

KIC 005966660

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})
005966660-01	OBS	0656.01	1.906644	131.928033	181.8	2.219	46.3	57.3	1.24	6736	1.96	2757.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005966660-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET

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.

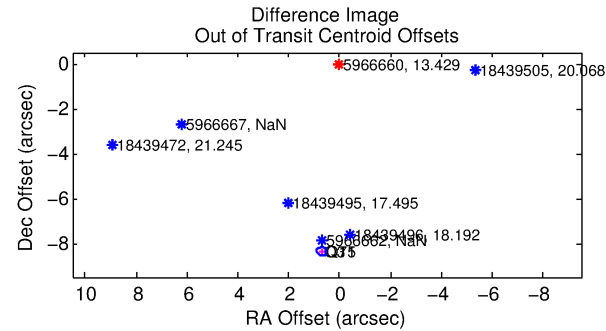
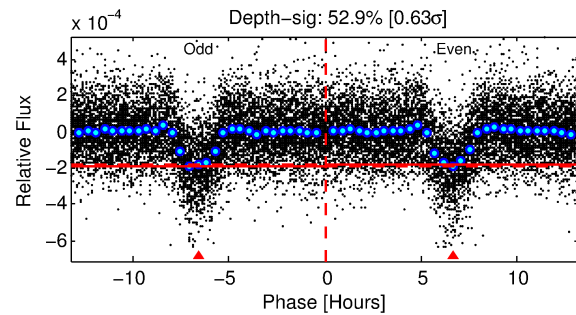
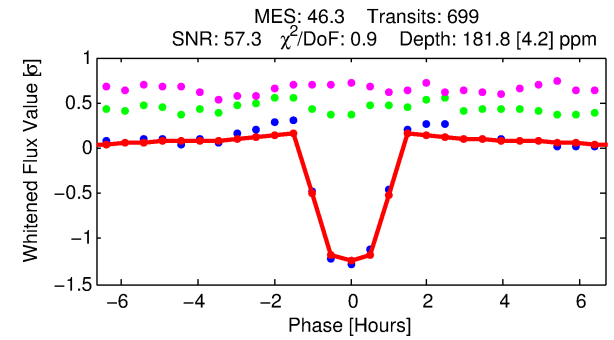
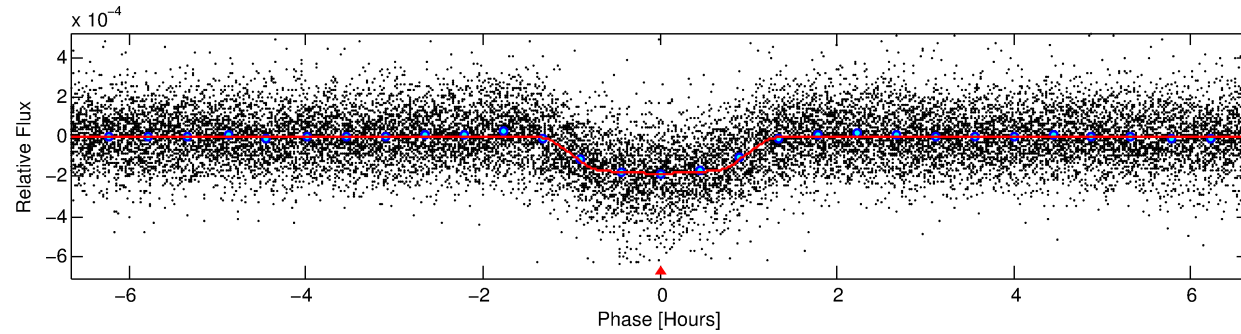
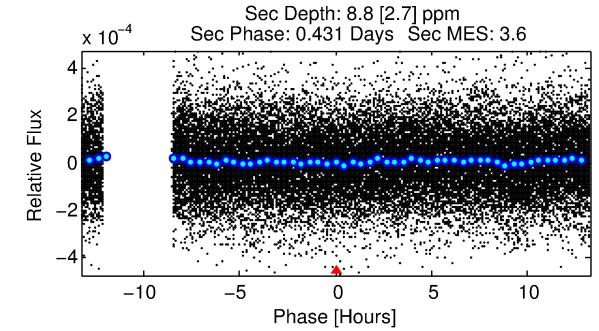
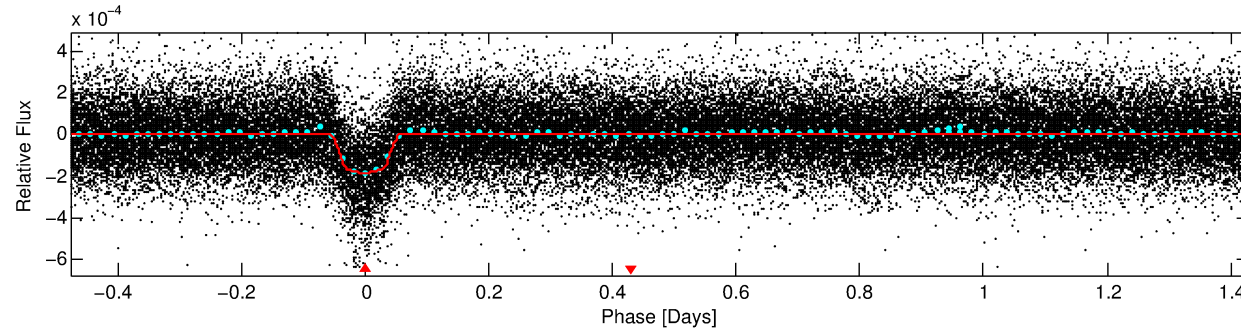
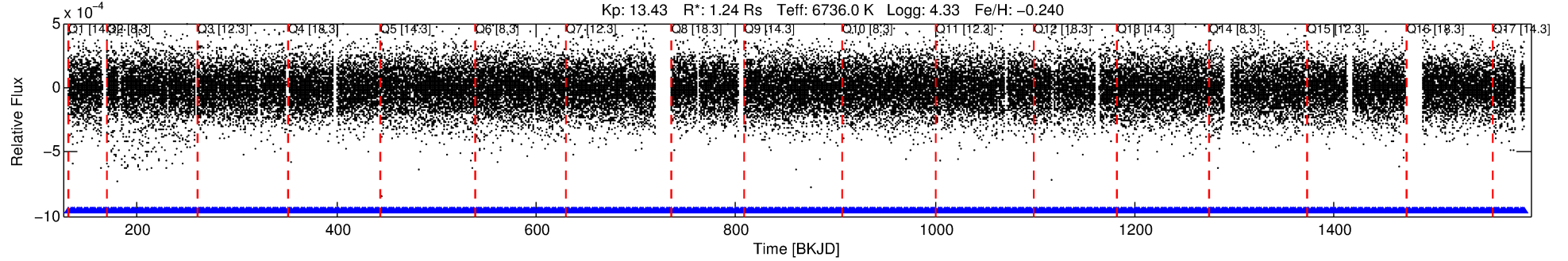
Ephemeris Match Information For 005966660-01

No Significant Match Found

DV One-Page Summary

KIC: 5966660 Candidate: 1 of 1 Period: 1.907 d
KOI: K00656.01 Corr: 0.841

Kp: 13.43 R*: 1.24 Rs Teff: 6736.0 K Logg: 4.33 Fe/H: -0.240



DV Fit Results:

Period = 1.90664 [0.00000] d
Epoch = 131.9280 [0.0005] BKJD
Rp/R* = 0.0144 [0.0013]
a/R* = 3.21 [1.58]
b = 0.90 [0.12]
Seff = 2757.13 [590.65]
Teq = 1848 [99] K
Rp = 1.95 [0.37] Re
a = 0.0322 [0.0045] AU
Ag = 1.30 [0.54] [0.56σ]
Teff = 3053 [278] K [4.08σ]

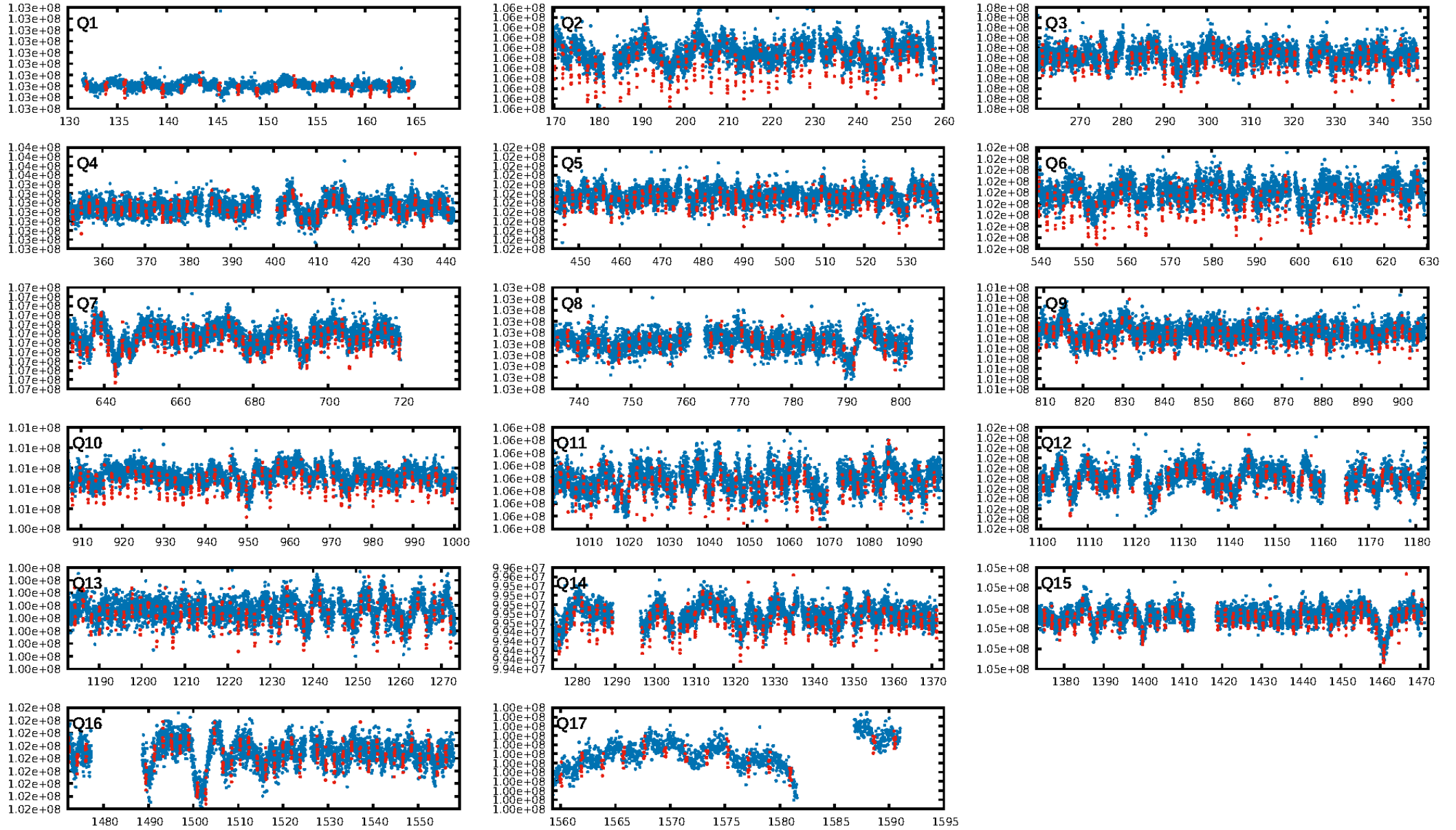
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [667/667]
GhostDiagnostic-chr: -0.3619
Centroid-sig: 0.0%
Centroid-so: 80.704 arcsec [430.03σ]
OotOffset-rm: 8.394 arcsec [125.36σ]
KicOffset-rm: 8.332 arcsec [123.36σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-st: 0/4/0/0 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 1.00 [17/17]

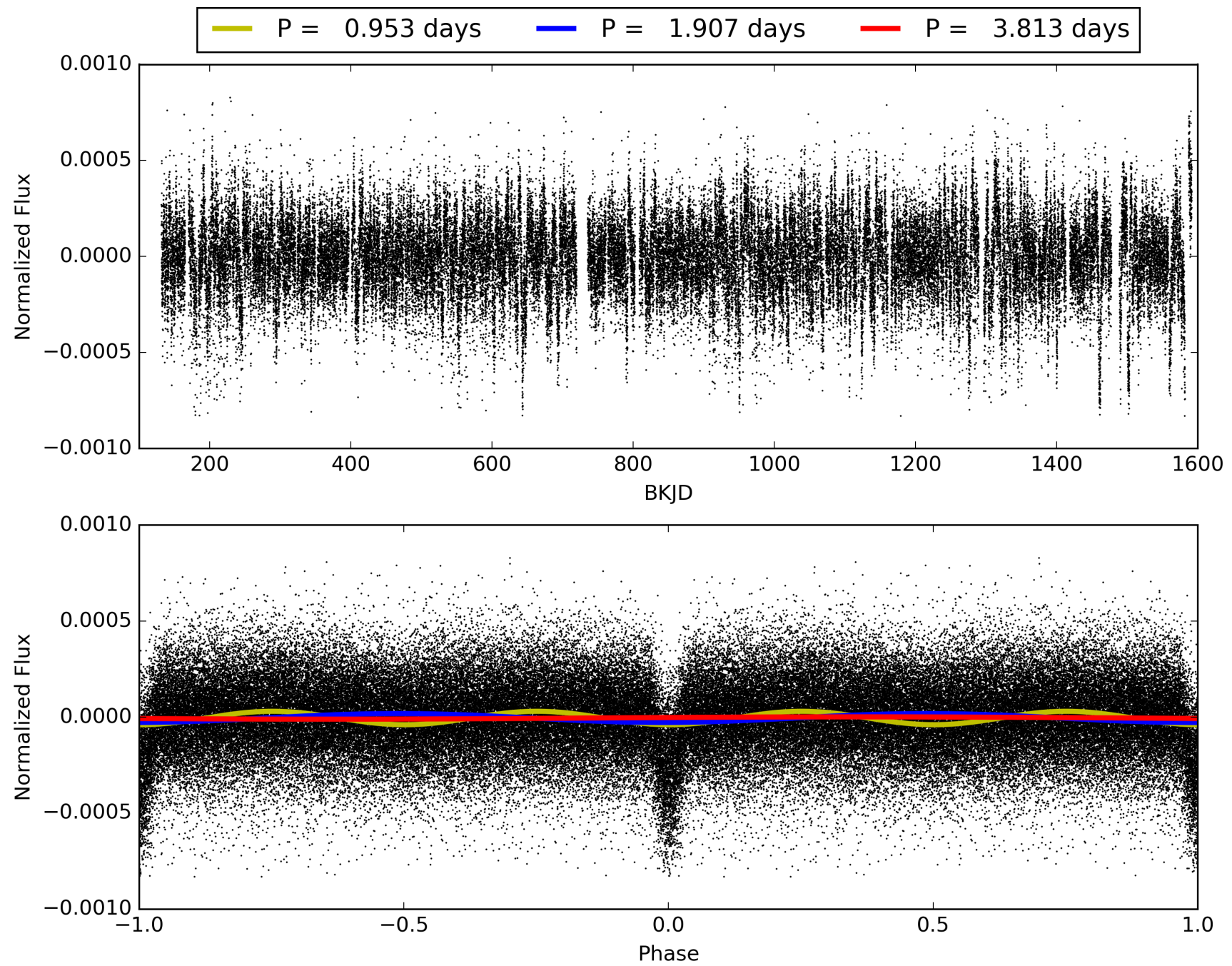
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:36:47 Z

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

TCE 005966660-01, PDC Light Curves

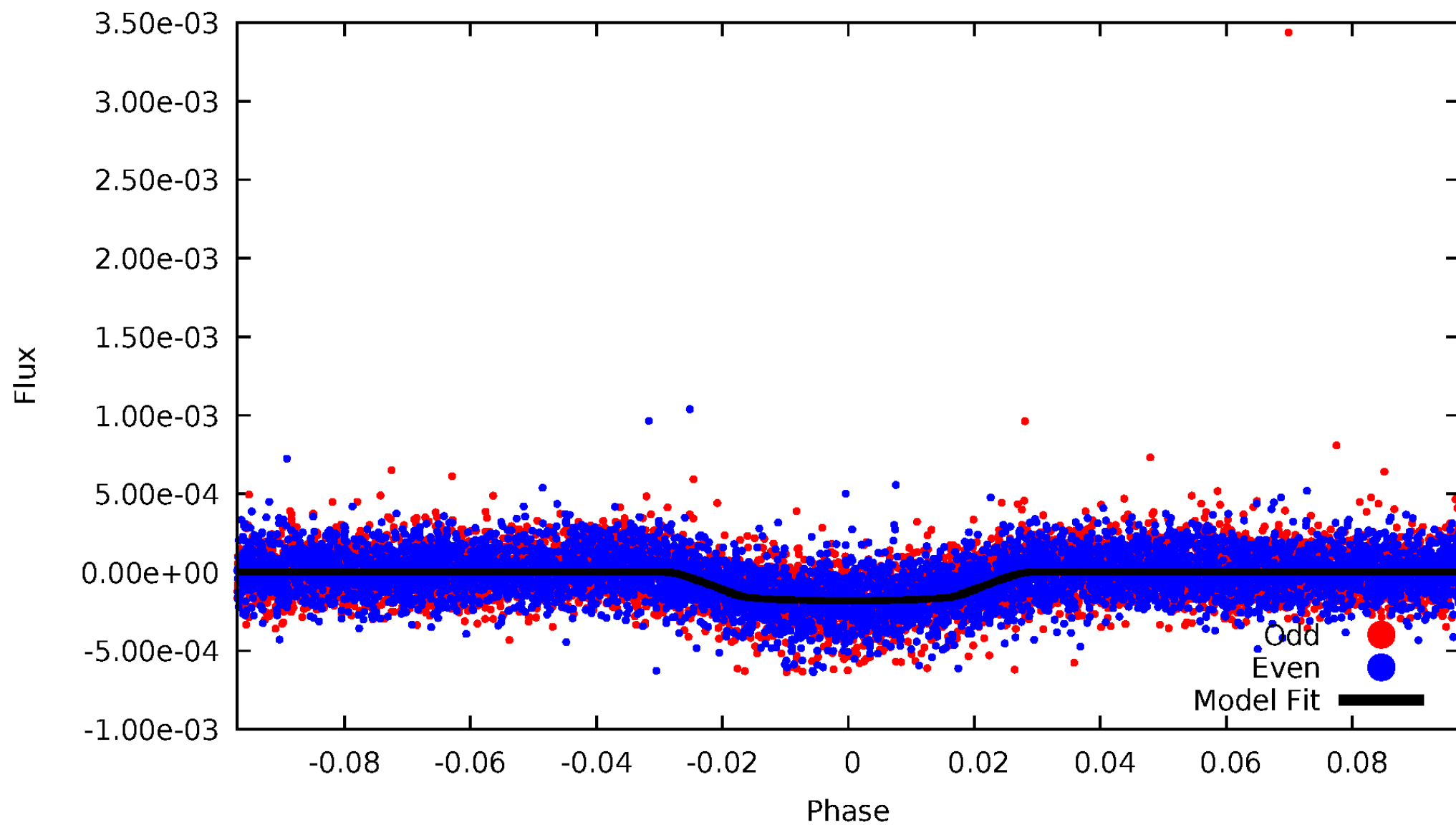


TCE 005966660-01



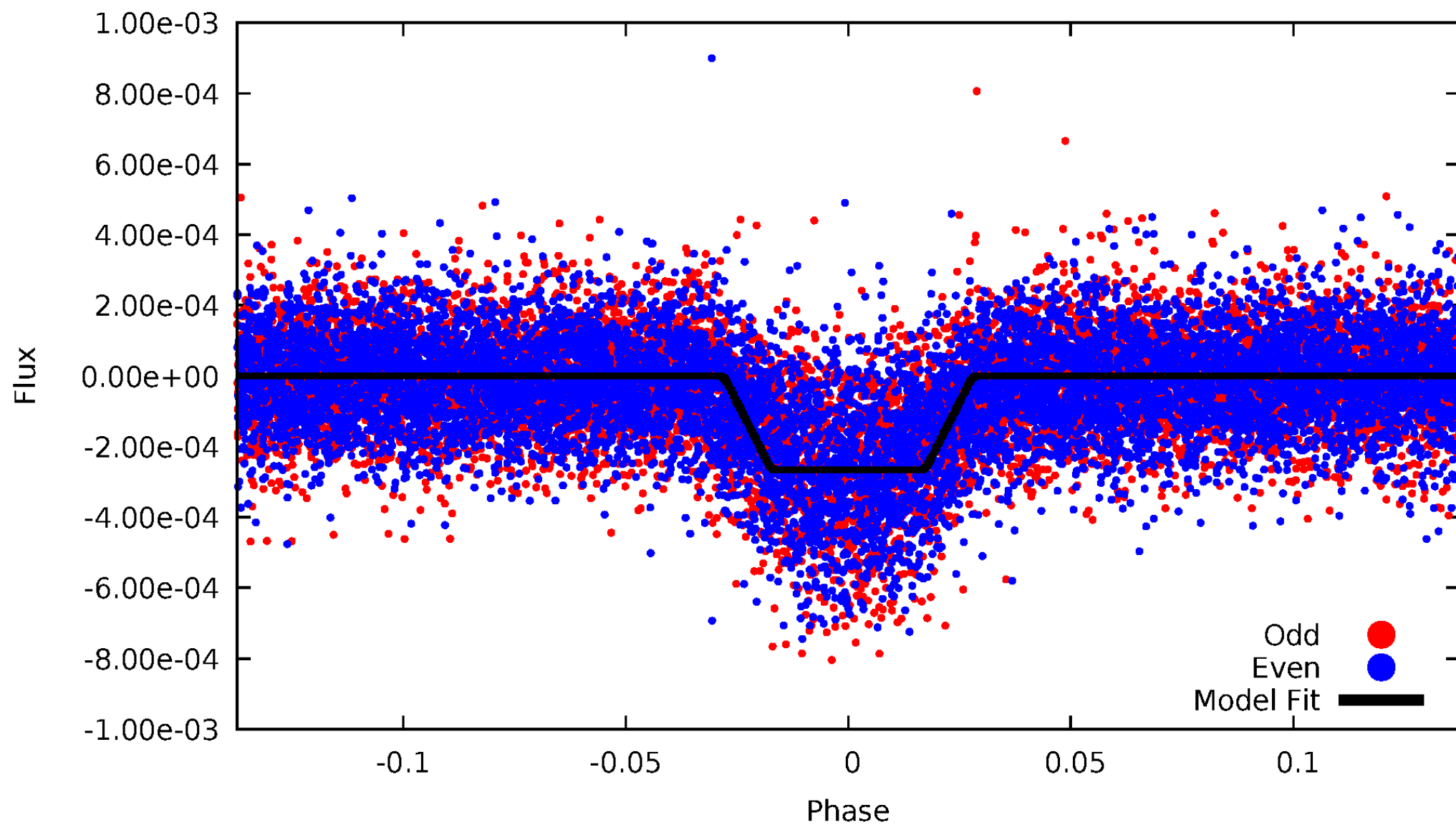
DV Odd/Even

TCE 005966660-01



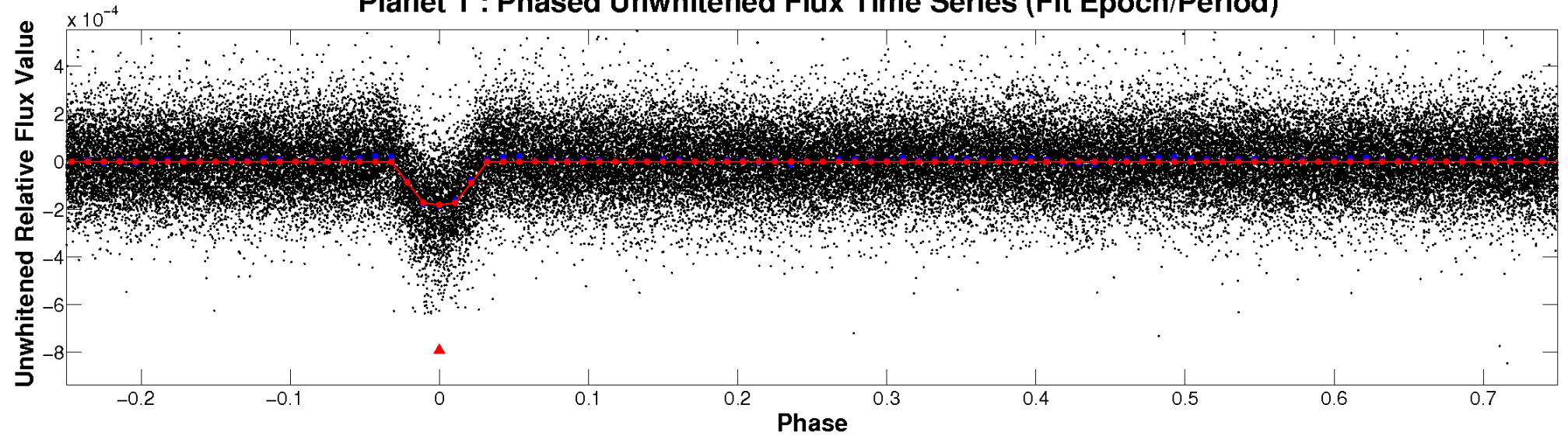
ALT Odd/Even

TCE 005966660-01

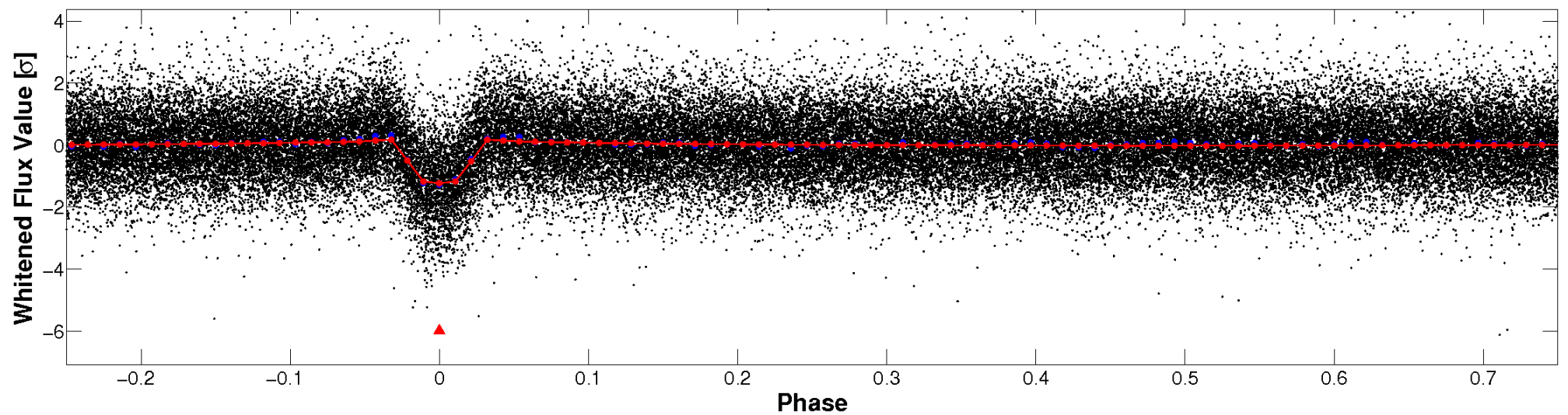


Non-Whitened Vs. Whitened Light Curve

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

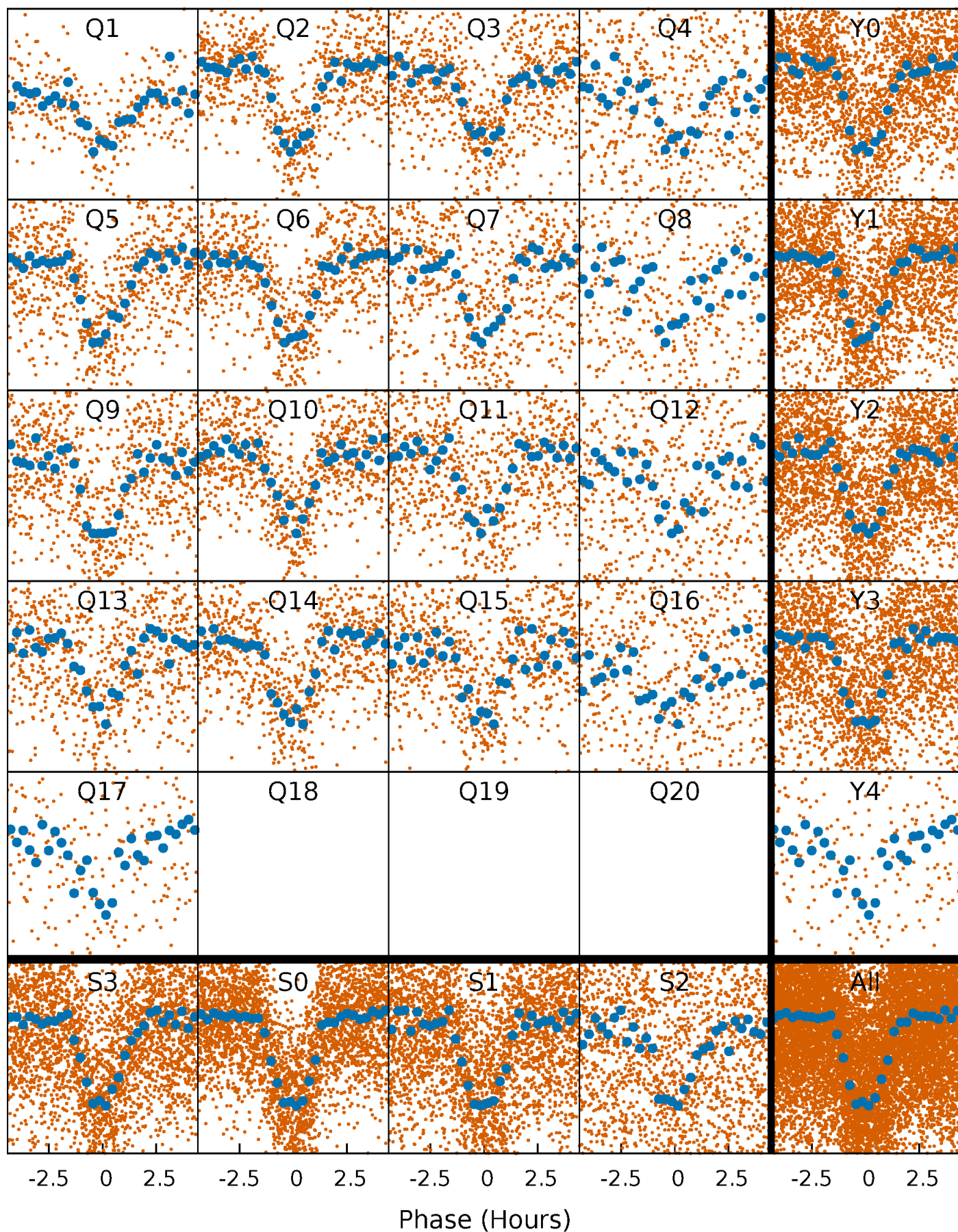


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



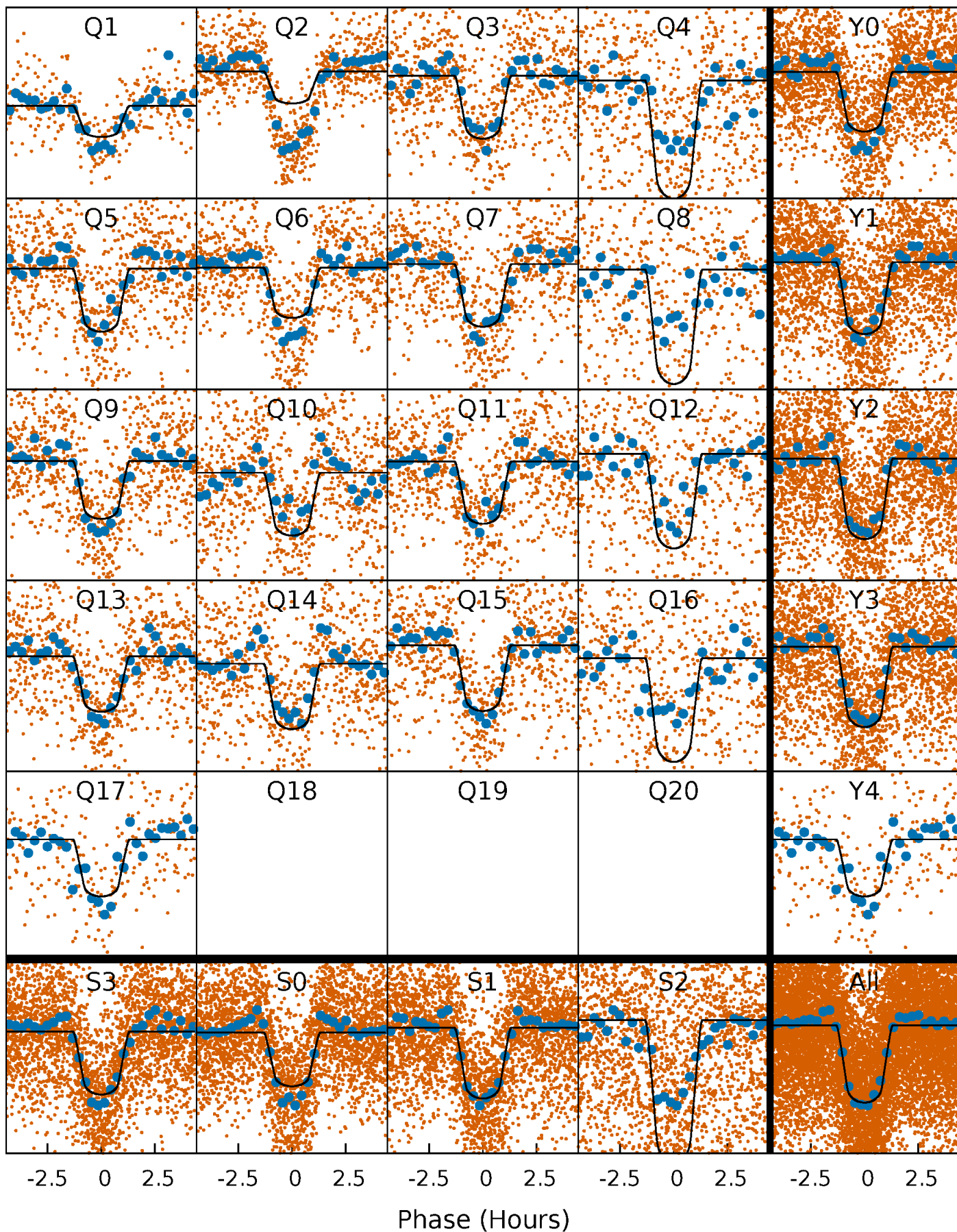
PDC Quarter-Phased Transit Curves

TCE 005966660-01 P= 1.906644 Days $T_0=131.928033$ (BKJD)



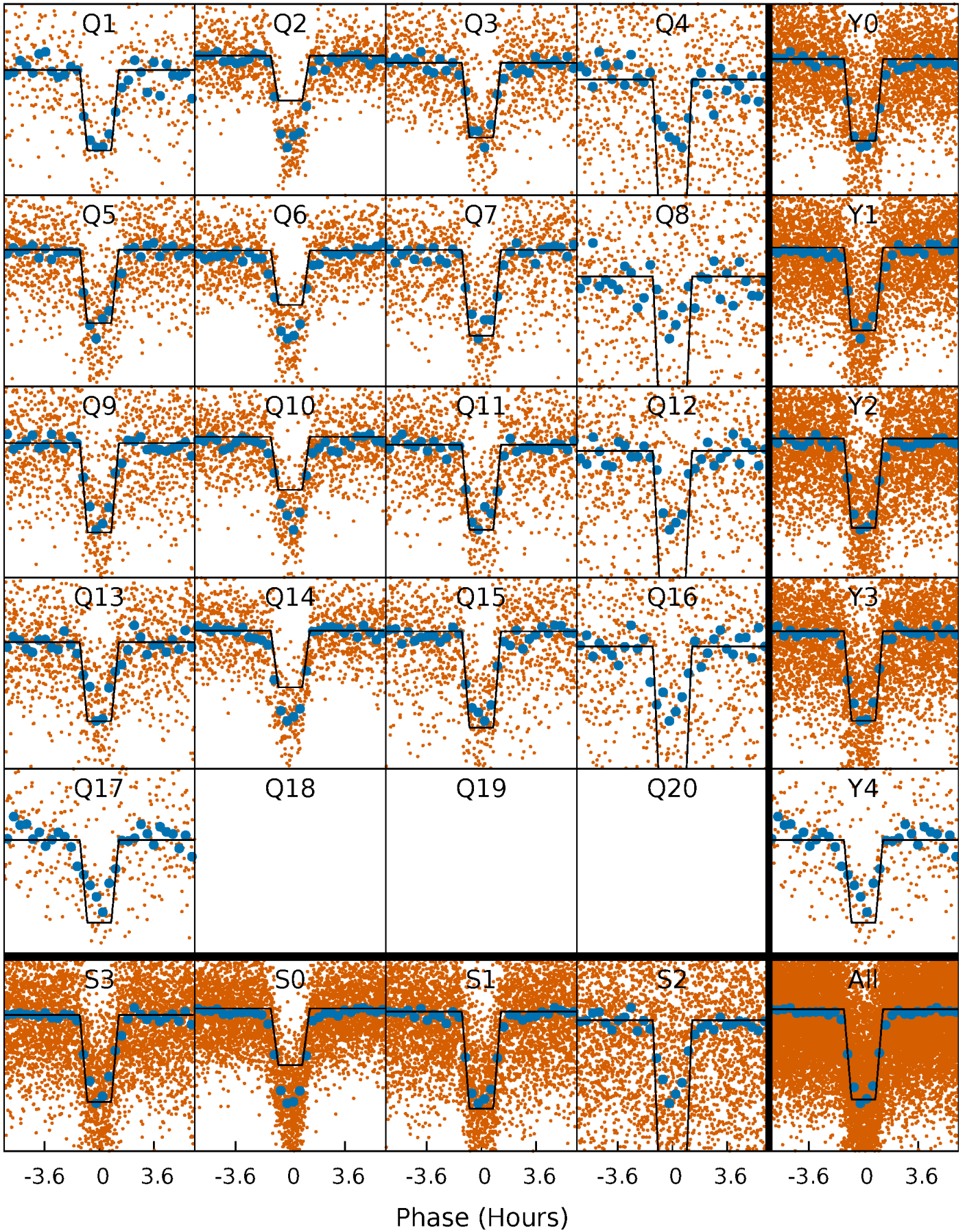
DV Quarter-Phased Transit Curves

TCE 005966660-01 P= 1.906644 Days $T_0=131.928033$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

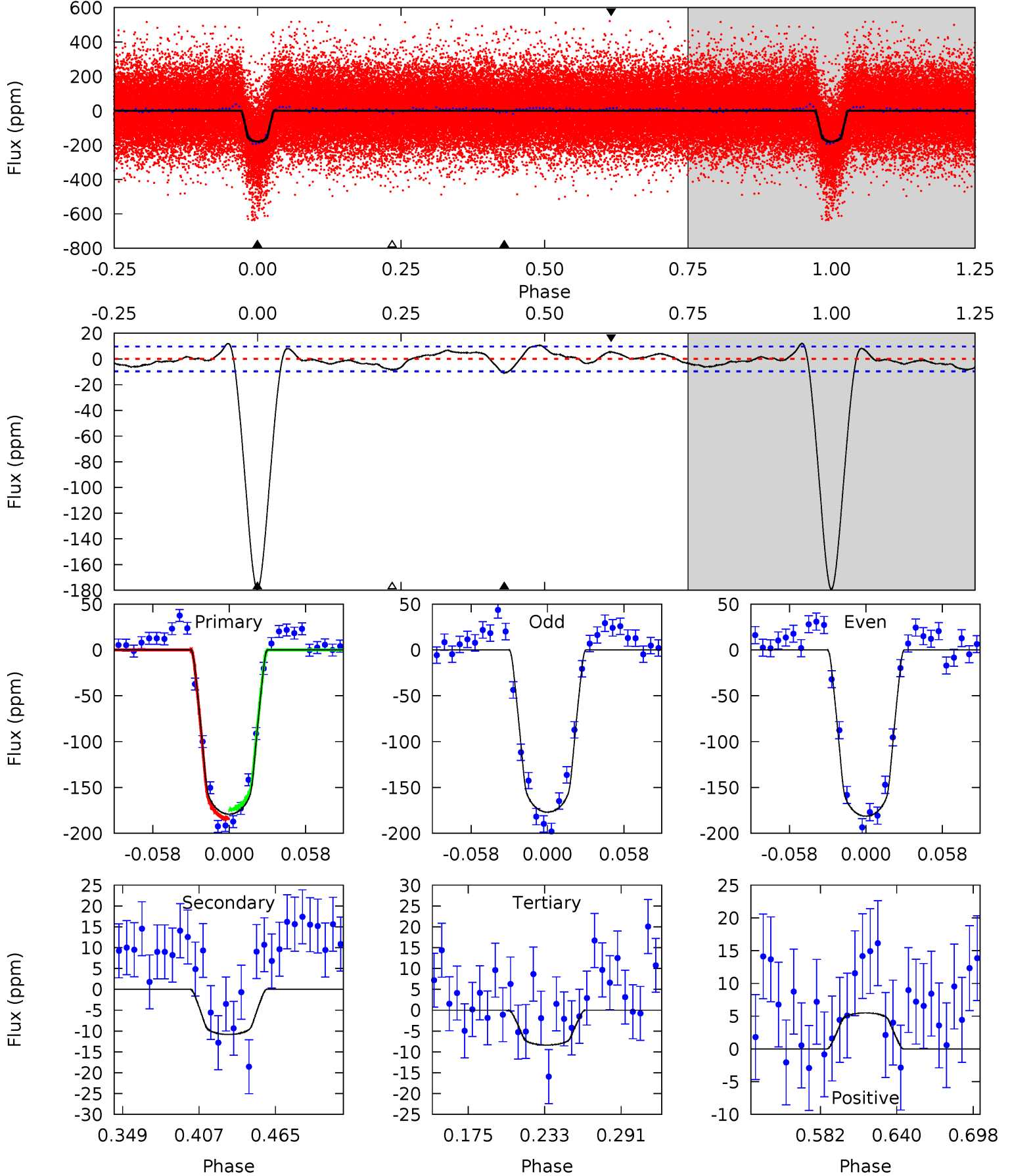
TCE 005966660-01 P= 1.906640 Days $T_0=131.929316$ (BKJD)



DV Model-Shift Uniqueness Test

005966660-01, P = 1.906644 Days, E = 130.021389 Days

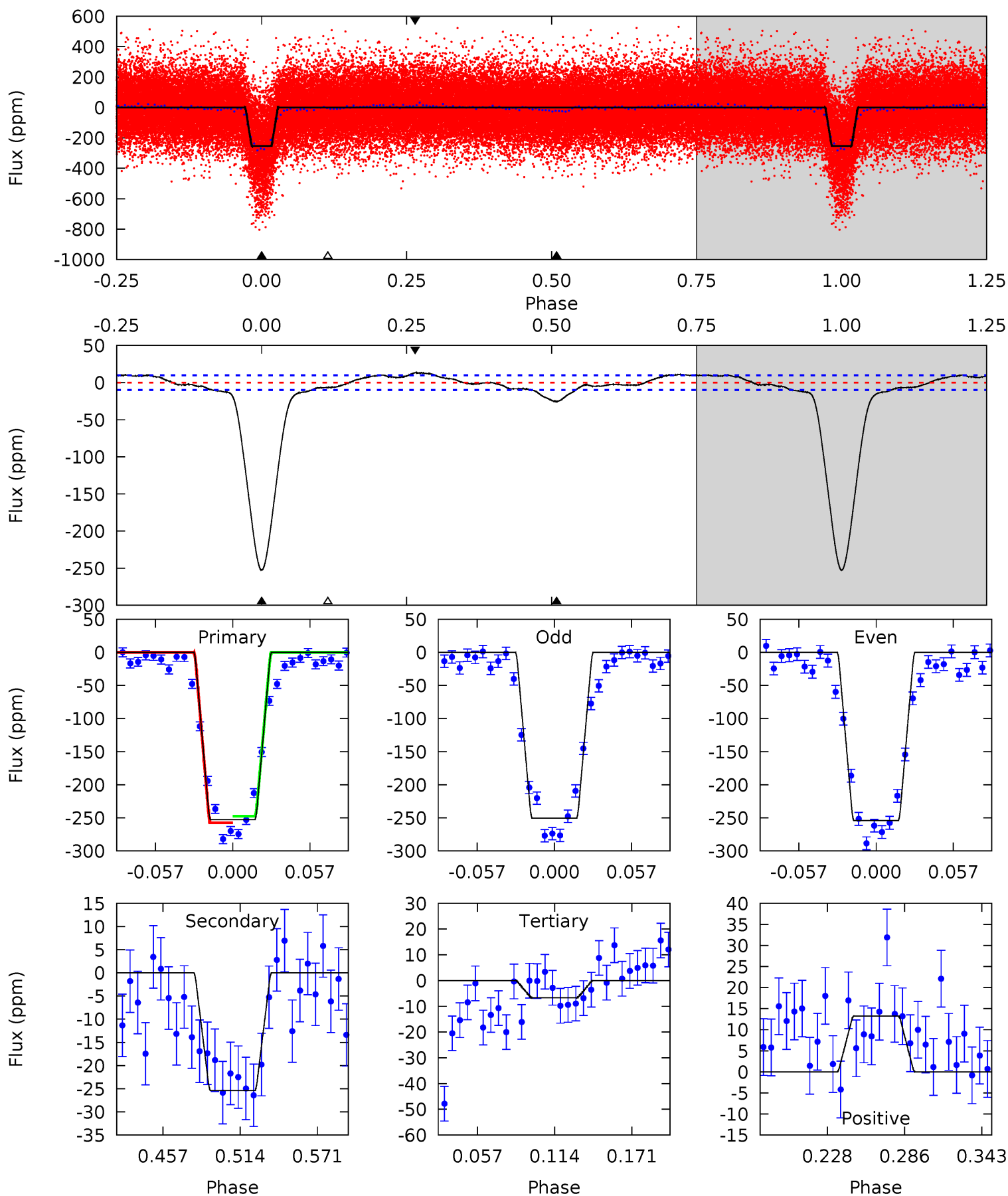
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
86.8	5.25	4.05	2.66	4.68	1.89	1.87	82.7	84.1	1.20	2.59	1.07	1.06	0.06	2.45



Alt Model-Shift Uniqueness Test

005966660-01, P = 1.906640 Days, E = 130.022676 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
119.5	12.0	3.16	6.26	4.68	1.90	3.50	116.3	113.2	8.84	5.74	0.91	1.03	0.05	2.41



Stellar Parameters For KIC 005966660

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6736^{+70}_{-101}	$4.335^{+0.038}_{-0.113}$	$-0.240^{+0.150}_{-0.150}$	$1.243^{+0.206}_{-0.083}$	$1.224^{+0.085}_{-0.085}$	$0.898^{+0.168}_{-0.295}$
	+1%/-1%	+1%/-3%	+62%/-62%	+17%/-7%	+7%/-7%	+19%/-33%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005966660-01 / KOI 0656.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-11 ± 2	$1.99^{+0.24}_{-0.21}$	2602^{+101}_{-66}	3513^{+205}_{-192}	$1.540^{+0.533}_{-0.411}$
Alt.	-25 ± 2	$2.27^{+0.24}_{-0.21}$	2606^{+103}_{-68}	3961^{+149}_{-149}	$2.785^{+0.674}_{-0.530}$

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

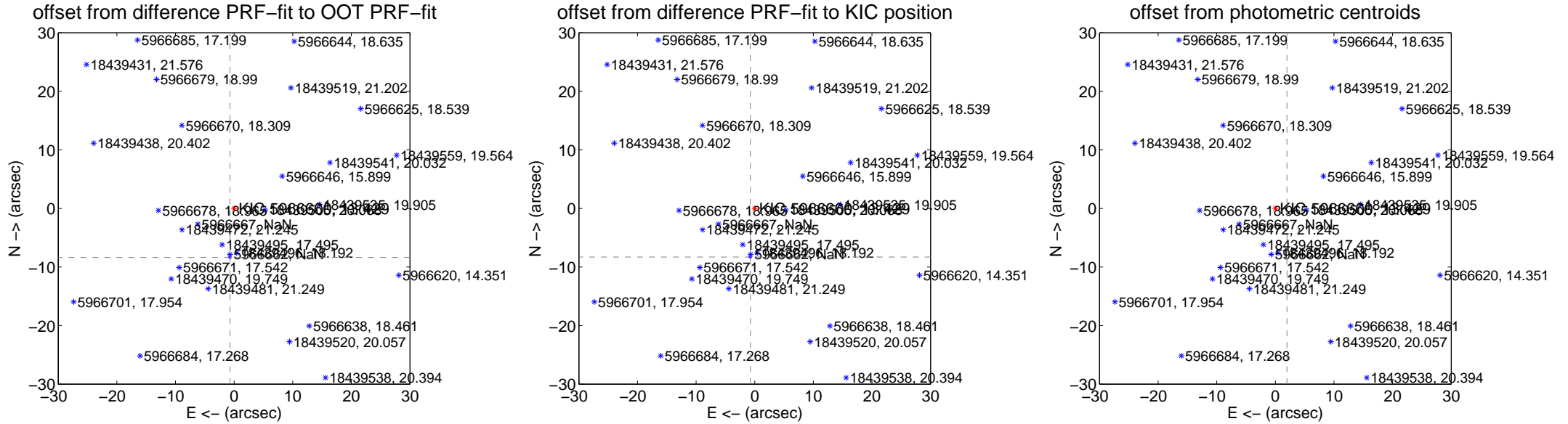
DV Centroid Data

Supplemental centroid analysis for 0059666660-01. Kepler magnitude: 13.43. Transit SNR 57.33

There are 4 quarters with good PRF difference image offsets

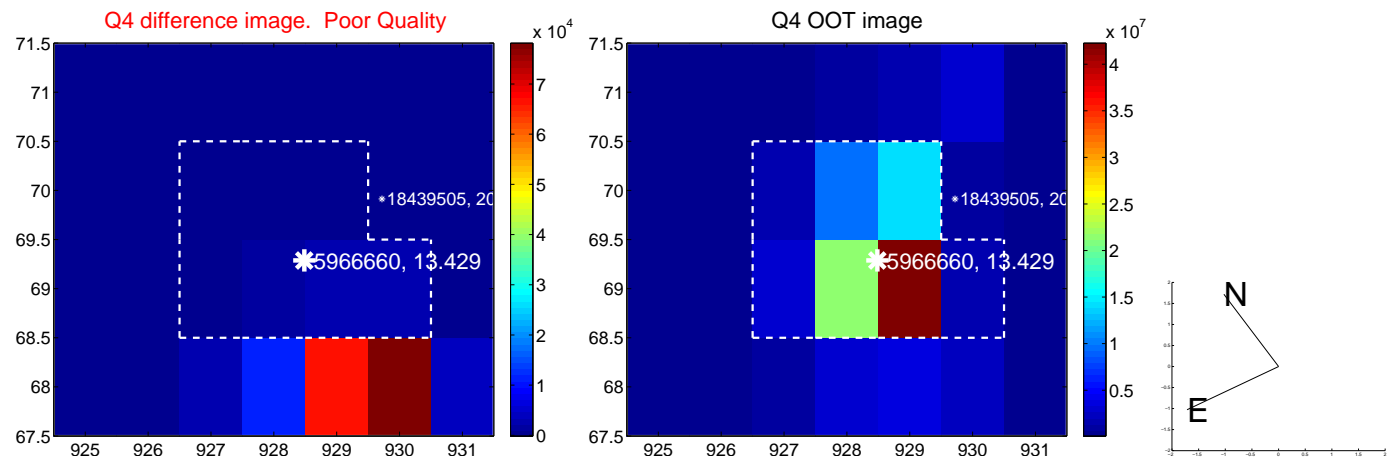
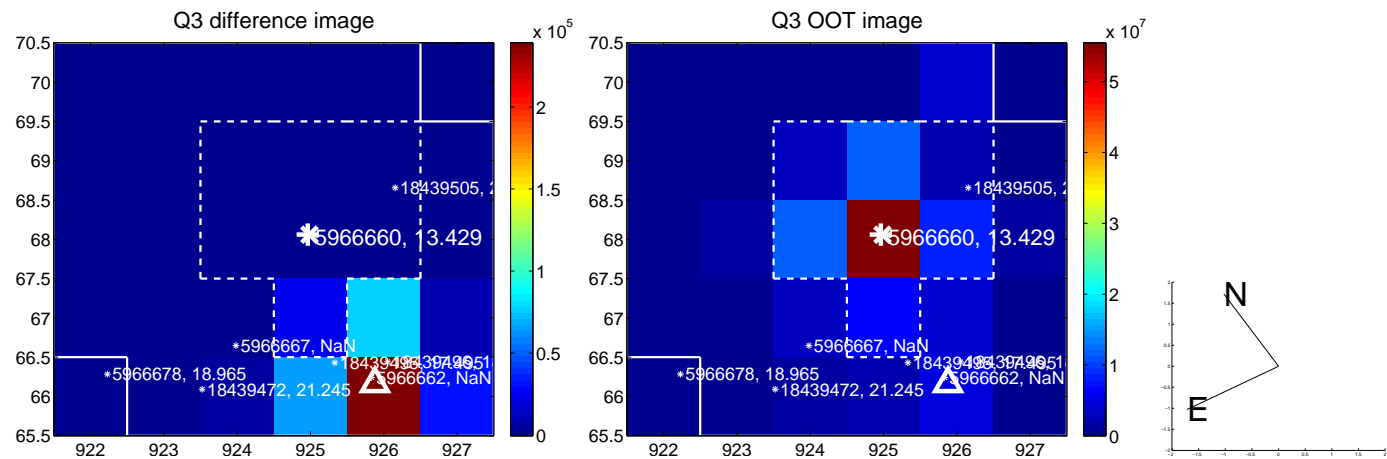
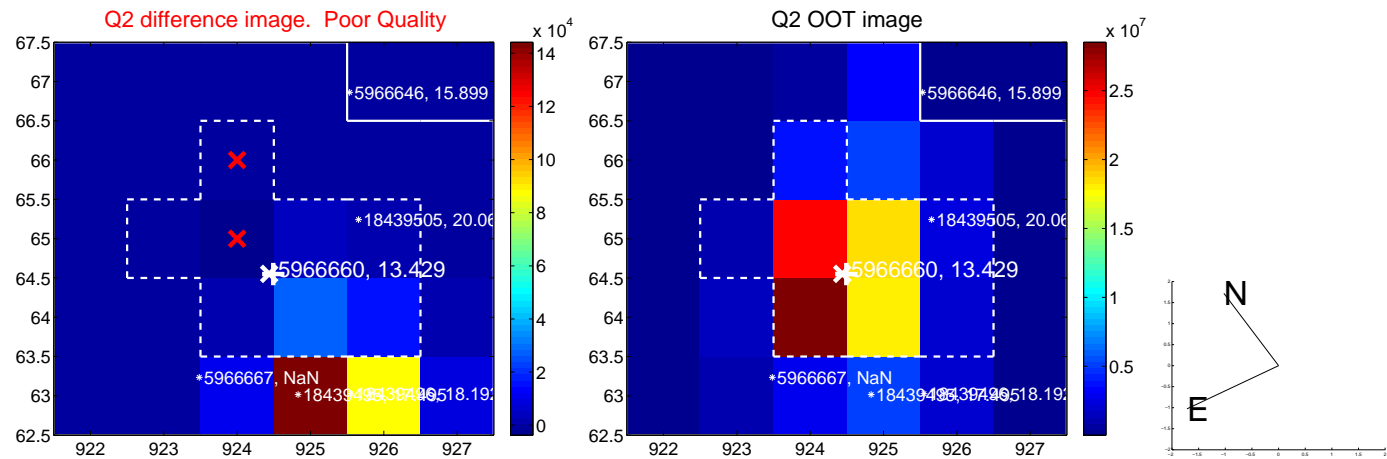
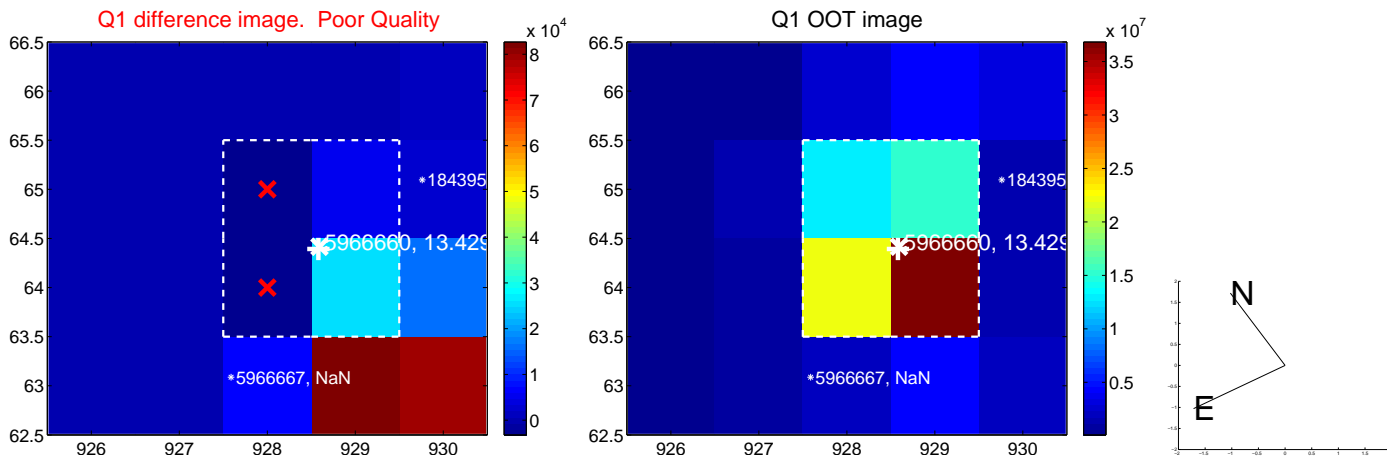
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.394 \pm 0.067	125.36	0.705 \pm 0.067	-8.364 \pm 0.067
PRF-fit source offset from KIC position	8.332 \pm 0.068	123.36	0.752 \pm 0.073	-8.298 \pm 0.067
photometric centroid source offset	80.70 \pm 0.19	430.03	-1.98 \pm 0.15	-80.68 \pm 0.19

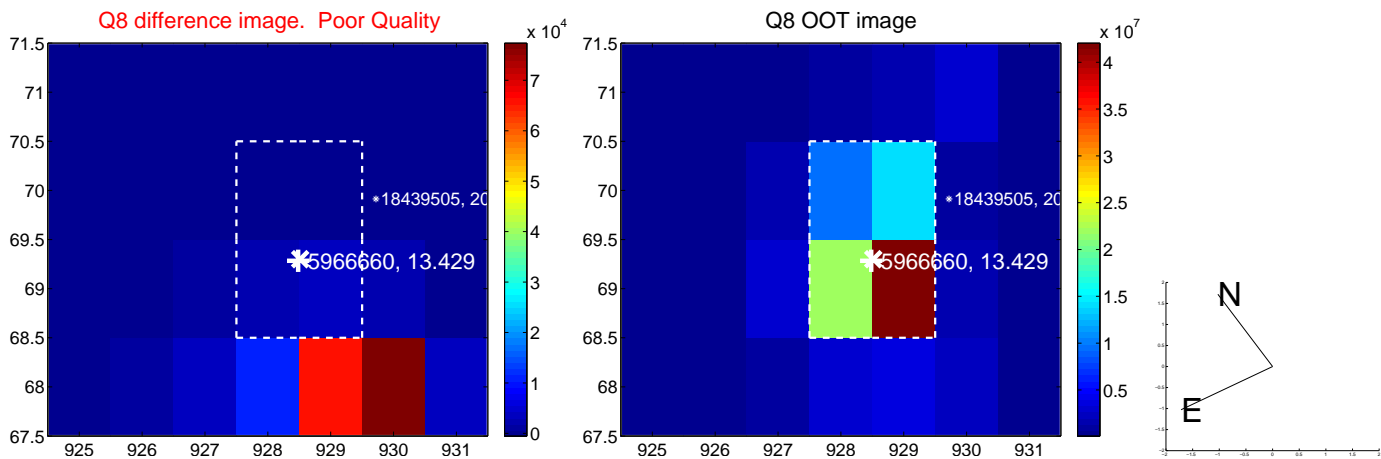
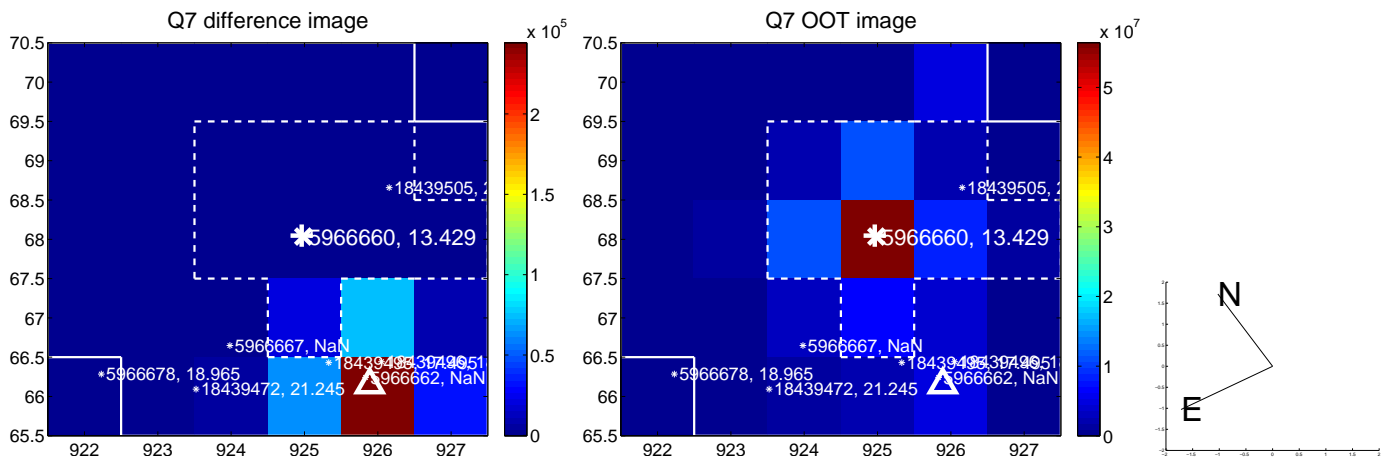
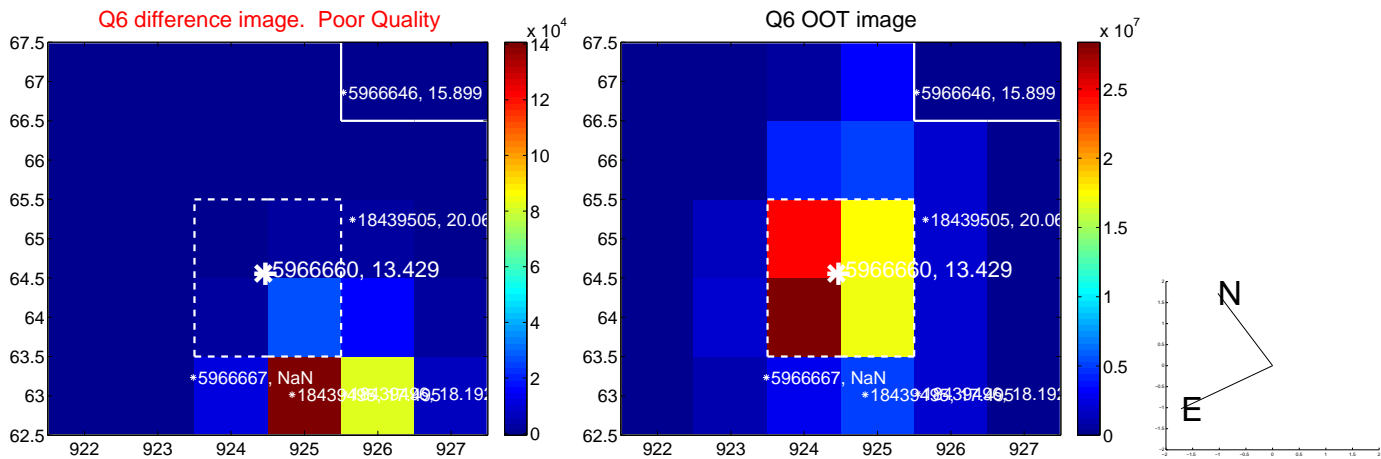
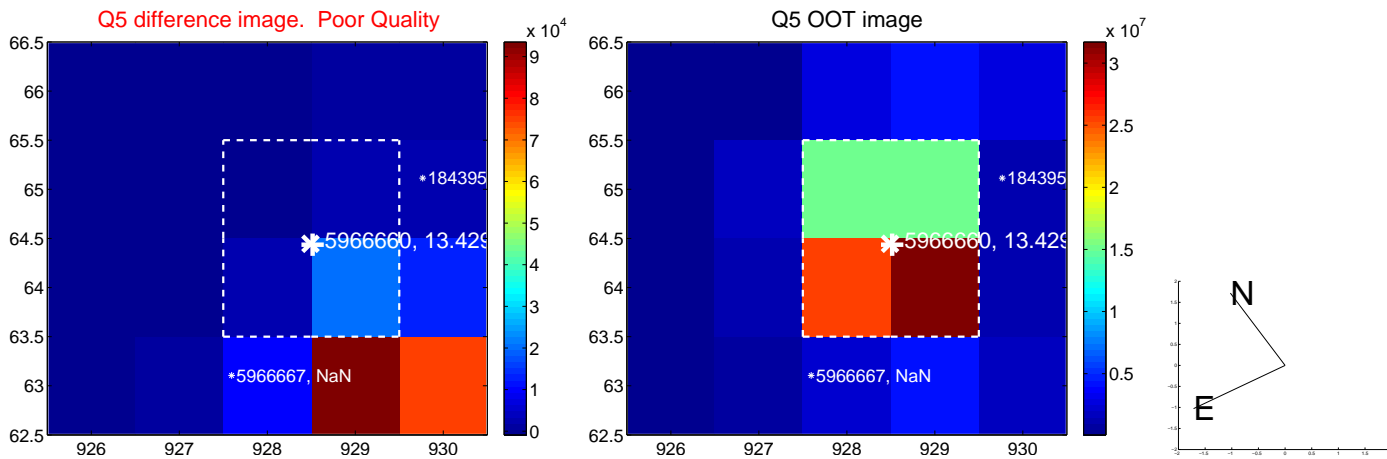


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

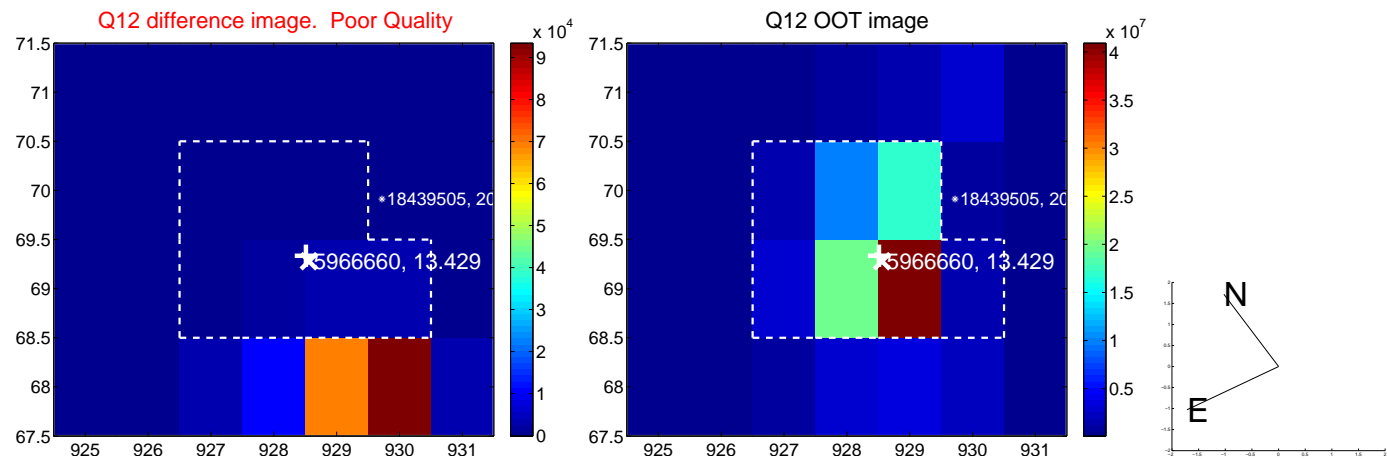
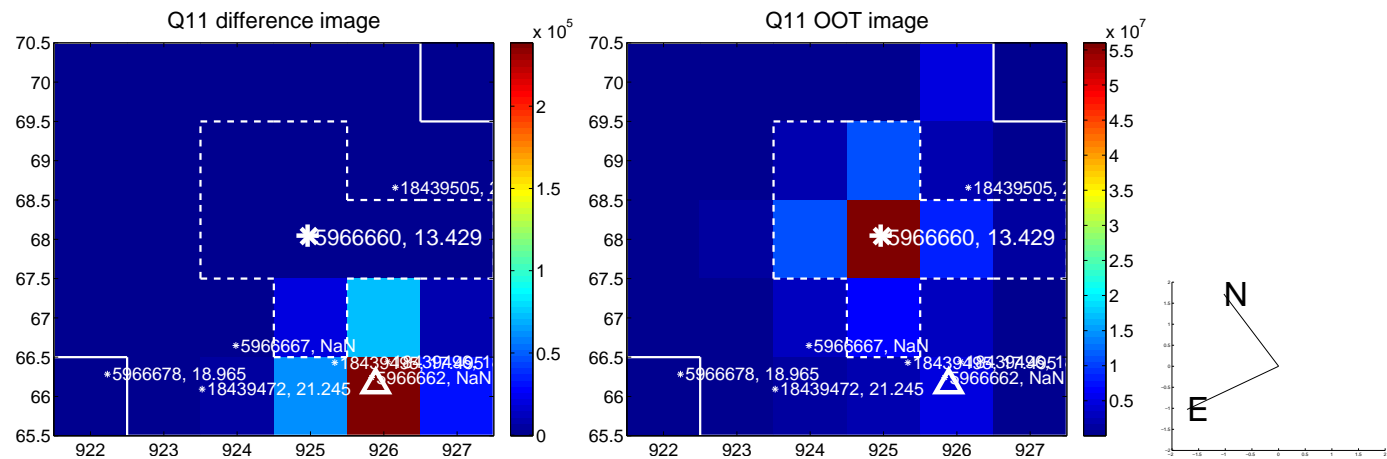
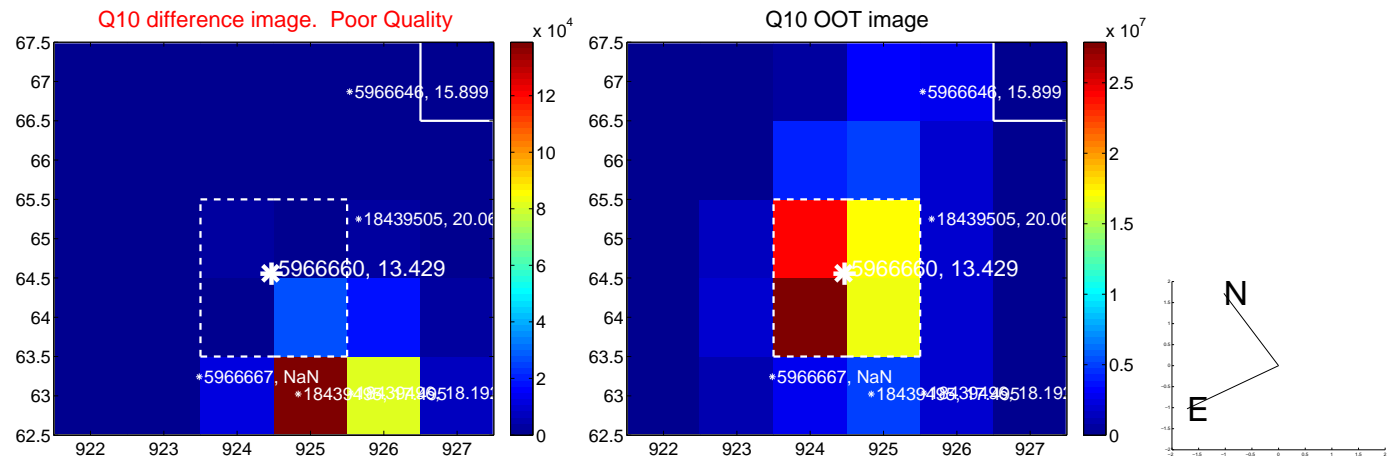
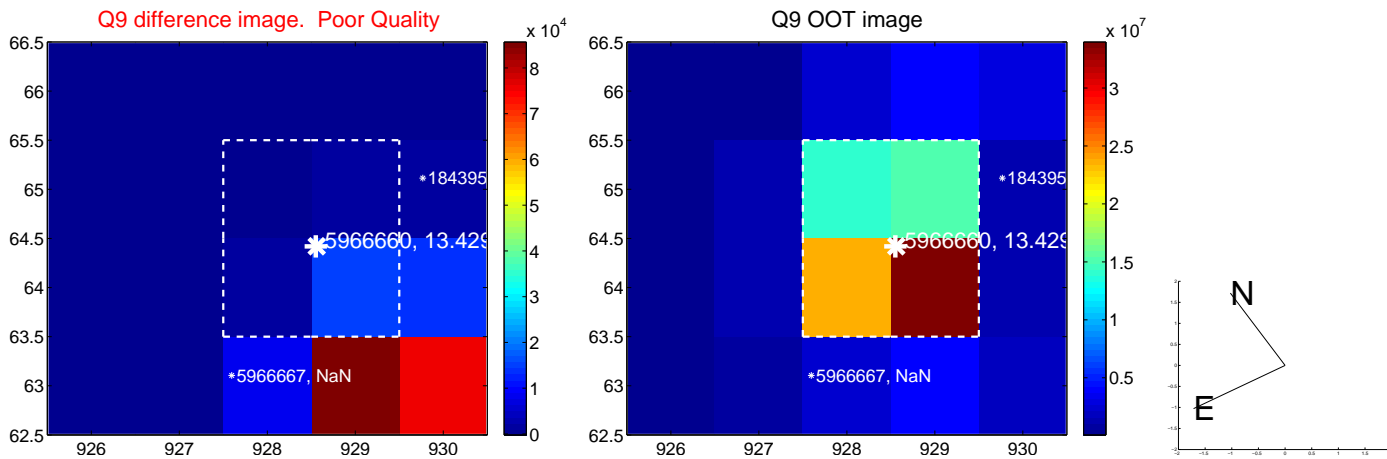
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



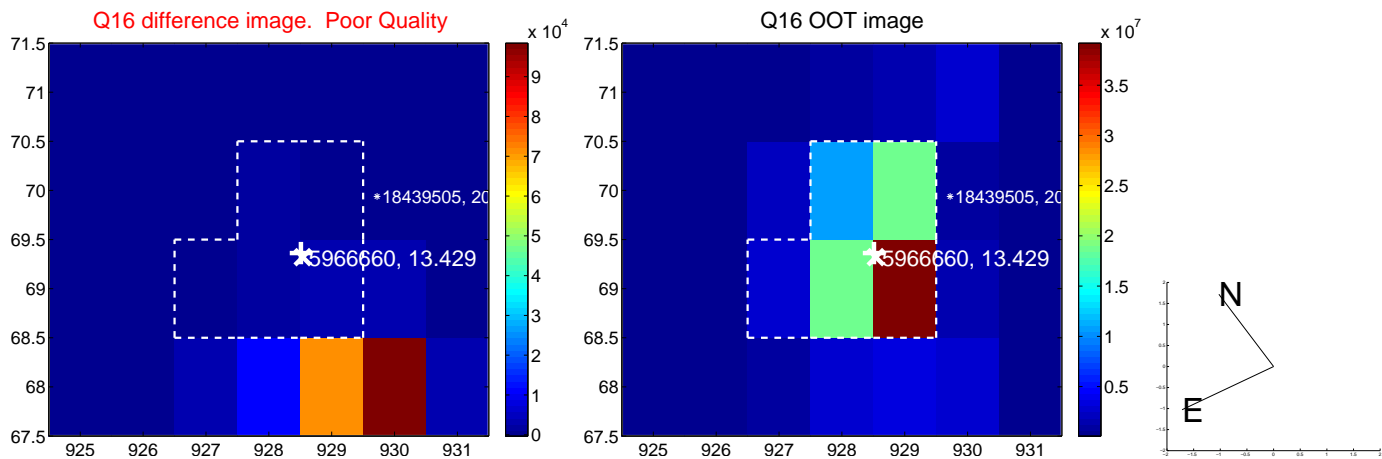
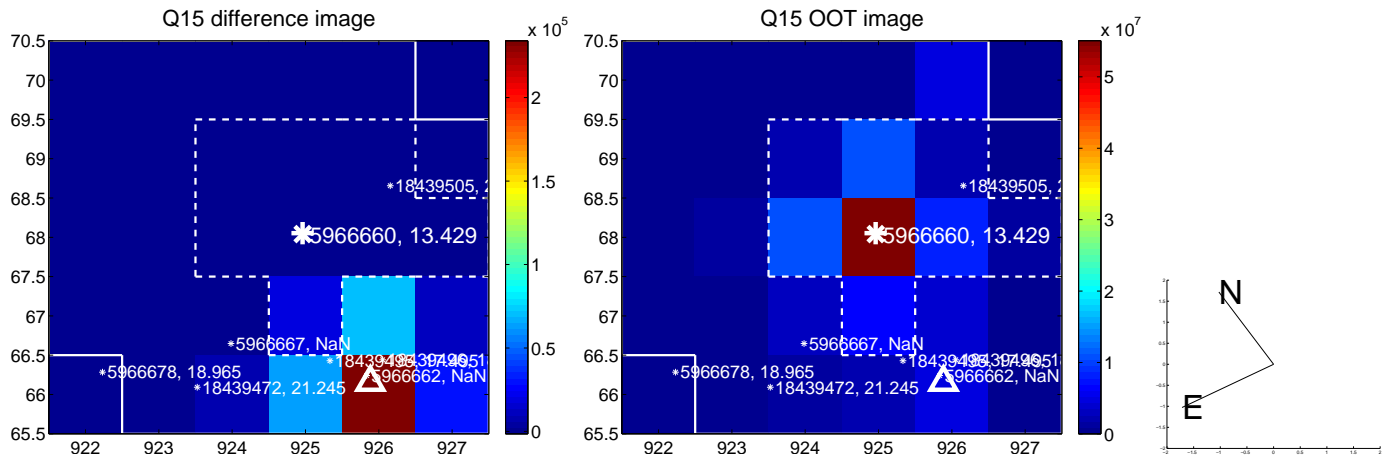
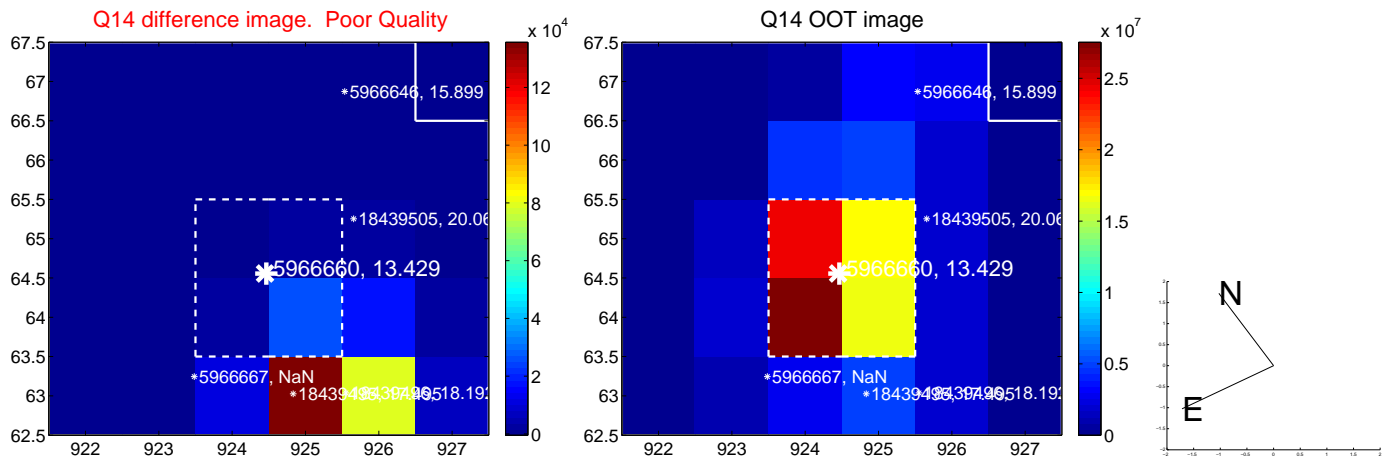
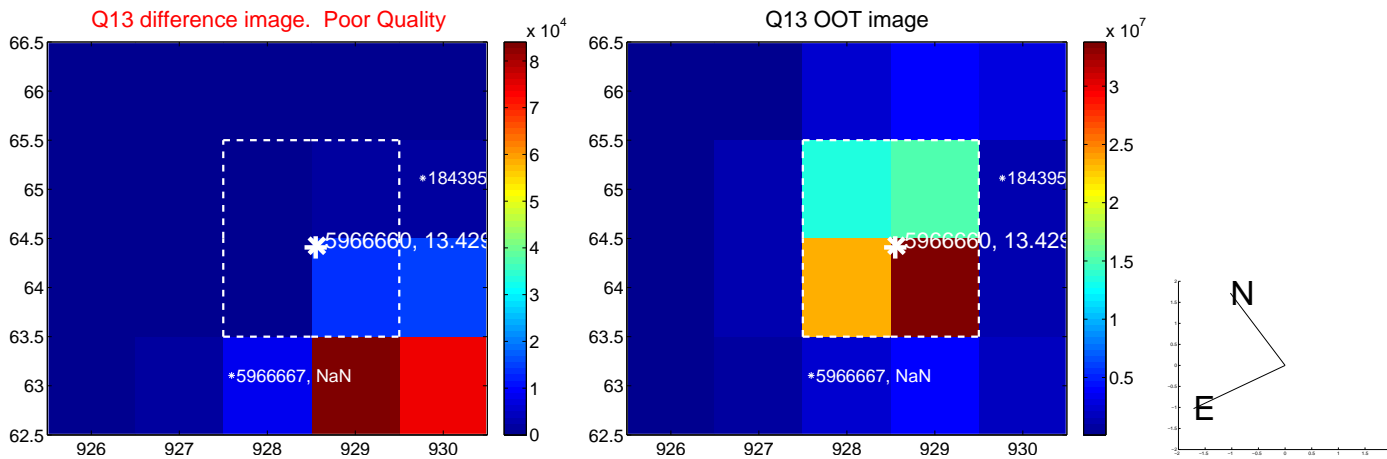
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



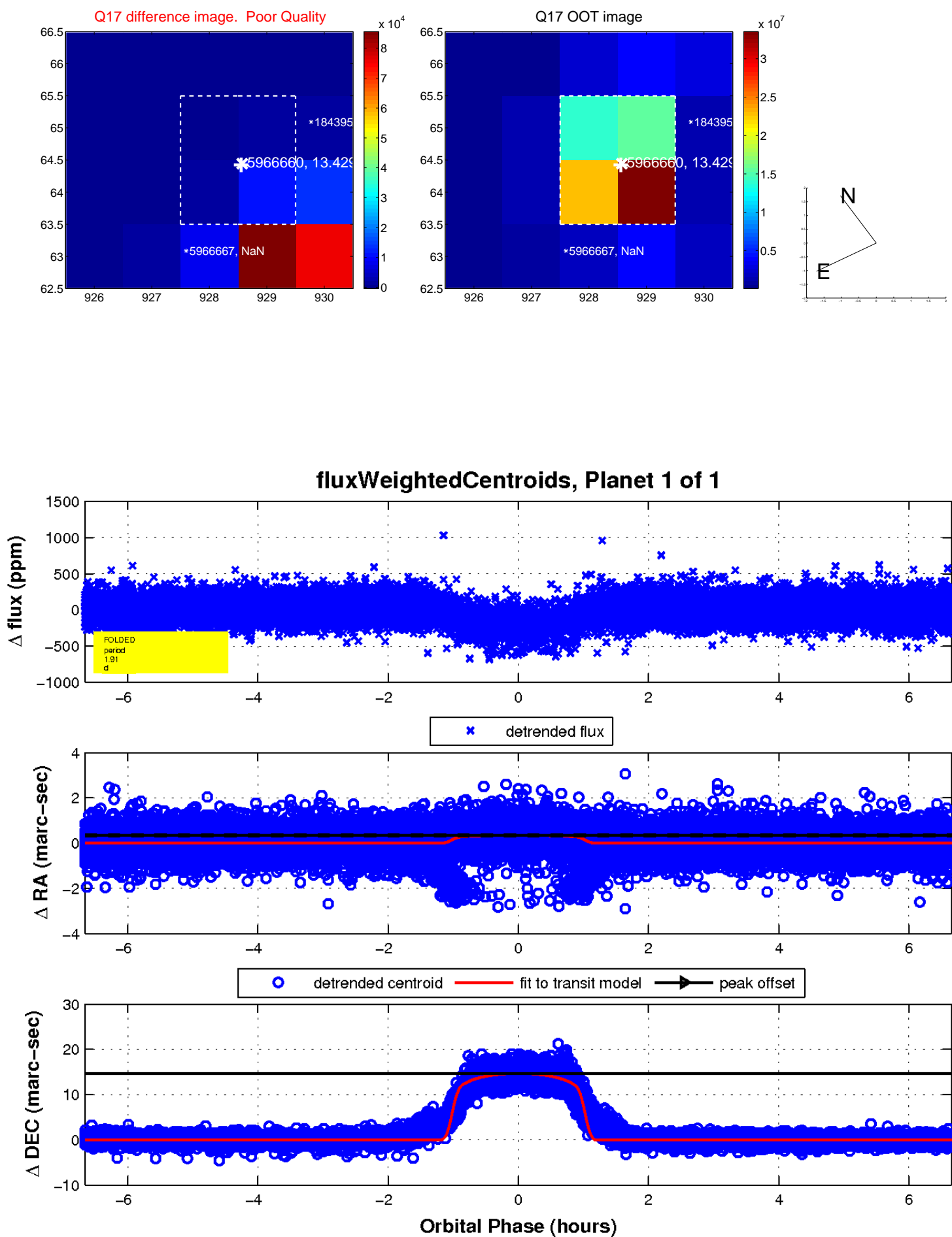
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

