

KIC 008379705

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})
008379705-01	OBS	2507.01	11.129724	138.571874	393.1	3.597	13.1	13.9	0.96	6122	2.43	119.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008379705-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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 008379705-01

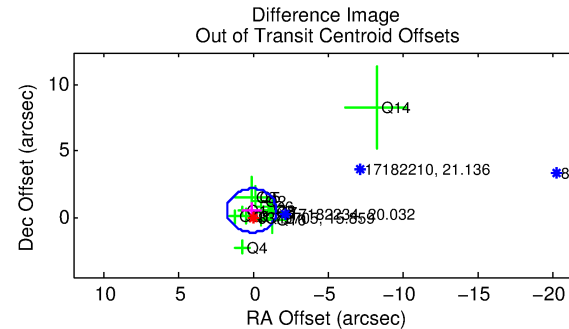
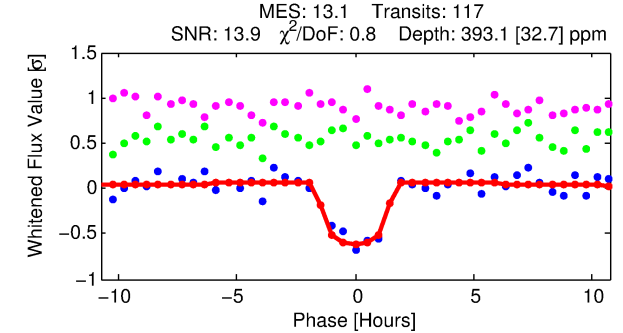
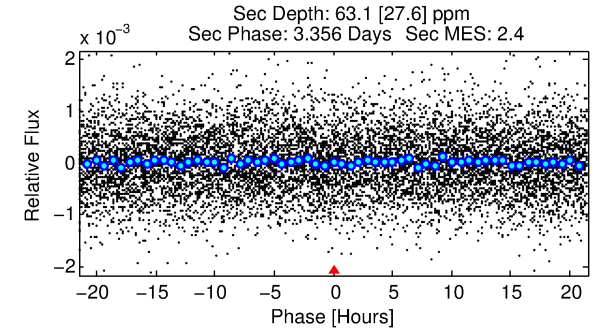
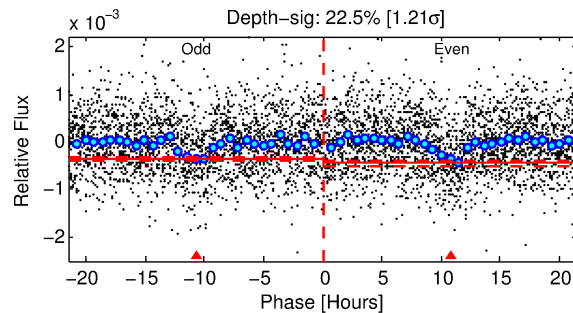
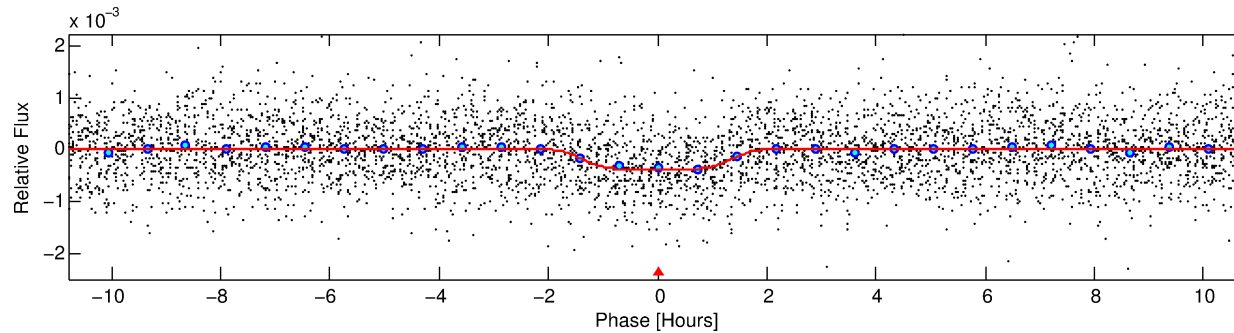
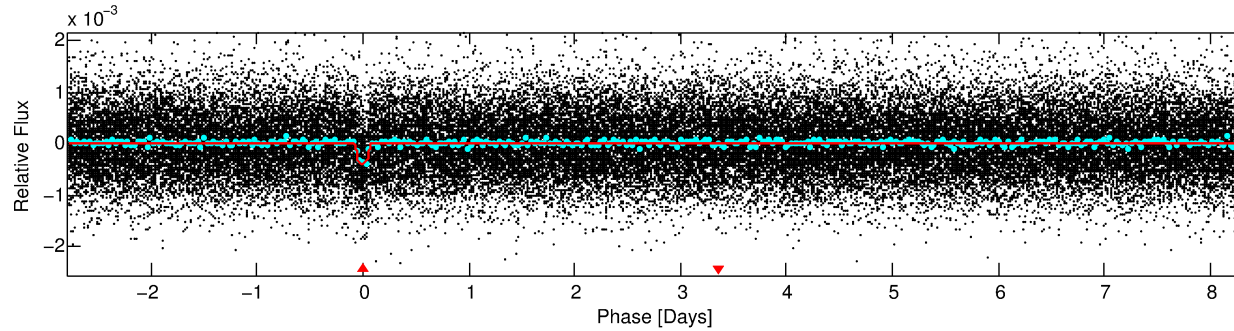
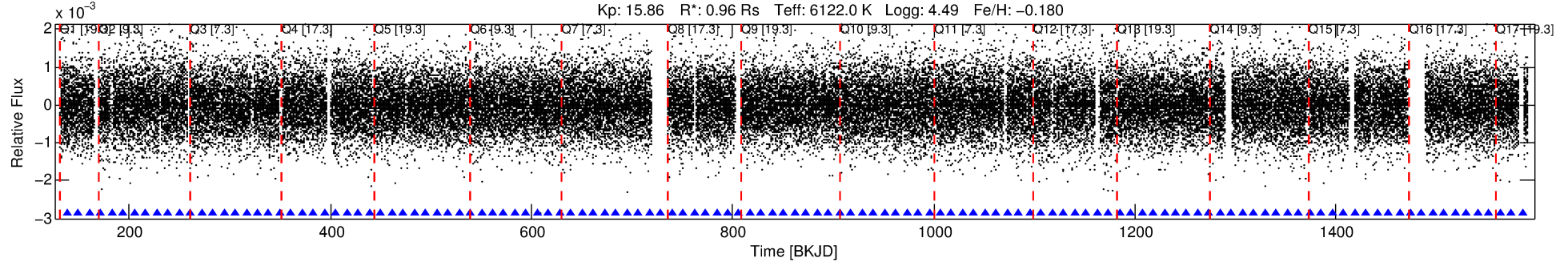
No Significant Match Found

DV One-Page Summary

KIC: 8379705 Candidate: 1 of 1 Period: 11.130 d

KOI: K02507.01 Corr: 0.878

Kp: 15.86 R*: 0.96 Rs Teff: 6122.0 K Logg: 4.49 Fe/H: -0.180



DV Fit Results:

Period = 11.12972 [0.00008] d
Epoch = 138.5719 [0.0055] BKJD
Rp/R* = 0.0231 [0.0017]
a/R* = 8.49 [2.29]
b = 0.96 [0.02]
Seff = 119.64 [49.41]
Teq = 843 [87] K
Rp = 2.43 [0.80] Re
a = 0.0989 [0.0264] AU
Ag = 57.41 [34.52] [1.63σ]
Teffp = 3589 [437] K [6.16σ]

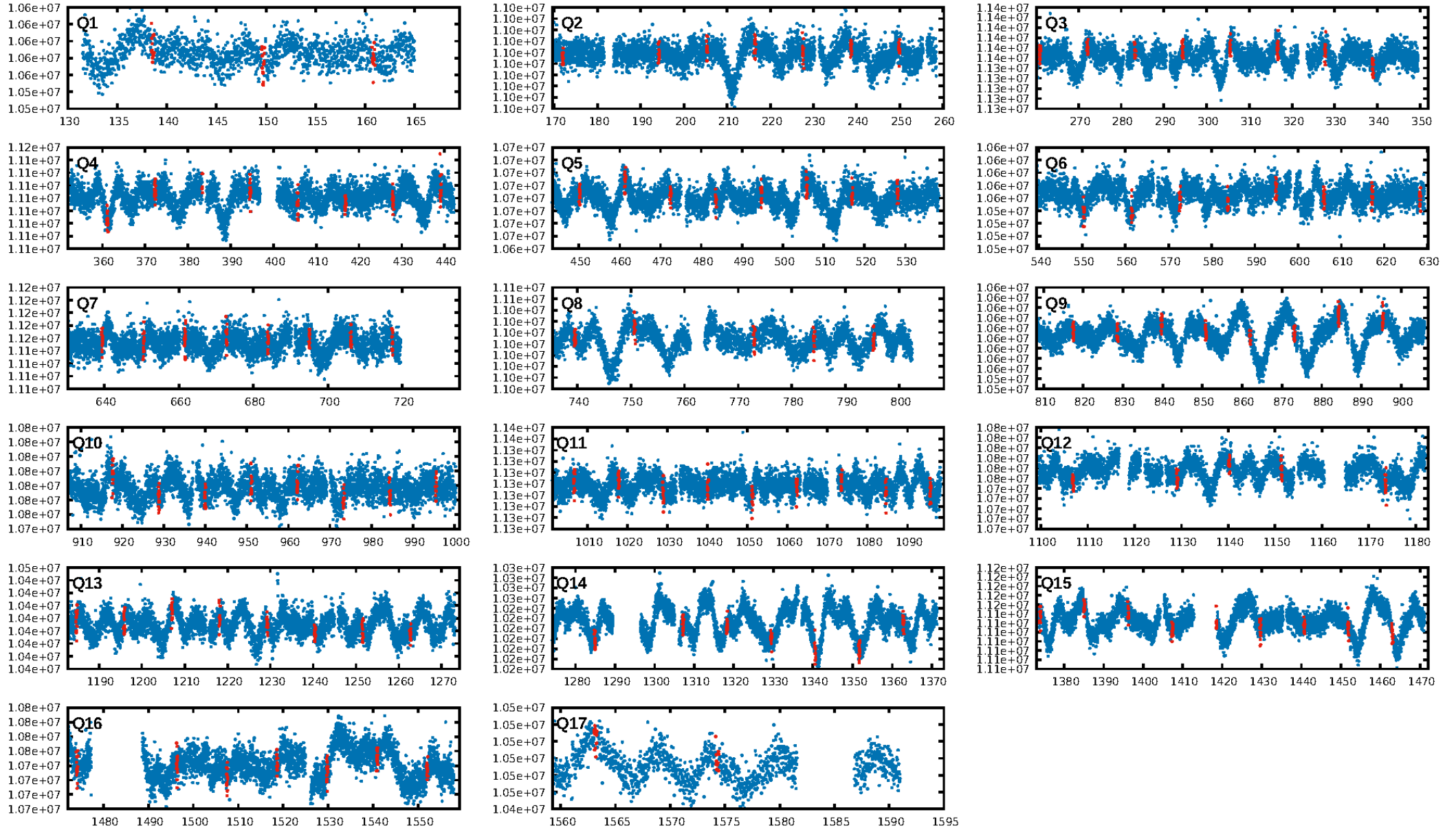
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.40e-38
RollingBand-fgt: 1.00 [112/112]
GhostDiagnostic-chr: 4.627
Centroid-sig: 0.2%
Centroid-so: 2.126 arcsec [2.45σ]
OotOffset-rm: 0.527 arcsec [0.96σ]
KicOffset-rm: 0.522 arcsec [1.00σ]
OotOffset-st: 4/3/3/4 [14]
KicOffset-st: 4/3/3/4 [14]
DiffImageQuality-fgm: 0.64 [9/14]
DiffImageOverlap-fno: 1.00 [17/17]

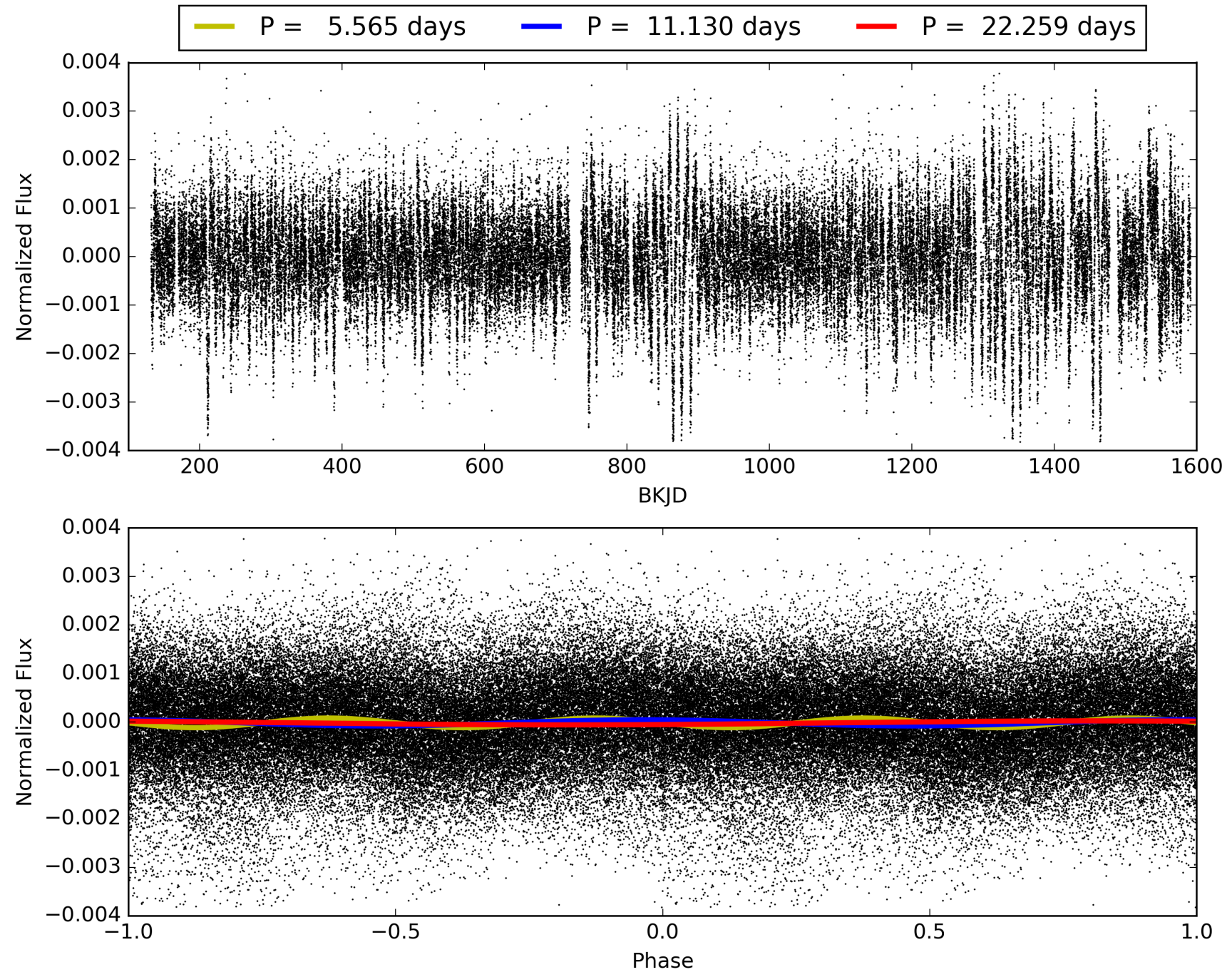
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:20:05 Z

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

TCE 008379705-01, PDC Light Curves

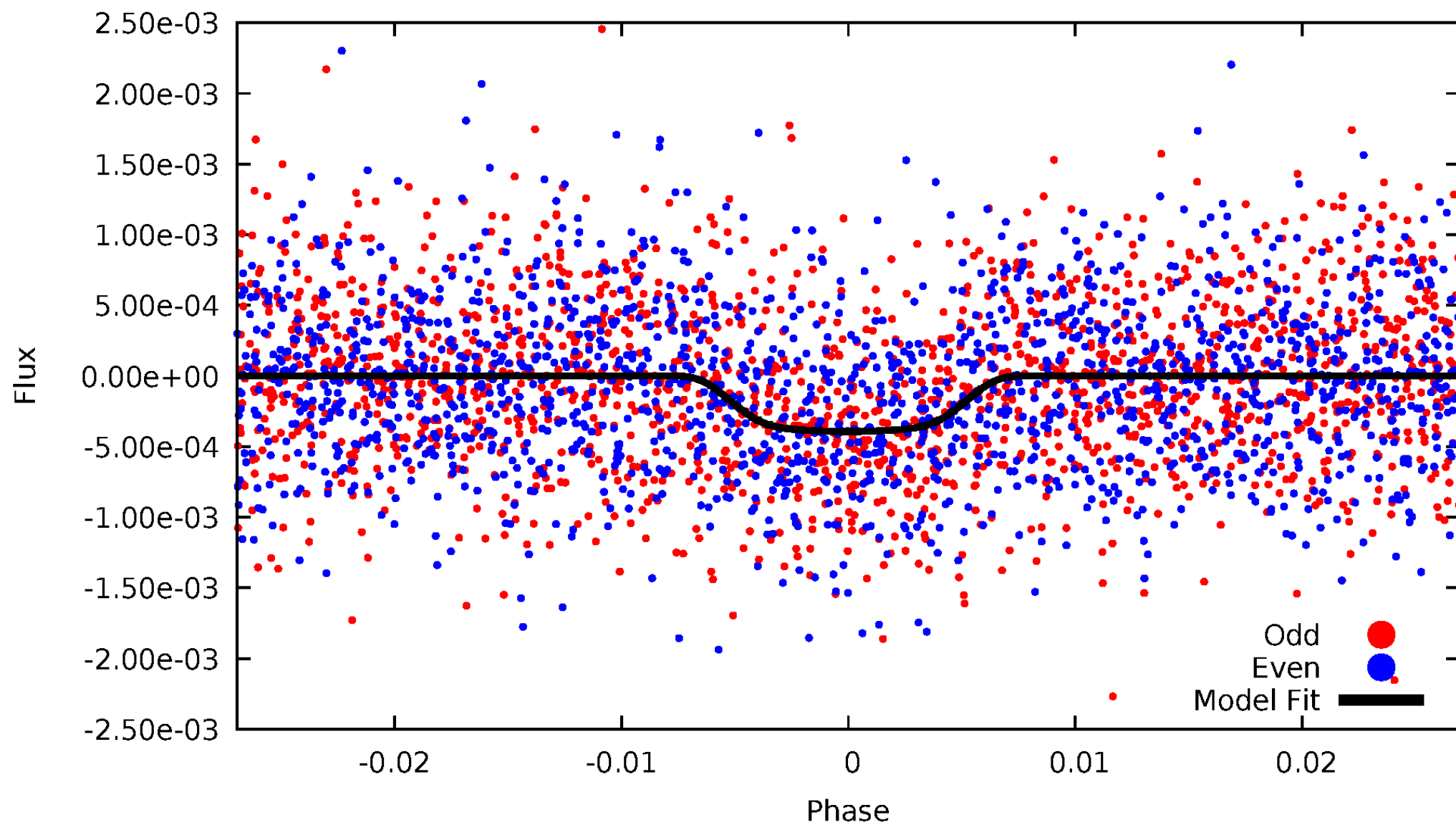


TCE 008379705-01



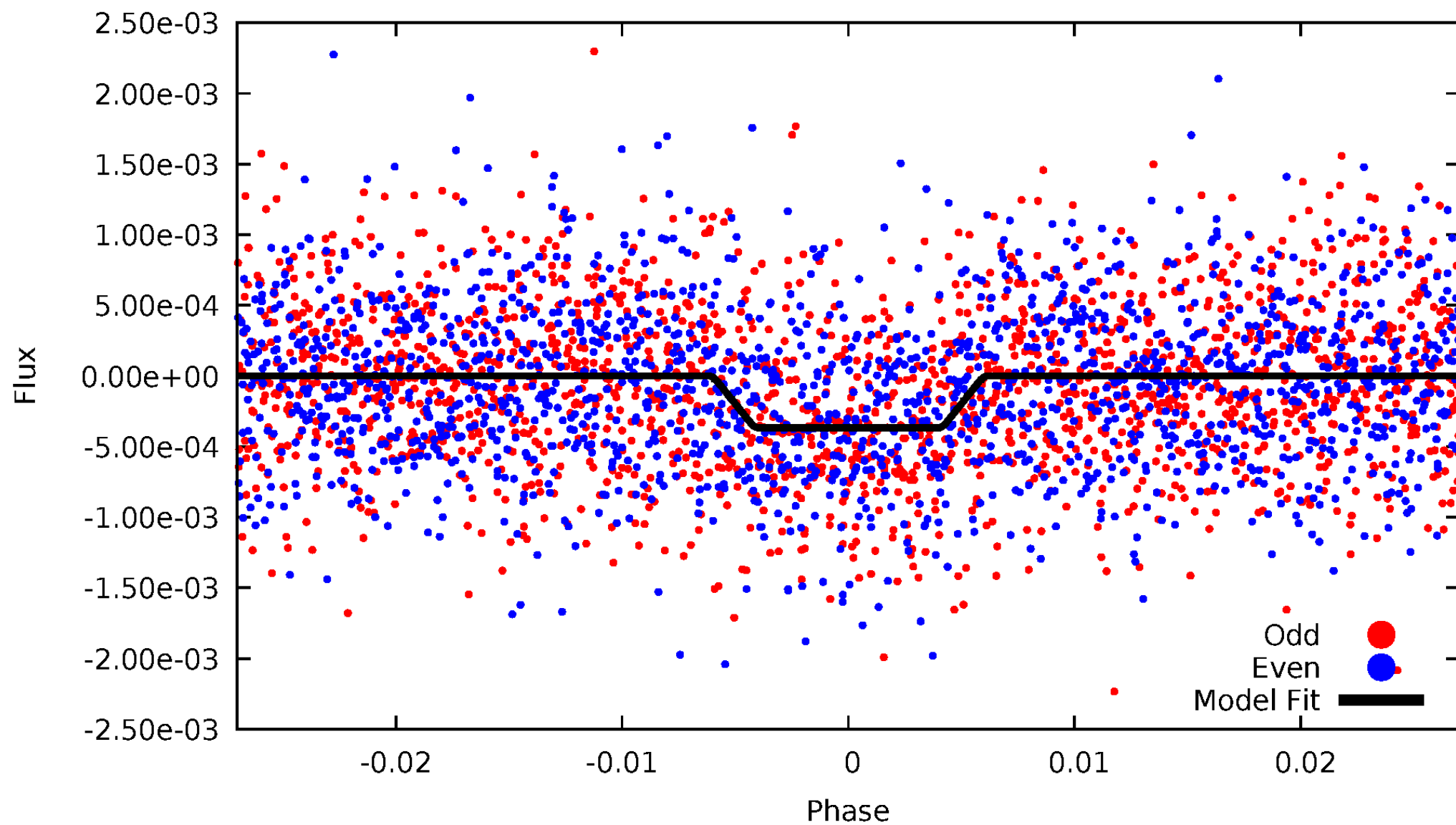
DV Odd/Even

TCE 008379705-01

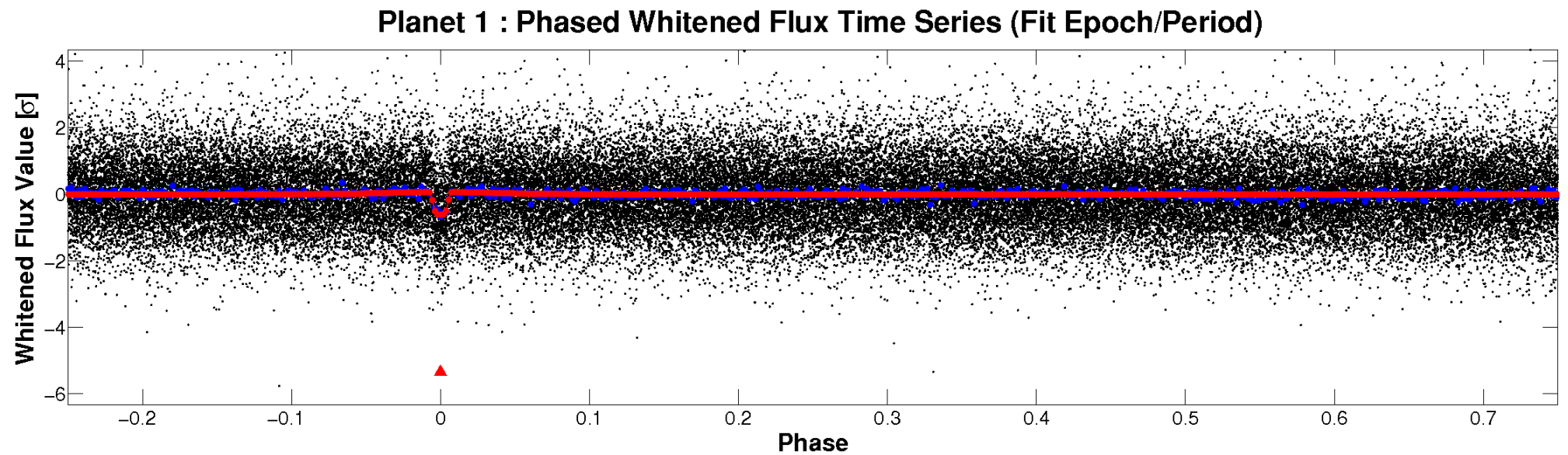
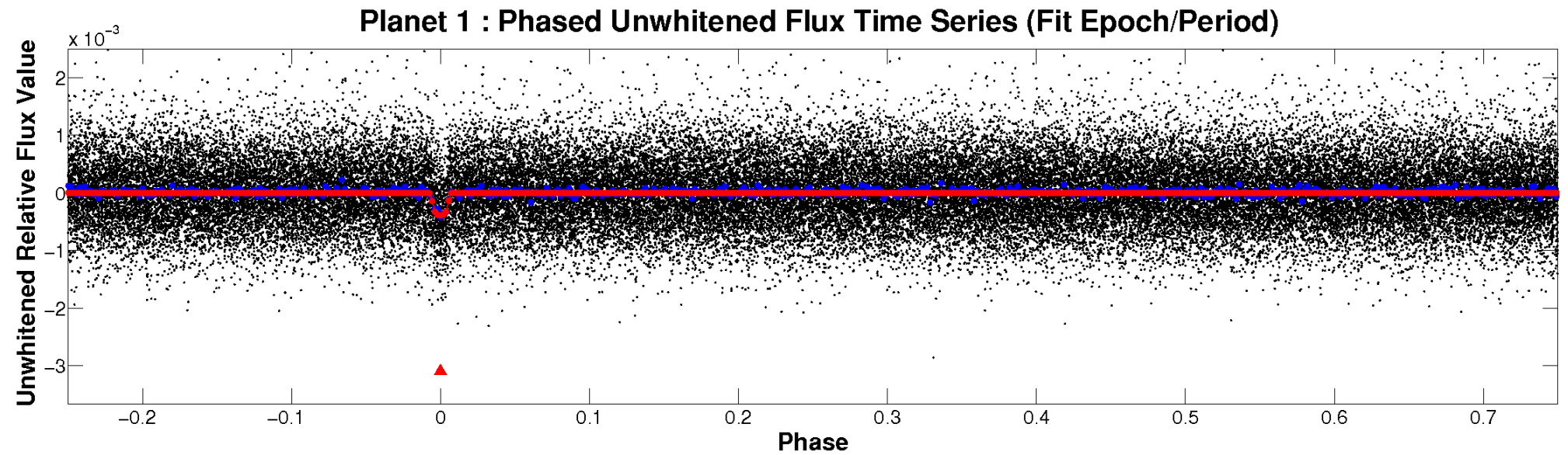


ALT Odd/Even

TCE 008379705-01

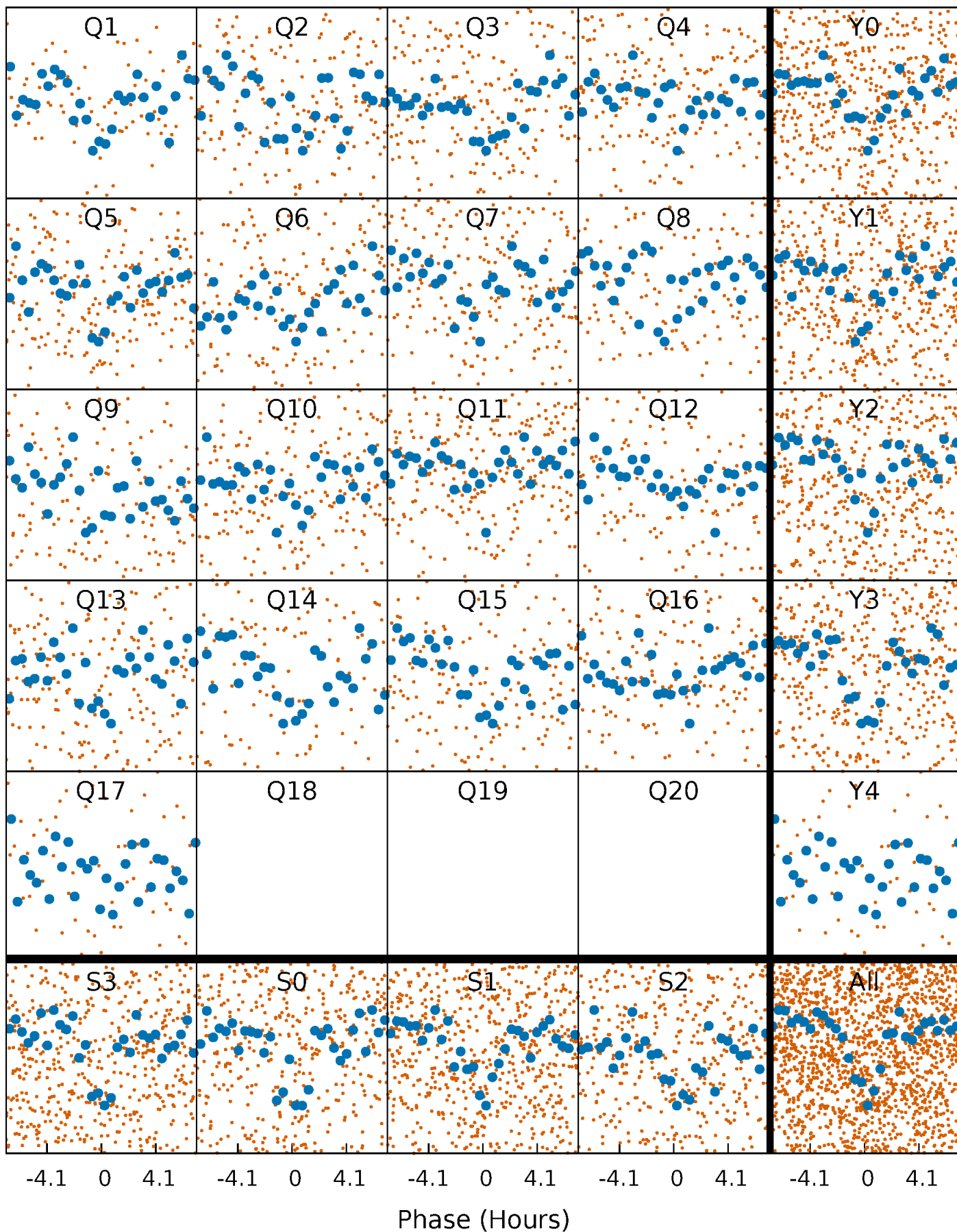


Non-Whitened Vs. Whitened Light Curve



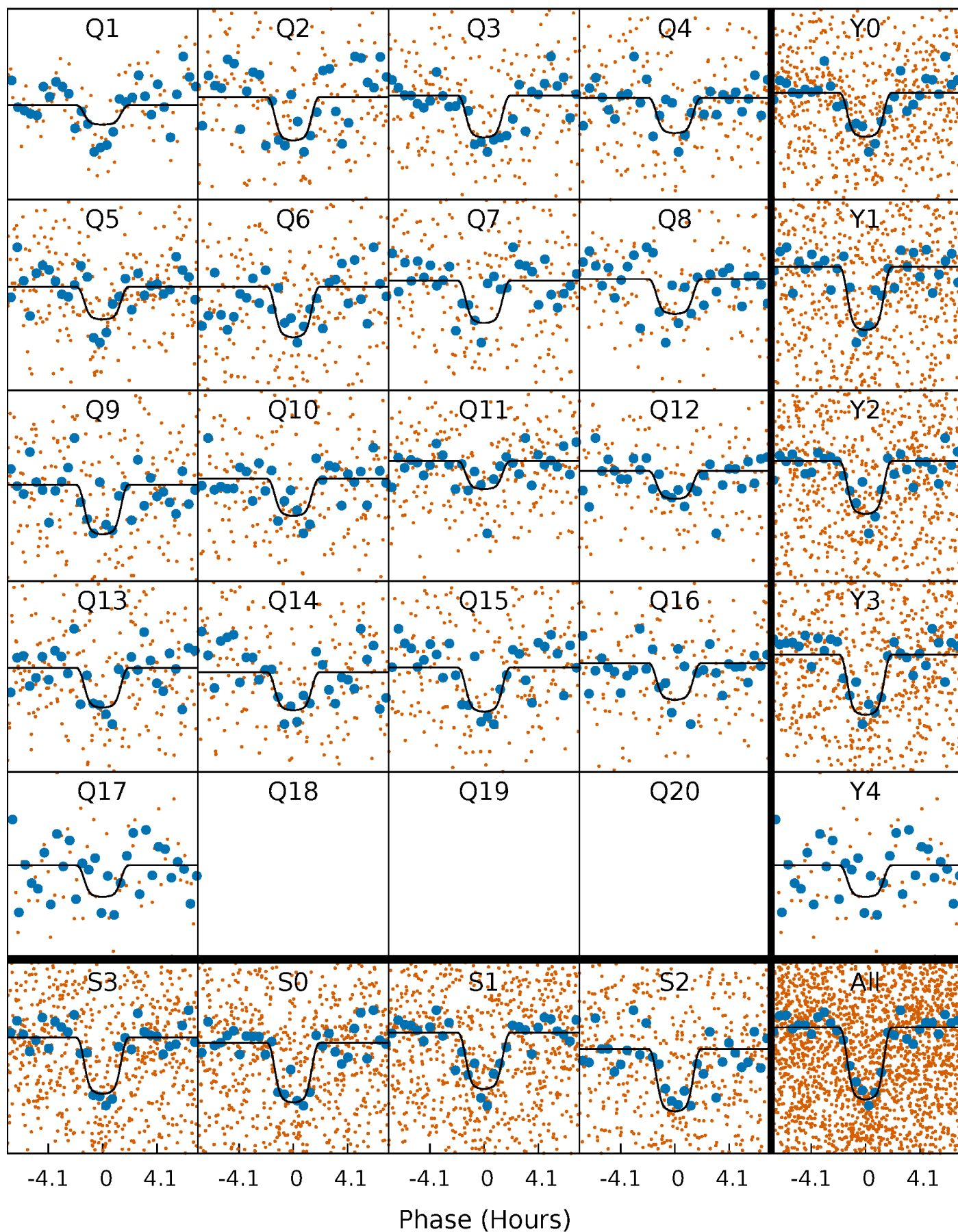
PDC Quarter-Phased Transit Curves

TCE 008379705-01 P= 11.129724 Days $T_0=138.571874$ (BKJD)



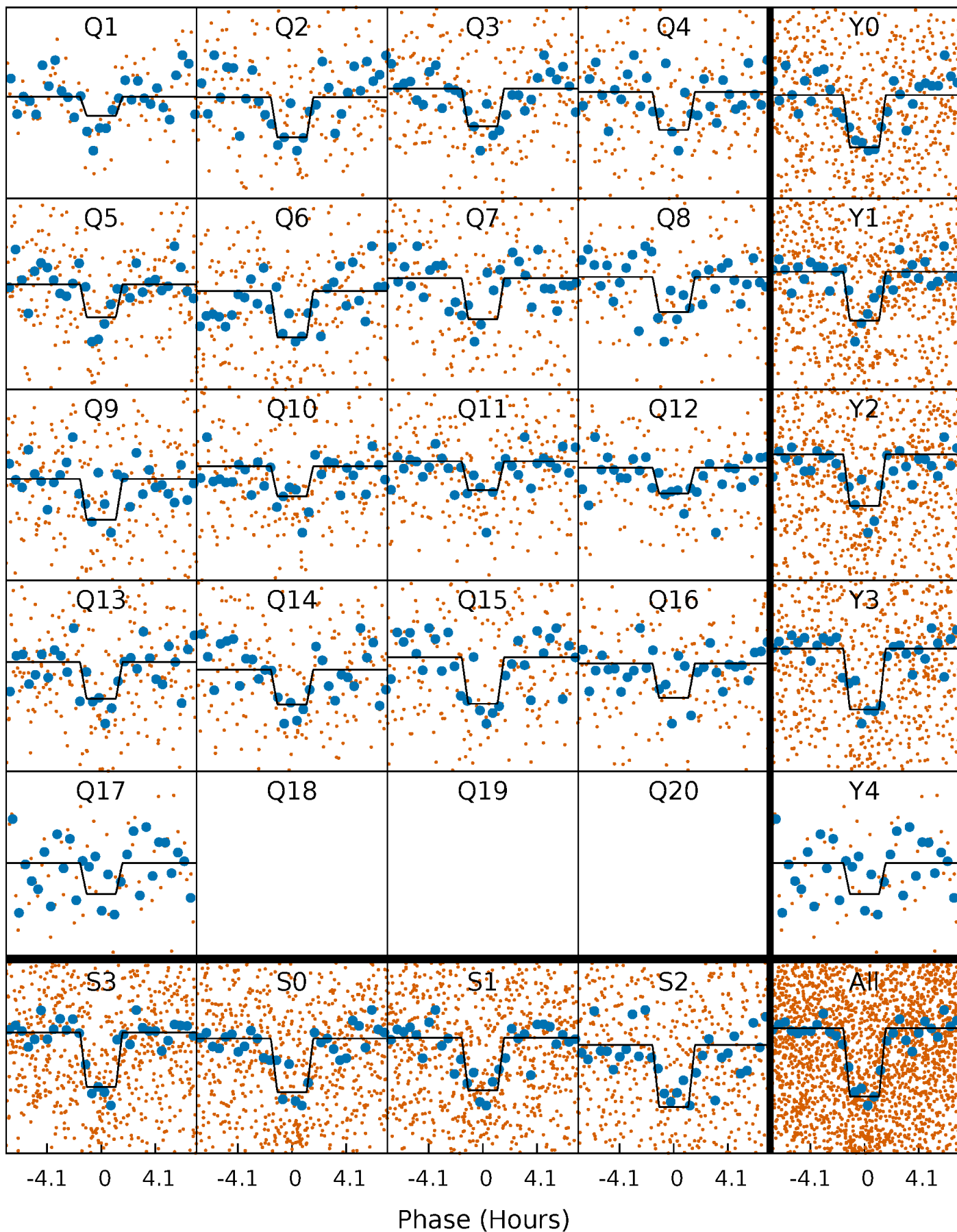
DV Quarter-Phased Transit Curves

TCE 008379705-01 P= 11.129724 Days $T_0=138.571874$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

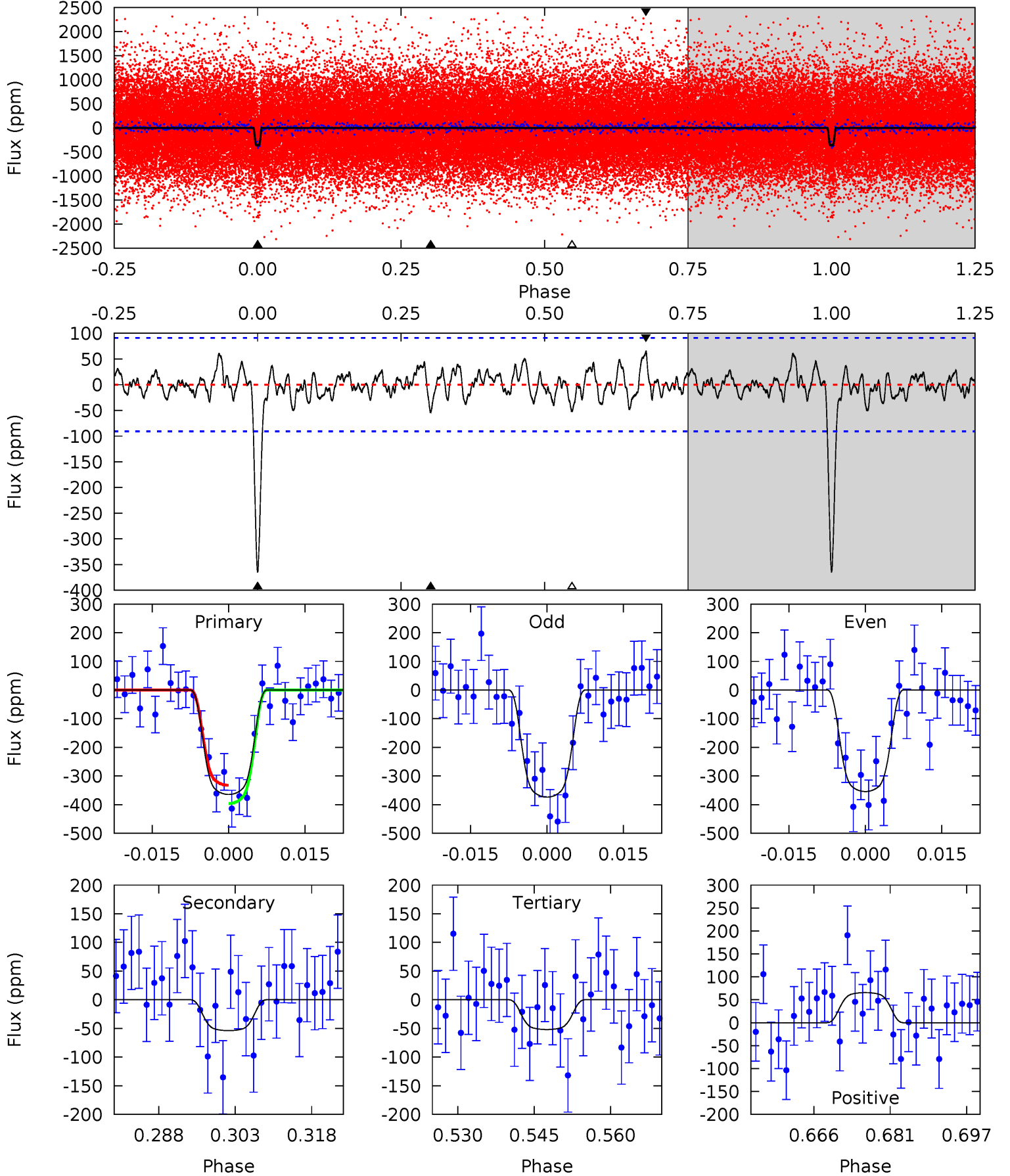
TCE 008379705-01 P= 11.129643 Days $T_0=138.578260$ (BKJD)



DV Model-Shift Uniqueness Test

008379705-01, $P = 11.129724$ Days, $E = 127.442150$ Days

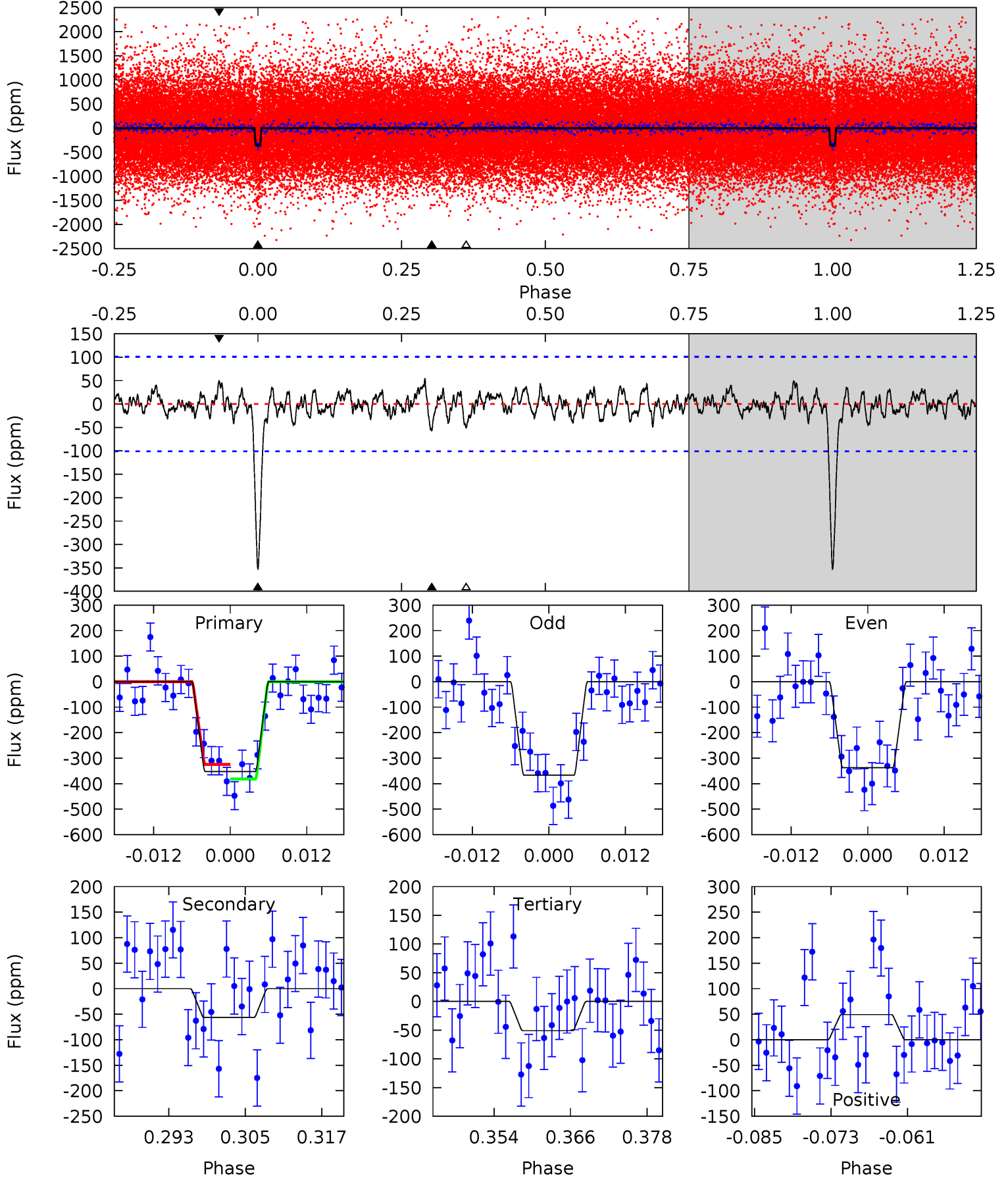
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.8	2.93	2.83	3.57	4.95	2.43	1.13	17.0	16.3	0.10	-0.64	0.53	1.00	0.15	1.74



Alt Model-Shift Uniqueness Test

008379705-01, P = 11.129643 Days, E = 127.448617 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.4	2.79	2.51	2.44	4.99	2.51	0.91	14.9	15.0	0.28	0.35	0.74	1.02	0.13	1.41



Stellar Parameters For KIC 008379705

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6122^{+190}_{-232}	$4.487^{+0.052}_{-0.208}$	$-0.180^{+0.300}_{-0.300}$	$0.964^{+0.309}_{-0.097}$	$1.041^{+0.140}_{-0.140}$	$1.635^{+0.450}_{-0.886}$
	+3%/-4%	+1%/-5%	+167%/-167%	+32%/-10%	+13%/-13%	+28%/-54%
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 008379705-01 / KOI 2507.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-54 ± 18	$2.52^{+0.44}_{-0.29}$	1204^{+84}_{-67}	3799^{+249}_{-283}	42^{+22}_{-16}
Alt.	-56 ± 20	$2.10^{+0.40}_{-0.26}$	1202^{+90}_{-56}	4095^{+330}_{-323}	65^{+34}_{-26}

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 $A_{obs} \gg 1.0$

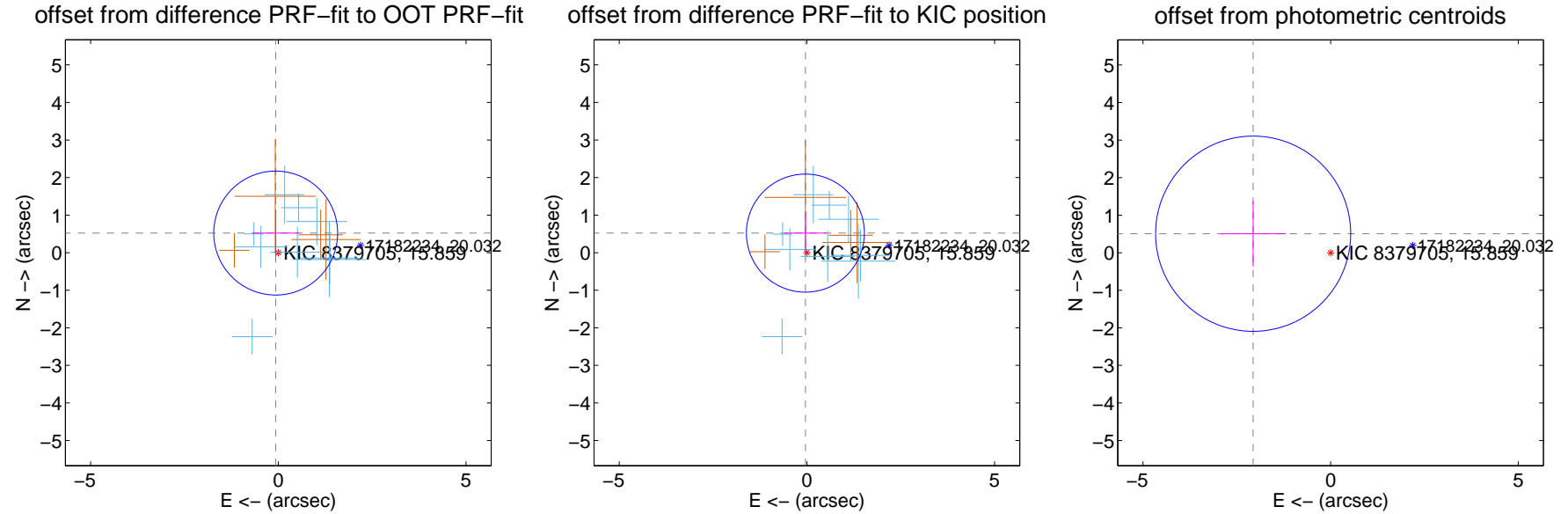
DV Centroid Data

Supplemental centroid analysis for 008379705-01. Kepler magnitude: 15.86. Transit SNR 13.90

There are 9 quarters with good PRF difference image offsets

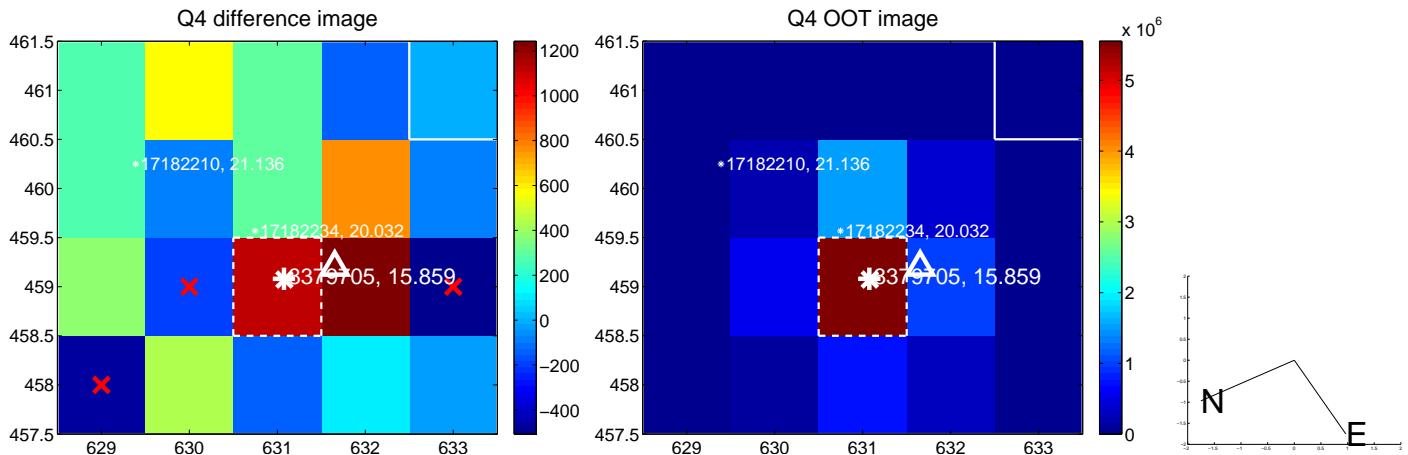
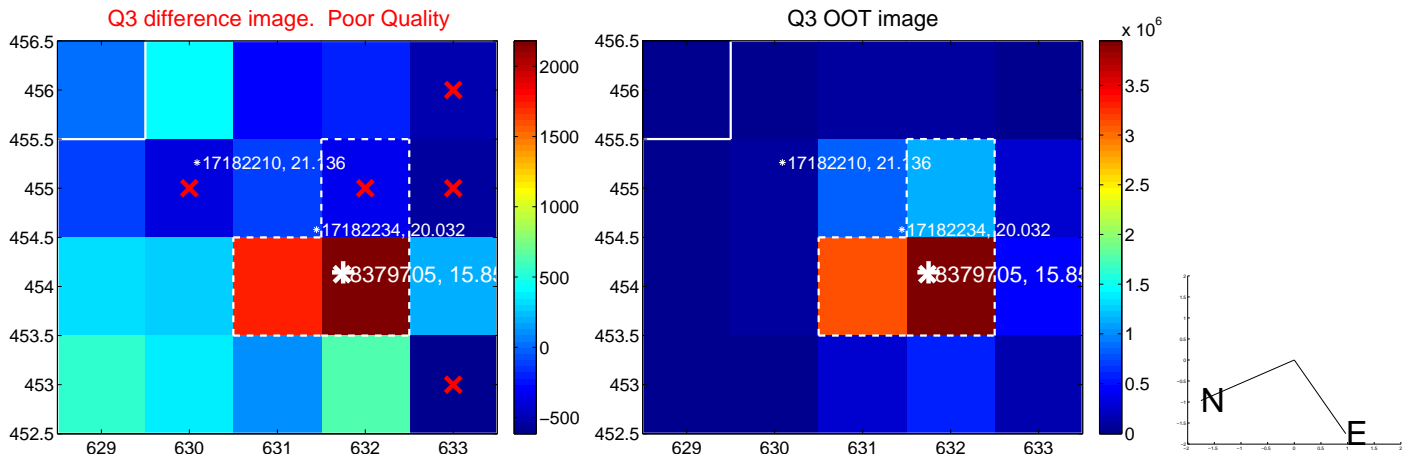
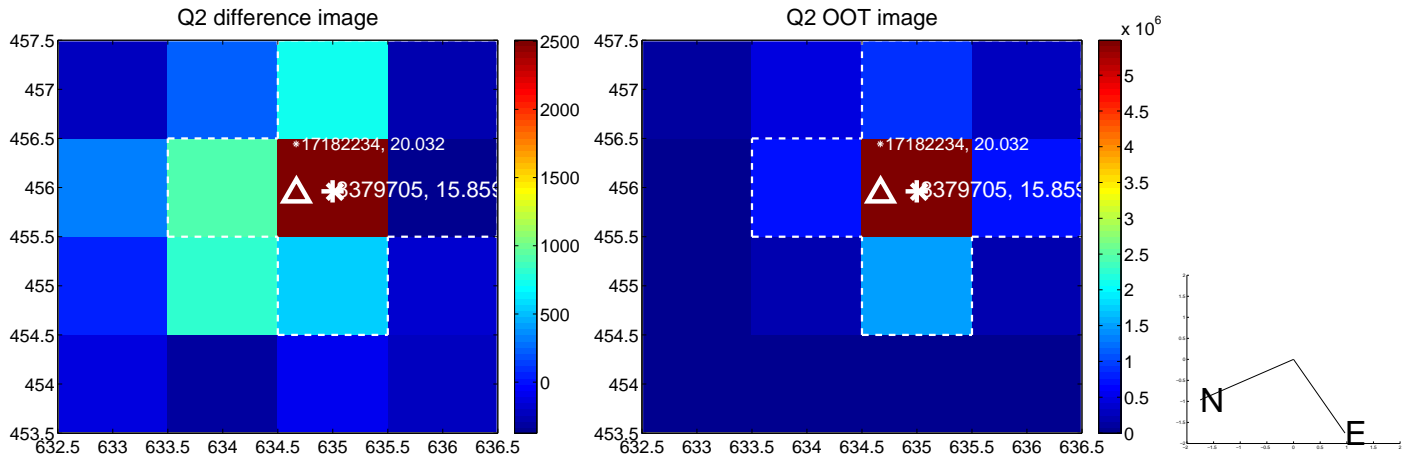
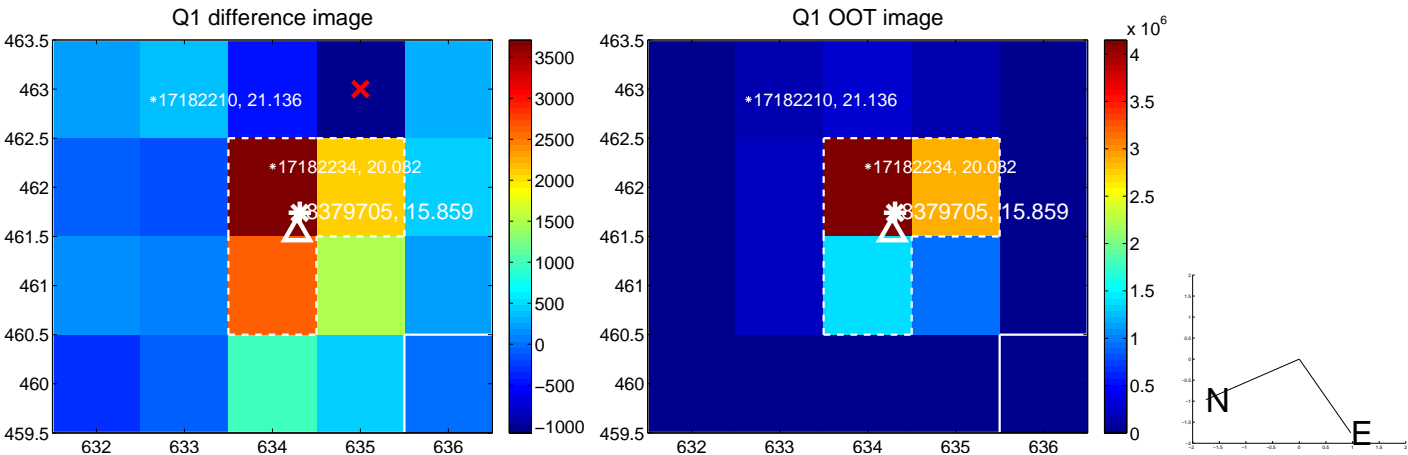
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.527 ± 0.550	0.96	0.070 ± 0.626	0.522 ± 0.626
PRF-fit source offset from KIC position	0.522 ± 0.524	1.00	0.040 ± 0.562	0.521 ± 0.561
photometric centroid source offset	2.13 ± 0.87	2.45	2.06 ± 0.87	0.51 ± 0.87

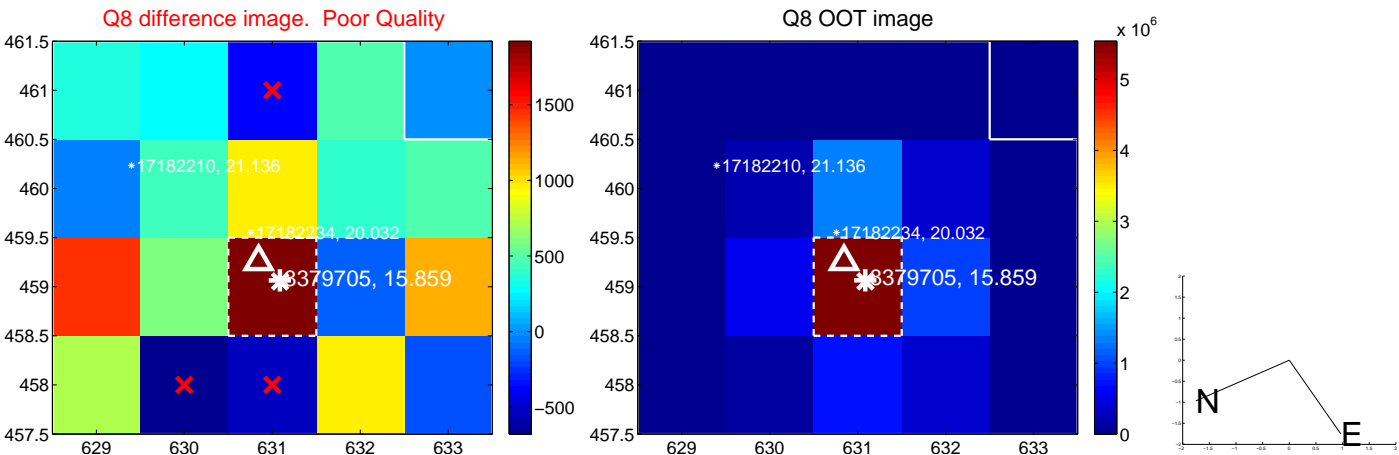
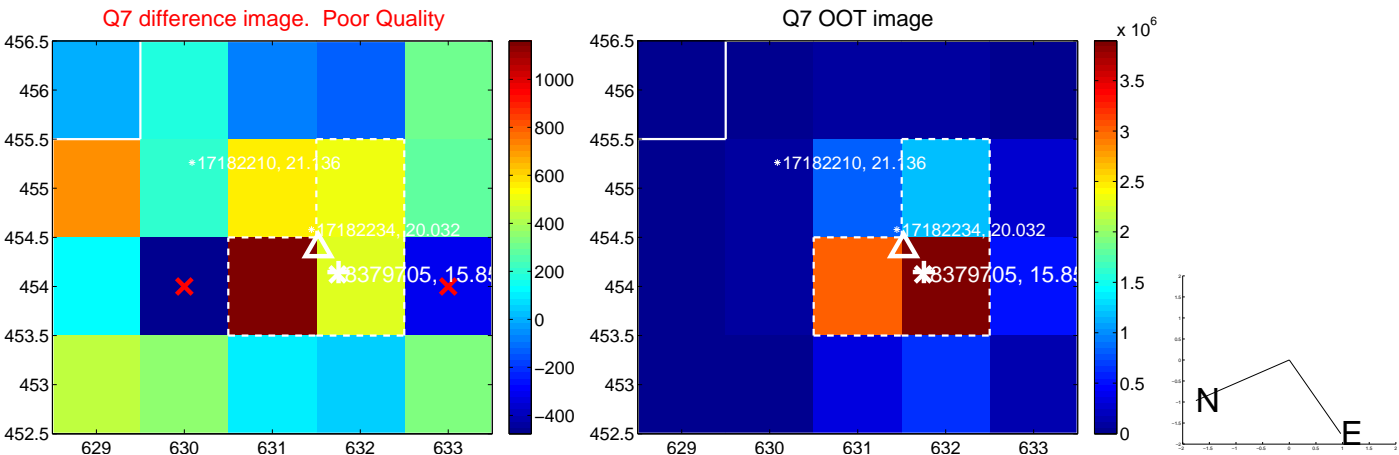
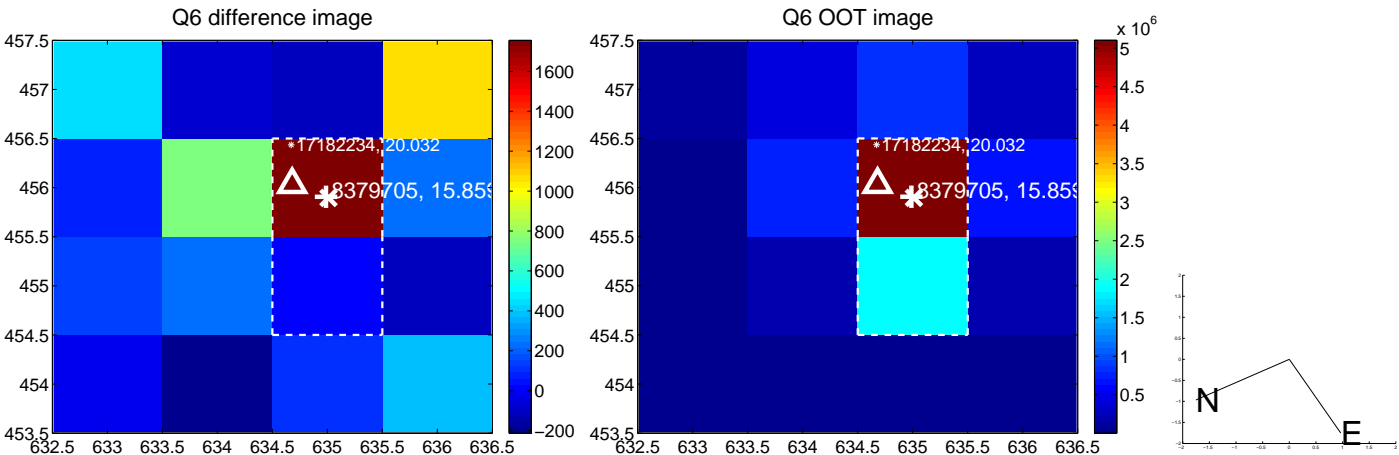
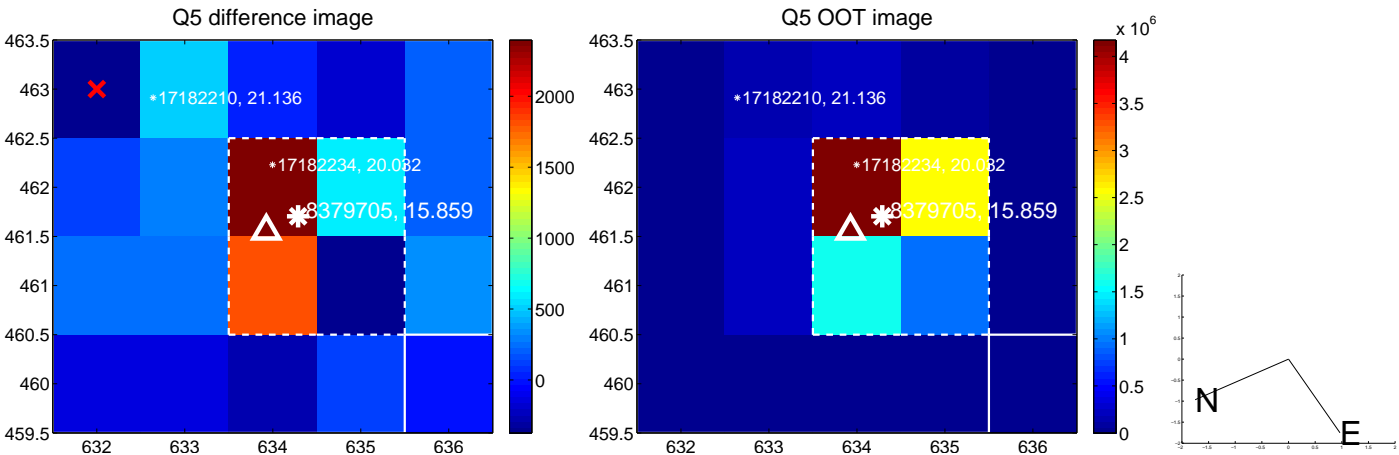


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

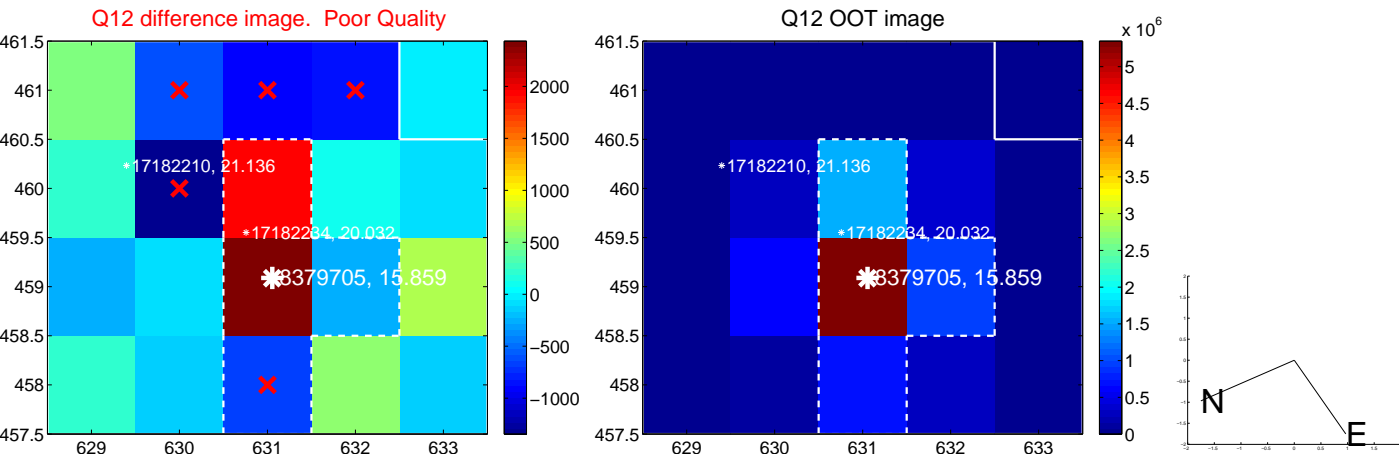
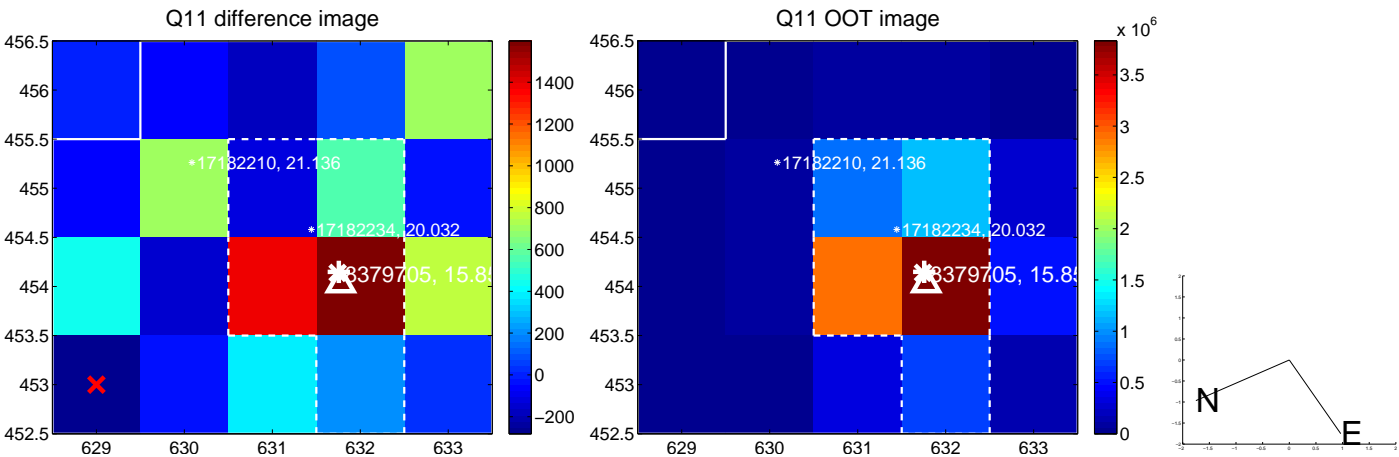
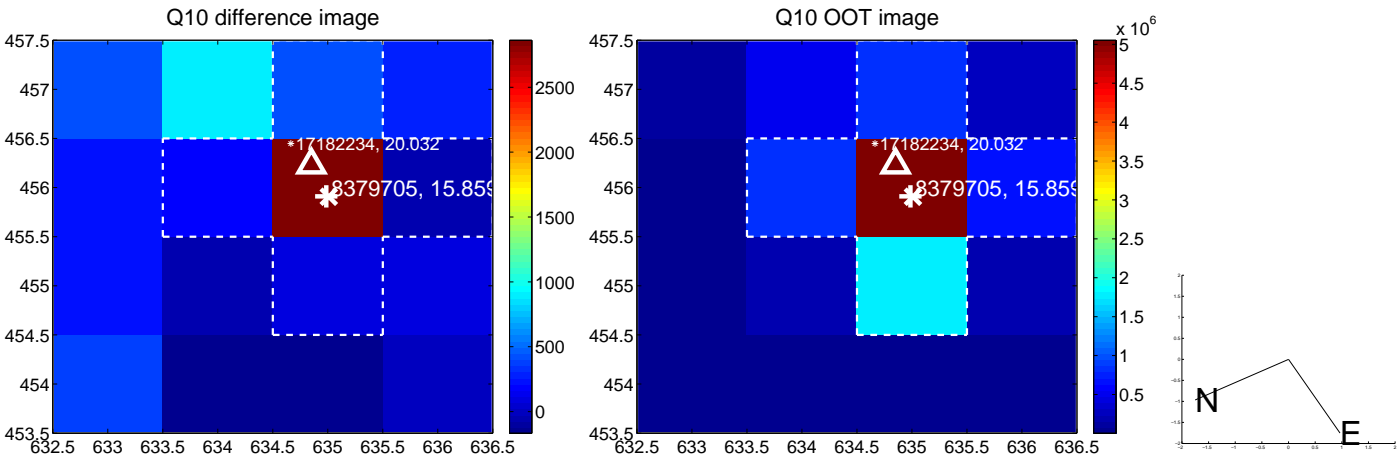
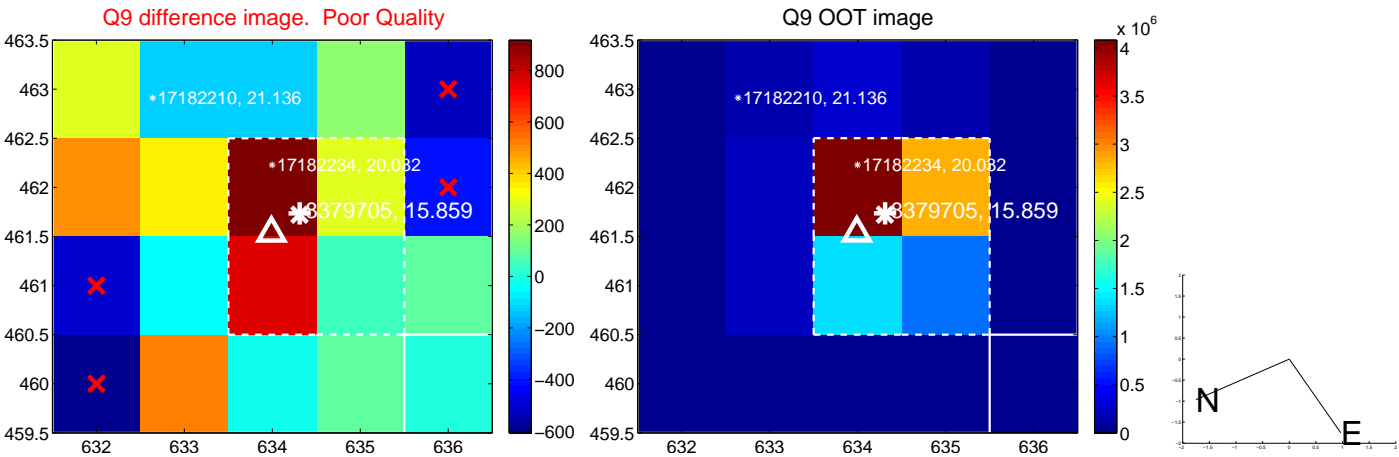
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



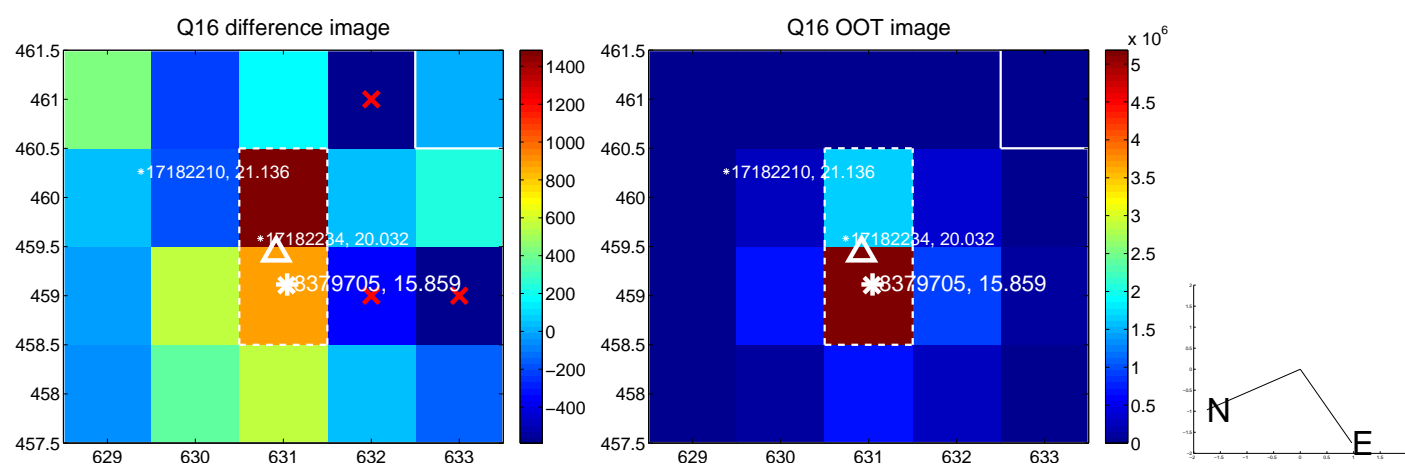
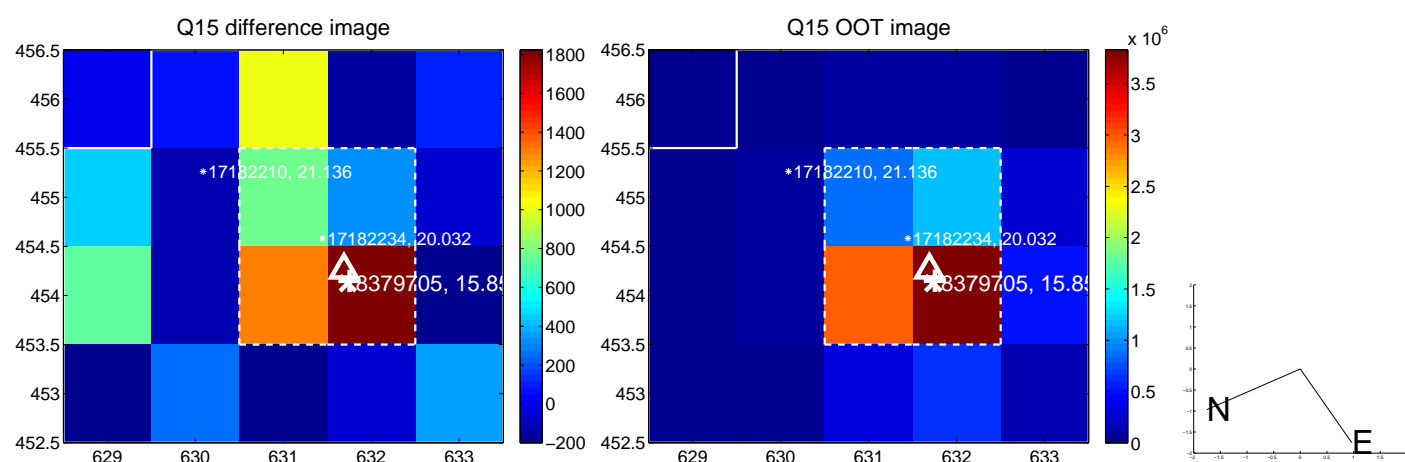
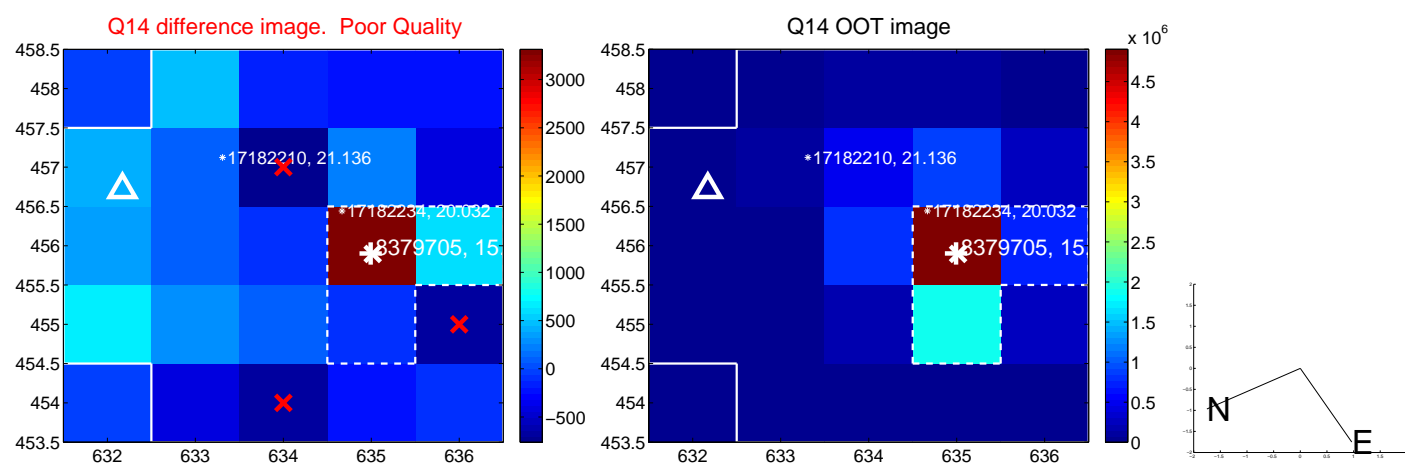
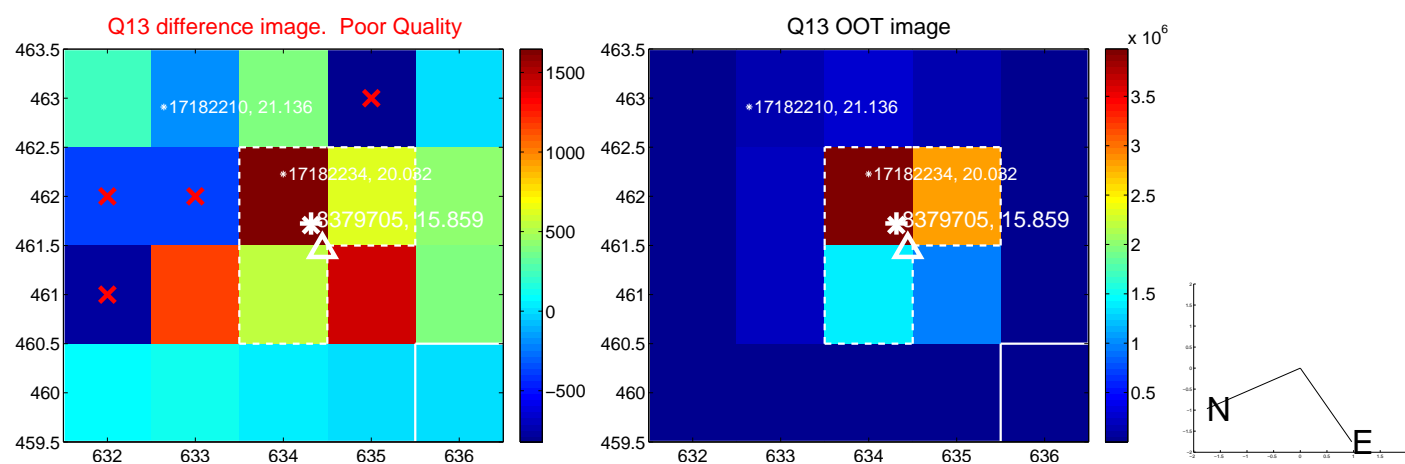
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



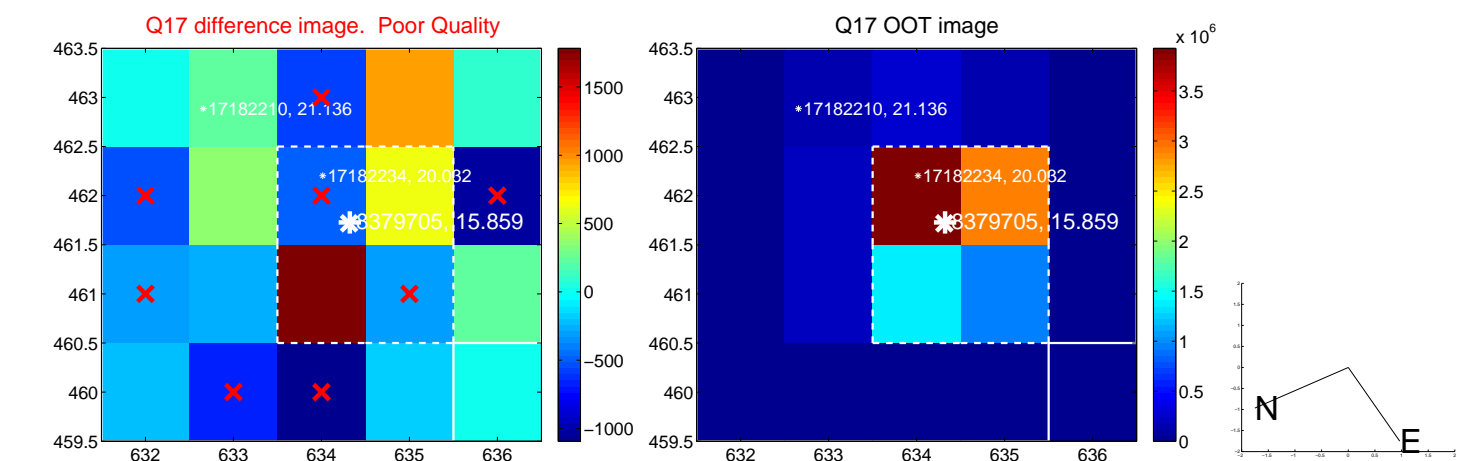
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



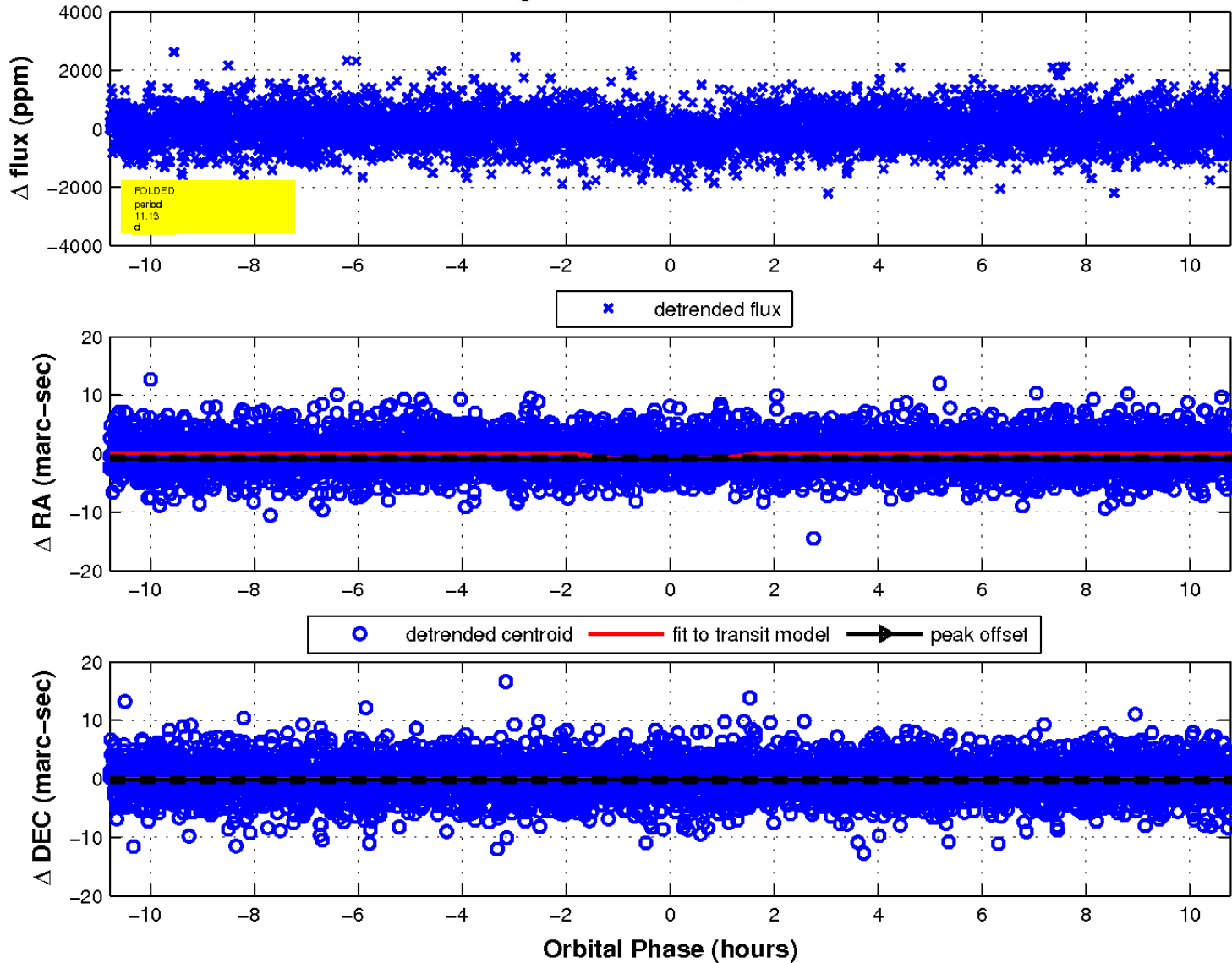
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

