

KIC 011127479

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})
011127479-01	OBS	2792.01	2.128214	132.481139	25.7	3.267	17.6	18.6	1.38	5952	0.81	1834.35

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011127479-01	OBS	PC	1.00	0	0	0	0	CENT_SATURATED

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 011127479-01

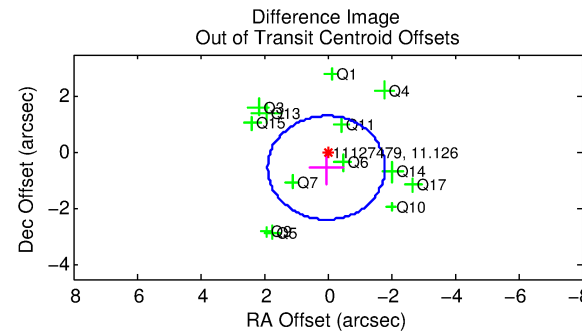
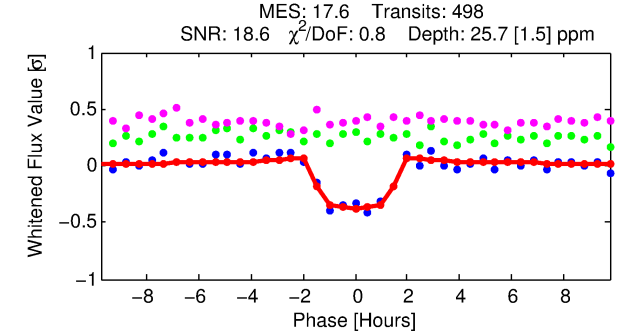
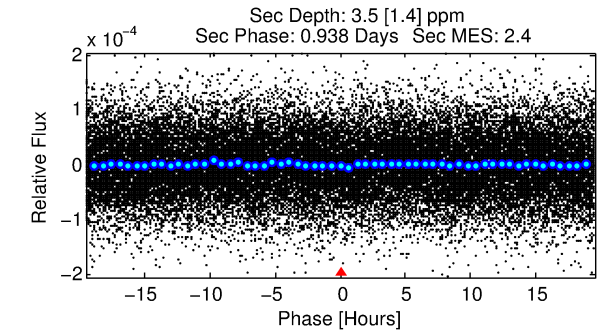
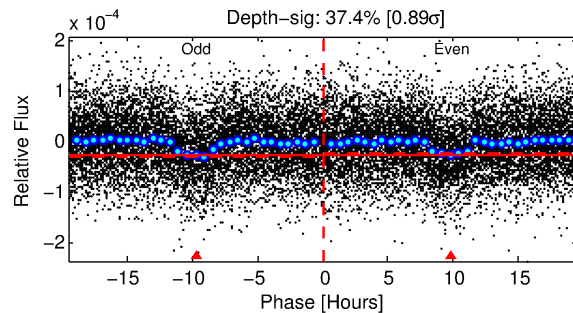
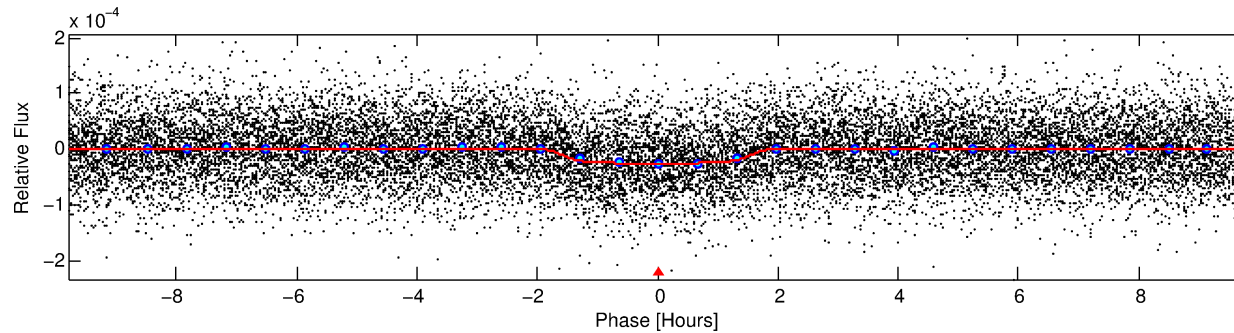
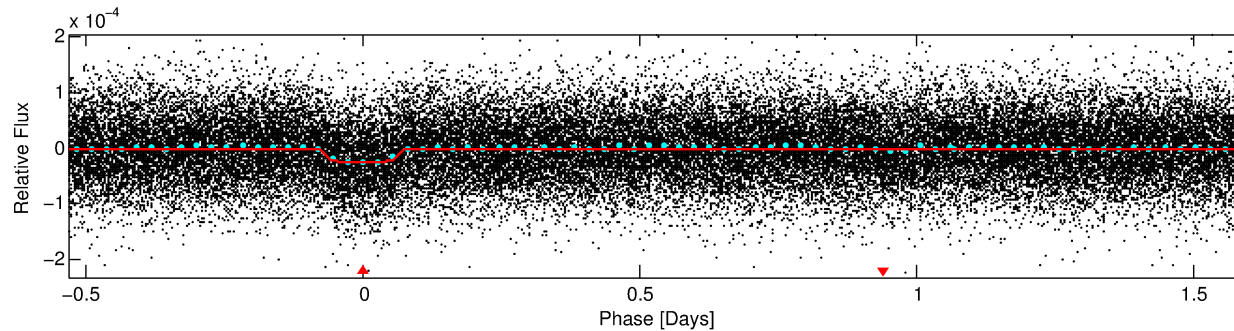
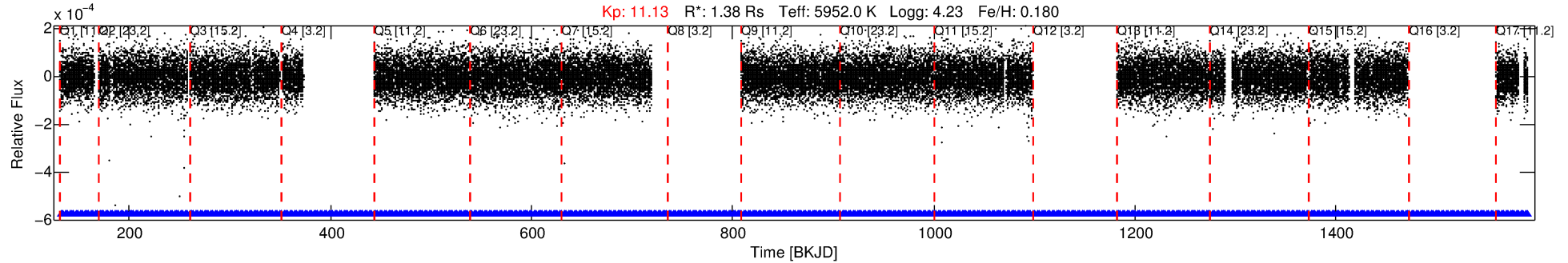
No Significant Match Found

DV One-Page Summary

KIC: 11127479 Candidate: 1 of 1 Period: 2.128 d

KOI: K02792.01 Corr: 0.967

Kp: 11.13 R*: 1.38 Rs Teff: 5952.0 K Logg: 4.23 Fe/H: 0.180



DV Fit Results:

Period = 2.12821 [0.00001] d
Epoch = 132.4811 [0.0020] BKJD
Rp/R* = 0.0054 [0.0010]
a/R* = 2.70 [1.98]
b = 0.87 [0.25]
Seff = 1834.35 [124.62]
Teq = 1669 [28] K
Rp = 0.81 [0.15] Re
a = 0.0341 [0.0011] AU
Ag = 3.42 [1.83] [1.32σ]
Teffp = 3509 [470] K [3.91σ]

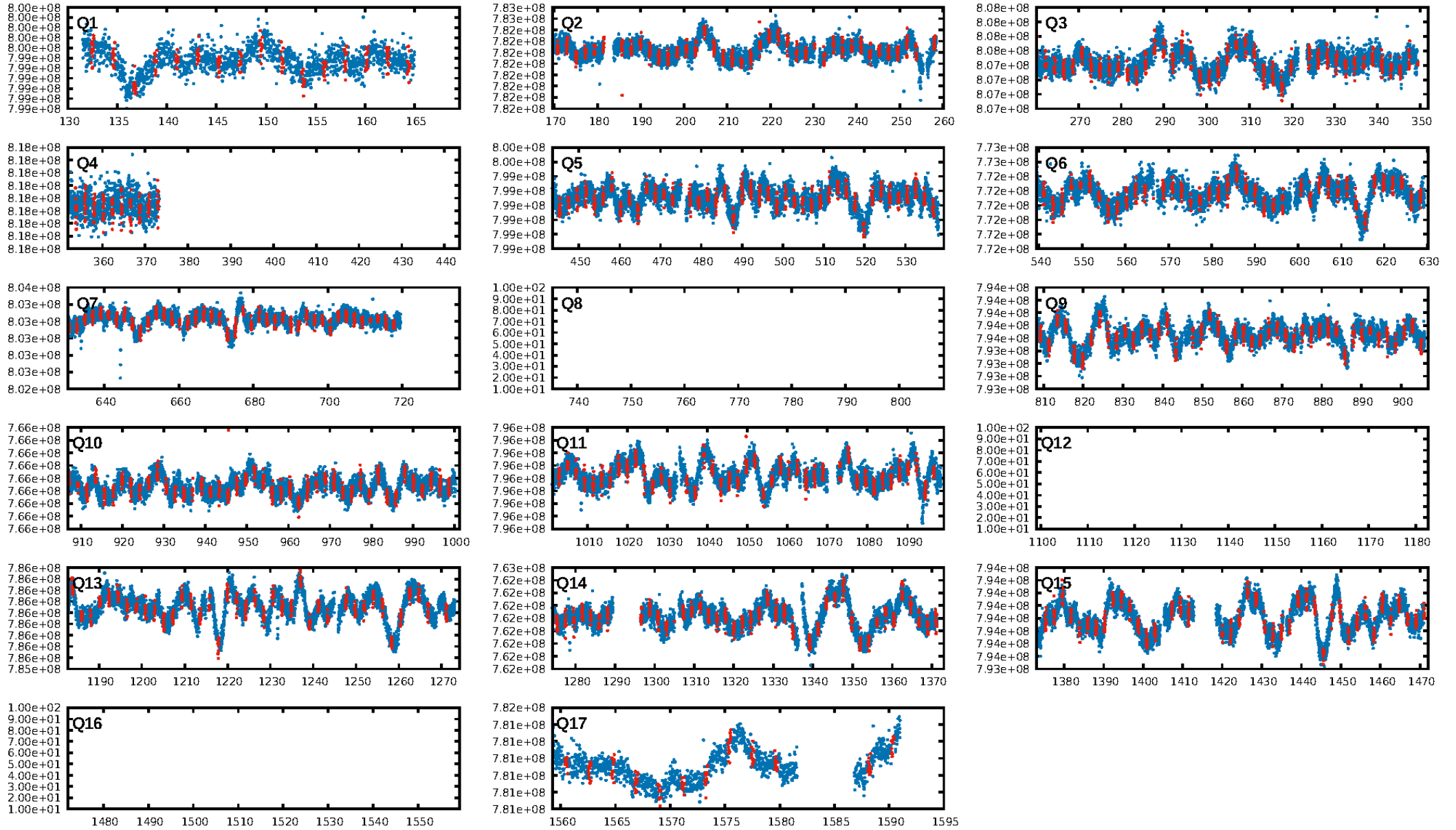
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.33e-62
RollingBand-fgt: 1.00 [460/460]
GhostDiagnostic-chr: 5.438
Centroid-sig: 0.2%
Centroid-so: 1.583 arcsec [2.68σ]
OotOffset-rm: 0.539 arcsec [0.88σ]
KicOffset-rm: 0.330 arcsec [0.60σ]
OotOffset-st: 3/4/1/5 [13]
KicOffset-st: 3/4/1/5 [13]
DiffImageQuality-fgm: 0.77 [10/13]
DiffImageOverlap-fno: 1.00 [14/14]

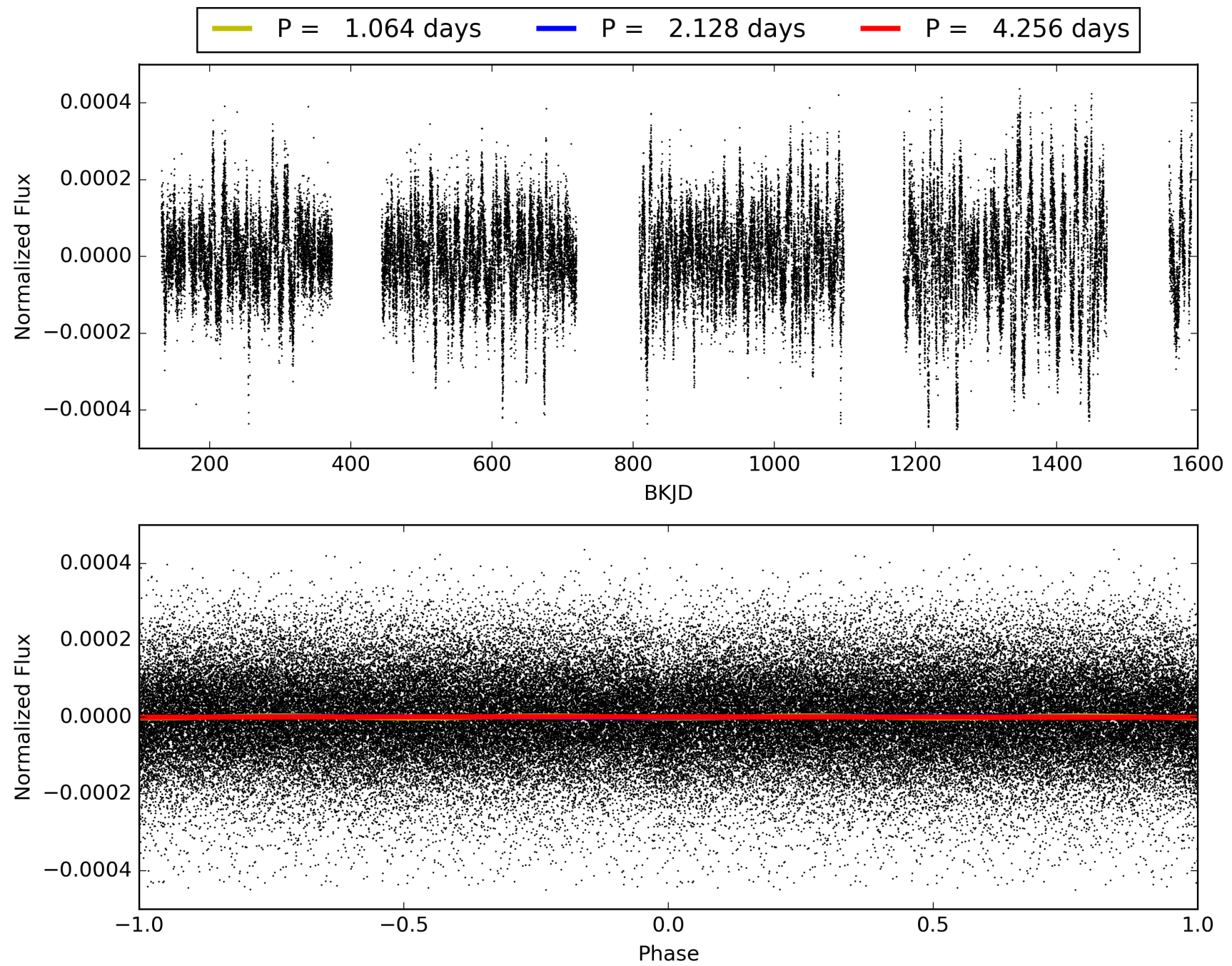
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:08:58 Z

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

TCE 011127479-01, PDC Light Curves

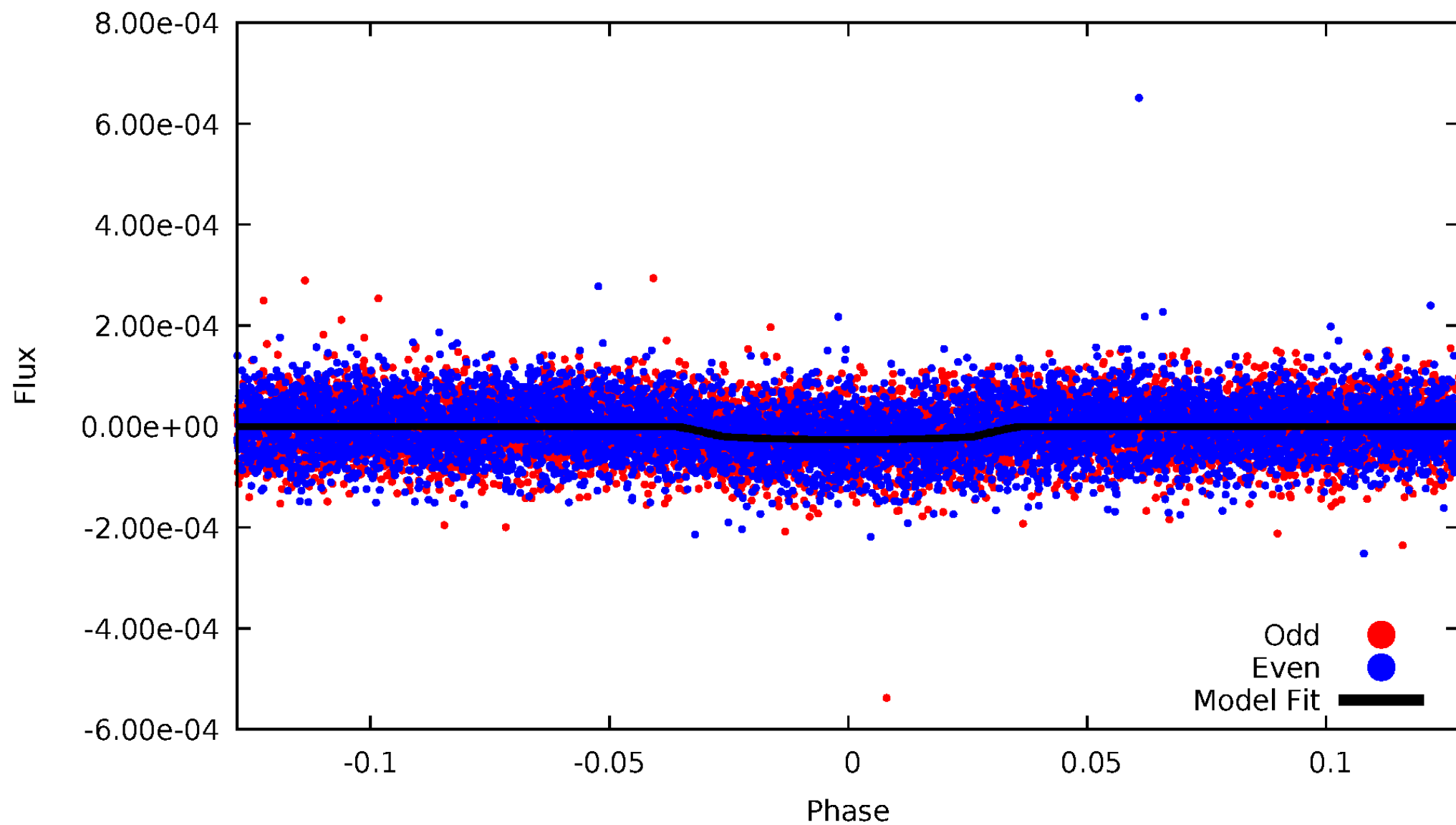


TCE 011127479-01



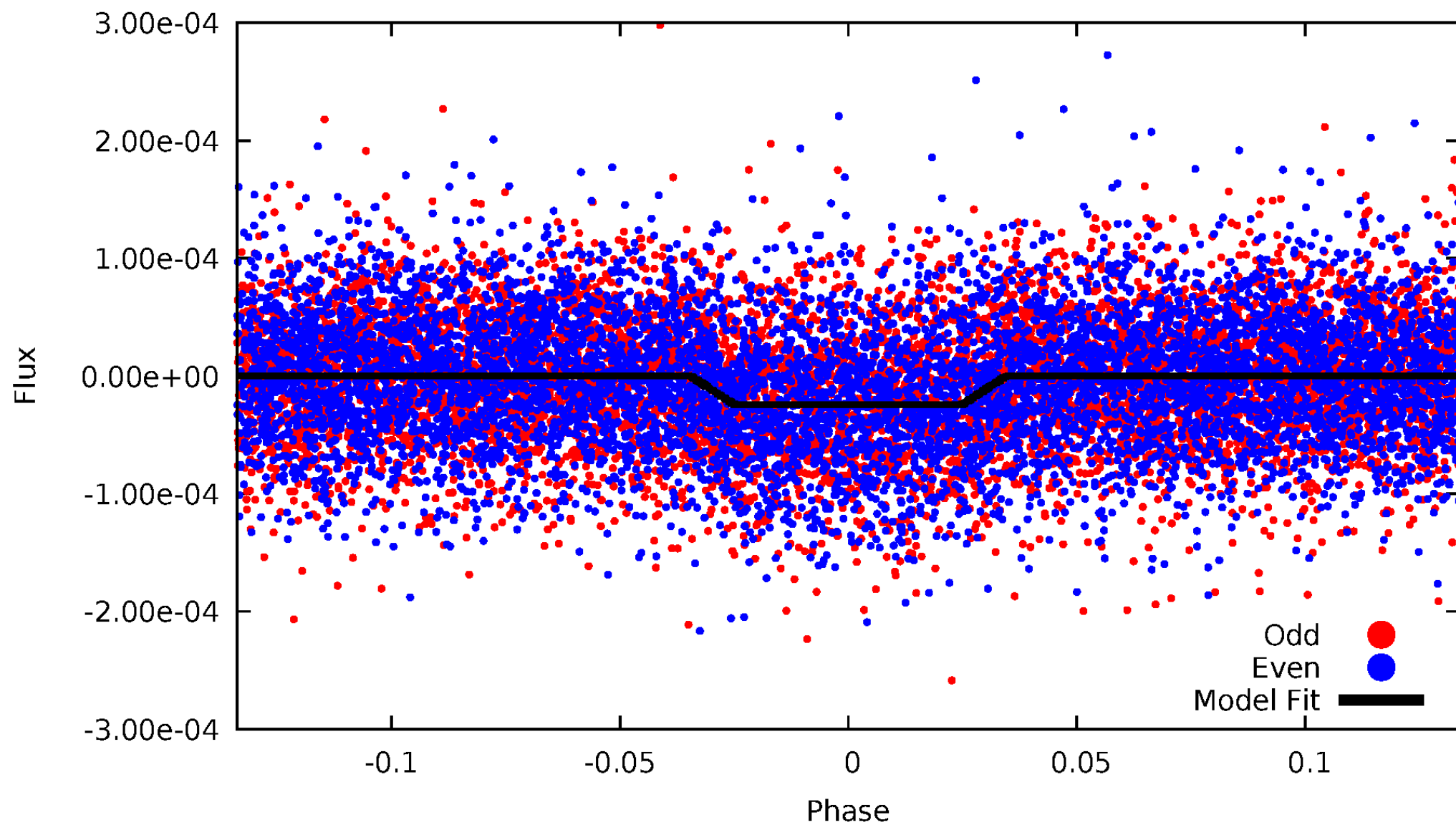
DV Odd/Even

TCE 011127479-01



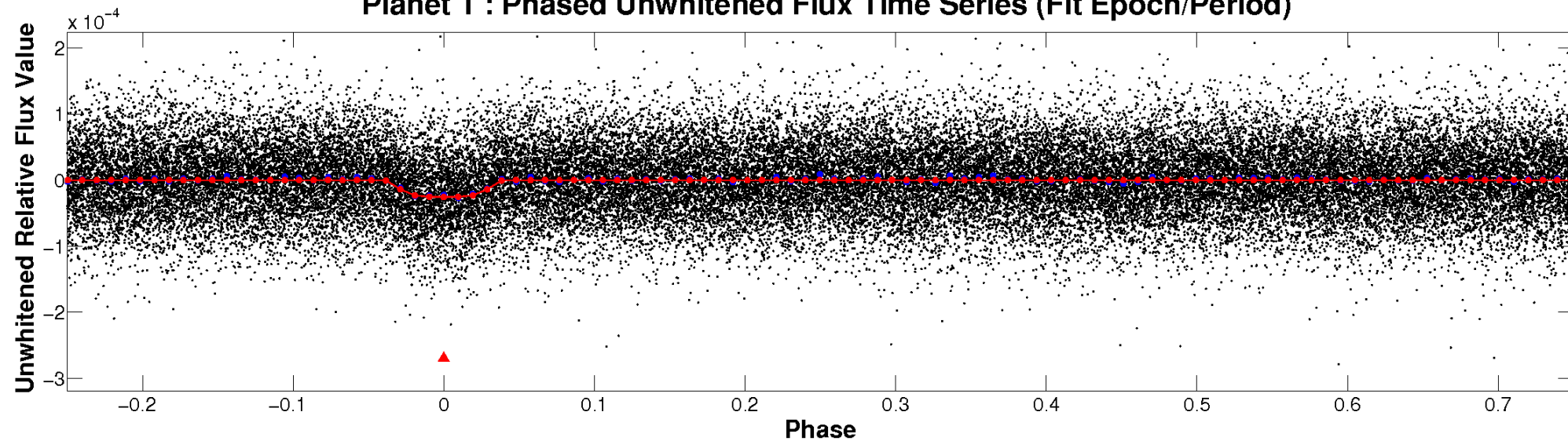
ALT Odd/Even

TCE 011127479-01

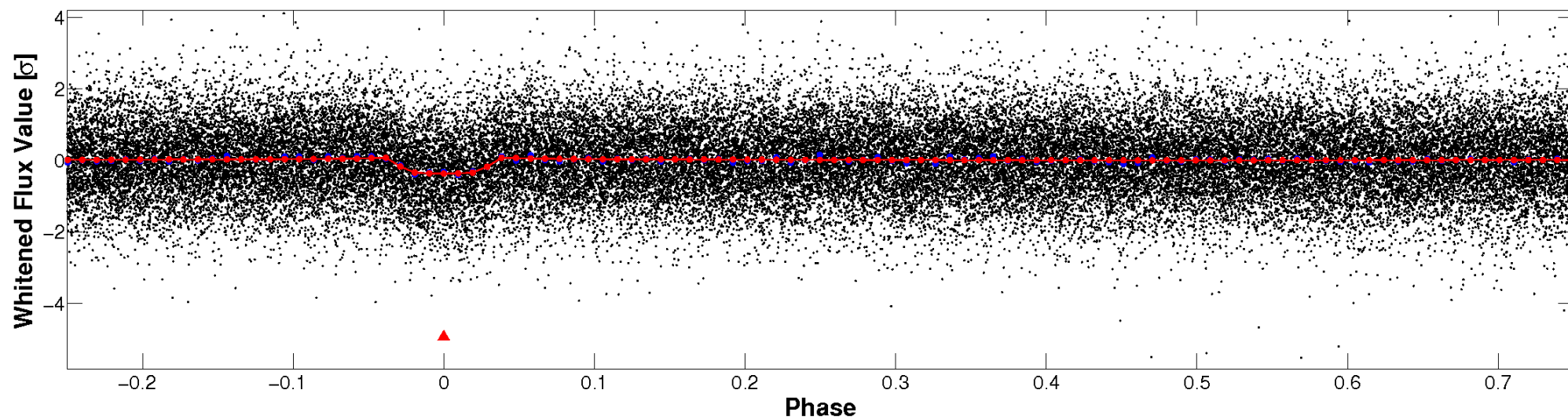


Non-Whitened Vs. Whitened Light Curve

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

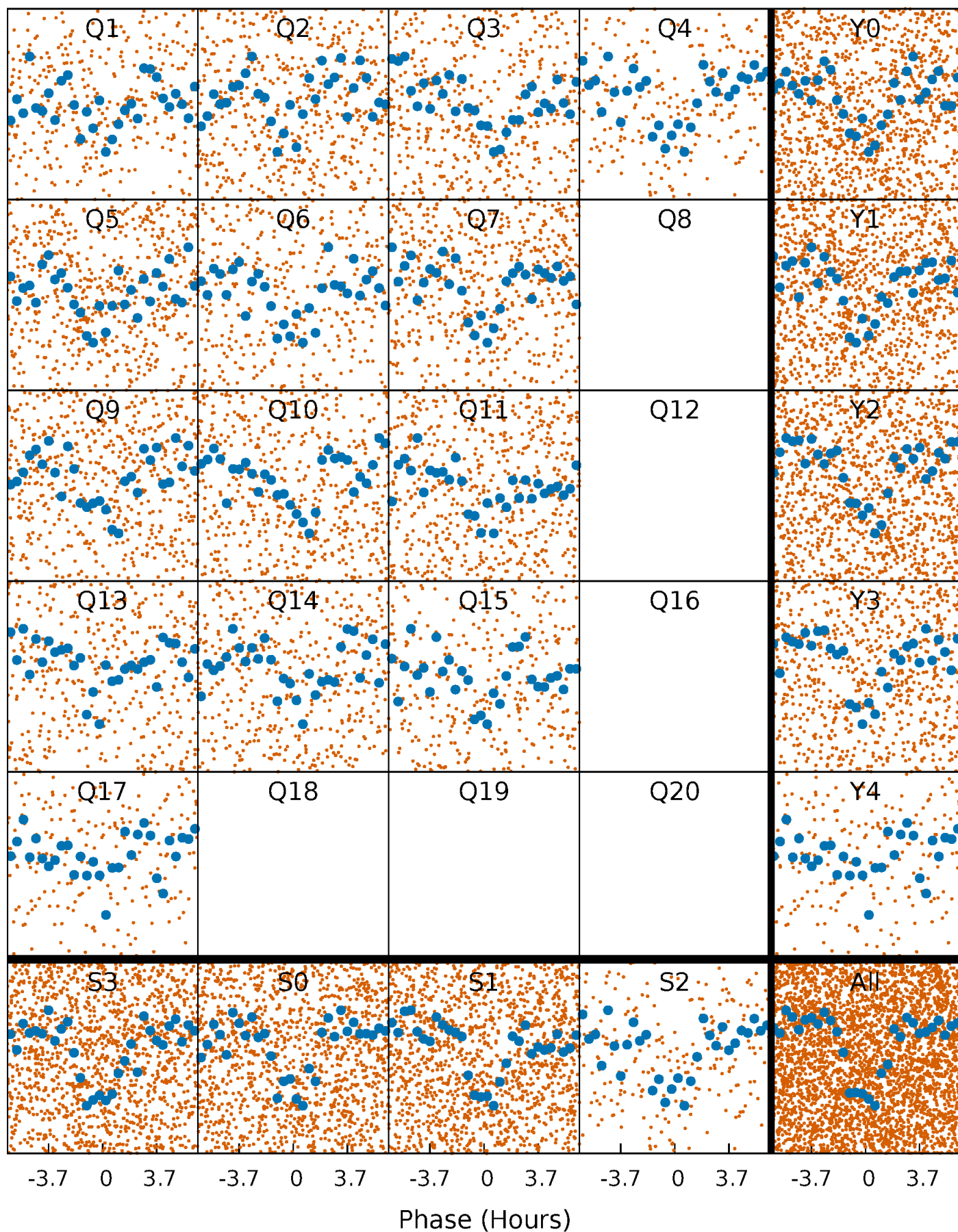


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



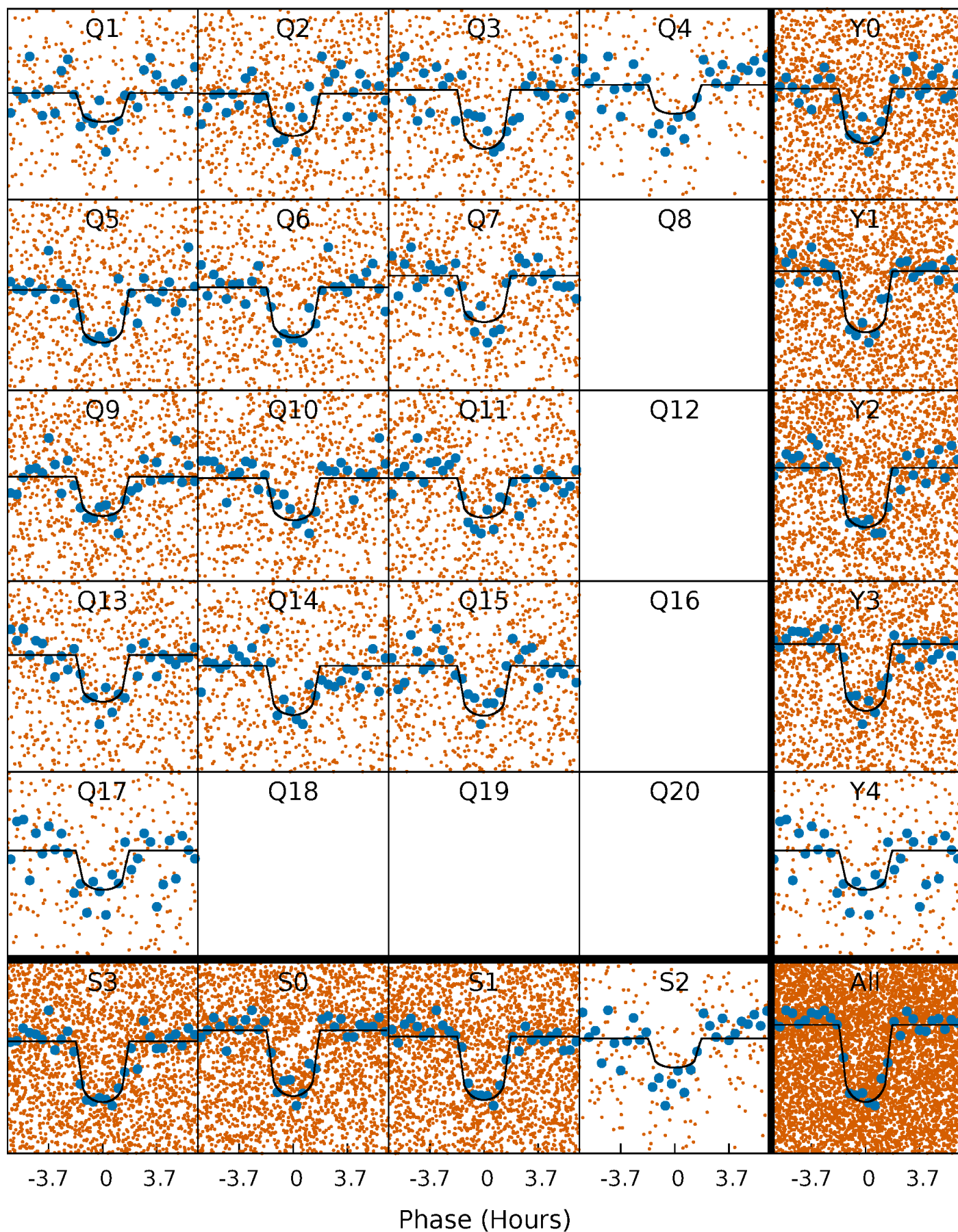
PDC Quarter-Phased Transit Curves

TCE 011127479-01 P= 2.128214 Days $T_0=132.481139$ (BKJD)



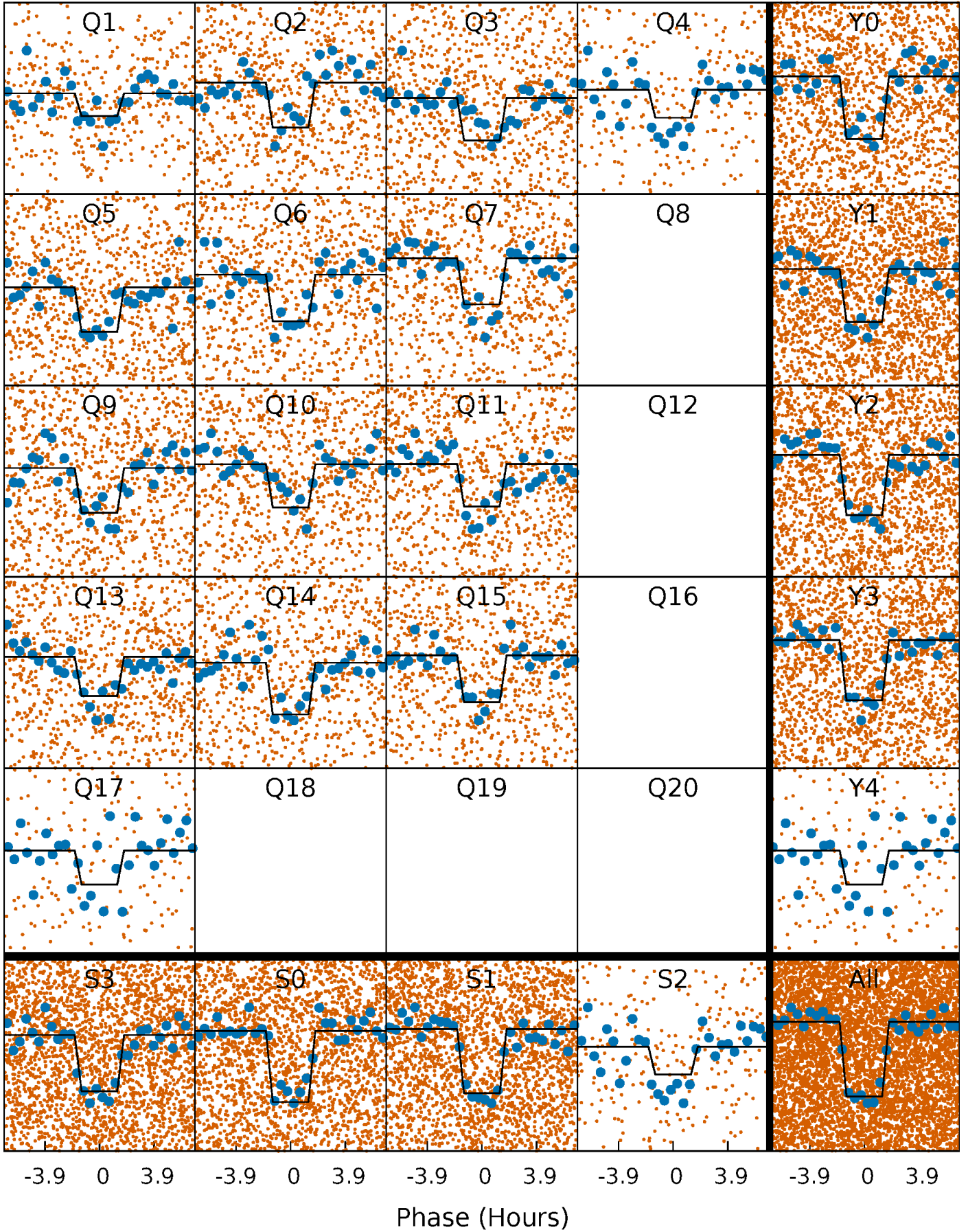
DV Quarter-Phased Transit Curves

TCE 011127479-01 P= 2.128214 Days $T_0=132.481139$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

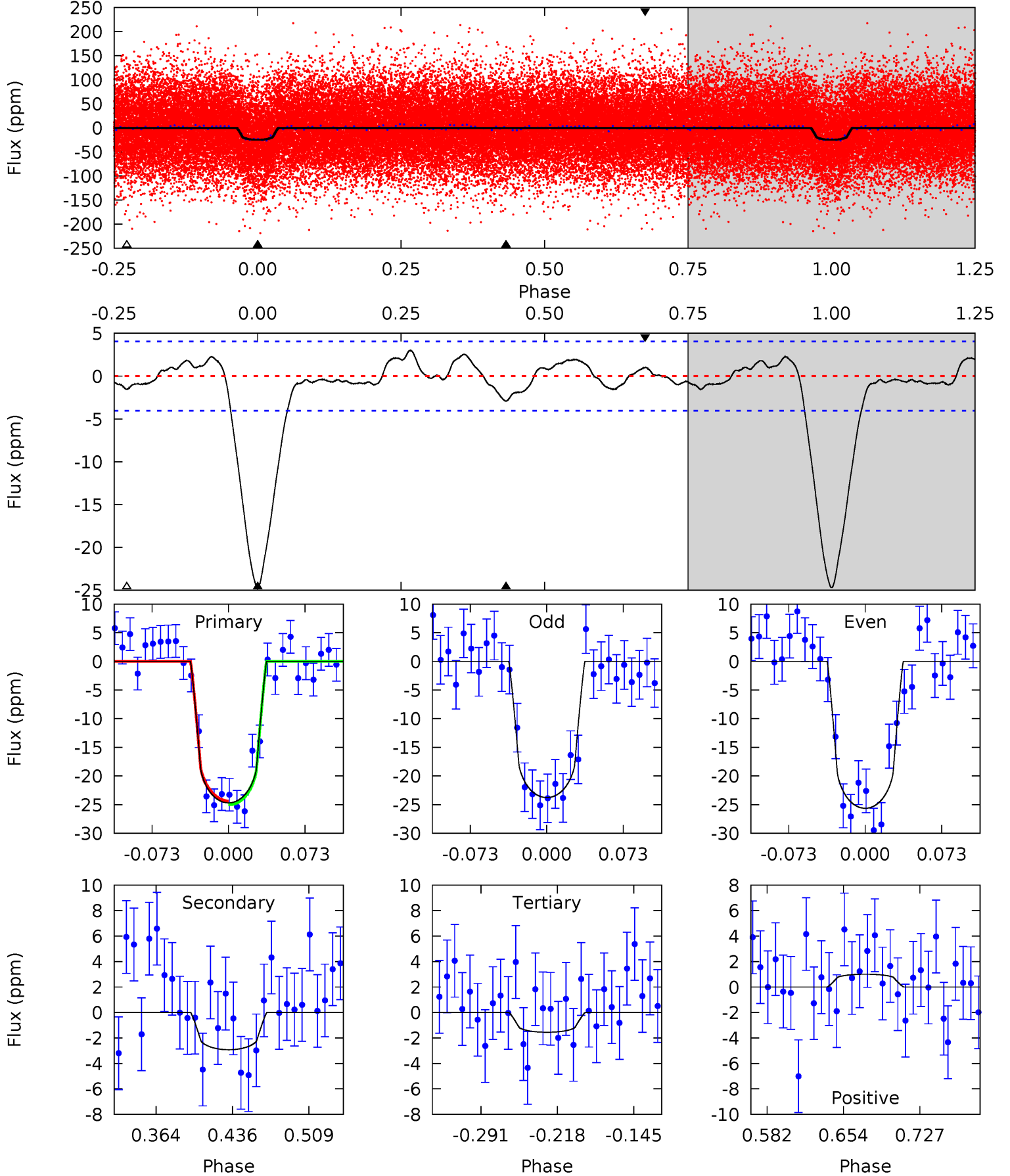
TCE 011127479-01 P= 2.128219 Days $T_0=132.479822$ (BKJD)



DV Model-Shift Uniqueness Test

011127479-01, P = 2.128214 Days, E = 130.352925 Days

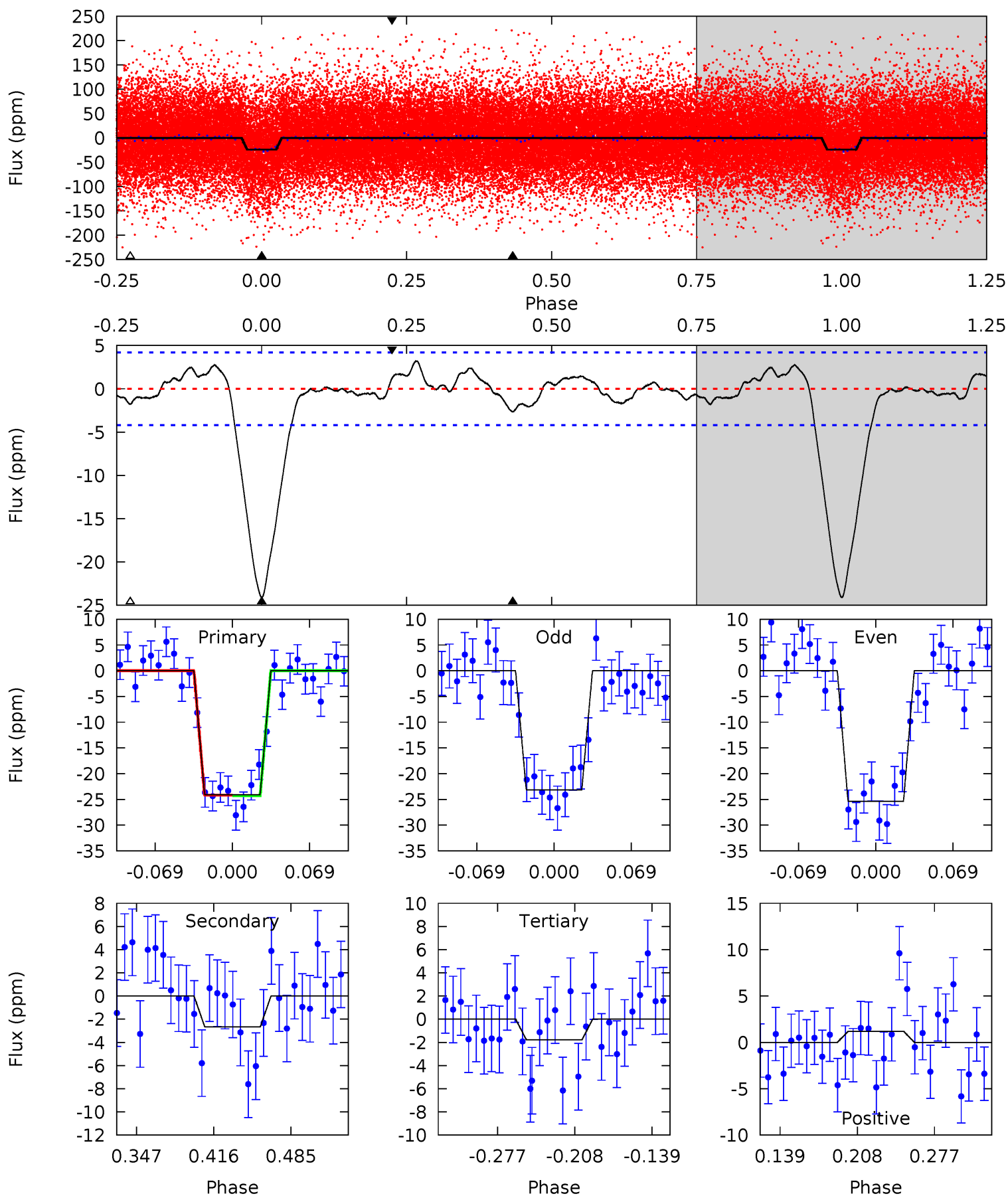
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.3	3.35	1.78	1.15	4.63	1.79	1.32	26.5	27.2	1.57	2.20	1.07	1.01	0.11	0.35



Alt Model-Shift Uniqueness Test

011127479-01, P = 2.128219 Days, E = 130.351603 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.7	2.95	1.98	1.32	4.64	1.82	1.28	24.7	25.4	0.97	1.63	1.24	1.04	0.12	0.06



Stellar Parameters For KIC 011127479

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5952^{+71}_{-83}	$4.227^{+0.014}_{-0.016}$	$0.180^{+0.150}_{-0.150}$	$1.377^{+0.039}_{-0.062}$	$1.168^{+0.043}_{-0.108}$	$0.630^{+0.045}_{-0.034}$
	+1%/-1%	+0%/-0%	+83%/-83%	+3%/-5%	+4%/-9%	+7%/-5%
Source	SPE72	AST10	SPE72	DSEP		

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

Secondary Eclipse Parameters for KIC 011127479-01 / KOI 2792.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3 ± 1	$0.80^{+0.14}_{-0.14}$	2333^{+33}_{-39}	3705^{+339}_{-338}	$2.928^{+1.738}_{-1.147}$
Alt.	-3 ± 1	$0.74^{+0.13}_{-0.15}$	2332^{+34}_{-33}	3731^{+377}_{-324}	$3.039^{+2.057}_{-1.152}$

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

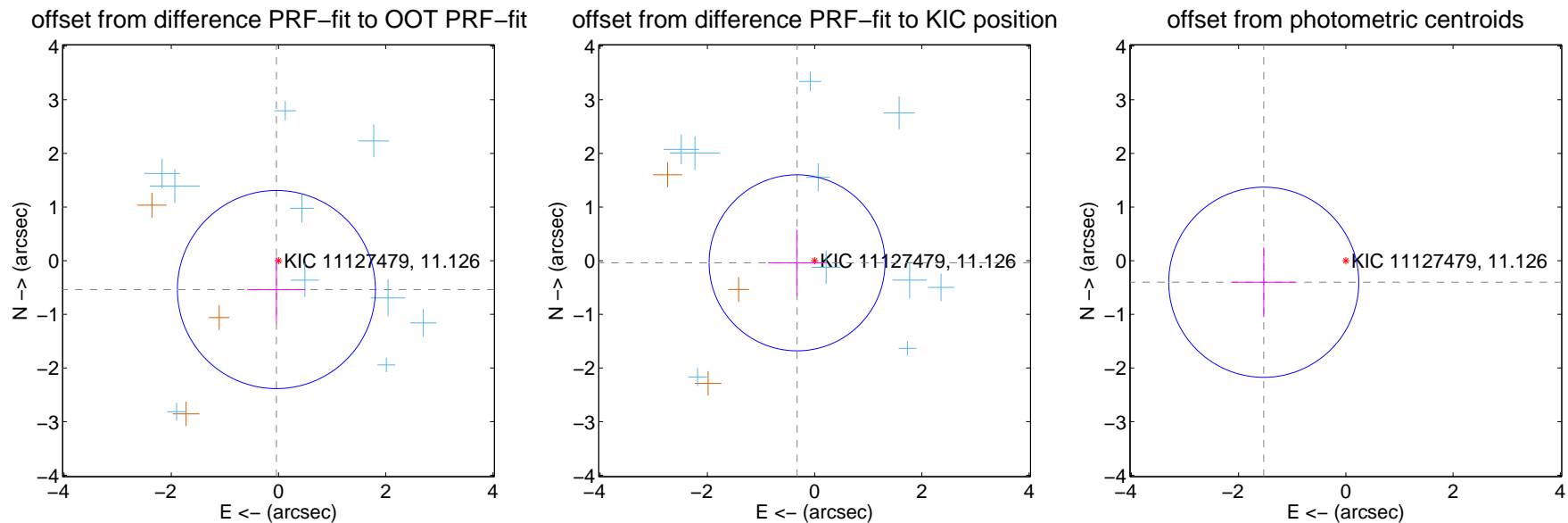
DV Centroid Data

Supplemental centroid analysis for 011127479-01. **Kepler magnitude: 11.13.** Transit SNR 18.61

There are 10 quarters with good PRF difference image offsets

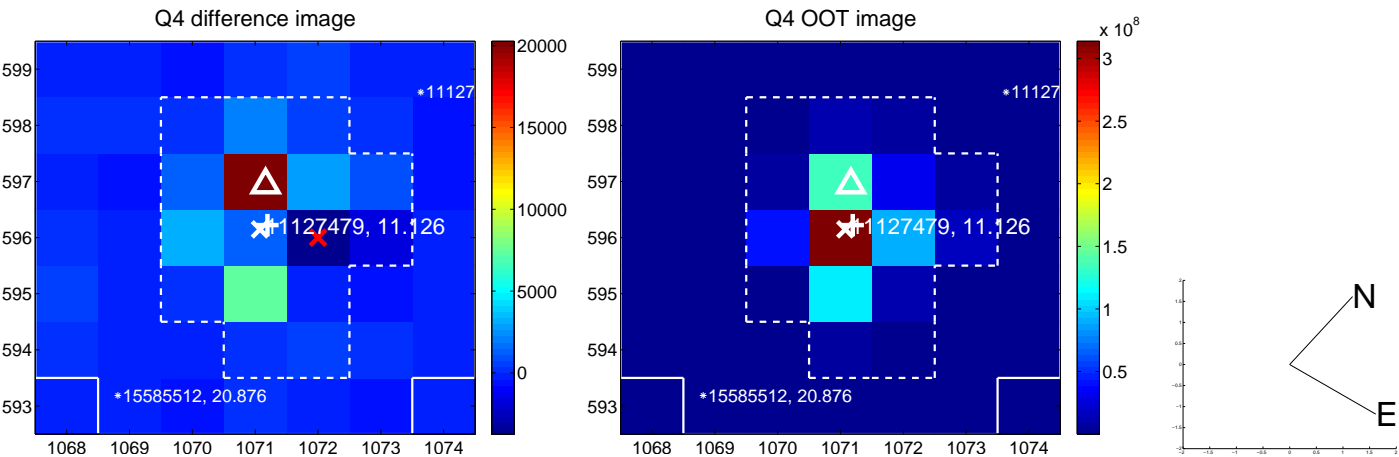
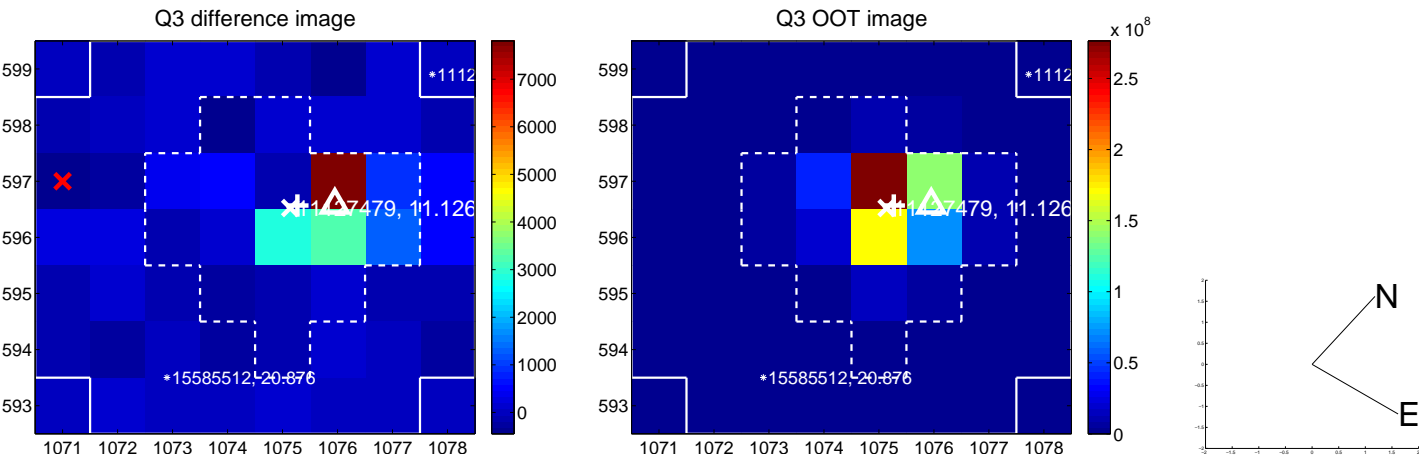
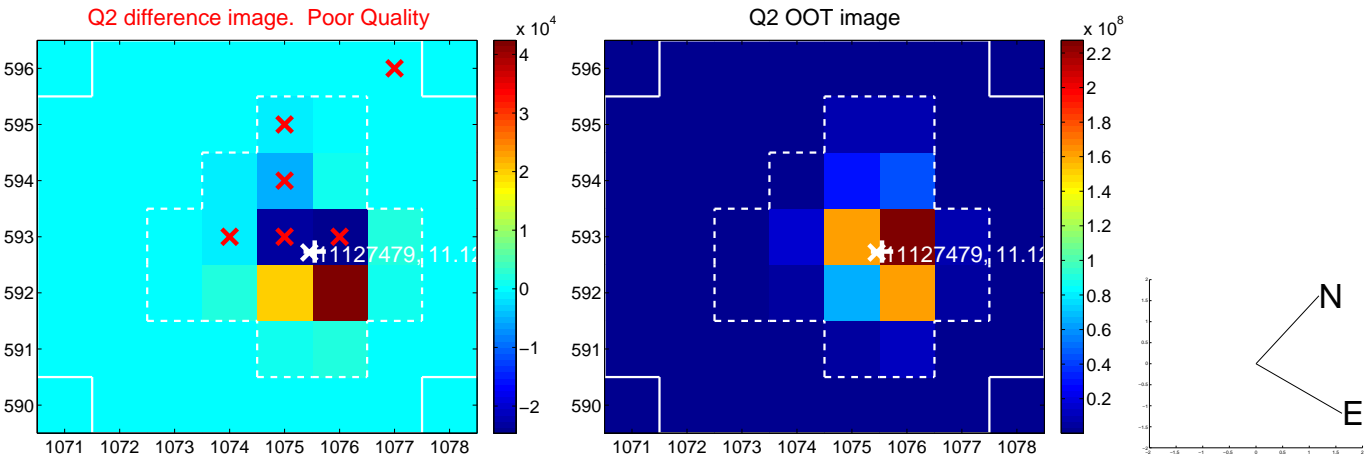
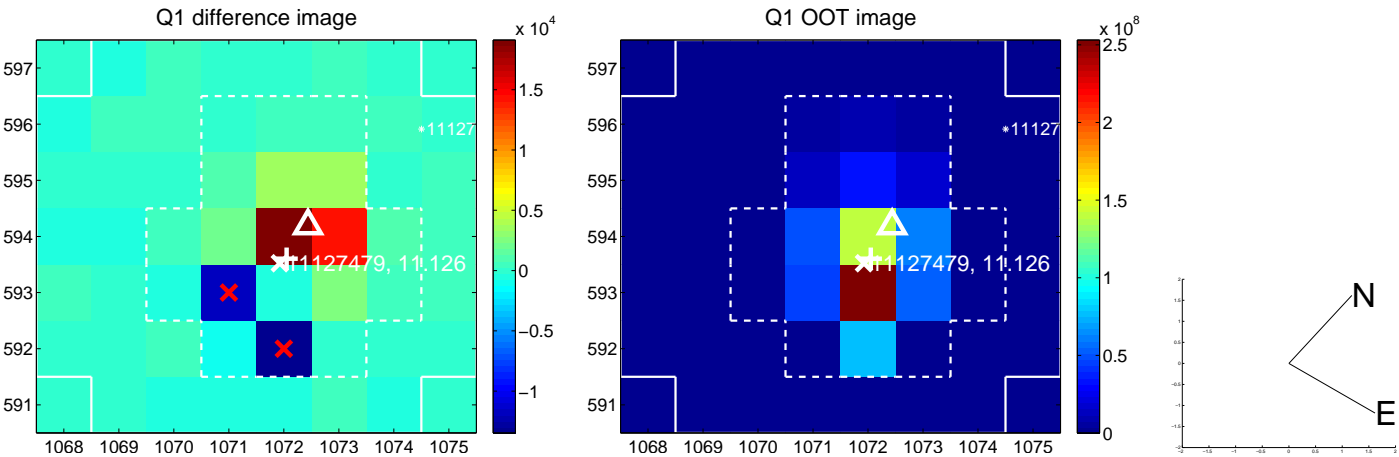
The direct PRF centroid is offset from the target star catalog position by about 0.75 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.539 ± 0.616	0.88	0.039 ± 0.543	-0.538 ± 0.616
PRF-fit source offset from KIC position	0.330 ± 0.547	0.60	0.327 ± 0.546	-0.040 ± 0.619
photometric centroid source offset	1.58 ± 0.59	2.68	1.53 ± 0.59	-0.40 ± 0.65

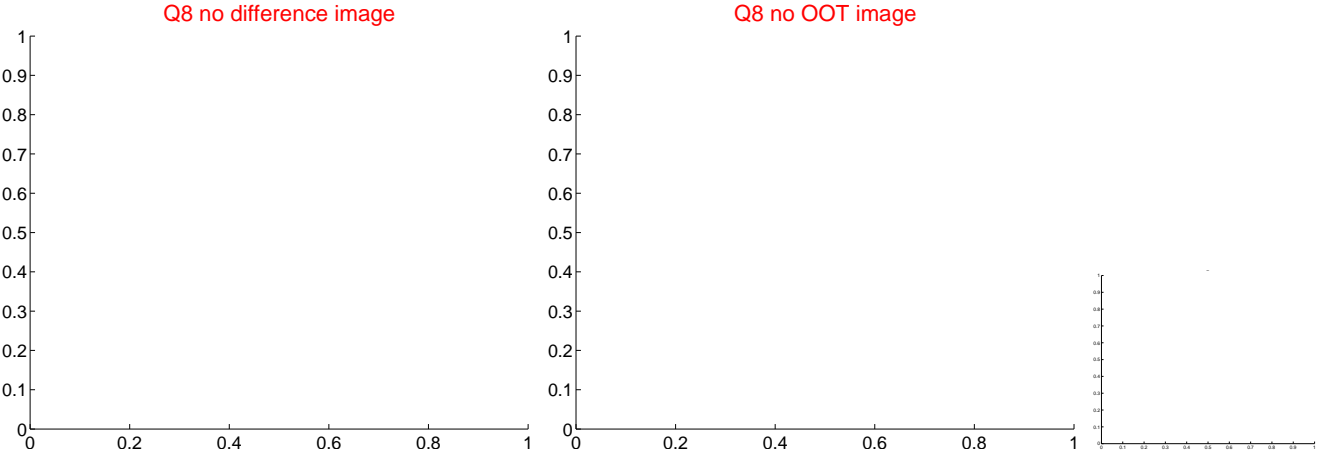
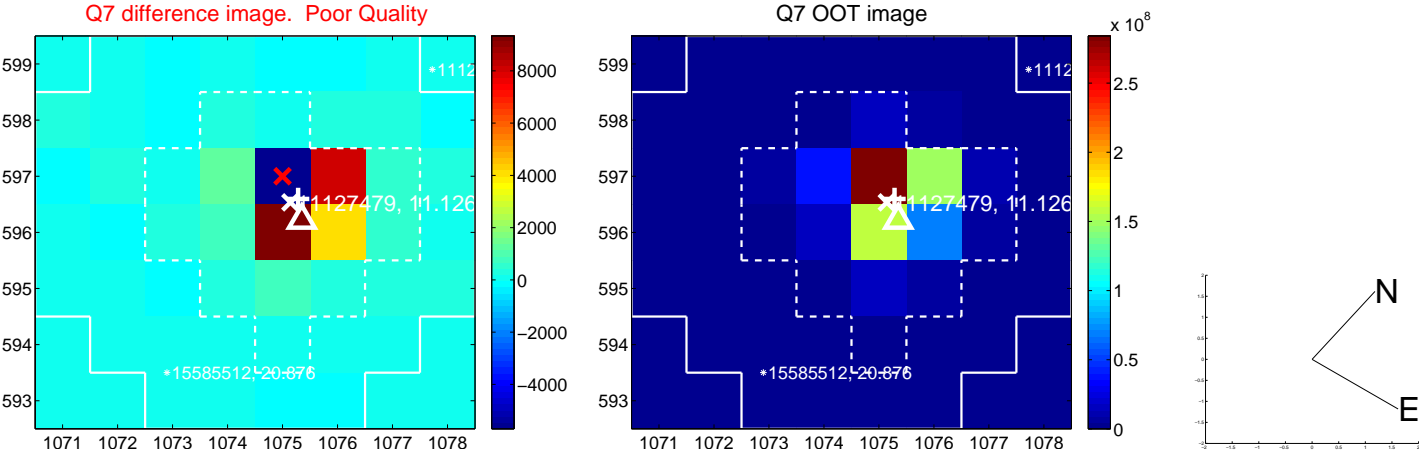
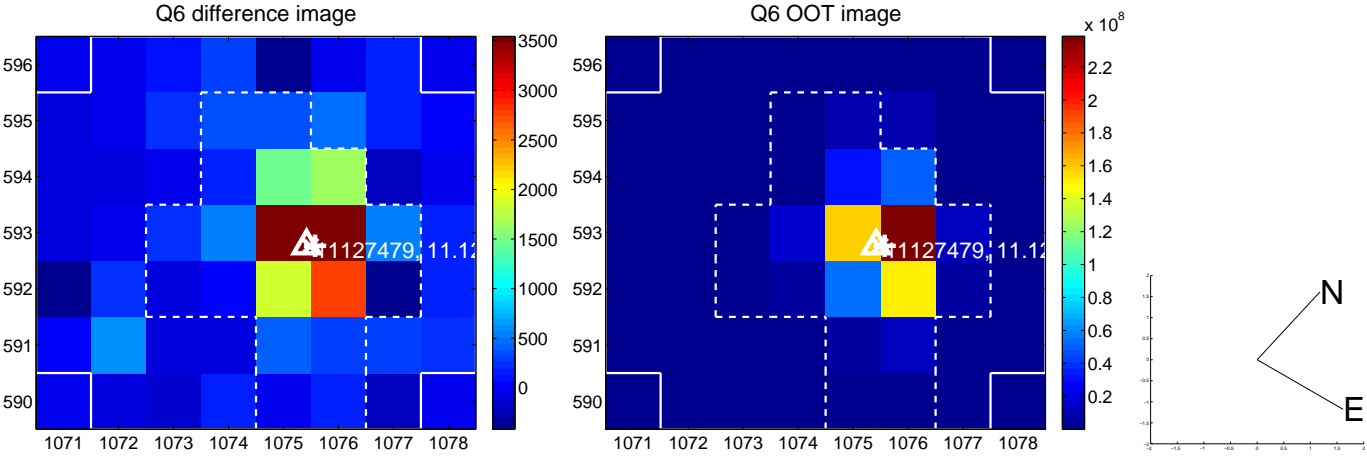
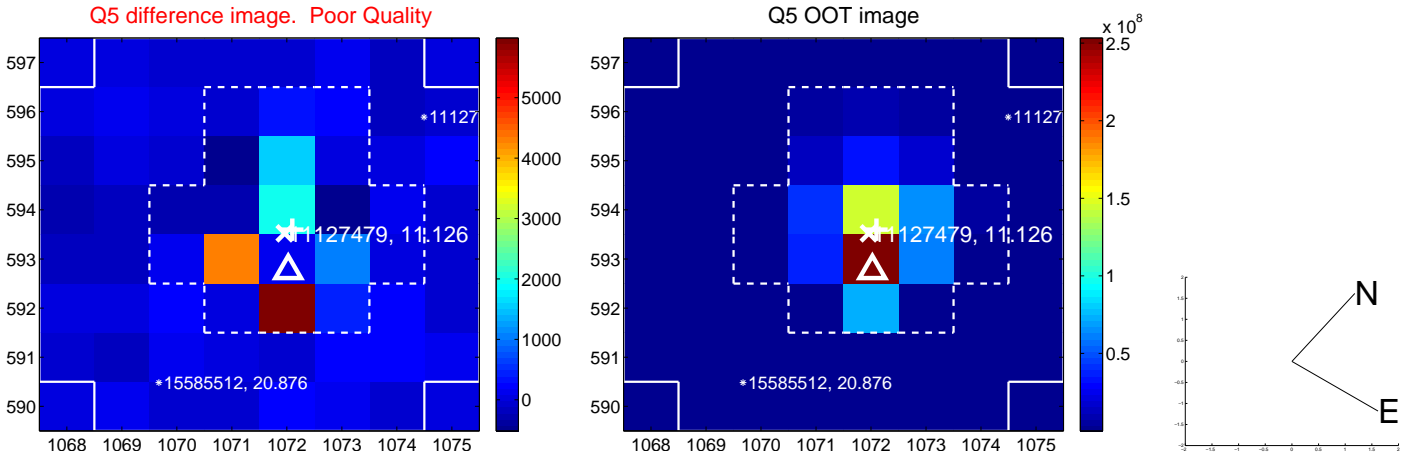


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

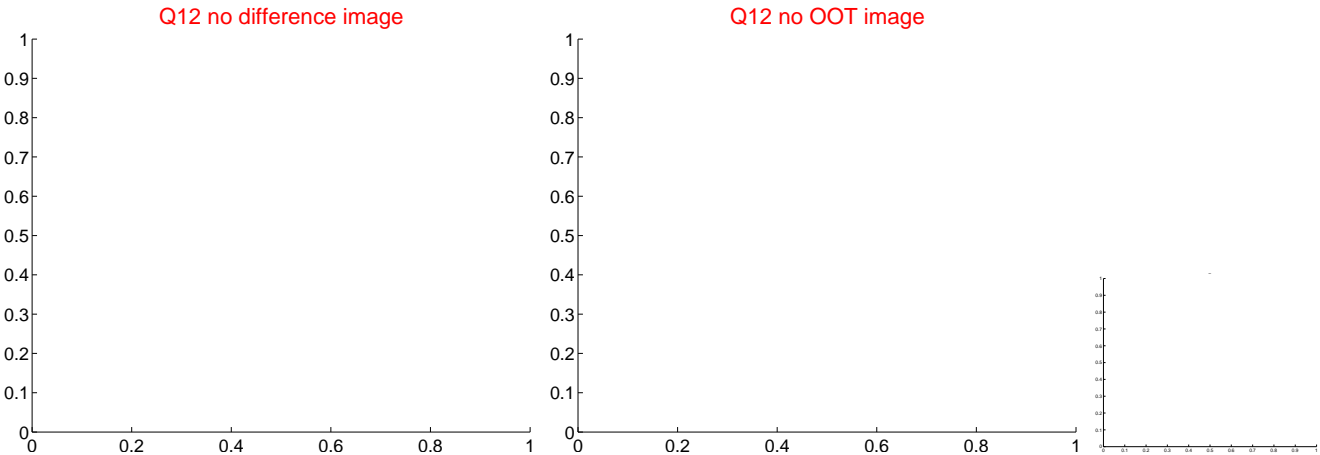
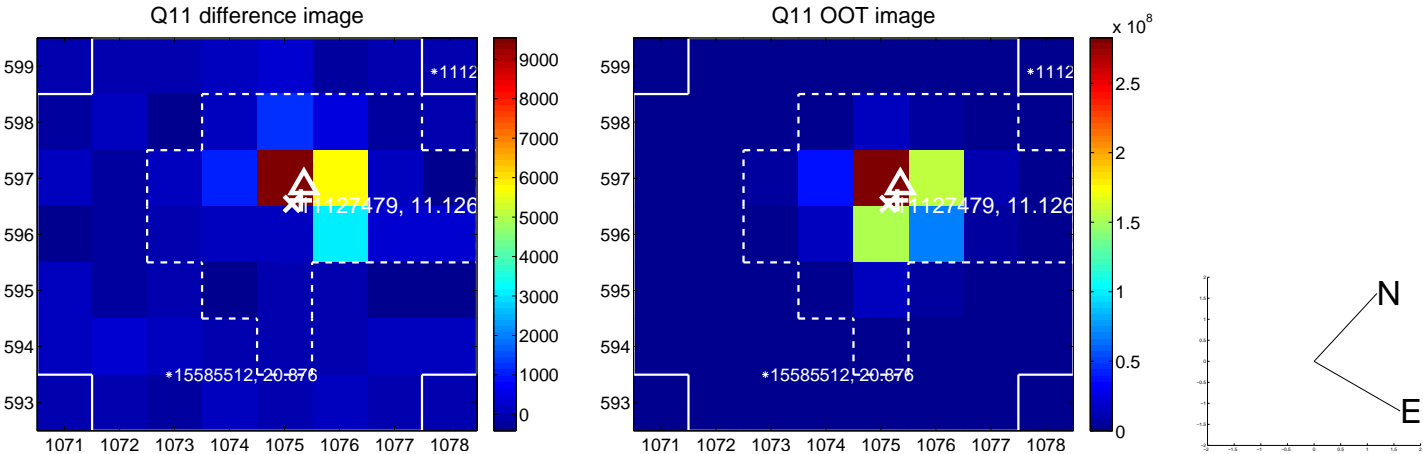
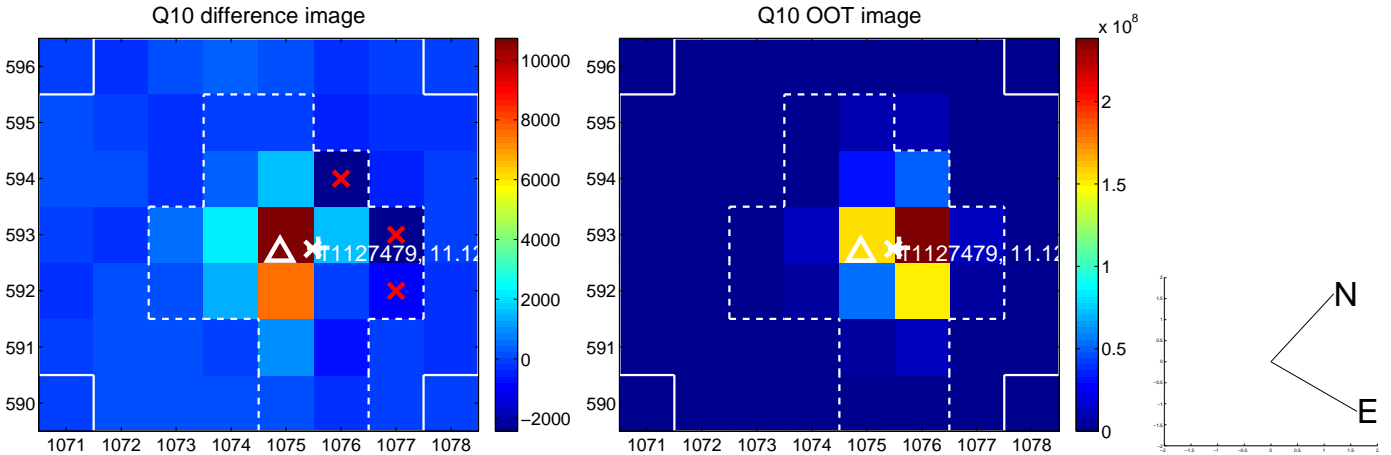
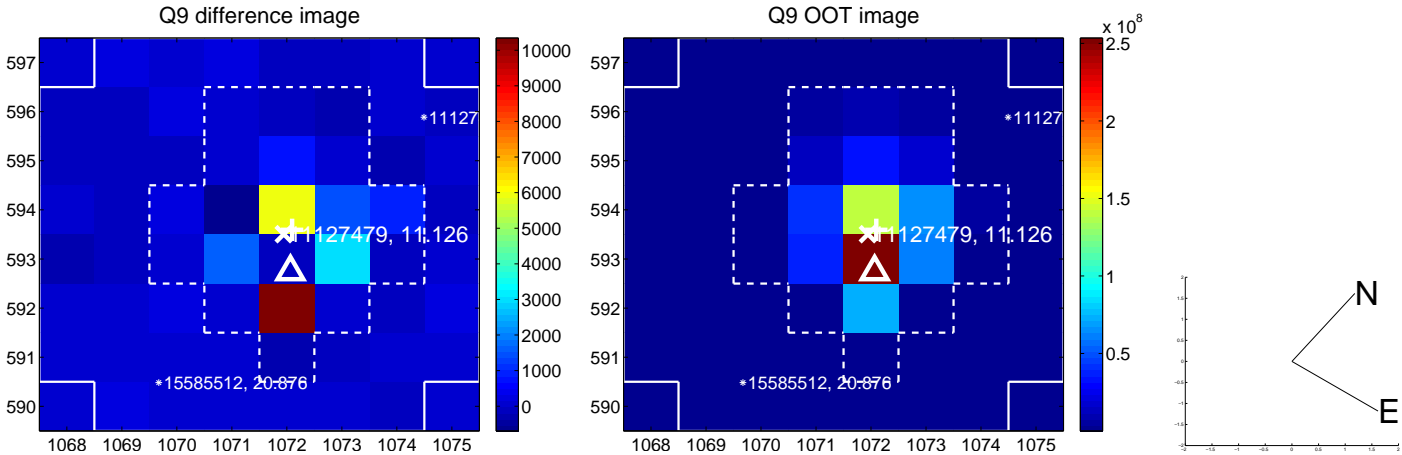
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



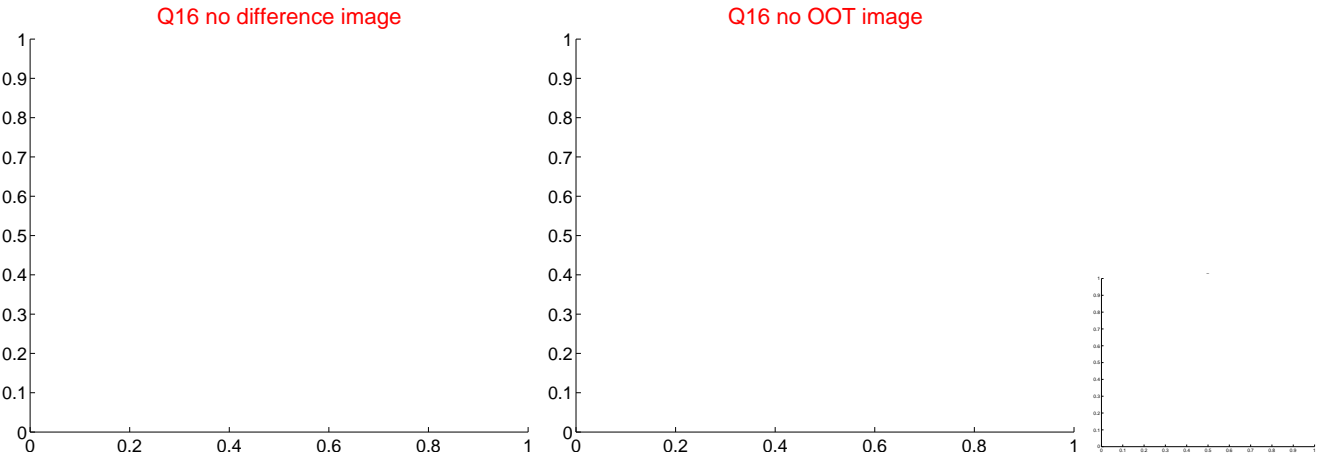
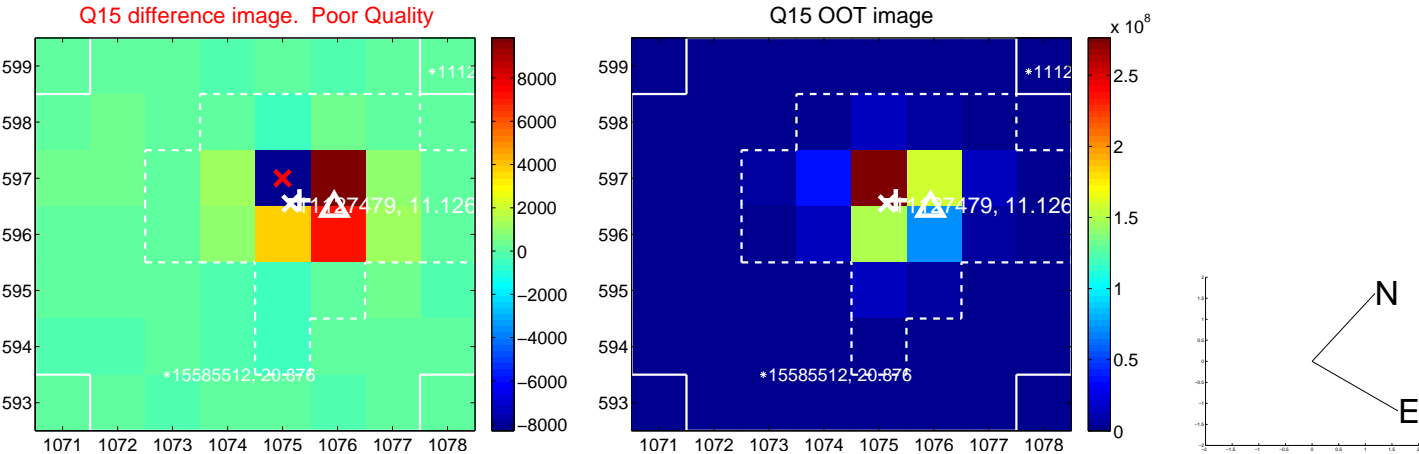
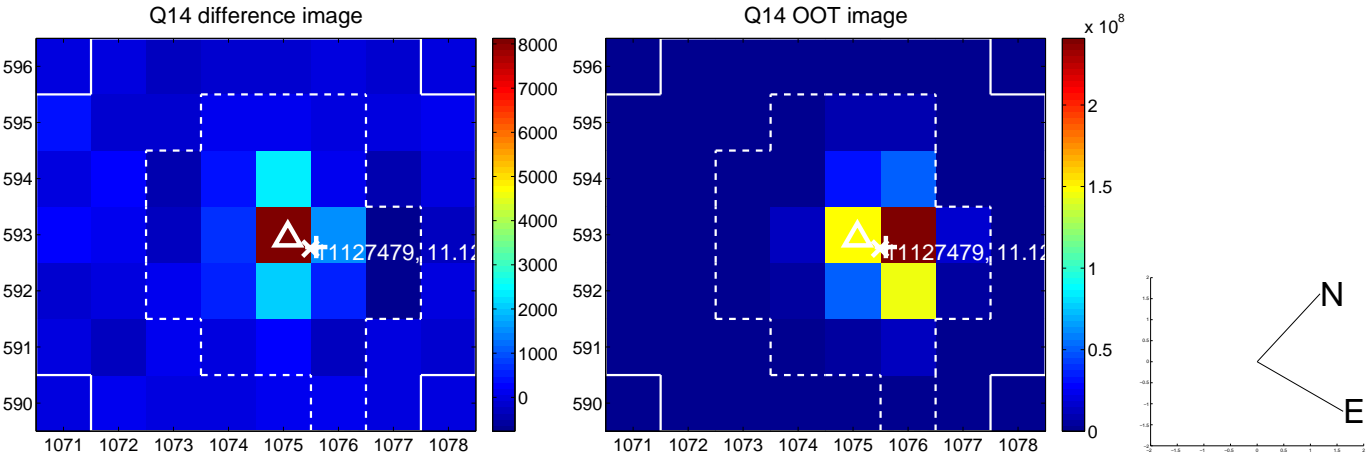
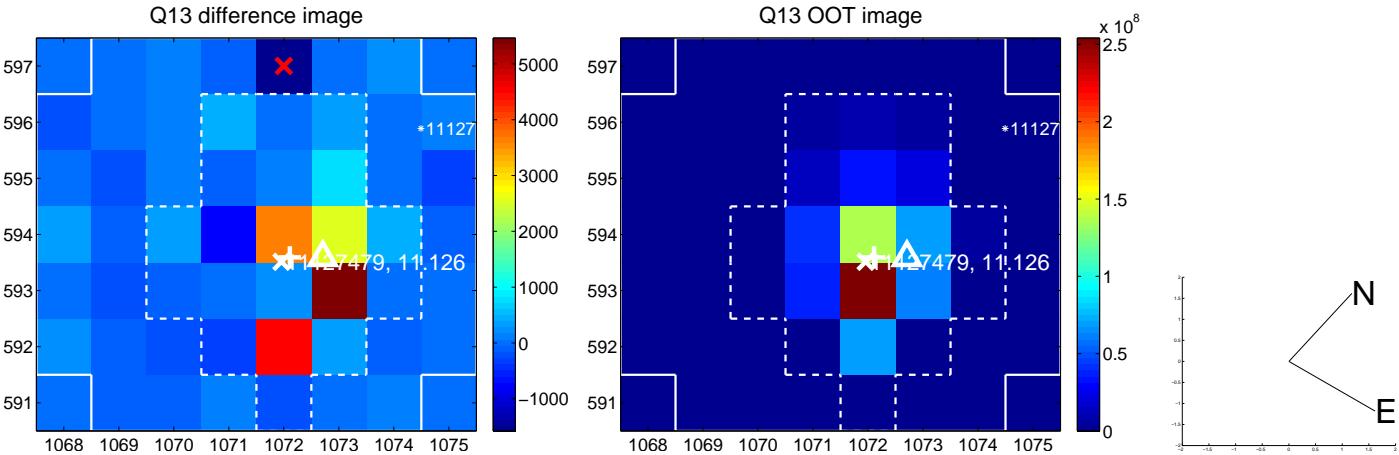
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



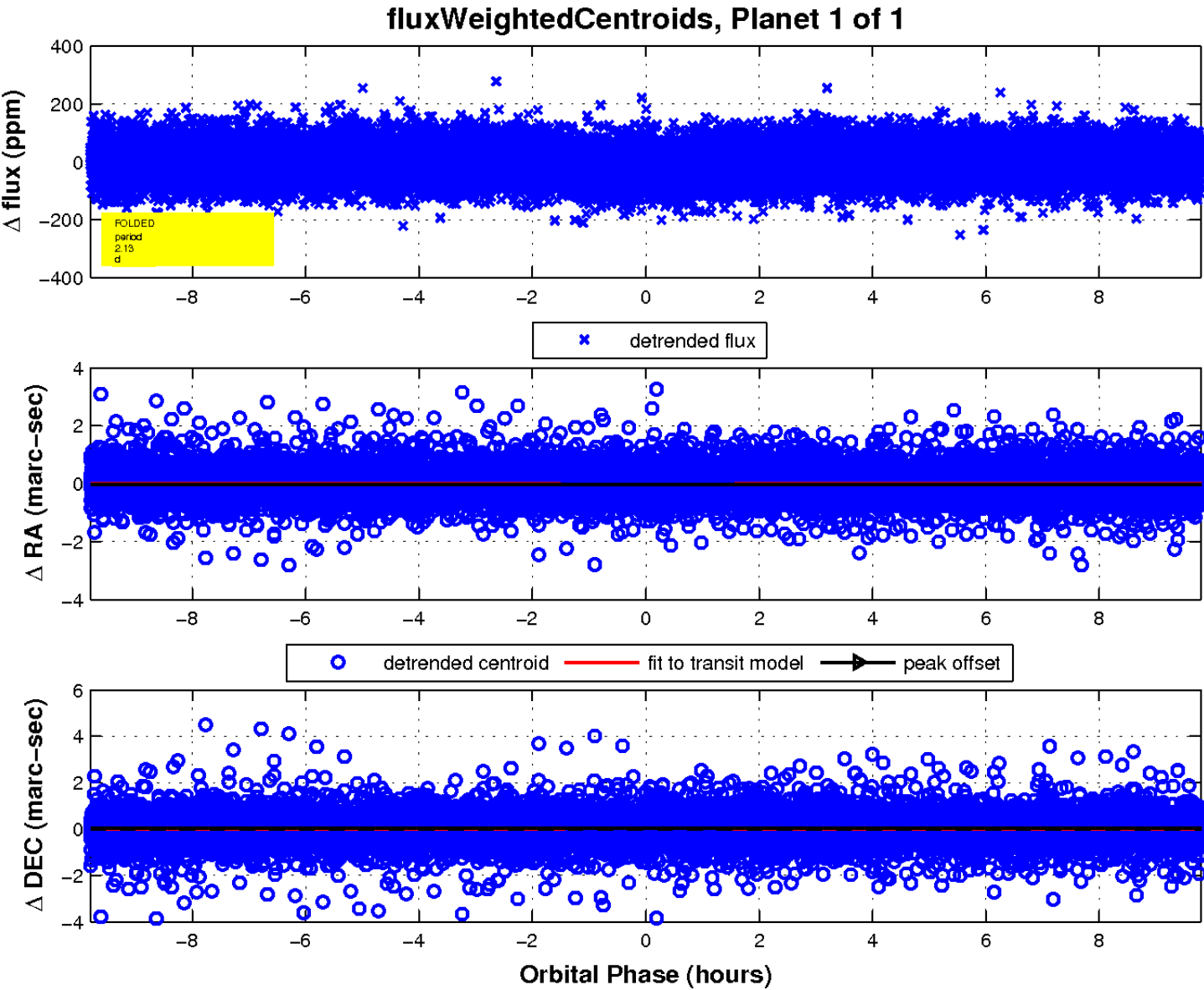
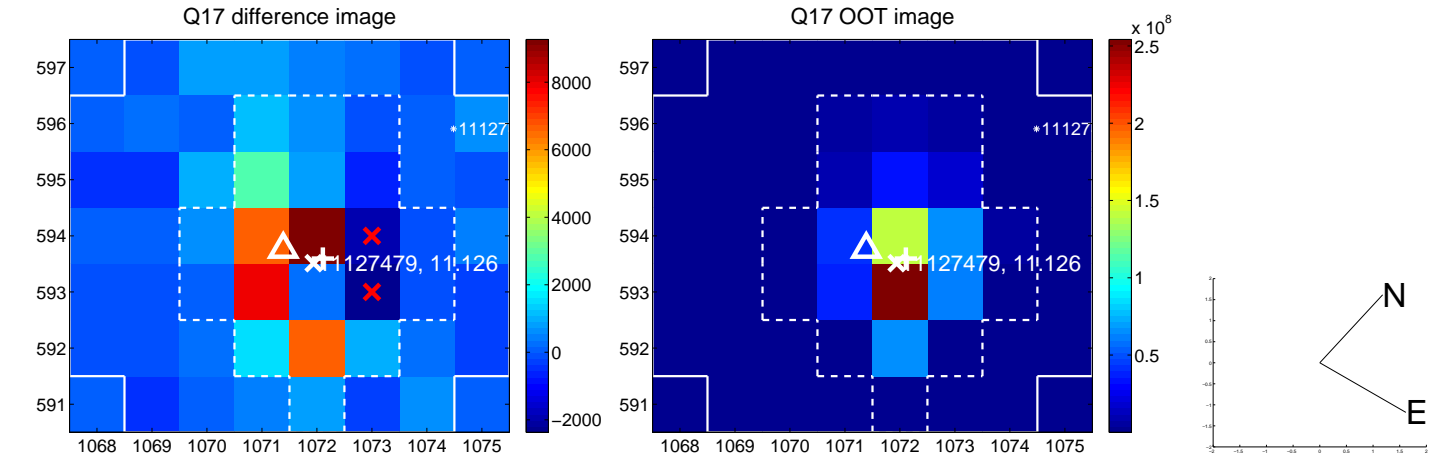
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

