

KIC 004927192

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})
004927192-01	OBS	No	3.126222	134.537863	0.0	9.613	7.4	0.0	2.12	6902	0.04	3973.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004927192-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—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.

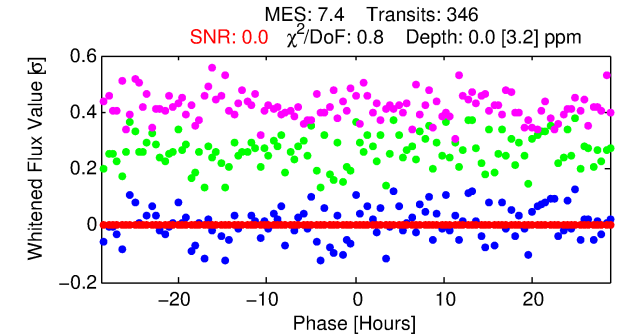
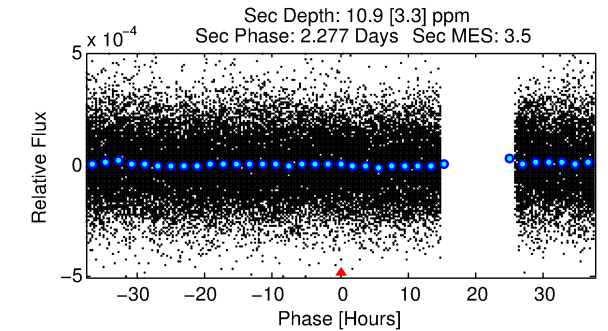
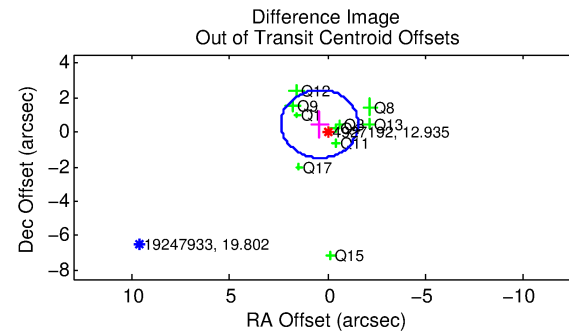
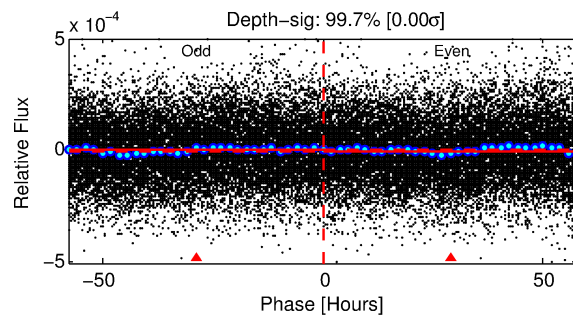
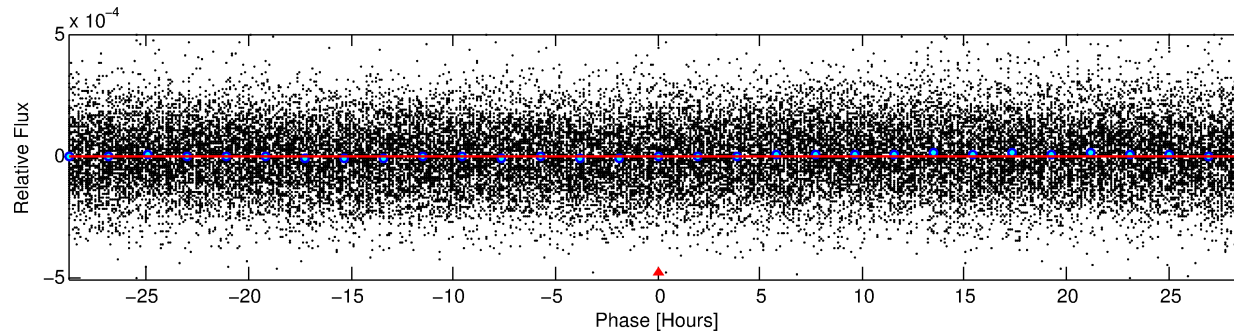
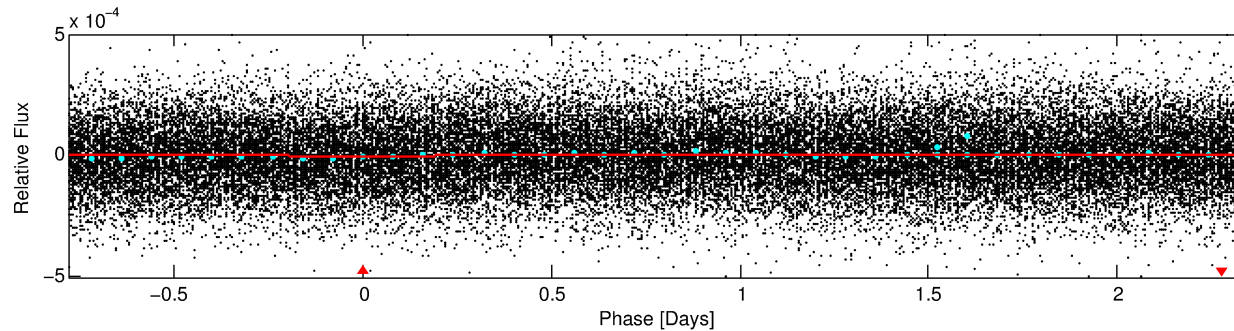
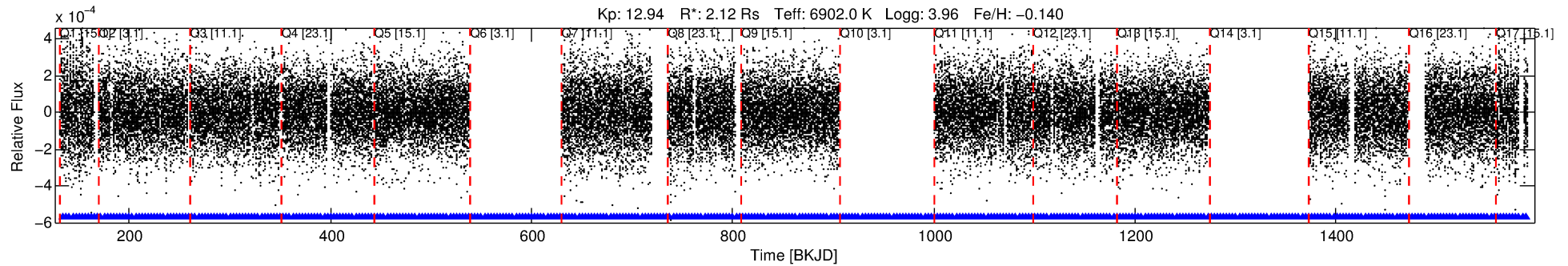
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004927192-01

No Significant Match Found

DV One-Page Summary

KIC: 4927192 Candidate: 1 of 1 Period: 3.126 d



DV Fit Results:

Period = 3.12622 [0.03239] d
Epoch = 134.5379 [6.0576] BKJD
Rp/R* = 0.0002 [0.0095]
a/R* = 1.94 [18.10]
b = 0.71 [13.28]
Seff = 3973.09 [1671.55]
Teff = 2024 [213] K
Rp = 0.04 [2.20] Re
a = 0.0480 [0.0122] AU
Ag = 9781.27 [1148942.73] [0.01 σ]
Teffp = 31128 [914113] K [0.03 σ]

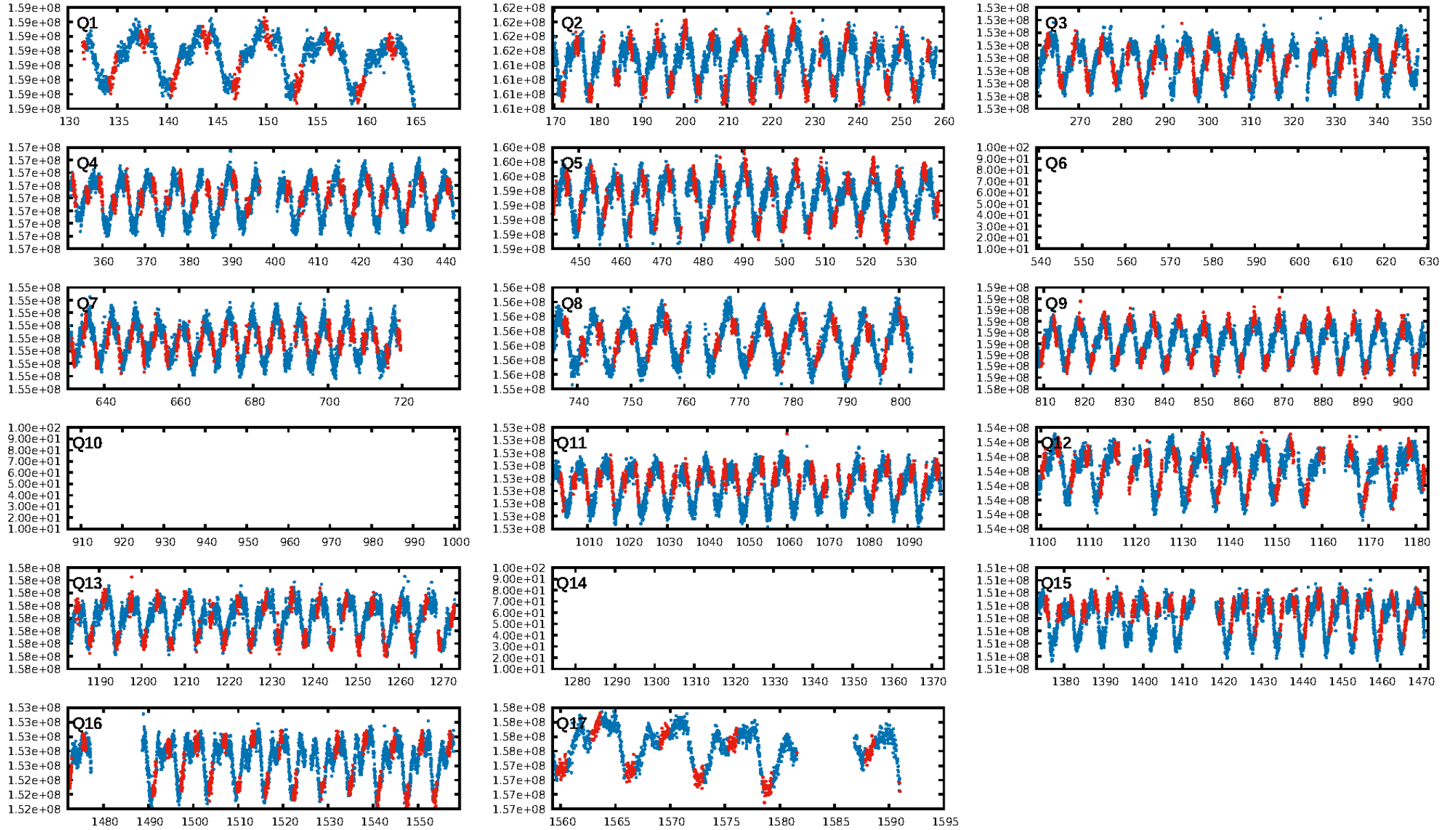
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.27e-10
RollingBand-fgt: 1.00 [327/327]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.626 arcsec [0.95 σ]
KicOffset-rm: 0.636 arcsec [0.87 σ]
OotOffset-st: 0/3/3/4 [10]
KicOffset-st: 0/3/3/4 [10]
DiffImageQuality-fgm: 0.40 [4/10]
DiffImageOverlap-fno: 1.00 [14/14]

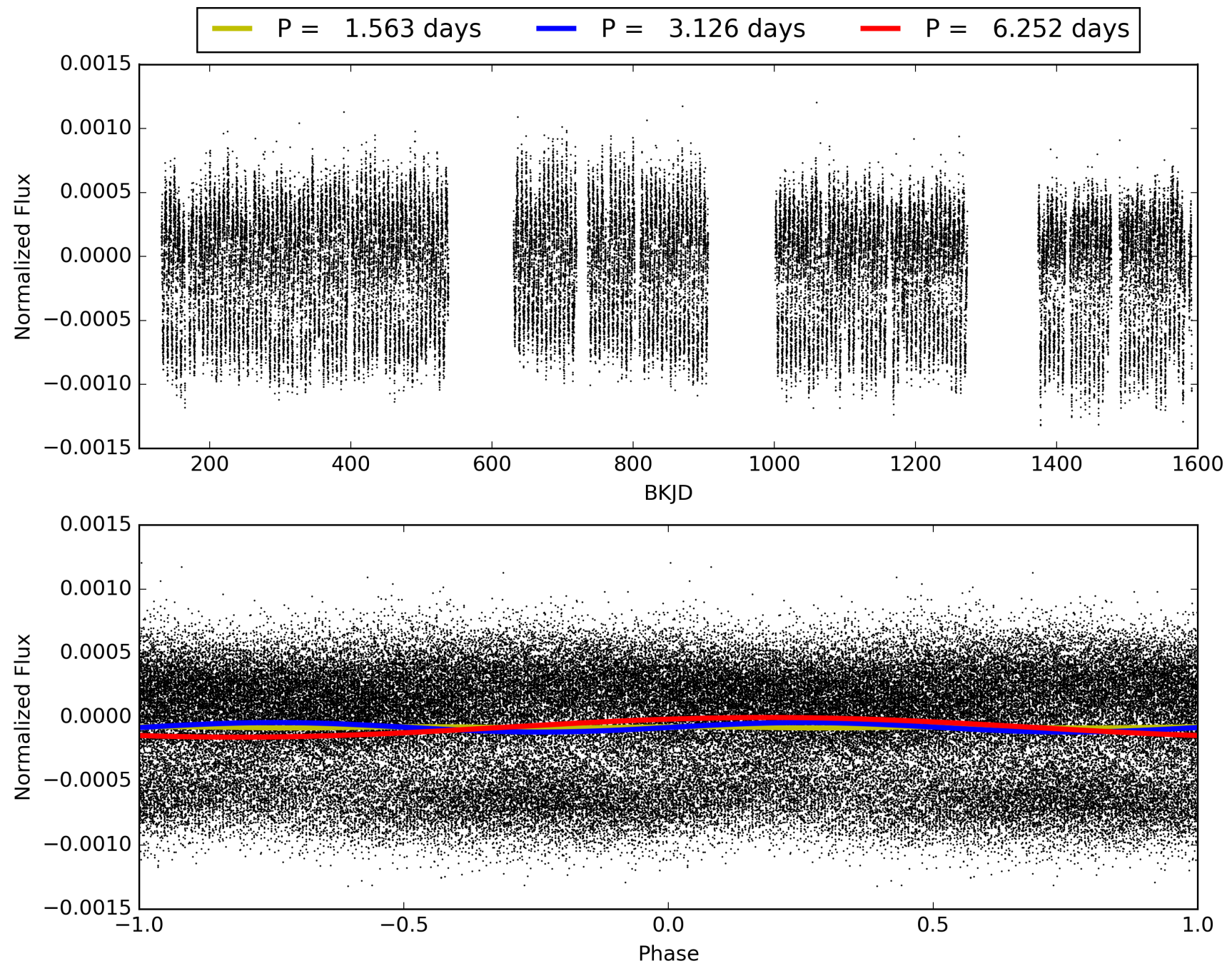
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:00:41 Z

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

TCE 004927192-01, PDC Light Curves

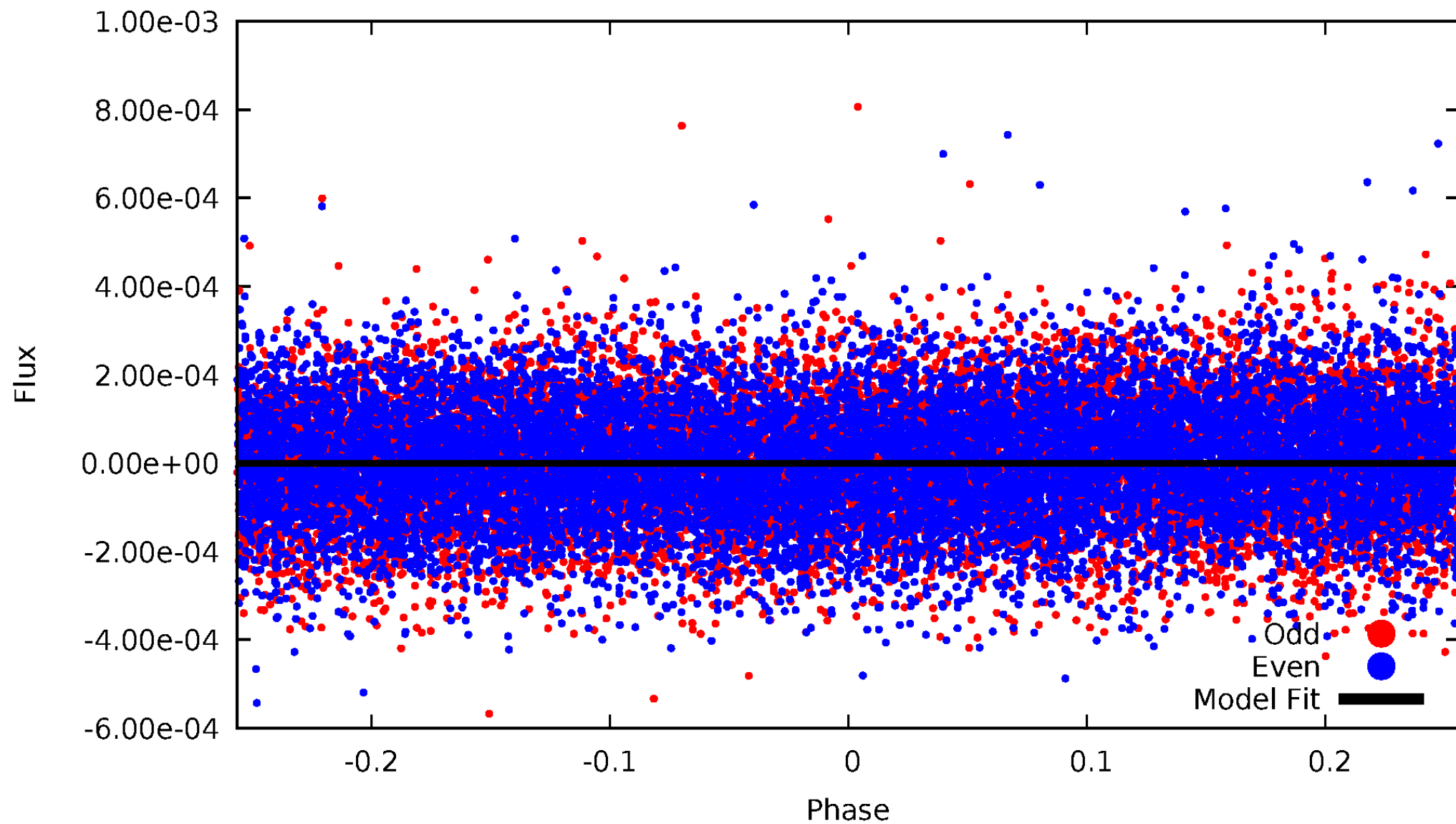


TCE 004927192-01



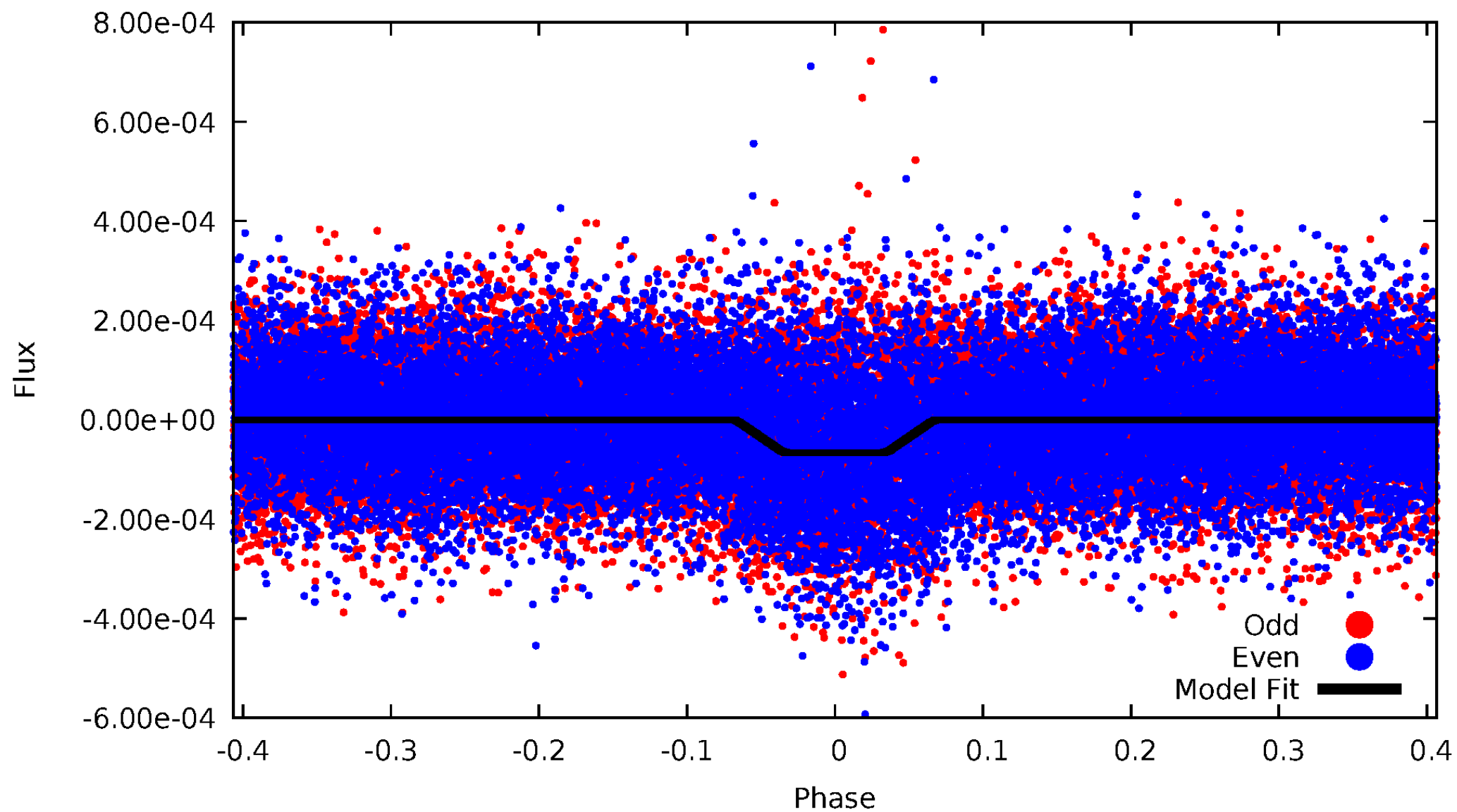
DV Odd/Even

TCE 004927192-01

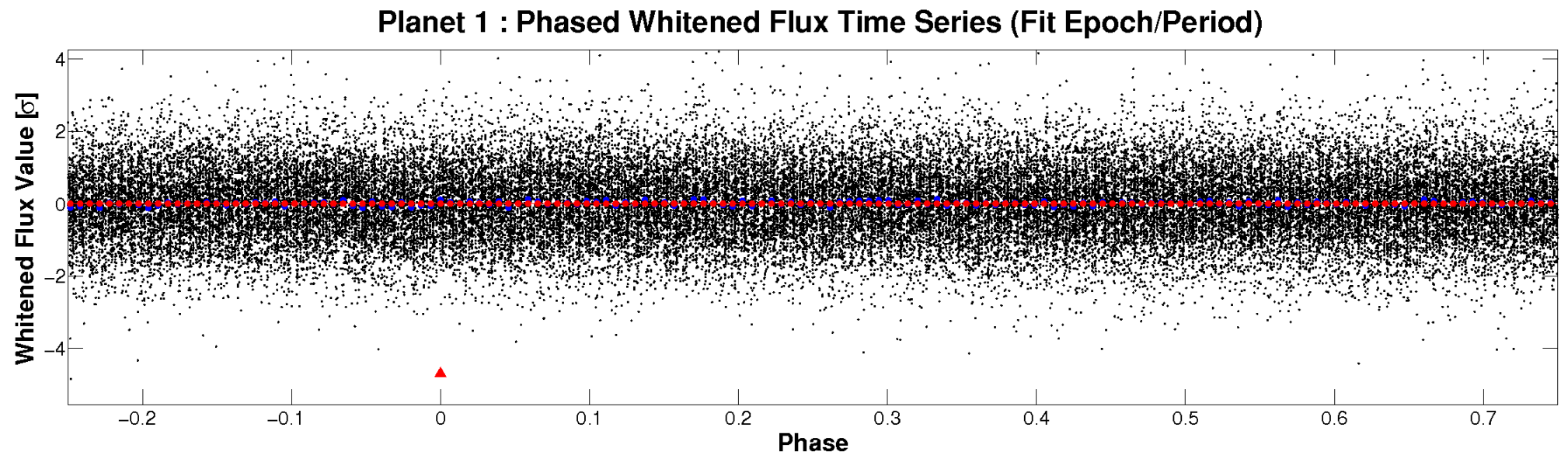
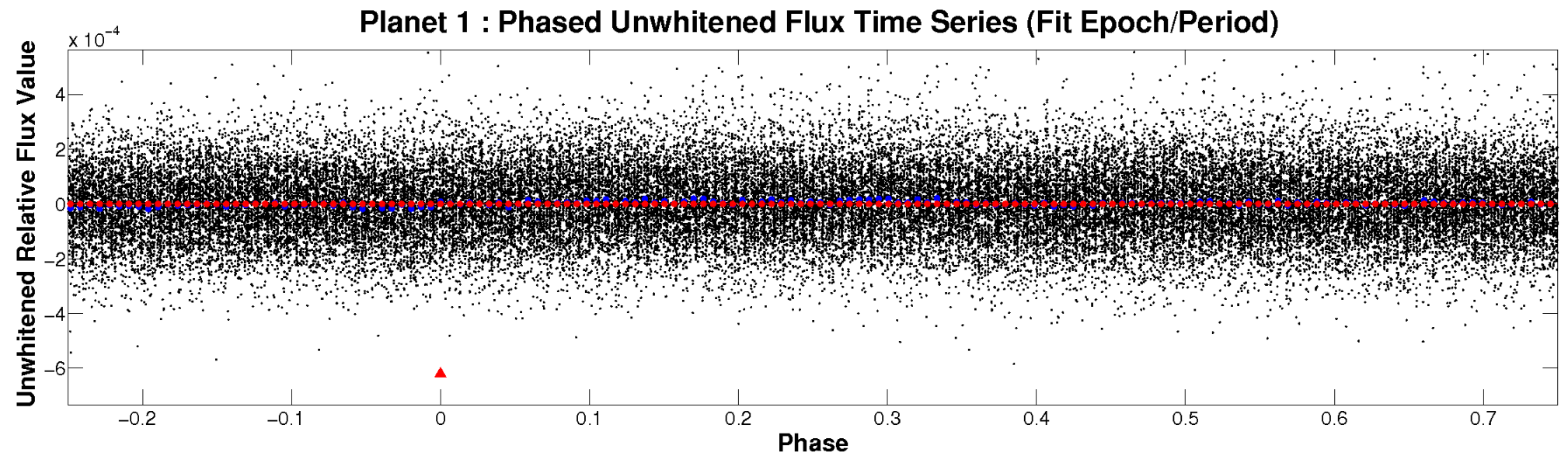


ALT Odd/Even

TCE 004927192-01

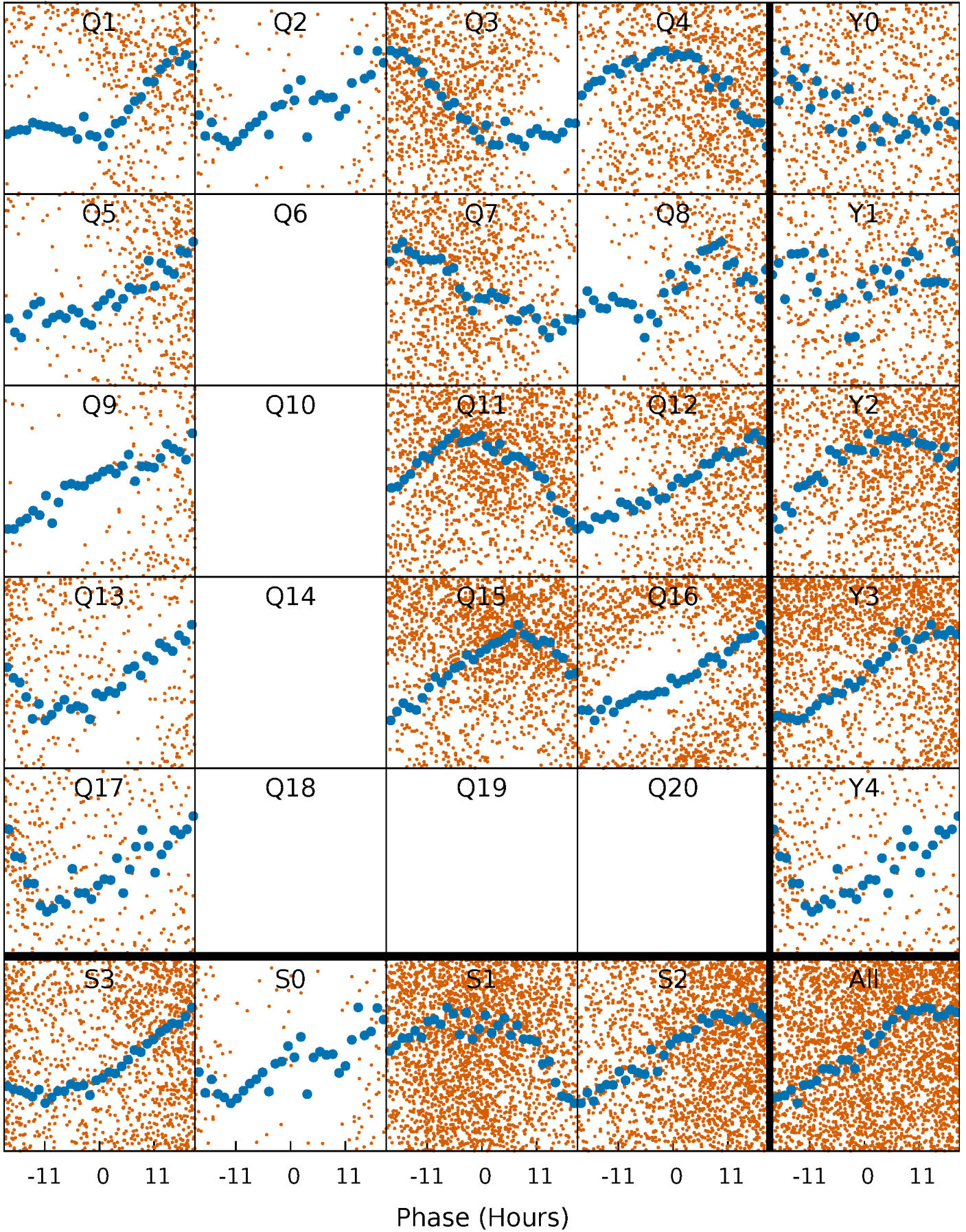


Non-Whitened Vs. Whitened Light Curve



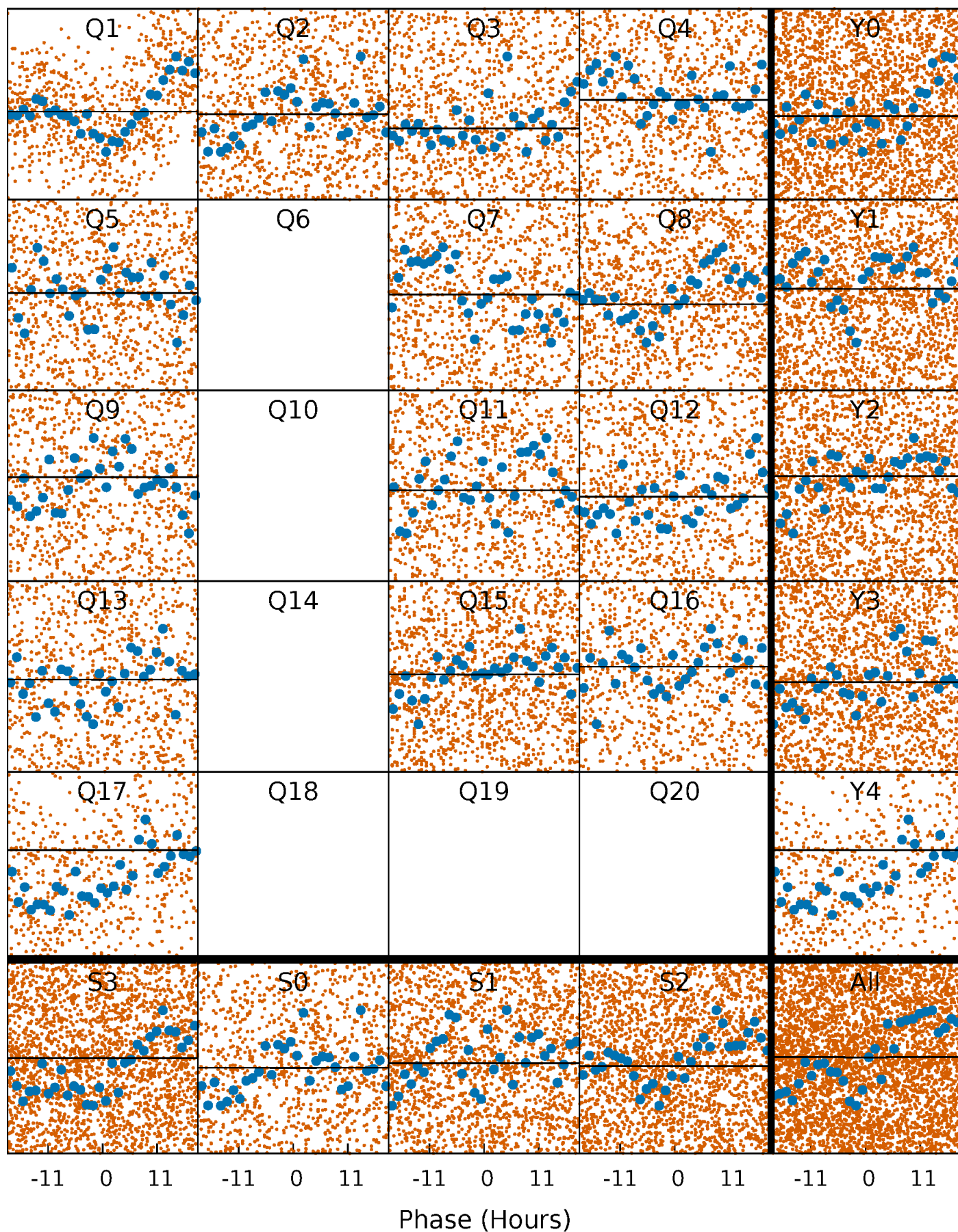
PDC Quarter-Phased Transit Curves

TCE 004927192-01 P= 3.126222 Days $T_0=134.537863$ (BKJD)



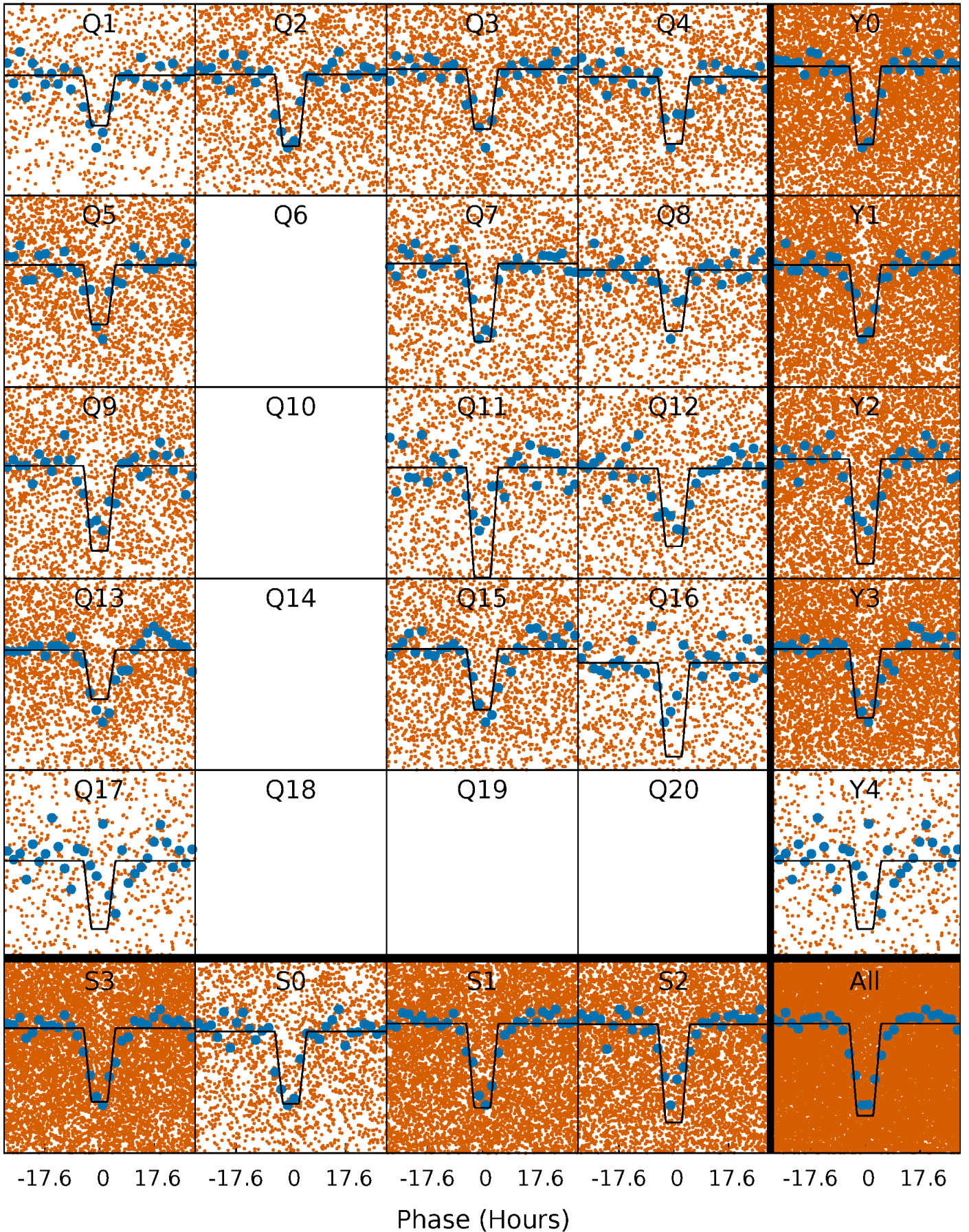
DV Quarter-Phased Transit Curves

TCE 004927192-01 $P = 3.126222$ Days $T_0 = 134.537863$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

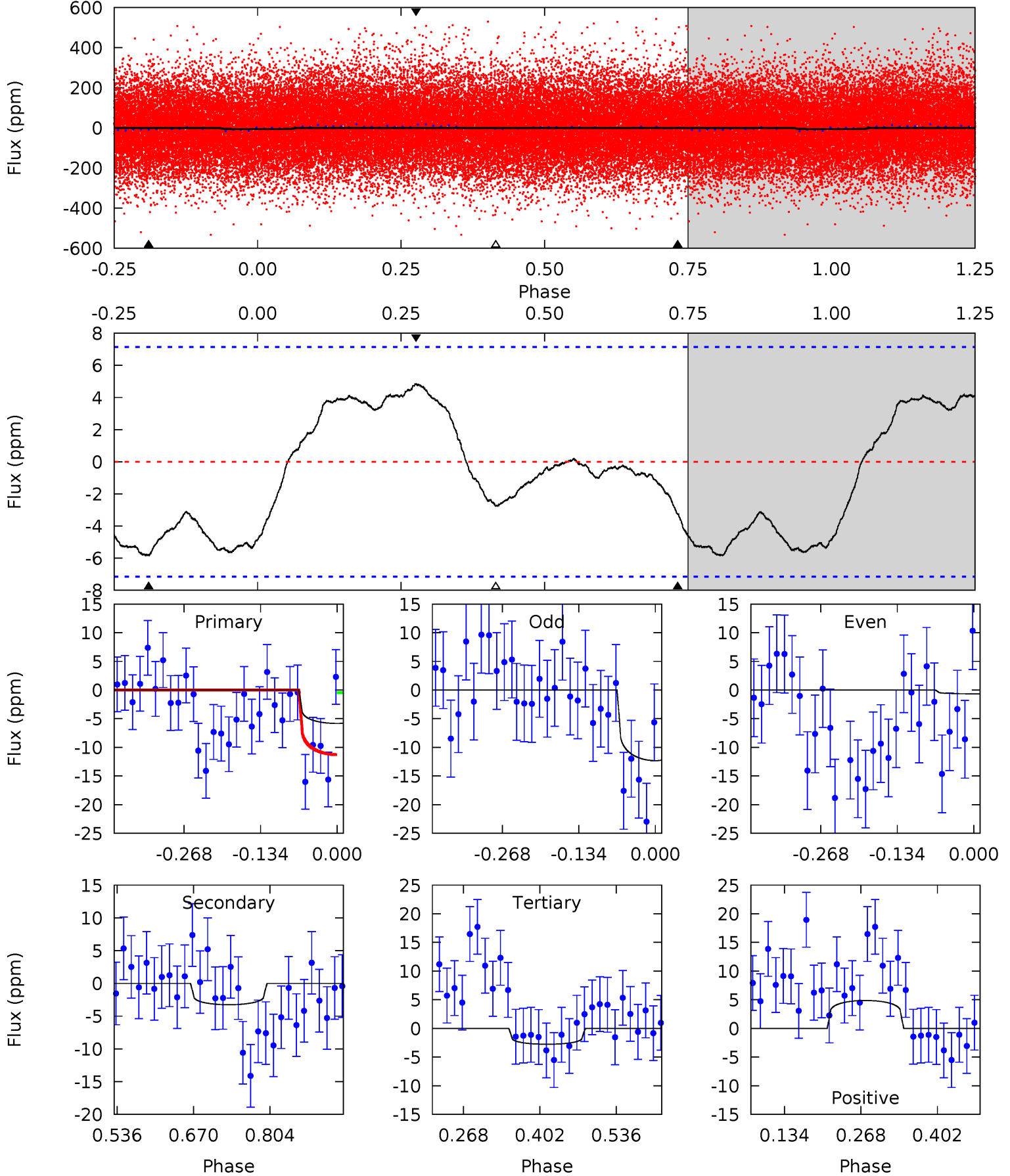
TCE 004927192-01 P= 3.155872 Days $T_0=134.532334$ (BKJD)



DV Model-Shift Uniqueness Test

004927192-01, P = 3.126222 Days, E = 131.411641 Days

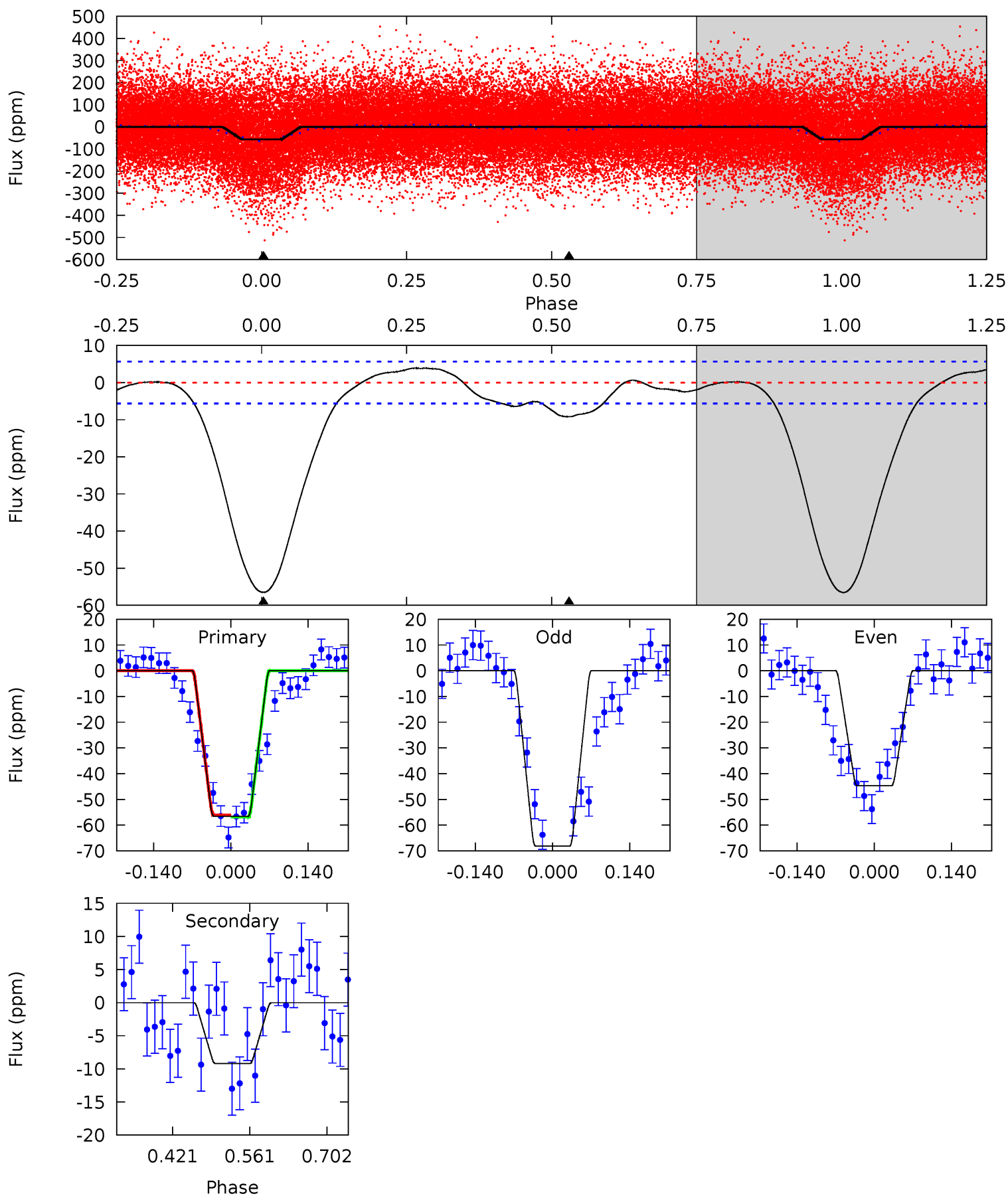
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.67	2.05	1.74	3.07	4.50	1.50	1.92	1.93	0.60	0.31	-1.02	3.74	0.85	0.46	3.46



Alt Model-Shift Uniqueness Test

004927192-01, P = 3.155872 Days, E = 131.376462 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
45.0	7.32	0	0	4.49	1.47	1.83	45.0	45.0	7.32	7.32	9.33	0.99	0.06	0.34



Stellar Parameters For KIC 004927192

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6902^{+184}_{-245}	$3.963^{+0.228}_{-0.123}$	$-0.140^{+0.300}_{-0.300}$	$2.121^{+0.481}_{-0.588}$	$1.506^{+0.183}_{-0.275}$	$0.222^{+0.308}_{-0.083}$
	+3%/-4%	+6%/-3%	+214%/-214%	+23%/-28%	+12%/-18%	+139%/-37%
Source	PHO1	FLK73	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 004927192-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3 ± 2	$1.39^{+1.70}_{-0.99}$	2784^{+172}_{-212}	3756^{+2755}_{-1389}	$1.876^{+19.961}_{-1.523}$
Alt.	-9 ± 1	$2.33^{+1.97}_{-1.51}$	2756^{+193}_{-202}	3867^{+2104}_{-868}	$2.078^{+13.513}_{-1.439}$

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

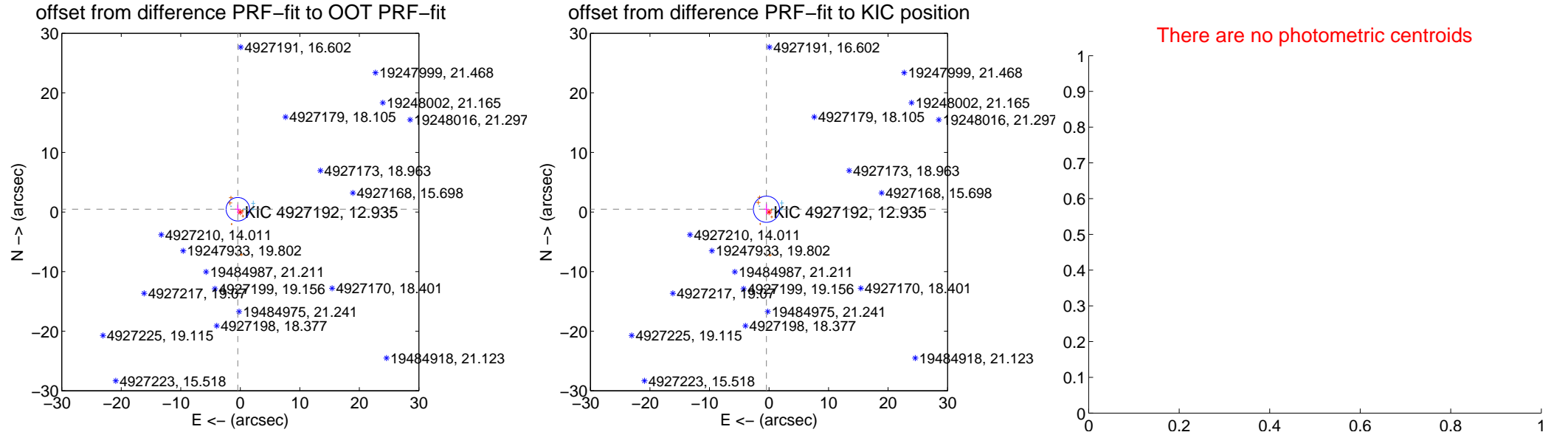
DV Centroid Data

Supplemental centroid analysis for 004927192-01. Kepler magnitude: 12.94. Transit SNR 0.01

There are 4 quarters with good PRF difference image offsets

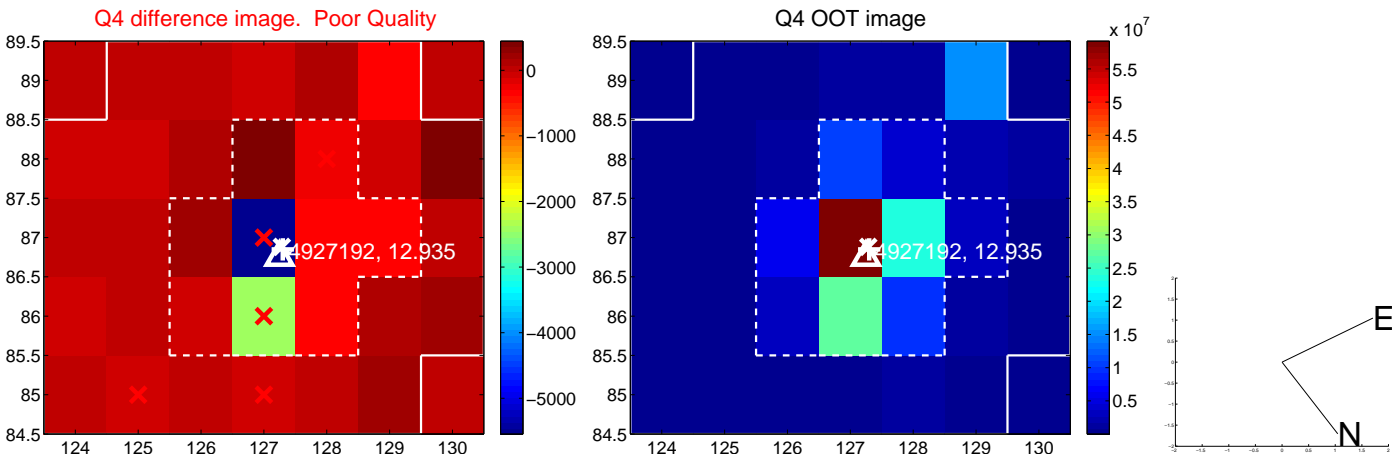
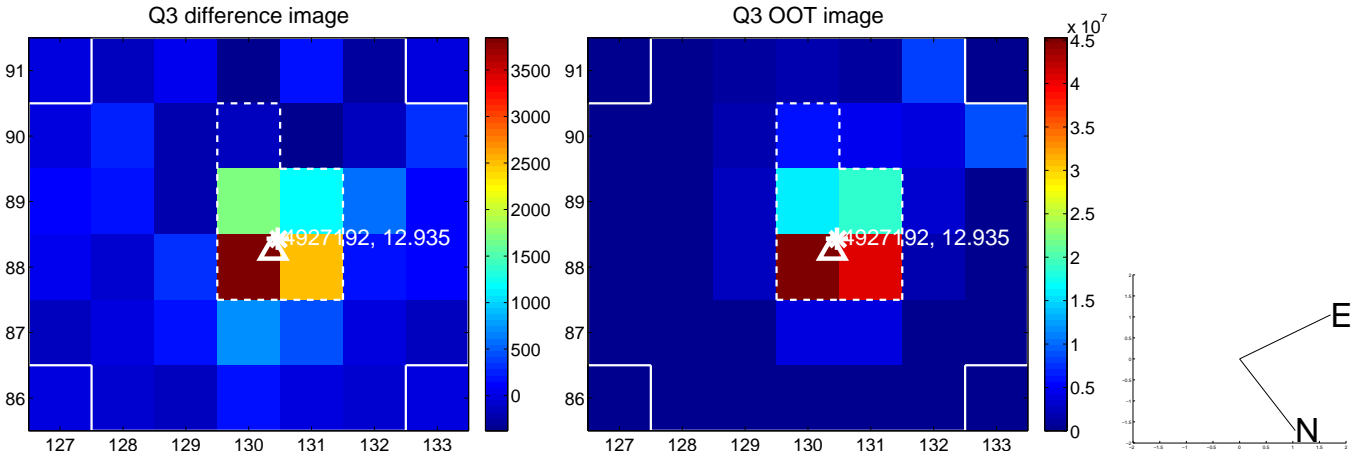
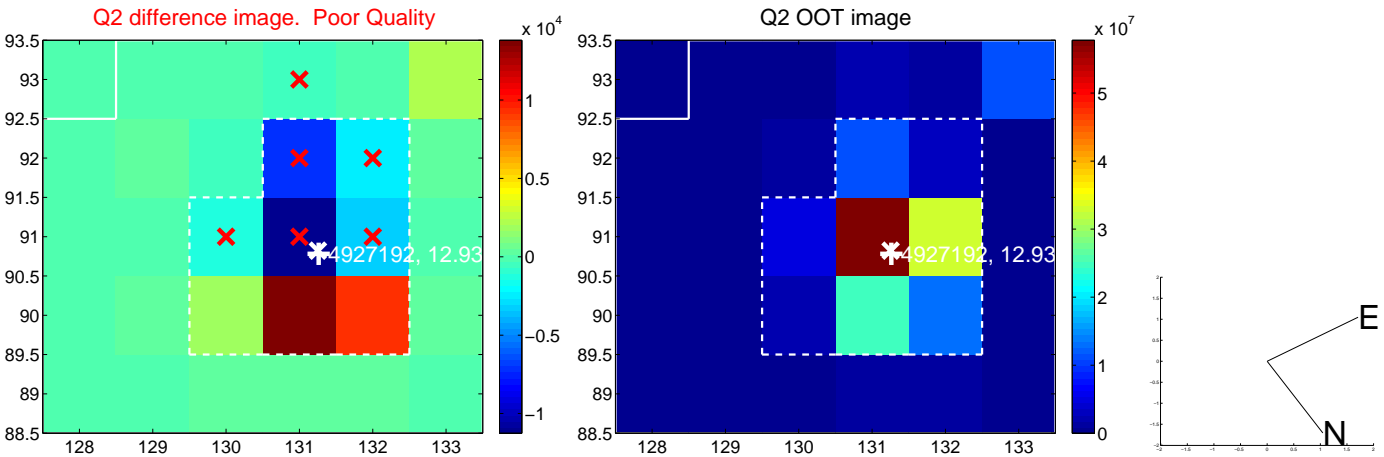
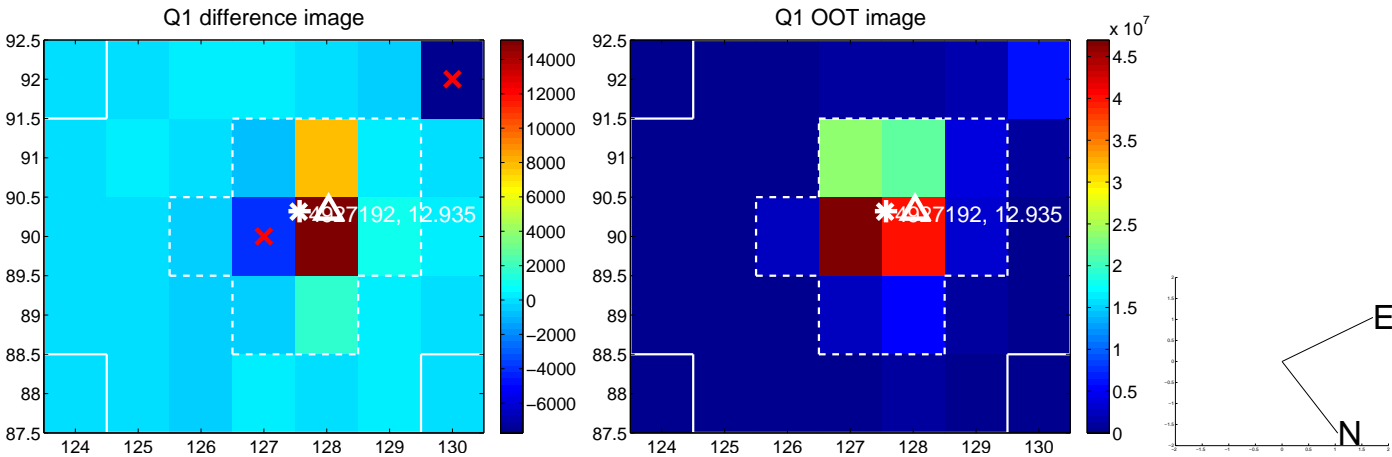
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.626 ± 0.657	0.95	0.414 ± 0.442	0.469 ± 0.755
PRF-fit source offset from KIC position	0.636 ± 0.733	0.87	0.428 ± 0.412	0.470 ± 0.865
photometric centroid source offset	—	—	—	—

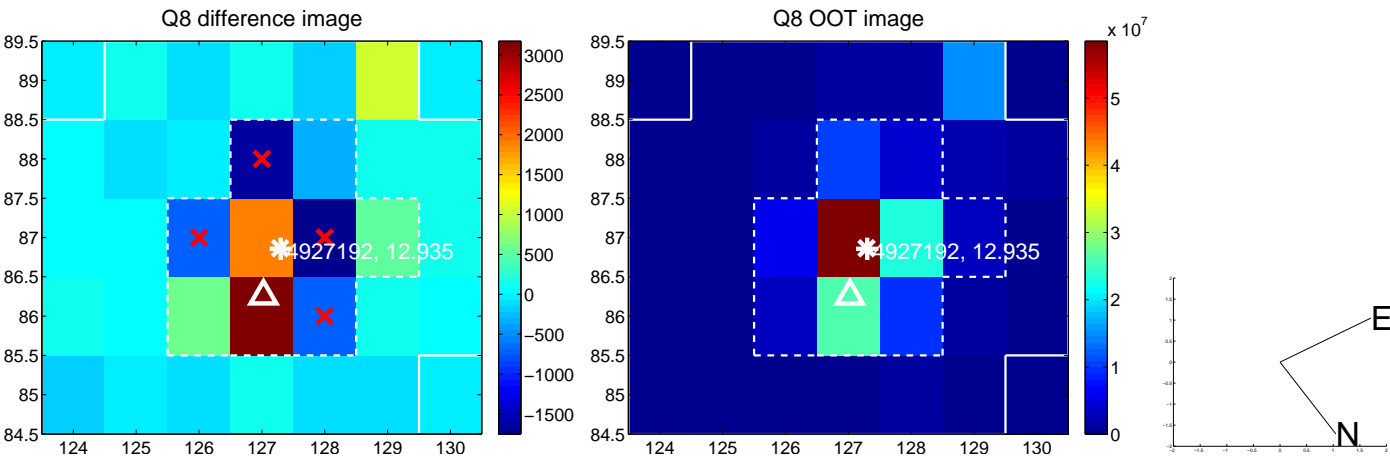
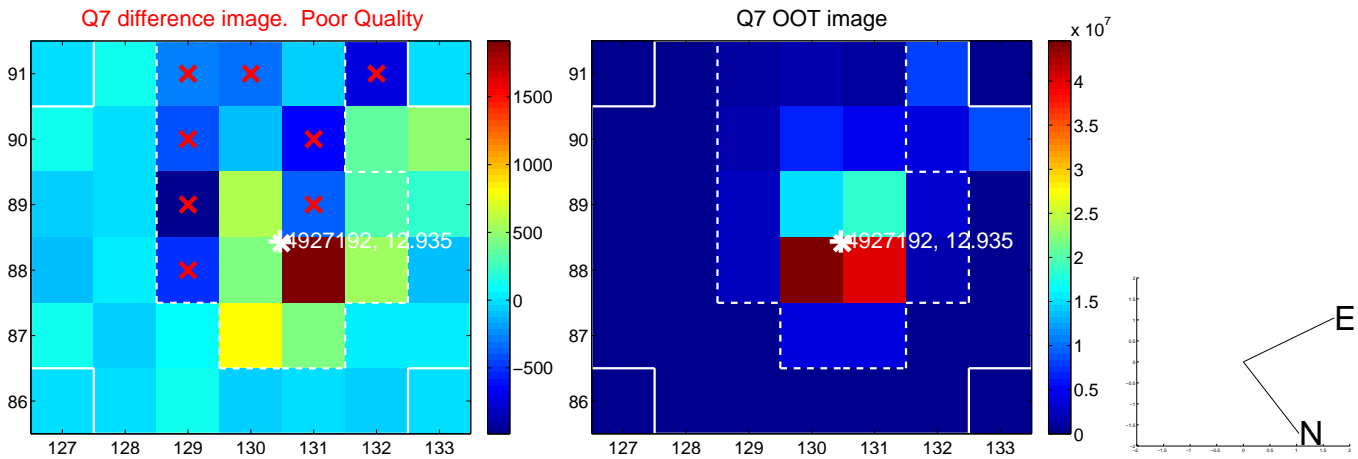
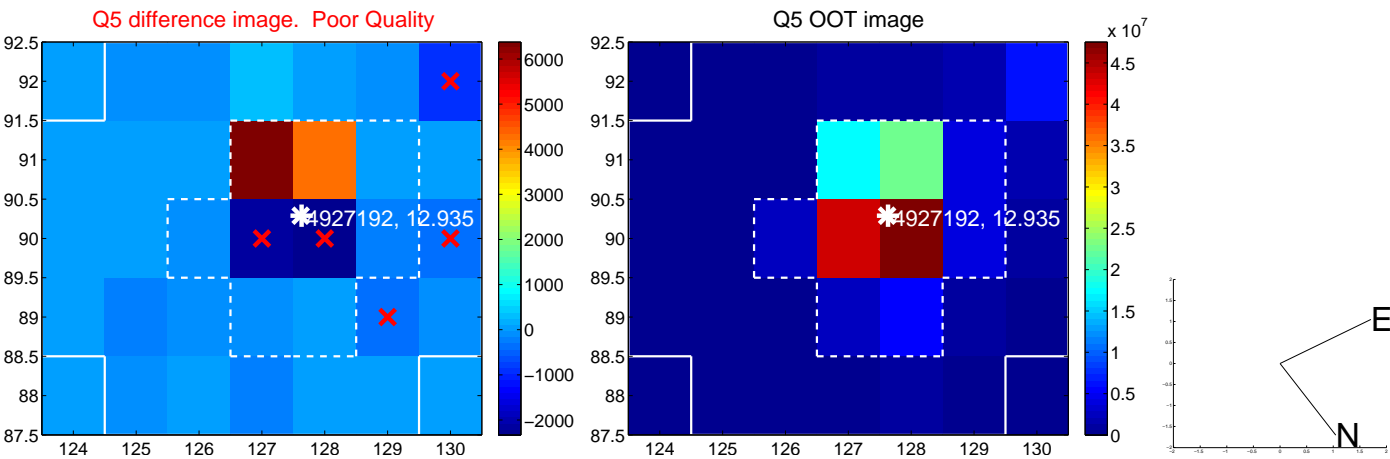


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

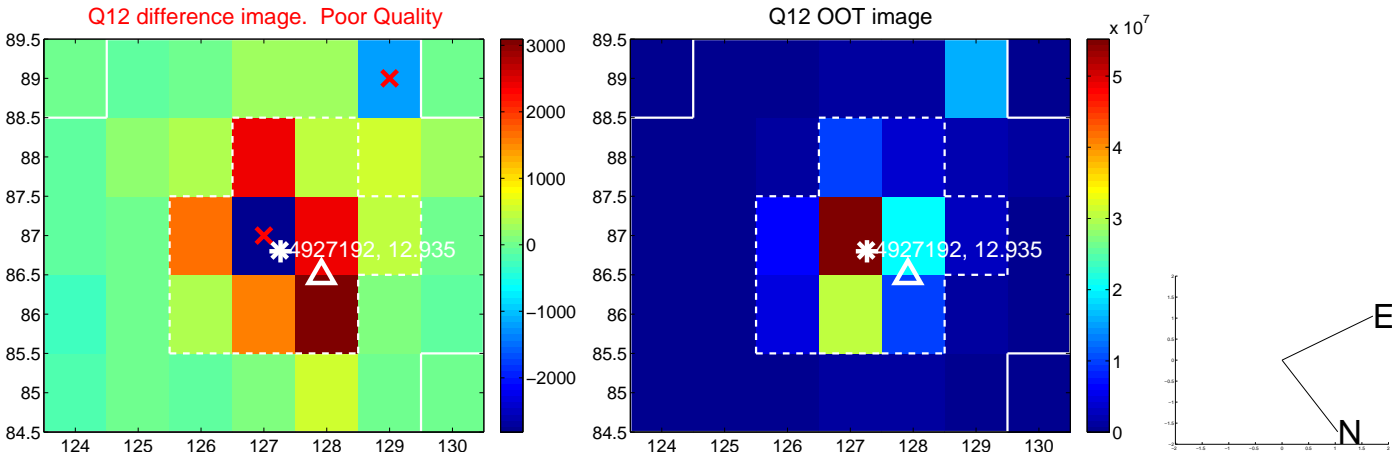
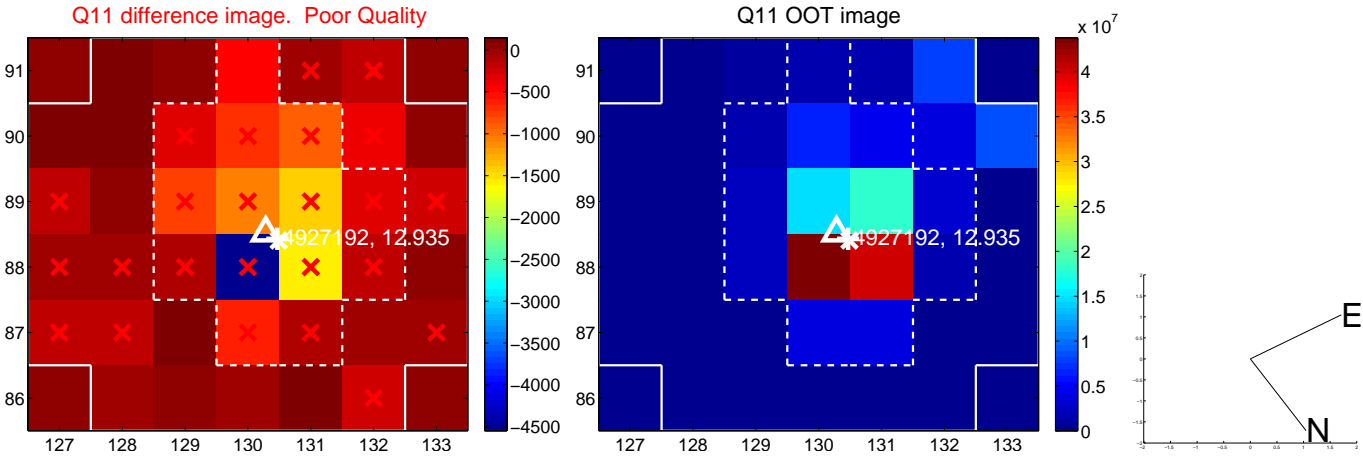
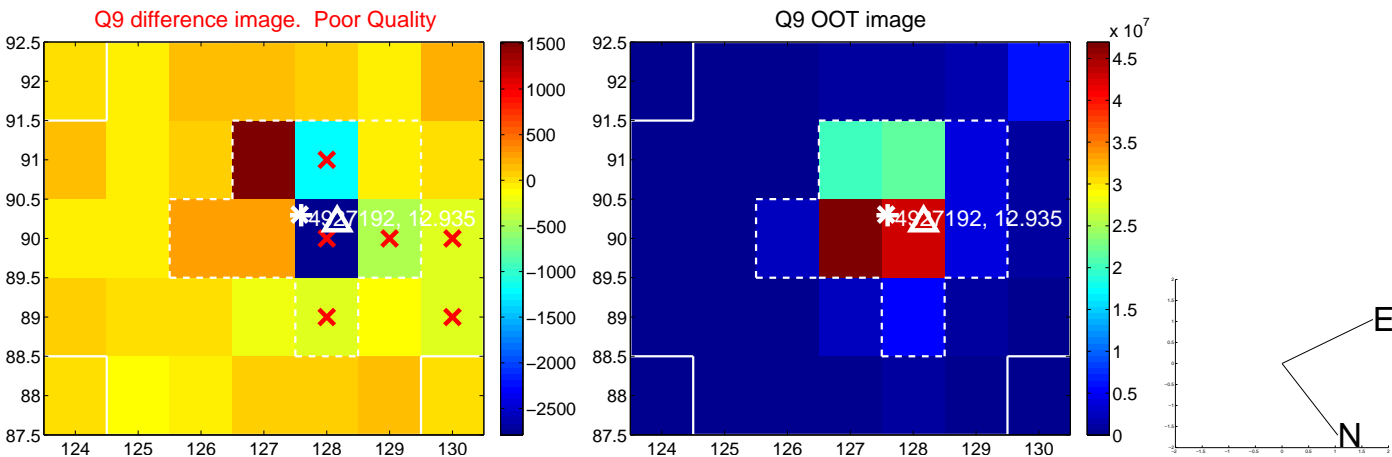
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



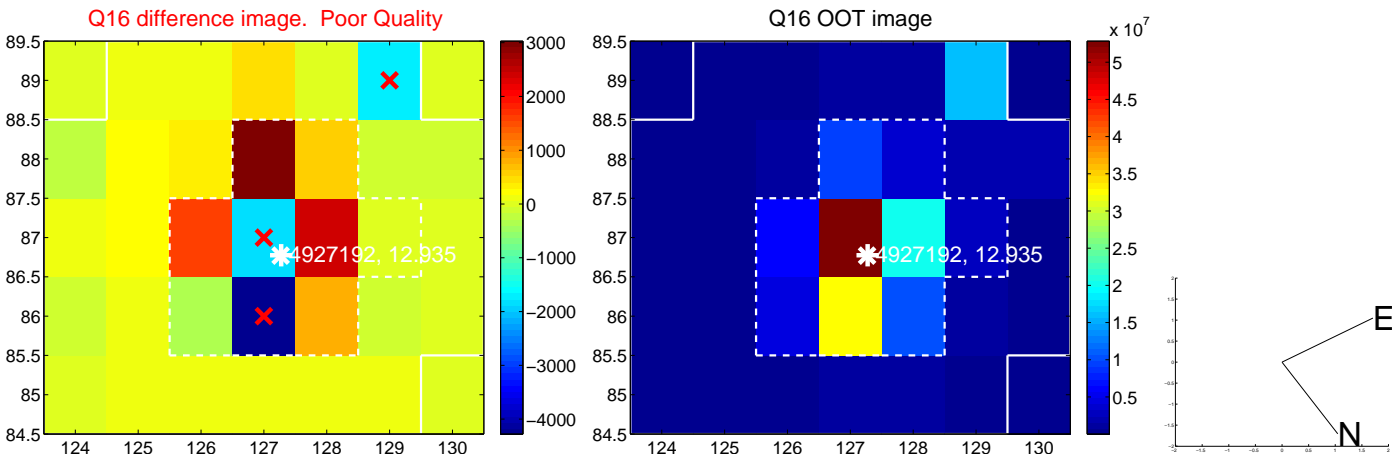
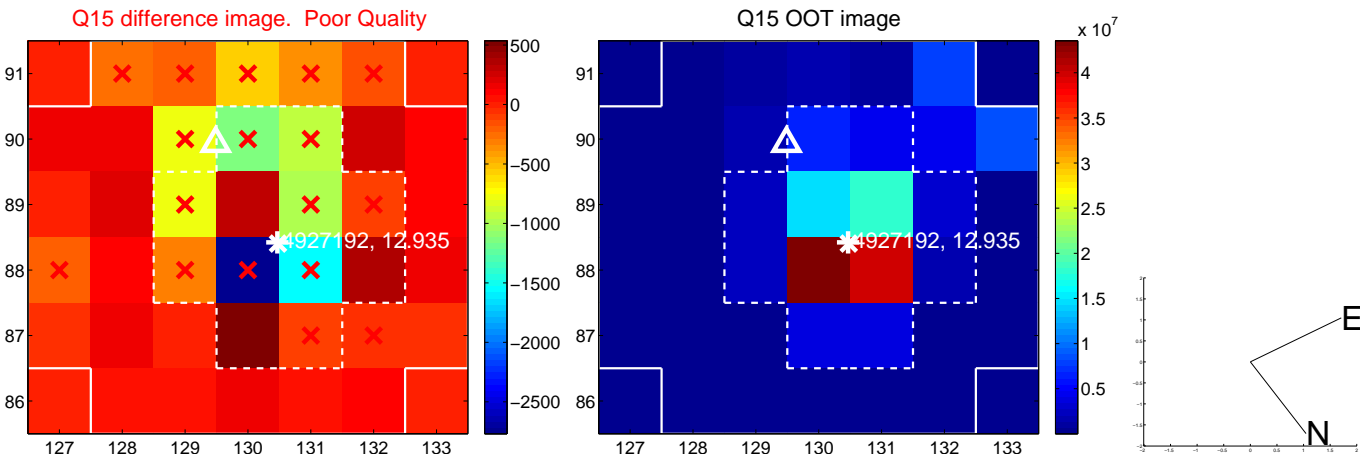
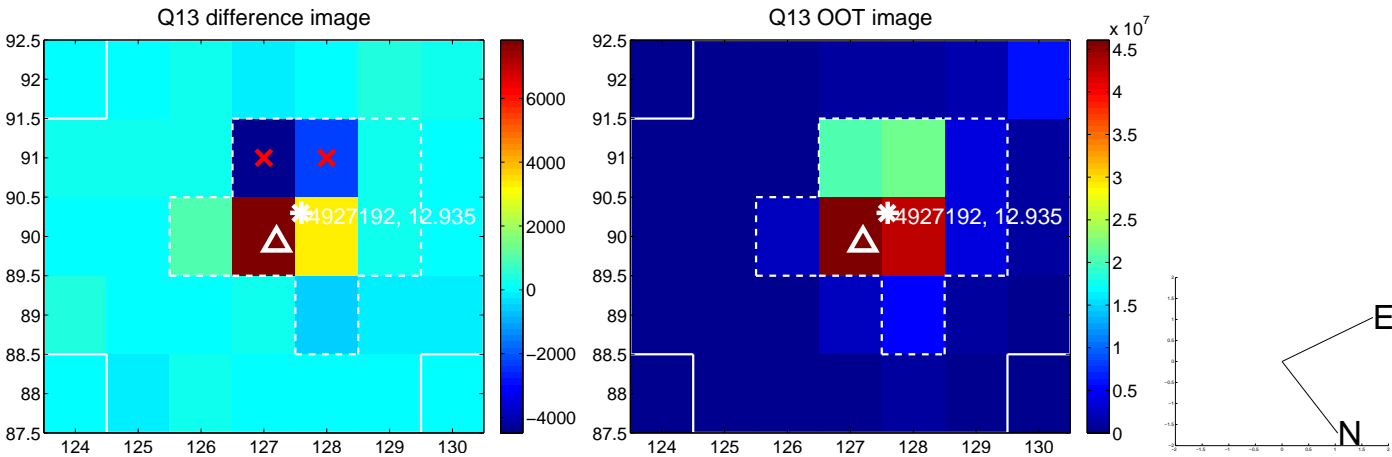
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



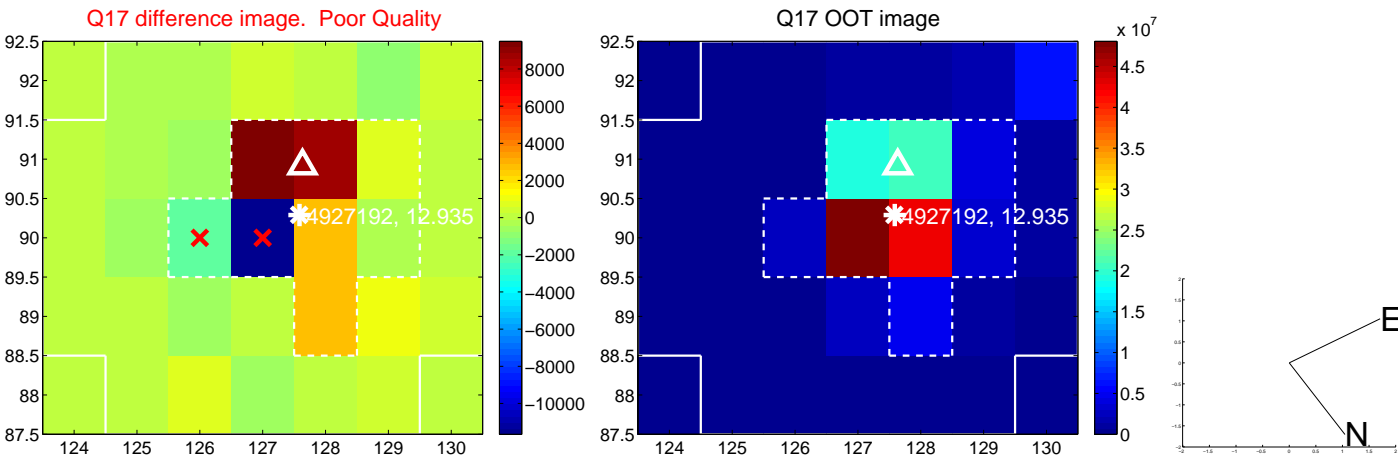
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

