

KIC 006953692

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})
006953692-01	OBS	No	14.287798	139.976556	58.5	25.920	8.7	10.5	1.03	6092	0.95	98.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006953692-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

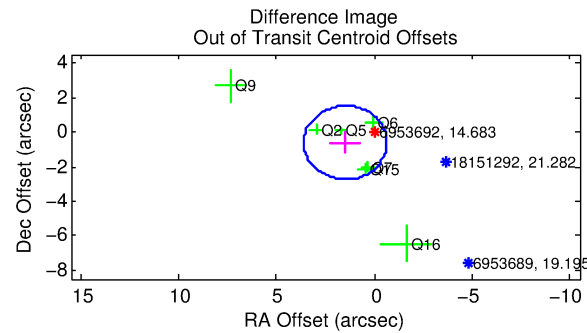
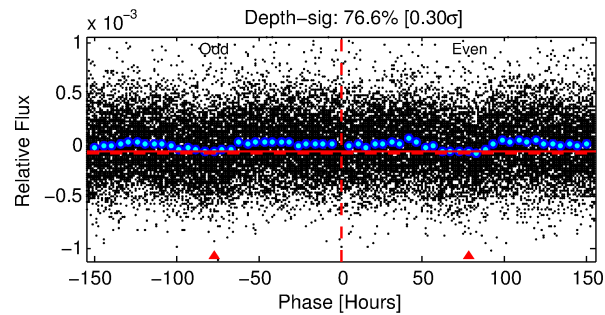
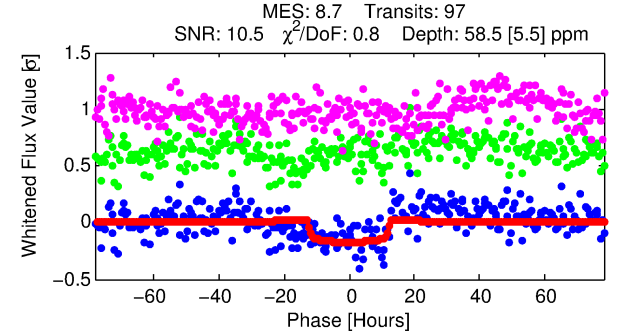
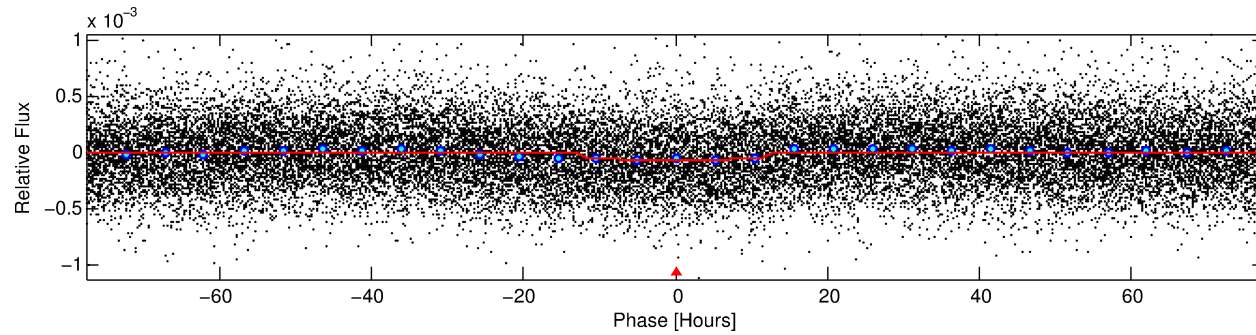
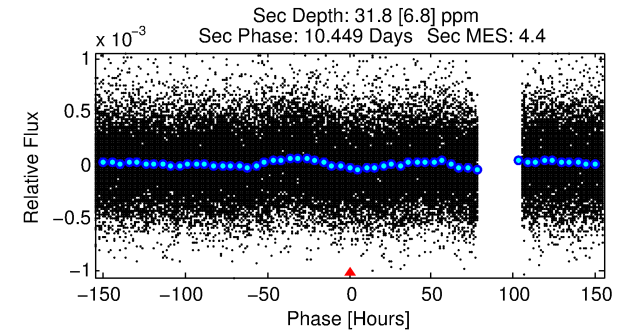
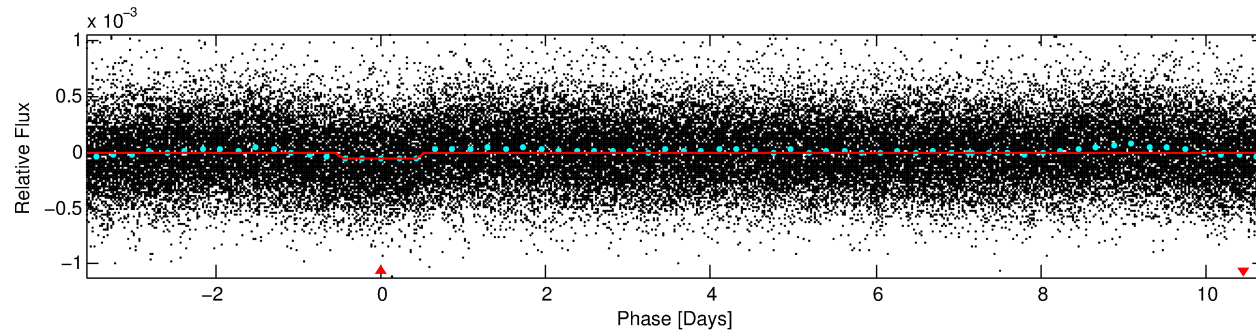
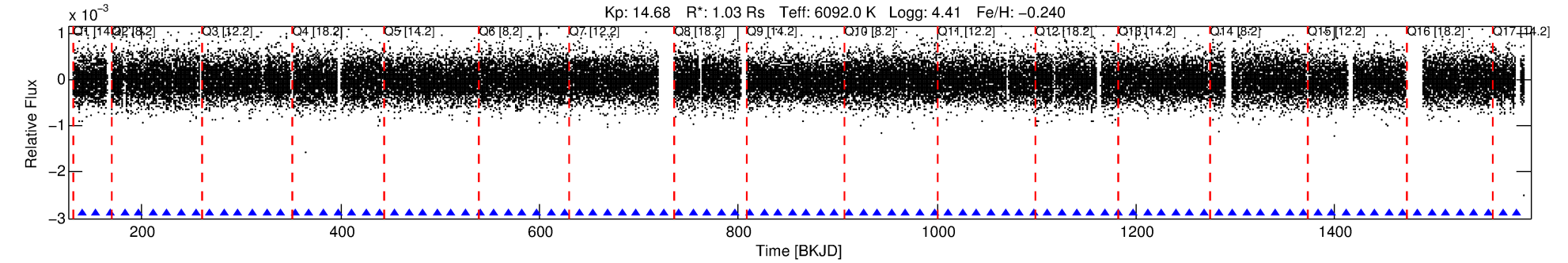
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006953692-01

No Significant Match Found

DV One-Page Summary

KIC: 6953692 Candidate: 1 of 1 Period: 14.288 d



DV Fit Results:

Period = 14.28780 [0.00061] d
Epoch = 139.9766 [0.0351] BKJD
Rp/R* = 0.0085 [0.0009]
a/R* = 1.93 [0.72]
b = 0.93 [0.08]
Seff = 98.80 [37.54]
Teq = 804 [76] K
Rp = 0.95 [0.29] Re
a = 0.1147 [0.0281] AU
Ag = 255.98 [119.51] [2.13σ]
Teffp = 4972 [409] K [10.02σ]

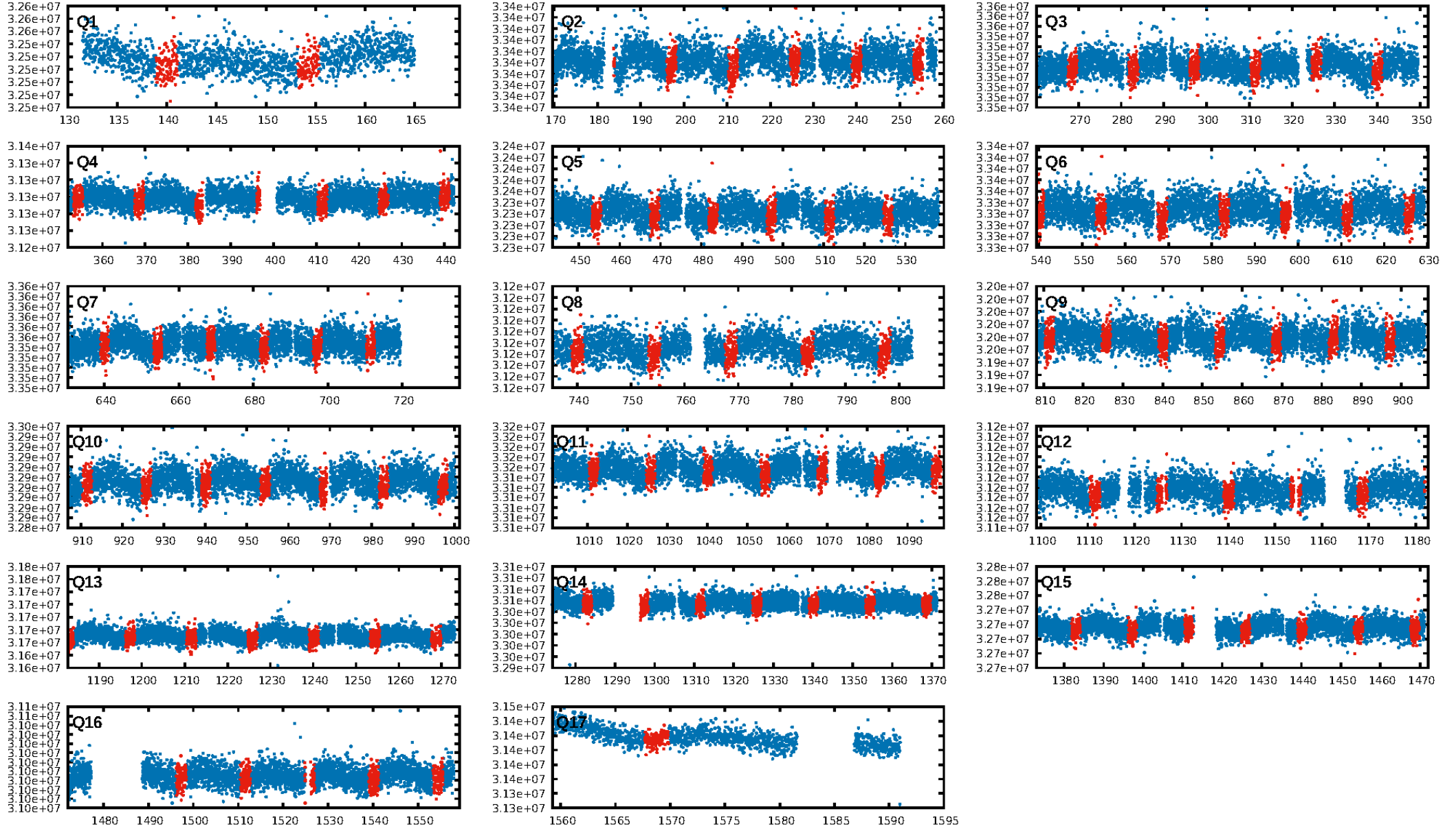
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 84.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.23e-17
RollingBand-fgt: 1.00 [94/94]
GhostDiagnostic-chr: 3.664
Centroid-sig: 19.5%
Centroid-so: 1.223 arcsec [1.09σ]
OotOffset-rm: 1.610 arcsec [2.27σ]
KicOffset-rm: 1.697 arcsec [2.36σ]
OotOffset-st: 2/2/1/2 [7]
KicOffset-st: 2/2/1/2 [7]
DiffImageQuality-fgm: 0.71 [5/7]
DiffImageOverlap-fno: 1.00 [17/17]

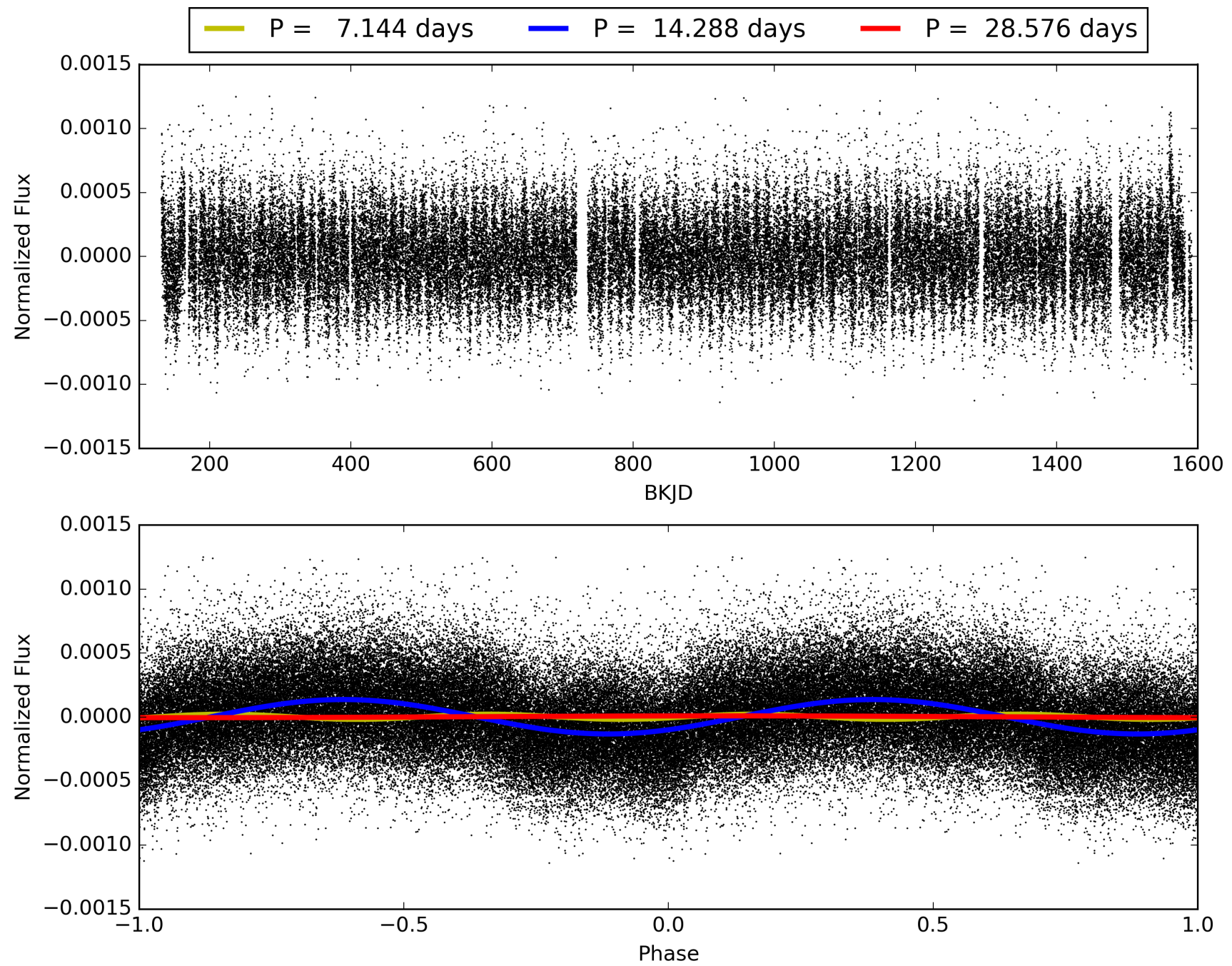
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:57:46 Z

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

TCE 006953692-01, PDC Light Curves

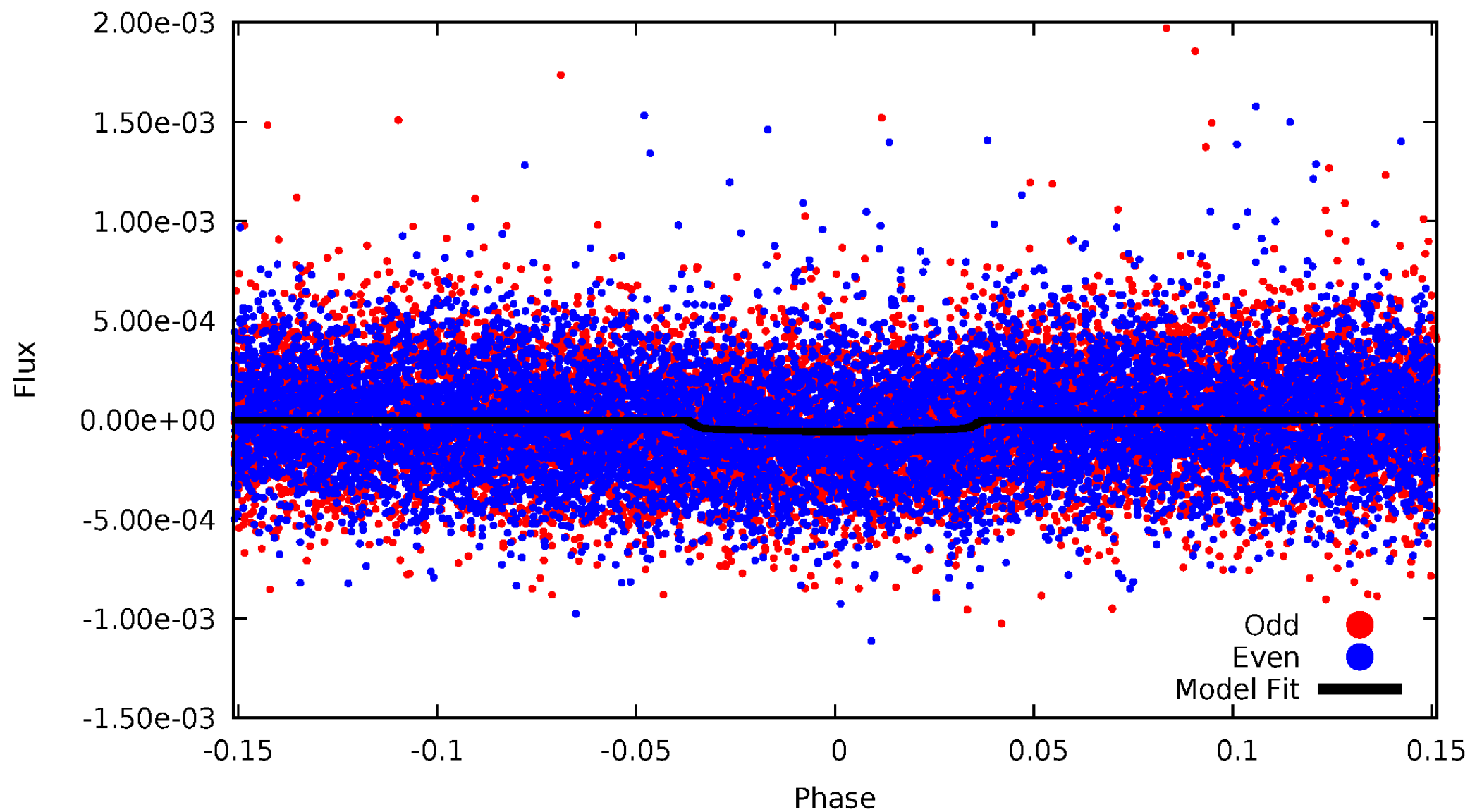


TCE 006953692-01



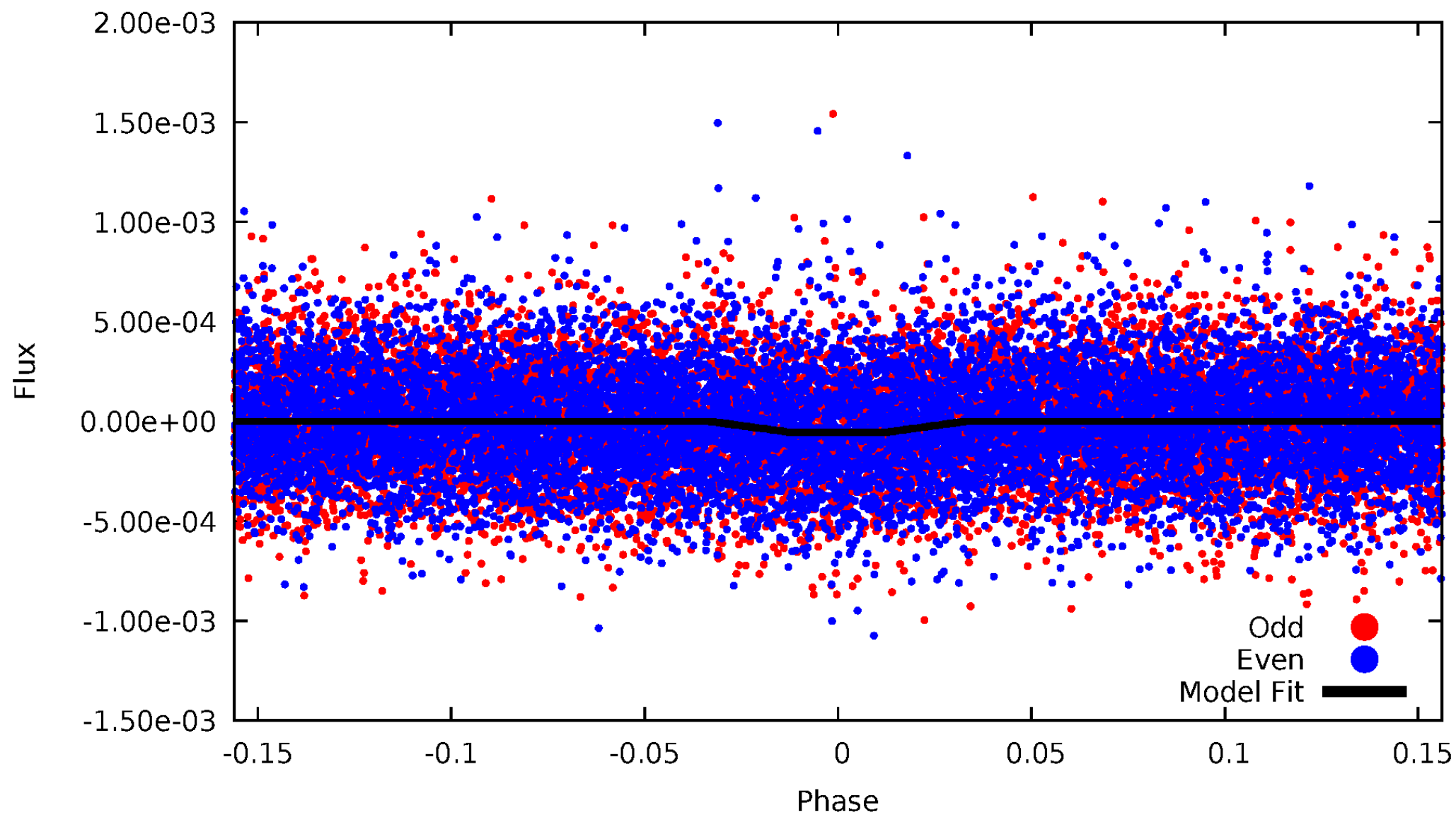
DV Odd/Even

TCE 006953692-01



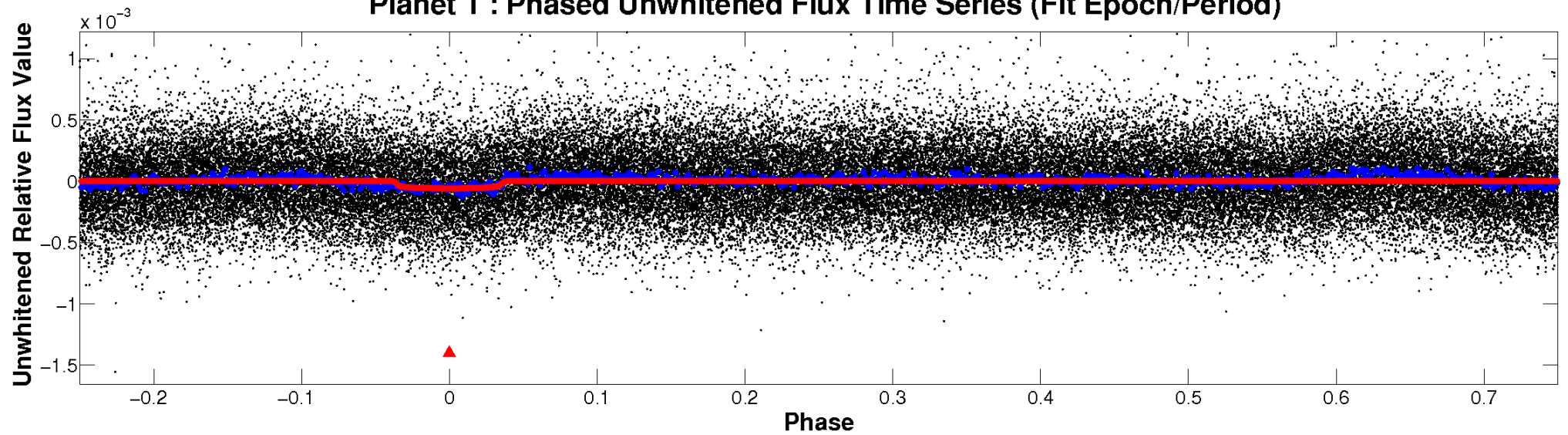
ALT Odd/Even

TCE 006953692-01

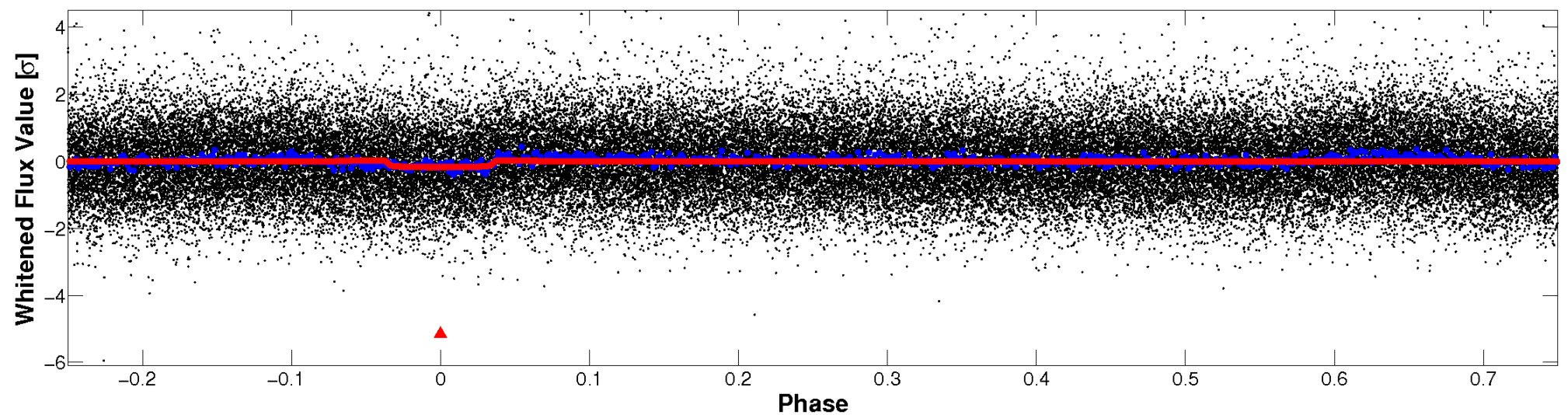


Non-Whitened Vs. Whitened Light Curve

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

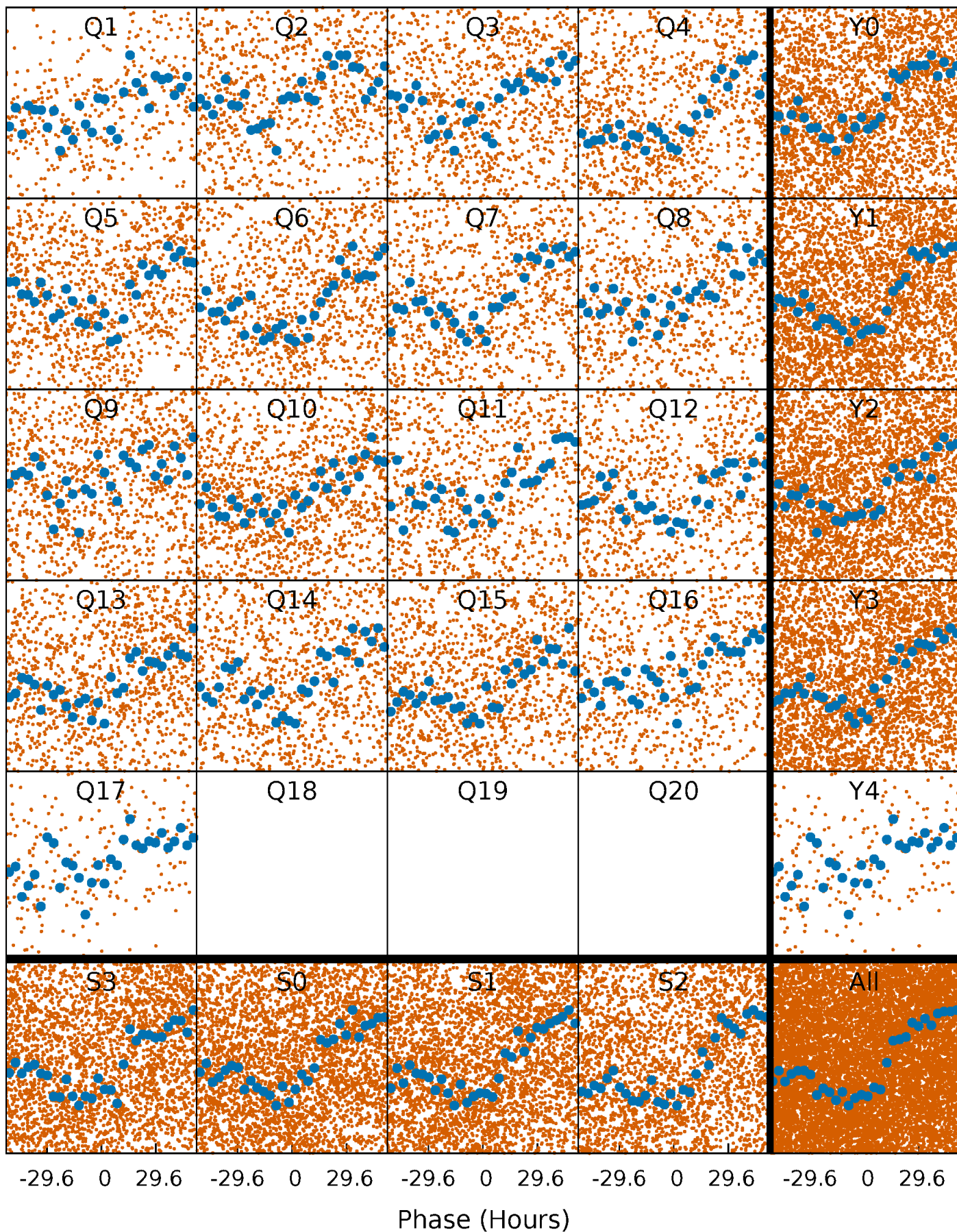


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



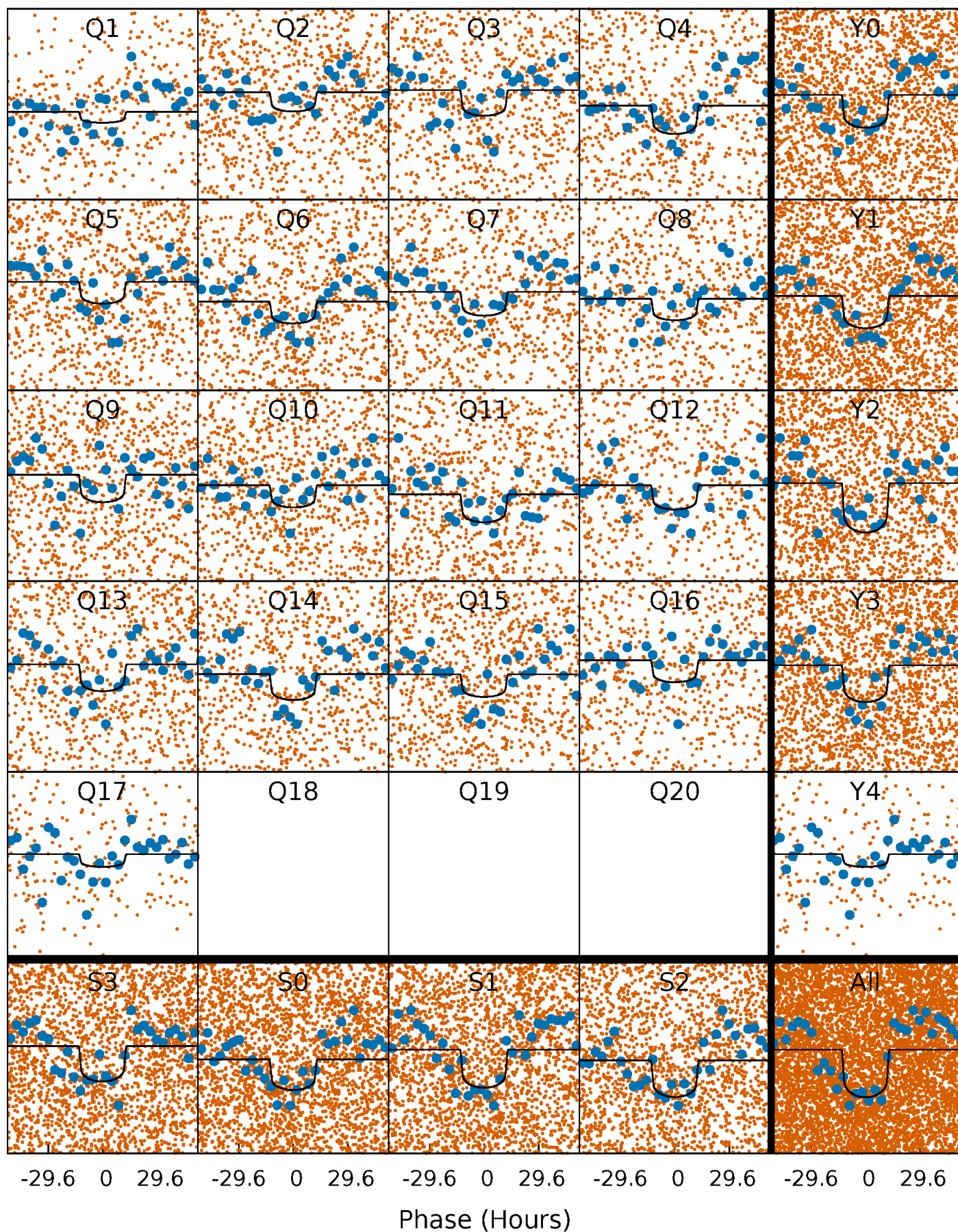
PDC Quarter-Phased Transit Curves

TCE 006953692-01 P= 14.287798 Days $T_0=139.976556$ (BKJD)



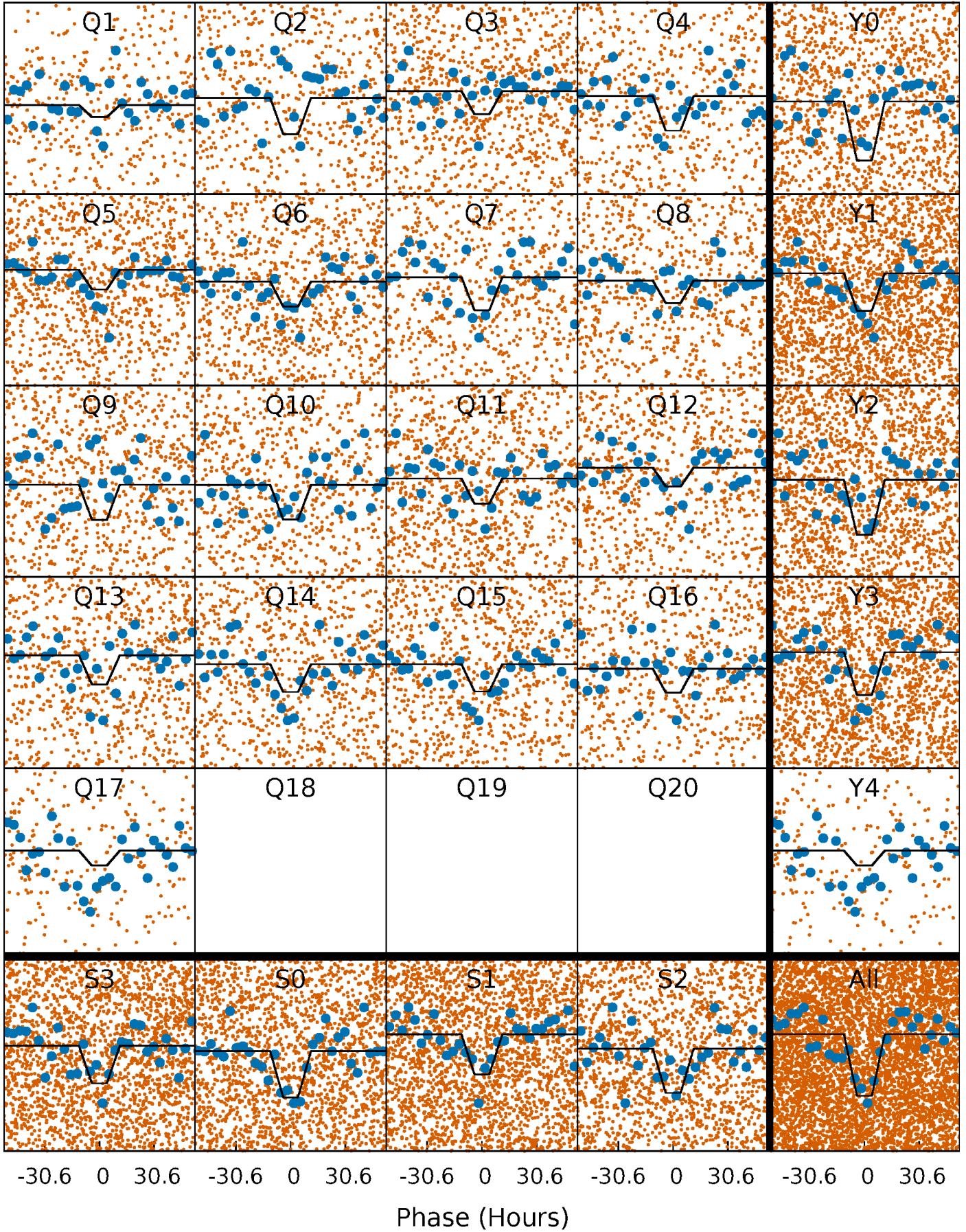
DV Quarter-Phased Transit Curves

TCE 006953692-01 P= 14.287798 Days $T_0=139.976556$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

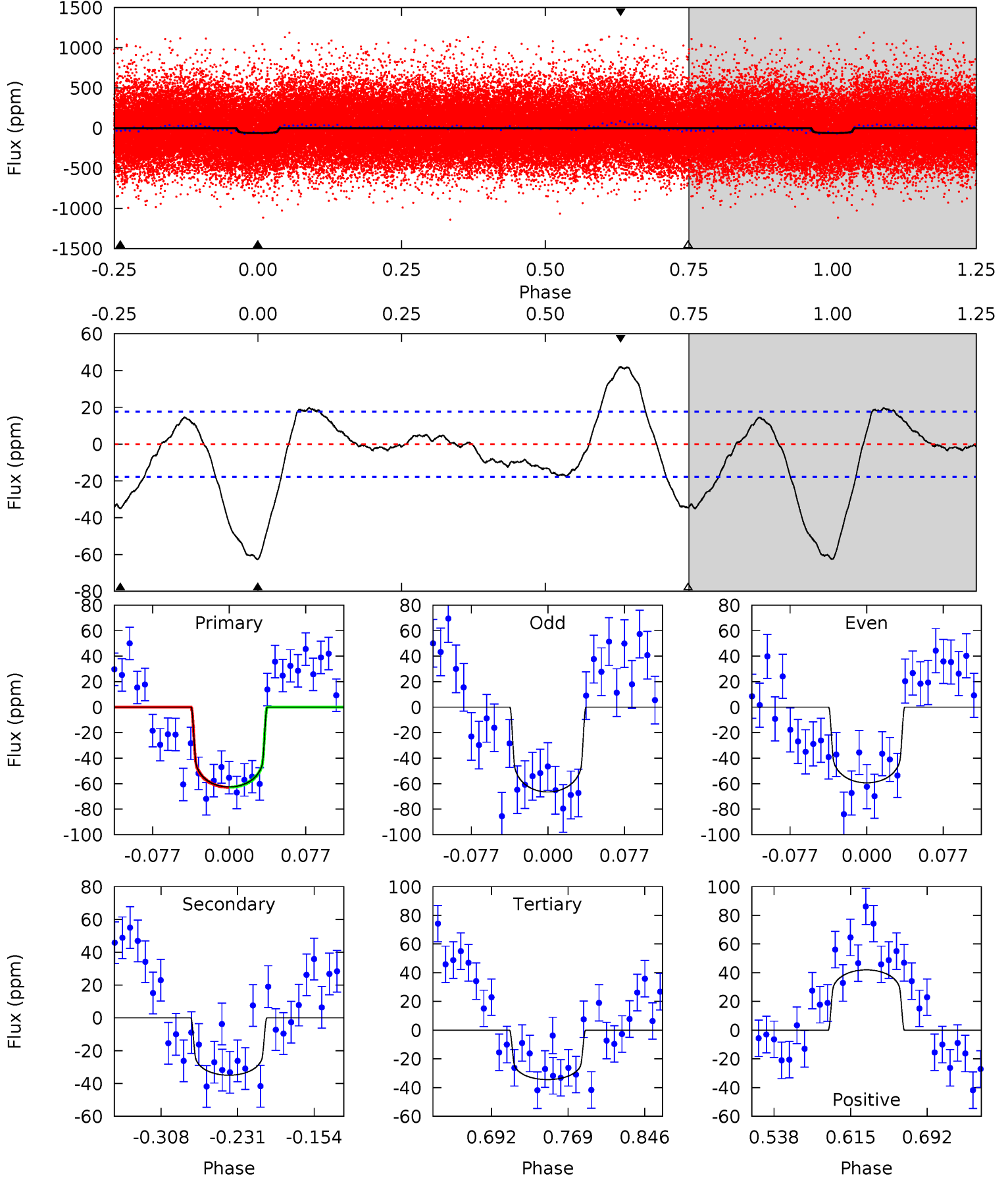
TCE 006953692-01 P= 14.284127 Days $T_0=140.267951$ (BKJD)



DV Model-Shift Uniqueness Test

006953692-01, P = 14.287798 Days, E = 125.688758 Days

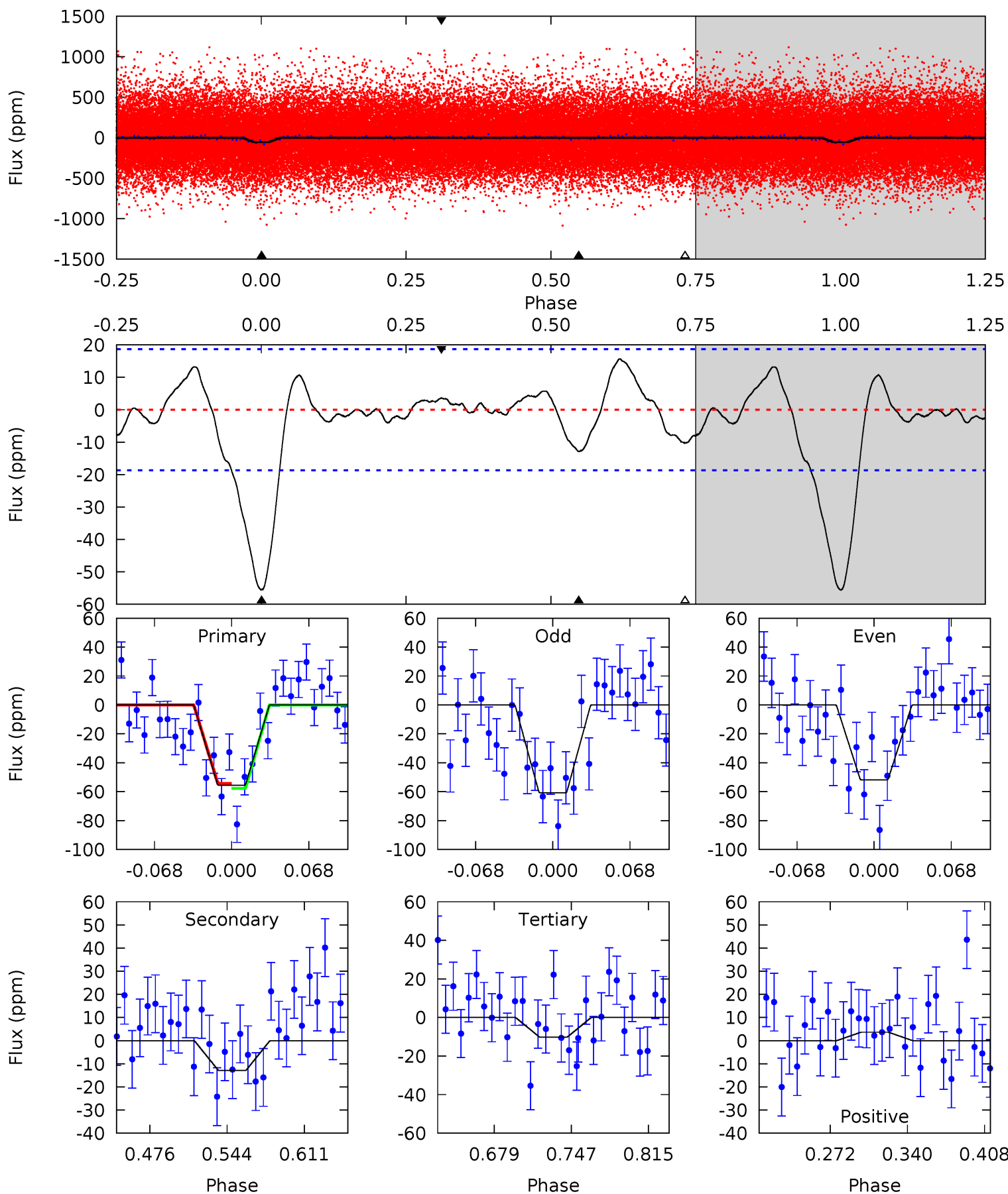
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.3	9.11	8.97	10.9	4.62	1.77	4.08	7.32	5.35	0.14	-1.83	0.93	0.97	0.40	0.01



Alt Model-Shift Uniqueness Test

006953692-01, P = 14.284127 Days, E = 125.983824 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	3.20	2.54	0.90	4.65	1.83	1.33	11.3	12.9	0.67	2.30	1.11	0.45	0.22	0.42



Stellar Parameters For KIC 006953692

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6092^{+181}_{-200}	$4.409^{+0.090}_{-0.195}$	$-0.240^{+0.300}_{-0.300}$	$1.026^{+0.298}_{-0.138}$	$0.984^{+0.142}_{-0.116}$	$1.283^{+0.598}_{-0.656}$
	+3%/-3%	+2%/-4%	+125%/-125%	+29%/-13%	+14%/-12%	+47%/-51%
Source	PHO1	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 006953692-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-35 ± 4	$0.98^{+0.17}_{-0.15}$	1142^{+79}_{-66}	5162^{+309}_{-294}	261^{+99}_{-76}
Alt.	-13 ± 4	$0.86^{+0.16}_{-0.13}$	1141^{+84}_{-64}	4404^{+378}_{-350}	120^{+69}_{-47}

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

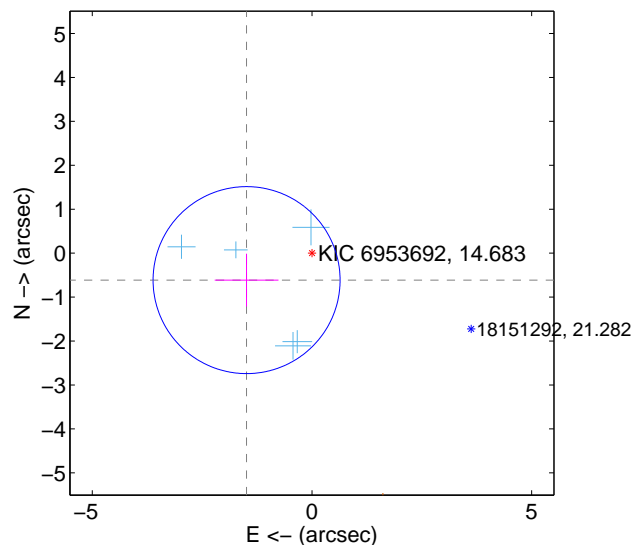
Supplemental centroid analysis for 006953692-01. Kepler magnitude: 14.68. Transit SNR 10.55

There are 5 quarters with good PRF difference image offsets

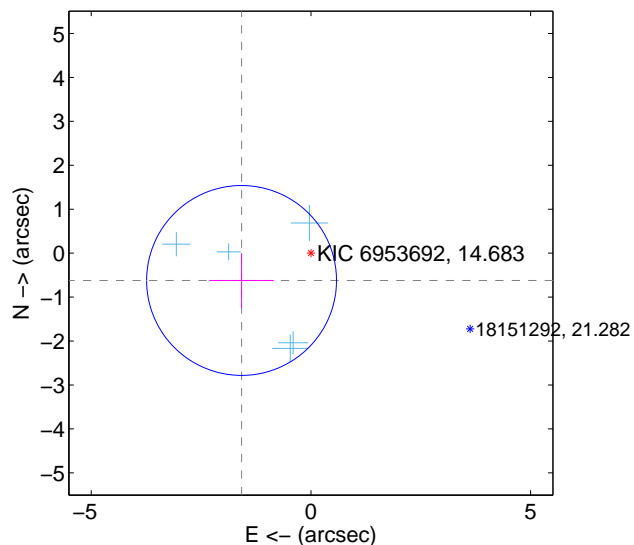
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.610 ± 0.709	2.27	1.488 ± 0.726	-0.613 ± 0.603
PRF-fit source offset from KIC position	1.697 ± 0.720	2.36	1.579 ± 0.734	-0.621 ± 0.624
photometric centroid source offset	1.22 ± 1.12	1.09	0.87 ± 1.16	0.86 ± 1.09

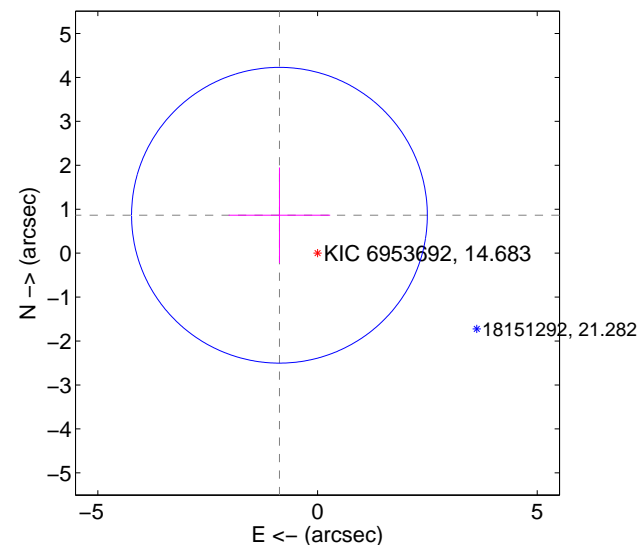
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

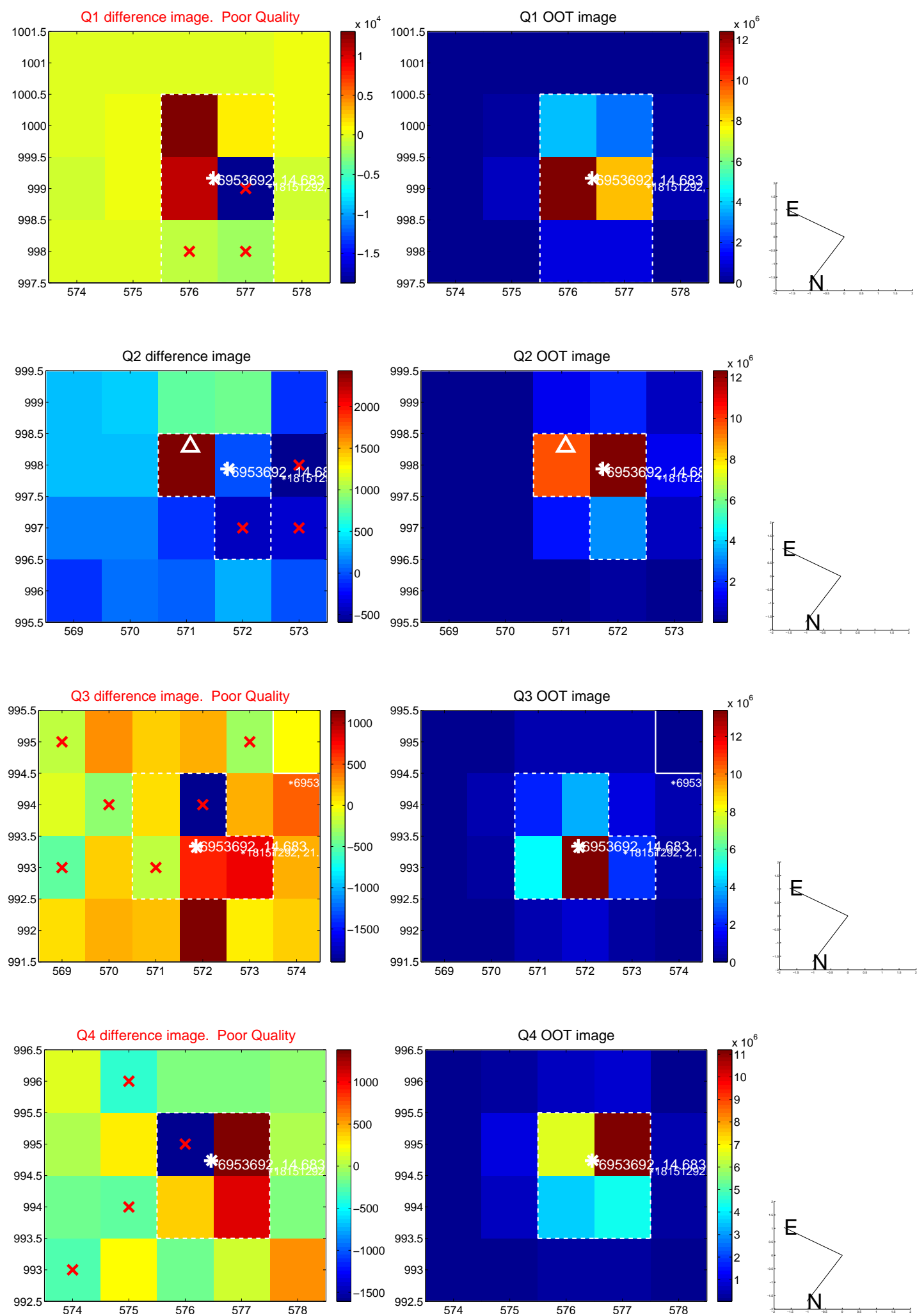


offset from photometric centroids

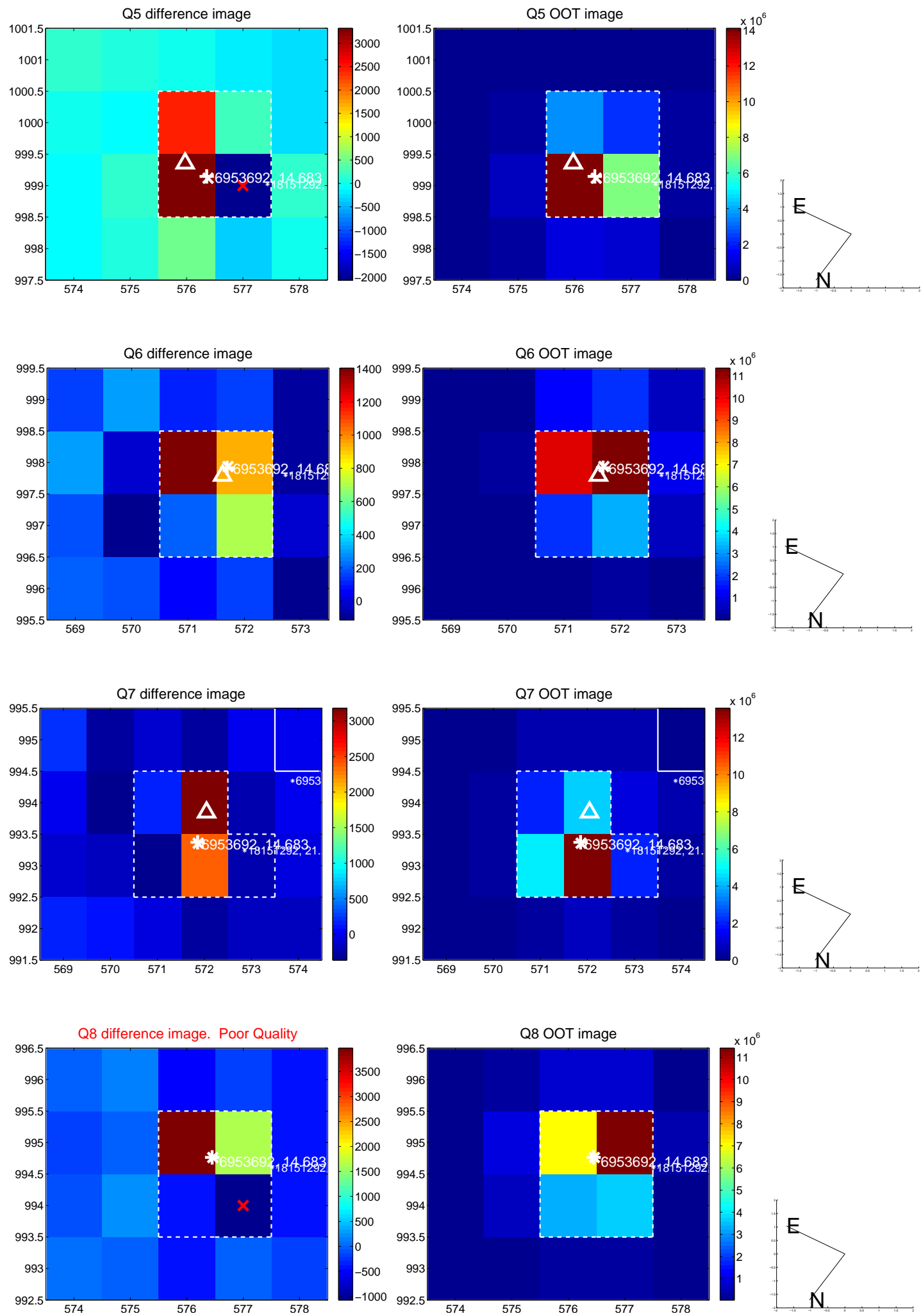


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

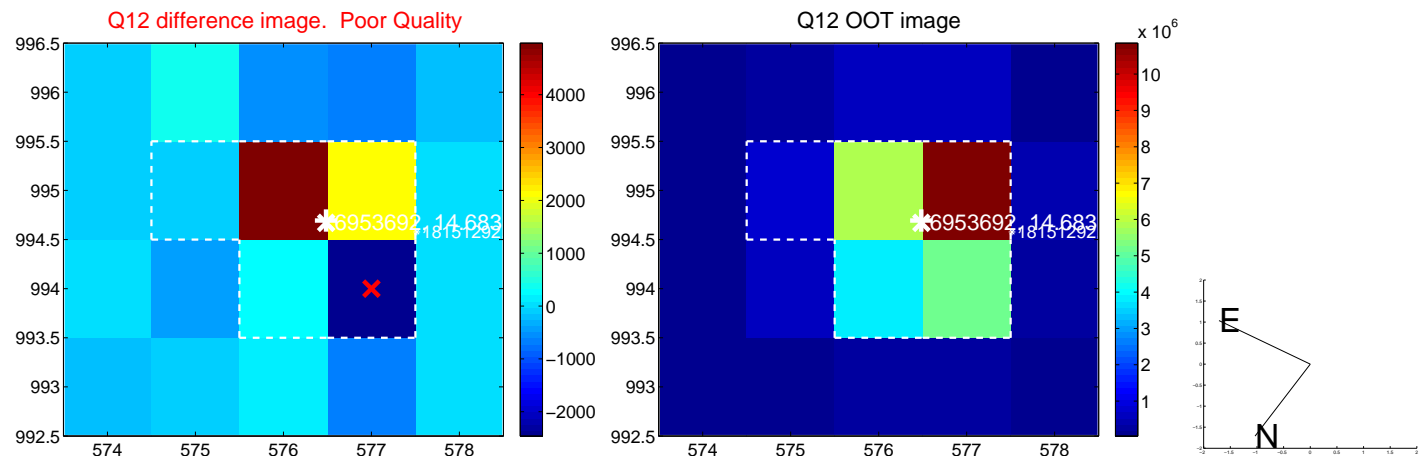
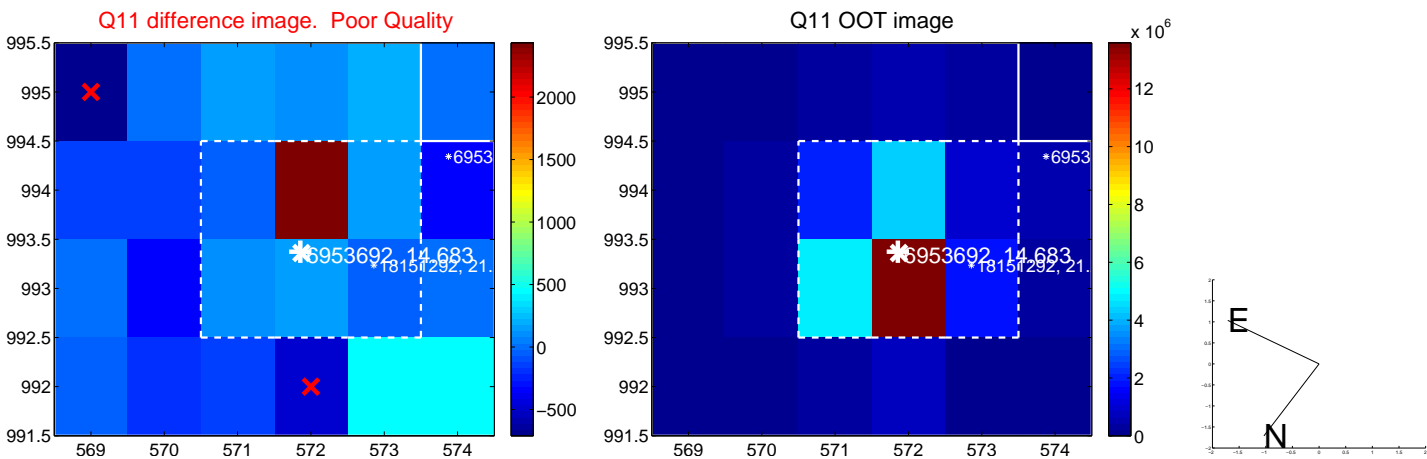
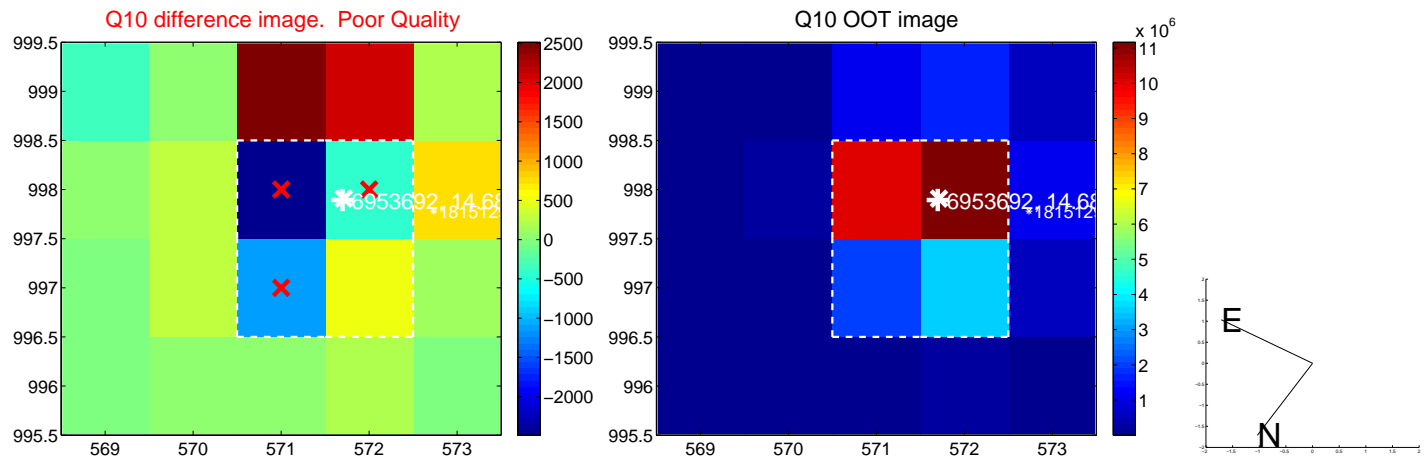
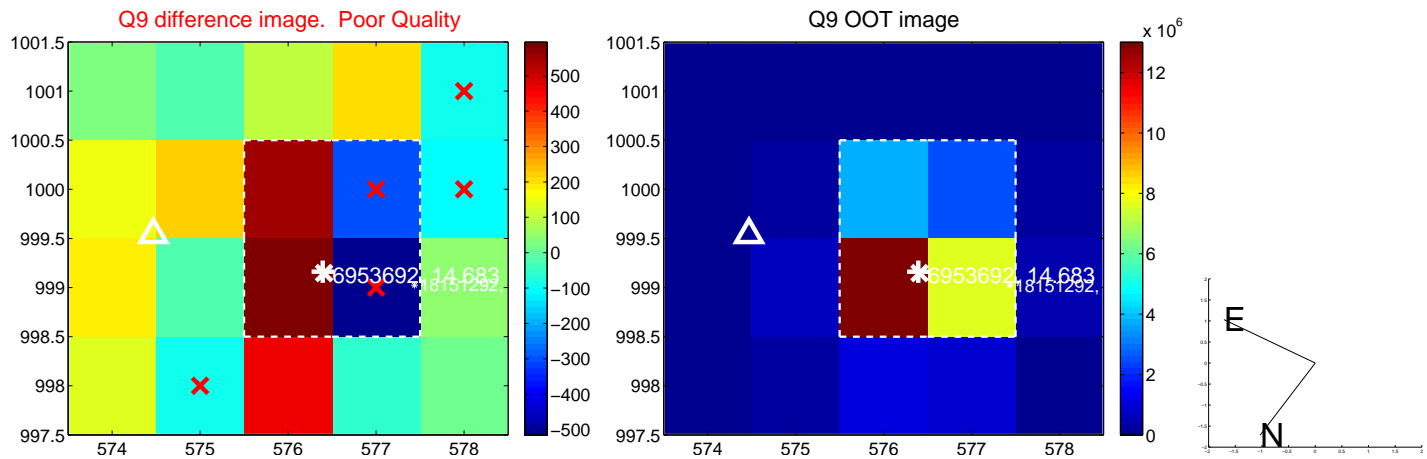
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



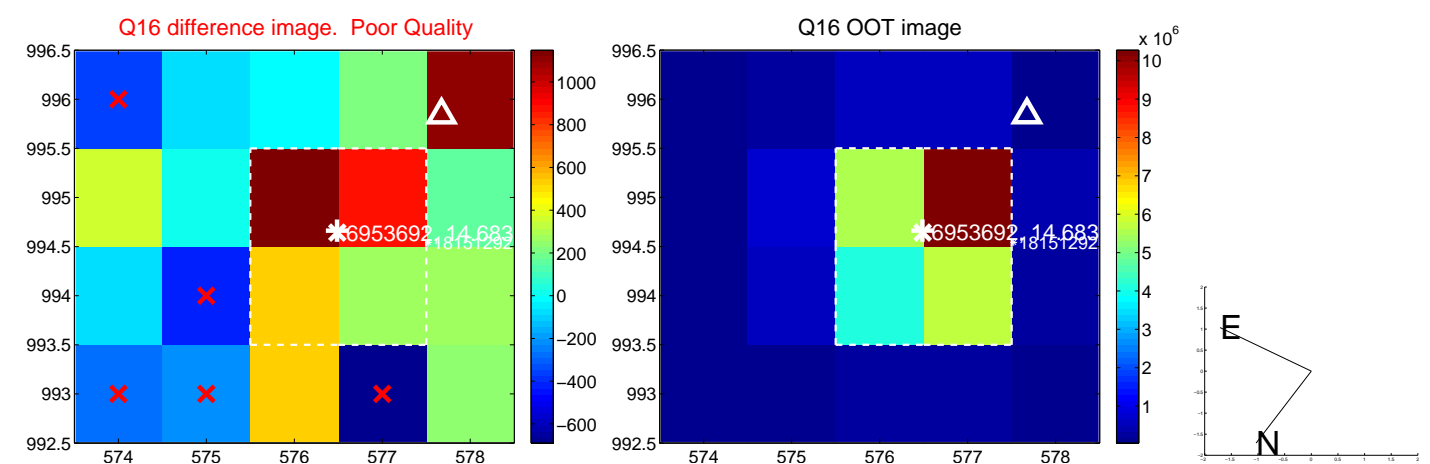
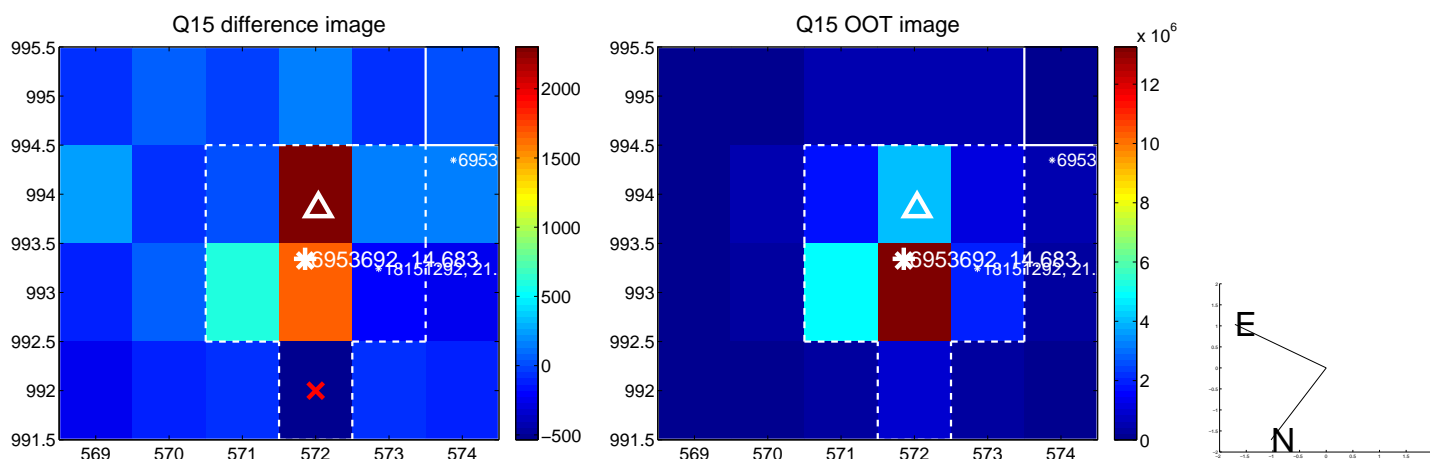
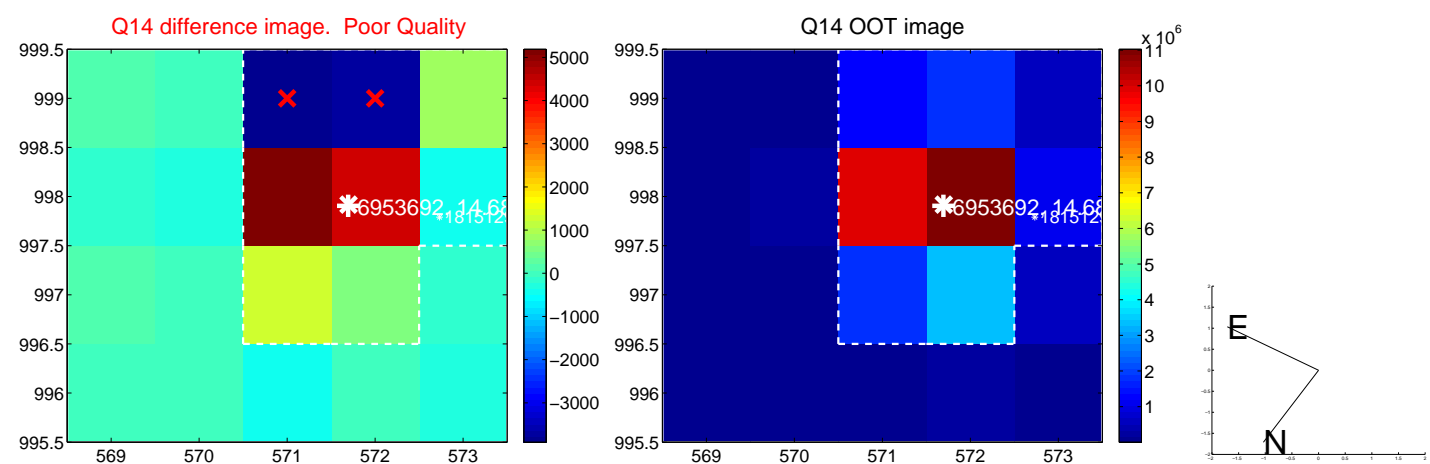
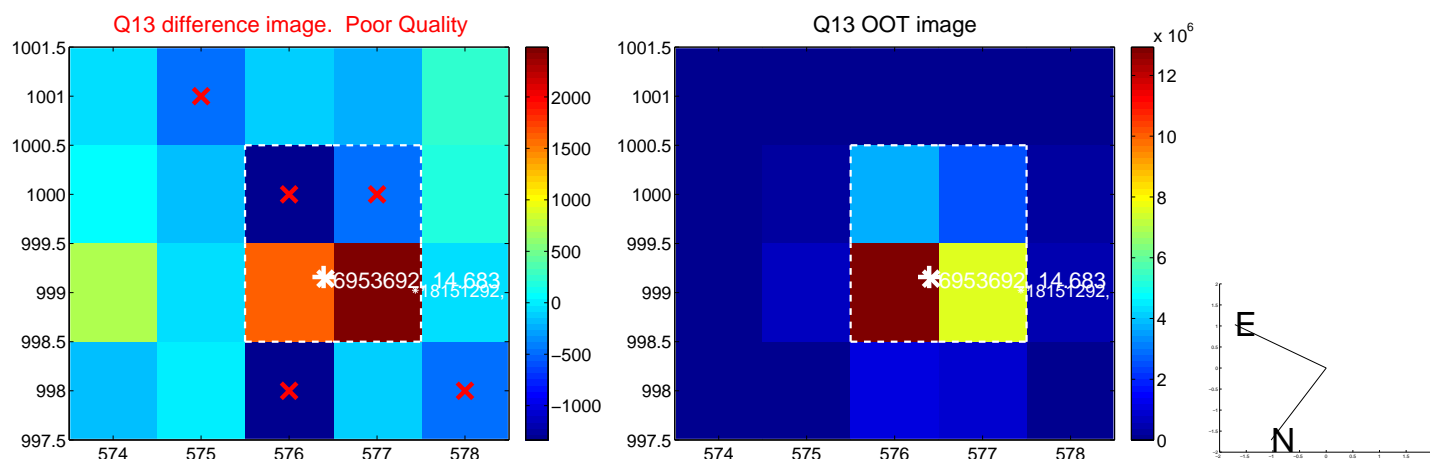
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



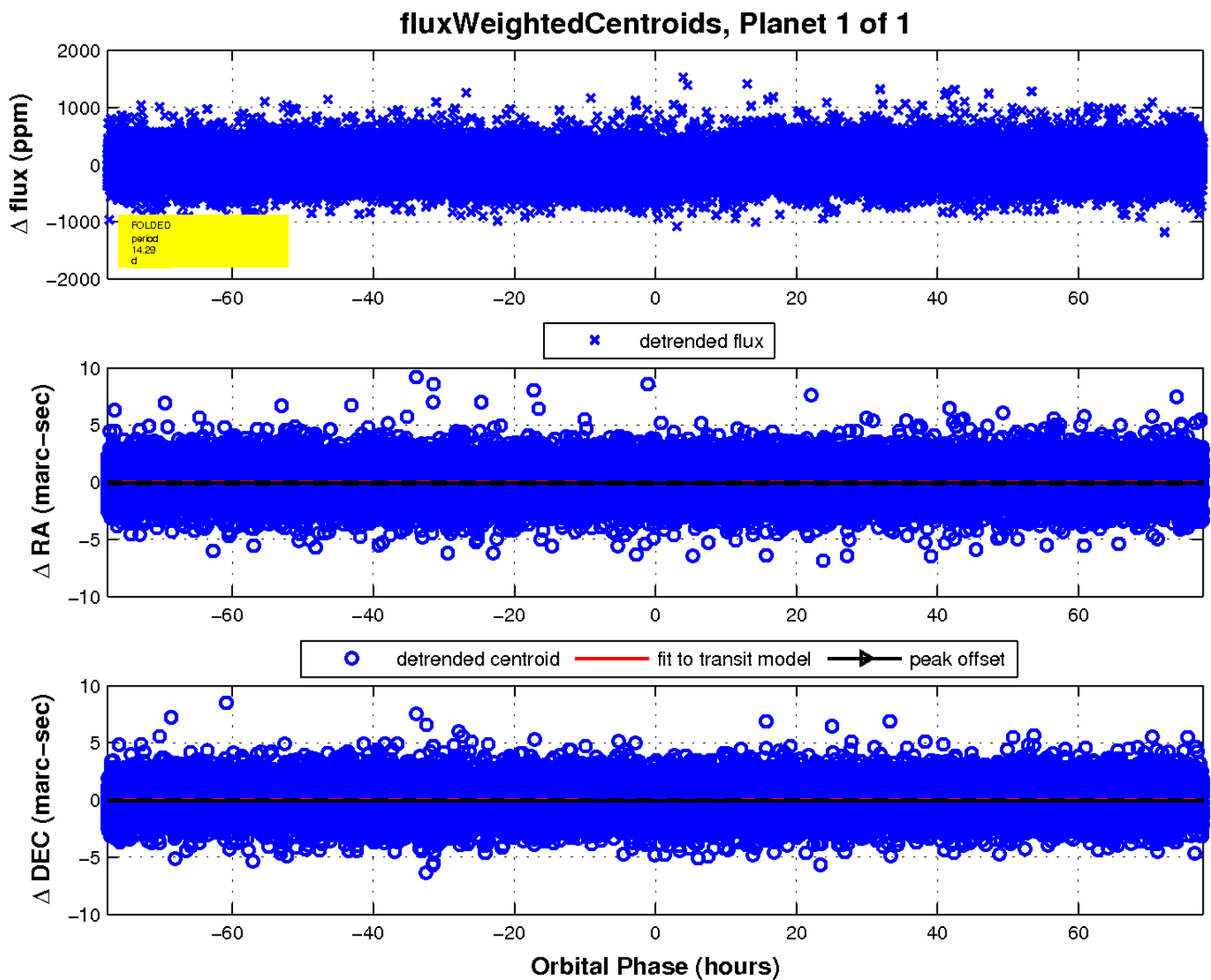
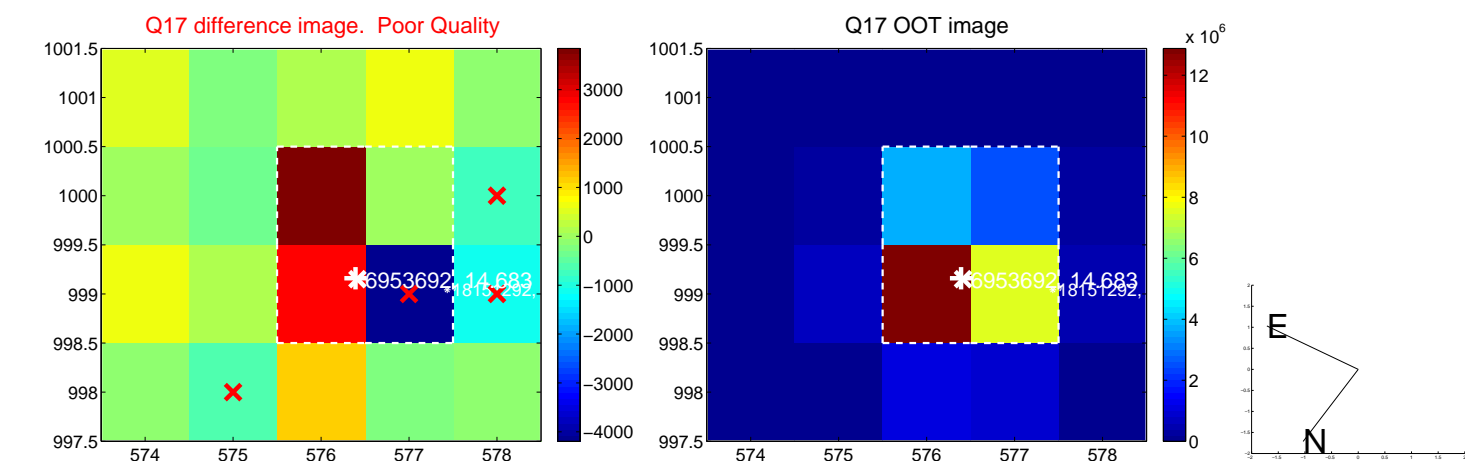
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

