

KIC 011027729

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})
011027729-01	OBS	No	4.877361	135.122153	0.0	31.429	11.6	0.0	1.74	7903	0.00	2543.01

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011027729-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—CENT_FEW_DIFFS

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

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

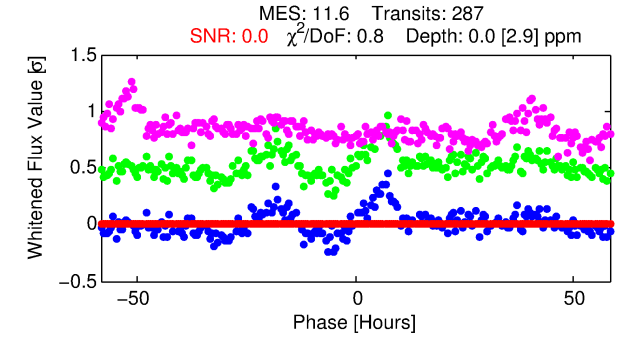
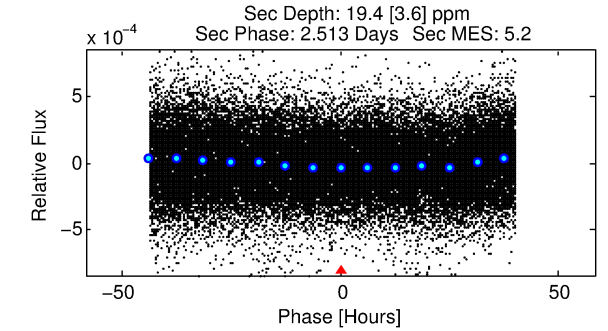
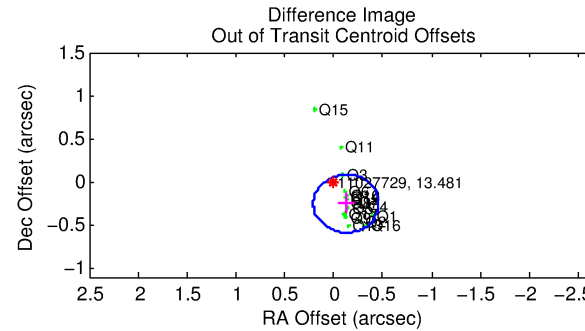
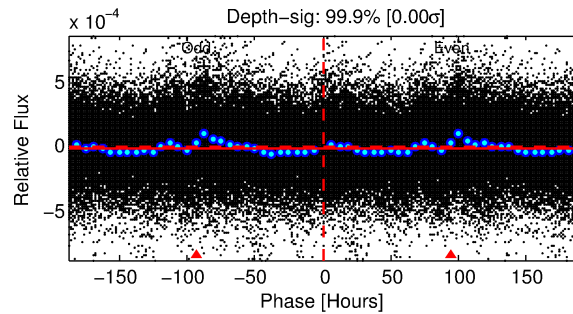
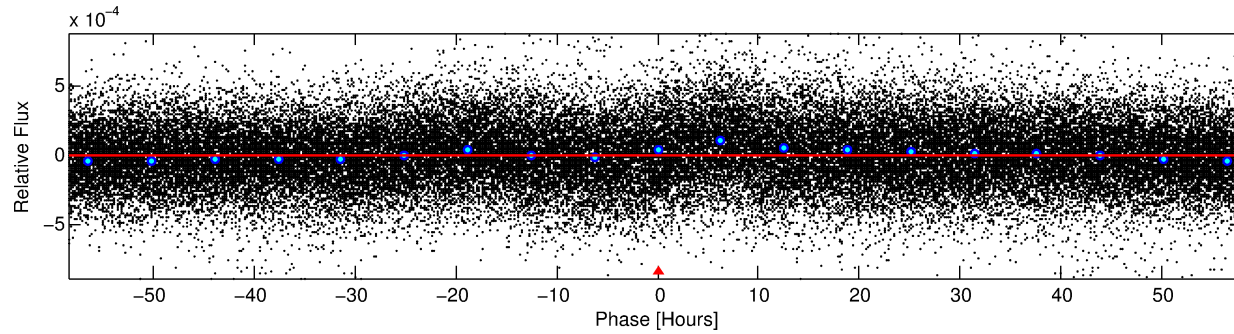
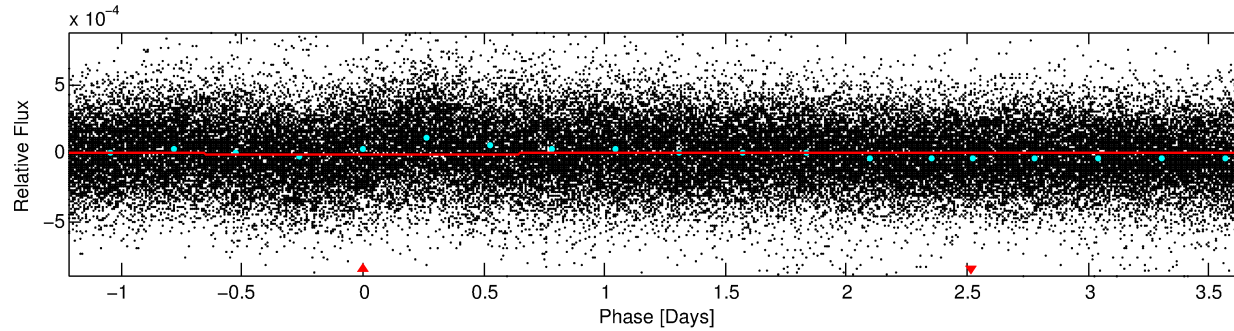
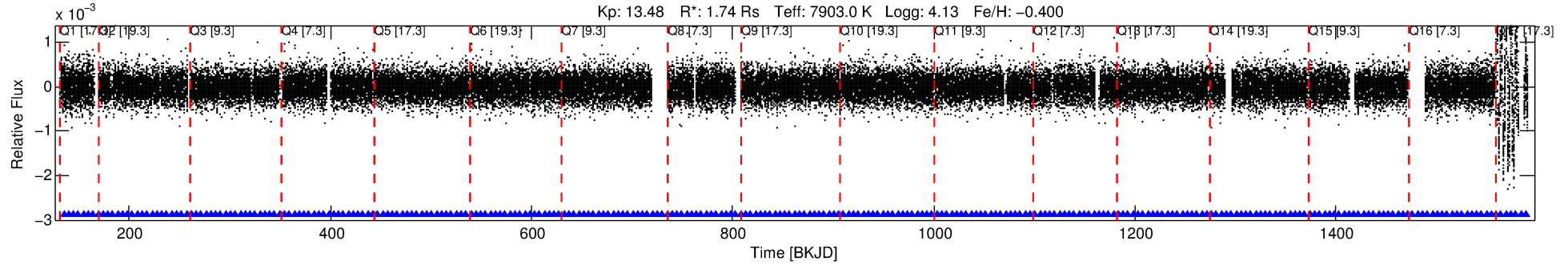
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011027729-01

No Significant Match Found

DV One-Page Summary

KIC: 11027729 Candidate: 1 of 1 Period: 4.877 d



DV Fit Results:

Period = 4.87736 [6.29909] d
Epoch = 135.1222 [897.2667] BKJD
Rp/R* = 0.0000 [0.0614]
a/R* = 1.20 [161.29]
b = 0.67 [724.82]
Seff = 2543.01 [4476.79]
Teq = 1811 [797] K
Rp = 0.00 [11.65] Re
a = 0.0645 [0.0574] AU
Ag = 2492503.61 [13775333077.96]
Teffp = 111240 [153701990] K [0.00σ]

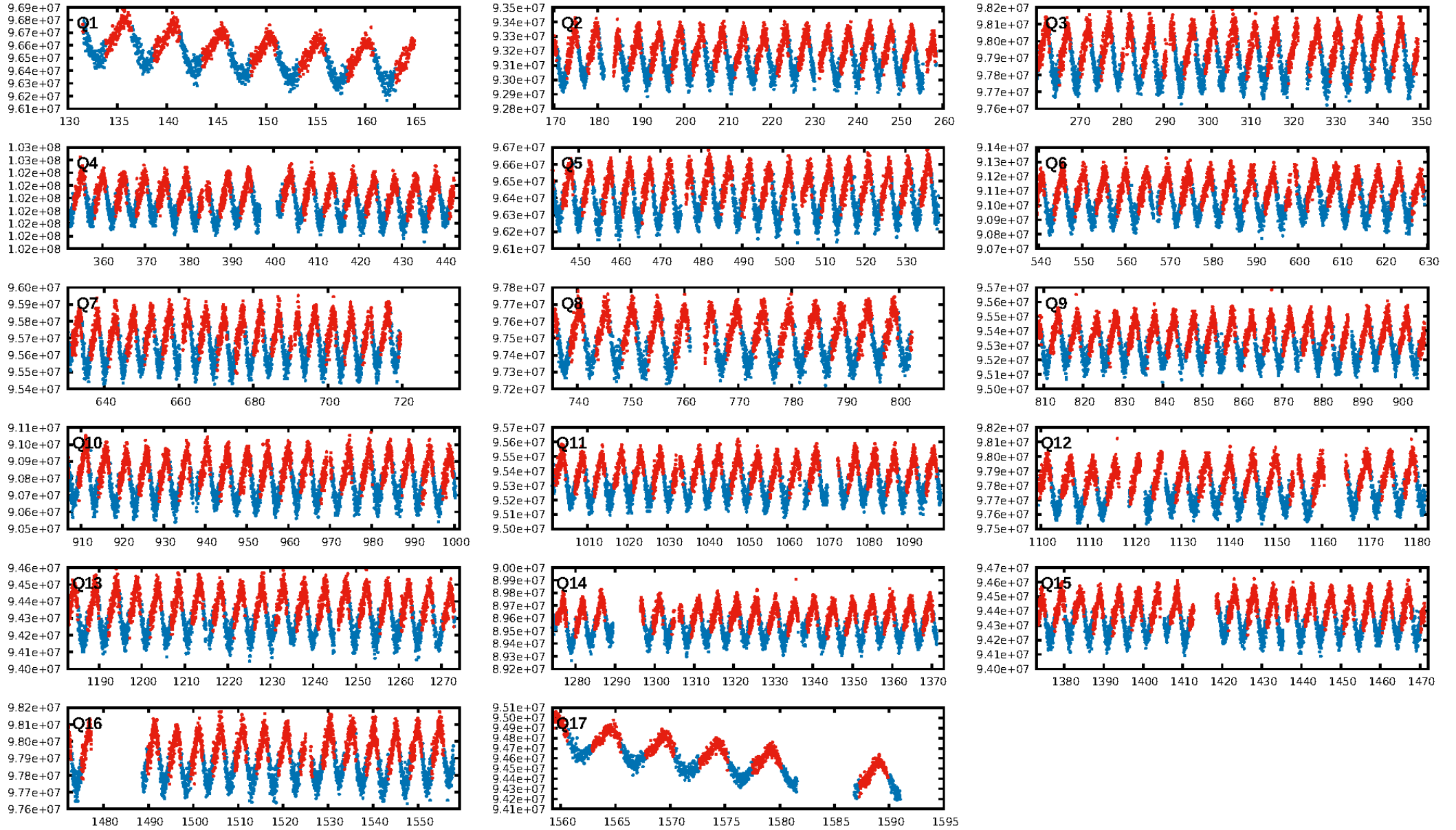
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.66e-34
RollingBand-fgt: 1.00 [274/274]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.282 arcsec [2.53σ]
KicOffset-rm: 0.444 arcsec [4.28σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 1.00 [17/17]

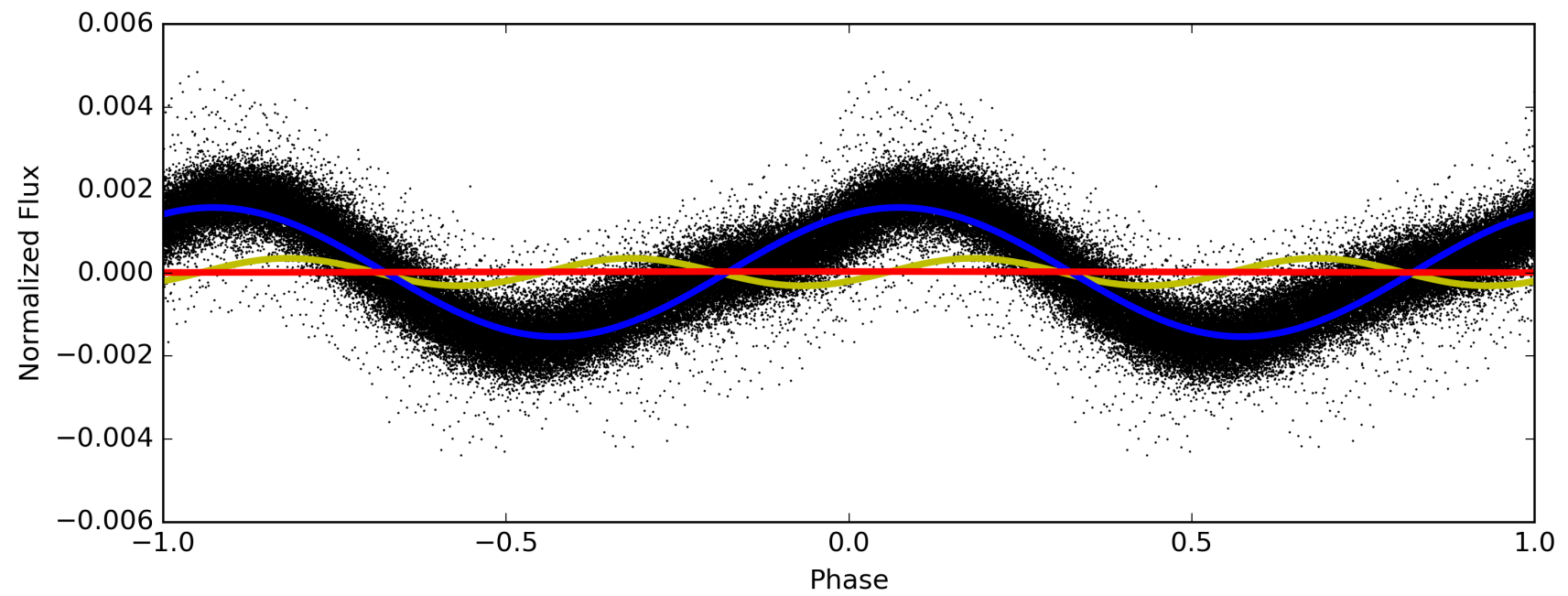
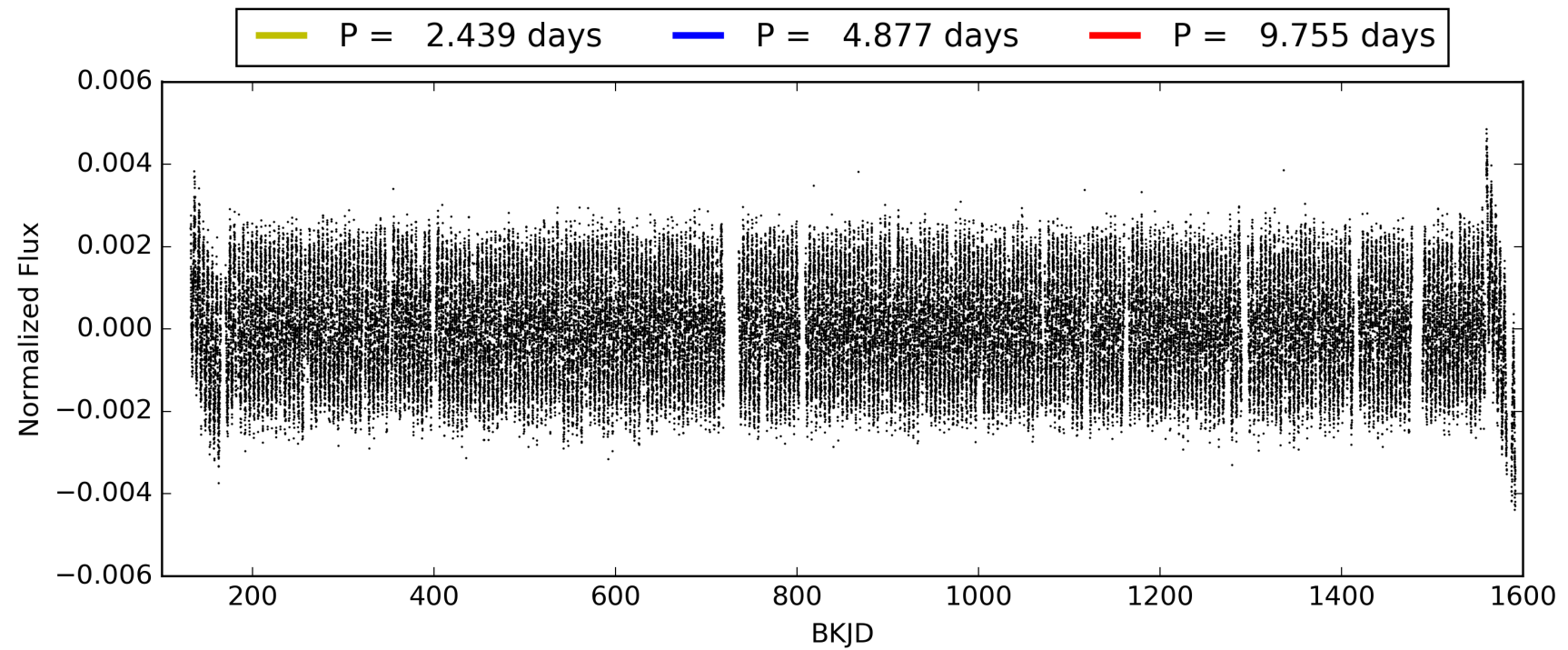
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:32:21 Z

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

TCE 011027729-01, PDC Light Curves

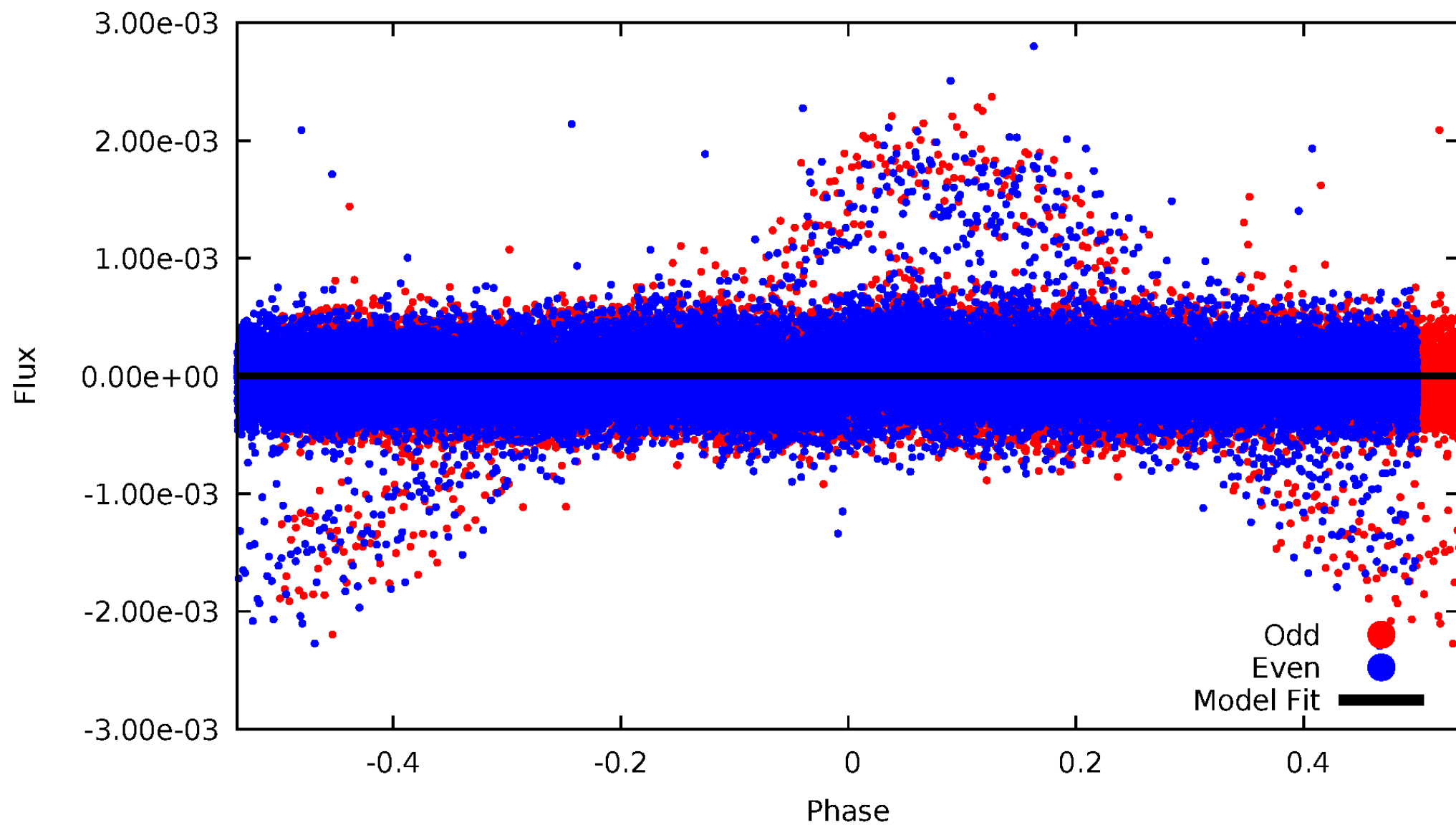


TCE 011027729-01



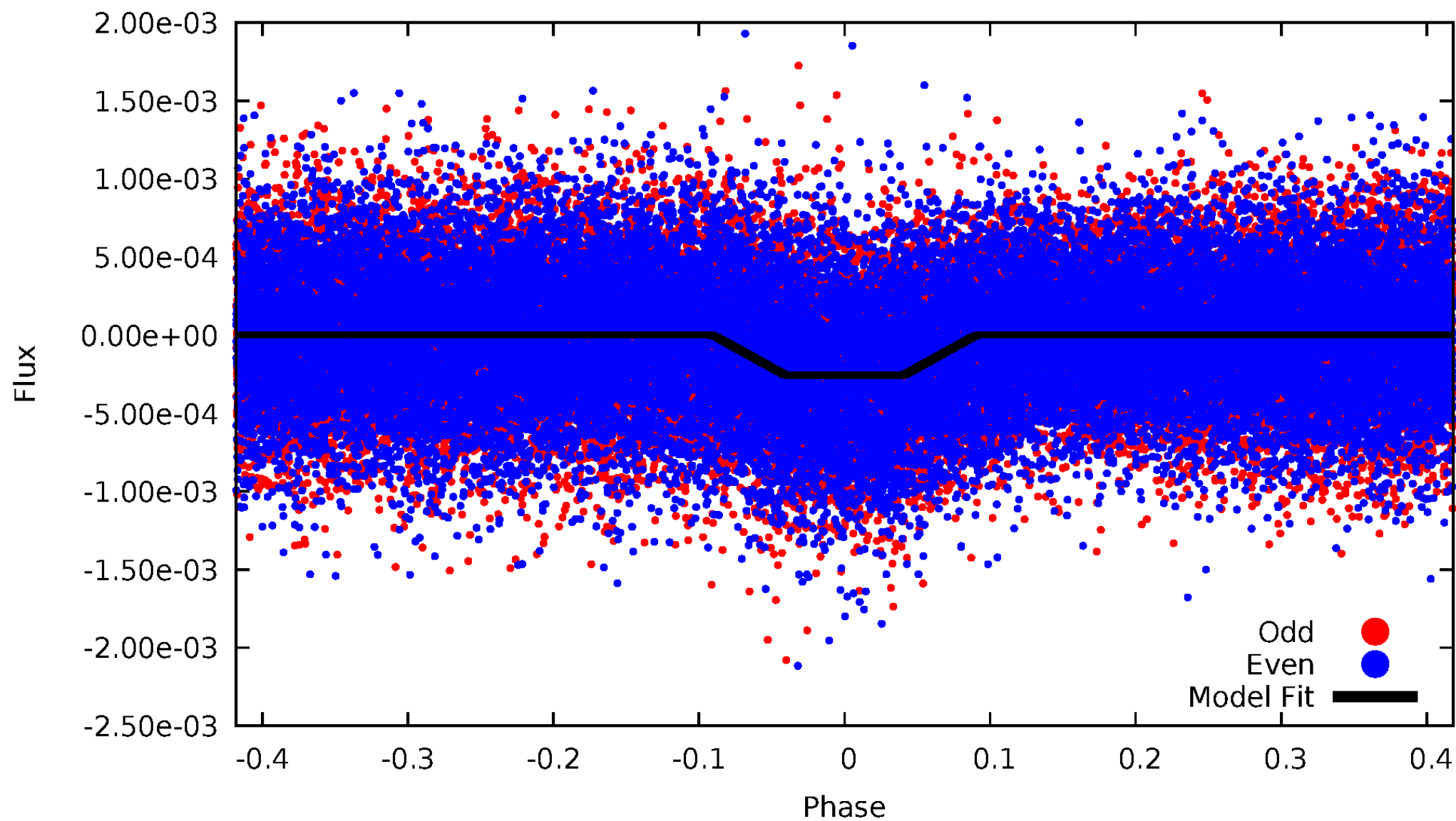
DV Odd/Even

TCE 011027729-01



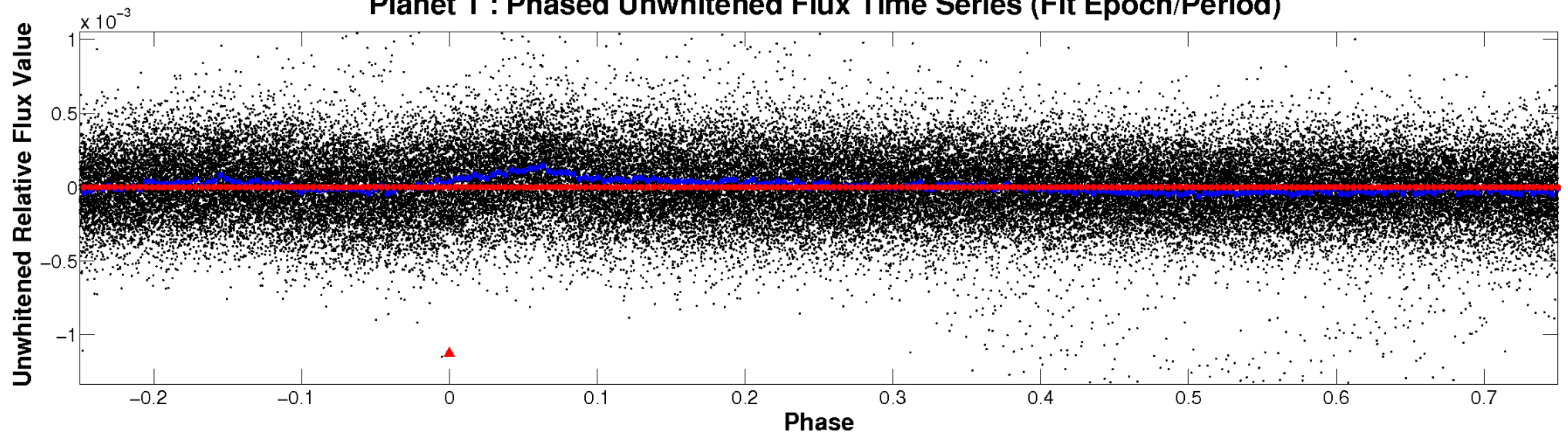
ALT Odd/Even

TCE 011027729-01

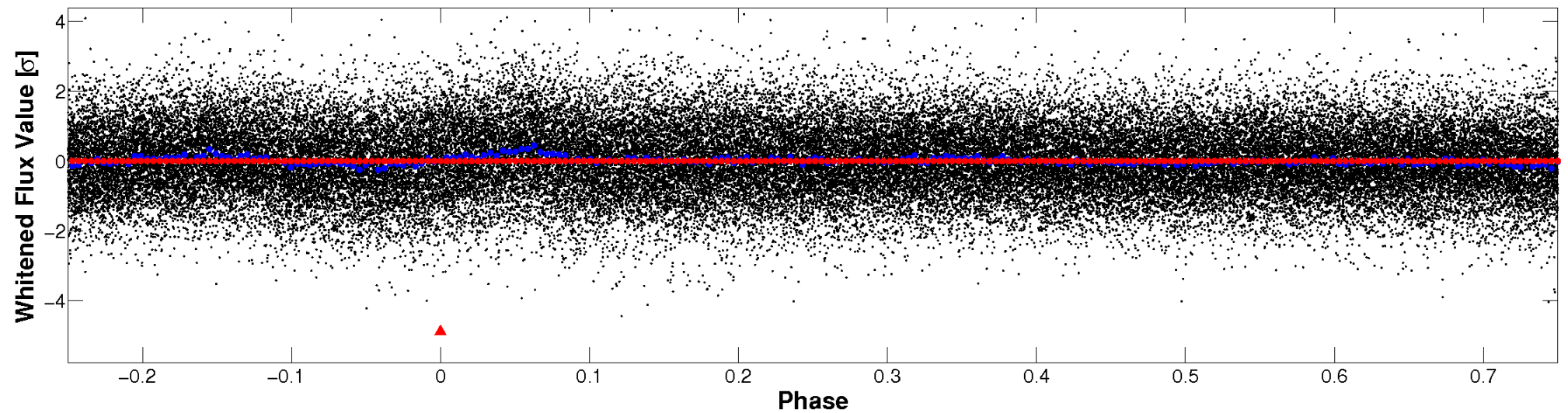


Non-Whitened Vs. Whitened Light Curve

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

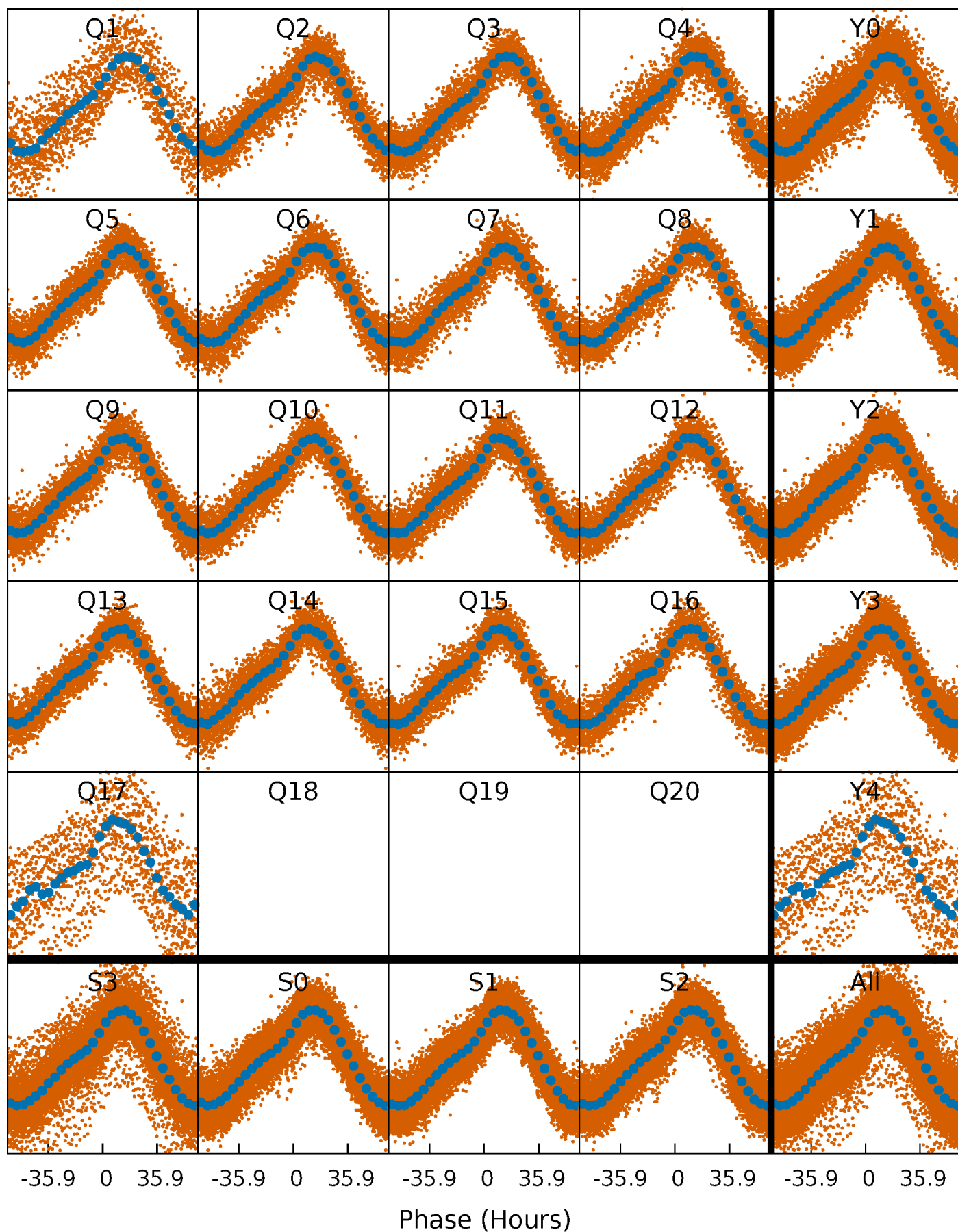


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



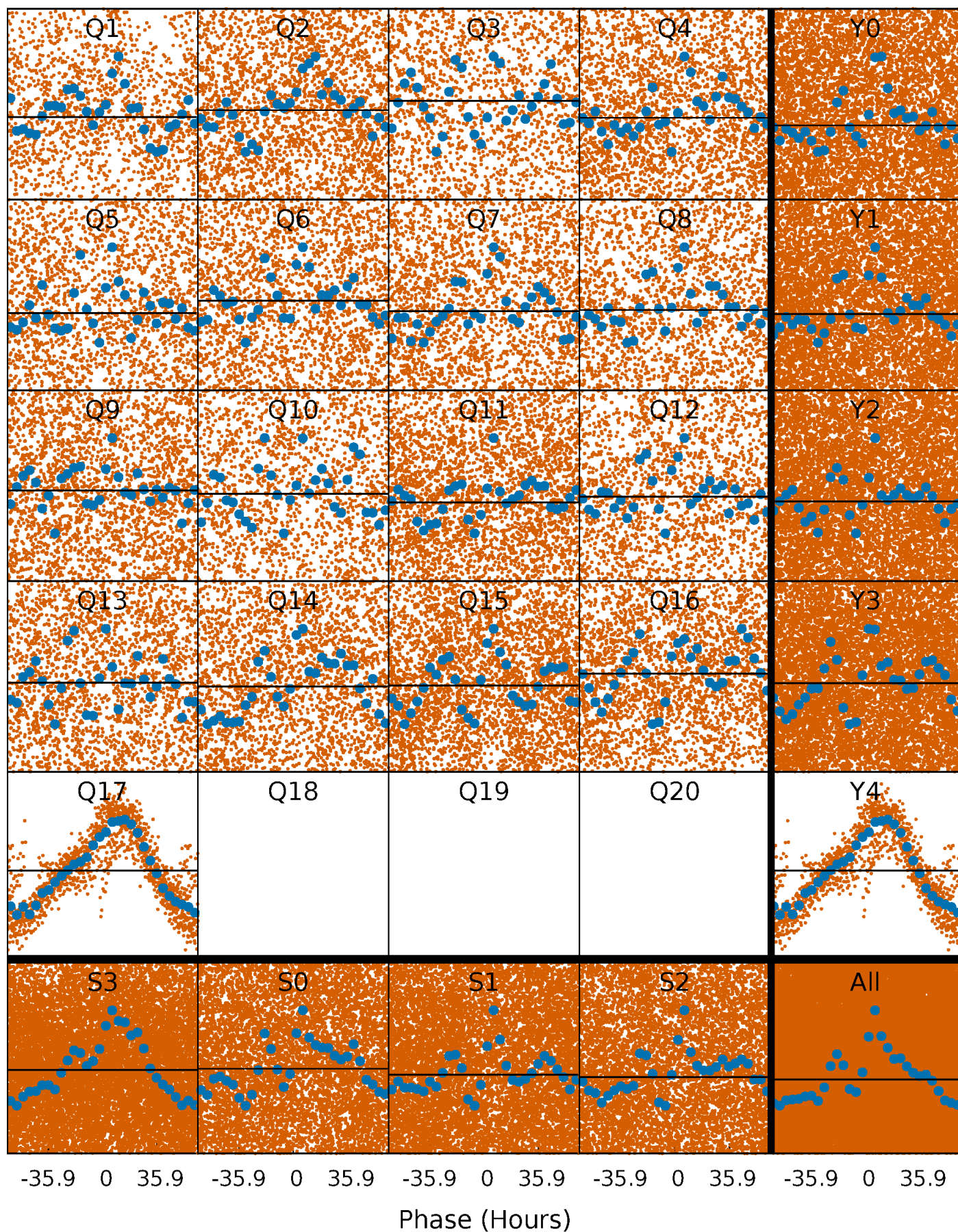
PDC Quarter-Phased Transit Curves

TCE 011027729-01 P= 4.877361 Days $T_0=135.122153$ (BKJD)



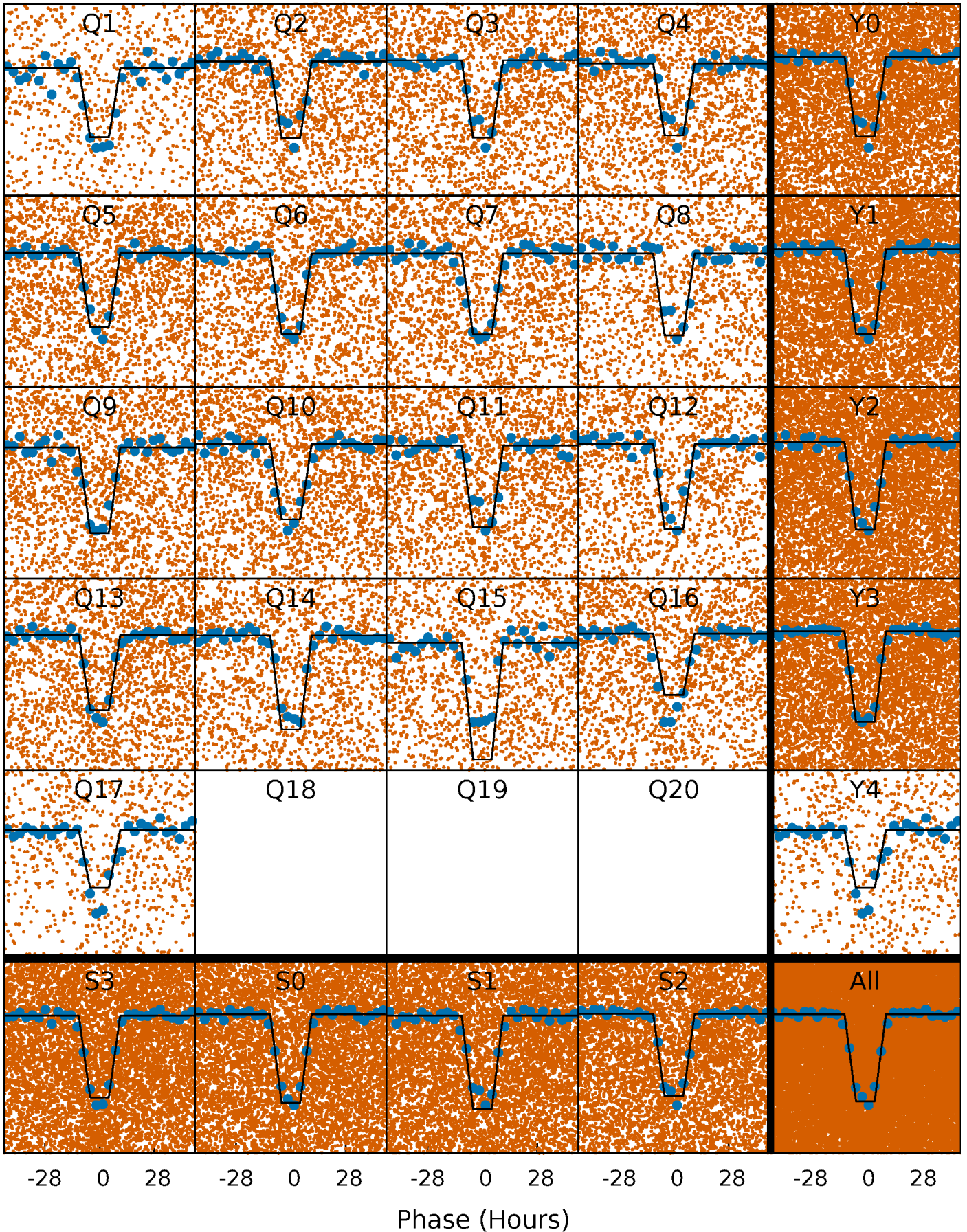
DV Quarter-Phased Transit Curves

TCE 011027729-01 P= 4.877361 Days $T_0=135.122153$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

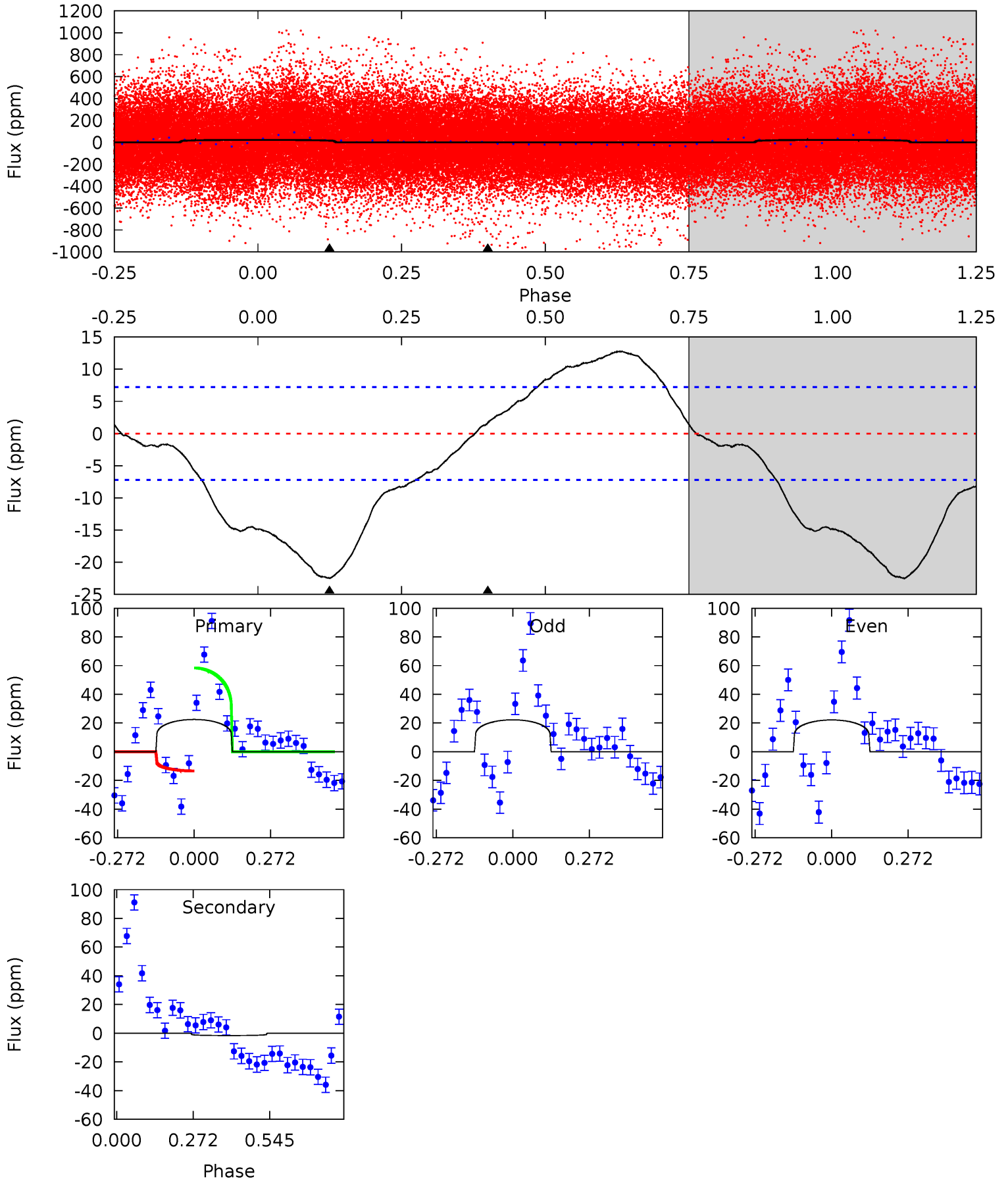
TCE 011027729-01 P= 4.876360 Days $T_0=135.009756$ (BKJD)



DV Model-Shift Uniqueness Test

011027729-01, P = 4.877361 Days, E = 130.244792 Days

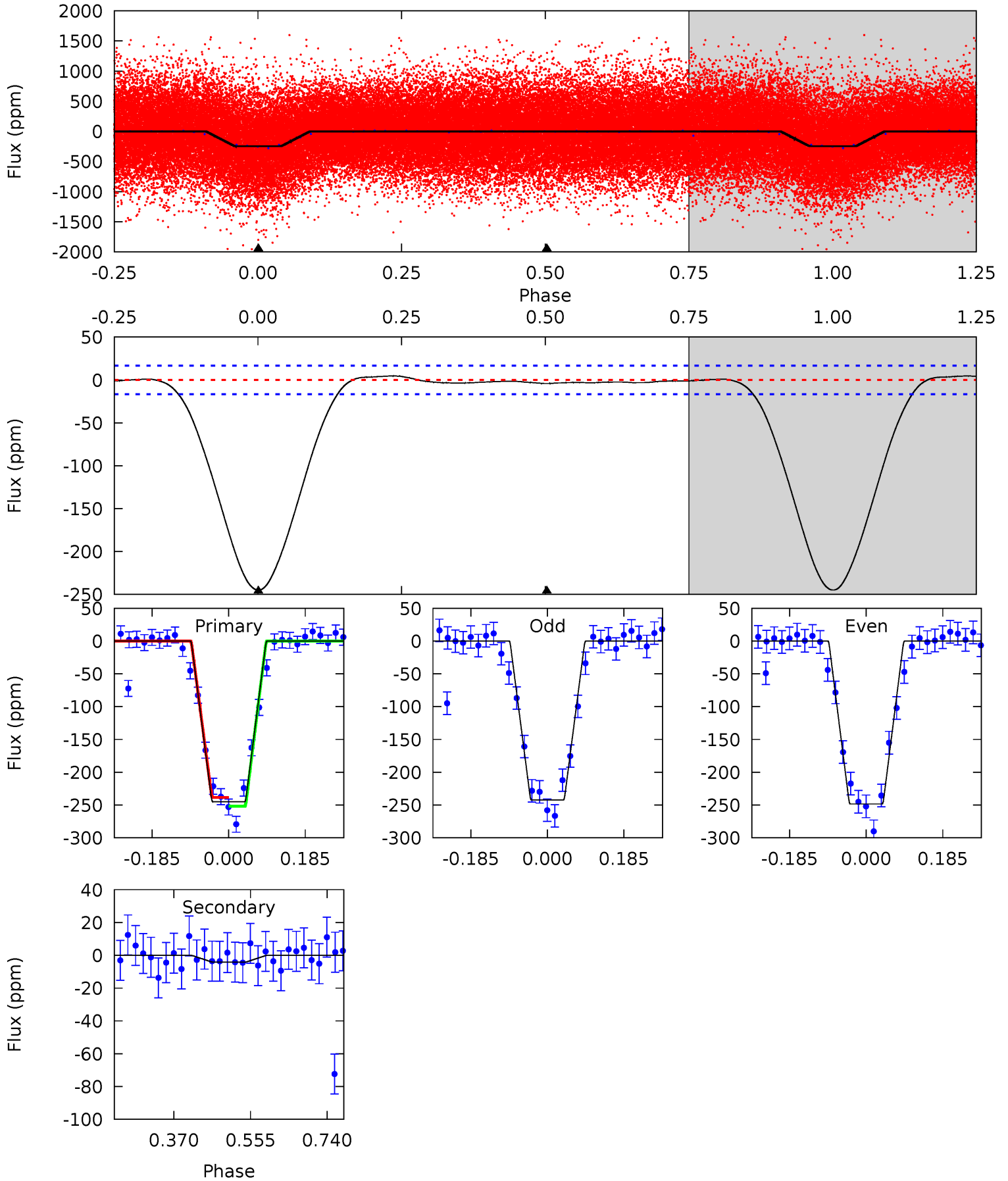
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.6	-1.00	0	0	4.35	1.10	2.63	13.6	13.6	-1.00	-1.00	0.03	2.04	0.36	12.6



Alt Model-Shift Uniqueness Test

011027729-01, P = 4.876360 Days, E = 130.133396 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
65.4	1.11	0	0	4.43	1.33	0.63	65.4	65.4	1.11	1.11	0.79	1.01	0.02	1.79



Stellar Parameters For KIC 011027729

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7903^{+221}_{-332}	$4.134^{+0.176}_{-0.160}$	$-0.400^{+0.200}_{-0.350}$	$1.739^{+0.471}_{-0.385}$	$1.501^{+0.187}_{-0.229}$	$0.402^{+0.344}_{-0.185}$
	+3%/-4%	+4%/-4%	+50%/-87%	+27%/-22%	+12%/-15%	+86%/-46%
Source	KIC0	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 011027729-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	2 ± 2	$7.51^{+8.66}_{-5.28}$	2315^{+964}_{-463}	-2879^{+408}_{-888}	$-0.051^{+0.051}_{-0.938}$
Alt.	-4 ± 4	$9.02^{+10.07}_{-6.16}$	2267^{+949}_{-455}	-2397^{+5508}_{-693}	$0.122^{+1.717}_{-0.120}$

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

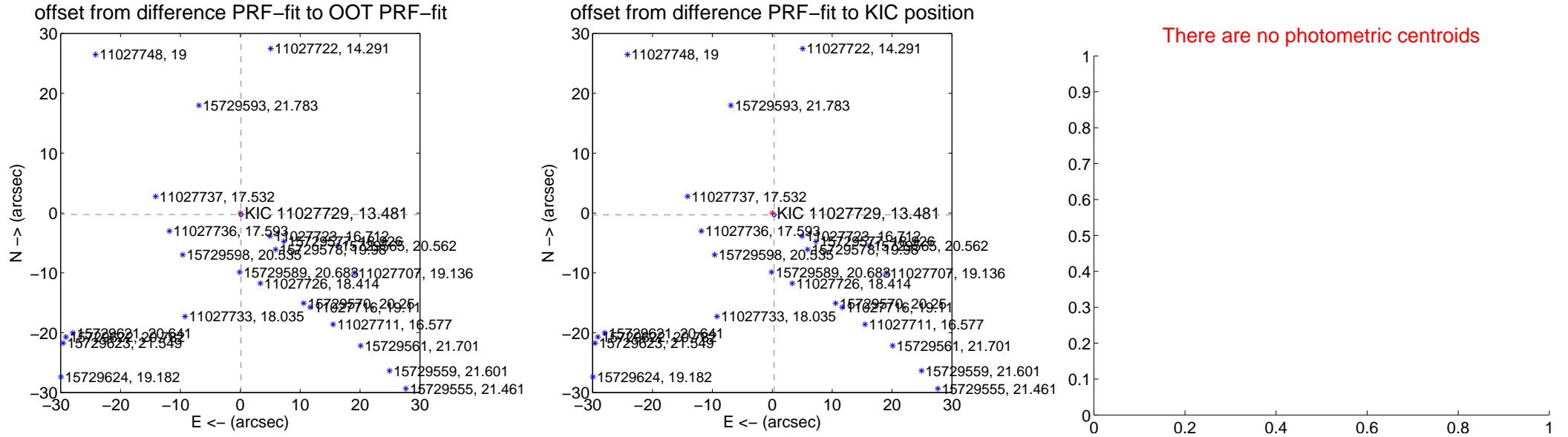
DV Centroid Data

Supplemental centroid analysis for 011027729-01. Kepler magnitude: 13.48. Transit SNR 0.00

There are 0 quarters with good PRF difference image offsets

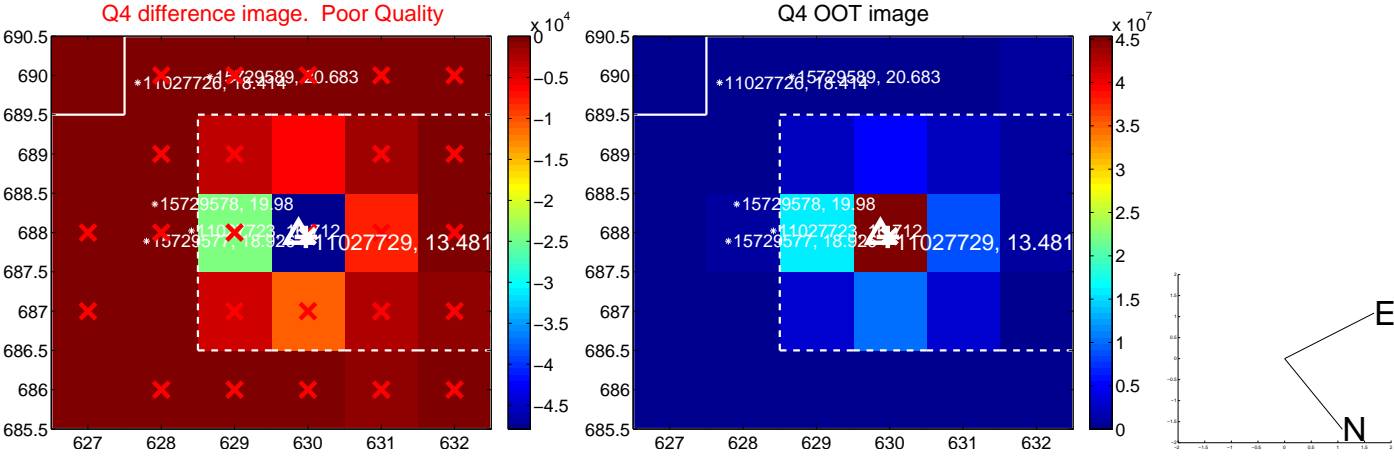
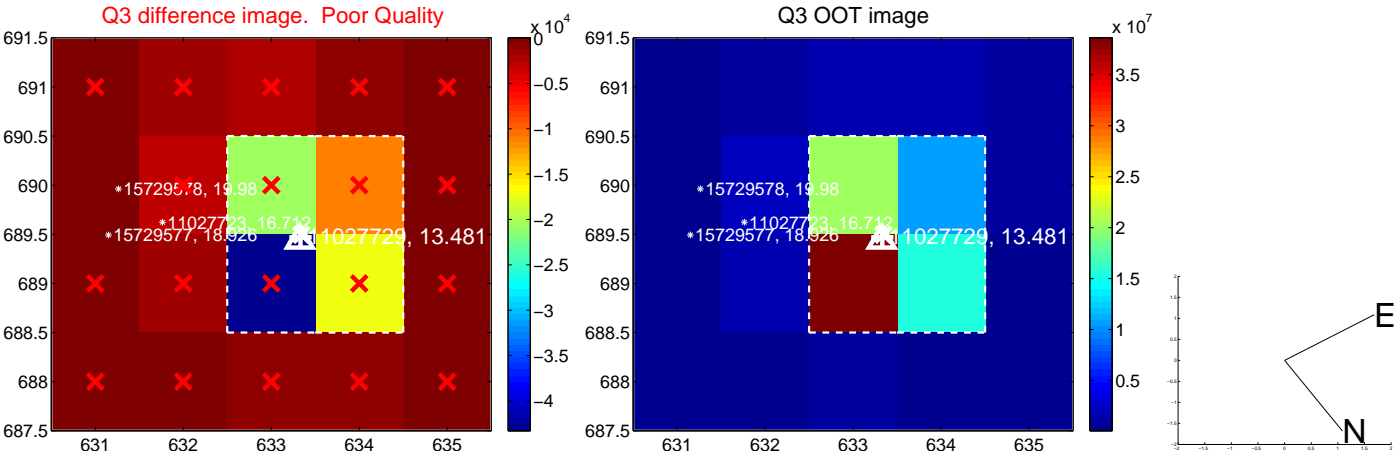
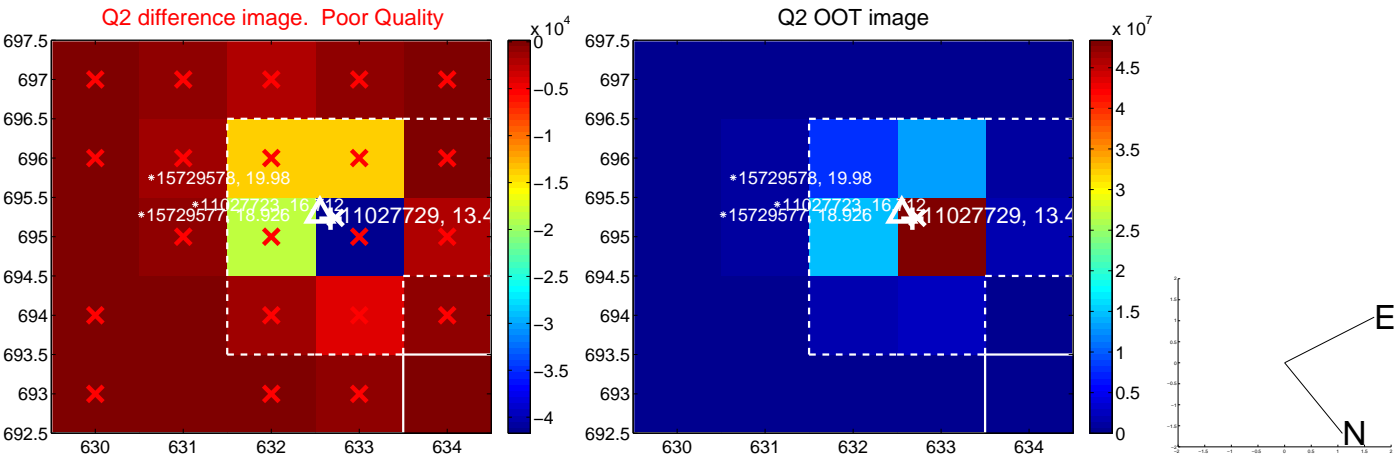
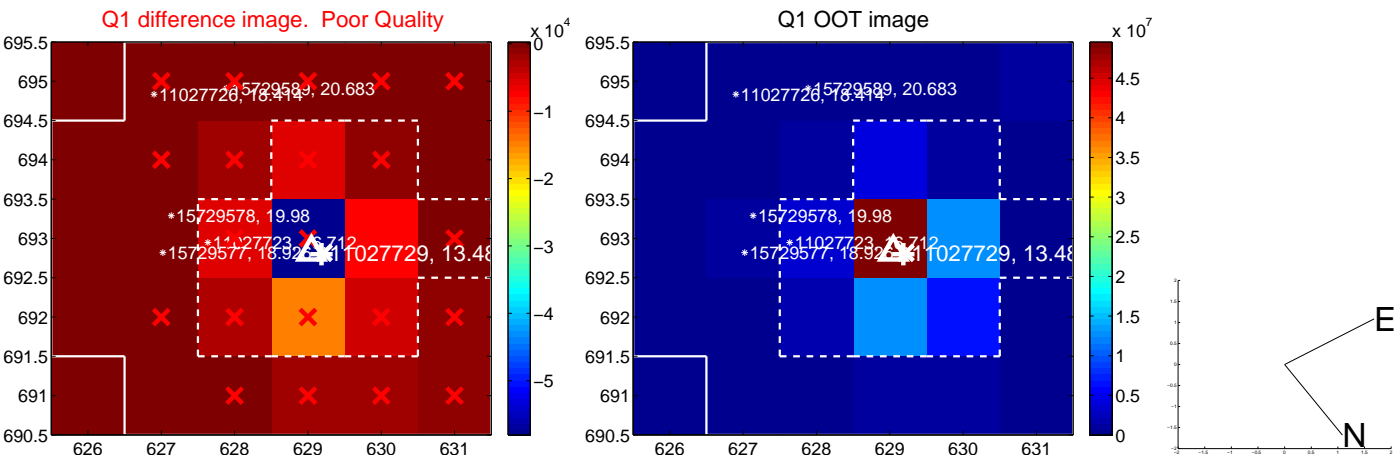
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.282 ± 0.112	2.53	-0.127 ± 0.074	-0.252 ± 0.109
PRF-fit source offset from KIC position	0.444 ± 0.104	4.28	-0.313 ± 0.074	-0.315 ± 0.107
photometric centroid source offset	—	—	—	—

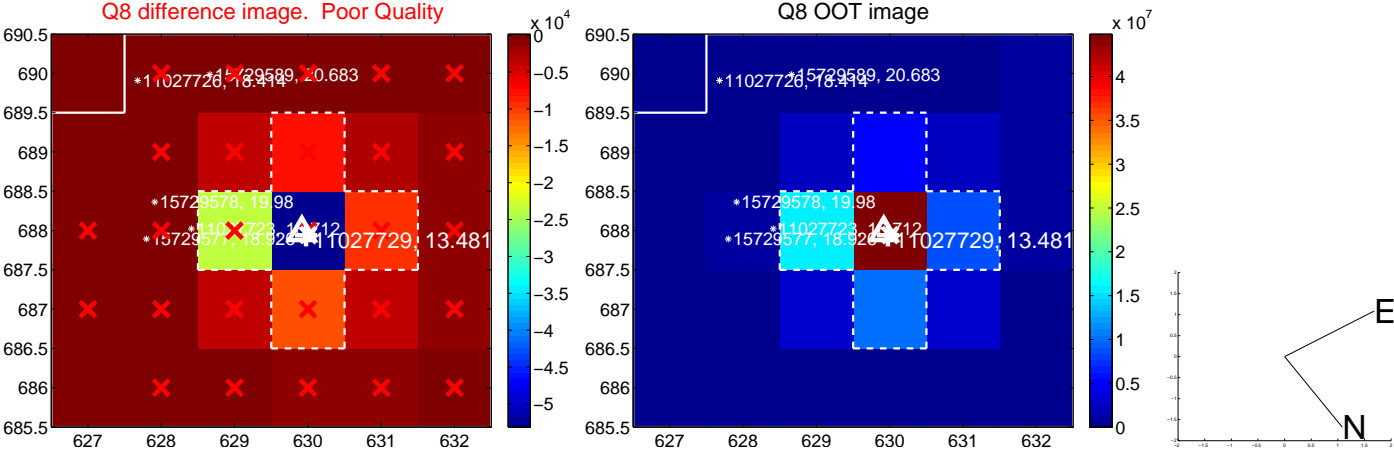
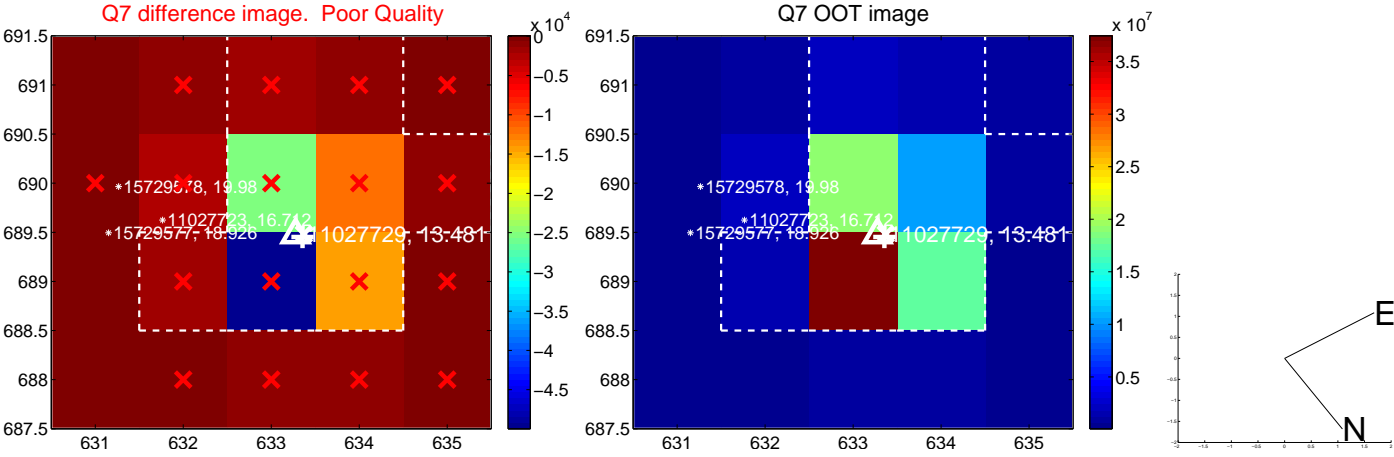
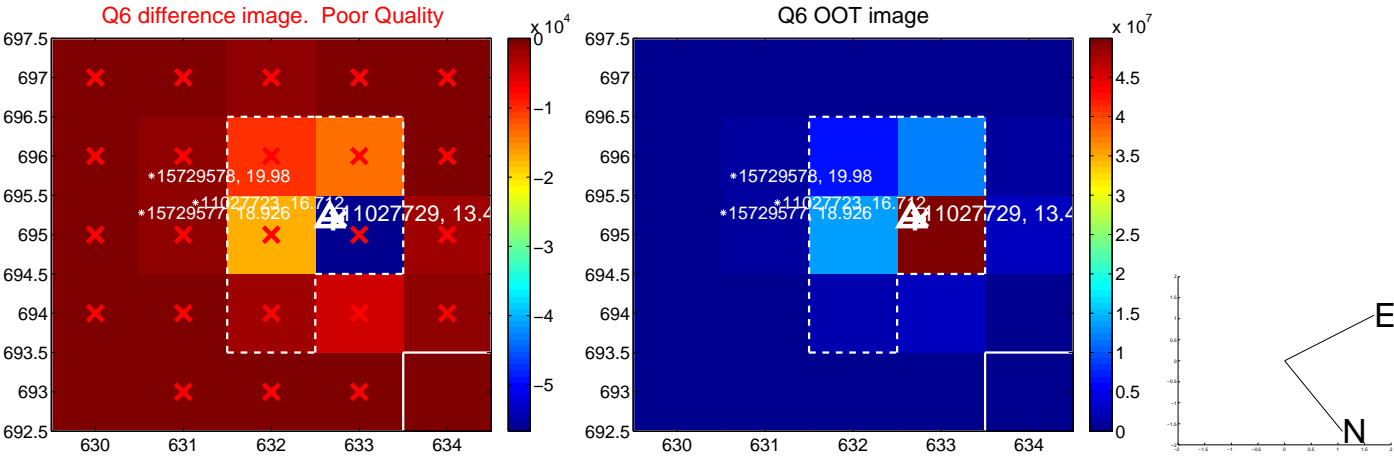
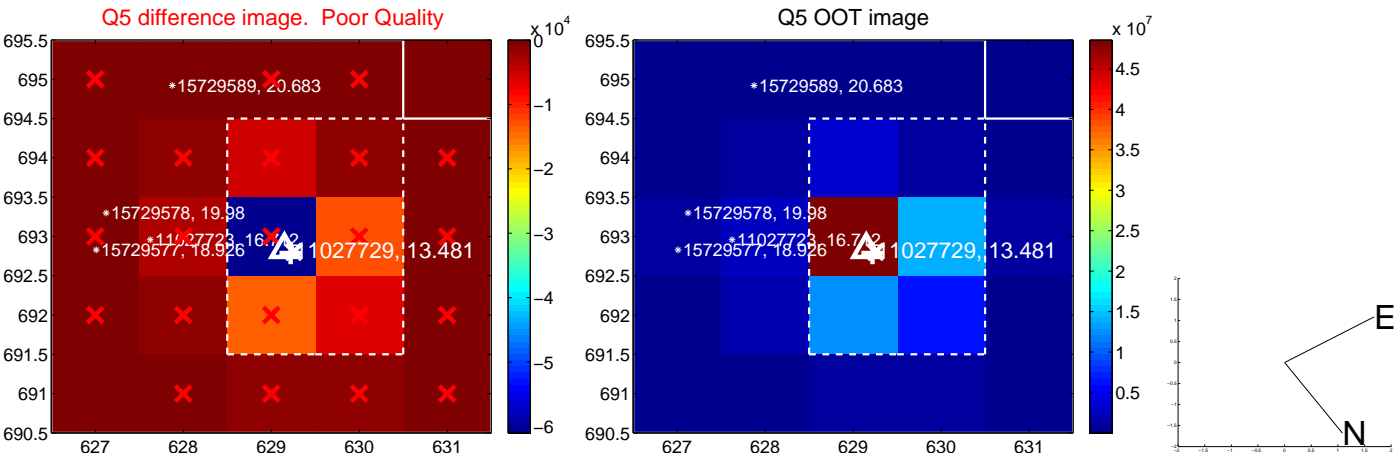


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

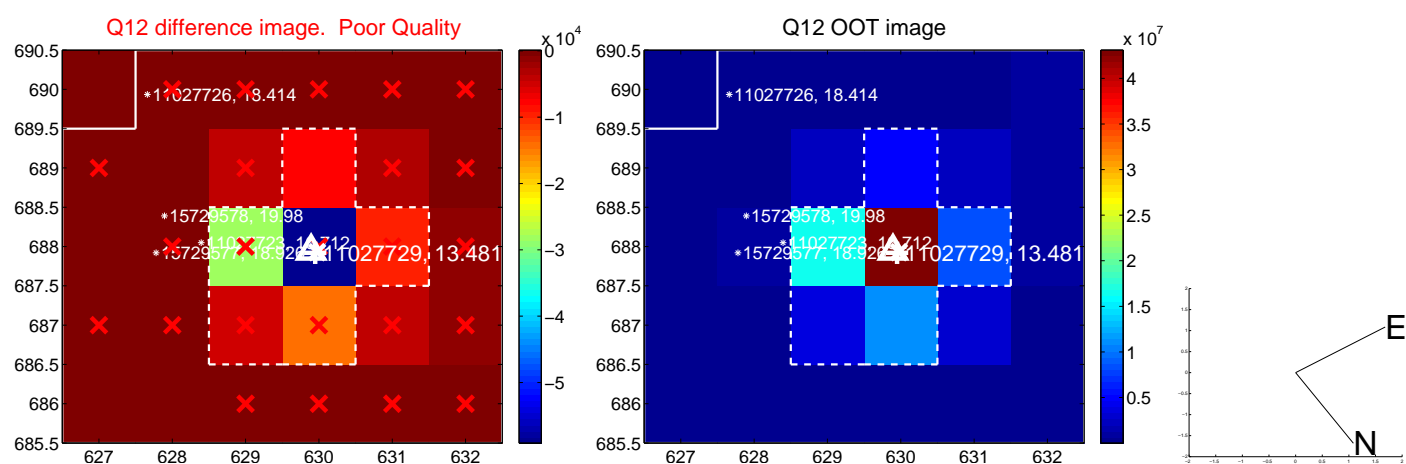
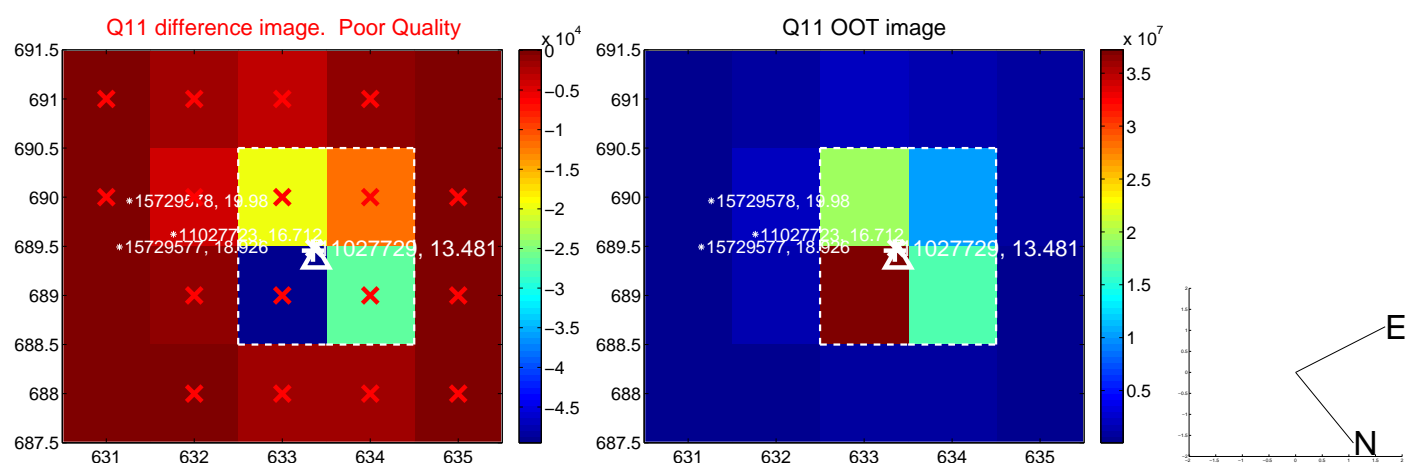
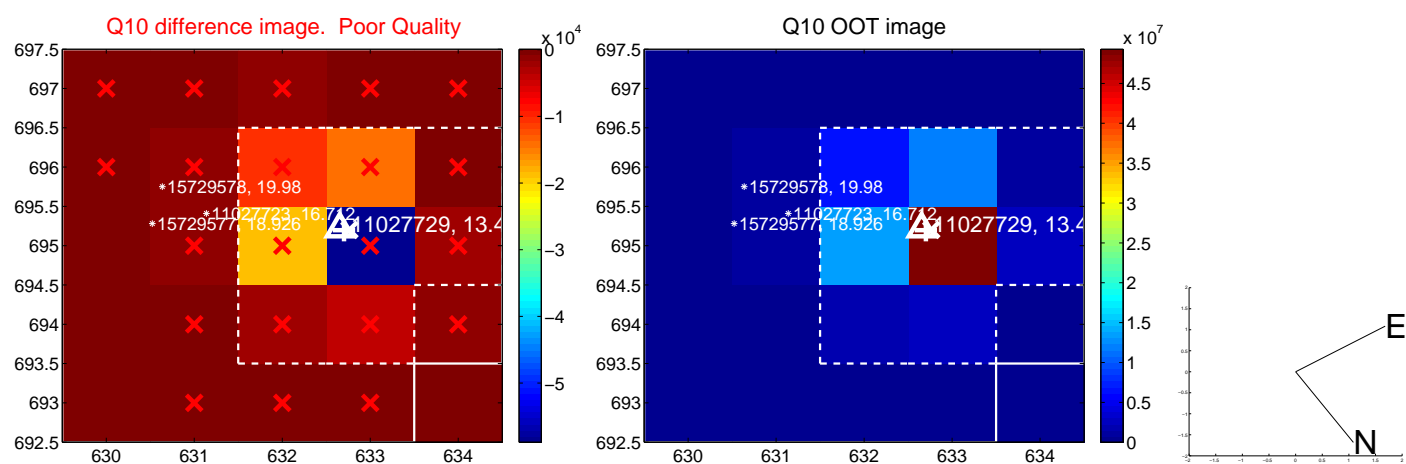
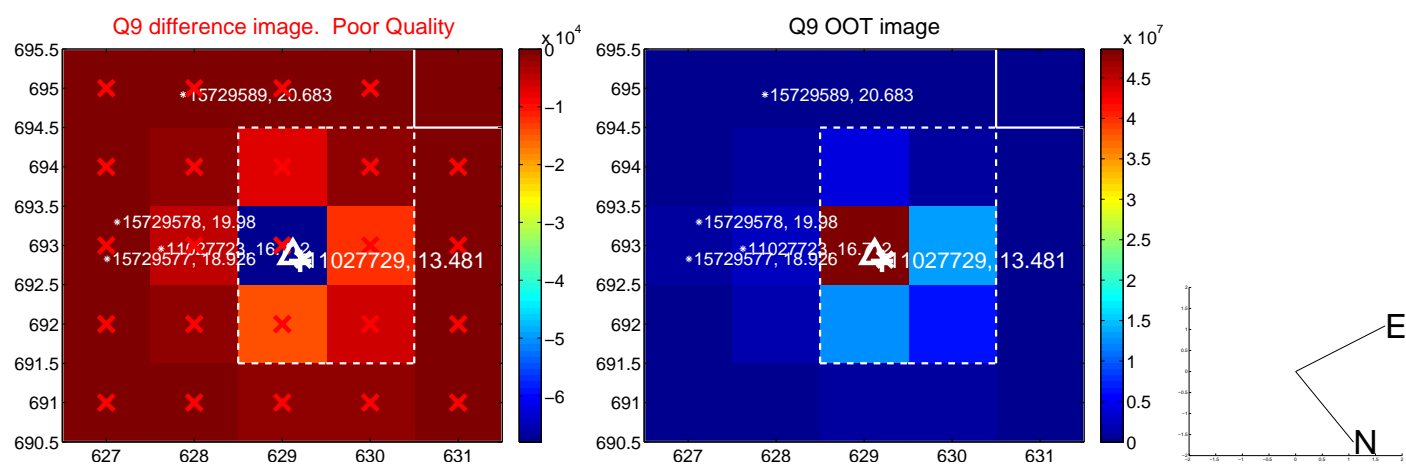
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



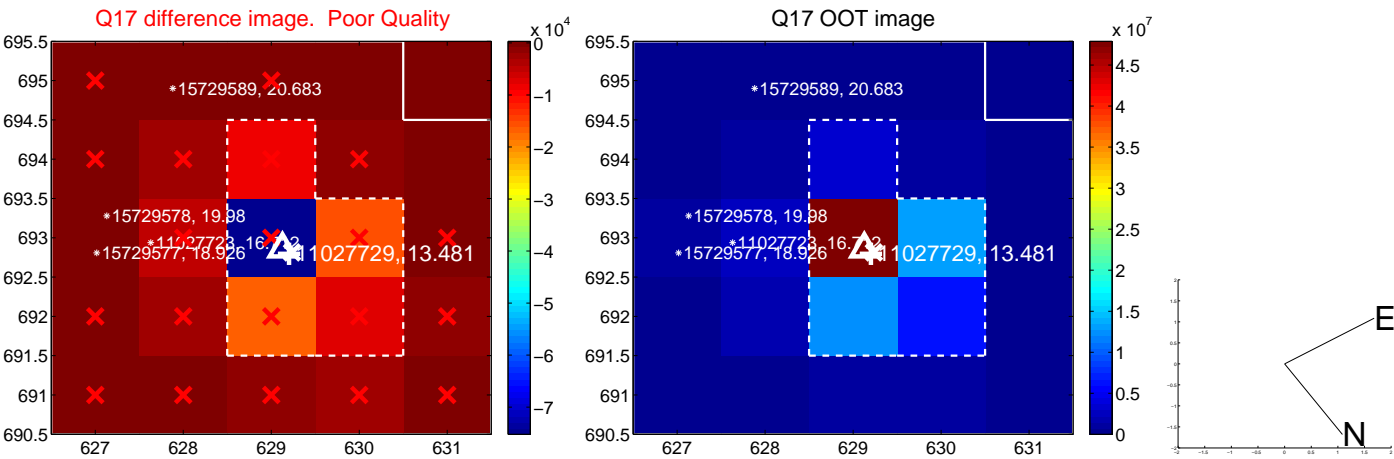
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

