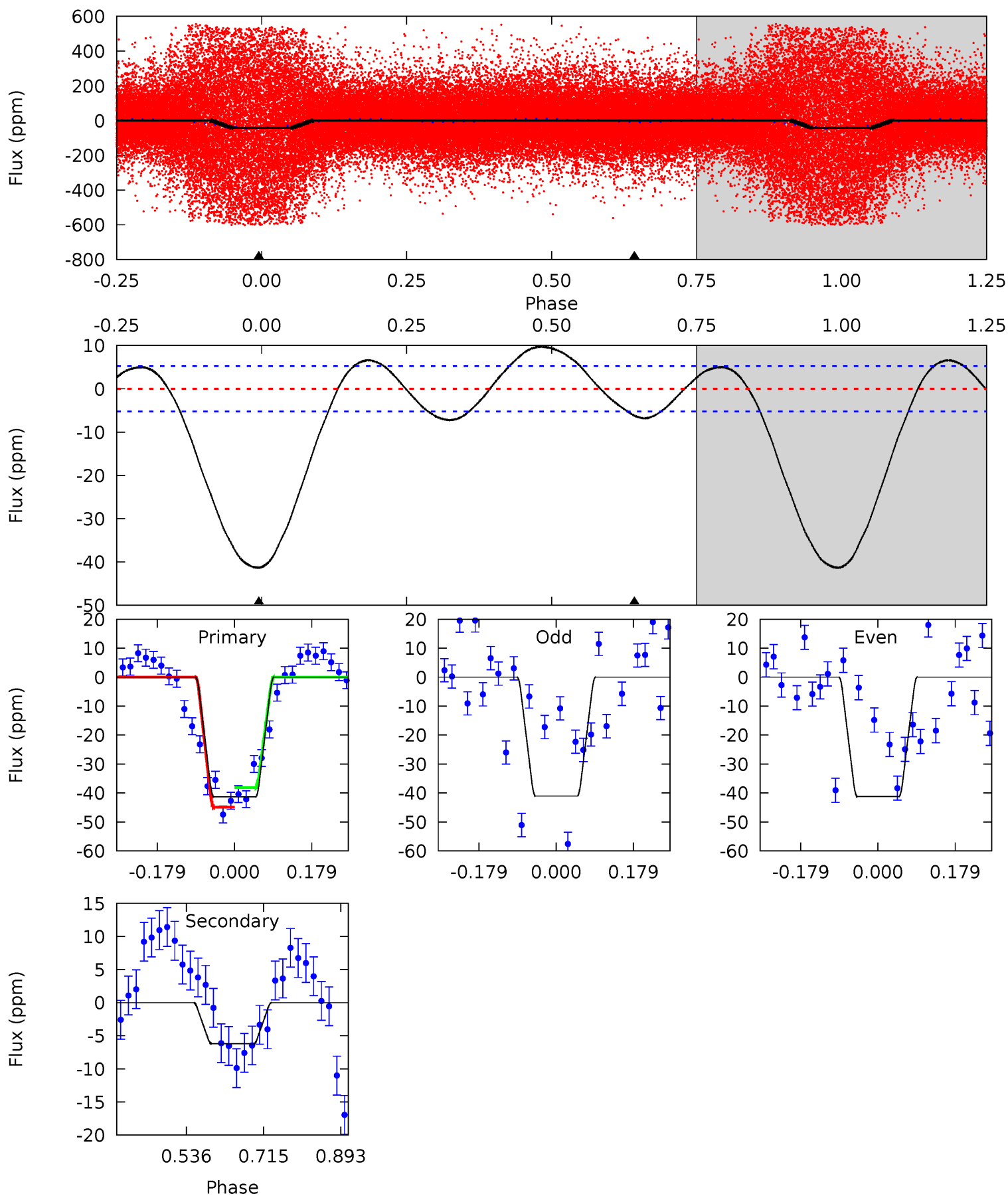
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.02	-1.42	0	0	4.37	1.16	1.92	3.02	3.02	-1.42	-1.42	3.10	5.46	0.52	0.97



Alt Model-Shift Uniqueness Test

006067707-01, P = 0.607495 Days, E = 131.369736 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.0	5.27	0	0	4.44	1.34	4.46	35.0	35.0	5.27	5.27	0.05	0.48	0.19	2.95



Stellar Parameters For KIC 006067707

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8749^{+241}_{-414}	$3.806^{+0.397}_{-0.132}$	$-0.280^{+0.450}_{-0.300}$	$2.911^{+0.711}_{-1.219}$	$1.979^{+0.406}_{-0.447}$	$0.113^{+0.411}_{-0.046}$
	+3%/-5%	+10%/-3%	+161%/-107%	+24%/-42%	+21%/-23%	+364%/-40%
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 006067707-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	2 ± 2	$0.41^{+0.23}_{-0.20}$	6689^{+563}_{-733}	-9286^{+2704}_{-6984}	$-2.152^{+1.692}_{-6.962}$
Alt.	-6 ± 1	$1.38^{+0.35}_{-0.35}$	6774^{+497}_{-712}	5056^{+965}_{-1244}	$0.549^{+0.401}_{-0.206}$

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 $A_{obs} \gg 1.0$

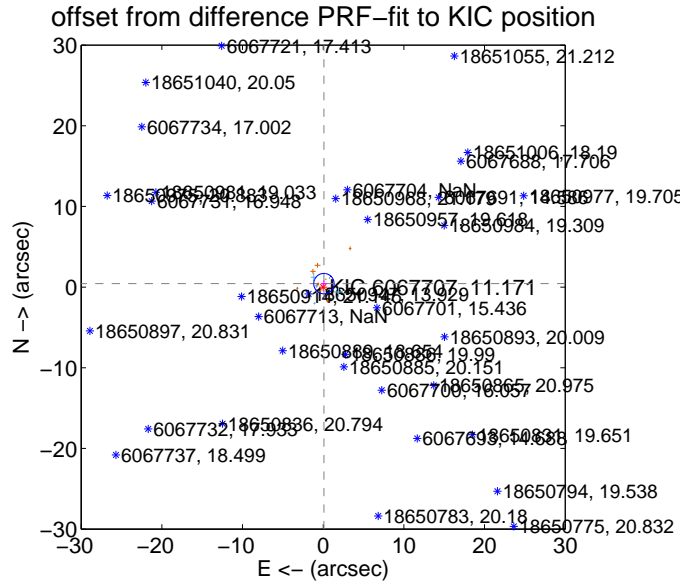
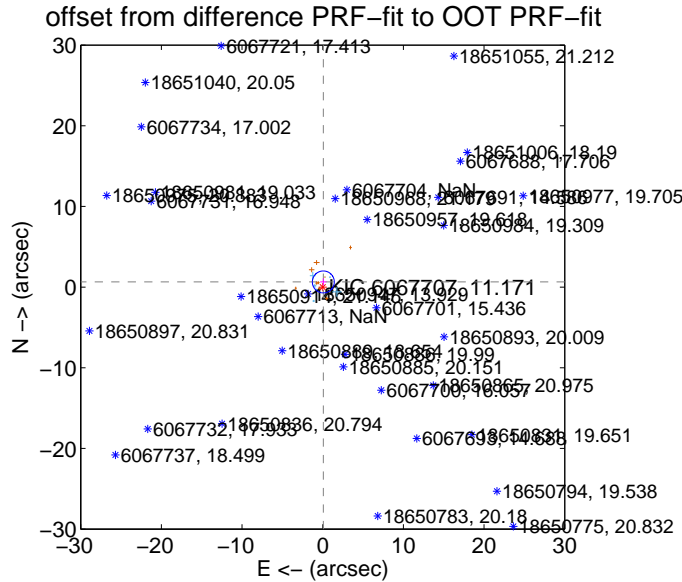
DV Centroid Data

Supplemental centroid analysis for 006067707-01. **Kepler magnitude: 11.17.** Transit SNR 1.25

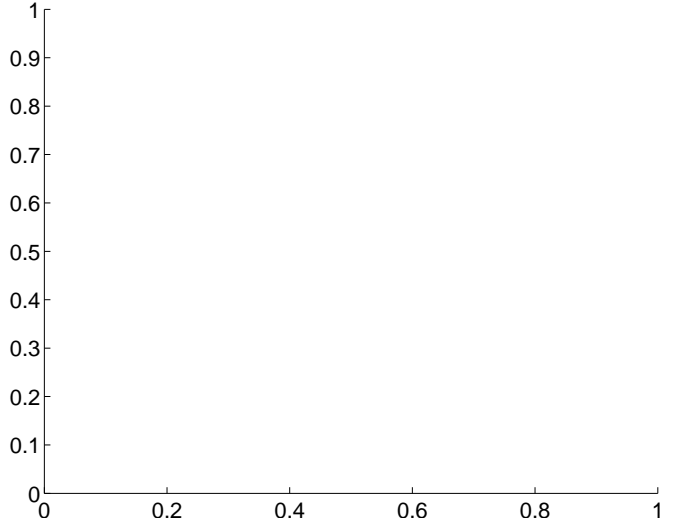
There are 6 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.645 ± 0.453	1.42	-0.077 ± 0.386	0.640 ± 0.439
PRF-fit source offset from KIC position	0.441 ± 0.421	1.05	-0.092 ± 0.380	0.431 ± 0.397
photometric centroid source offset	—	—	—	—

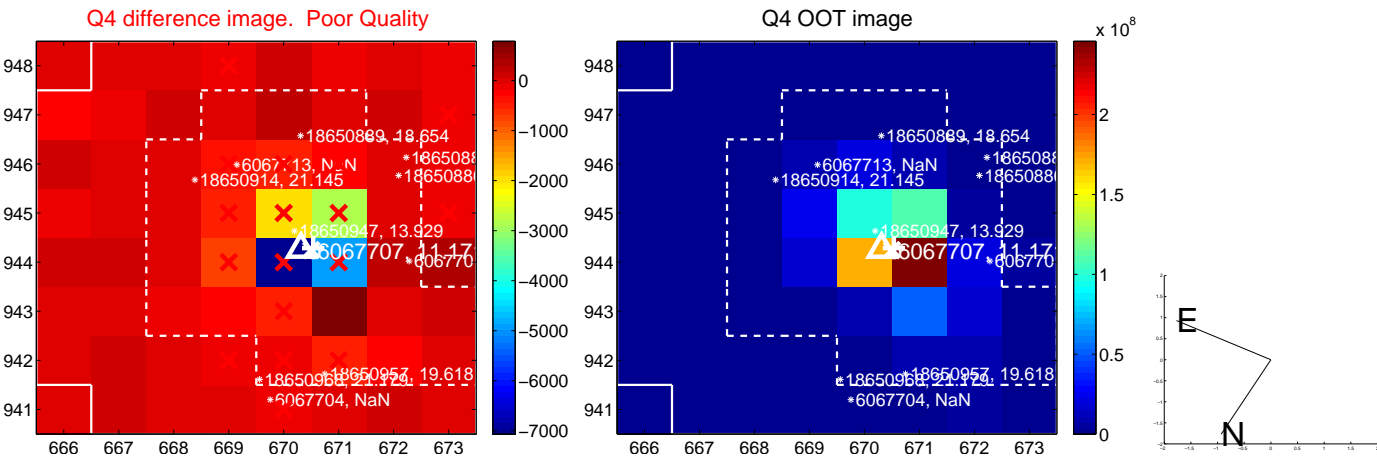
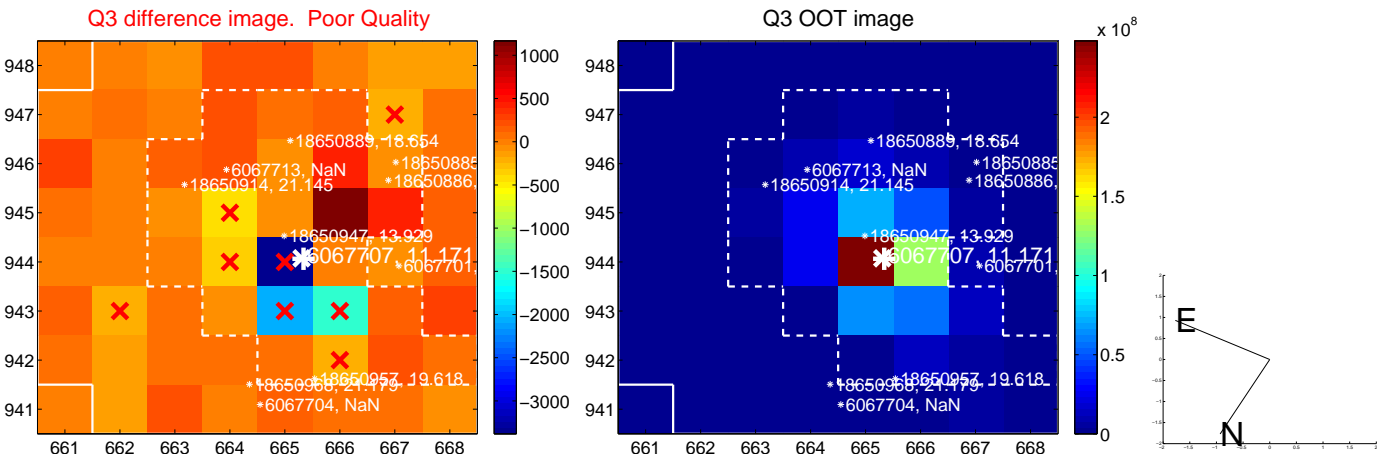
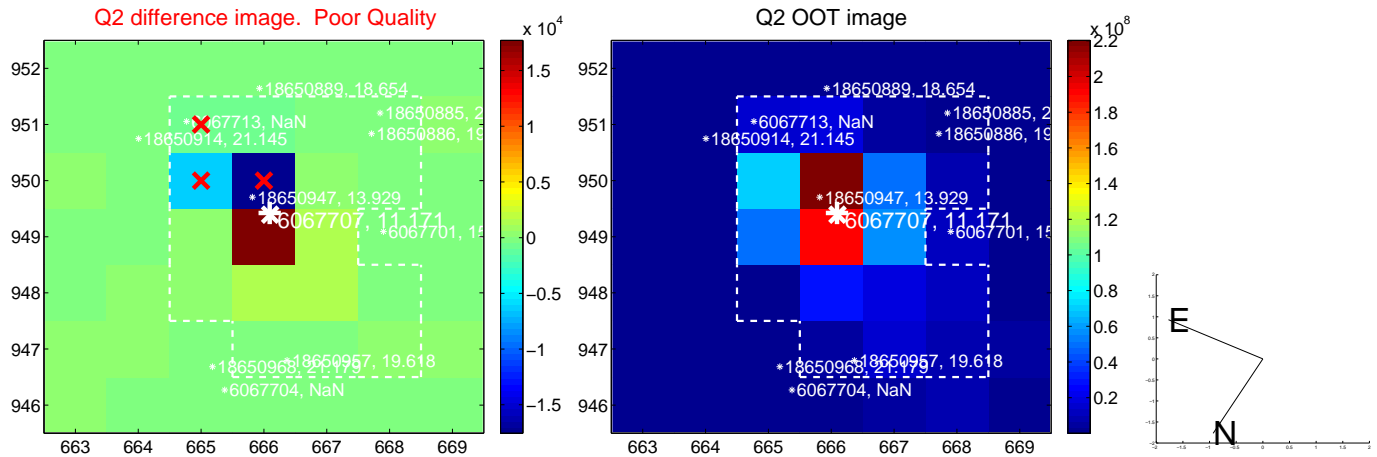
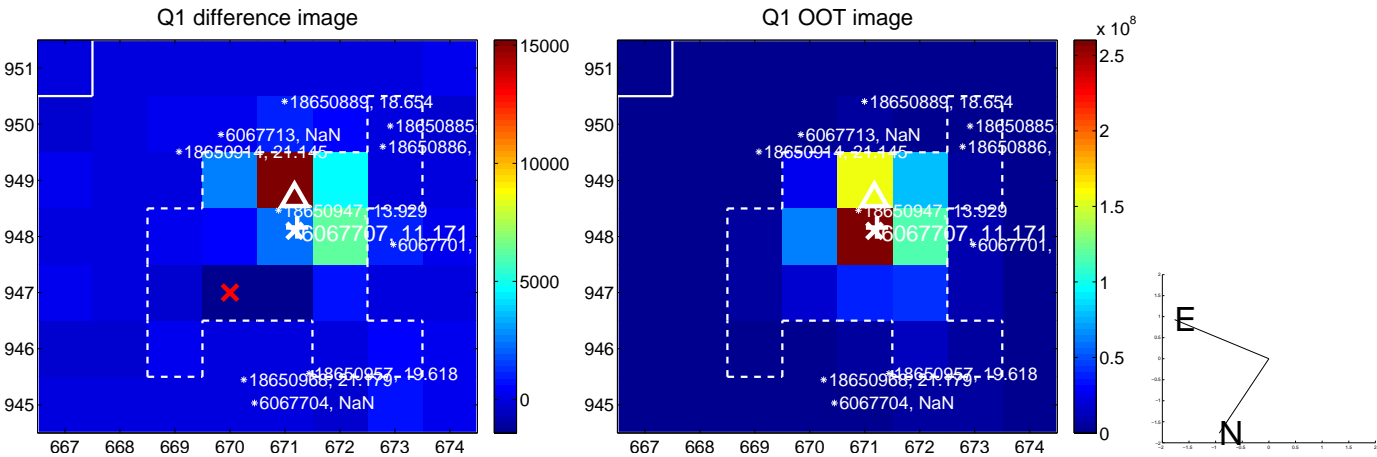


There are no photometric centroids

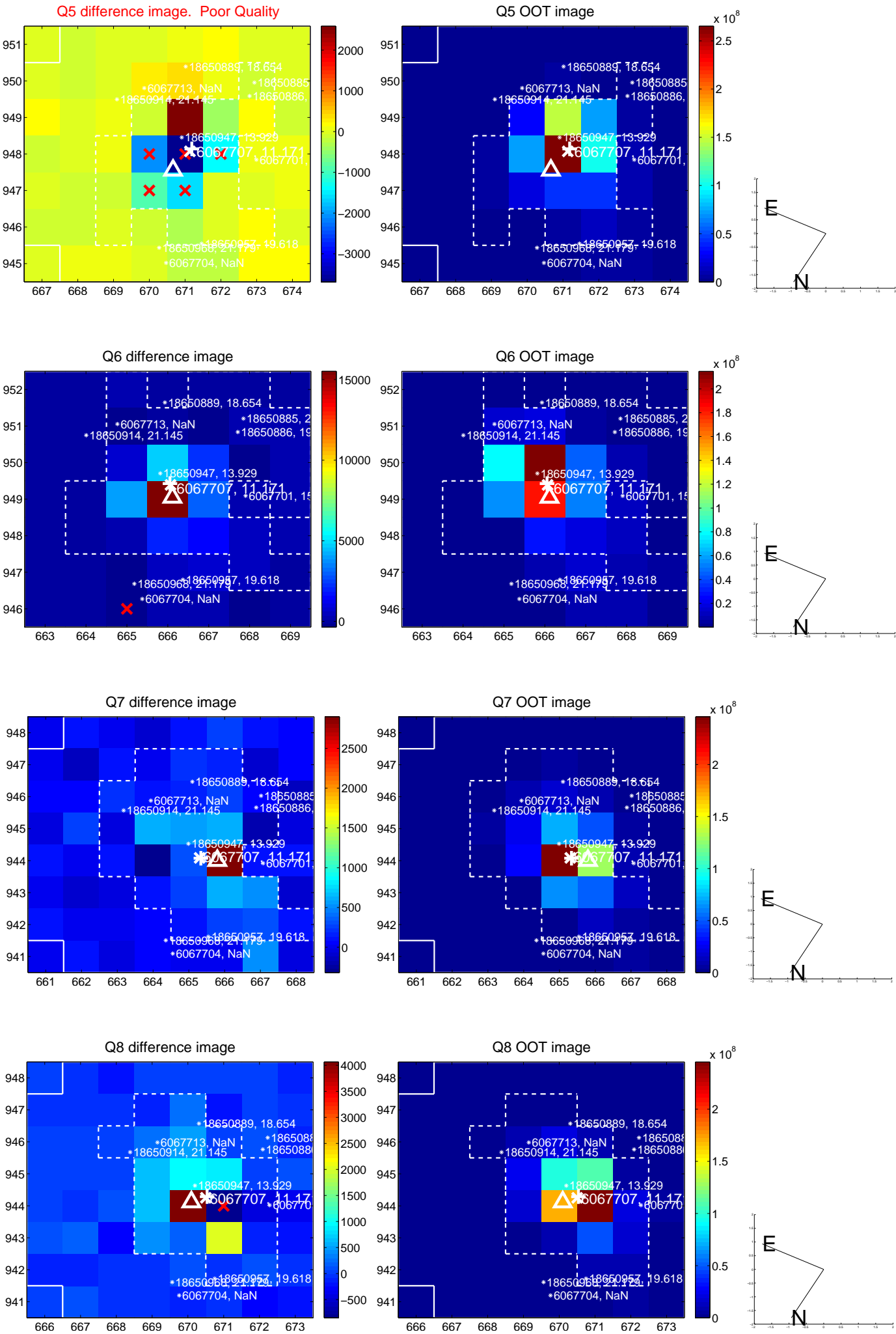


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

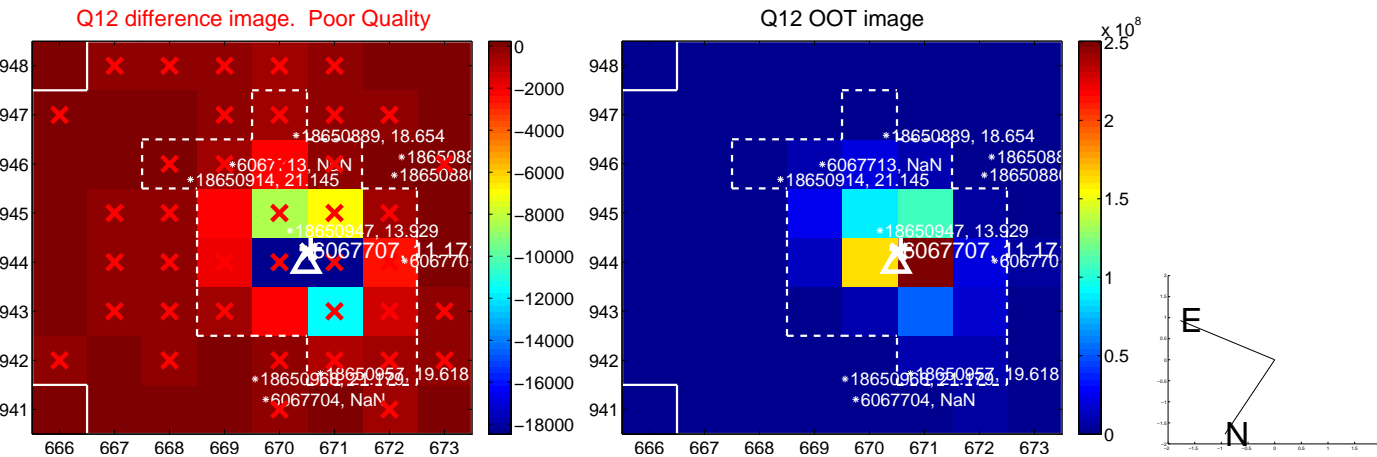
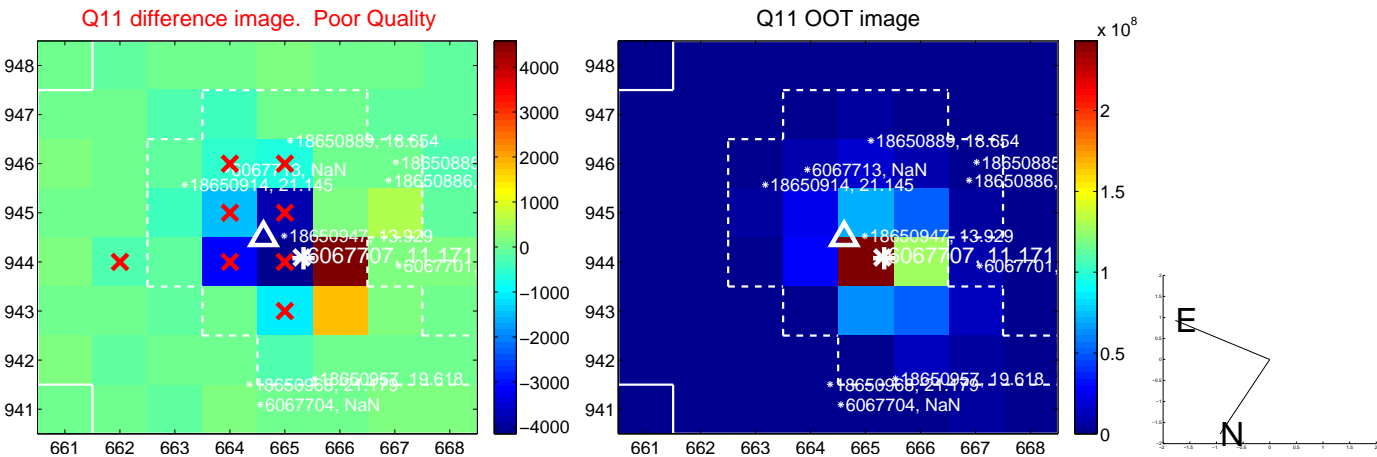
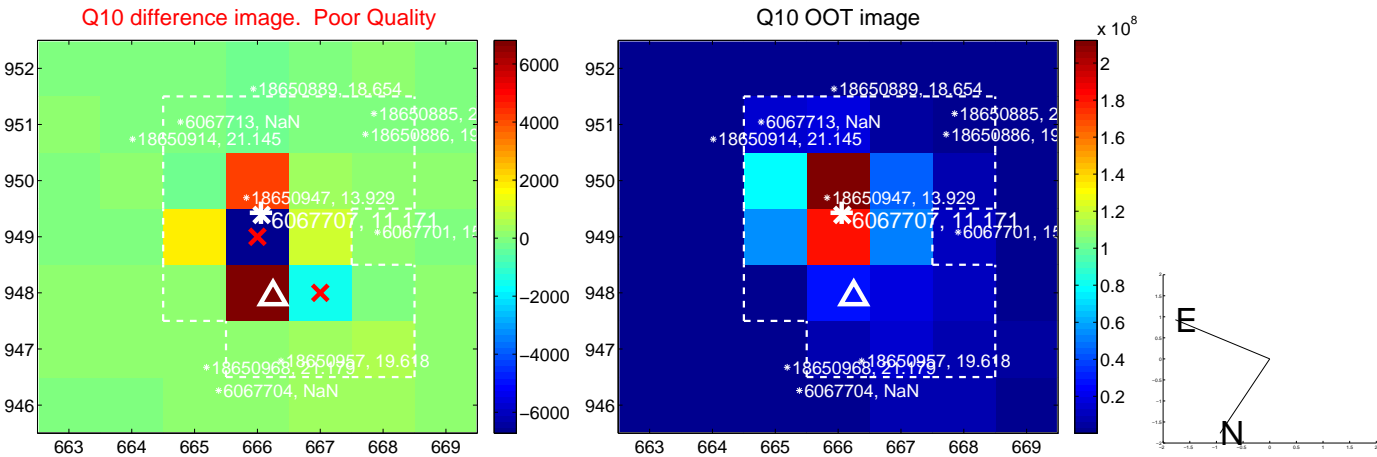
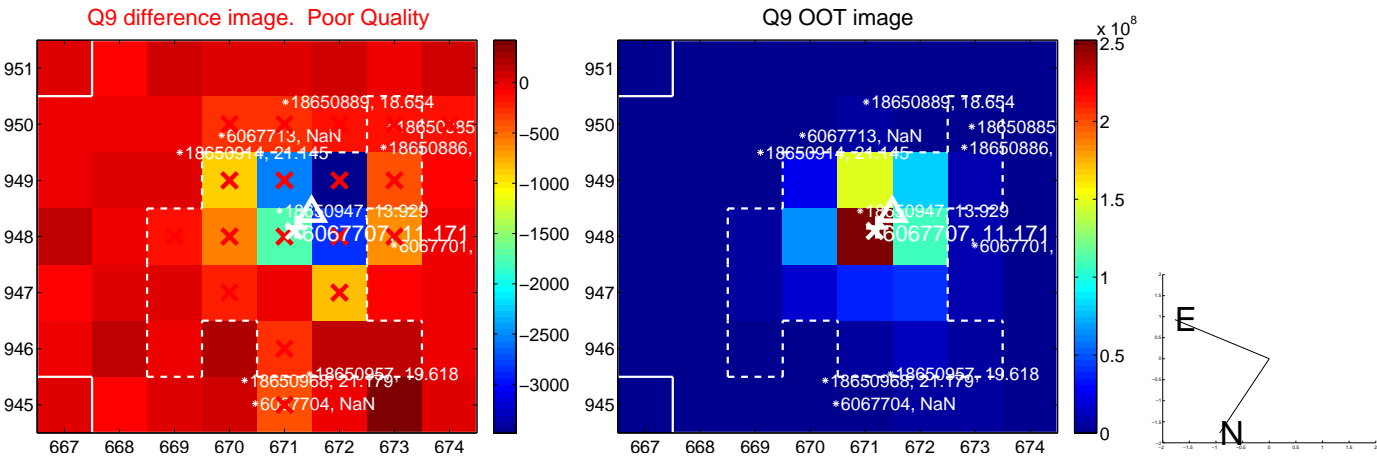
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



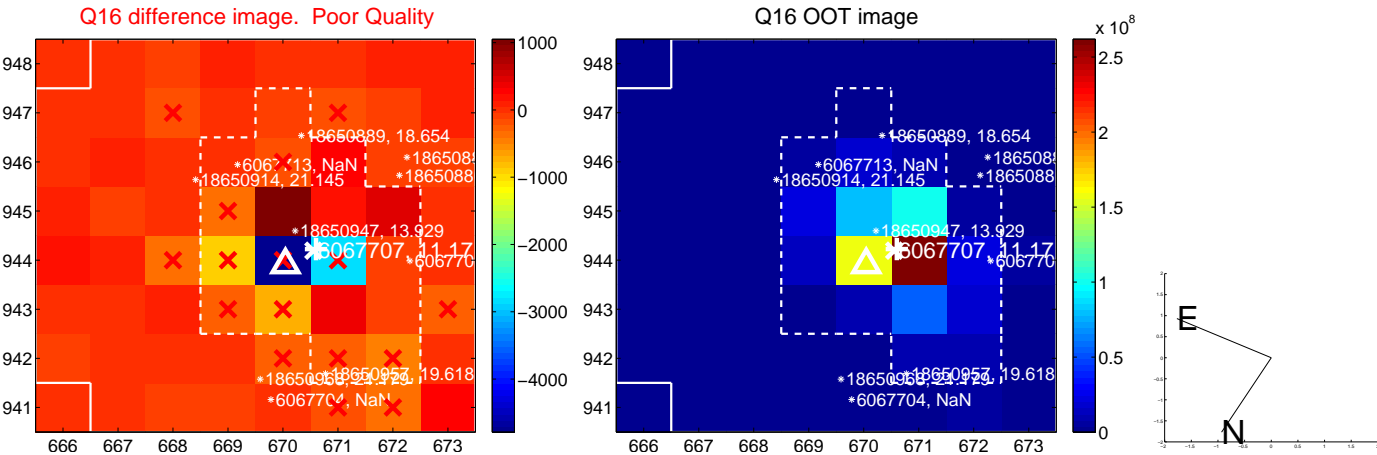
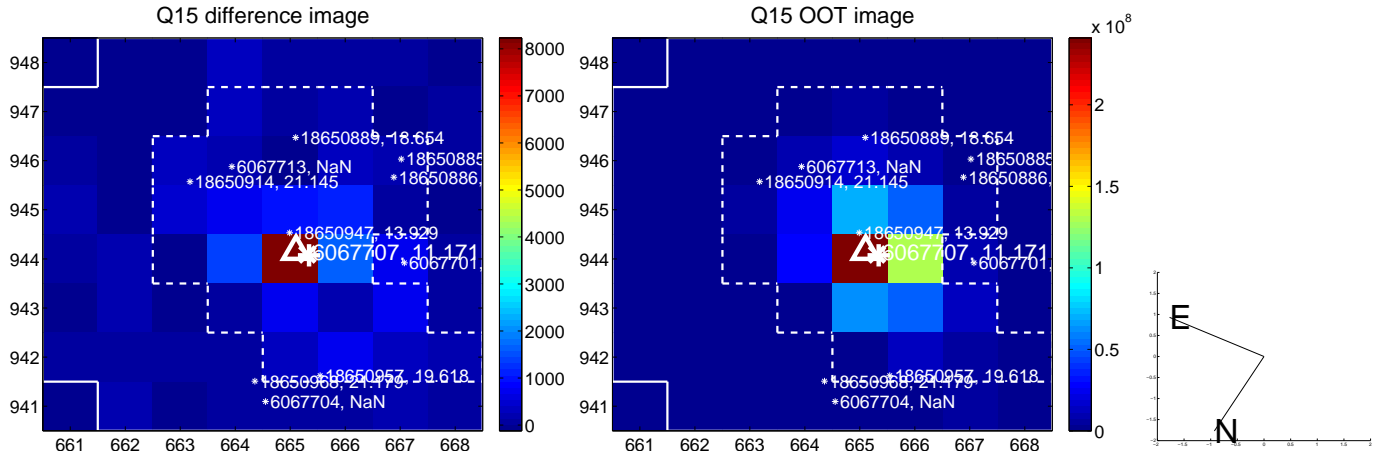
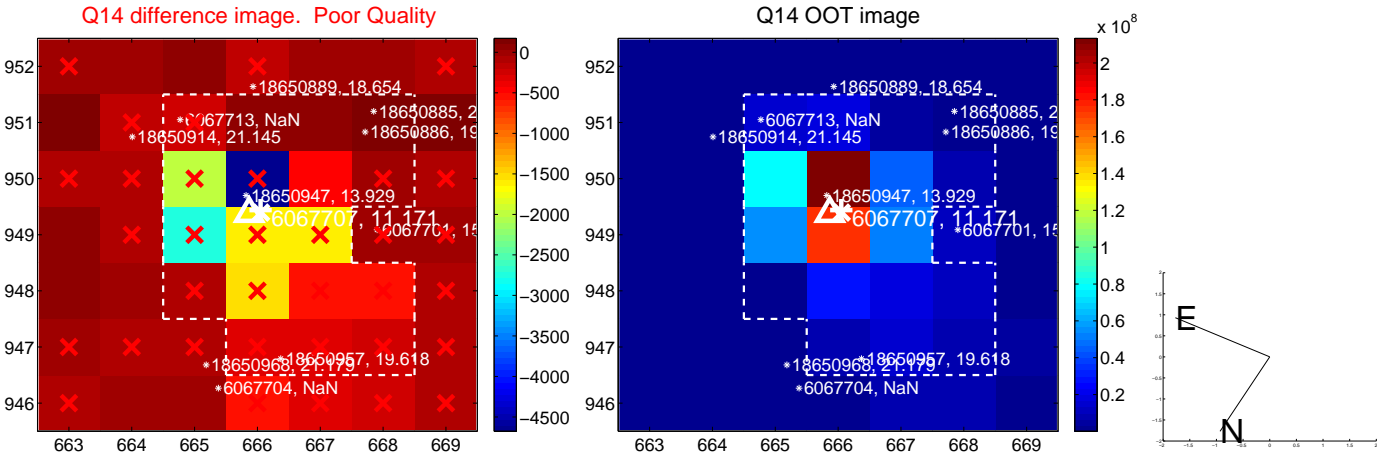
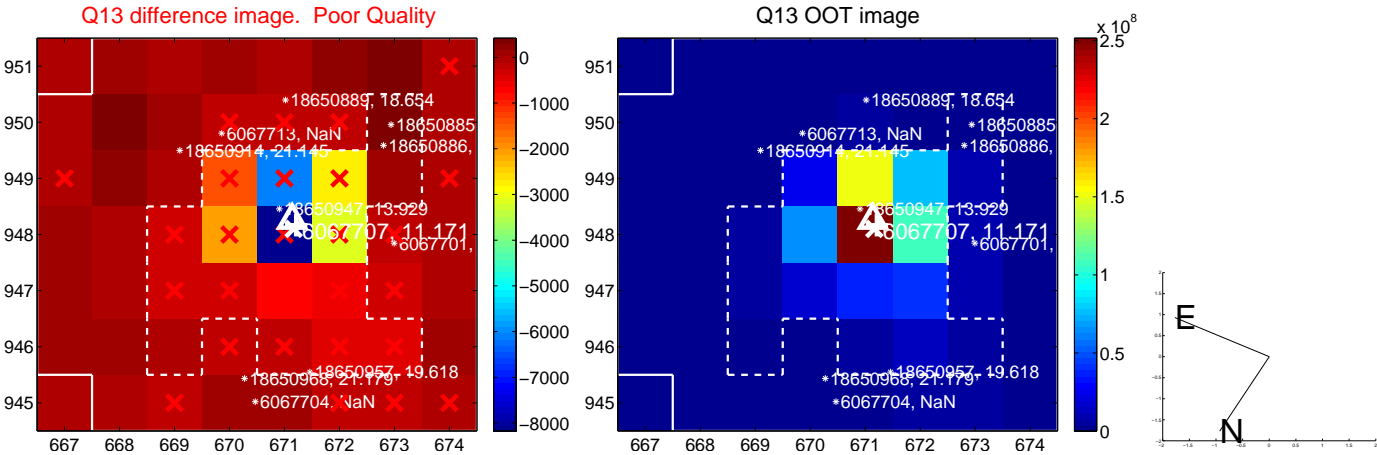
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



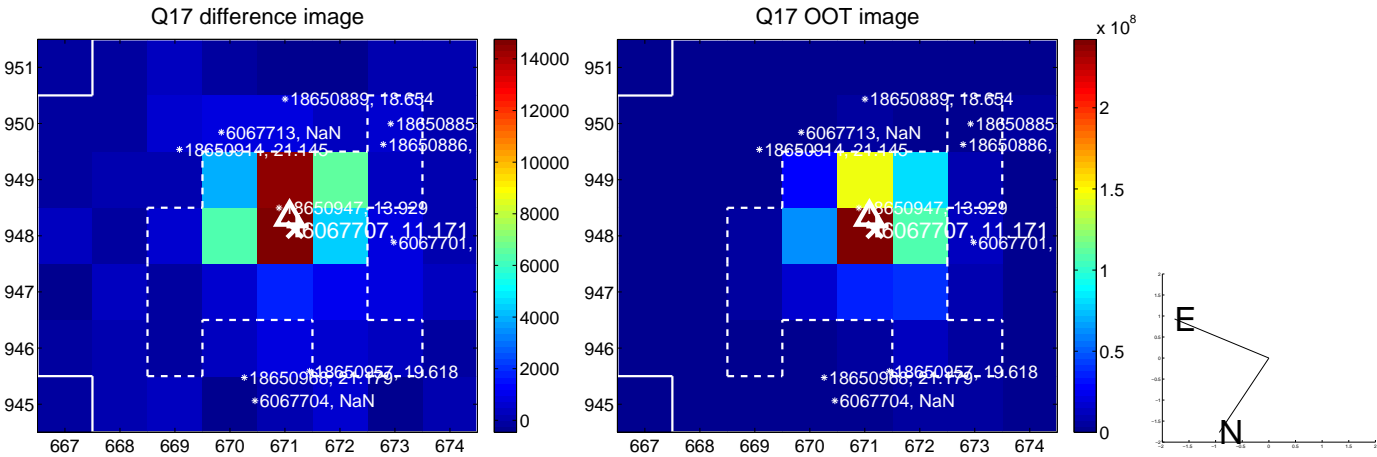
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

