

KIC 006125282

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})
006125282-01	OBS	No	0.532033	131.961419	4.3	3.960	8.4	2.7	3.69	5196	0.82	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006125282-01	OBS	FP	0.00	1	0	0	0	LPP_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.

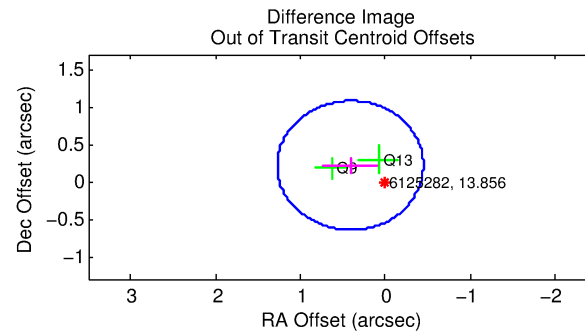
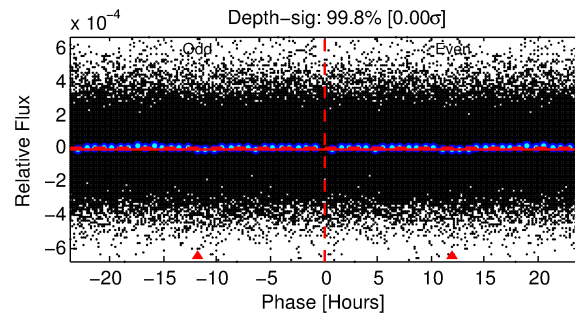
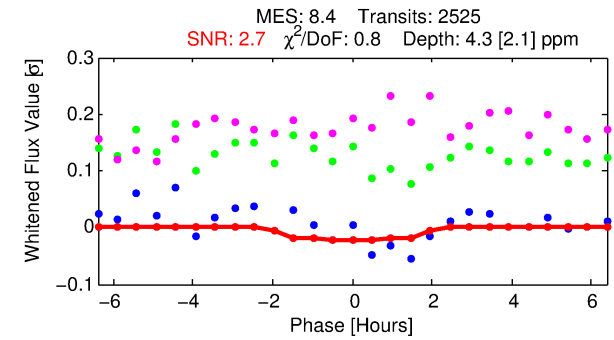
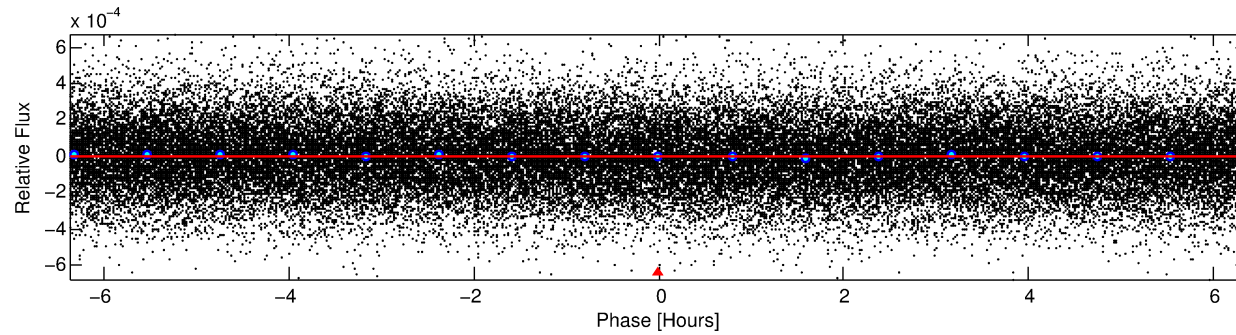
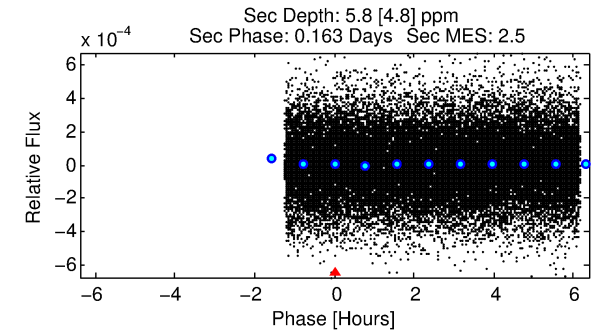
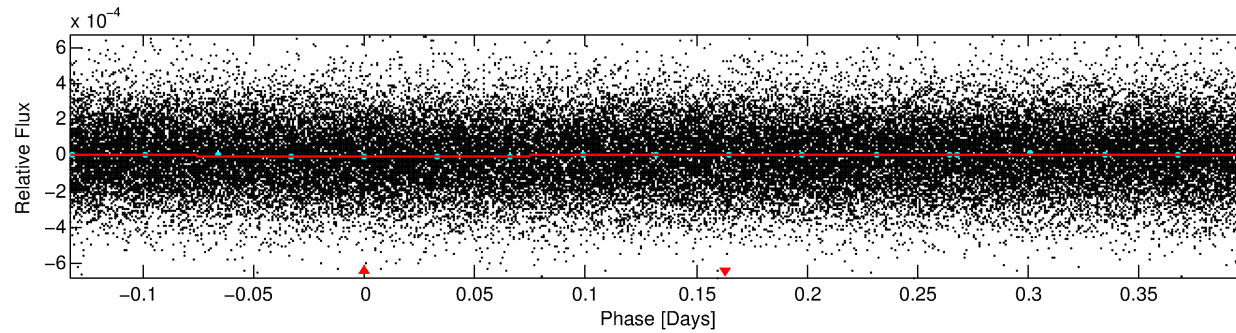
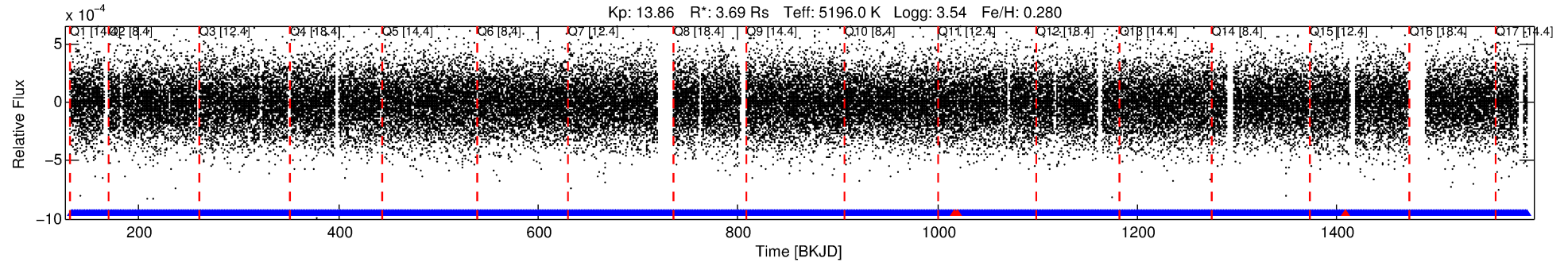
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006125282-01

No Significant Match Found

DV One-Page Summary

KIC: 6125282 Candidate: 1 of 1 Period: 0.532 d



DV Fit Results:

Period = 0.53203 [0.00004] d
Epoch = 131.9614 [0.0173] BKJD
Rp/R* = 0.0020 [0.0039]
a/R* = 1.11 [1.50]
b = 0.70 [5.22]
Seff = N/A
Teq = N/A
Rp = 0.82 [1.66] Re
a = N/A
Ag = N/A
Teffp = N/A

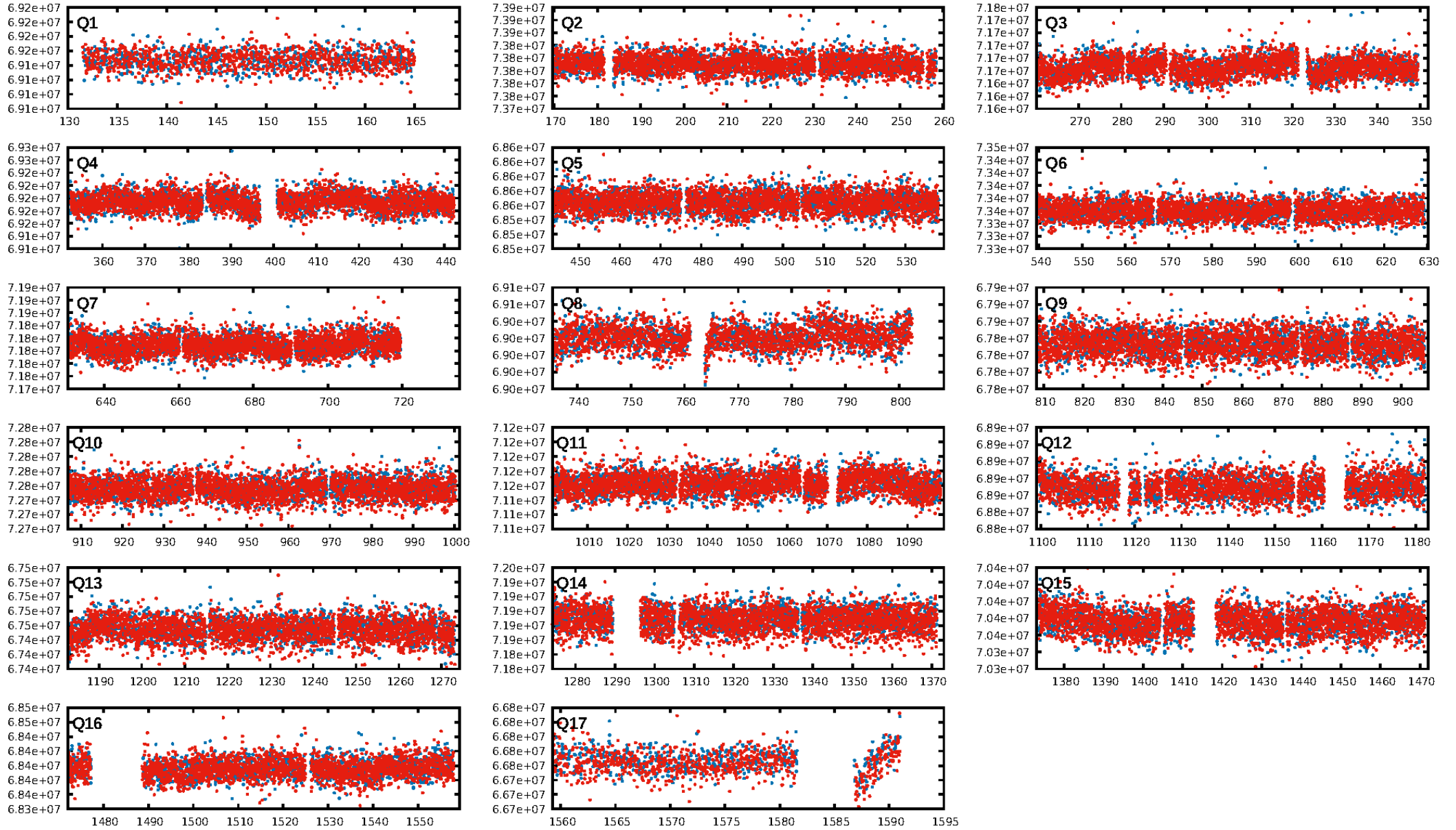
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.15e-13
RollingBand-fgt: 1.00 [2408/2411]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.463 arcsec [1.61σ]
KicOffset-rm: 0.387 arcsec [1.34σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [17/17]

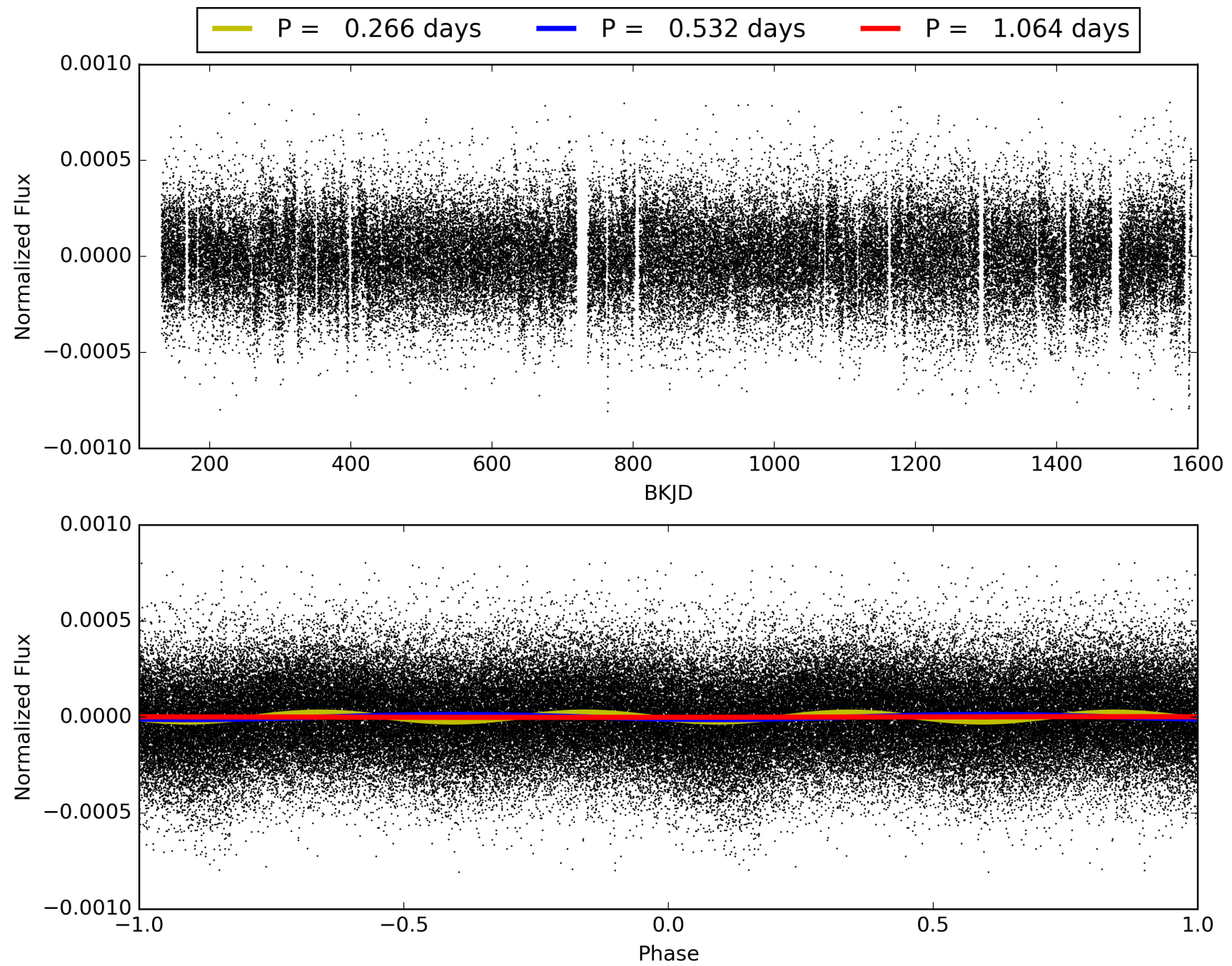
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:21:26 Z

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

TCE 006125282-01, PDC Light Curves

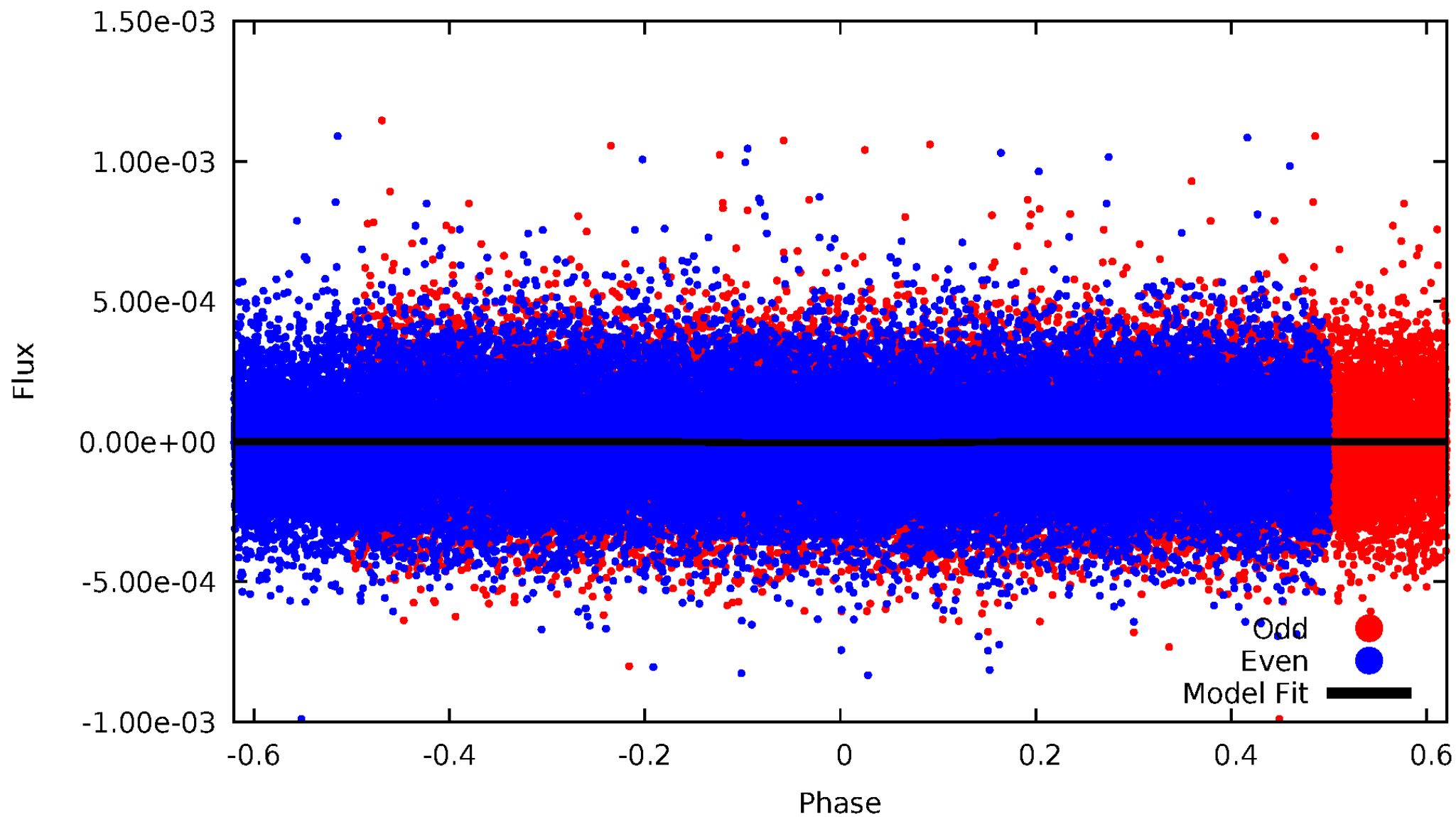


TCE 006125282-01



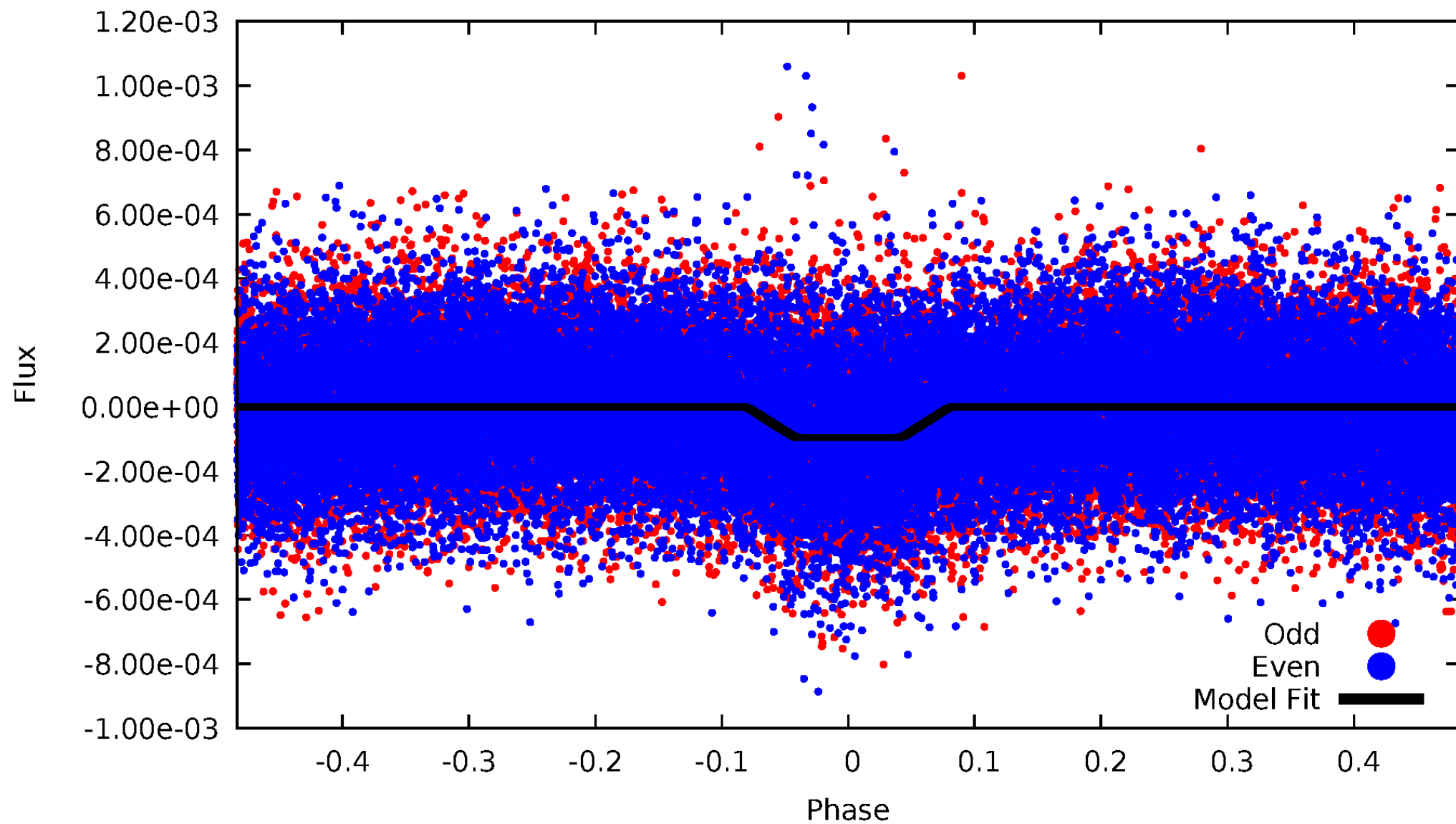
DV Odd/Even

TCE 006125282-01



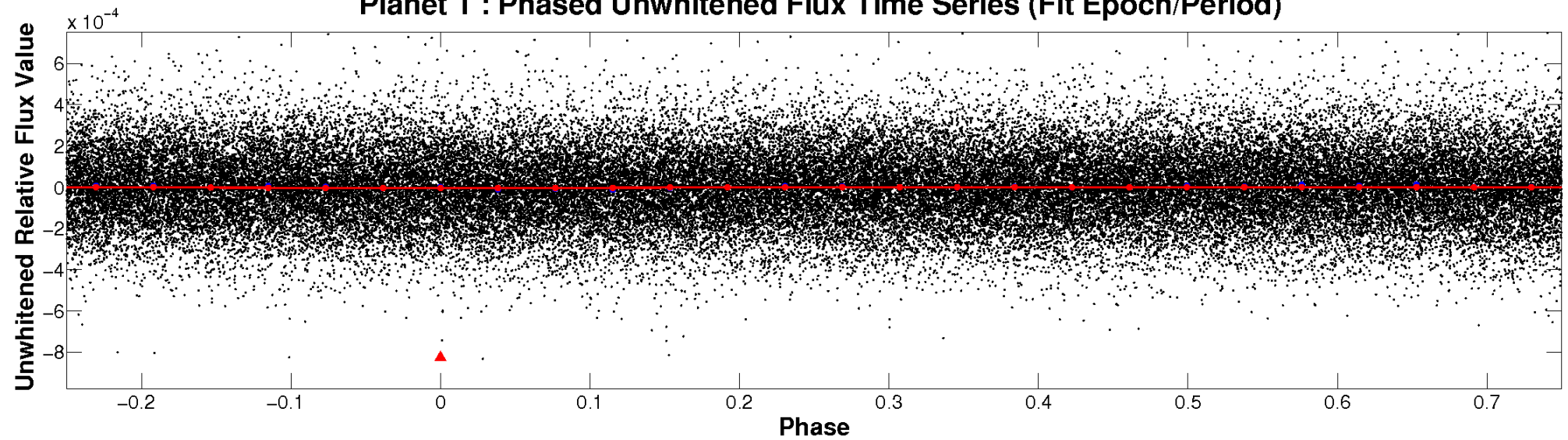
ALT Odd/Even

TCE 006125282-01

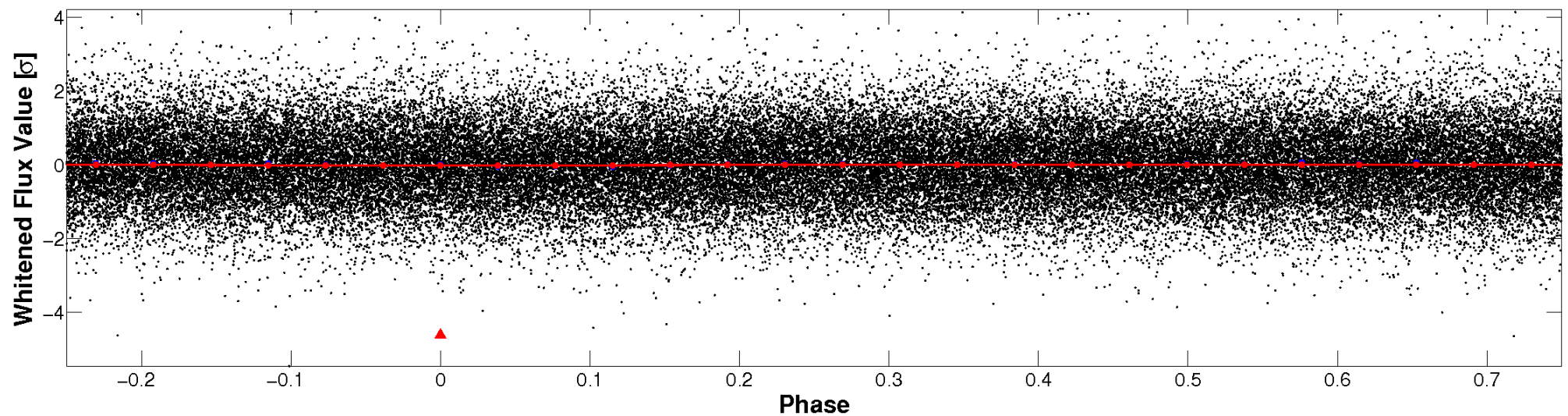


Non-Whitened Vs. Whitened Light Curve

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

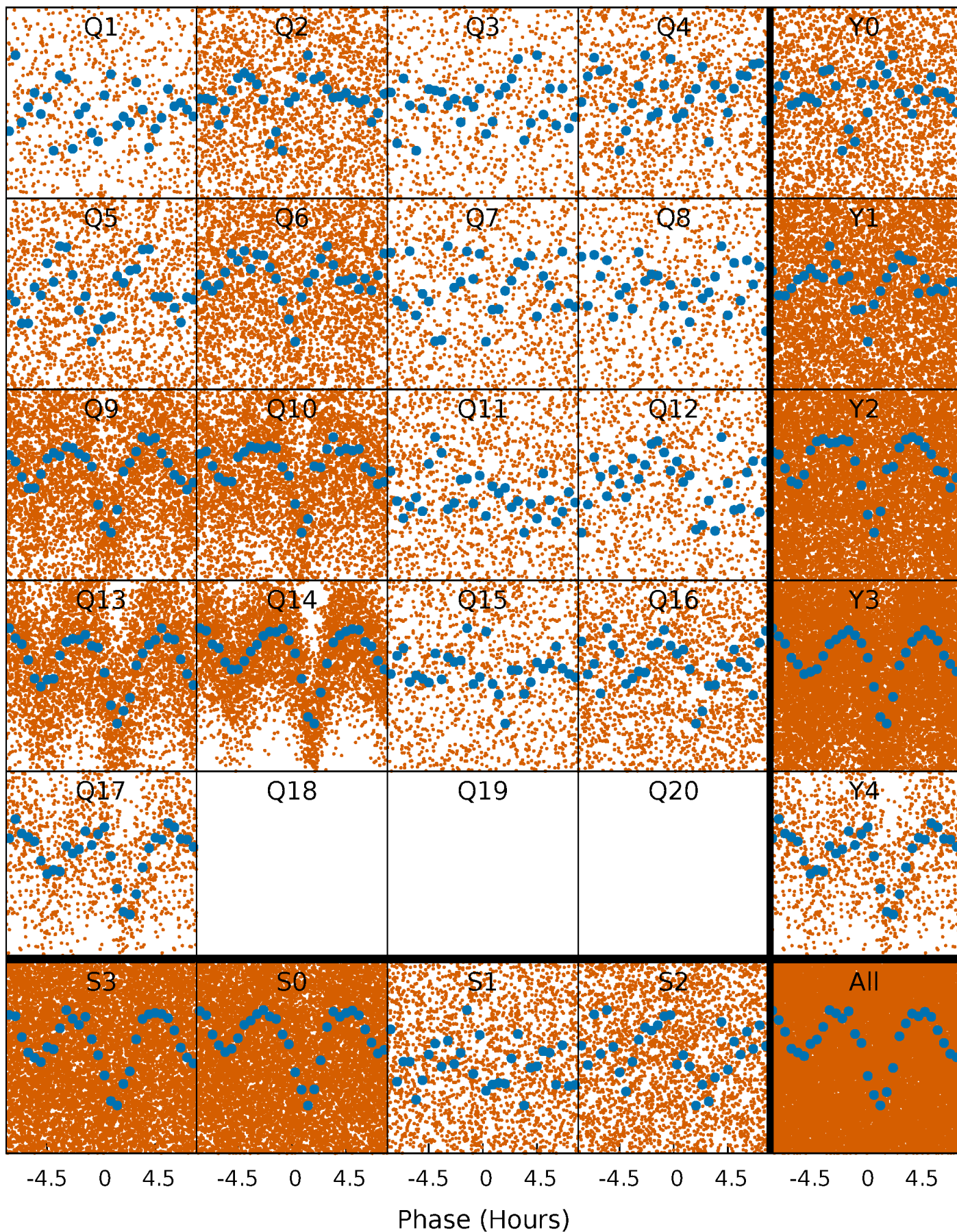


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



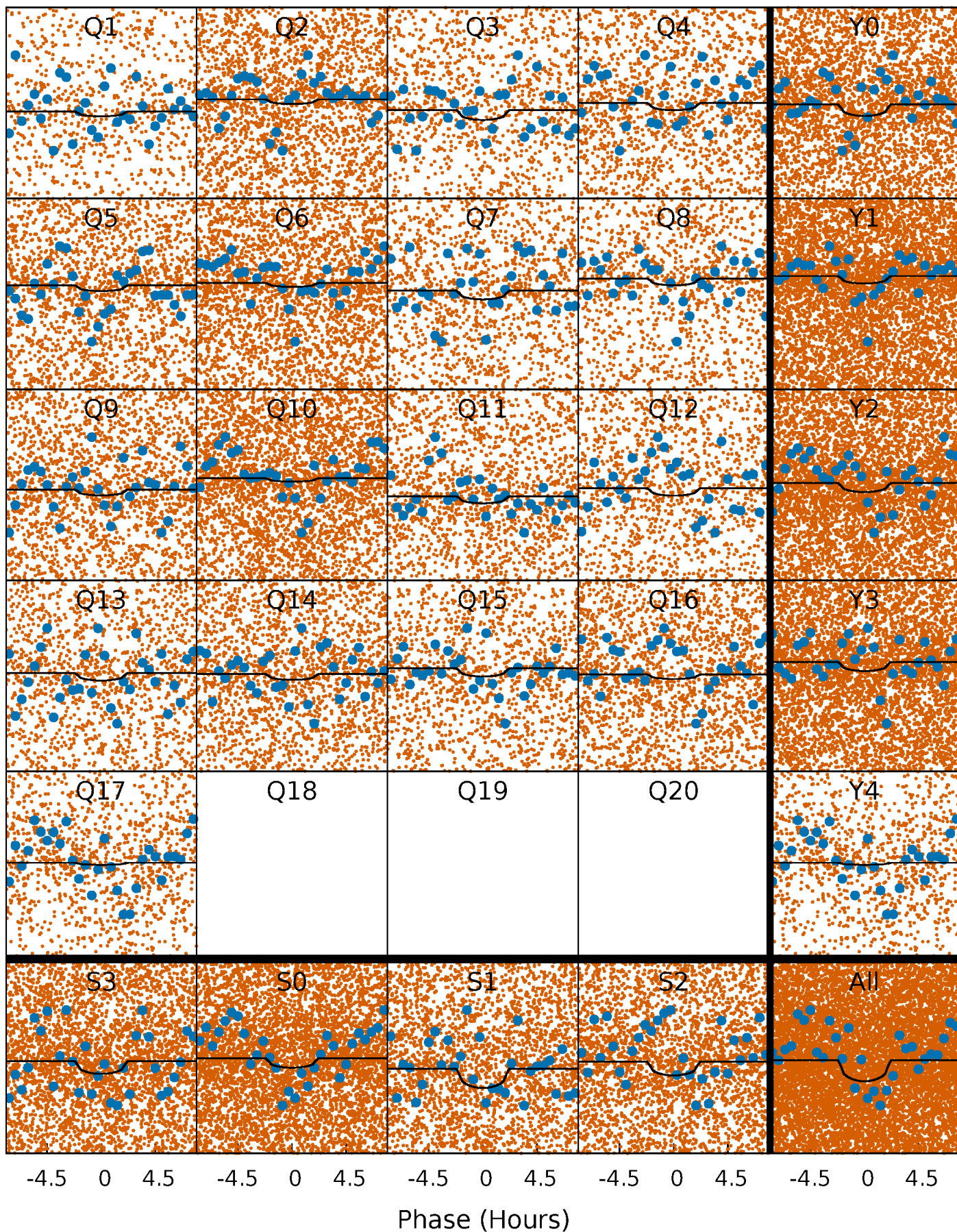
PDC Quarter-Phased Transit Curves

TCE 006125282-01 P= 0.532033 Days $T_0=131.961419$ (BKJD)



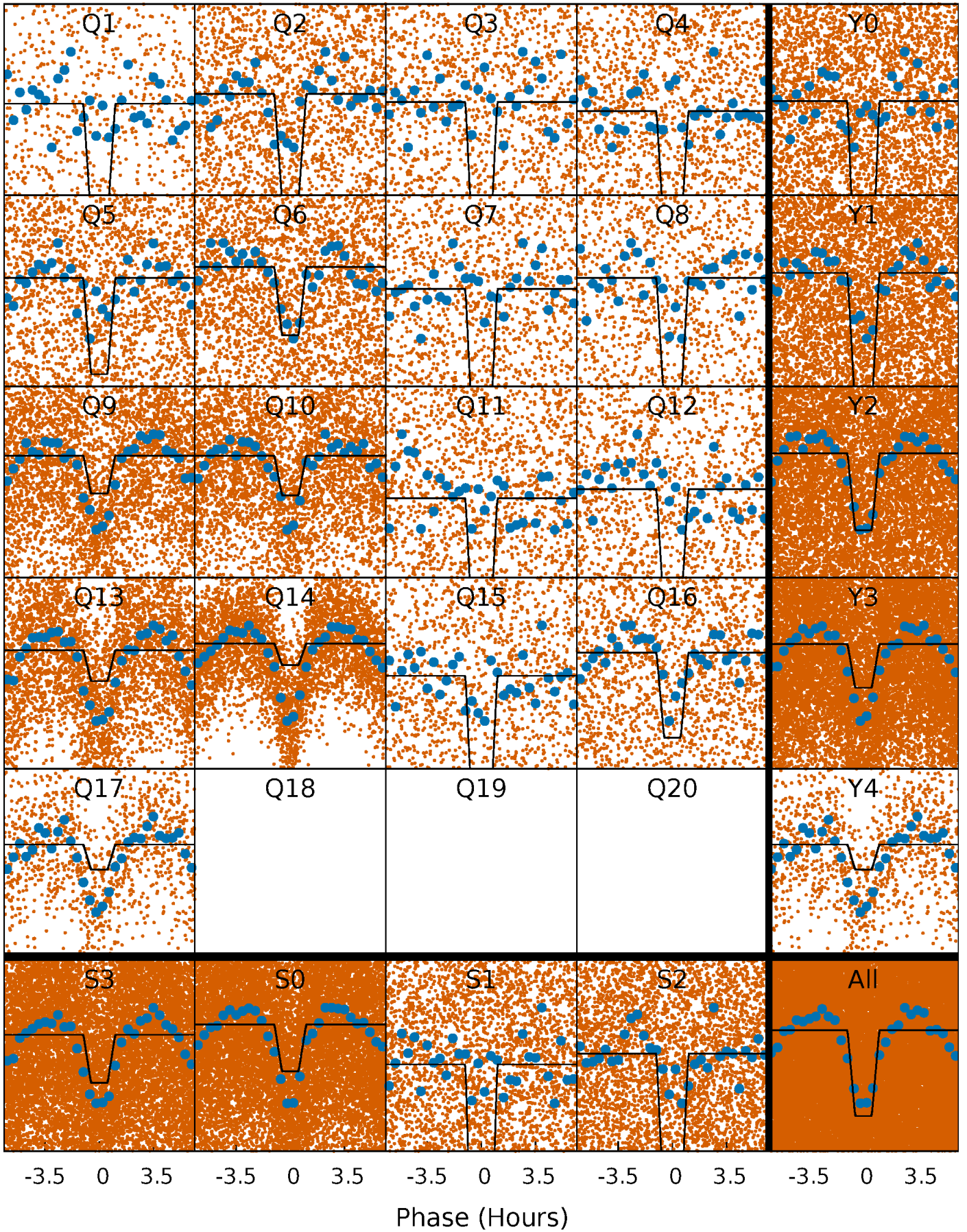
DV Quarter-Phased Transit Curves

TCE 006125282-01 P= 0.532033 Days $T_0=131.961419$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

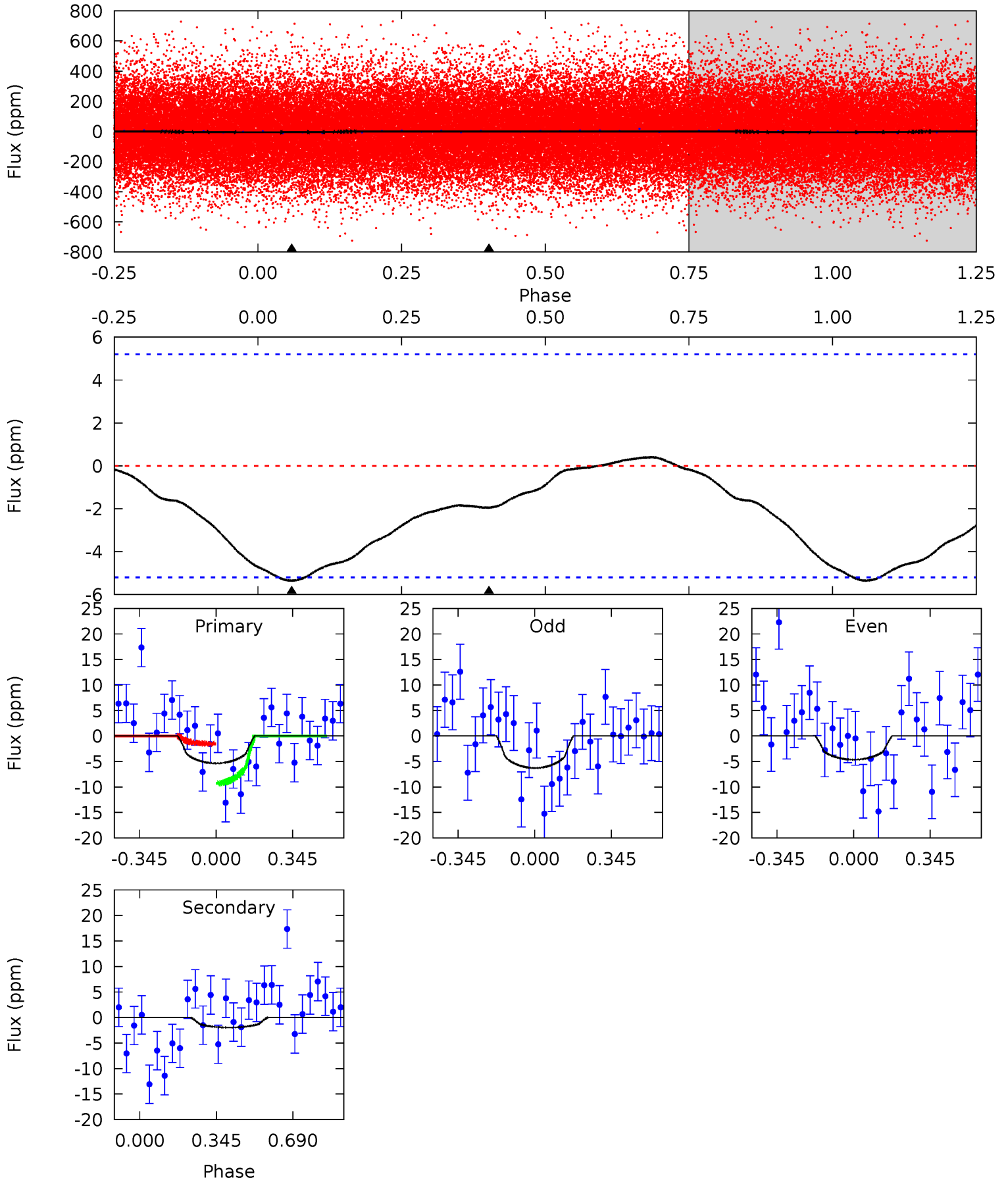
TCE 006125282-01 P= 0.532084 Days $T_0=131.918470$ (BKJD)



DV Model-Shift Uniqueness Test

006125282-01, P = 0.532033 Days, E = 131.429386 Days

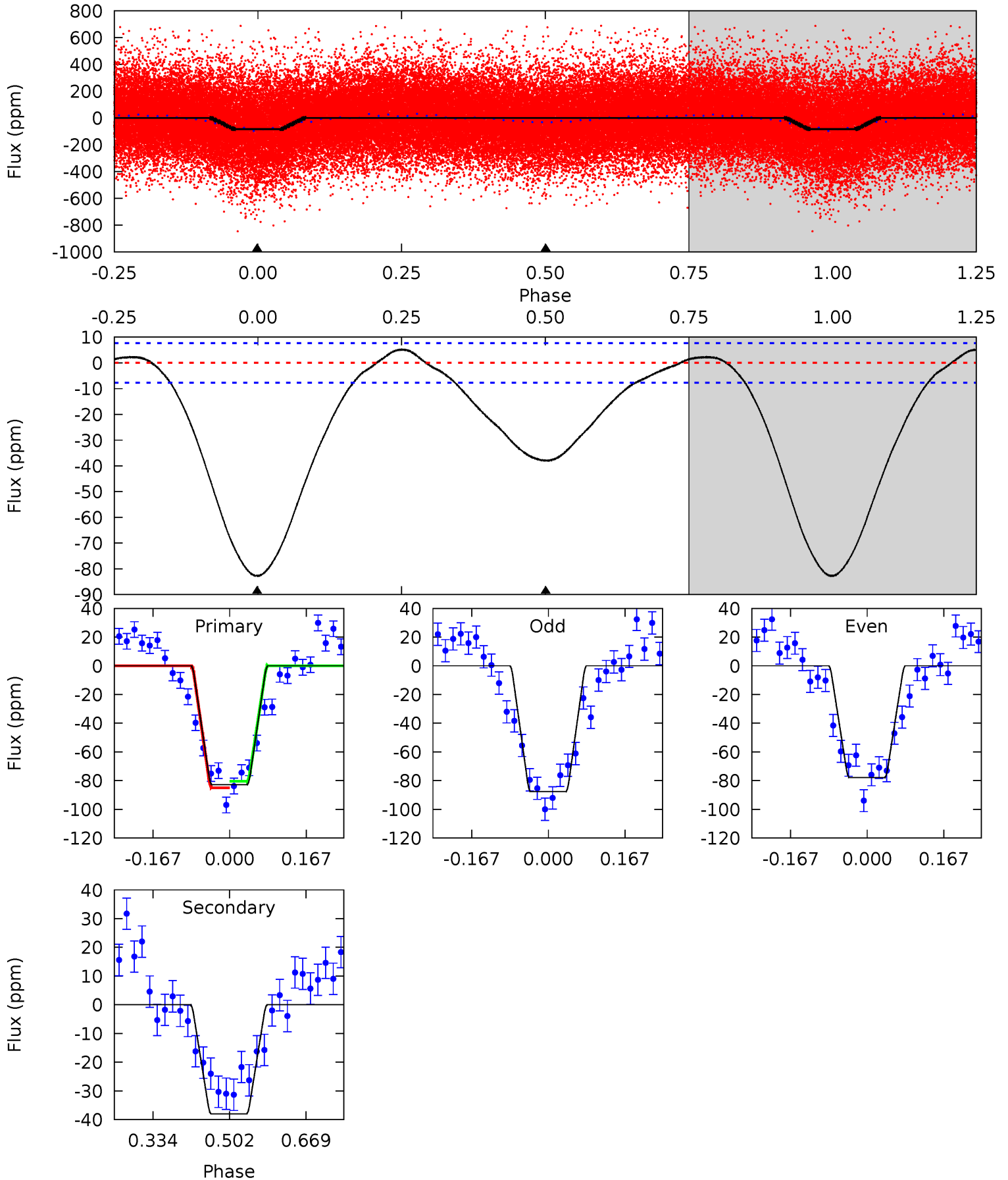
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.43	1.62	0	0	4.30	0.94	0.23	4.43	4.43	1.62	1.62	0.68	0.76	0.07	3.24



Alt Model-Shift Uniqueness Test

006125282-01, P = 0.532084 Days, E = 131.386386 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
47.9	22.0	0	0	4.46	1.38	1.84	47.9	47.9	22.0	22.0	2.82	1.13	0.06	1.35



Stellar Parameters For KIC 006125282

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5196^{+207}_{-186}	$3.540^{+0.864}_{-0.216}$	$0.280^{+0.150}_{-0.300}$	$3.689^{+0.946}_{-2.647}$	$1.719^{+0.195}_{-0.782}$	$0.048^{+1.239}_{-0.023}$
	+4%/-4%	+24%/-6%	+54%/-107%	+26%/-72%	+11%/-45%	+2568%/-48%
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 006125282-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2 ± 1	$1.26^{+1.31}_{-0.88}$	4896^{+492}_{-910}	-3630^{+8618}_{-709}	$0.136^{+1.311}_{-0.114}$
Alt.	-38 ± 2	$3.42^{+2.06}_{-1.65}$	4822^{+523}_{-840}	3364^{+1593}_{-7102}	$0.400^{+1.073}_{-0.236}$

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

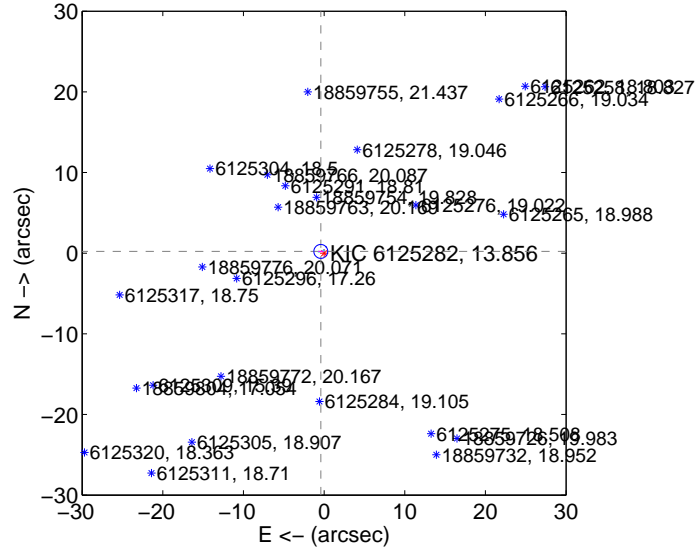
Supplemental centroid analysis for 006125282-01. Kepler magnitude: 13.86. Transit SNR 2.71

There are 2 quarters with good PRF difference image offsets

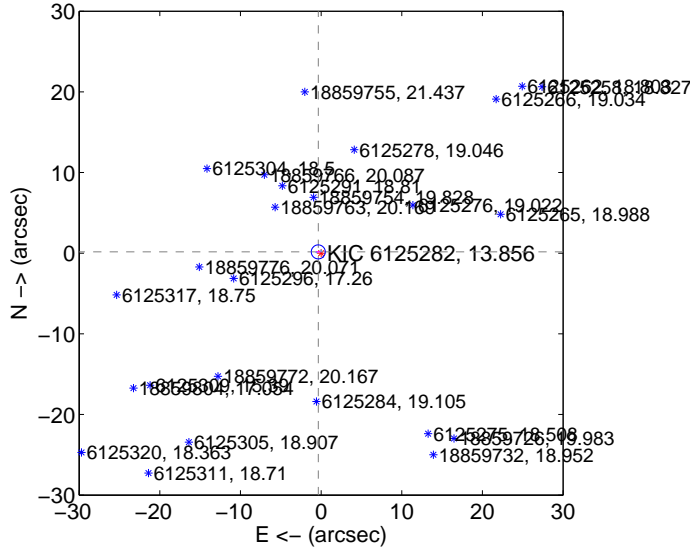
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.463 ± 0.287	1.61	0.409 ± 0.321	0.216 ± 0.095
PRF-fit source offset from KIC position	0.387 ± 0.289	1.34	0.353 ± 0.314	0.158 ± 0.098
photometric centroid source offset	—	—	—	—

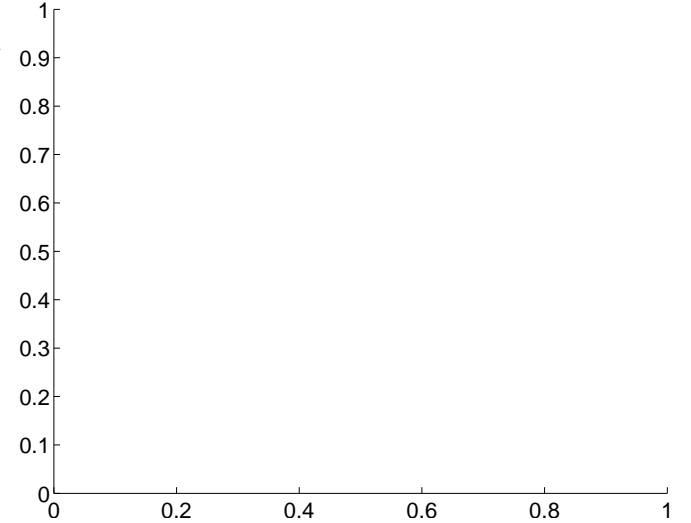
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

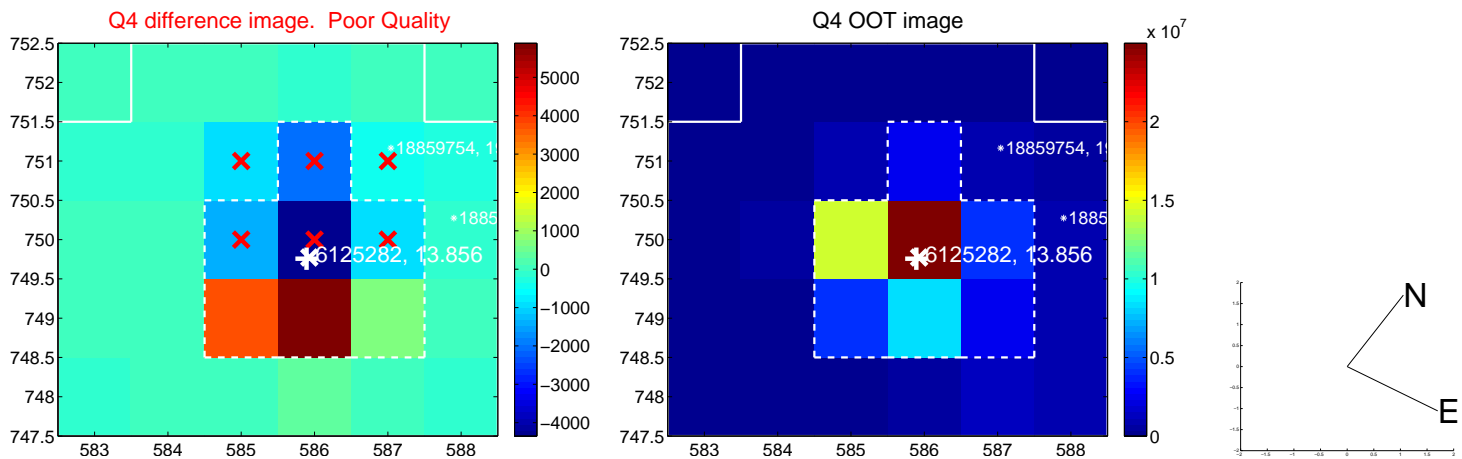
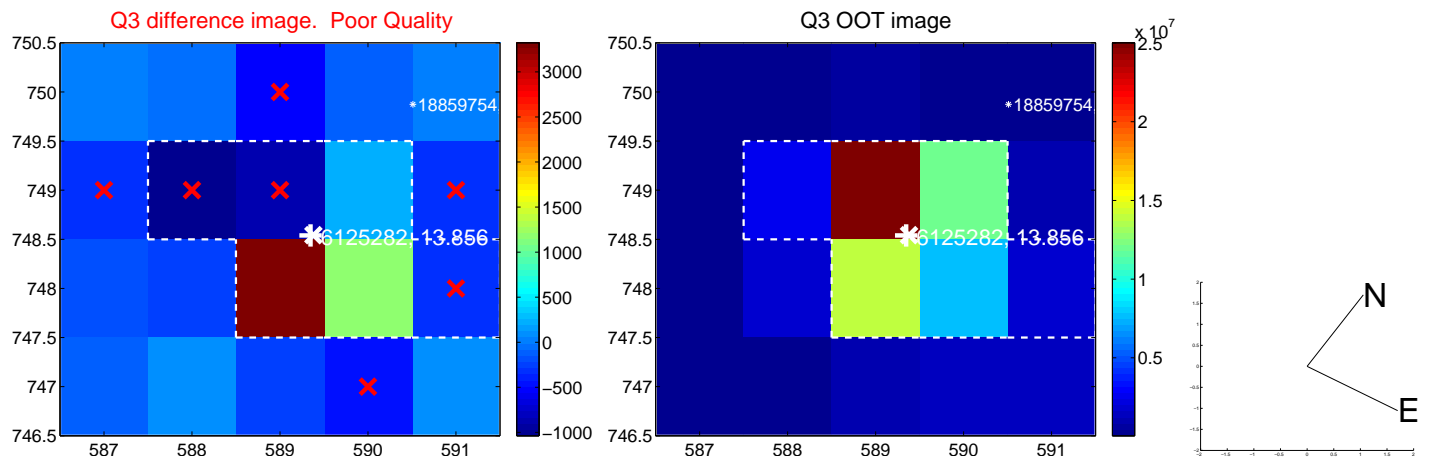
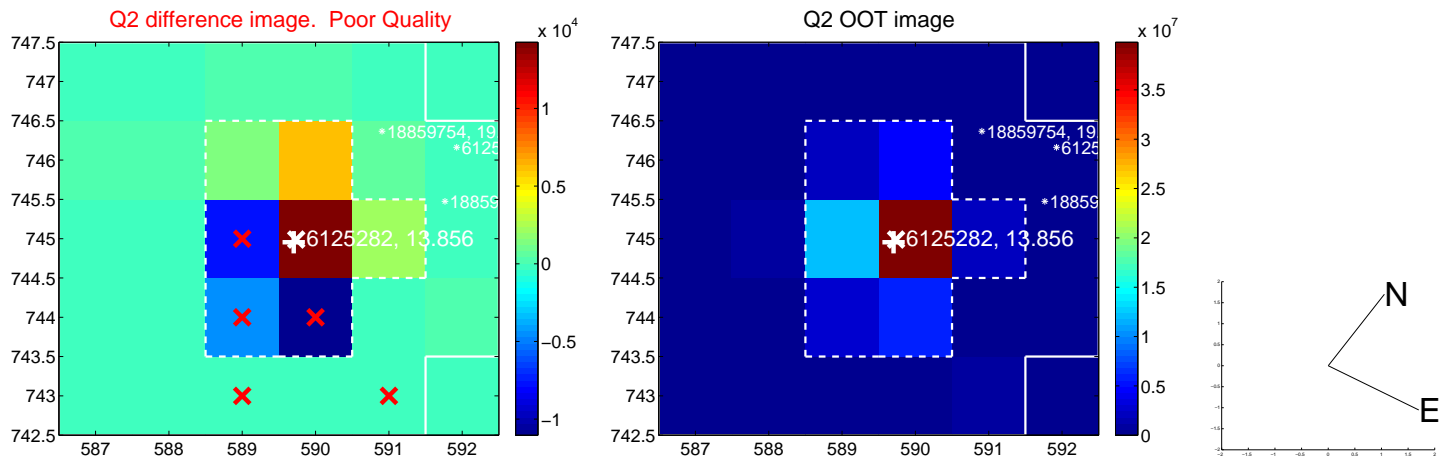
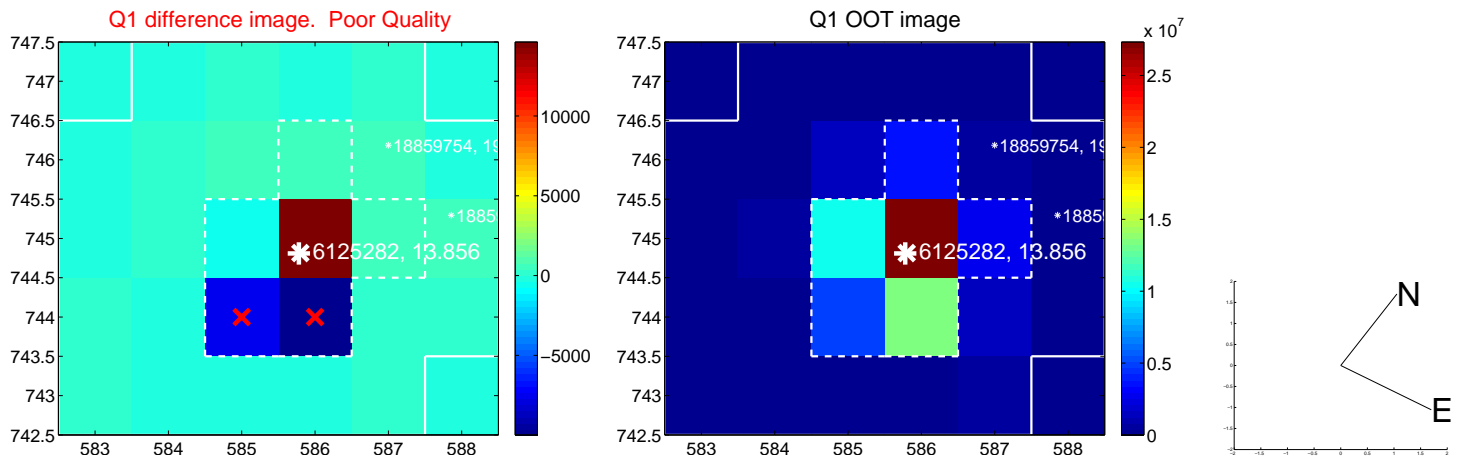


There are no photometric centroids

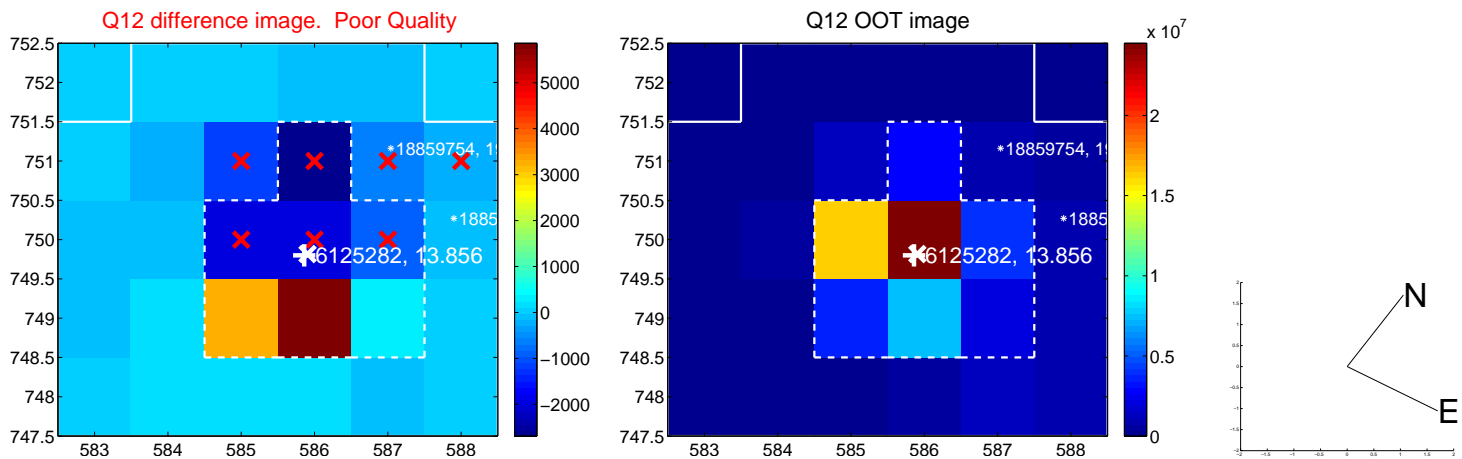
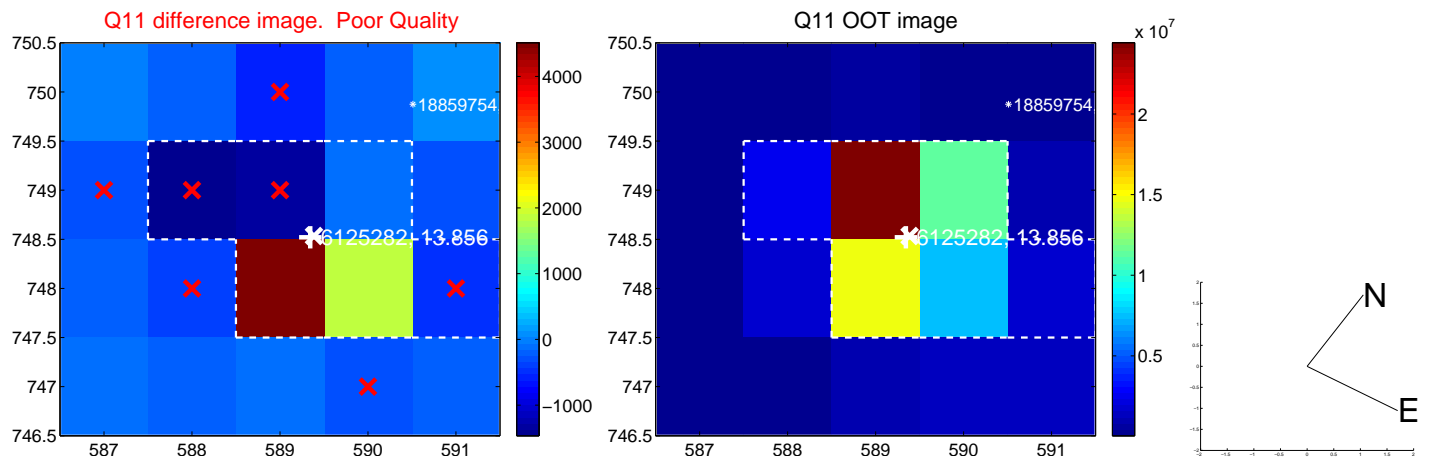
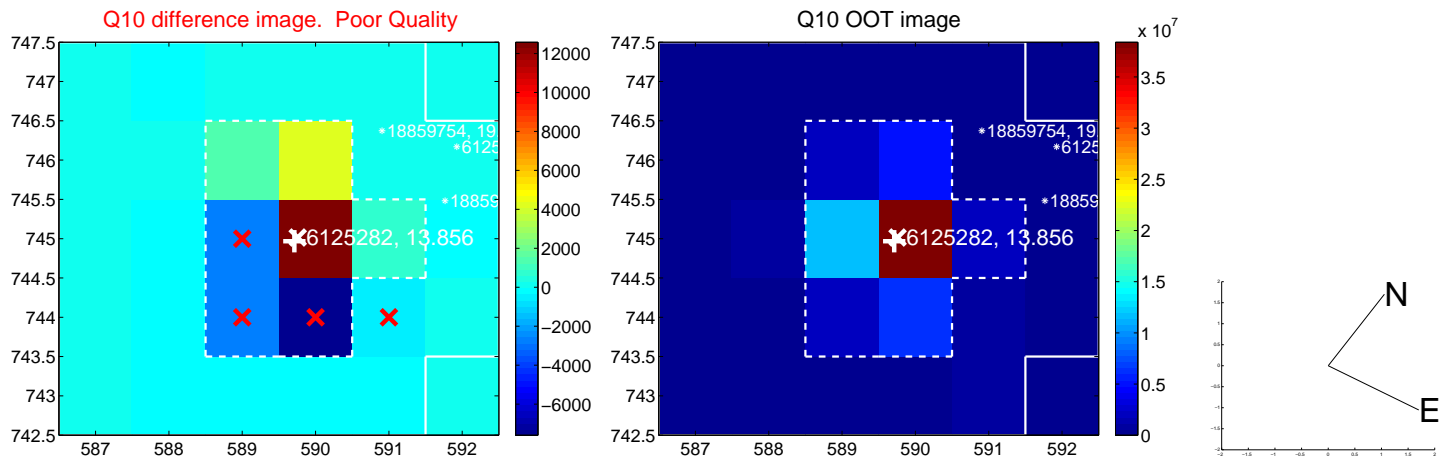
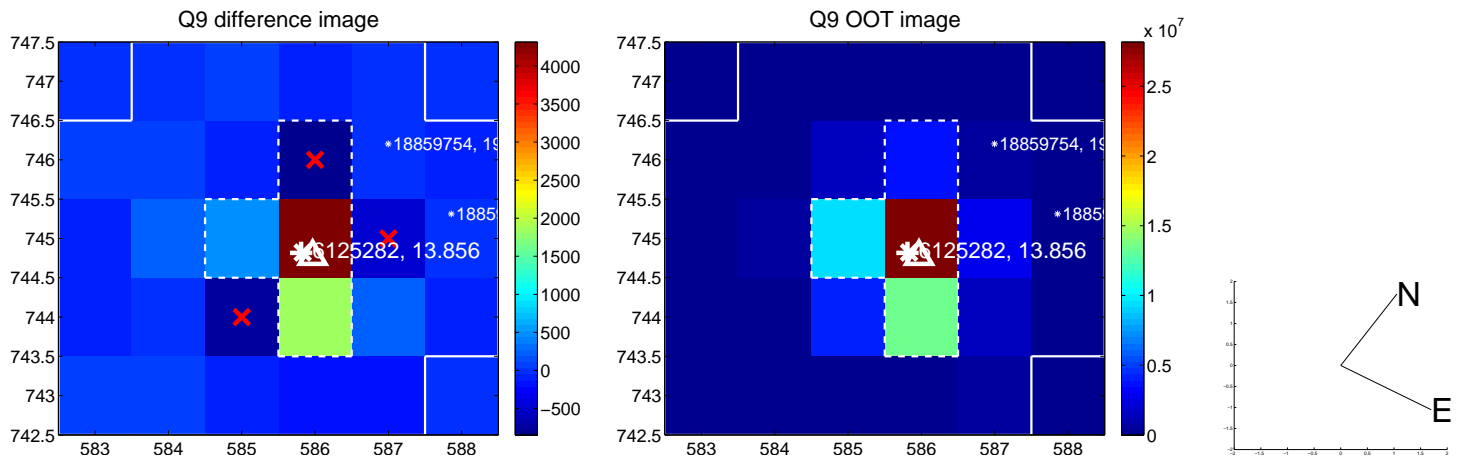


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

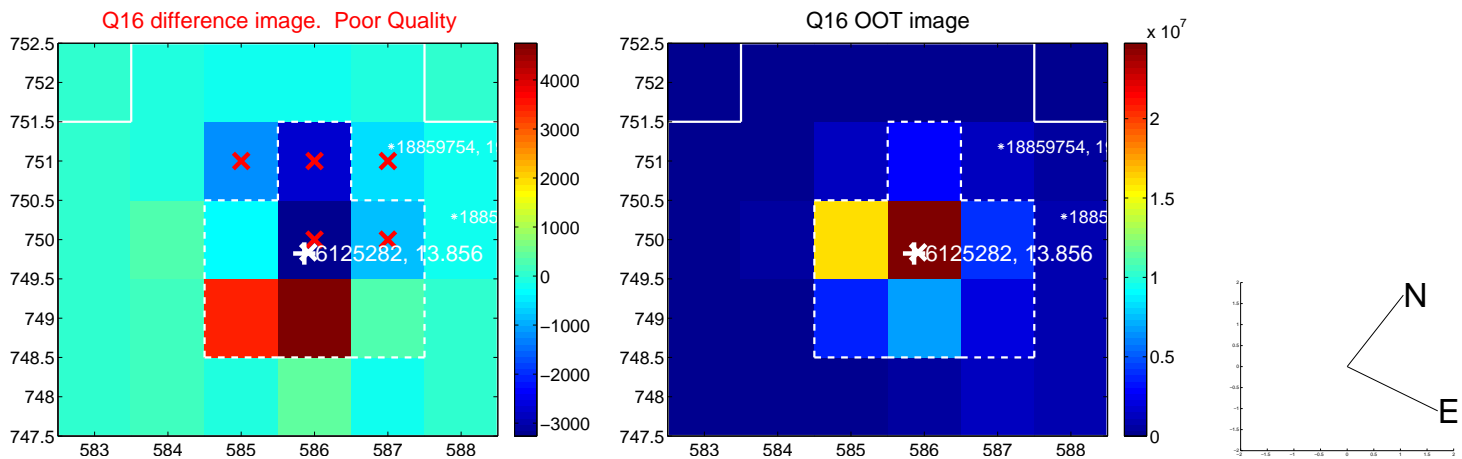
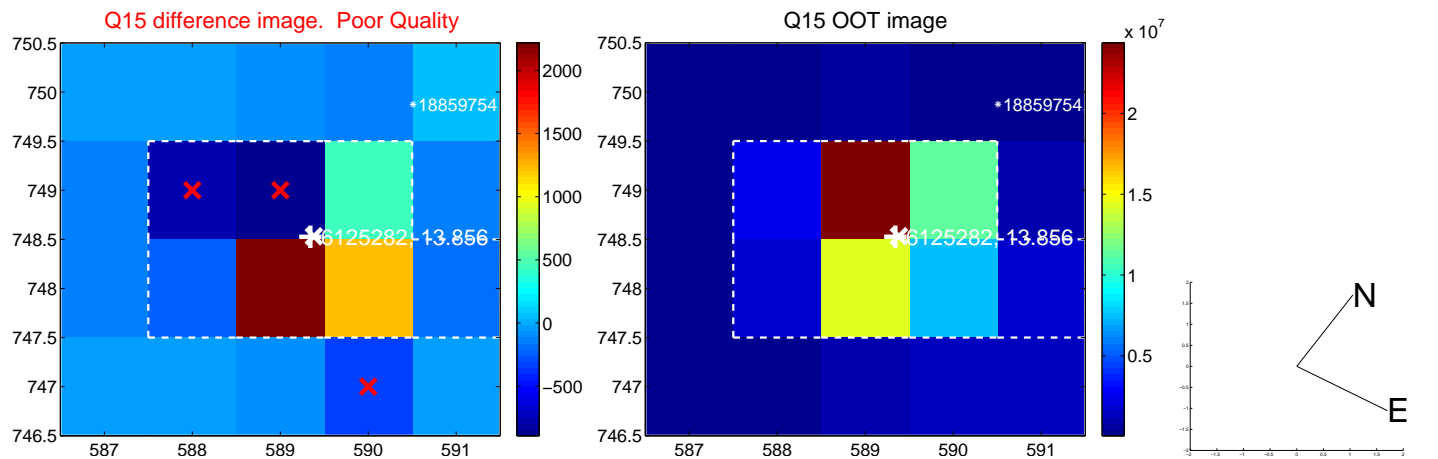
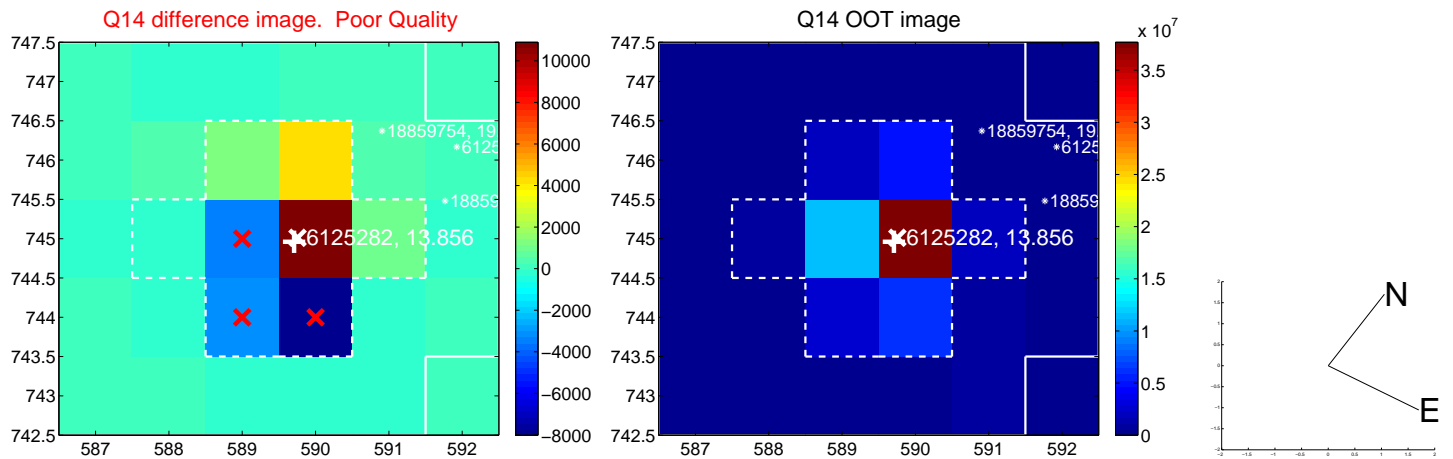
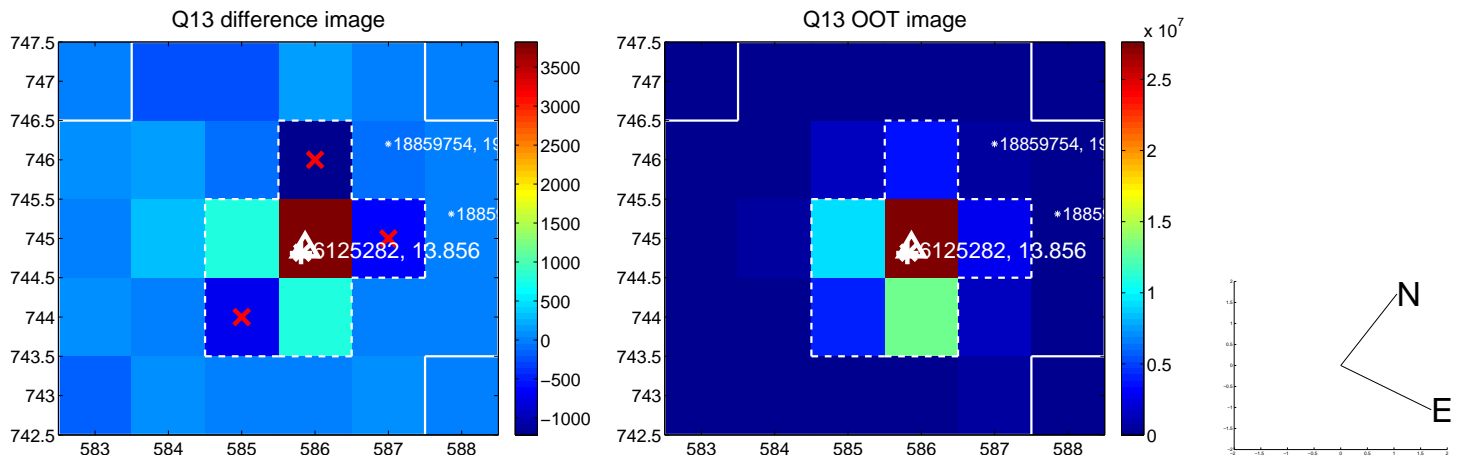
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



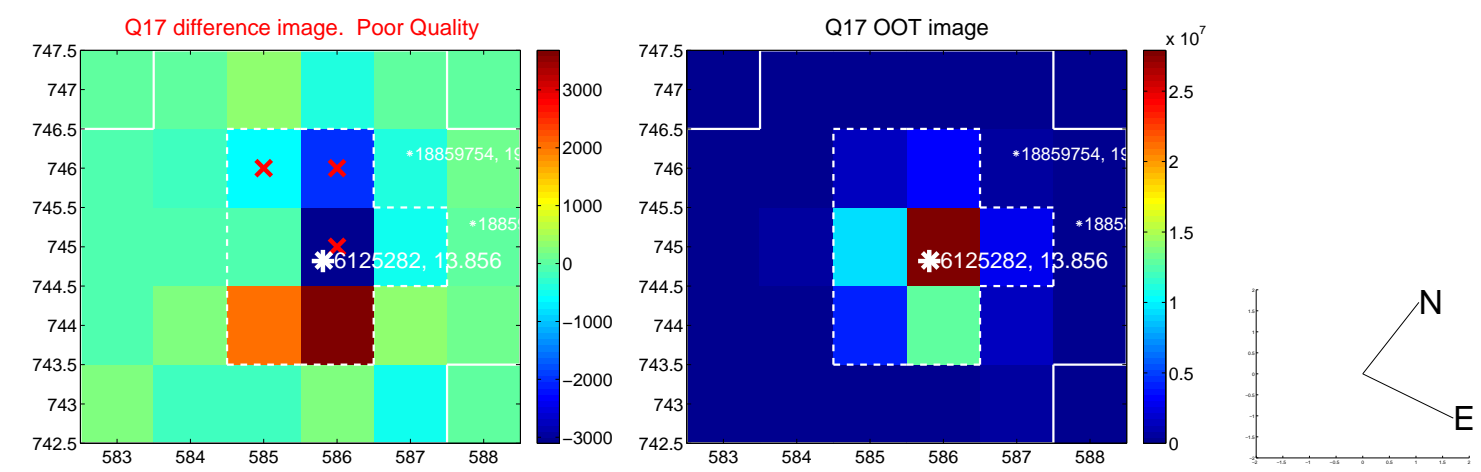
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

