

KIC 006370120

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})
006370120-01	OBS	2811.01	1.354774	131.645255	133.7	1.577	10.5	13.3	0.69	4414	0.99	348.78

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006370120-01	OBS	PC	1.00	0	0	0	0	CENT_FEW_MEAS

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

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

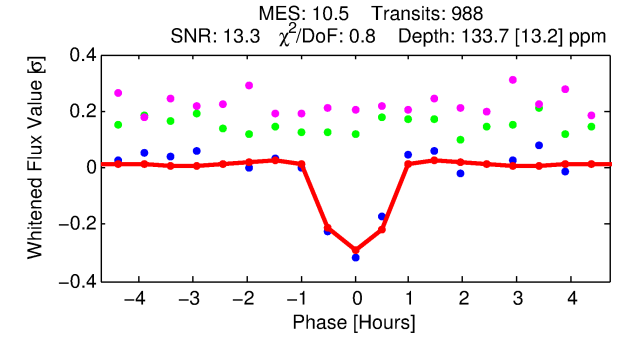
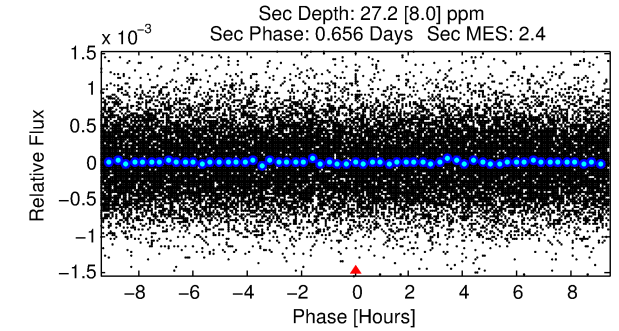
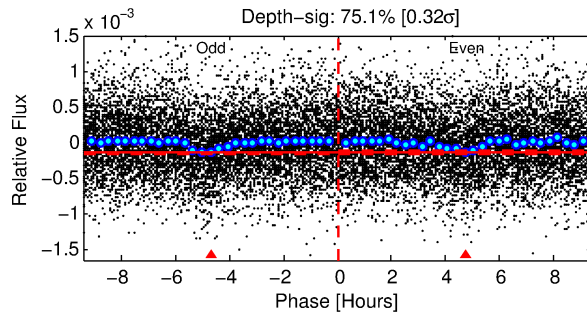
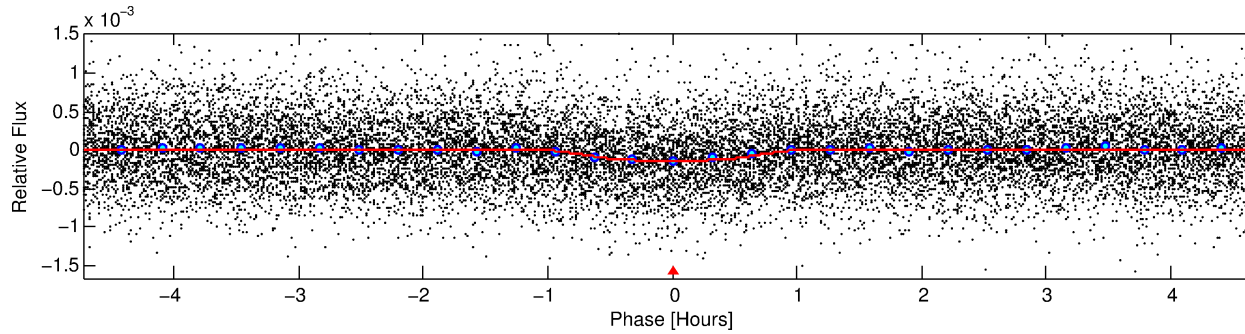
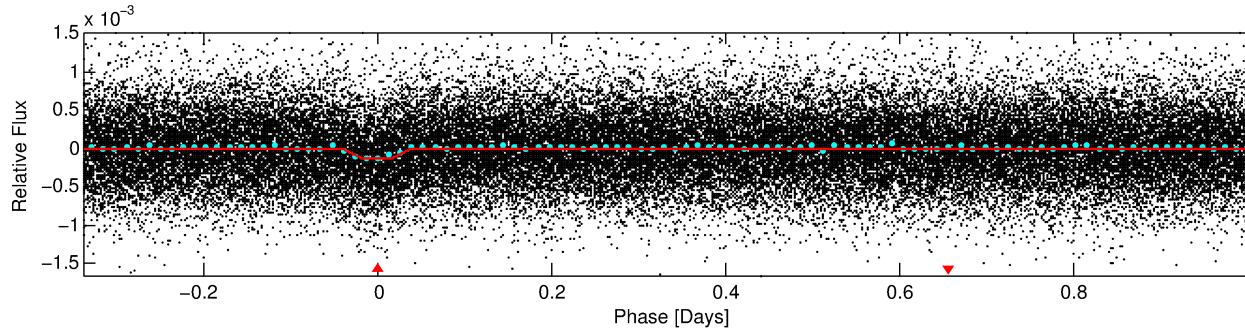
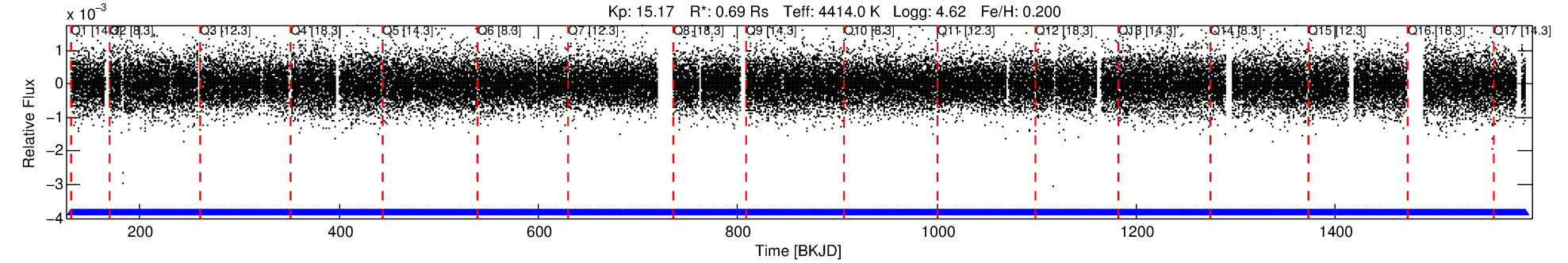
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006370120-01

No Significant Match Found

DV One-Page Summary

KIC: 6370120 Candidate: 1 of 1 Period: 1.355 d
KOI: K02811.01 Corr: 0.950



DV Fit Results:

Period = 1.35477 [0.00001] d
Epoch = 131.6453 [0.0017] BKJD
Rp/R* = 0.0132 [0.0107]
a/R* = 3.19 [8.52]
b = 0.90 [0.65]
Seff = 348.78 [51.30]
Teq = 1102 [41] K
Rp = 0.99 [0.81] Re
a = 0.0215 [0.0011] AU
Ag = 7.05 [11.67] [0.52 σ]
Teffp = 2776 [1152] K [1.45 σ]

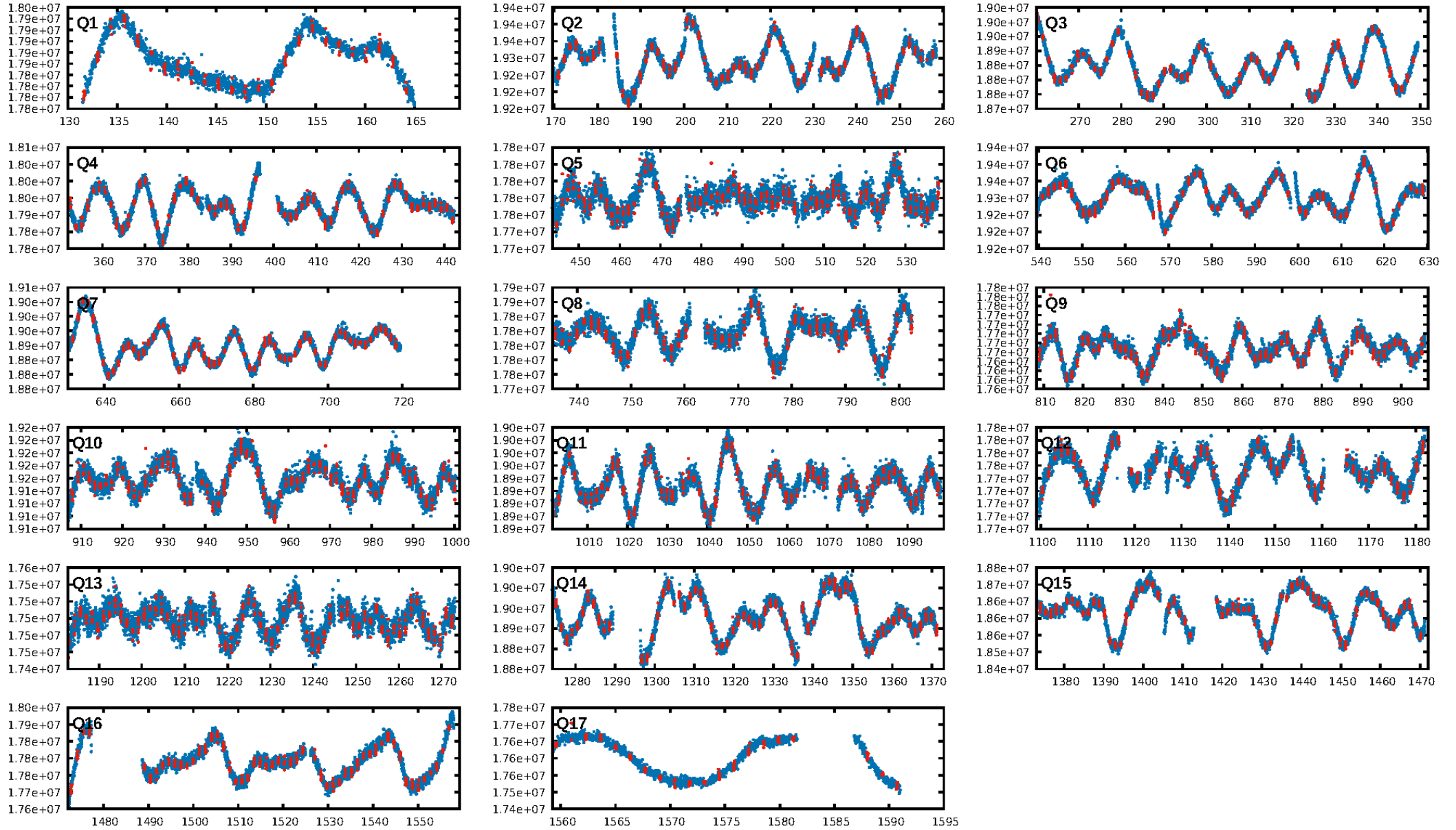
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.71e-24
RollingBand-fgt: 1.00 [943/943]
GhostDiagnostic-chr: -0.8018
Centroid-sig: N/A
Centroid-so: 32.762 arcsec [39.09 σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

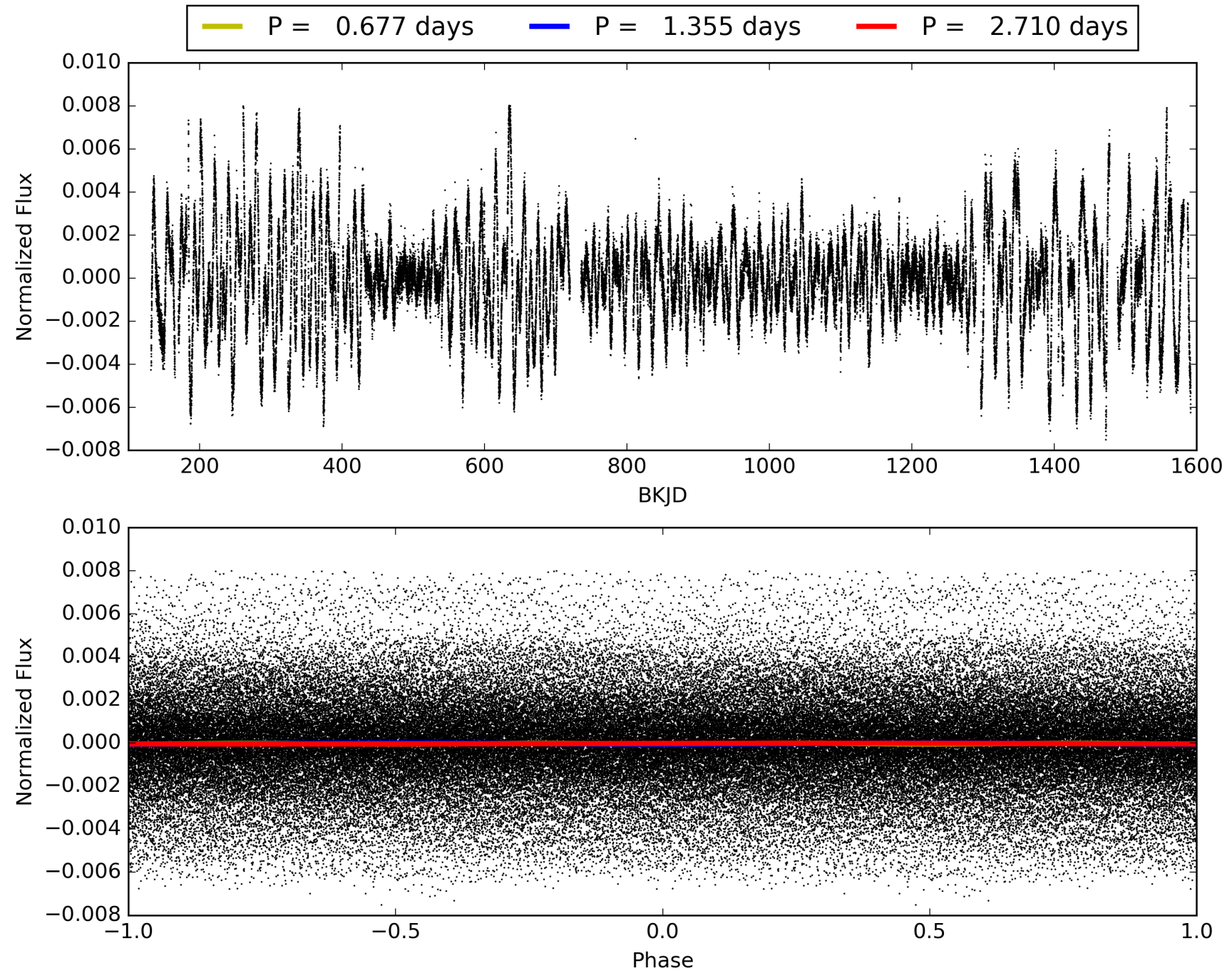
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:08:03 Z

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

TCE 006370120-01, PDC Light Curves

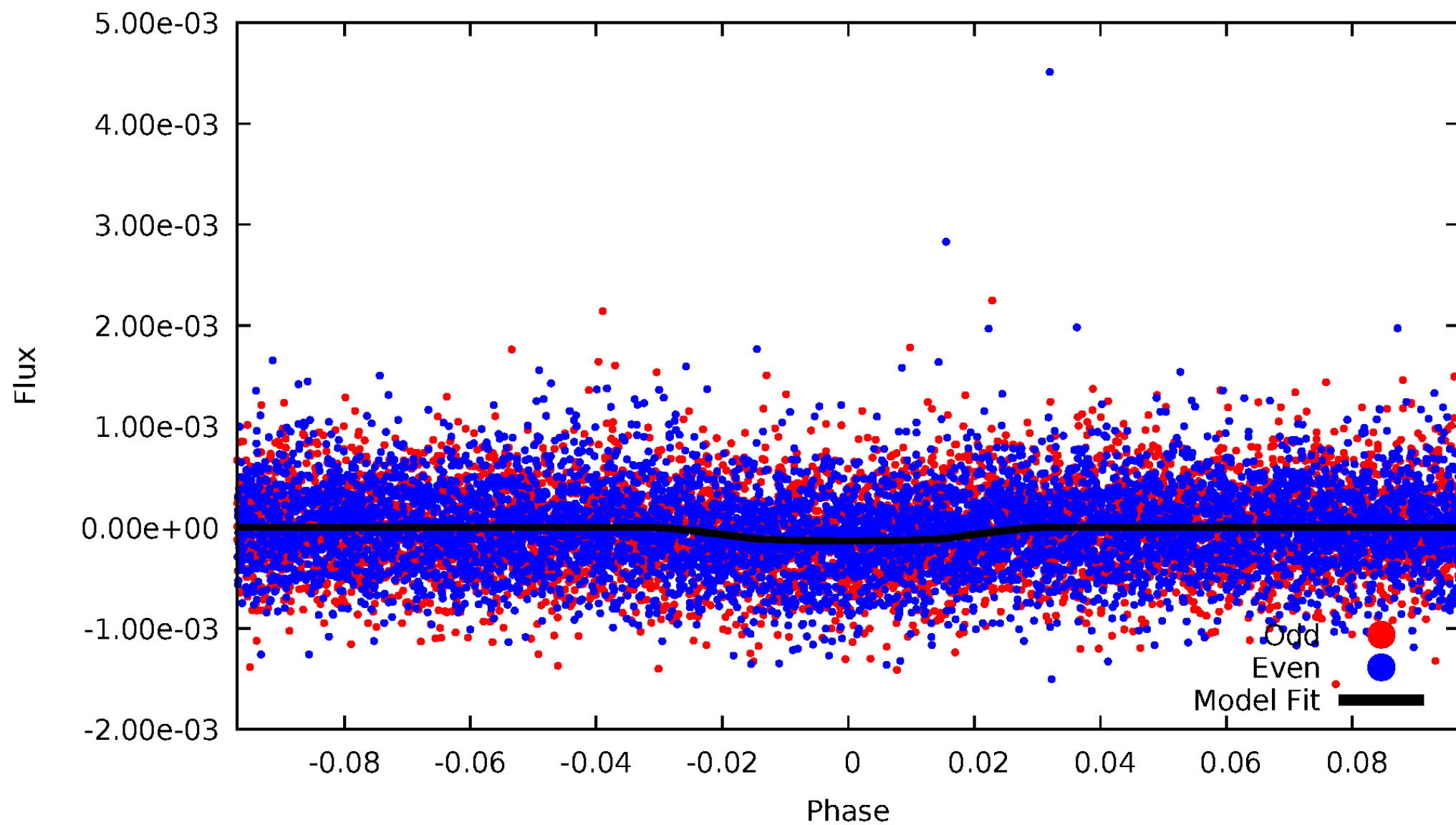


TCE 006370120-01



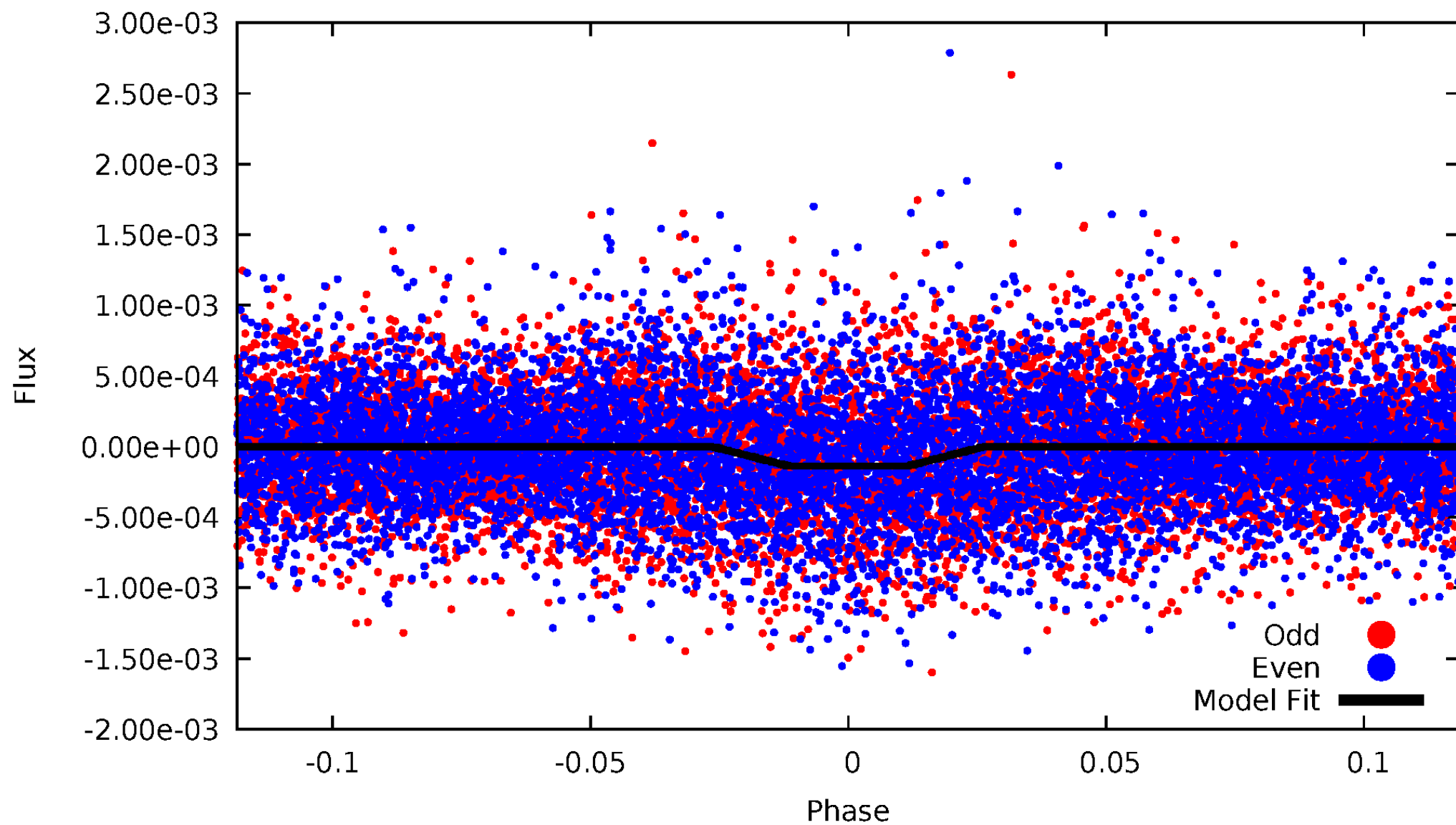
DV Odd/Even

TCE 006370120-01

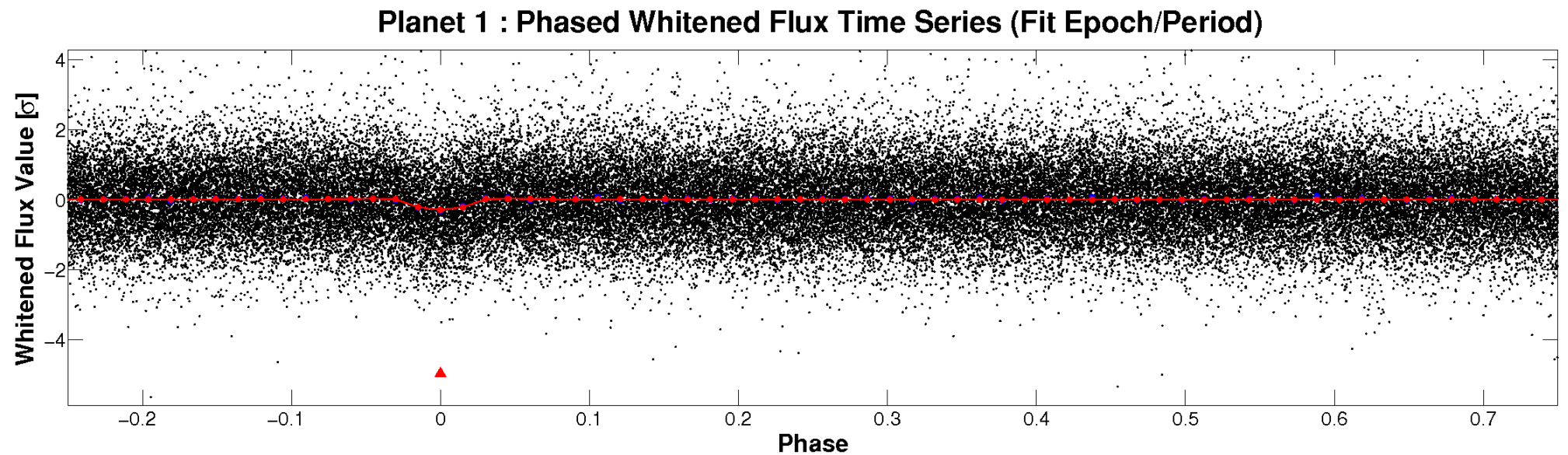
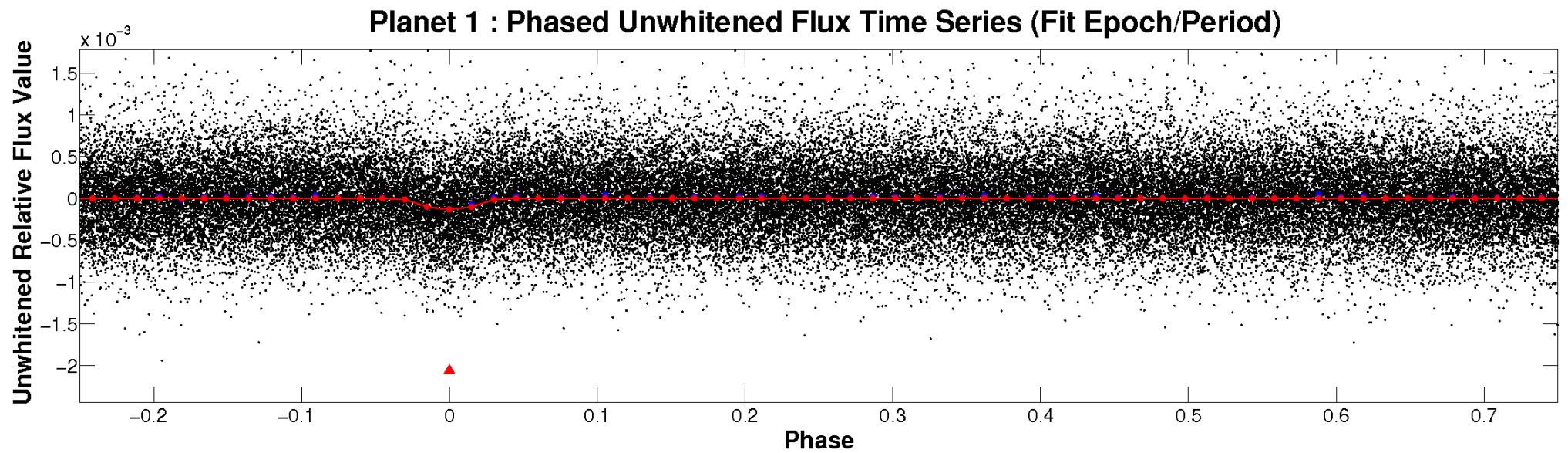


ALT Odd/Even

TCE 006370120-01

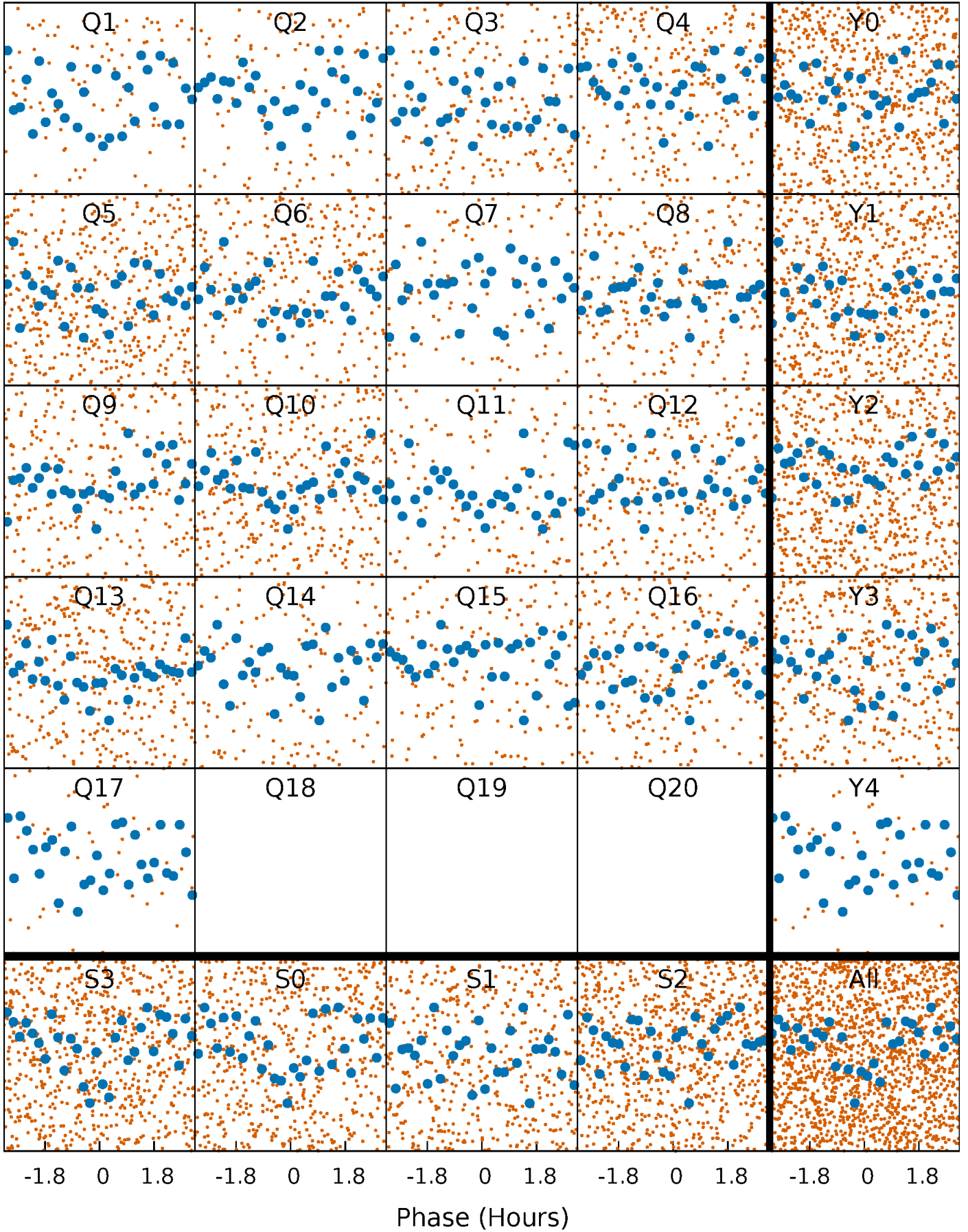


Non-Whitened Vs. Whitened Light Curve



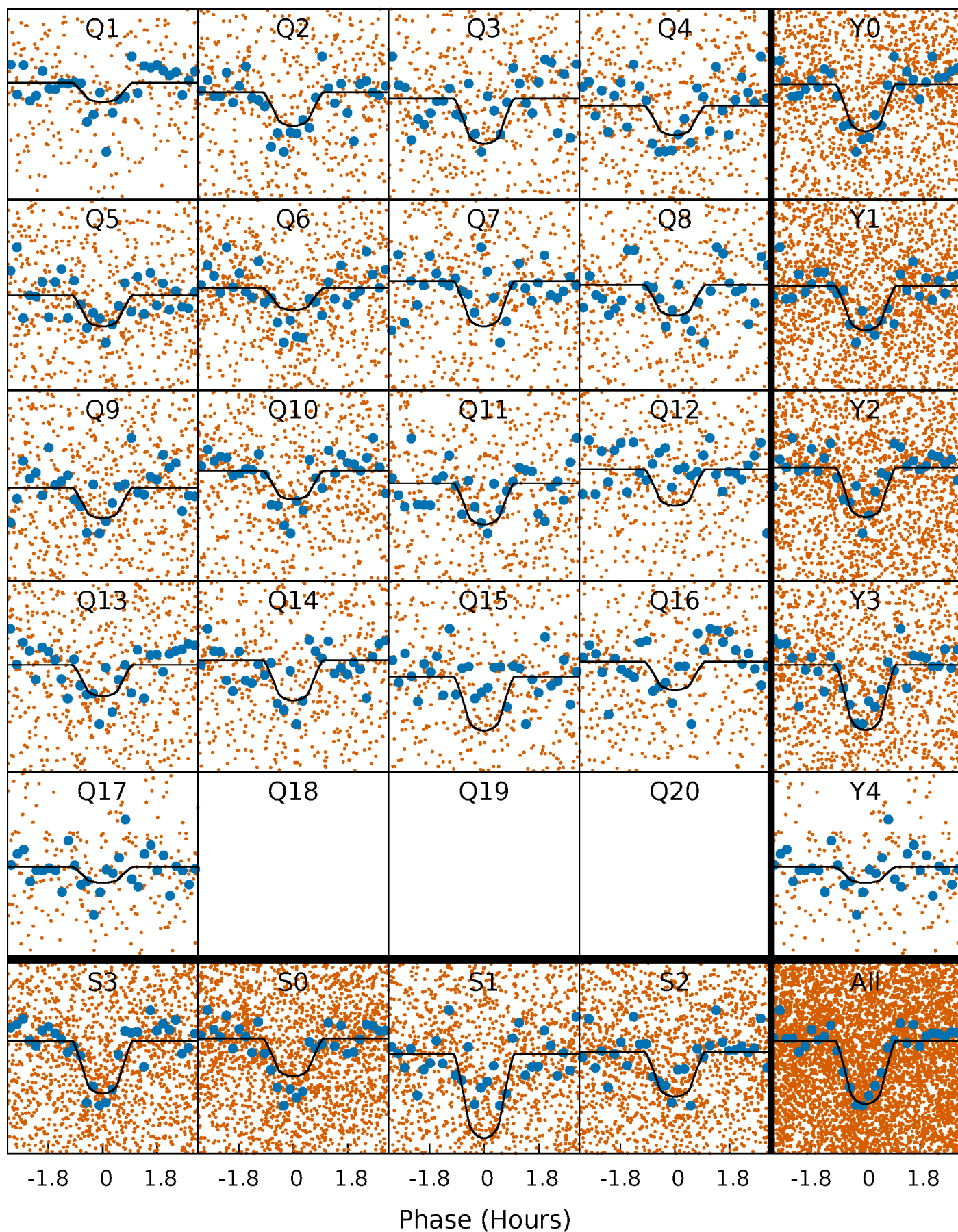
PDC Quarter-Phased Transit Curves

TCE 006370120-01 P= 1.354774 Days $T_0=131.645255$ (BKJD)



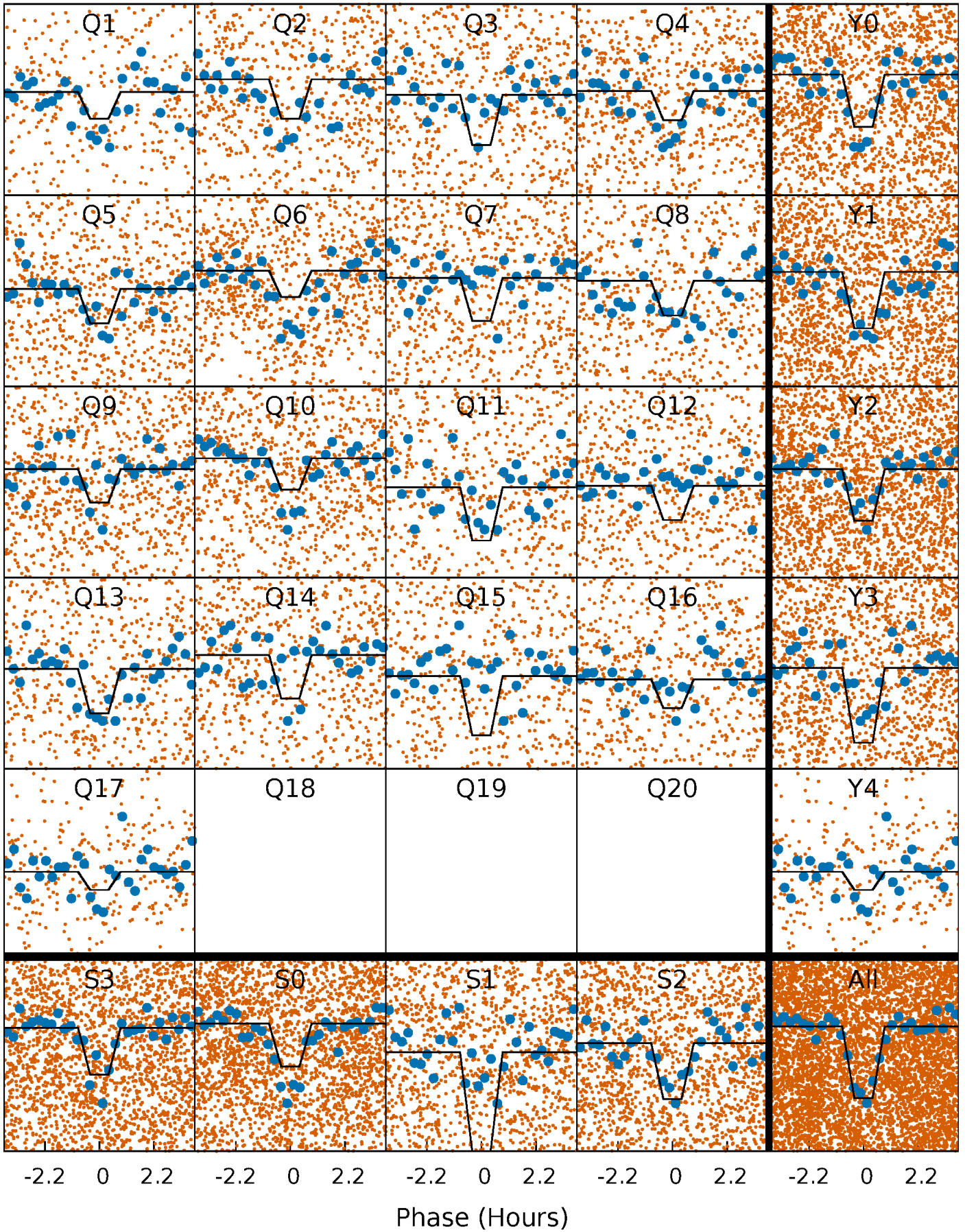
DV Quarter-Phased Transit Curves

TCE 006370120-01 P= 1.354774 Days $T_0=131.645255$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

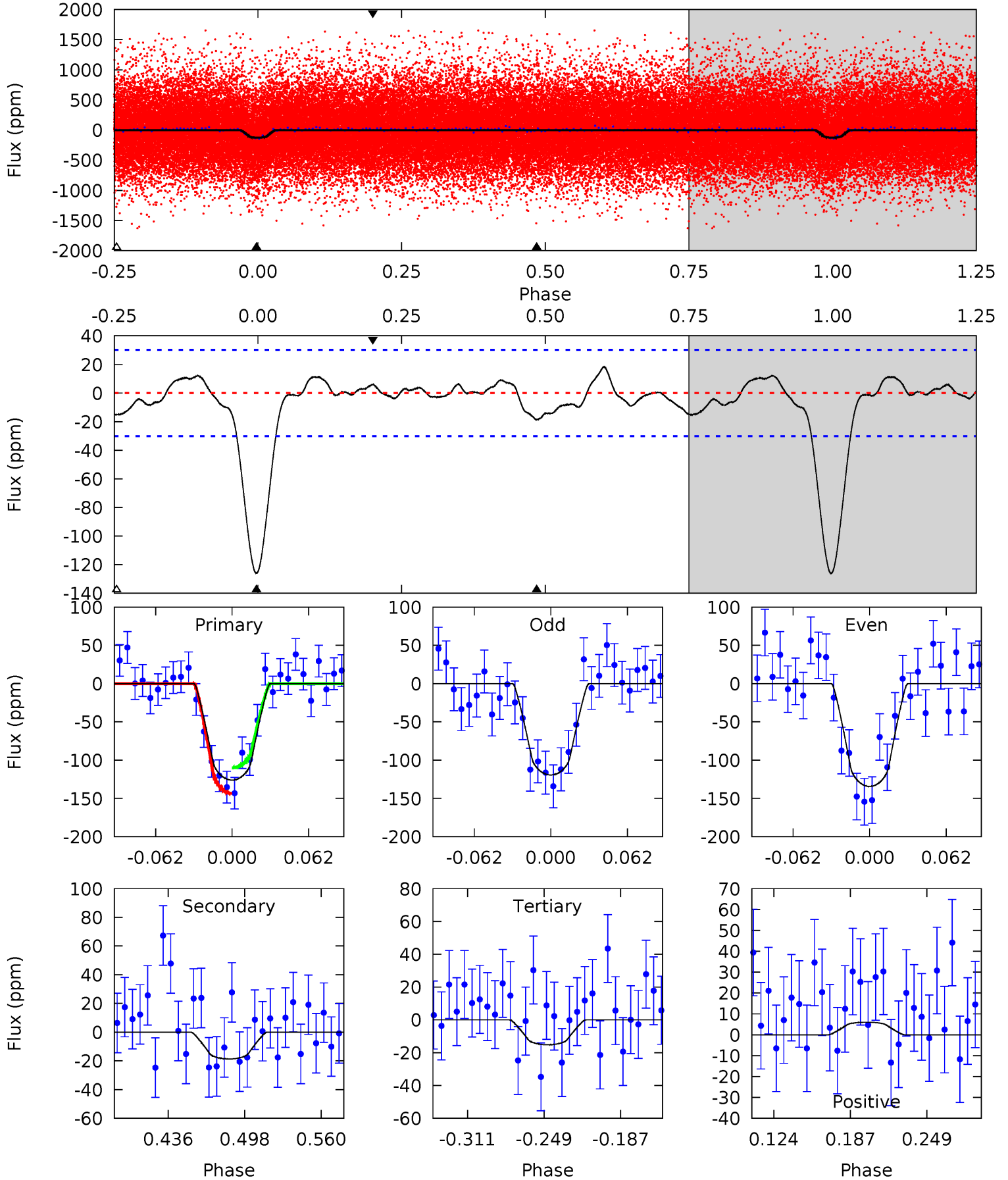
TCE 006370120-01 P= 1.354761 Days $T_0=131.647393$ (BKJD)



DV Model-Shift Uniqueness Test

006370120-01, P = 1.354774 Days, E = 130.290481 Days

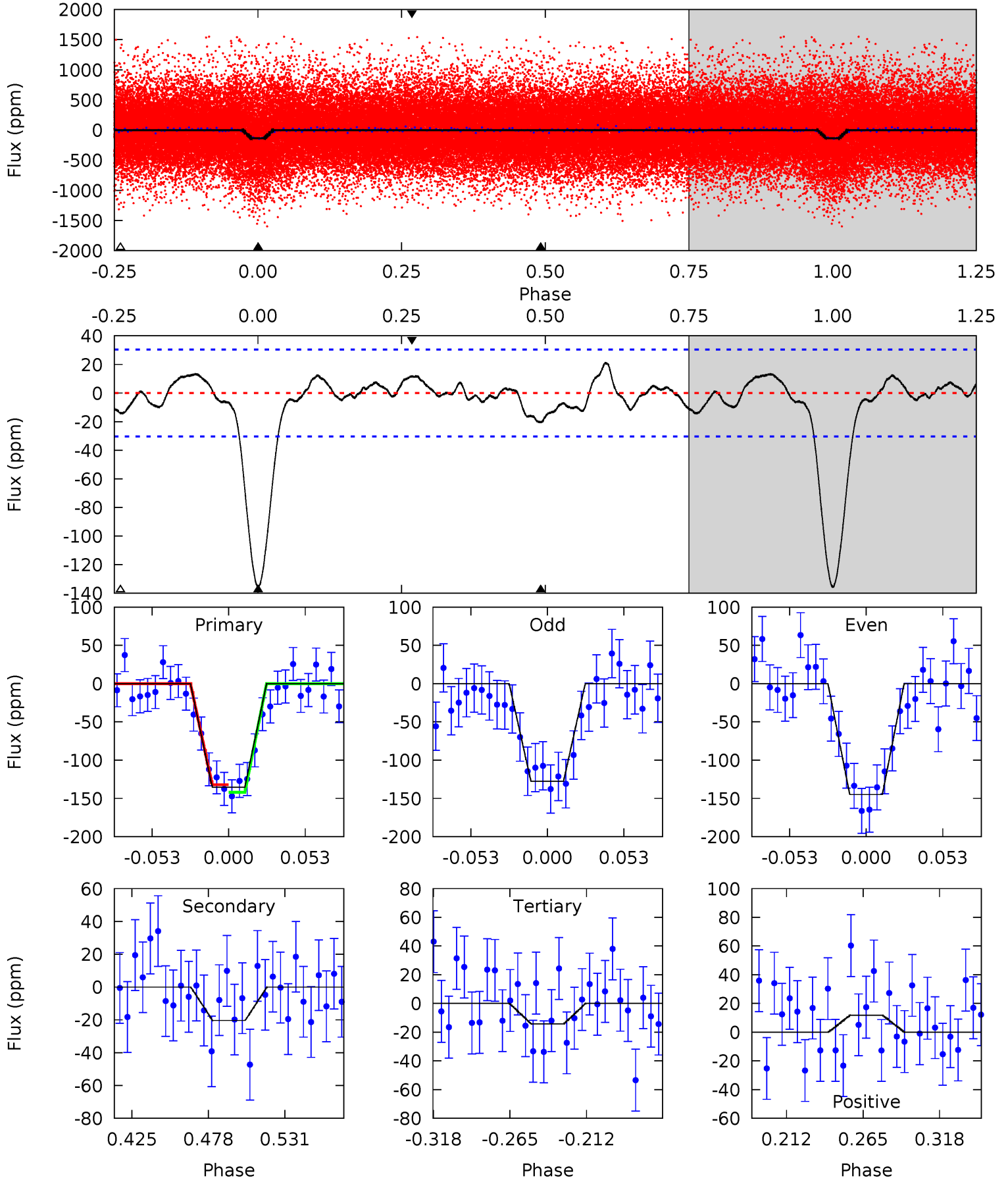
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.5	2.89	2.35	0.93	4.66	1.86	1.04	17.1	18.5	0.54	1.96	1.16	1.05	0.13	2.59



Alt Model-Shift Uniqueness Test

006370120-01, P = 1.354761 Days, E = 130.292632 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	3.15	2.20	1.82	4.70	1.93	1.11	18.8	19.1	0.95	1.34	1.34	1.05	0.13	0.77



Stellar Parameters For KIC 006370120

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4414^{+132}_{-145}	$4.621^{+0.030}_{-0.030}$	$0.200^{+0.200}_{-0.300}$	$0.689^{+0.034}_{-0.049}$	$0.723^{+0.037}_{-0.059}$	$3.120^{+0.511}_{-0.336}$
	+3%/-3%	+1%/-1%	+100%/-150%	+5%/-7%	+5%/-8%	+16%/-11%
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 006370120-01 / KOI 2811.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-19 ± 6	$1.13^{+0.73}_{-0.67}$	1542^{+48}_{-52}	2877^{+1005}_{-446}	$3.523^{+18.915}_{-2.344}$
Alt.	-20 ± 6	$1.06^{+0.72}_{-0.67}$	1539^{+48}_{-53}	2996^{+1058}_{-492}	$4.567^{+22.768}_{-3.137}$

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 $A_{obs} \gg 1.0$

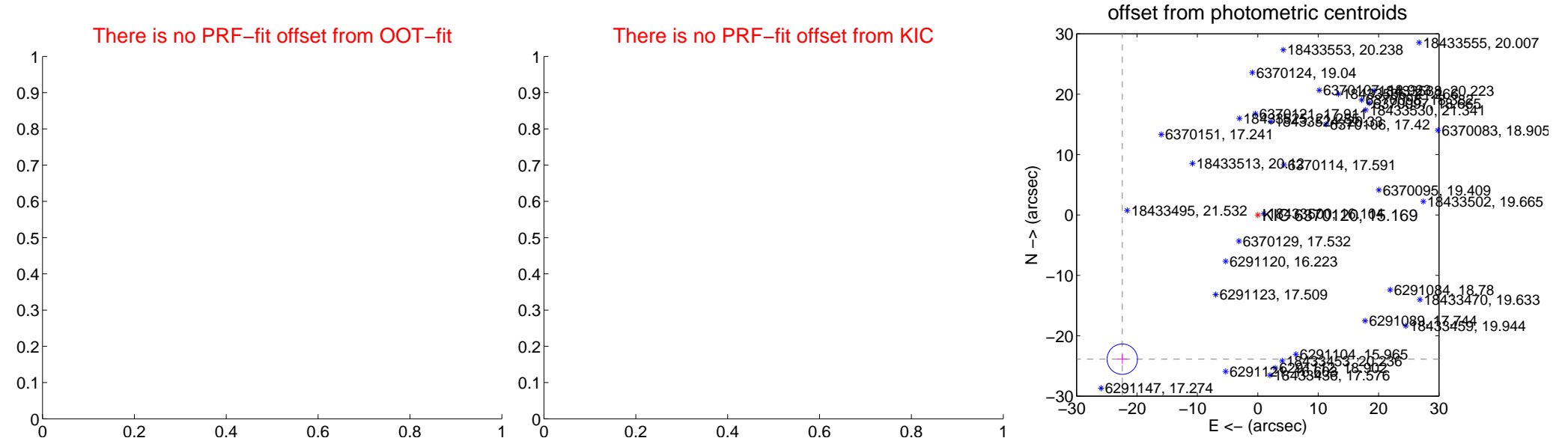
DV Centroid Data

Supplemental centroid analysis for 006370120-01. Kepler magnitude: 15.17. Transit SNR 13.26

There are 0 quarters with good PRF difference image offsets

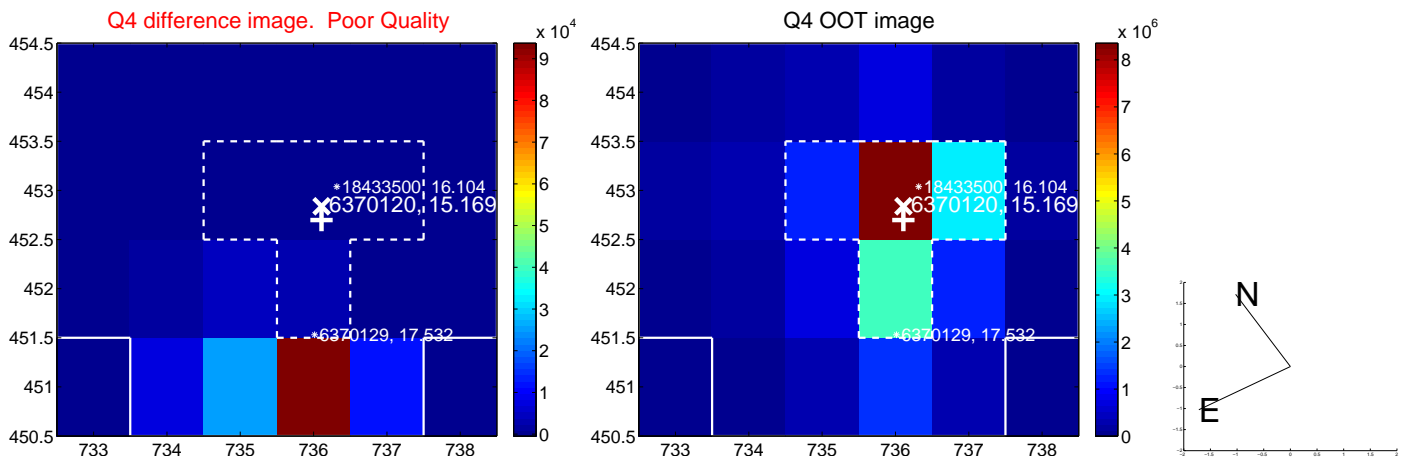
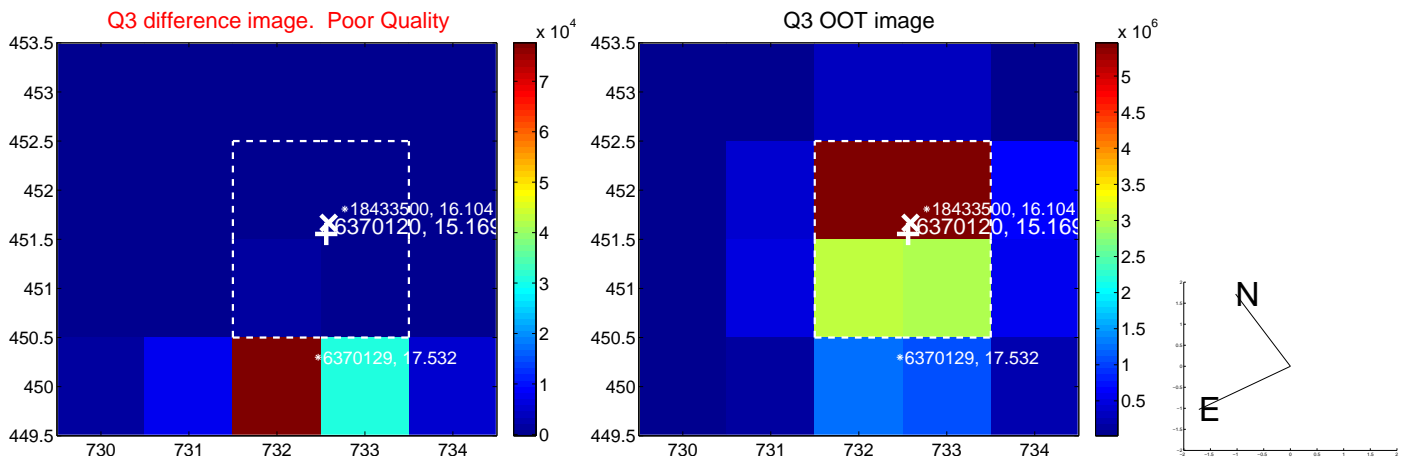
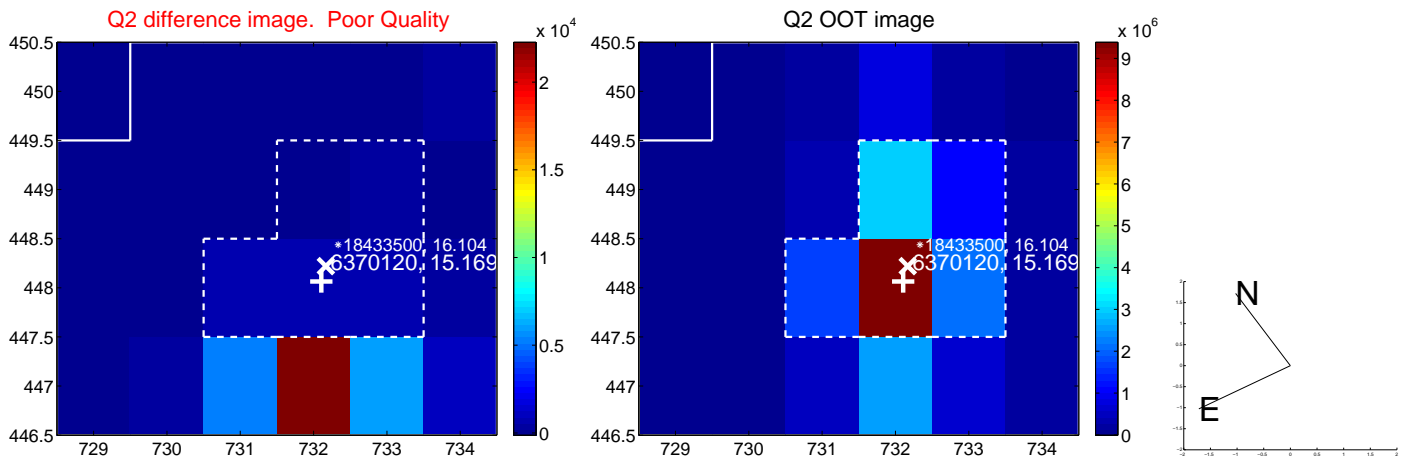
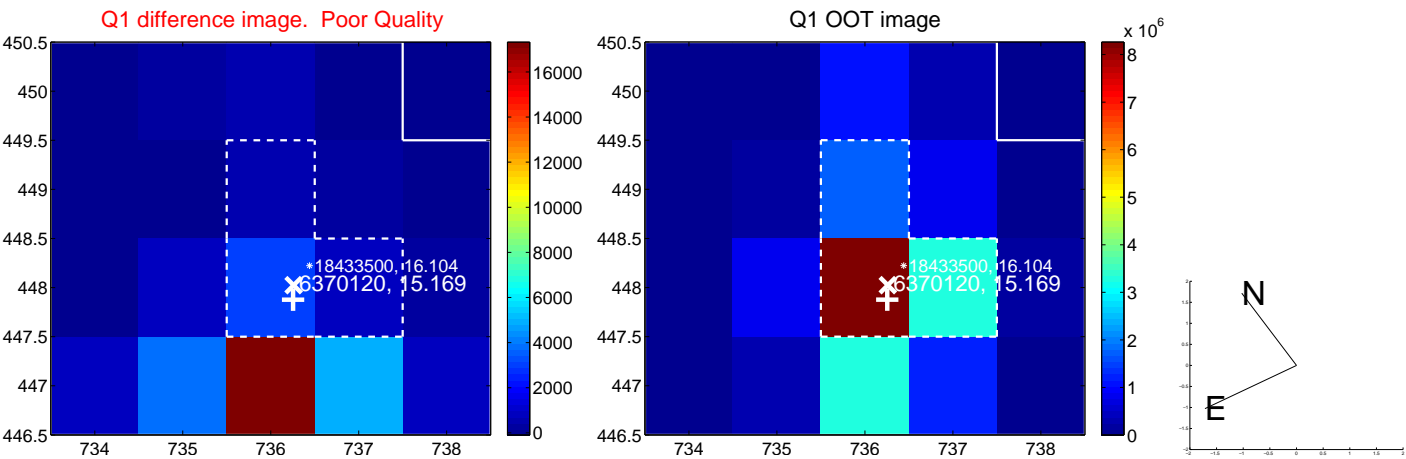
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	32.76 ± 0.84	39.09	22.43 ± 0.85	-23.88 ± 0.82

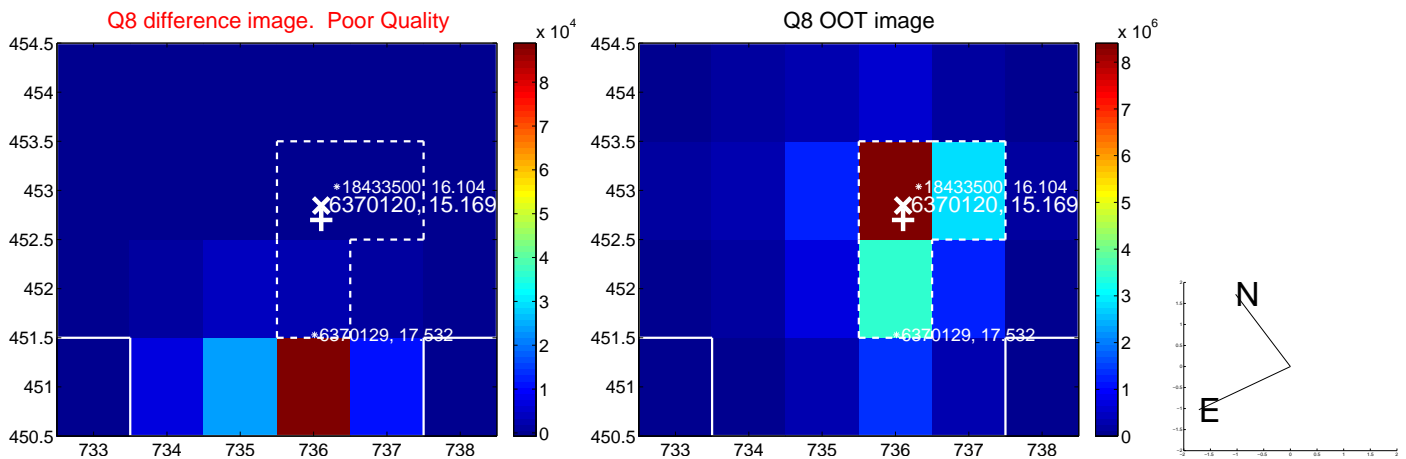
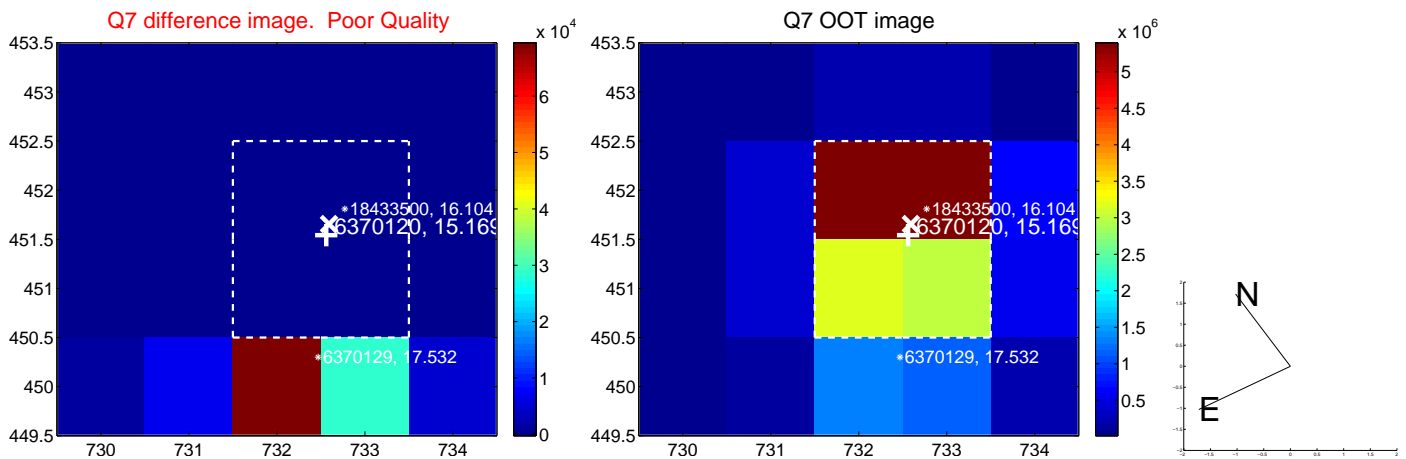
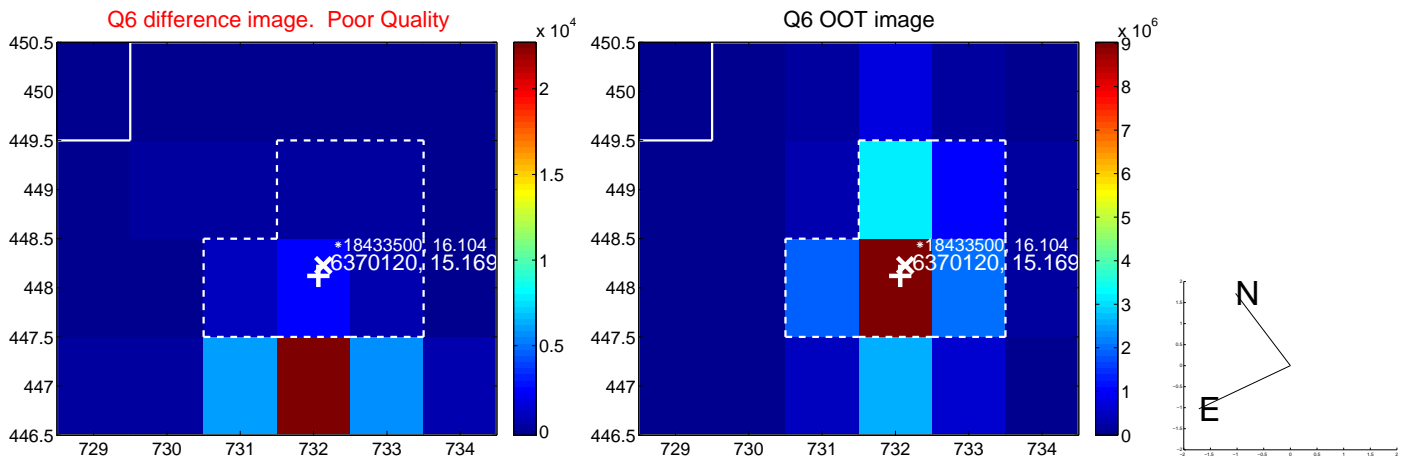
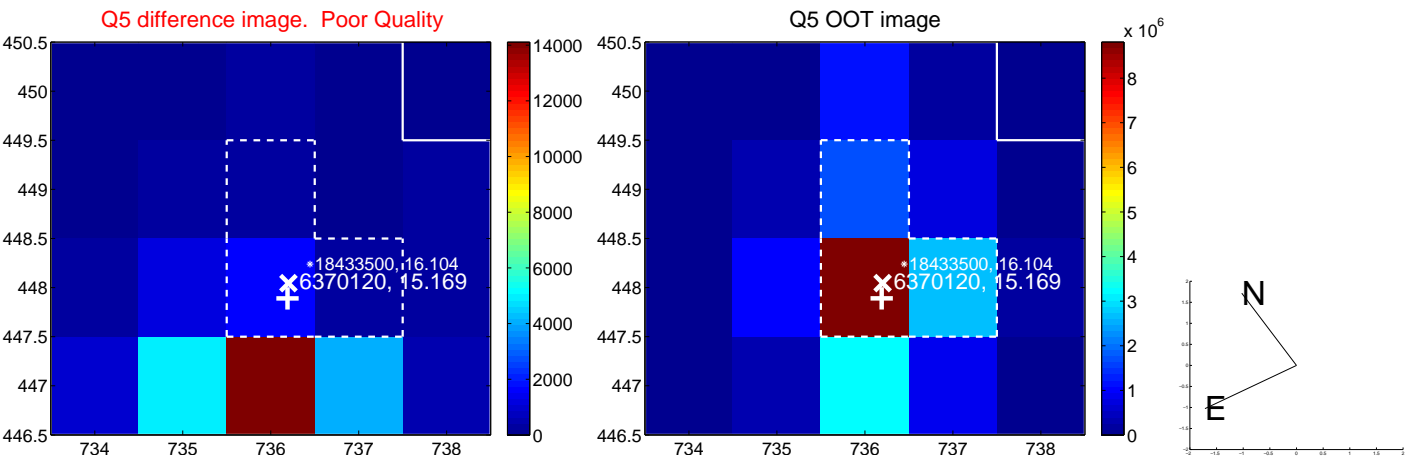


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

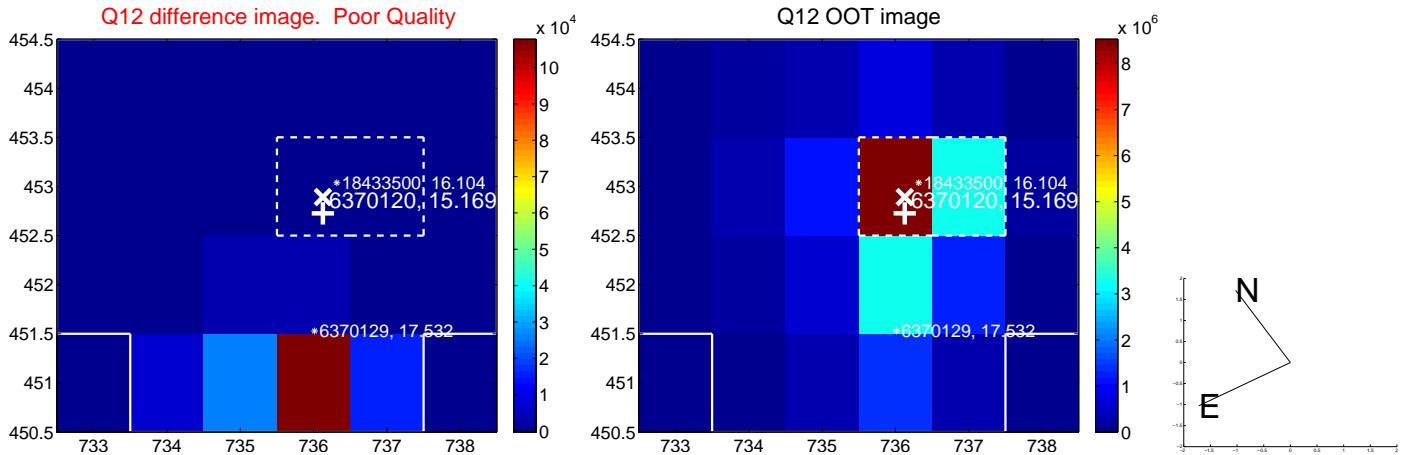
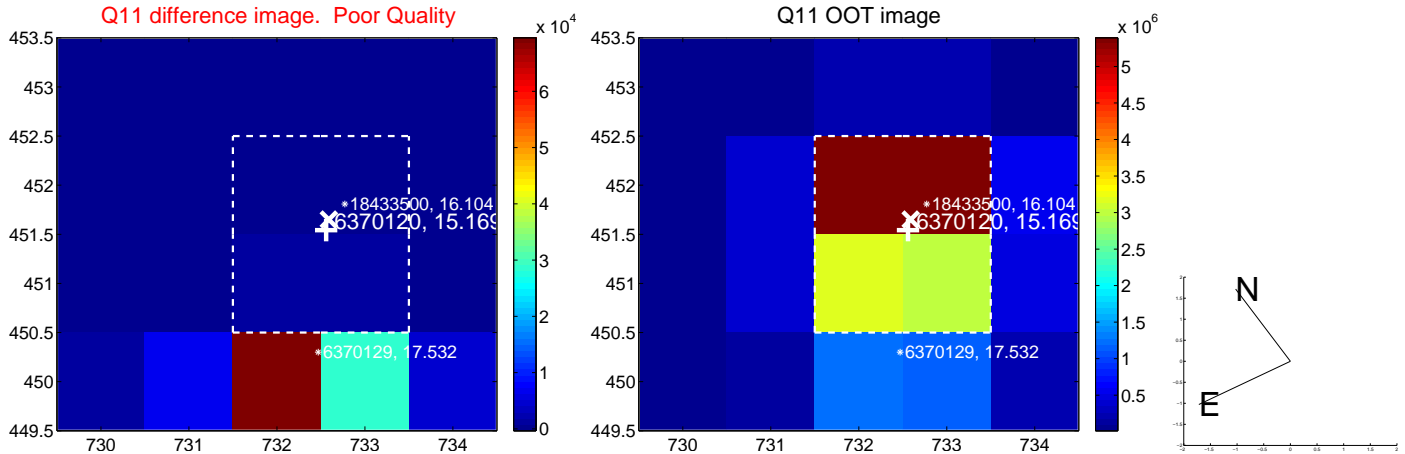
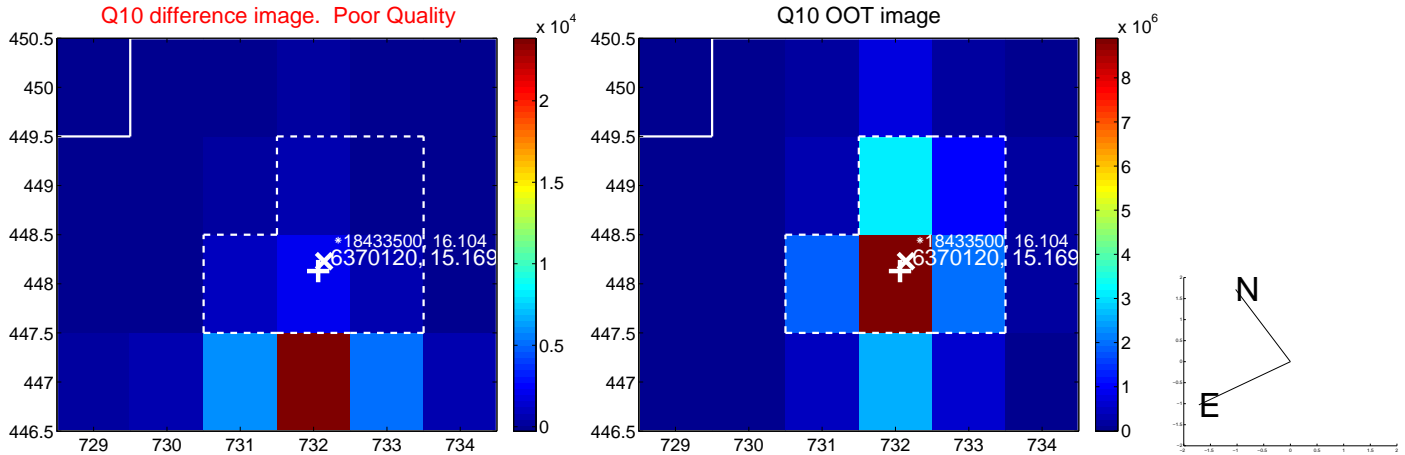
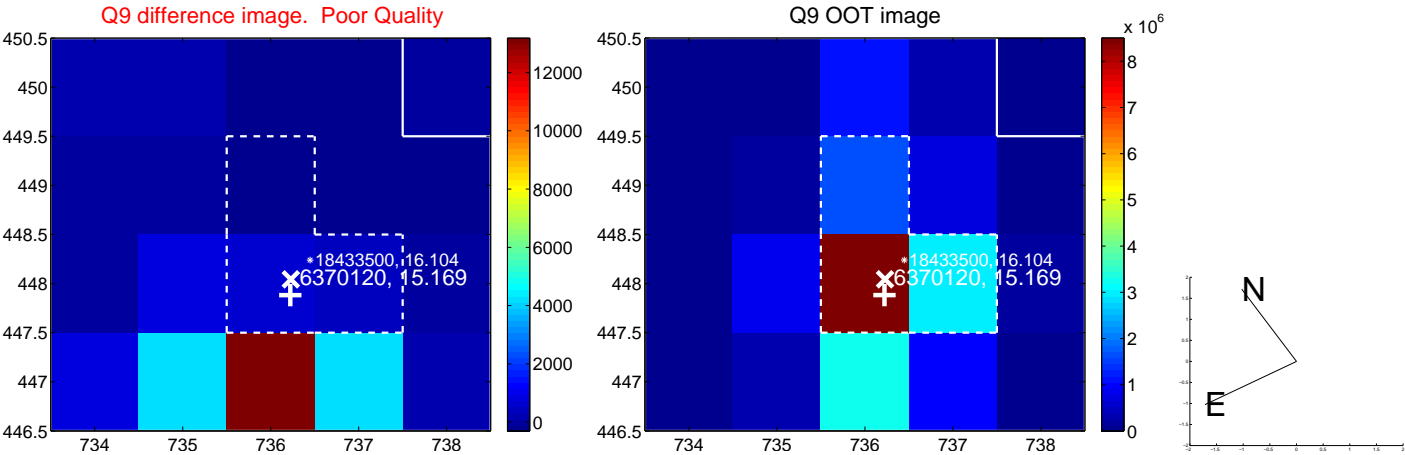
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



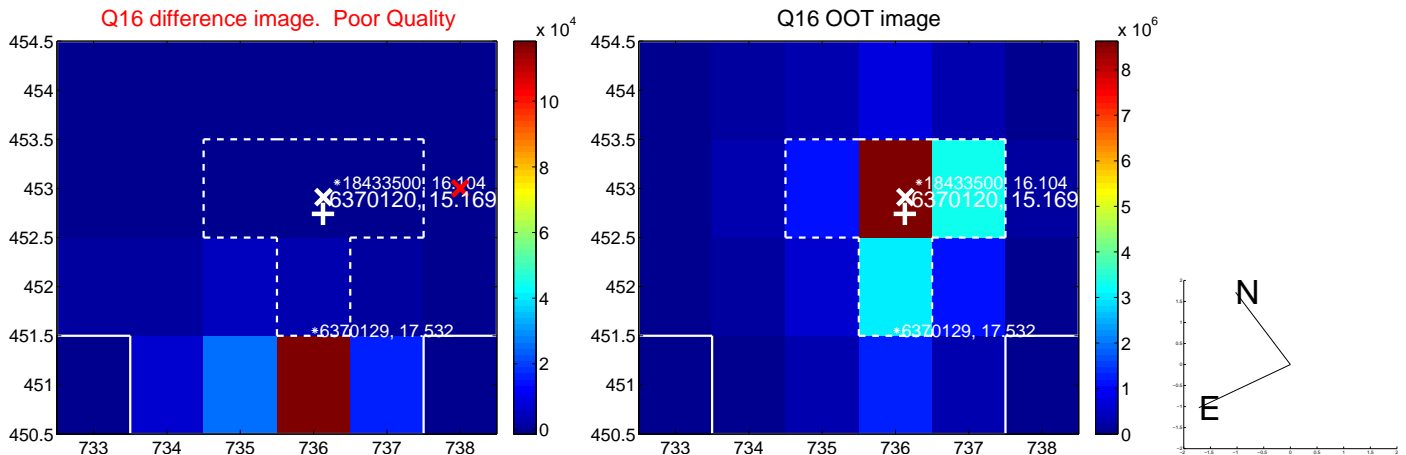
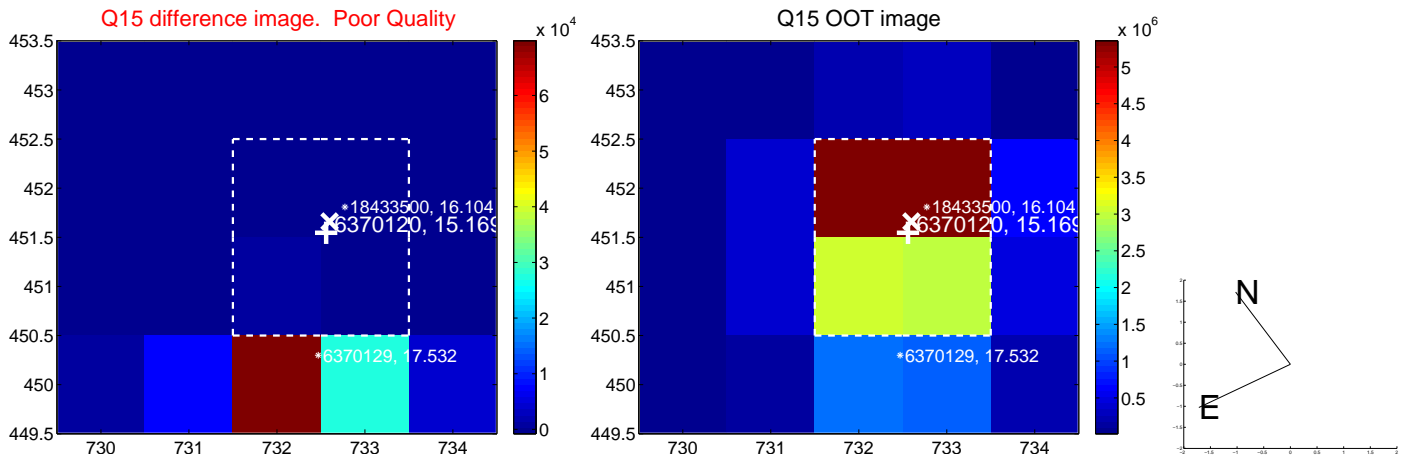
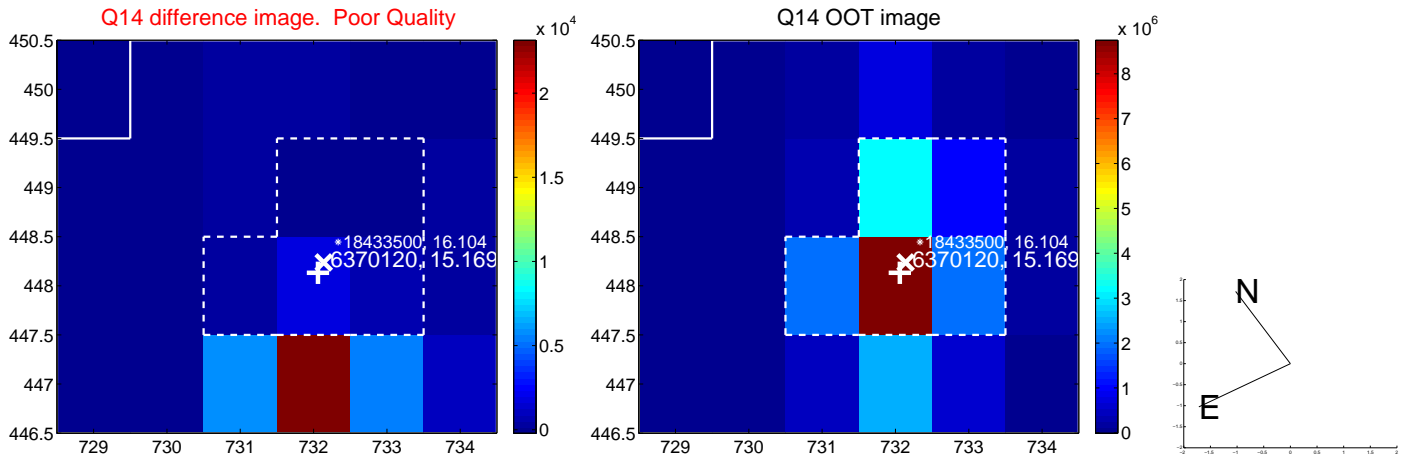
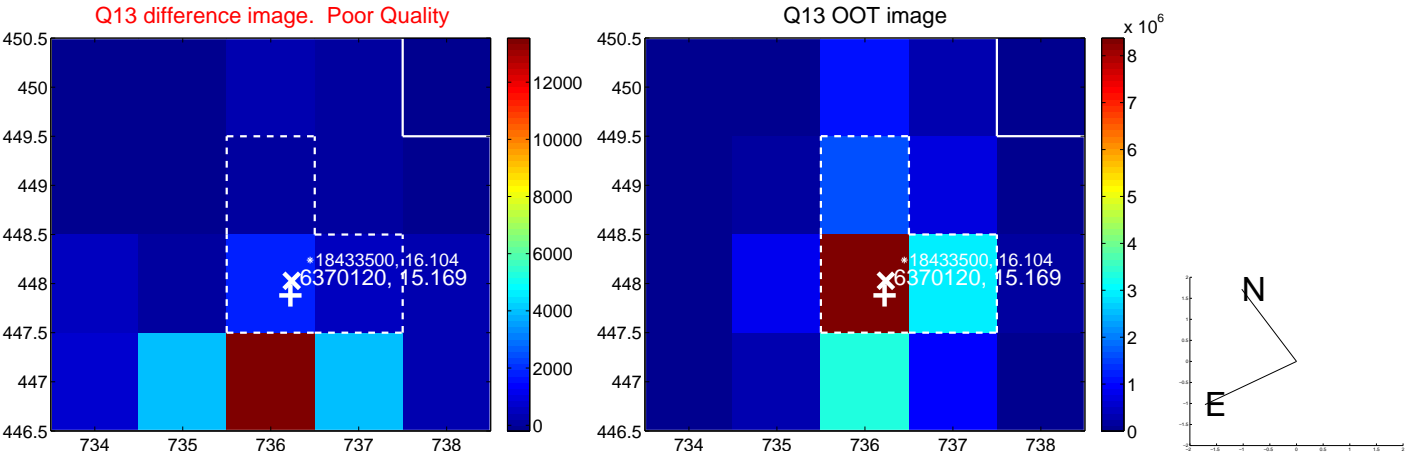
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



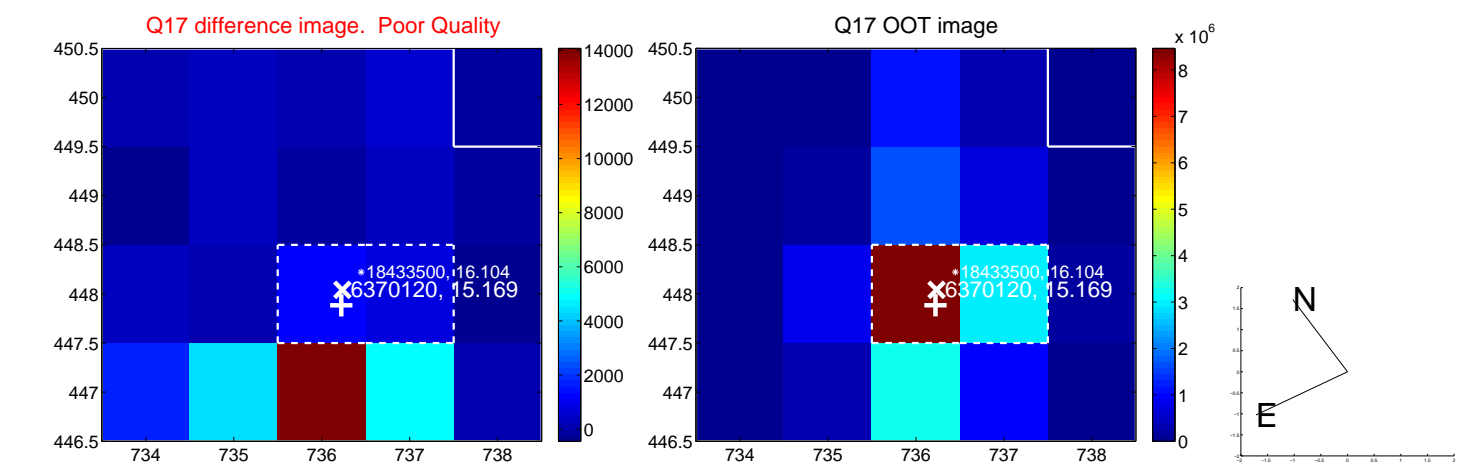
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



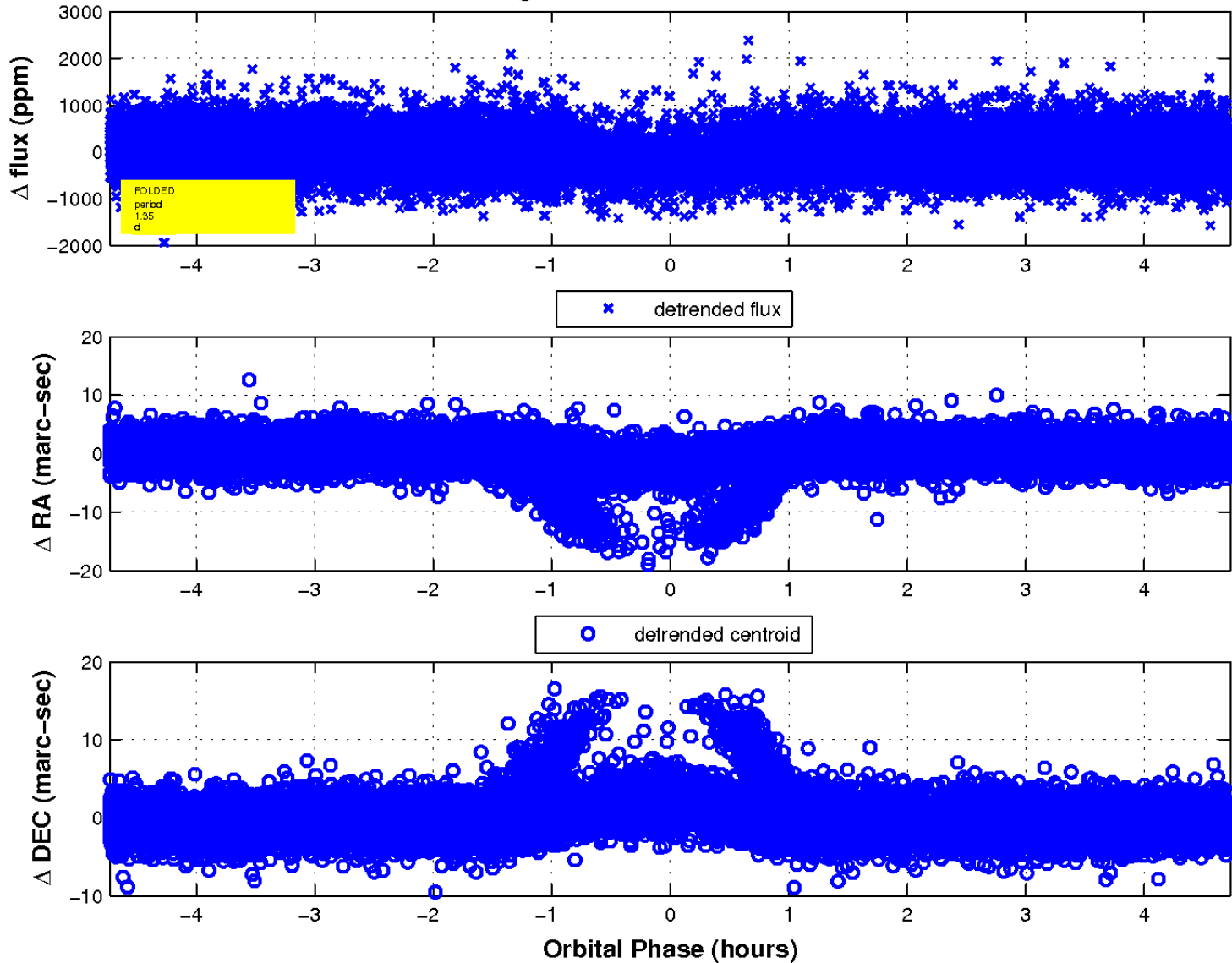
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

