

KIC 007380829

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})
007380829-01	OBS	1703.01	3.174631	132.244963	209.2	8.047	30.2	37.1	1.00	5999	1.93	668.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007380829-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET—HALO_GHOST

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.

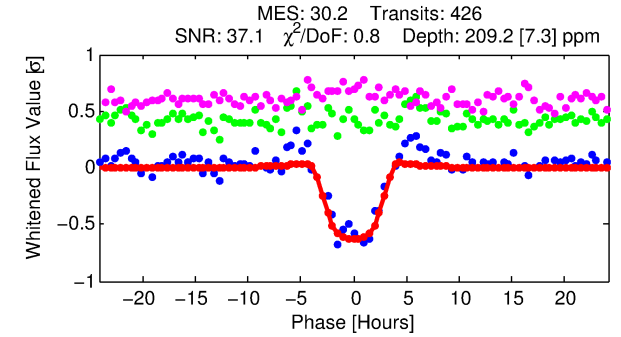
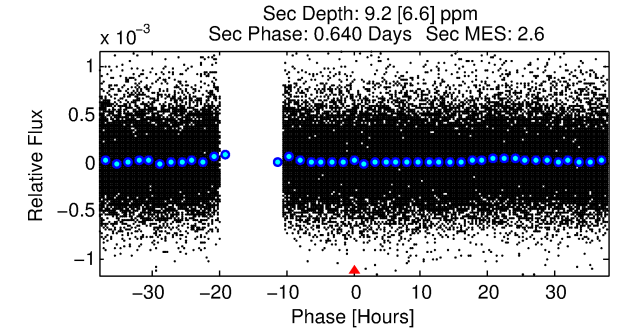
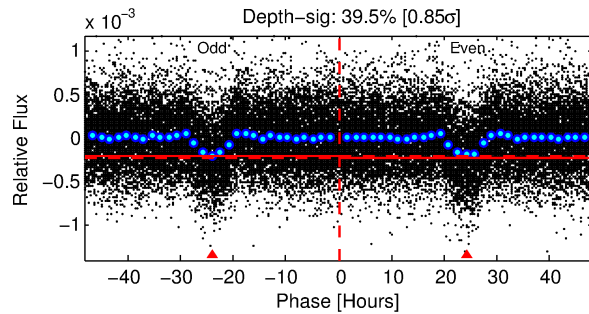
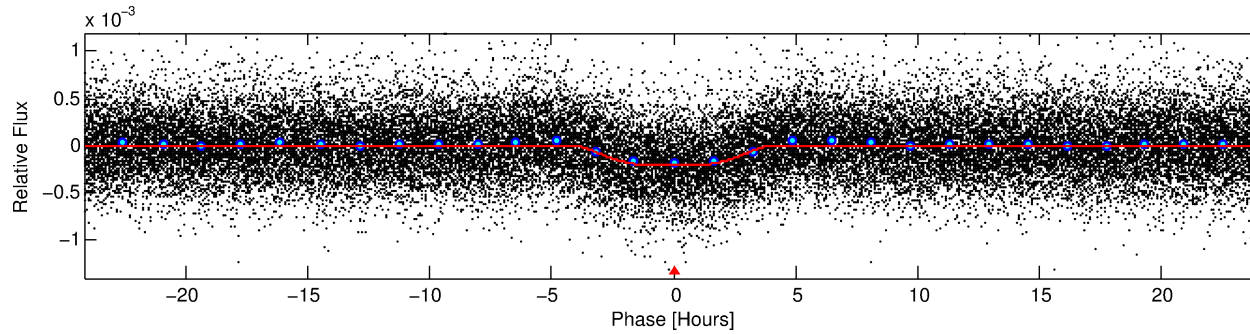
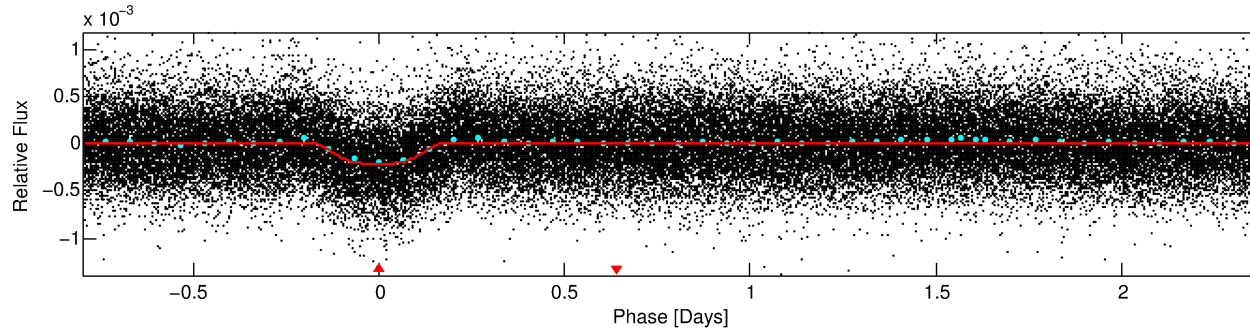
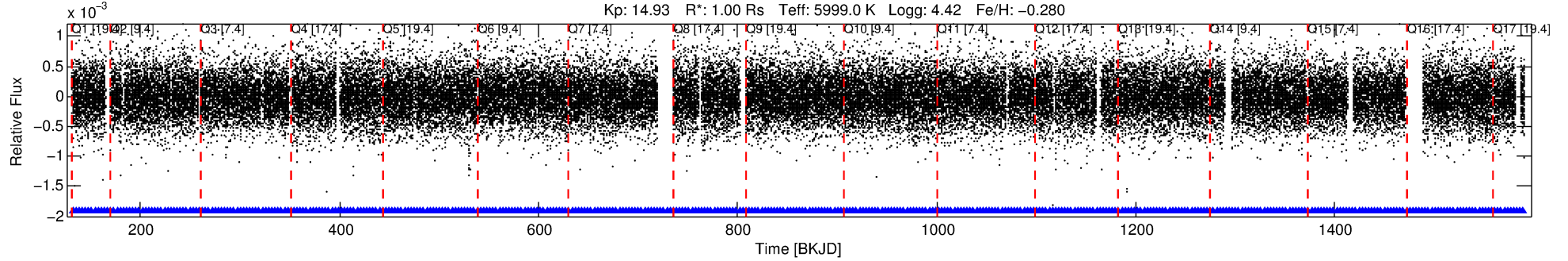
Ephemeris Match Information For 007380829-01

No Significant Match Found

DV One-Page Summary

KIC: 7380829 Candidate: 1 of 1 Period: 3.175 d
KOI: K01703.01 Corr: 0.868

Kp: 14.93 R*: 1.00 Rs Teff: 5999.0 K Logg: 4.42 Fe/H: -0.280



DV Fit Results:

Period = 3.17463 [0.00002] d
Epoch = 132.2450 [0.0046] BKJD
Rp/R* = 0.0177 [0.0004]
a/R* = 1.31 [0.03]
b = 0.98 [0.00]
Seff = 668.54 [246.99]
Teq = 1297 [120] K
Rp = 1.93 [0.56] Re
a = 0.0415 [0.0100] AU
Ag = 2.33 [1.86] [0.72σ]
Teffp = 2478 [452] K [2.53σ]

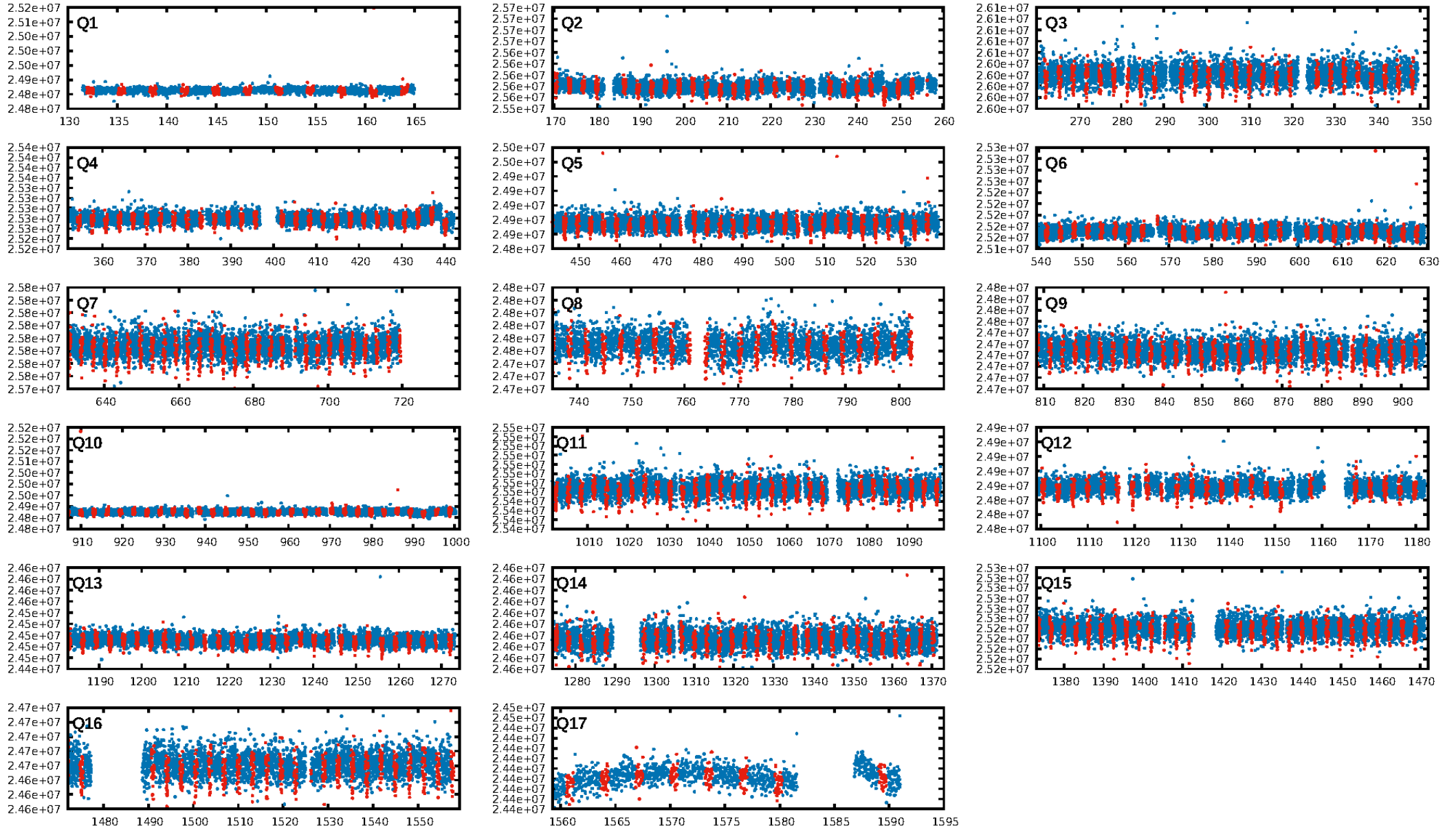
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.61e-185
RollingBand-fgt: 1.00 [407/407]
GhostDiagnostic-chr: -0.1749
Centroid-sig: 0.0%
Centroid-so: 99.950 arcsec [147.91σ]
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]

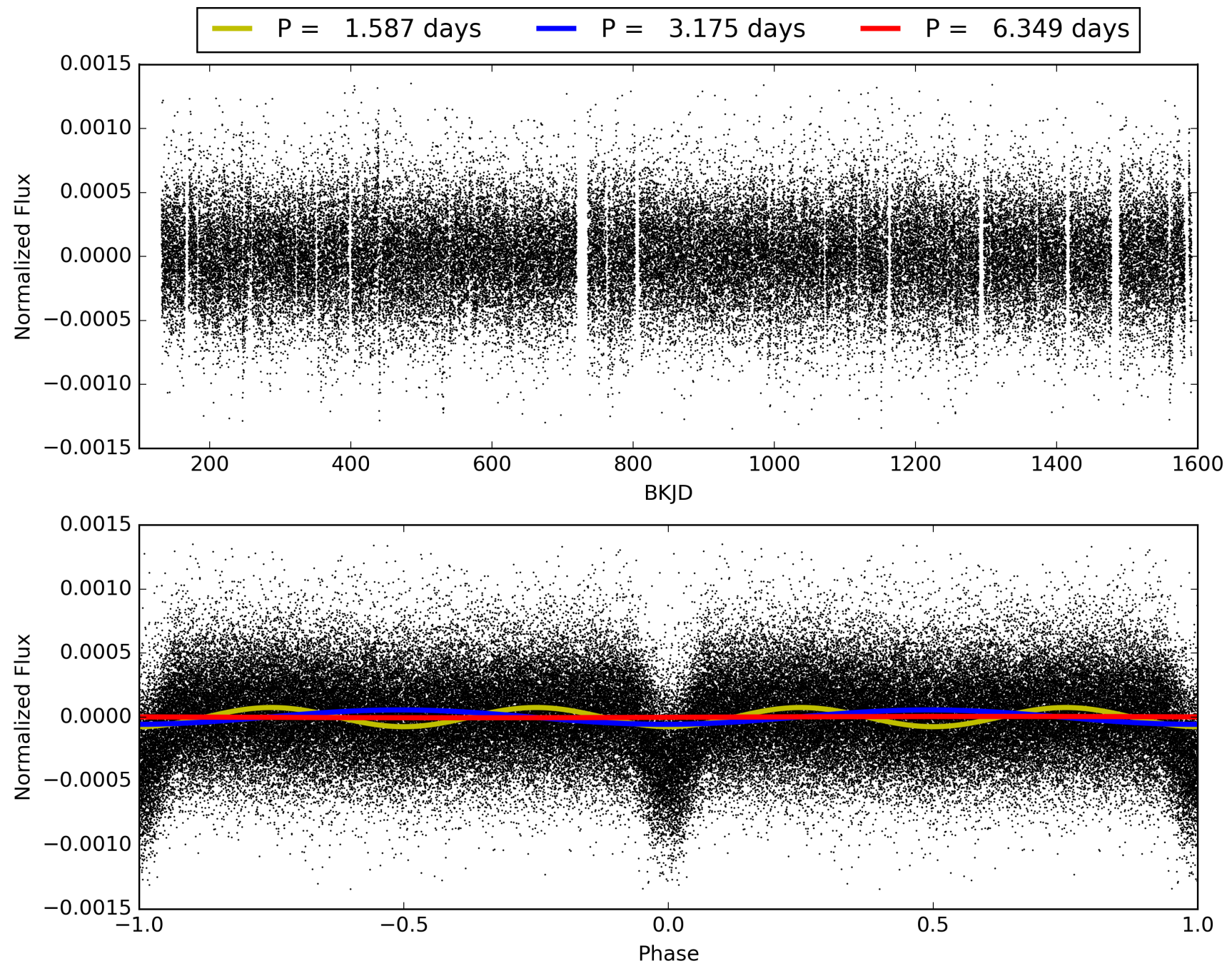
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:13:45 Z

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

TCE 007380829-01, PDC Light Curves

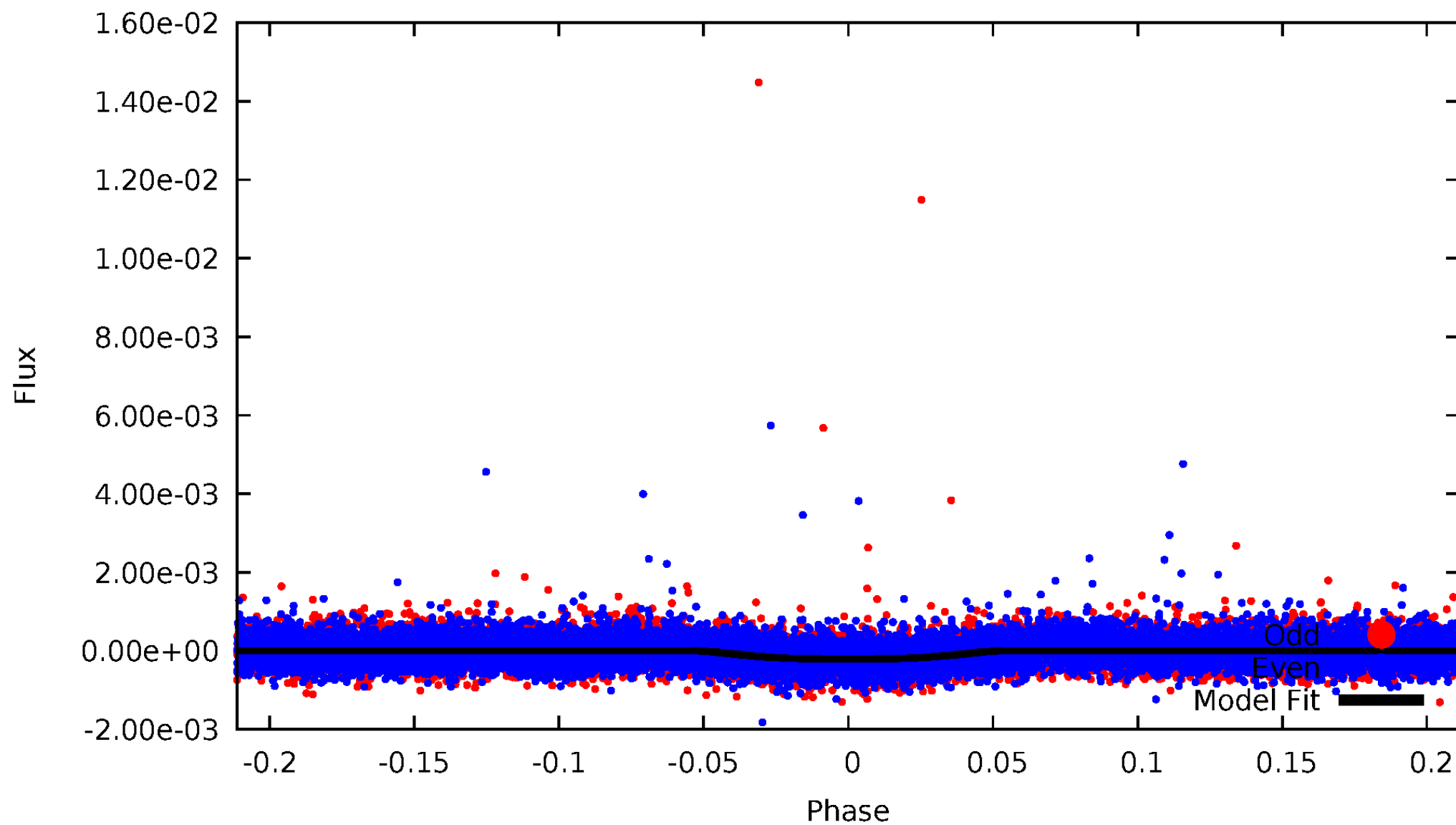


TCE 007380829-01



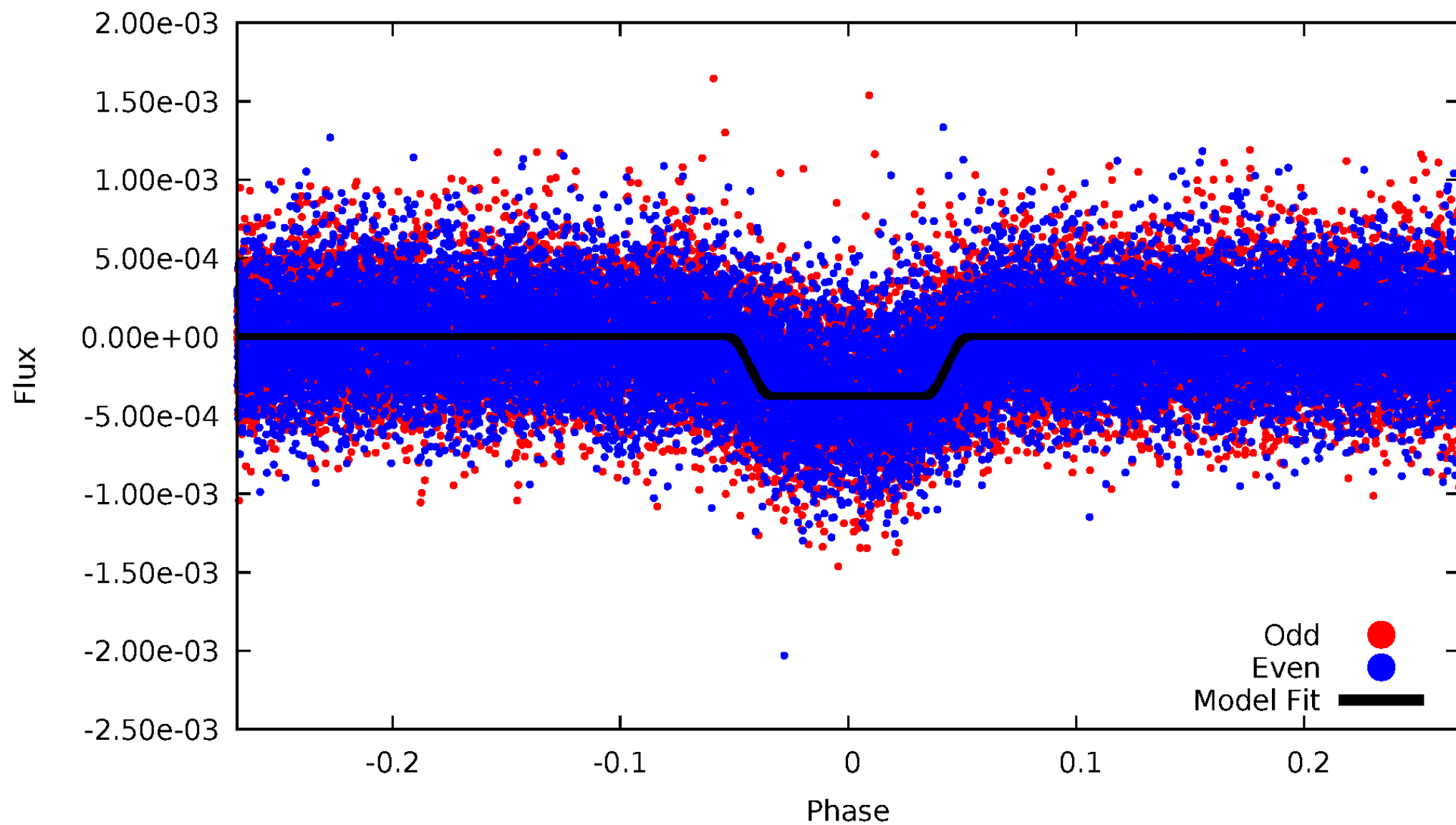
DV Odd/Even

TCE 007380829-01



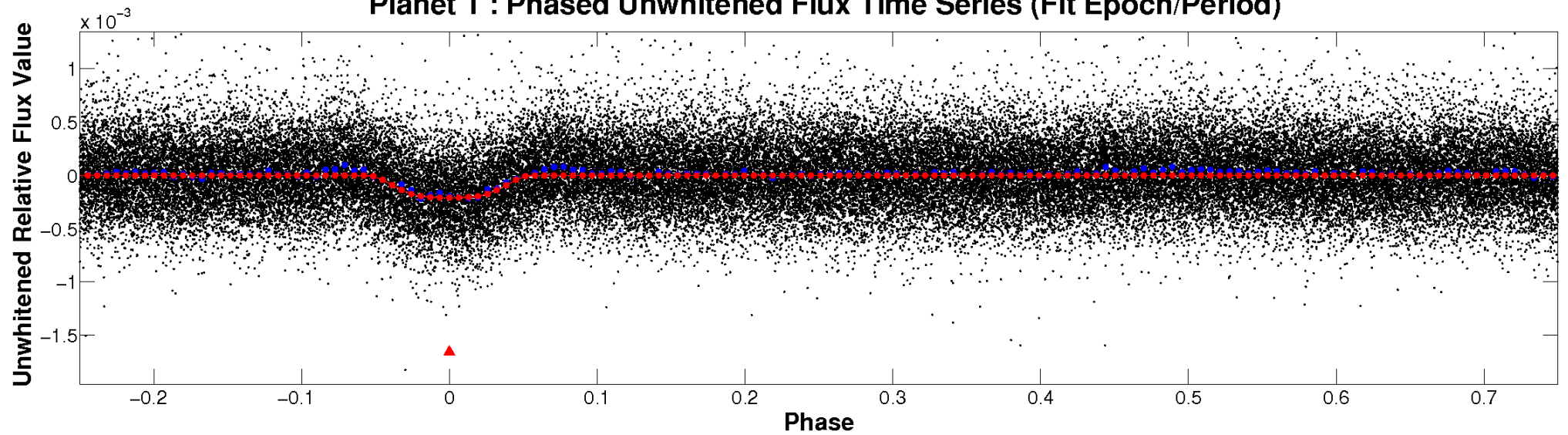
ALT Odd/Even

TCE 007380829-01

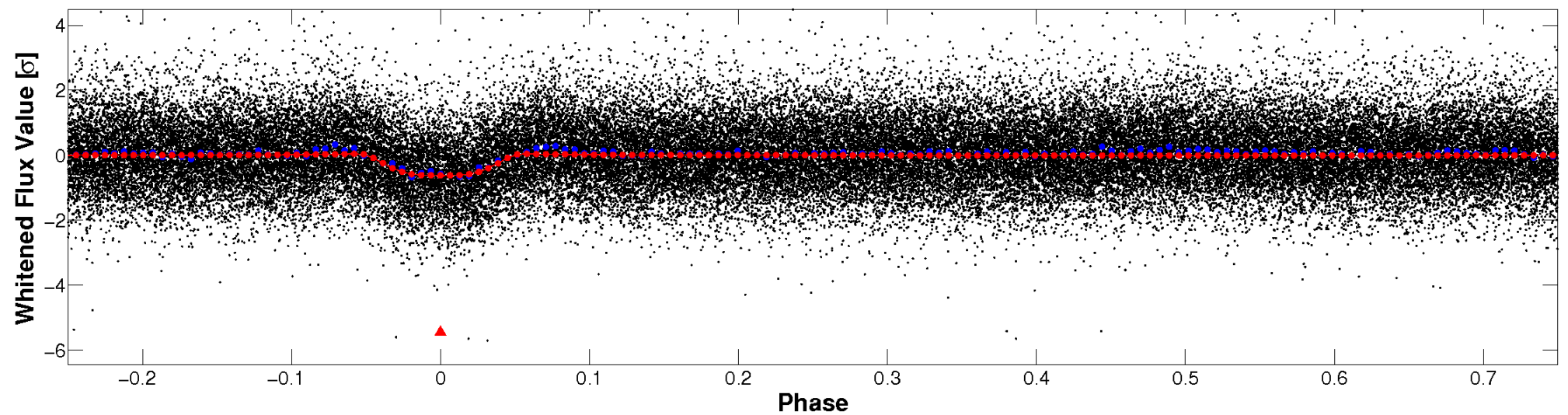


Non-Whitened Vs. Whitened Light Curve

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

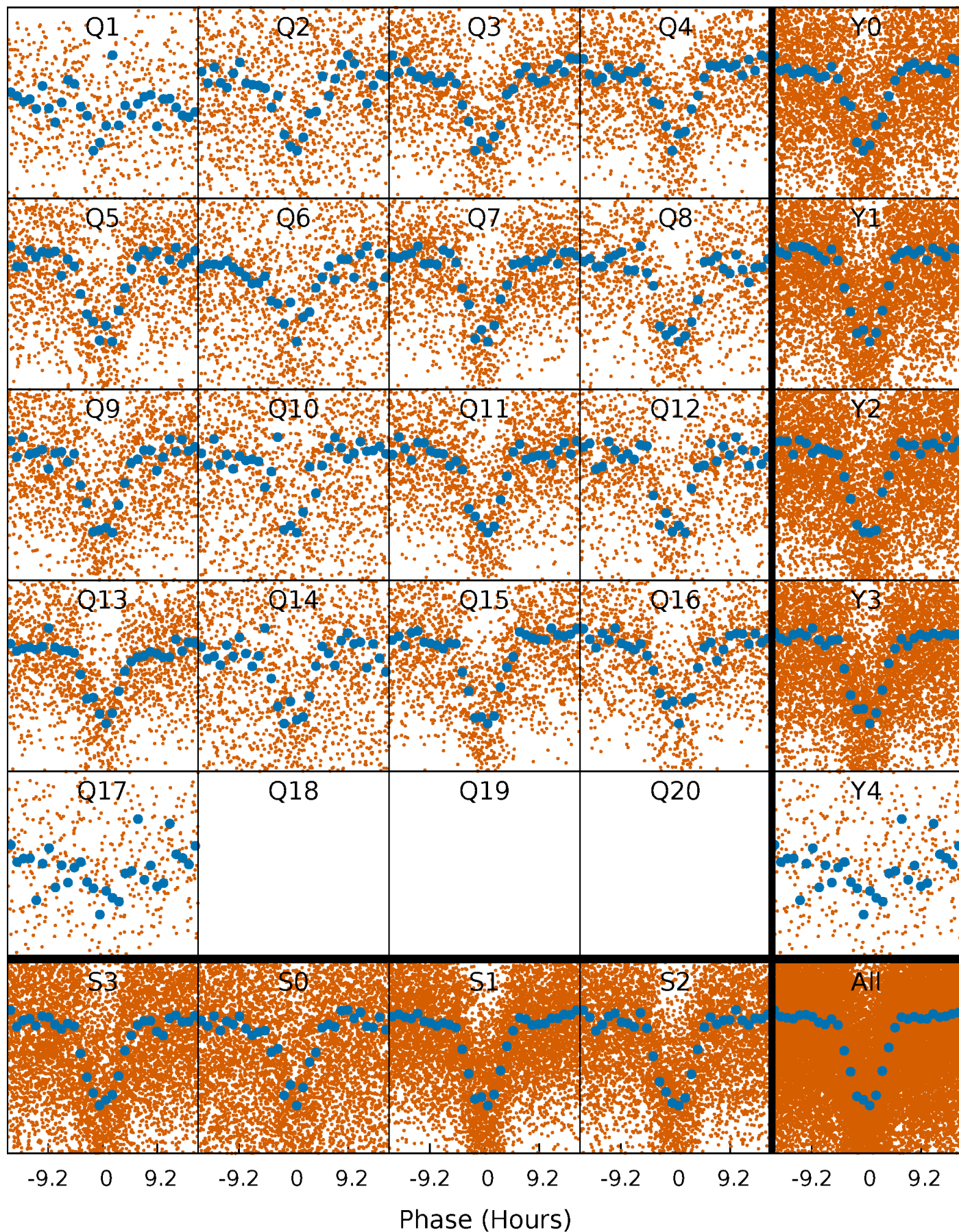


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



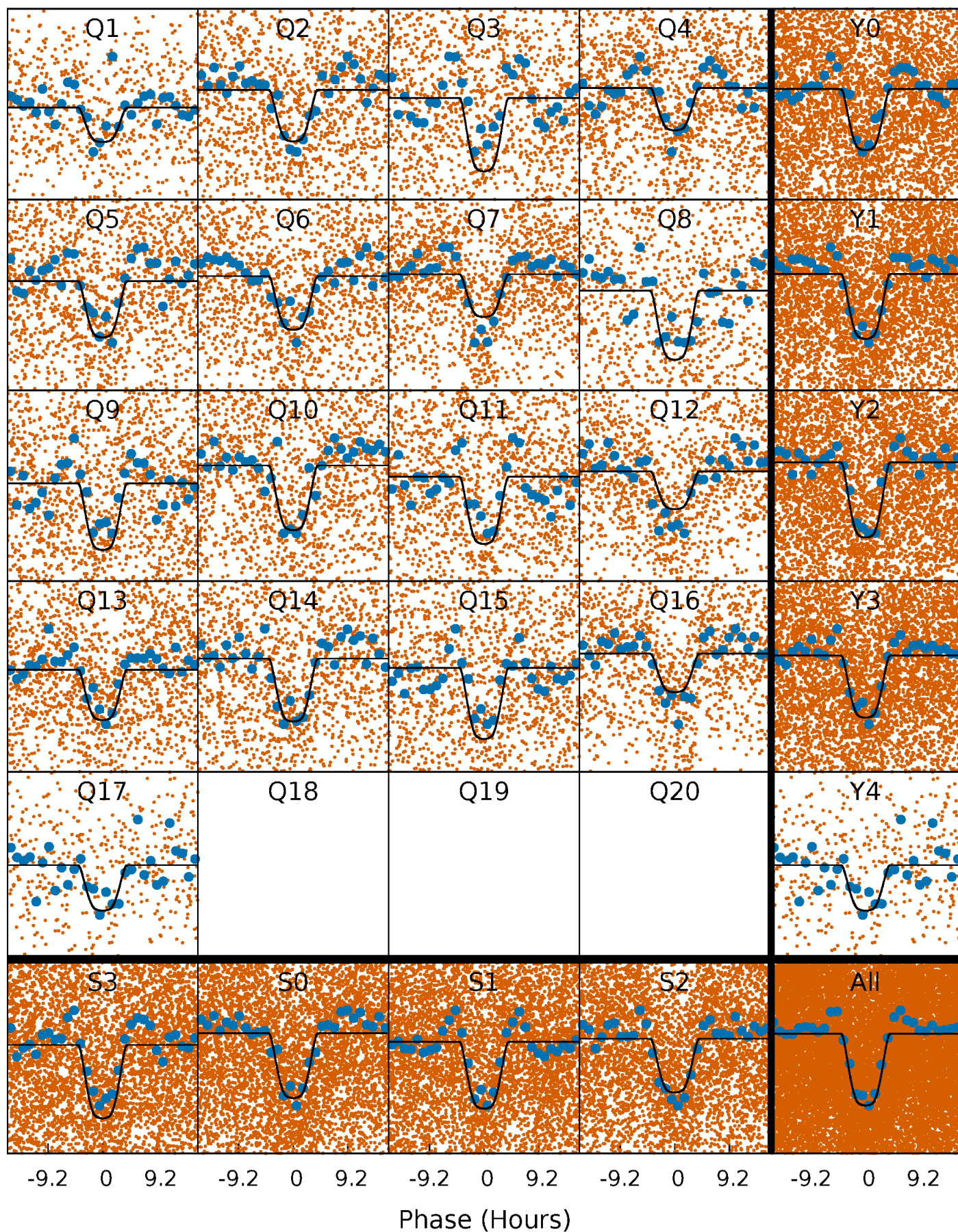
PDC Quarter-Phased Transit Curves

TCE 007380829-01 P= 3.174631 Days $T_0=132.244963$ (BKJD)



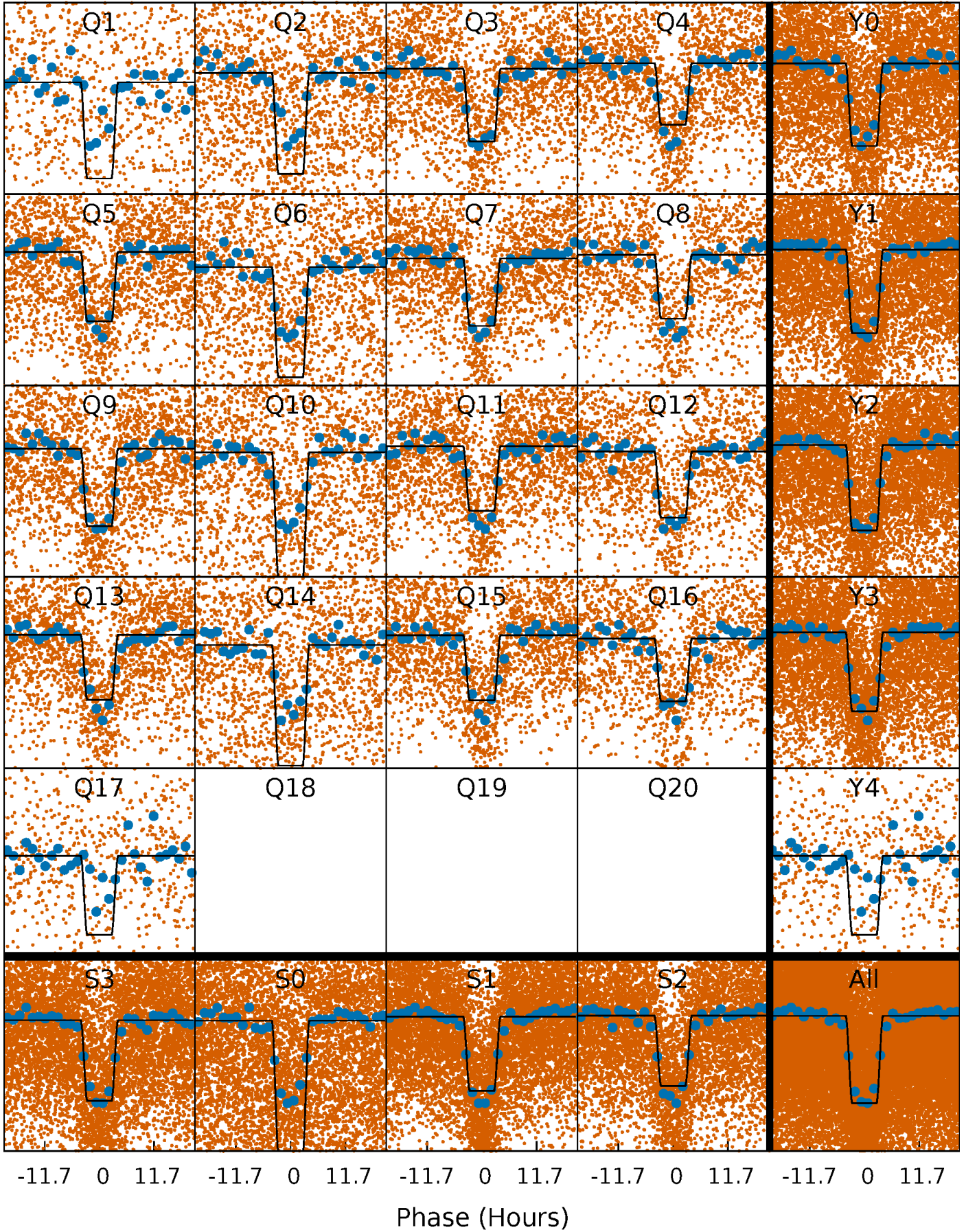
DV Quarter-Phased Transit Curves

TCE 007380829-01 P= 3.174631 Days $T_0=132.244963$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

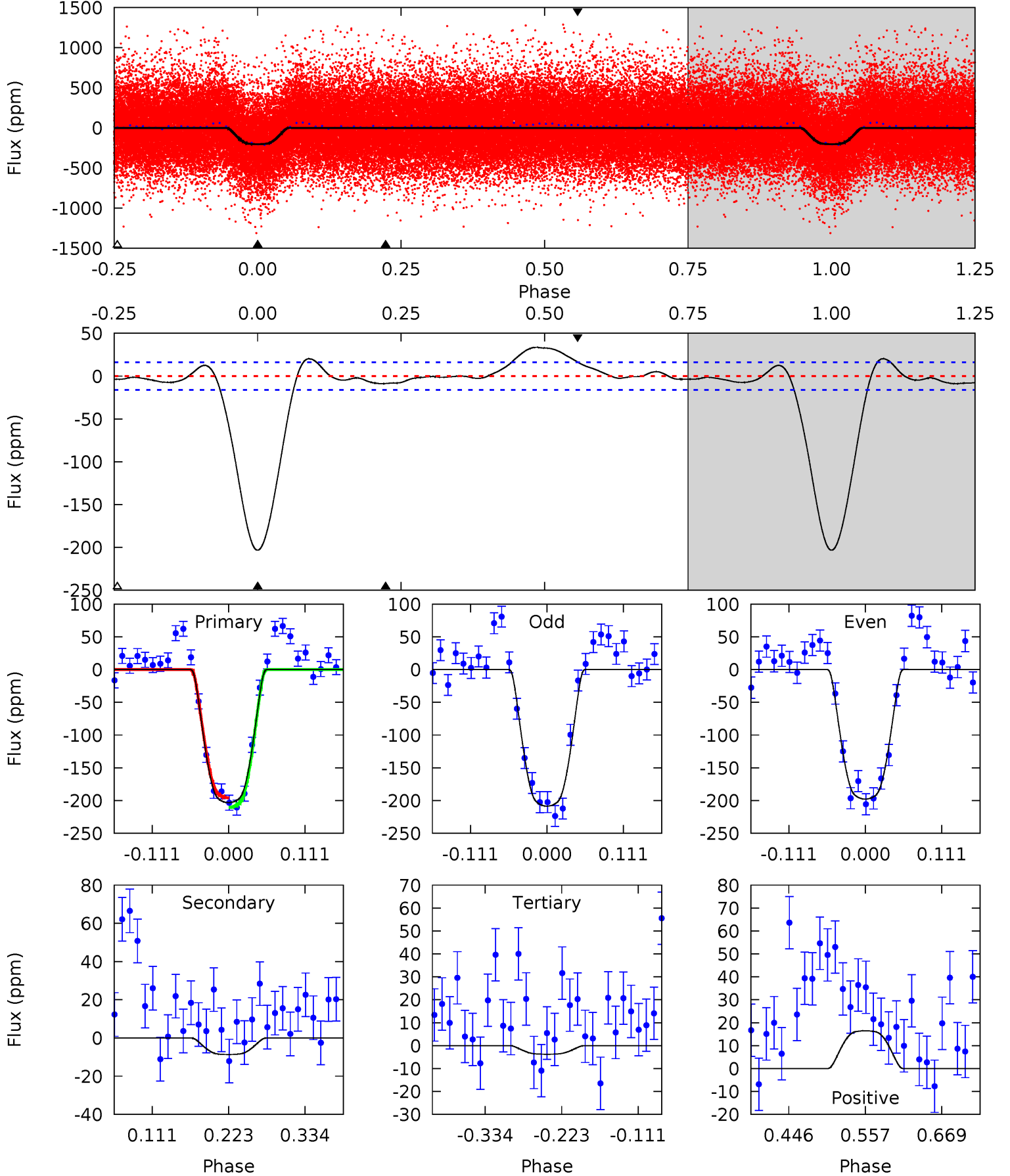
TCE 007380829-01 P= 3.174577 Days $T_0=132.256822$ (BKJD)



DV Model-Shift Uniqueness Test

007380829-01, P = 3.174631 Days, E = 129.070332 Days

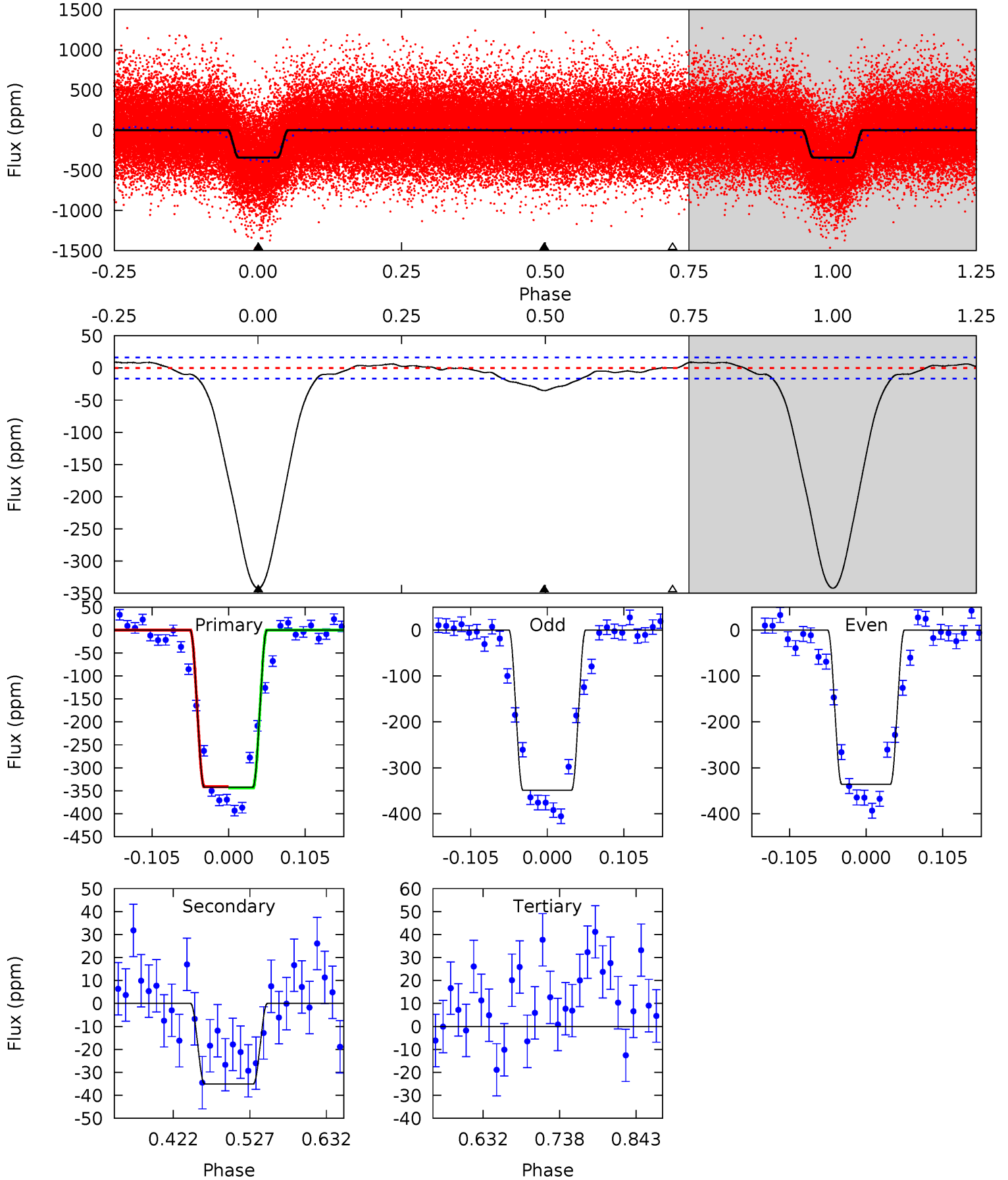
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
57.0	2.43	1.05	4.63	4.54	1.59	3.44	56.0	52.4	1.38	-2.19	1.51	0.97	0.14	2.06



Alt Model-Shift Uniqueness Test

007380829-01, P = 3.174577 Days, E = 129.082245 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
94.7	9.71	0	0	4.55	1.62	1.57	94.7	94.7	9.71	9.71	1.78	0.98	0.03	0.36



Stellar Parameters For KIC 007380829

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5999^{+169}_{-190}	$4.417^{+0.101}_{-0.188}$	$-0.280^{+0.300}_{-0.300}$	$0.996^{+0.288}_{-0.155}$	$0.945^{+0.132}_{-0.108}$	$1.348^{+0.625}_{-0.686}$
	+3%/-3%	+2%/-4%	+107%/-107%	+29%/-16%	+14%/-11%	+46%/-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 007380829-01 / KOI 1703.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-9 ± 4	$1.96^{+0.32}_{-0.19}$	1824^{+131}_{-100}	2997^{+203}_{-284}	$2.047^{+1.104}_{-0.909}$
Alt.	-35 ± 4	$2.12^{+0.34}_{-0.18}$	1826^{+141}_{-96}	3694^{+97}_{-103}	$7.132^{+1.832}_{-1.784}$

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

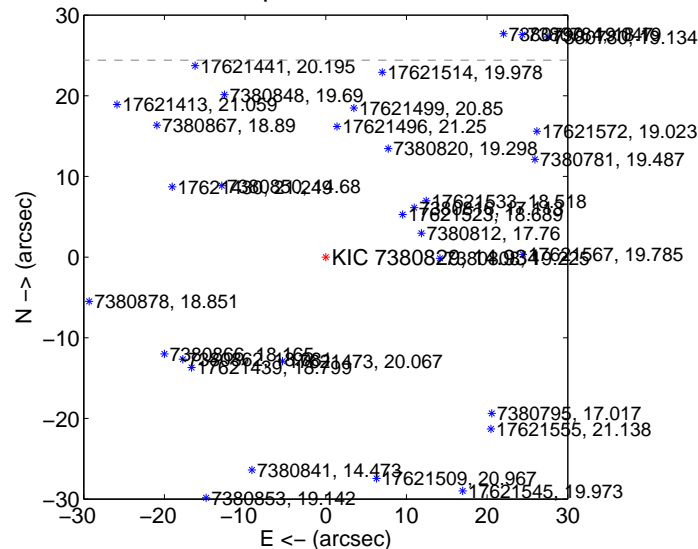
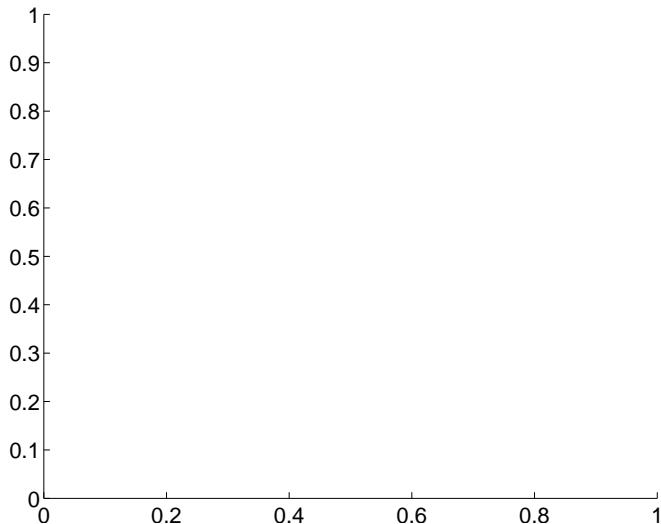
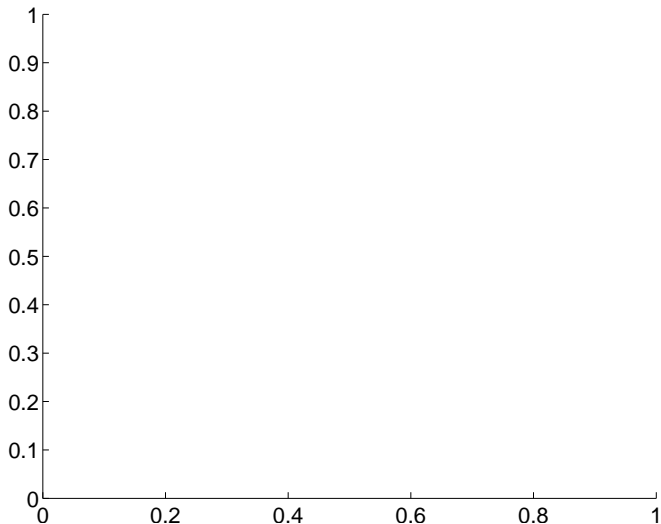
DV Centroid Data

Supplemental centroid analysis for 007380829-01. Kepler magnitude: 14.93. Transit SNR 37.10

There are 0 quarters with good PRF difference image offsets

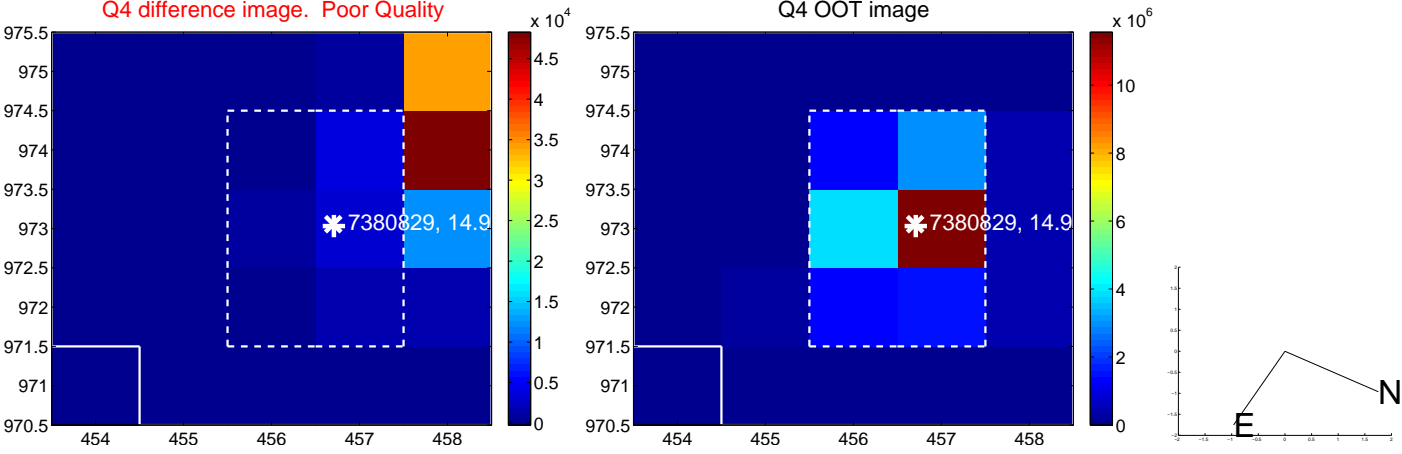
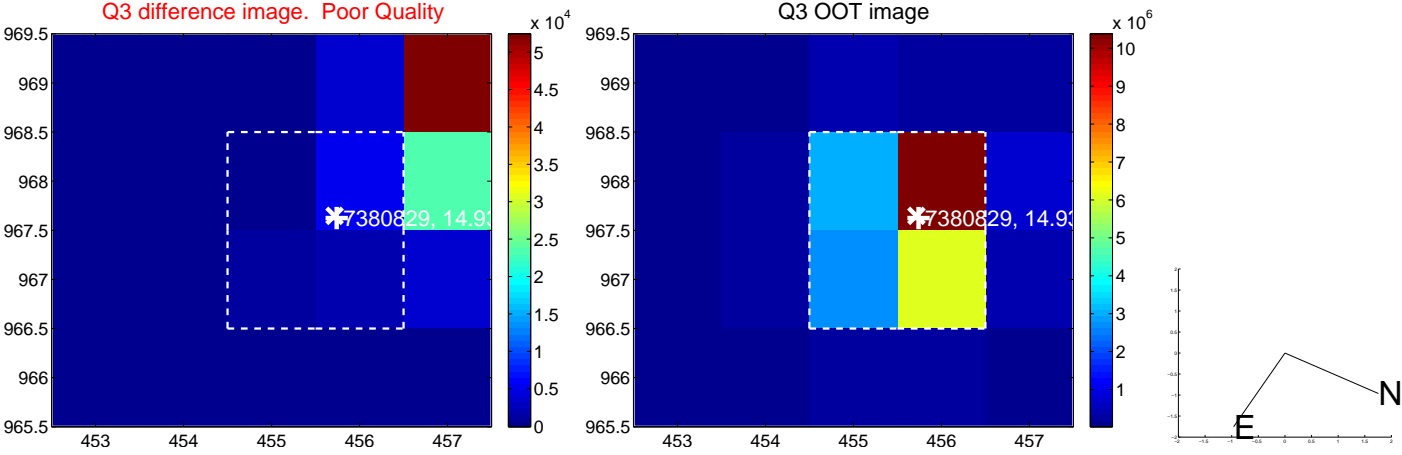
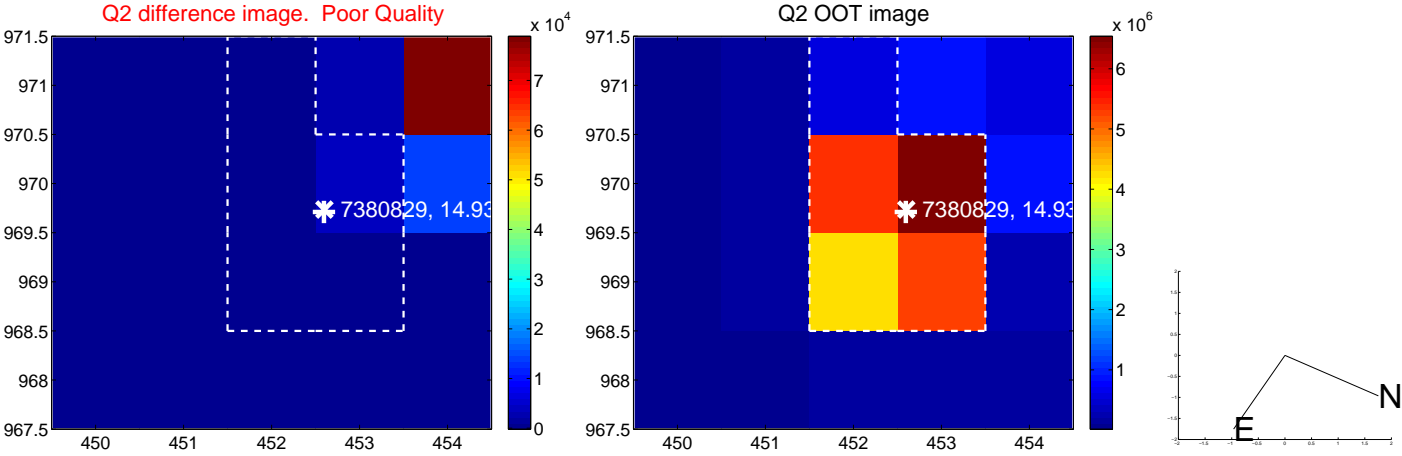
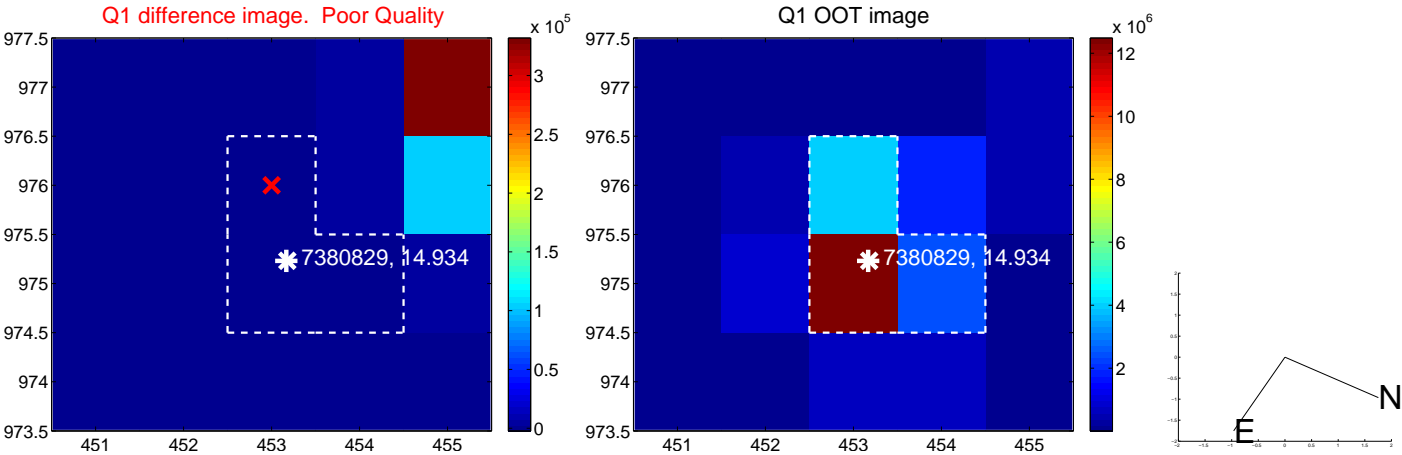
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	99.94 \pm 0.68	147.91	-96.91 \pm 0.68	24.41 \pm 0.52

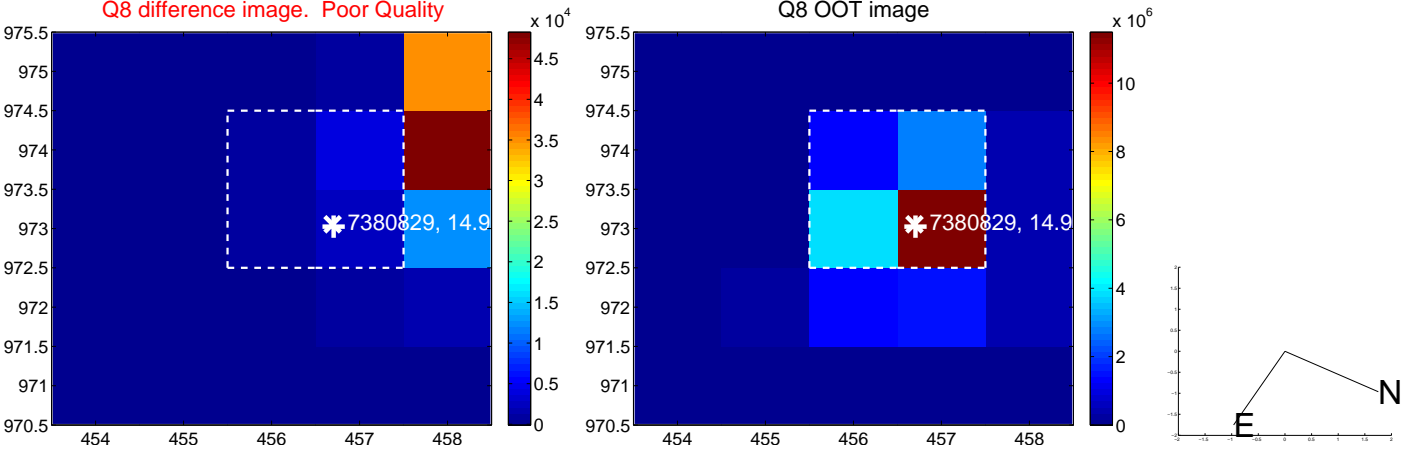
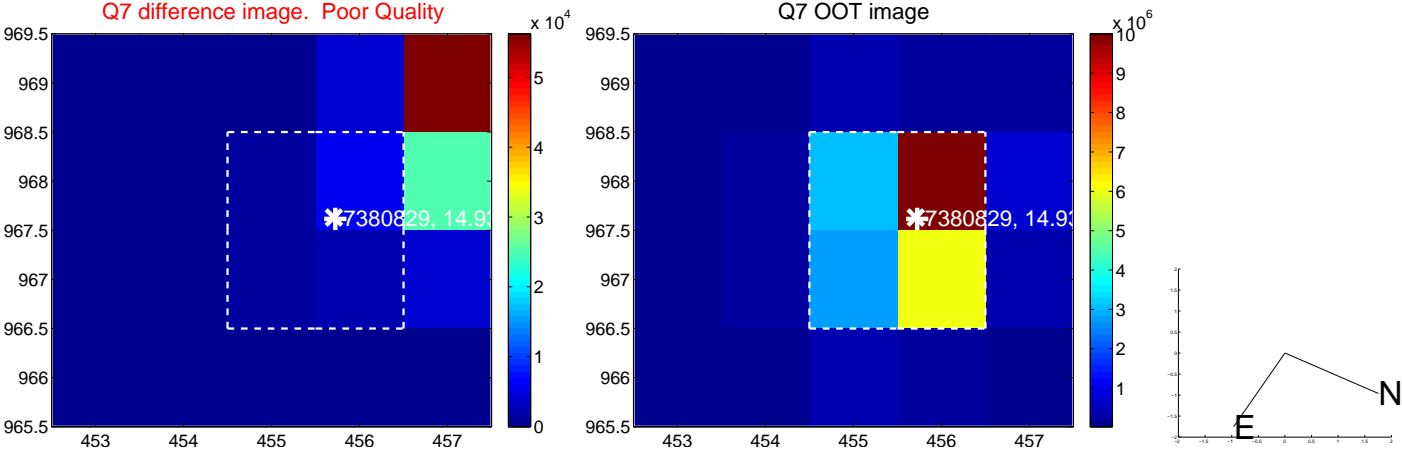
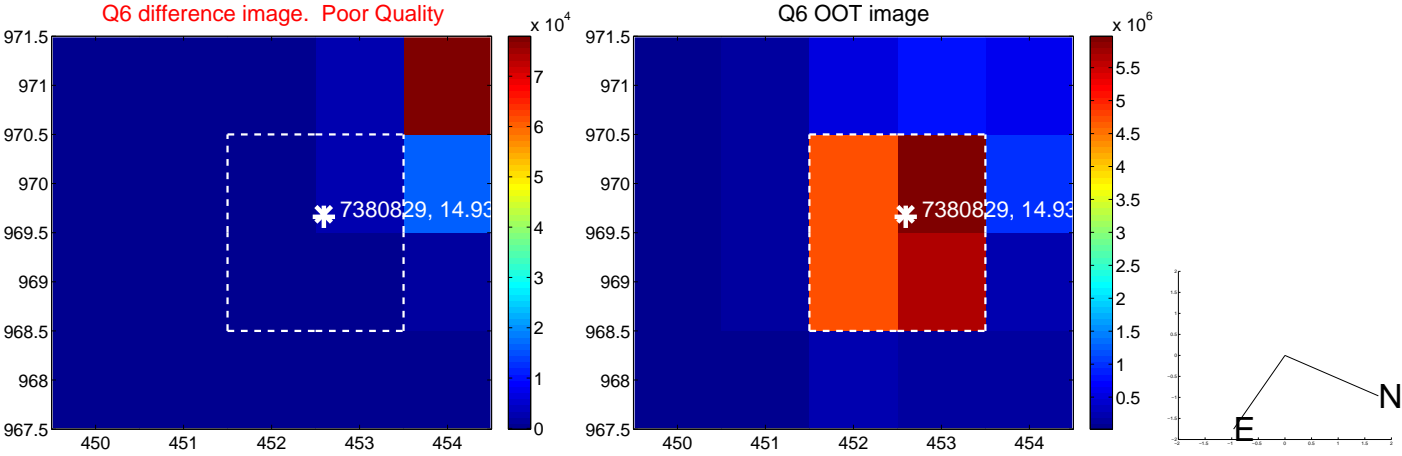
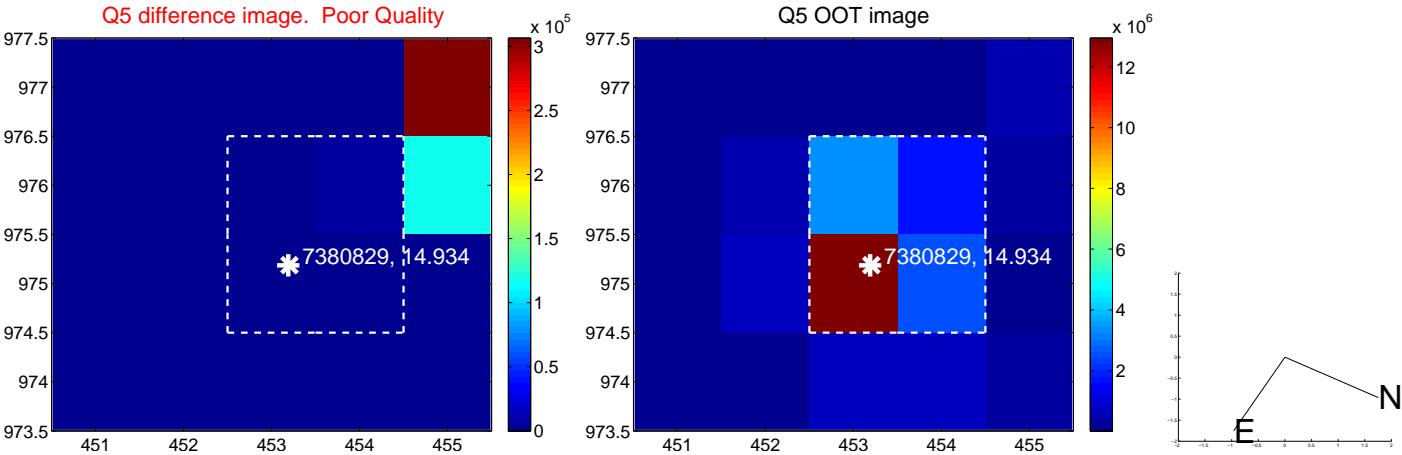


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

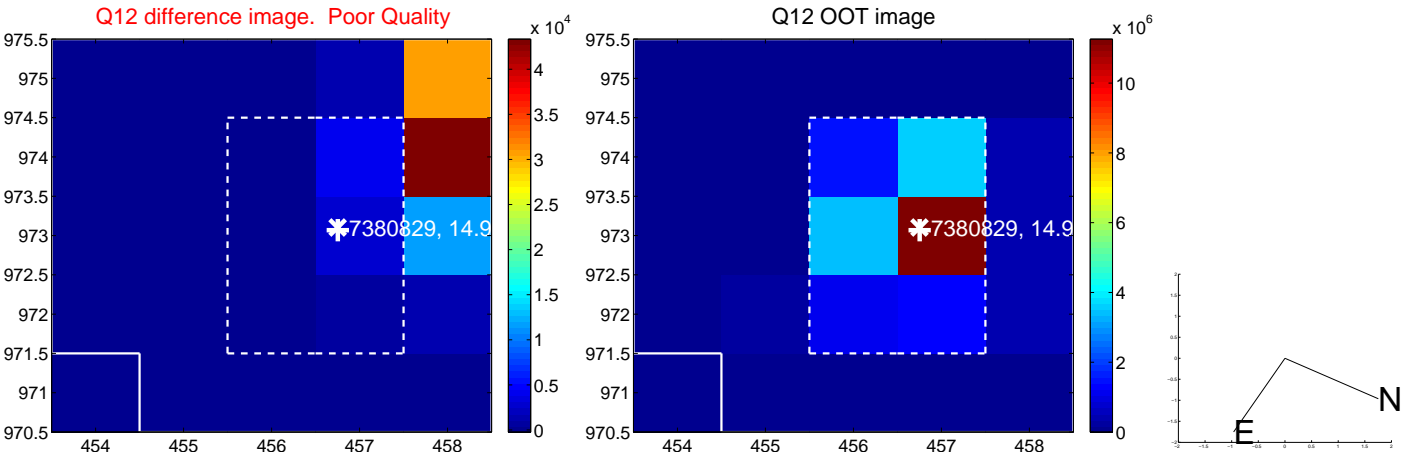
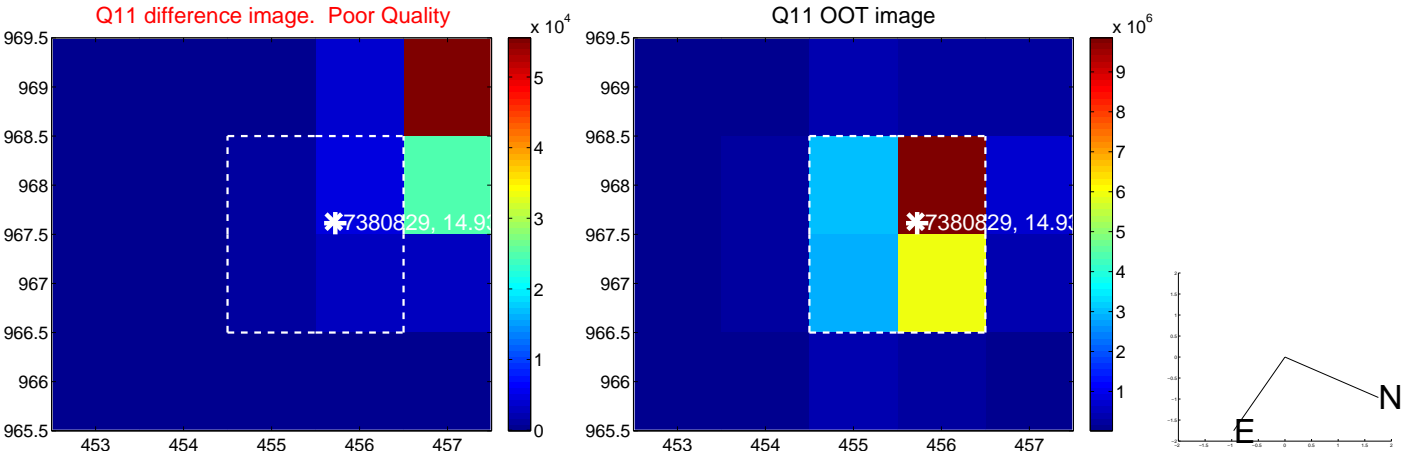
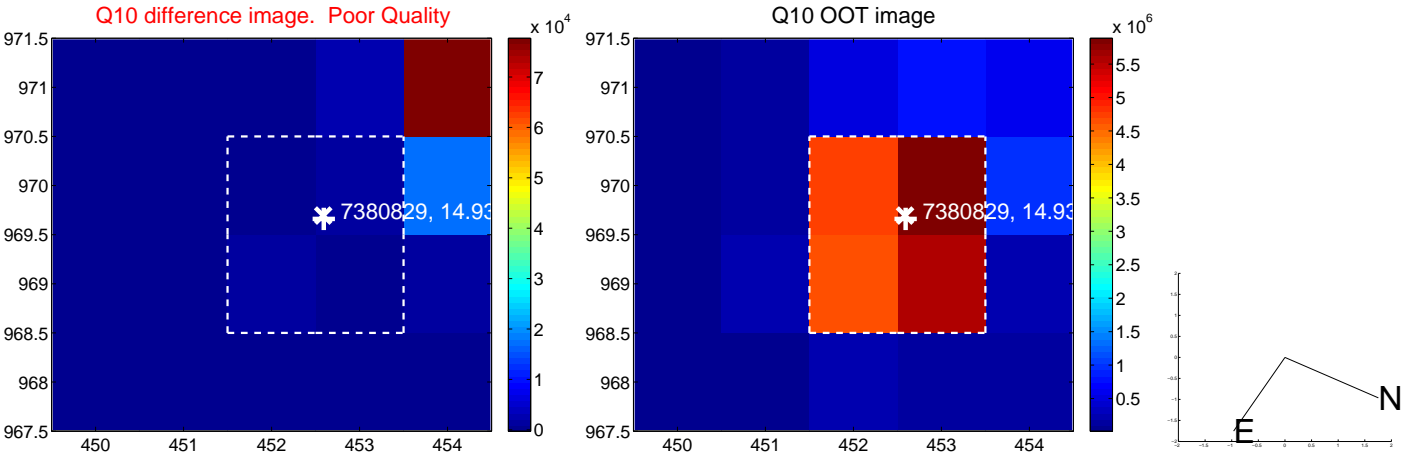
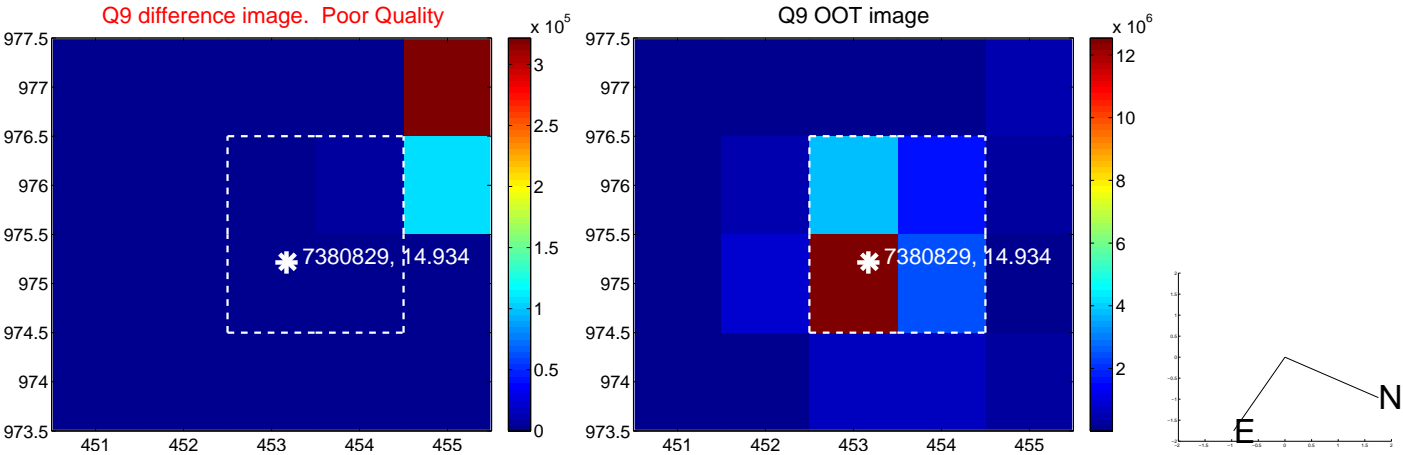
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



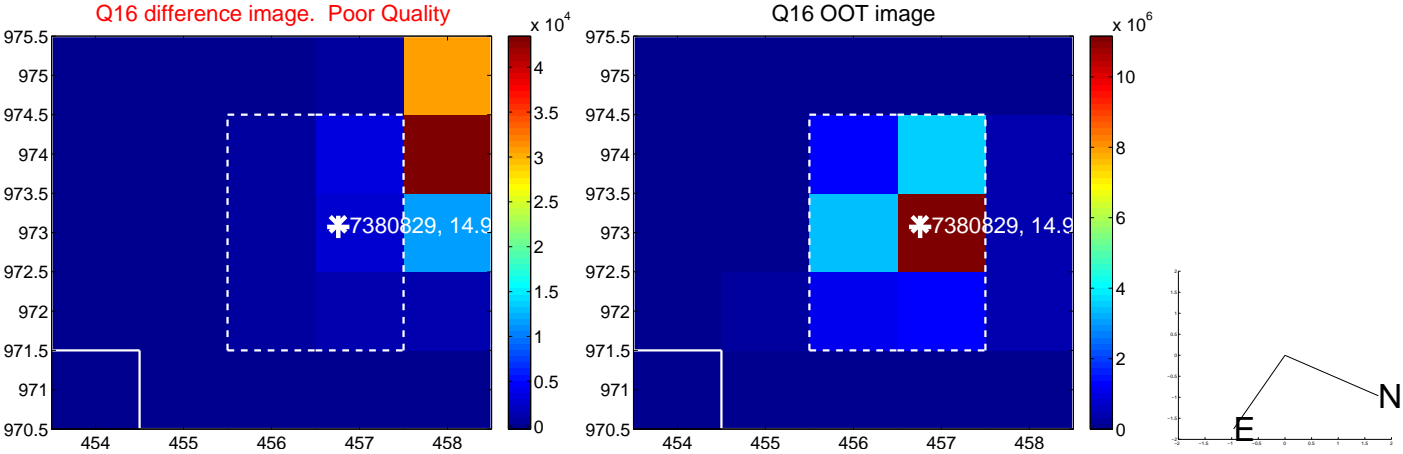
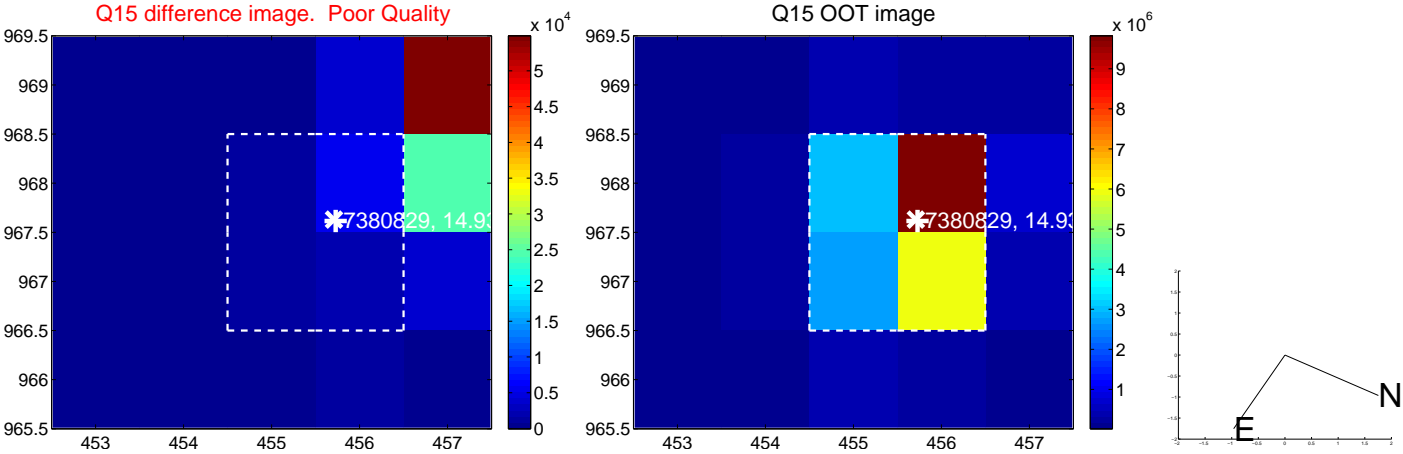
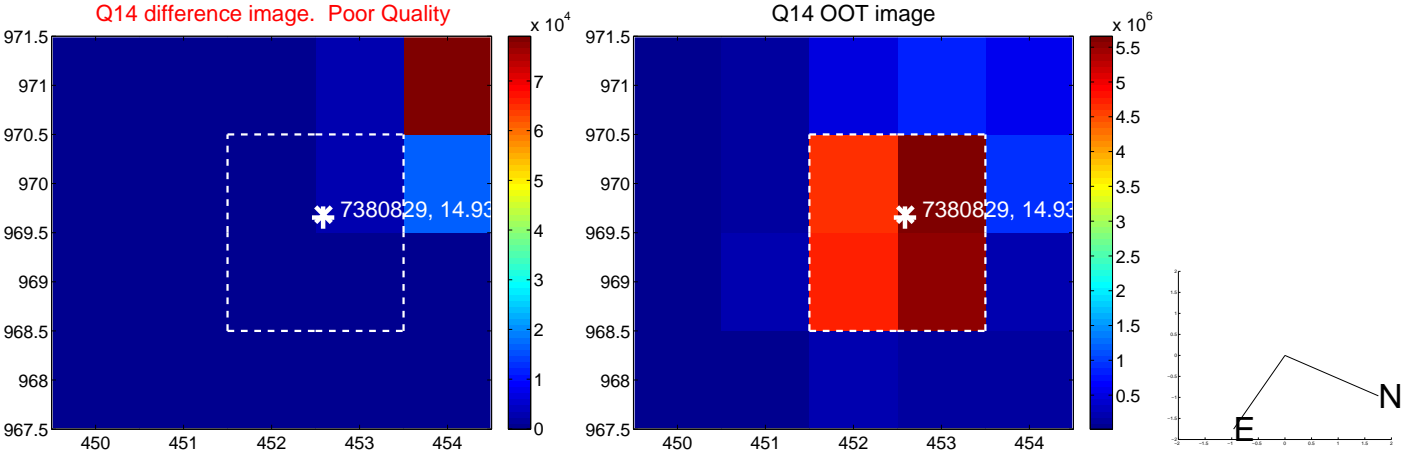
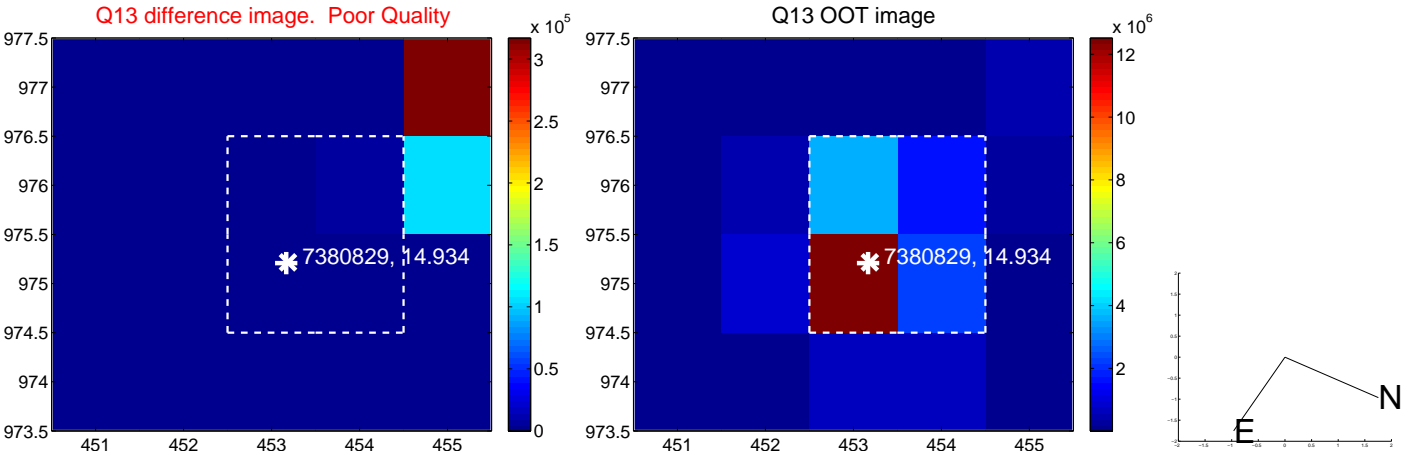
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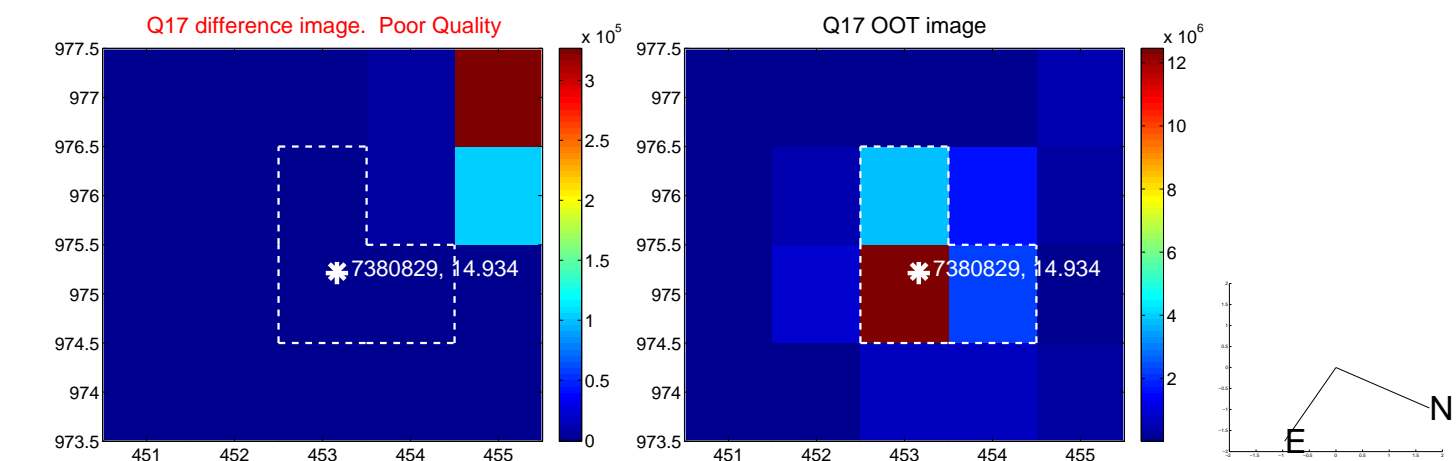
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



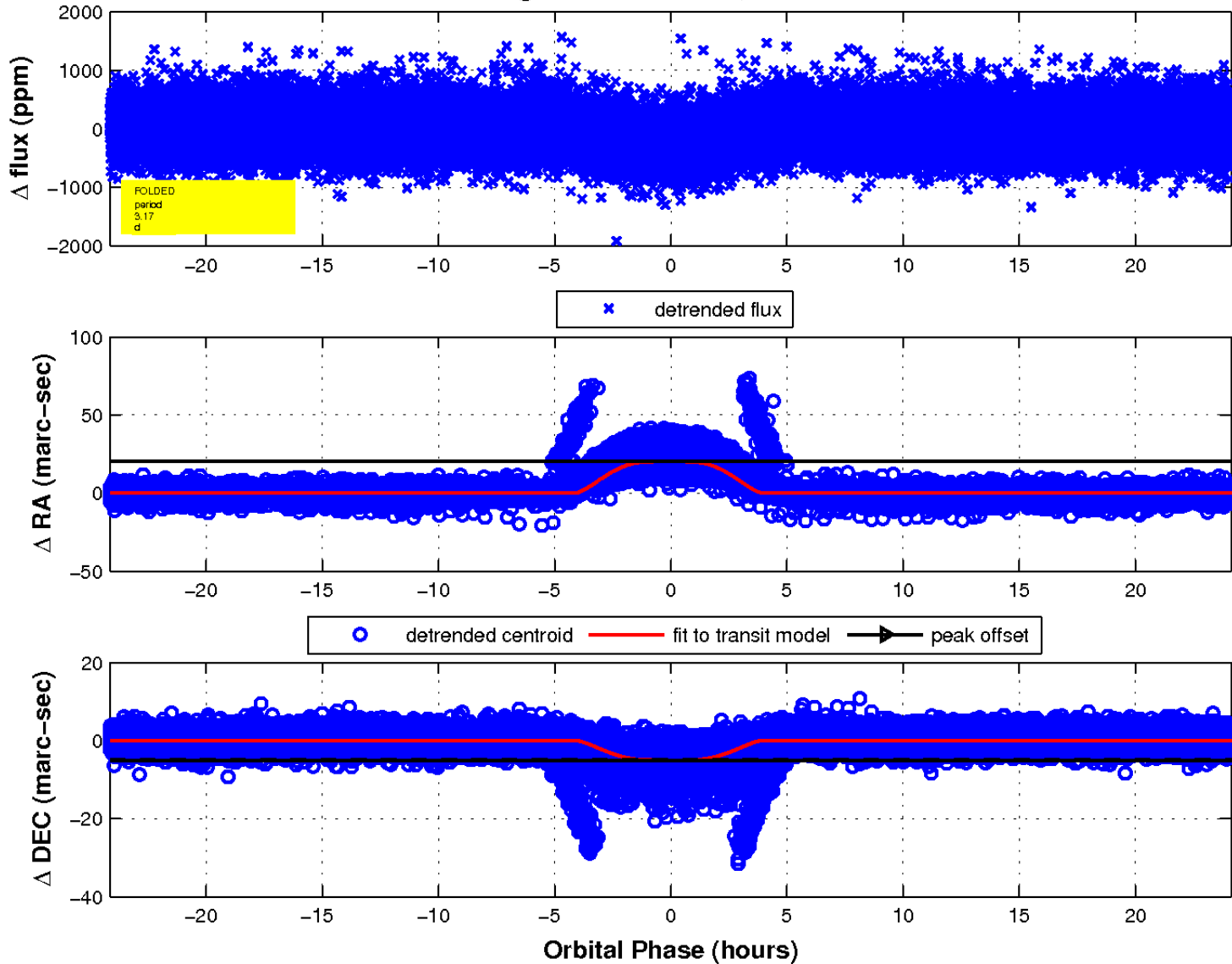
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

