

KIC 006122790

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})
006122790-01	OBS	No	1.118603	132.295035	133.8	1.135	11.8	3.3	0.59	3991	0.83	251.91

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006122790-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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.

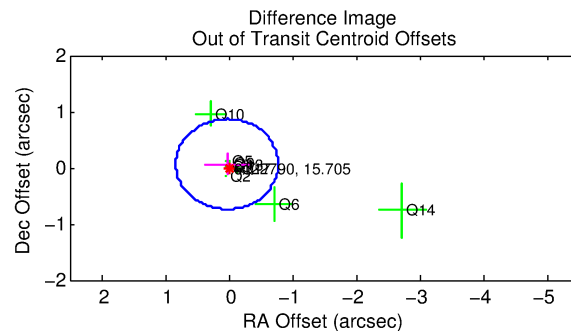
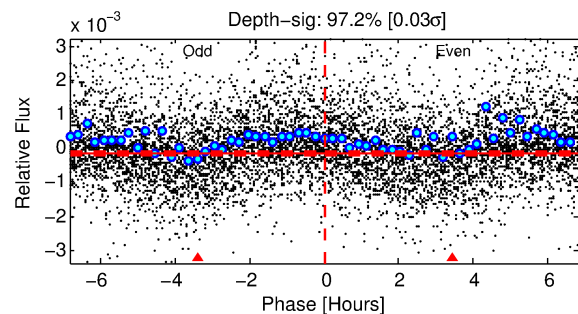
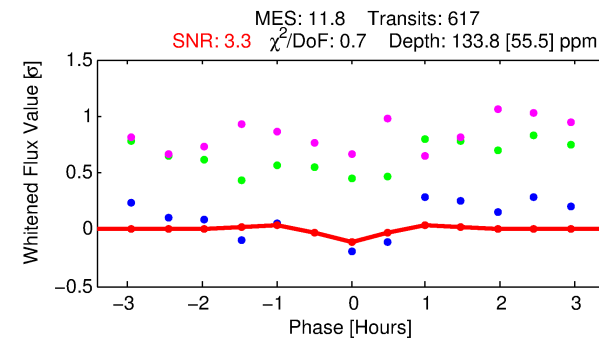
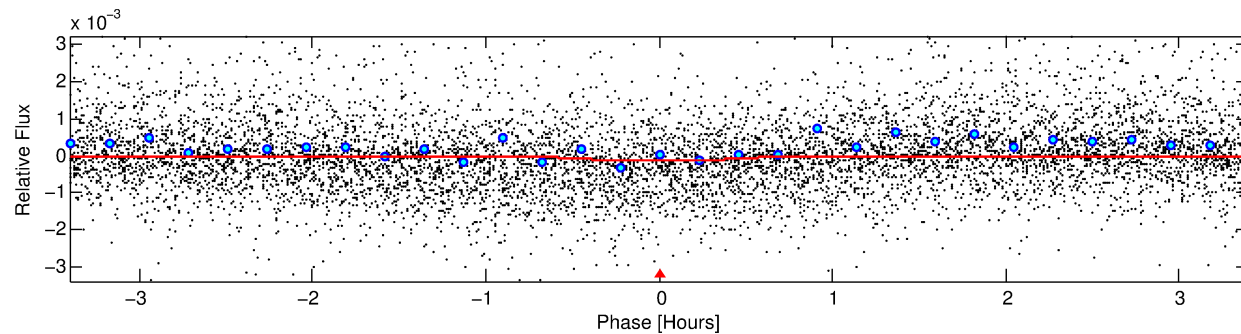
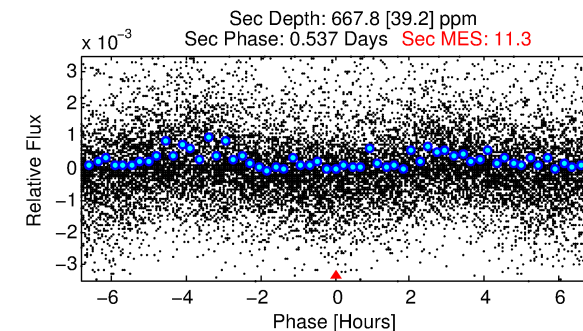
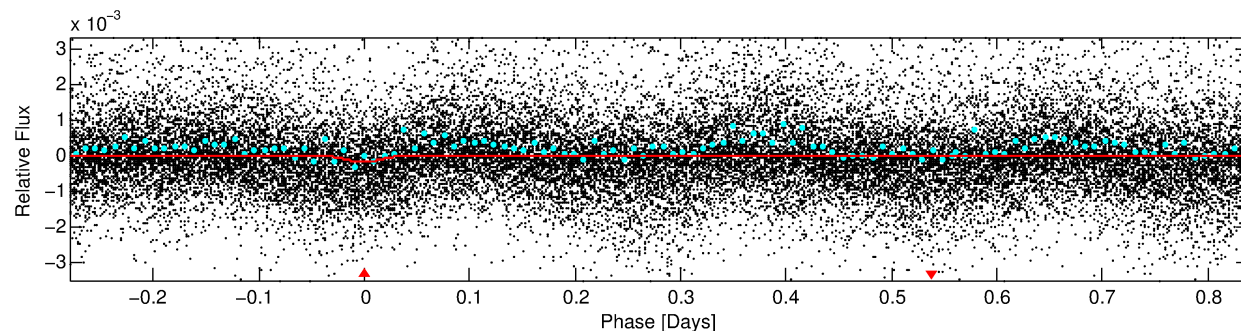
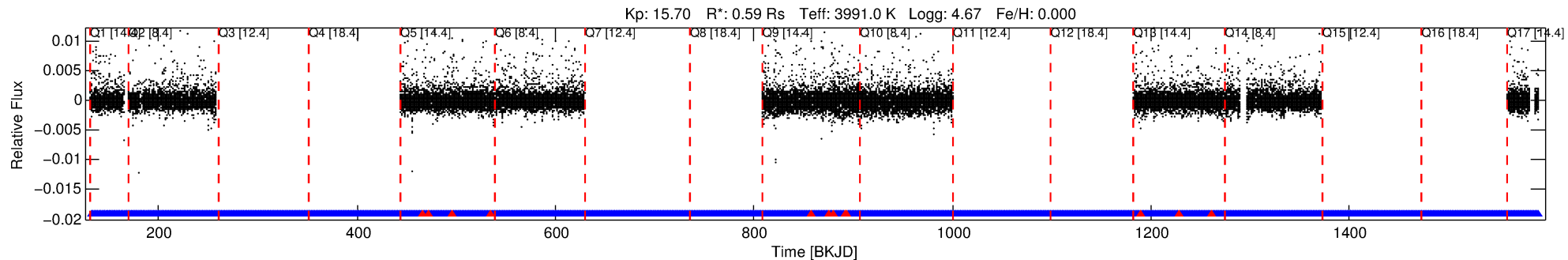
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006122790-01

No Significant Match Found

DV One-Page Summary

KIC: 6122790 Candidate: 1 of 1 Period: 1.119 d



DV Fit Results:

Period = 1.11860 [0.00003] d
Epoch = 132.2950 [0.0040] BKJD
Rp/R* = 0.0129 [0.0308]
a/R* = 3.63 [33.74]
b = 0.90 [2.19]
Seff = 251.91 [24.80]
Teq = 1016 [25] K
Rp = 0.83 [1.98] Re
a = 0.0177 [0.0007] AU
Ag = 167.96 [803.87] [0.21σ]
Teff = 5654 [6766] K [0.69σ]

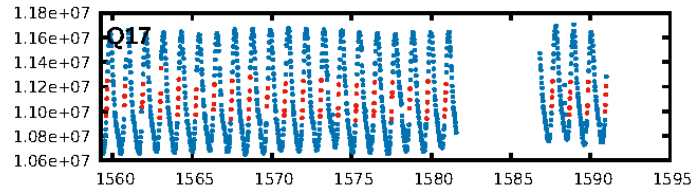
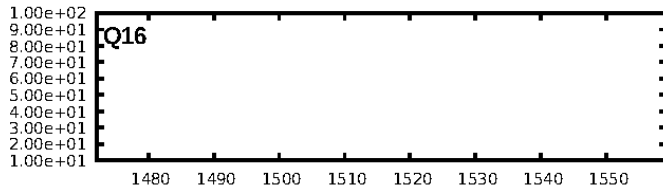
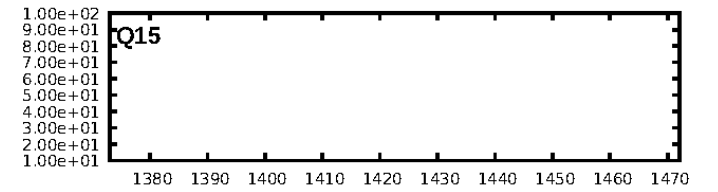
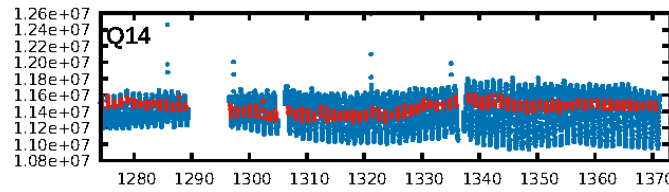
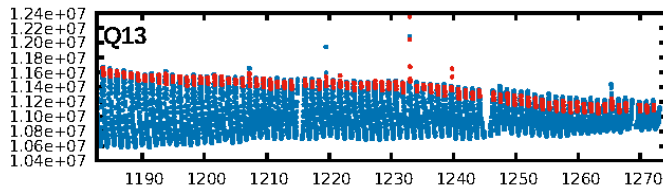
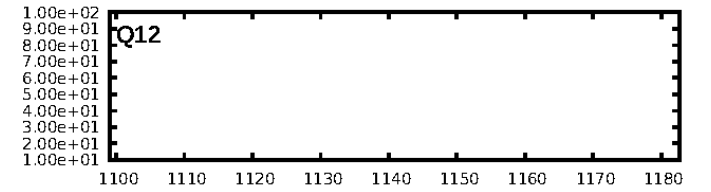
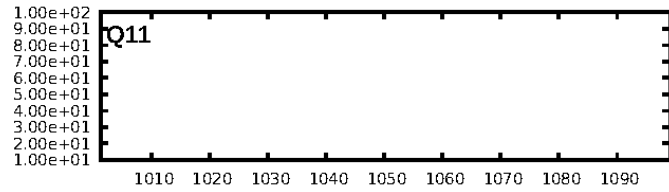
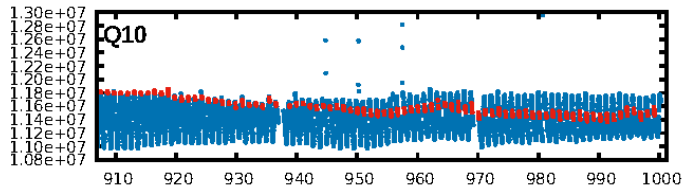
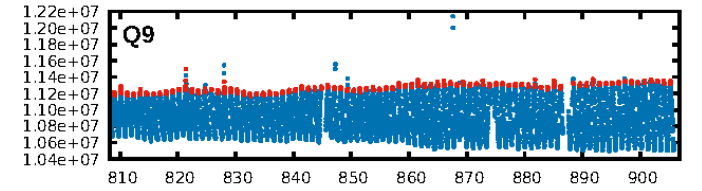
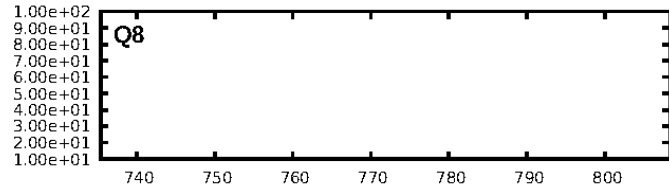
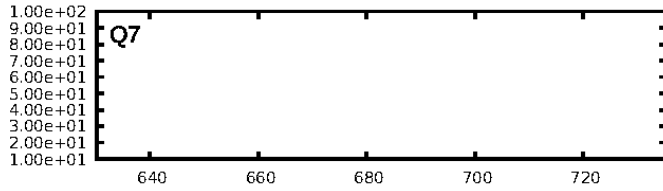
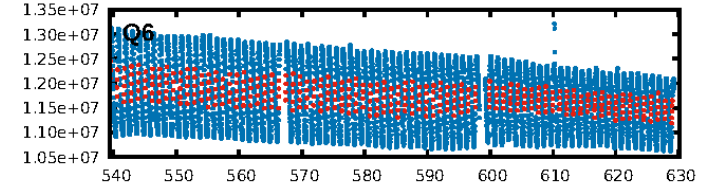
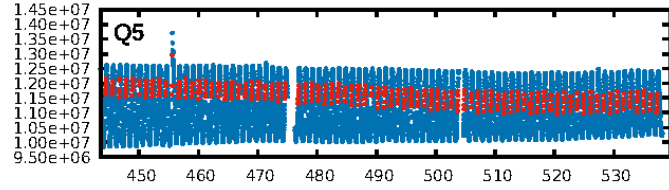
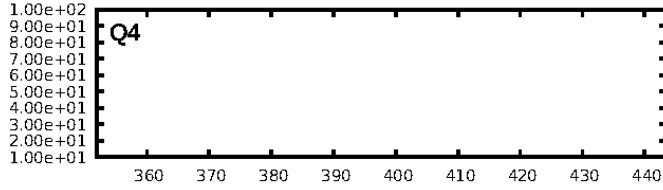
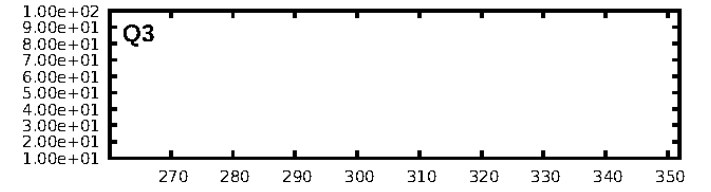
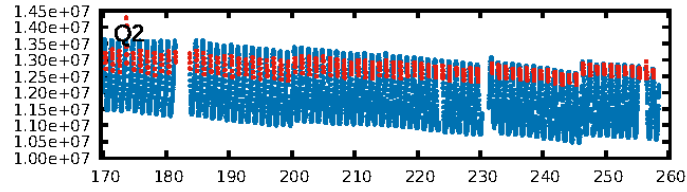
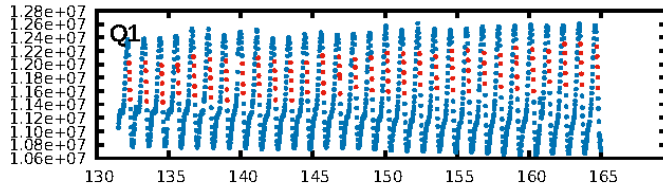
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.11e-23
RollingBand-fgt: 0.98 [551/563]
GhostDiagnostic-chr: 1.435
Centroid-sig: 75.2%
Centroid-so: 0.260 arcsec [0.14σ]
OotOffset-rm: 0.068 arcsec [0.25σ]
KicOffset-rm: 0.670 arcsec [2.83σ]
OotOffset-st: 4/0/0/5 [9]
KicOffset-st: 4/0/0/5 [9]
DiffImageQuality-fgm: 0.11 [1/9]
DiffImageOverlap-fno: 1.00 [9/9]

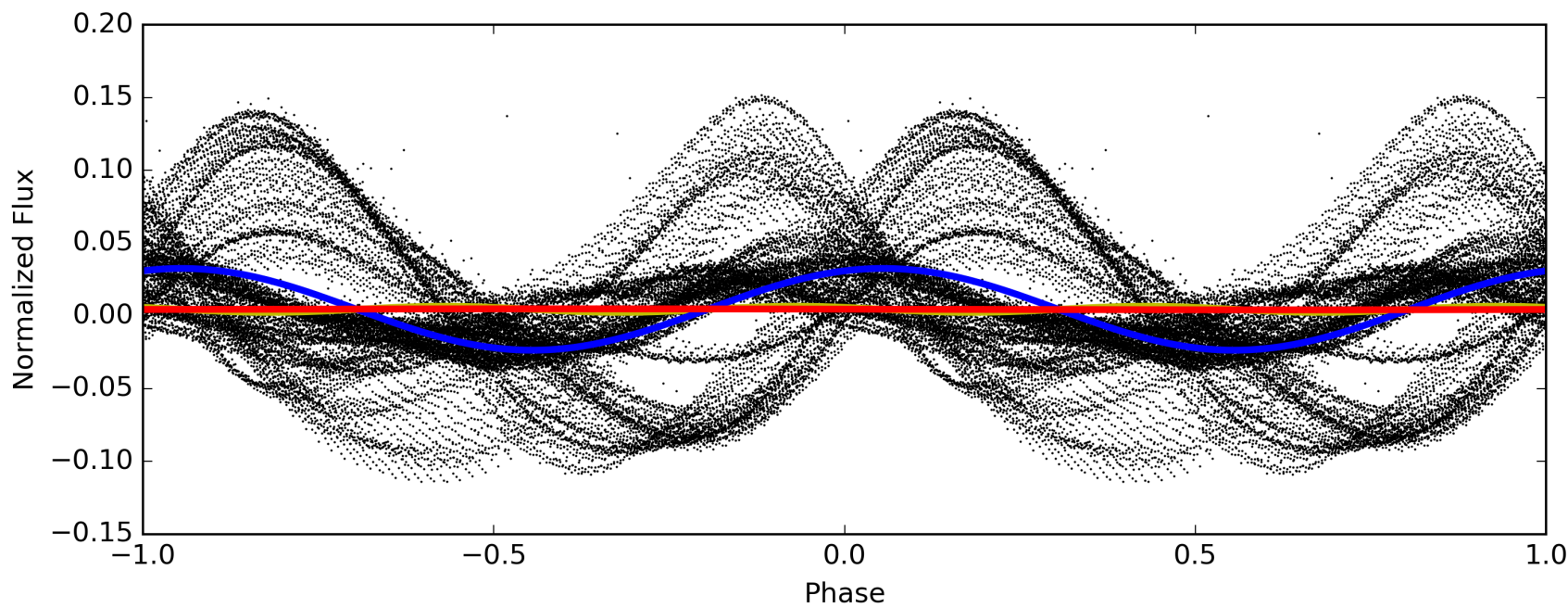
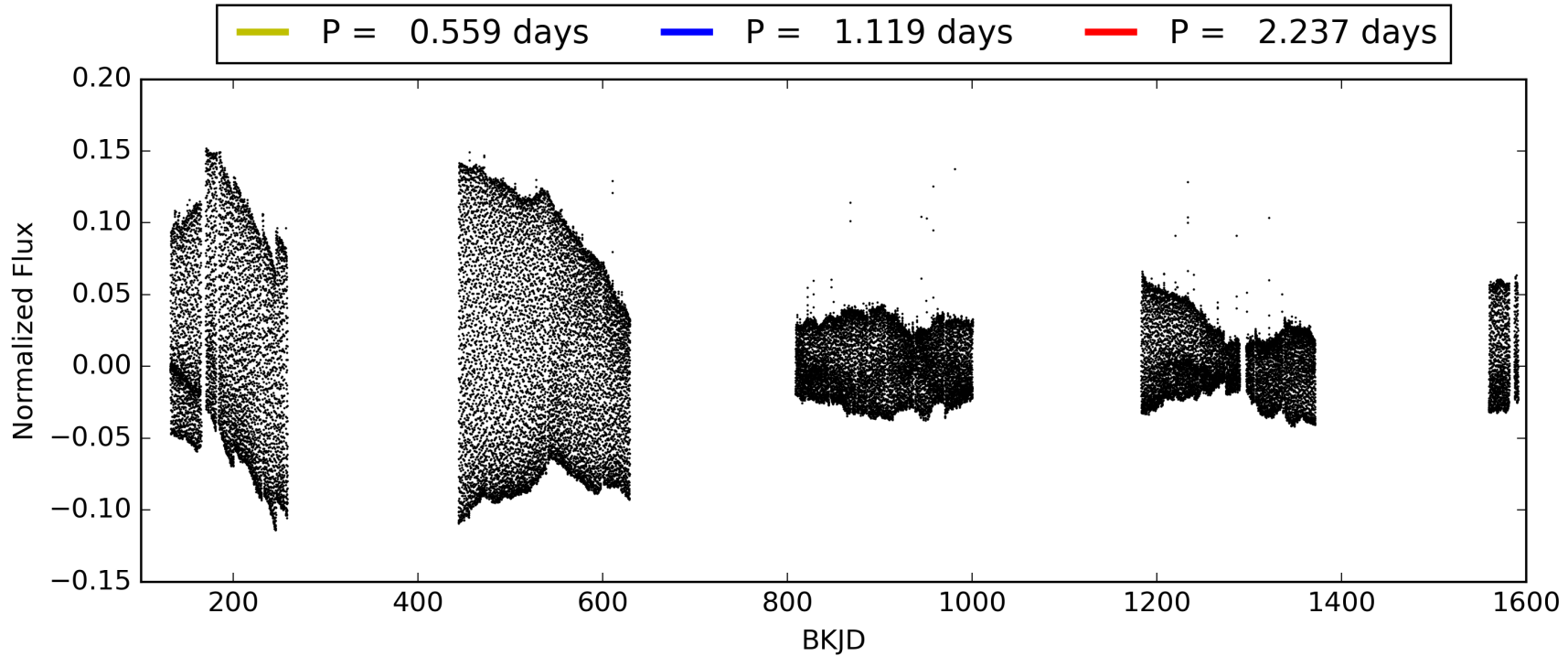
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:18:50 Z

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

TCE 006122790-01, PDC Light Curves

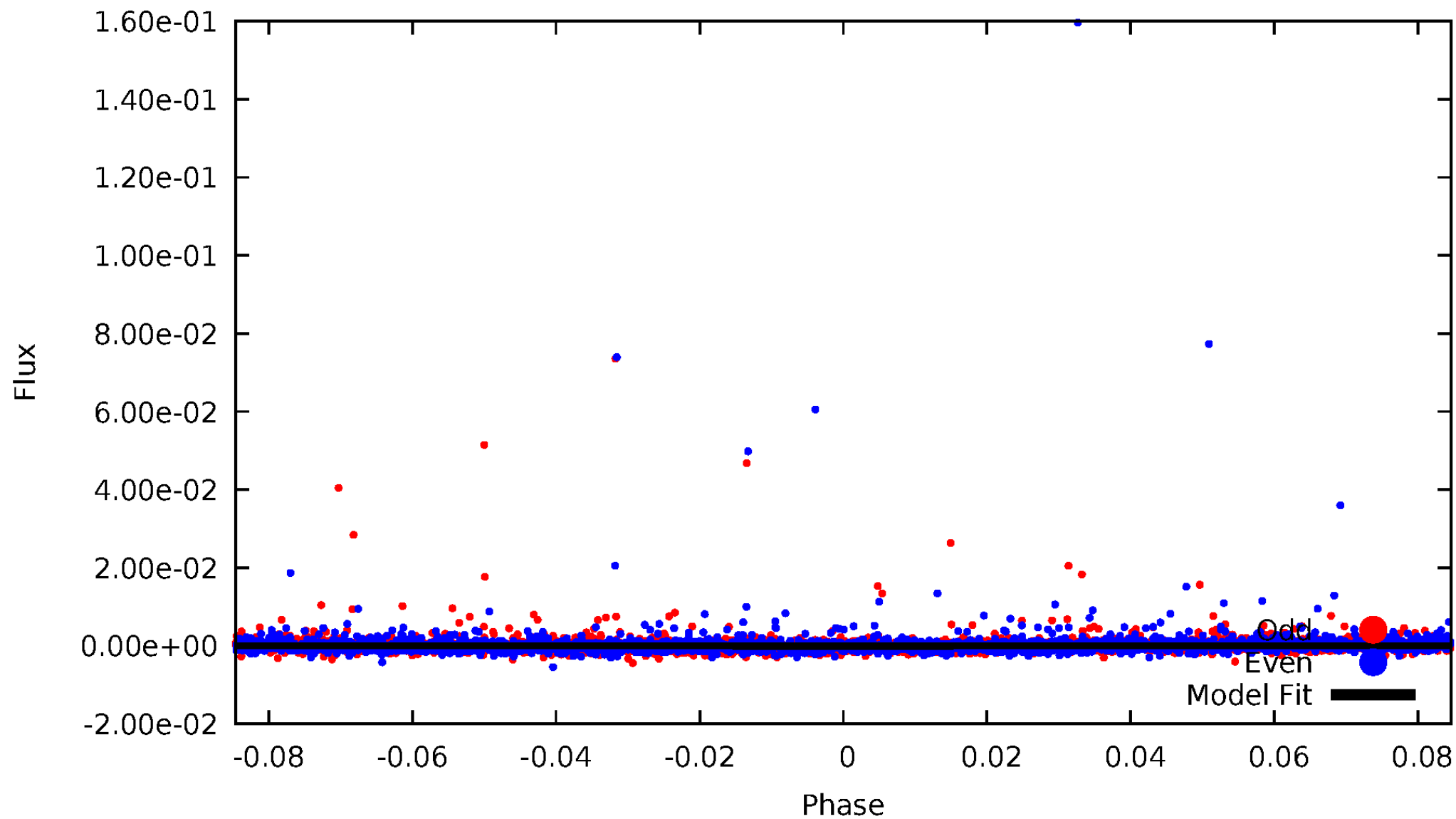


TCE 006122790-01



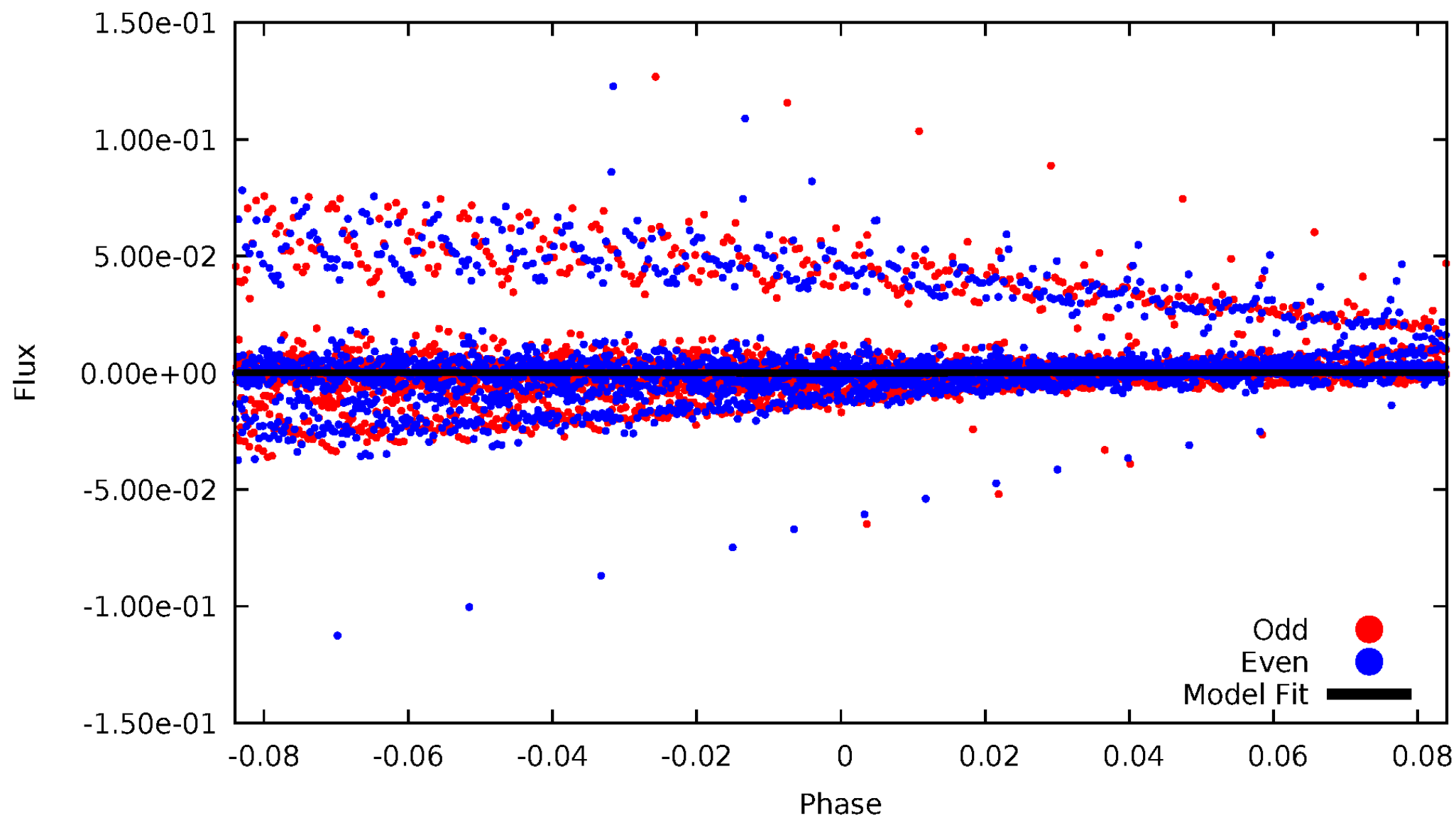
DV Odd/Even

TCE 006122790-01



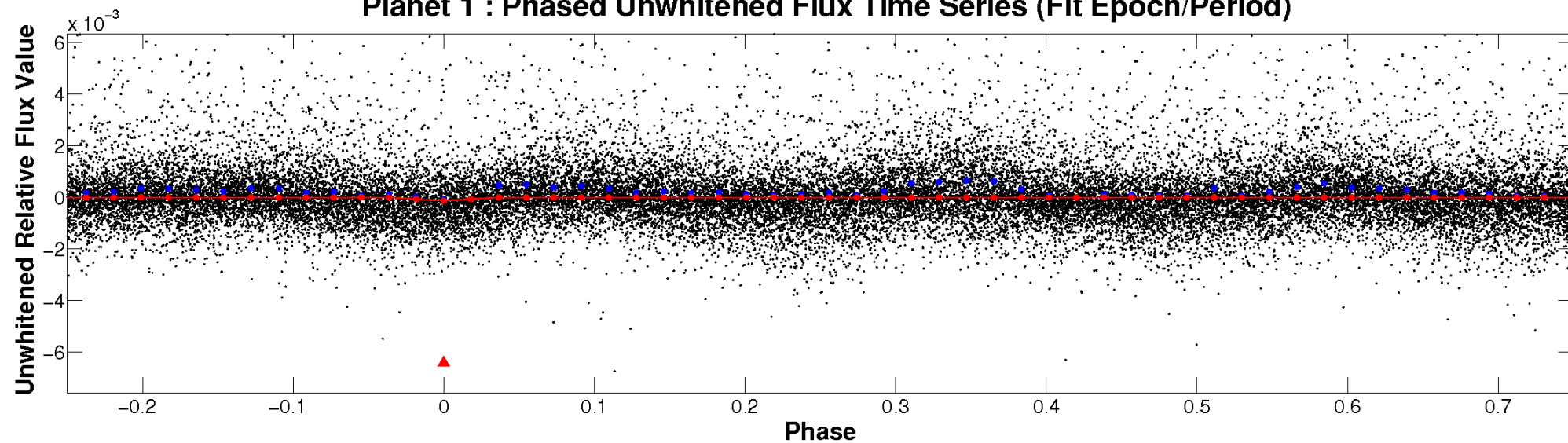
ALT Odd/Even

TCE 006122790-01

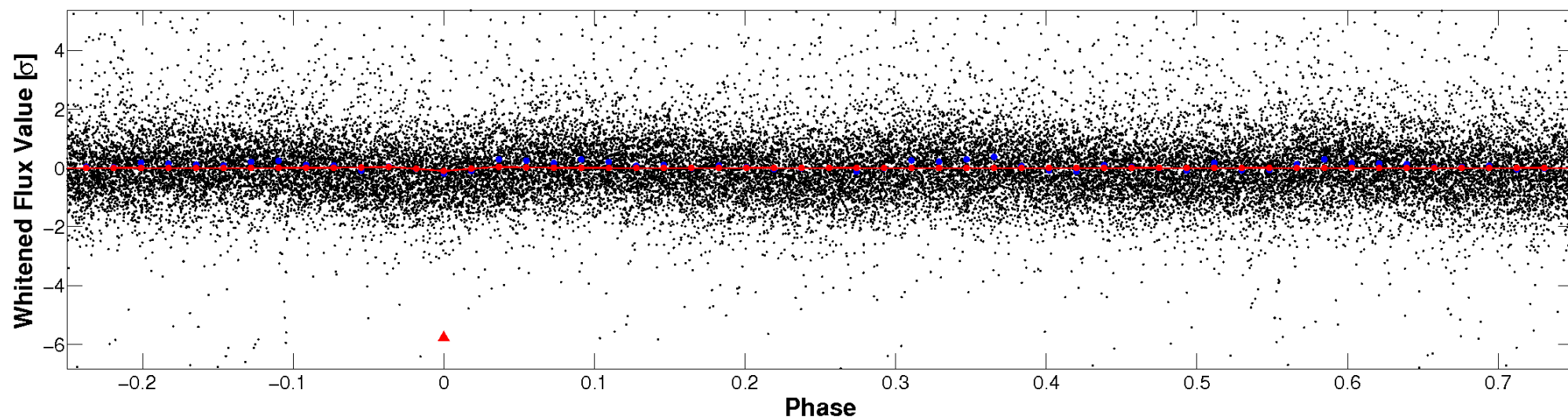


Non-Whitened Vs. Whitened Light Curve

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

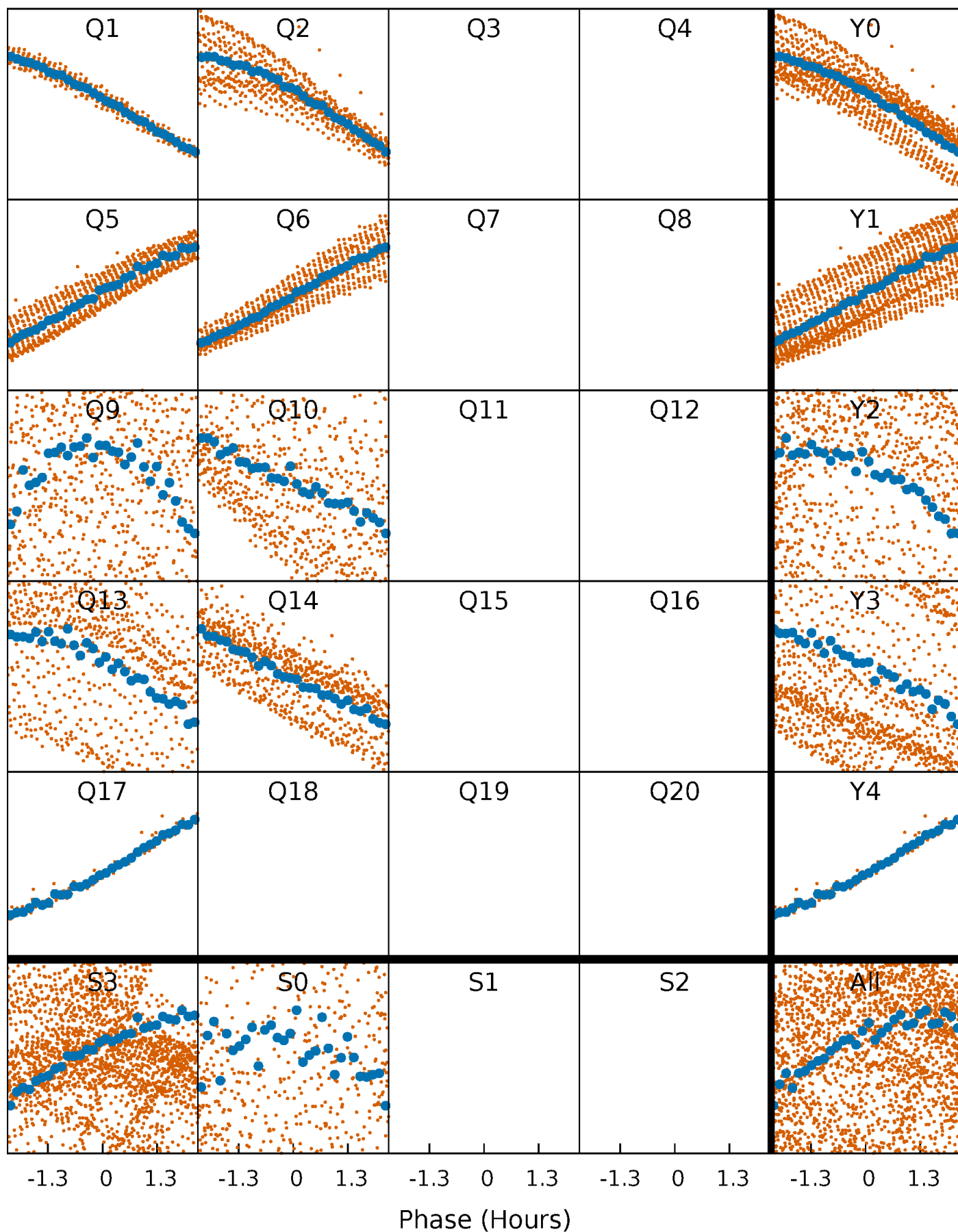


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



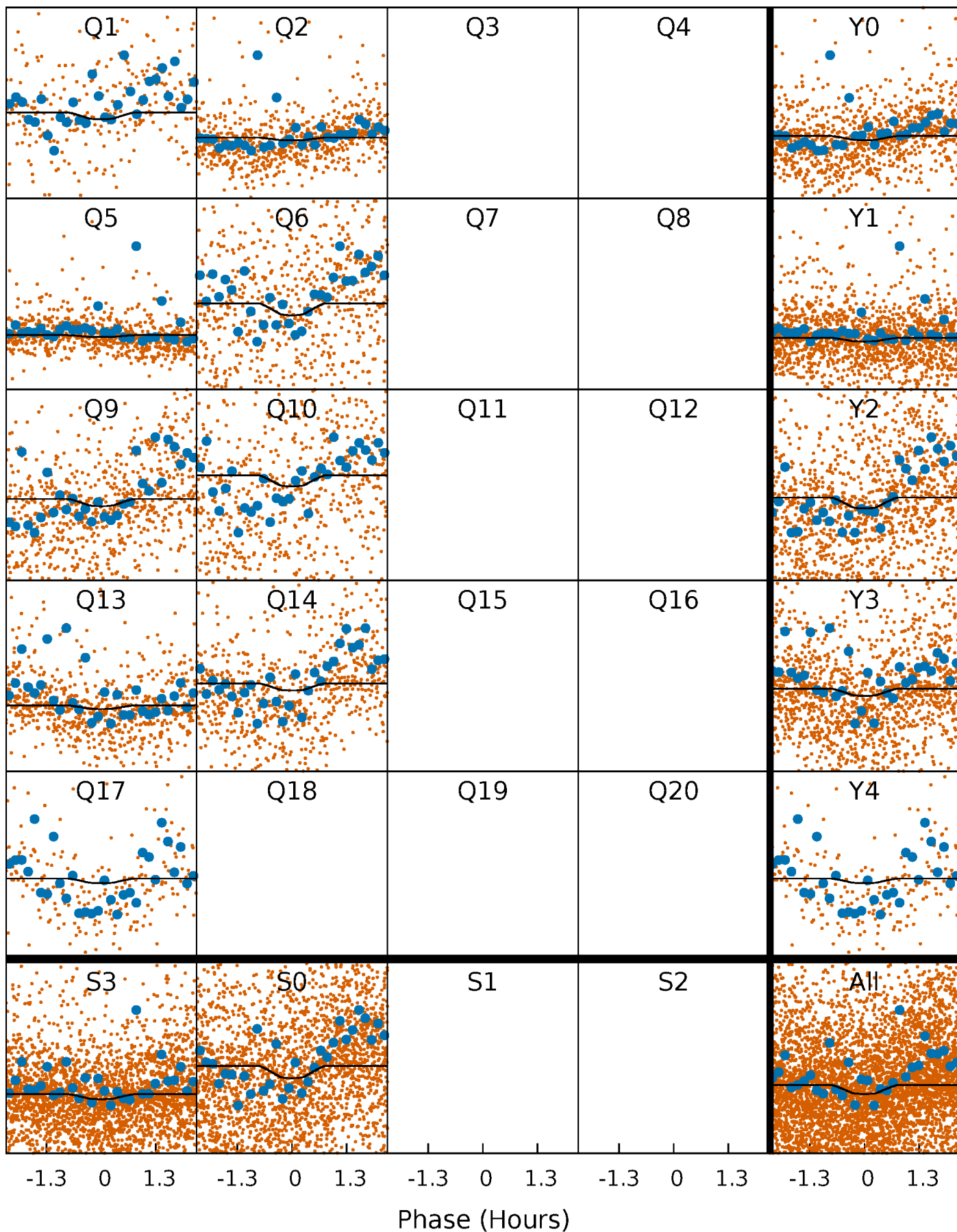
PDC Quarter-Phased Transit Curves

TCE 006122790-01 P= 1.118603 Days $T_0=132.295035$ (BKJD)



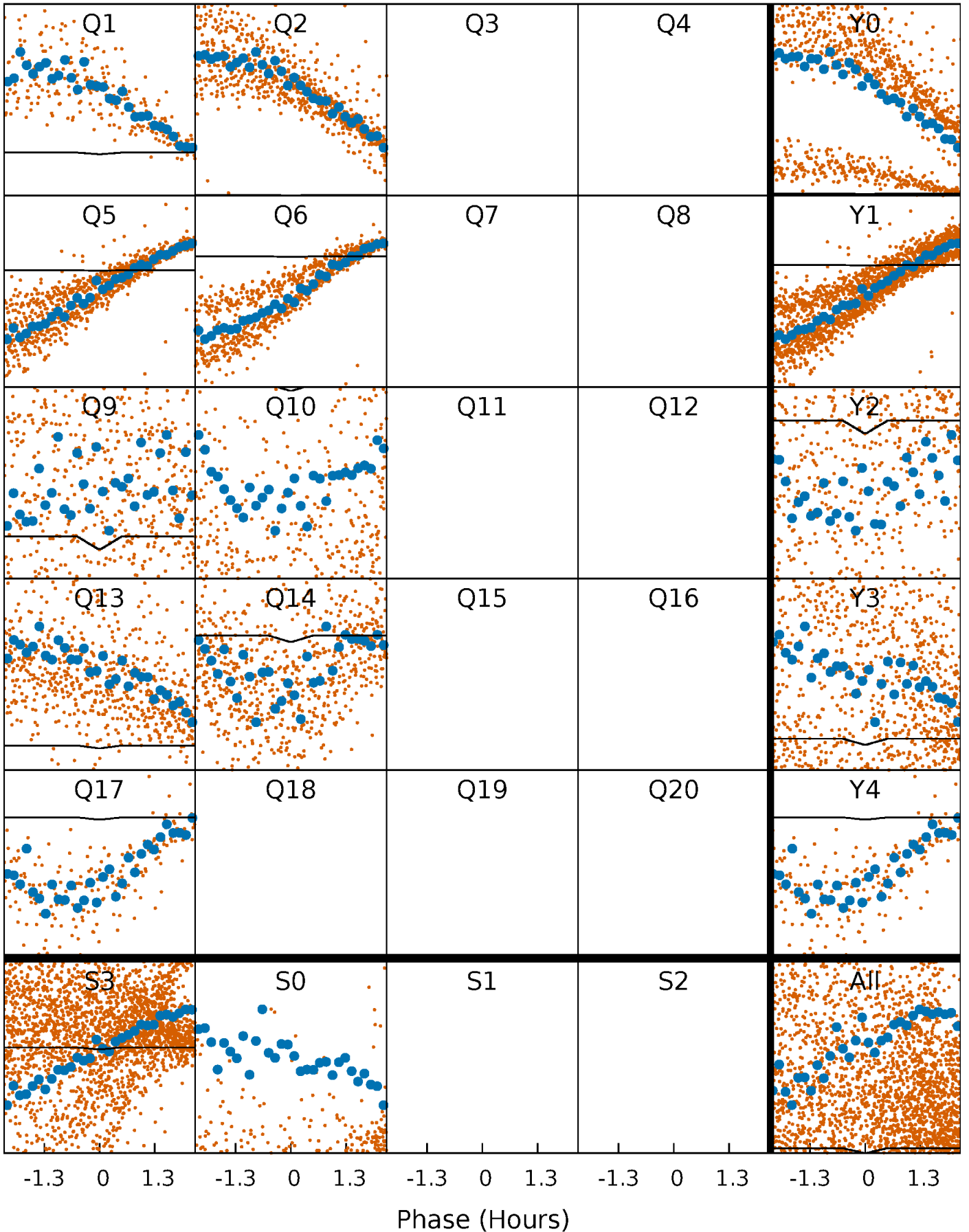
DV Quarter-Phased Transit Curves

TCE 006122790-01 P= 1.118603 Days $T_0=132.295035$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

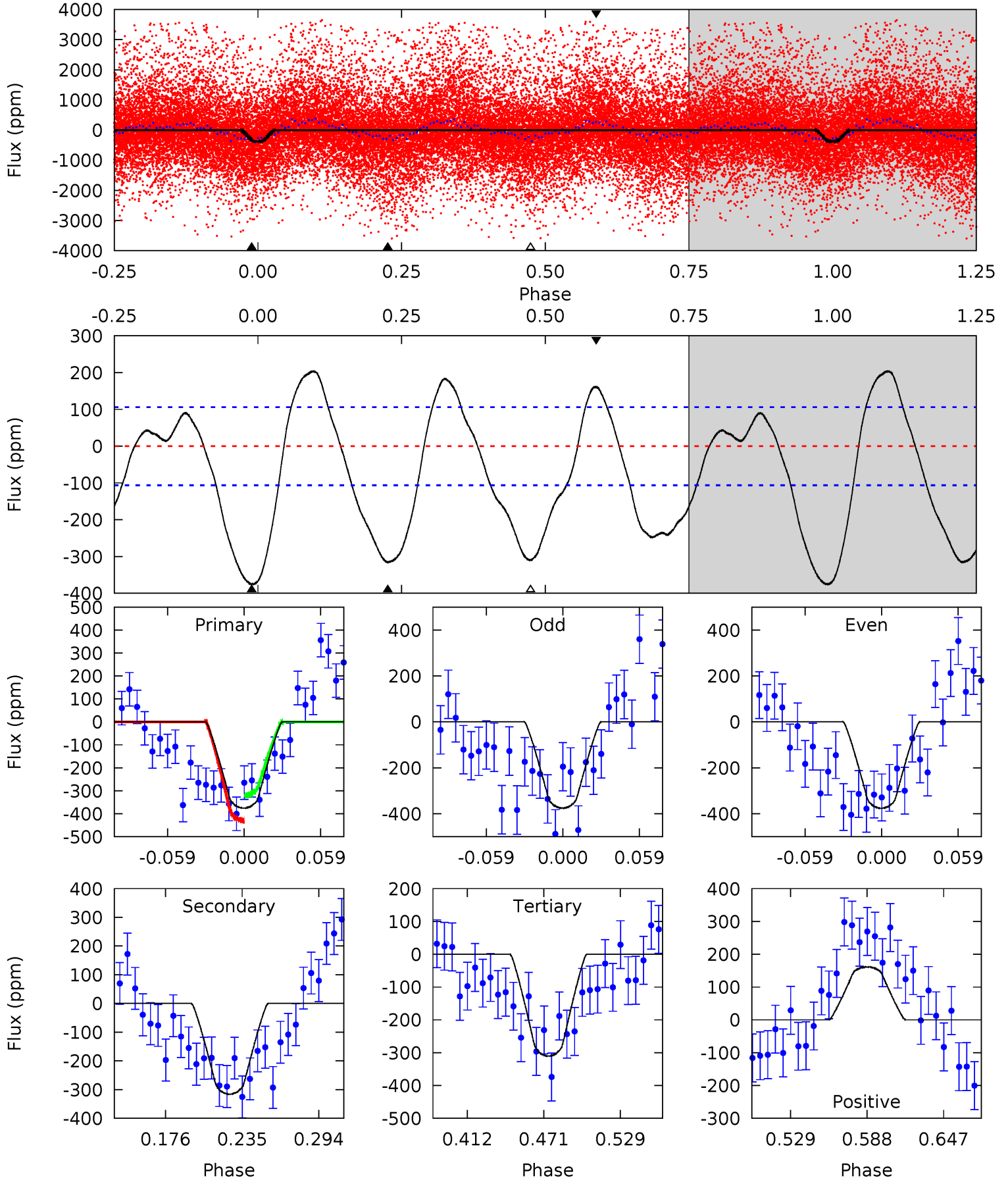
TCE 006122790-01 P= 1.118603 Days $T_0=132.295043$ (BKJD)



DV Model-Shift Uniqueness Test

006122790-01, P = 1.118603 Days, E = 131.176432 Days

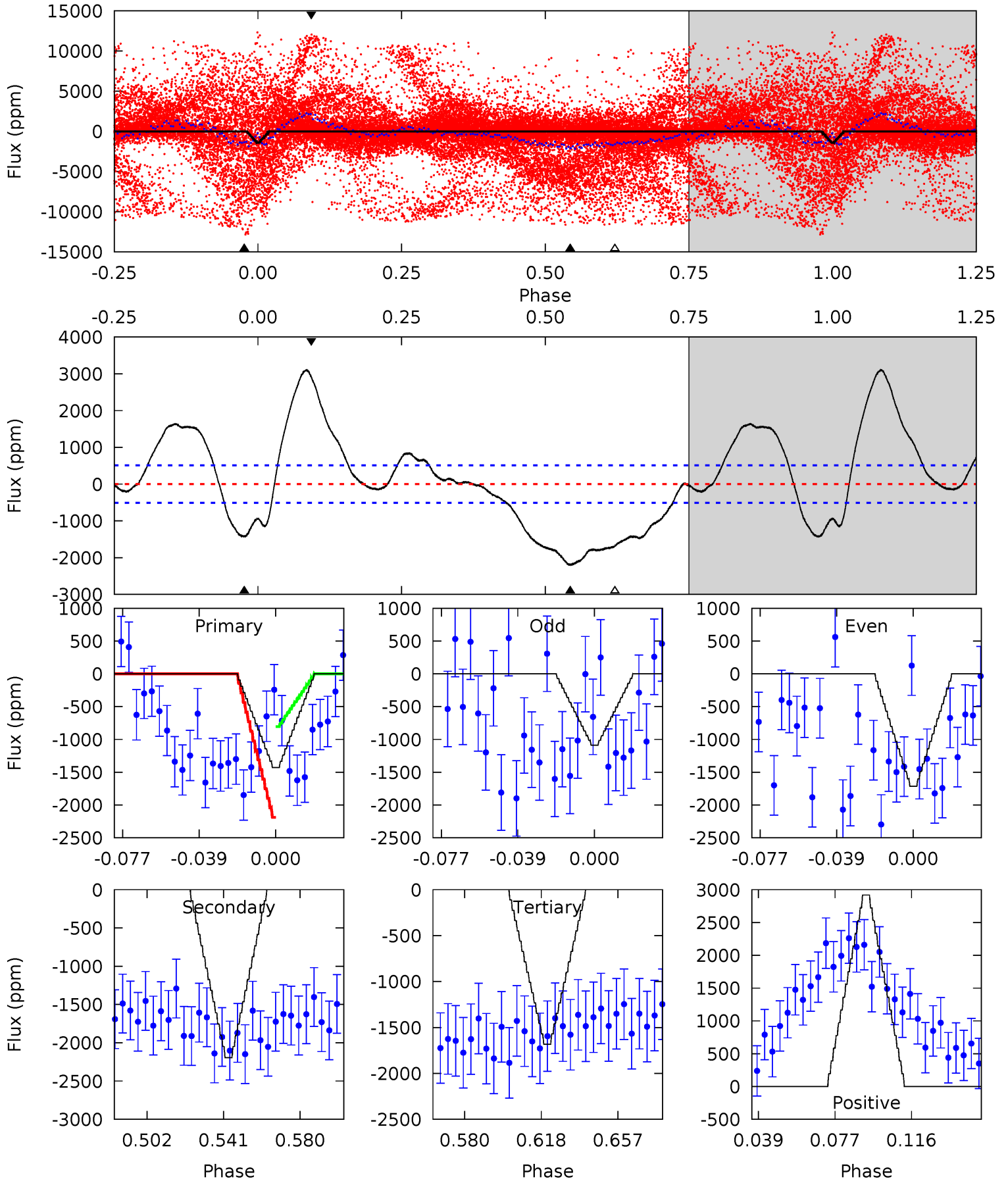
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	13.9	13.7	7.10	4.67	1.89	6.36	2.86	9.43	0.23	6.80	0.01	0.10	0.35	2.42



Alt Model-Shift Uniqueness Test

006122790-01, P = 1.118603 Days, E = 131.176440 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.4	20.5	15.7	27.3	4.76	2.07	11.0	-2.37	-13.9	4.80	-6.77	3.00	-3.90	0.59	6.31



Stellar Parameters For KIC 006122790

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3991^{+79}_{-79}	$4.668^{+0.032}_{-0.014}$	$0.000^{+0.100}_{-0.100}$	$0.588^{+0.020}_{-0.028}$	$0.587^{+0.029}_{-0.024}$	$4.066^{+0.519}_{-0.255}$
	+2%/-2%	+1%/-0%	+inf%/-inf%	+3%/-5%	+5%/-4%	+13%/-6%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 006122790-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-316 ± 23	$1.65^{+1.51}_{-1.13}$	1415^{+31}_{-32}	3525^{+1861}_{-646}	20^{+185}_{-15}
Alt.	-2195 ± 107	$1.72^{+1.58}_{-1.18}$	1412^{+31}_{-29}	4938^{+4067}_{-1094}	126^{+1199}_{-92}

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

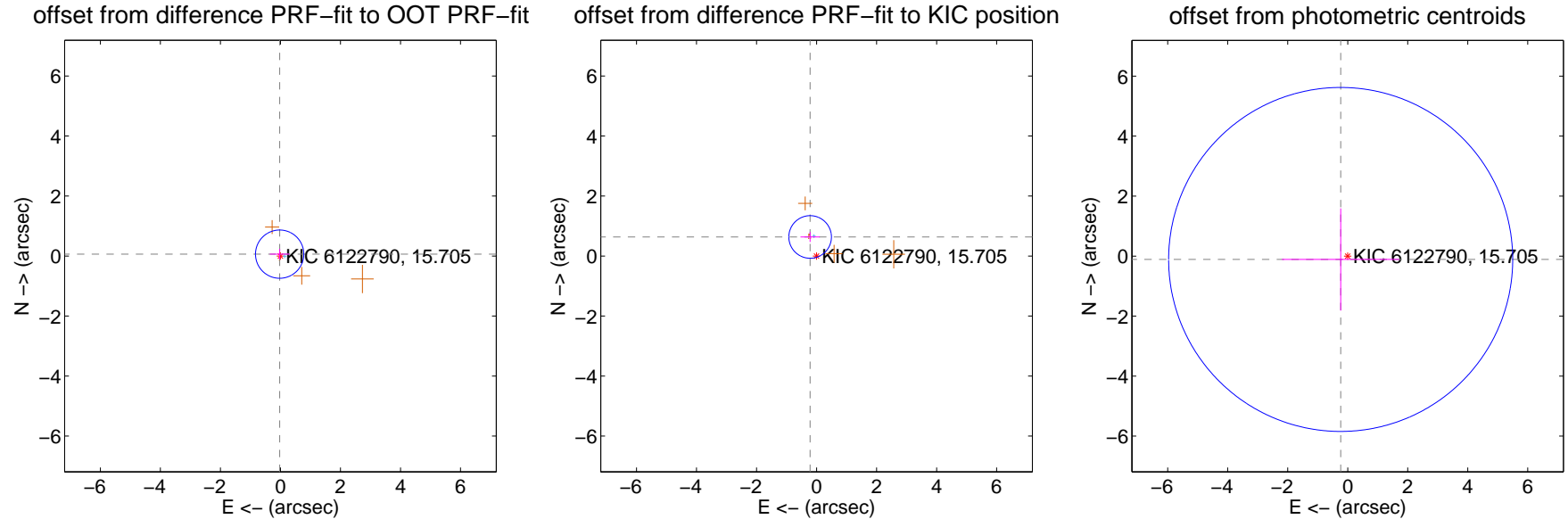
DV Centroid Data

Supplemental centroid analysis for 006122790-01. Kepler magnitude: 15.71. Transit SNR 3.27

There are 1 quarters with good PRF difference image offsets

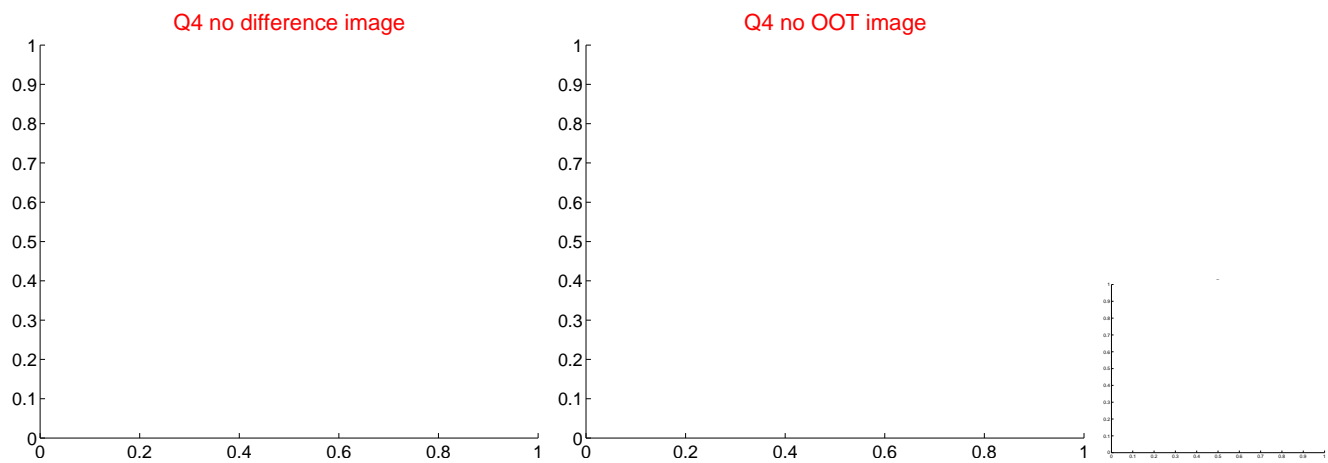
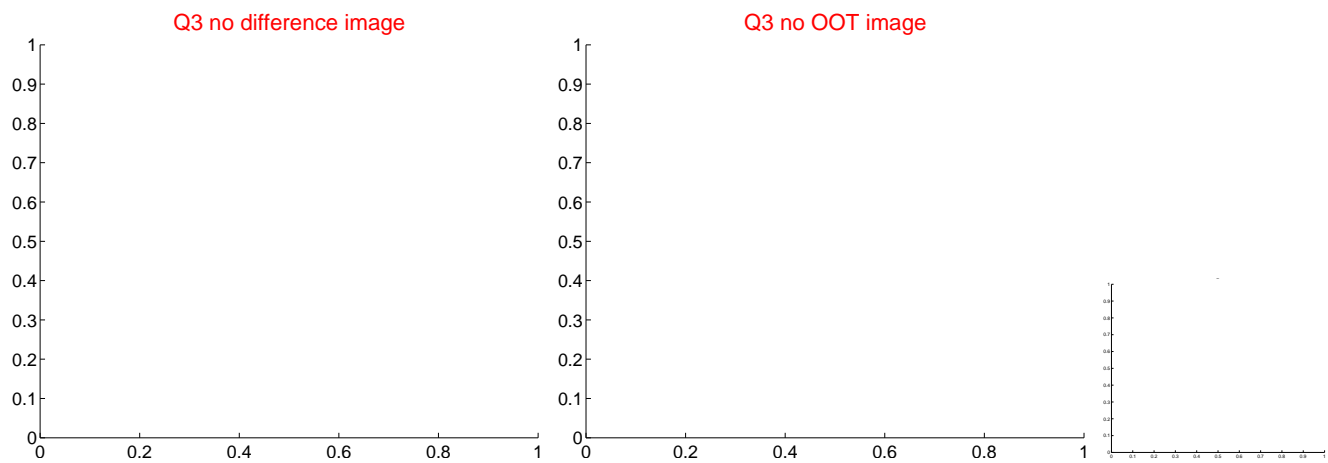
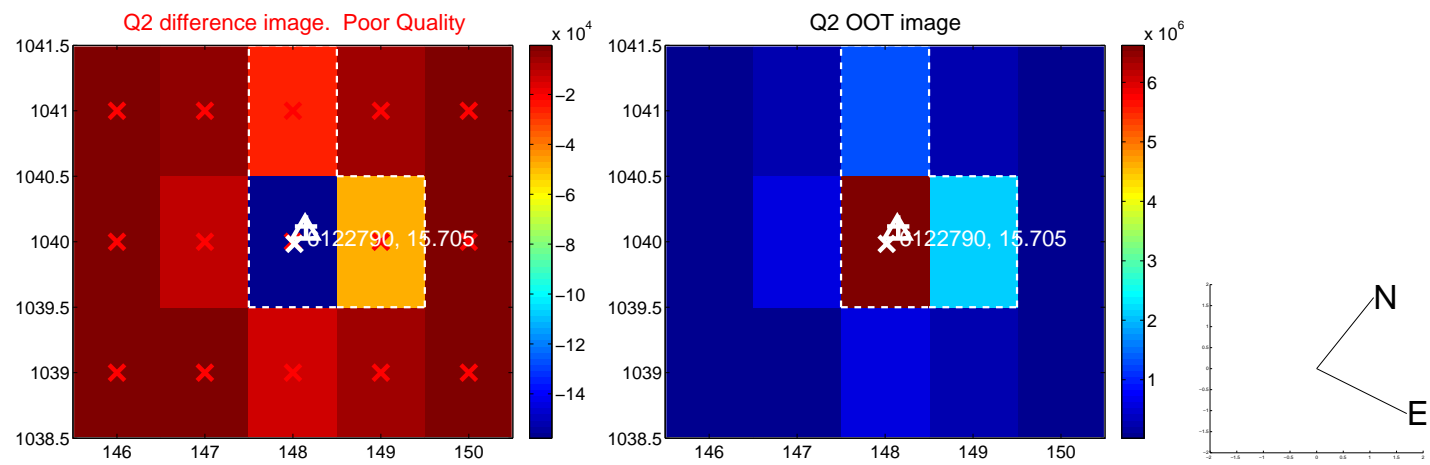
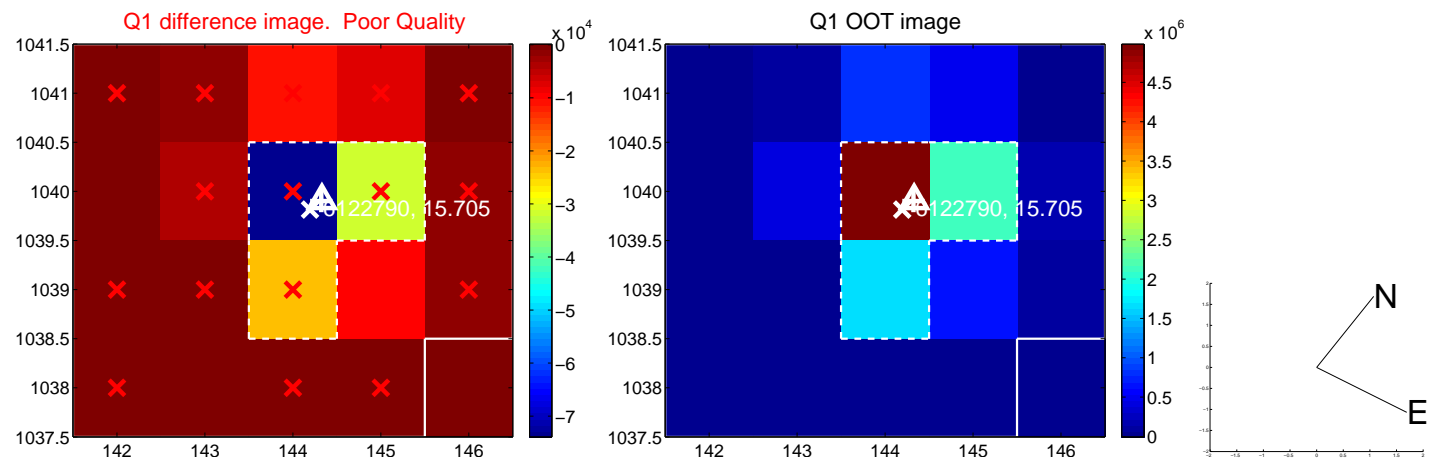
The direct PRF centroid is offset from the target star catalog position by about 0.71 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.068 ± 0.268	0.25	0.027 ± 0.327	0.063 ± 0.178
PRF-fit source offset from KIC position	0.670 ± 0.237	2.83	0.215 ± 0.321	0.635 ± 0.166
photometric centroid source offset	0.26 ± 1.91	0.14	0.23 ± 1.96	-0.11 ± 1.70

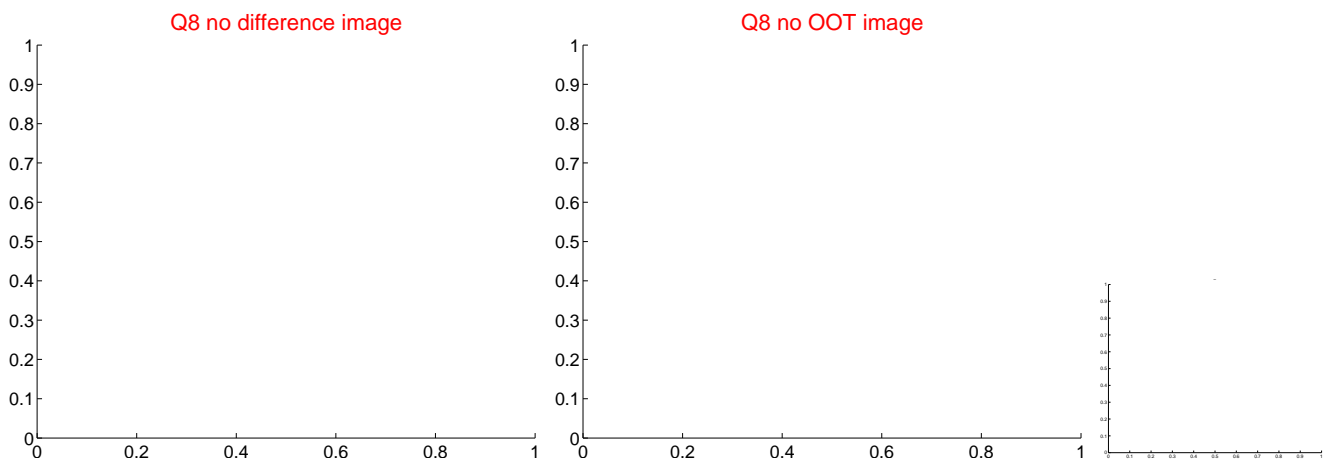
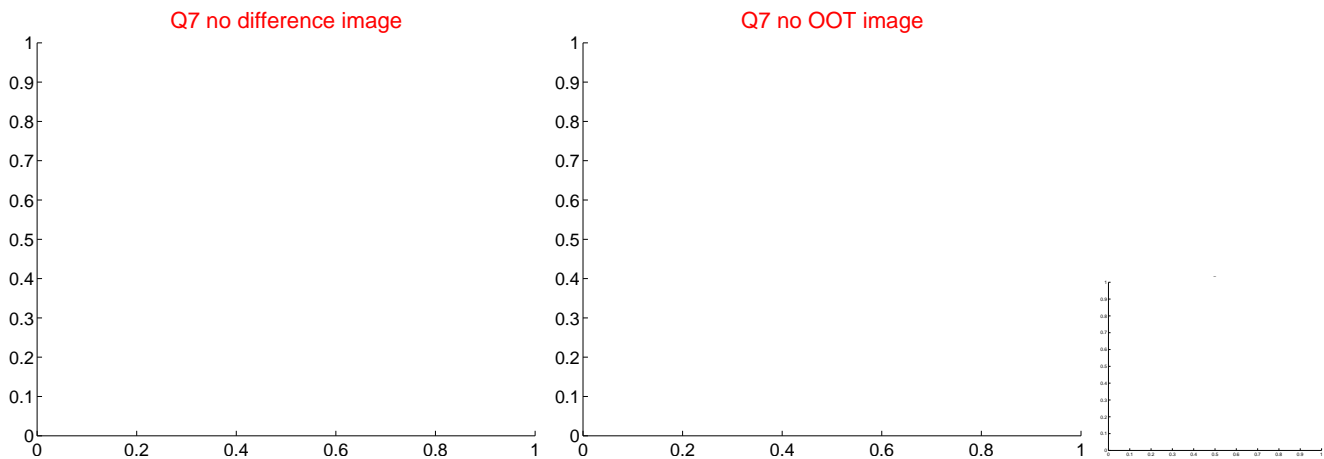
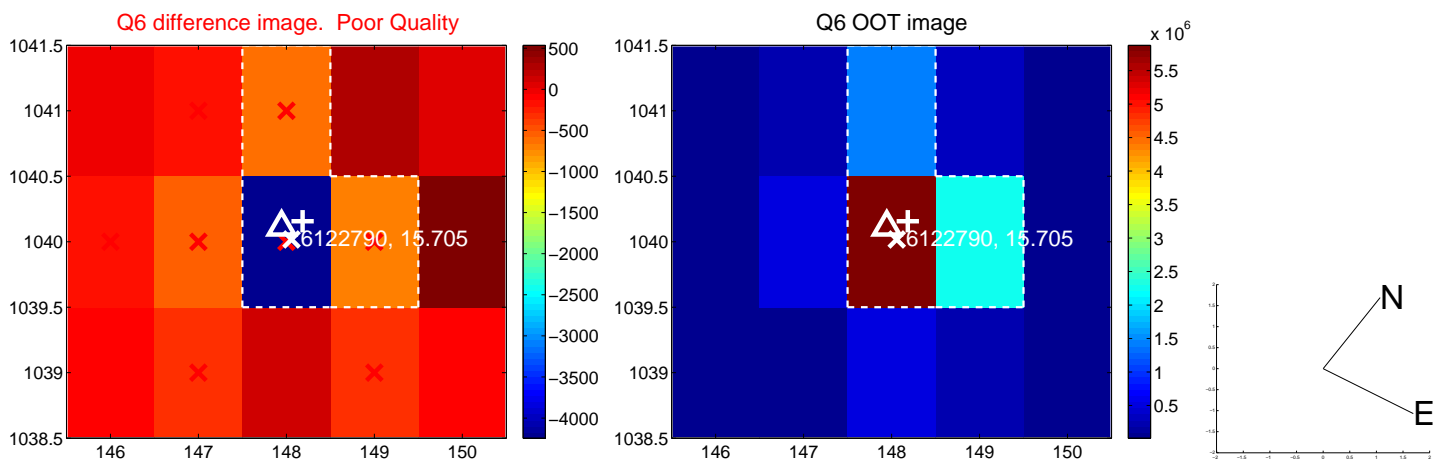
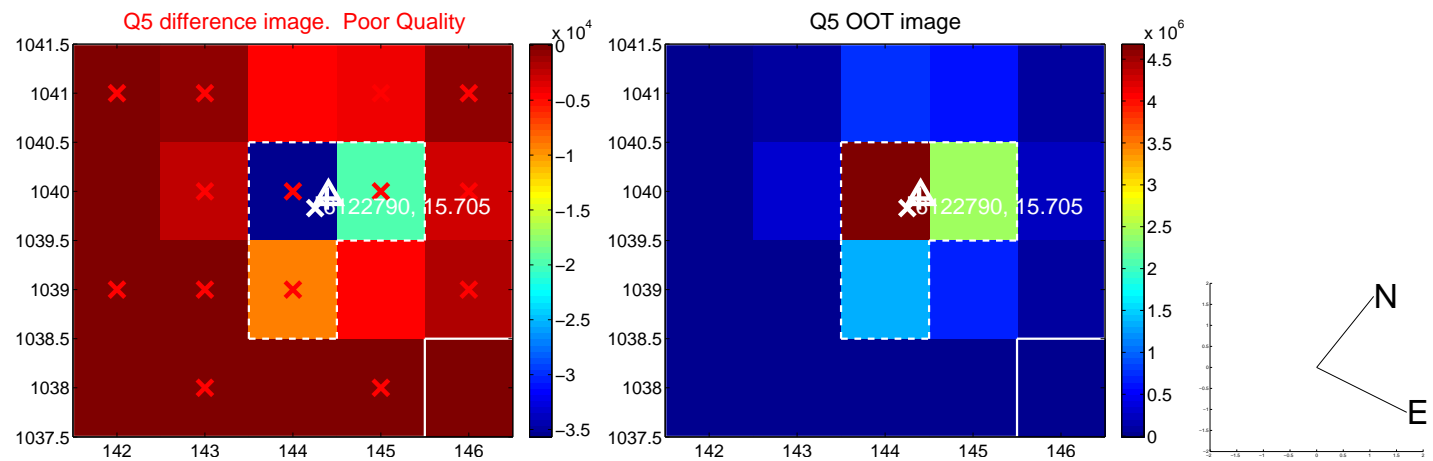


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

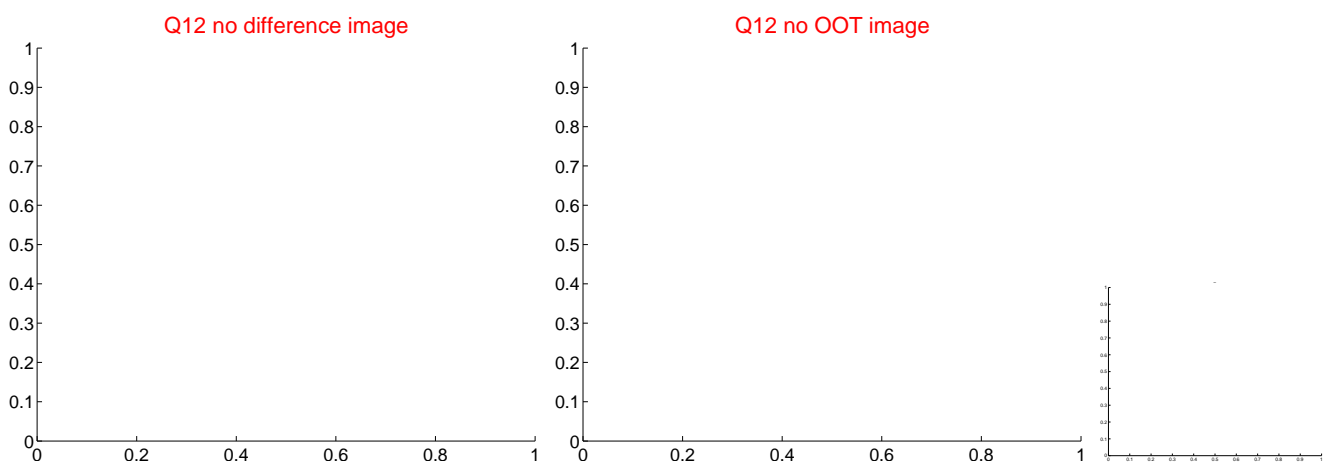
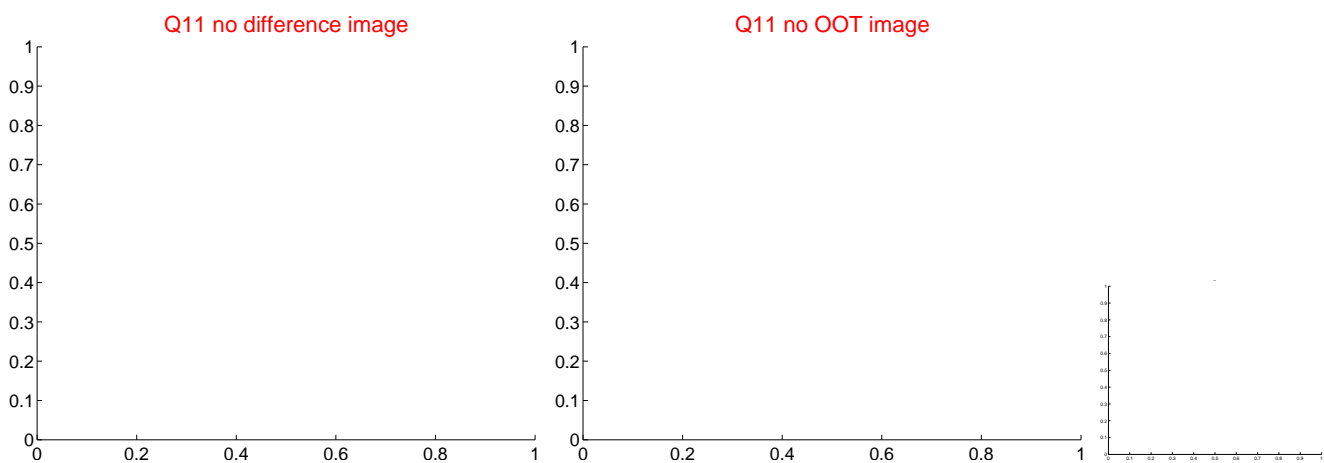
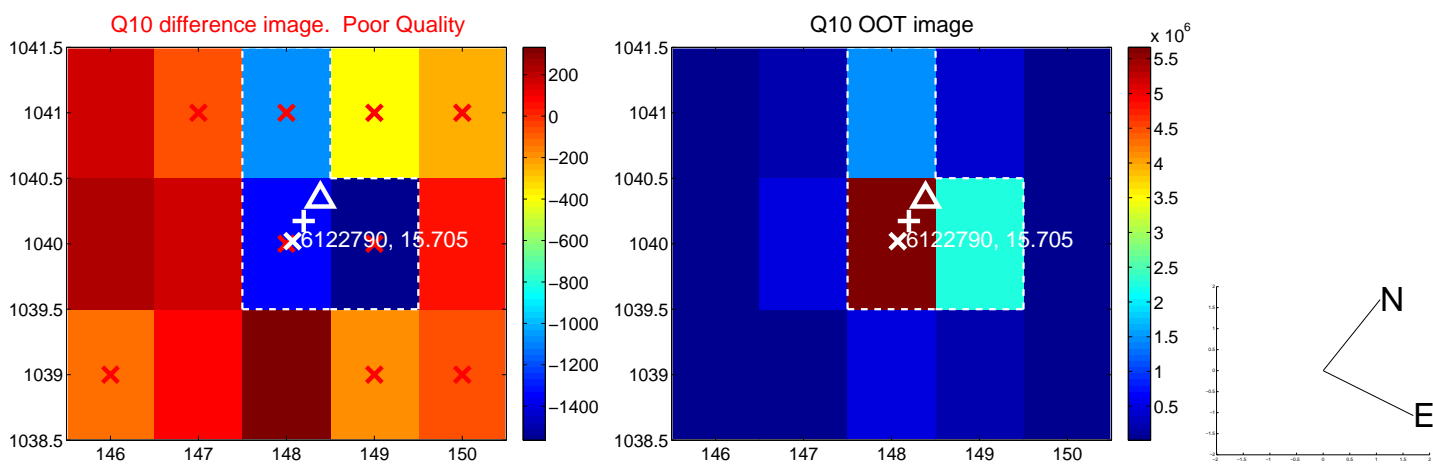
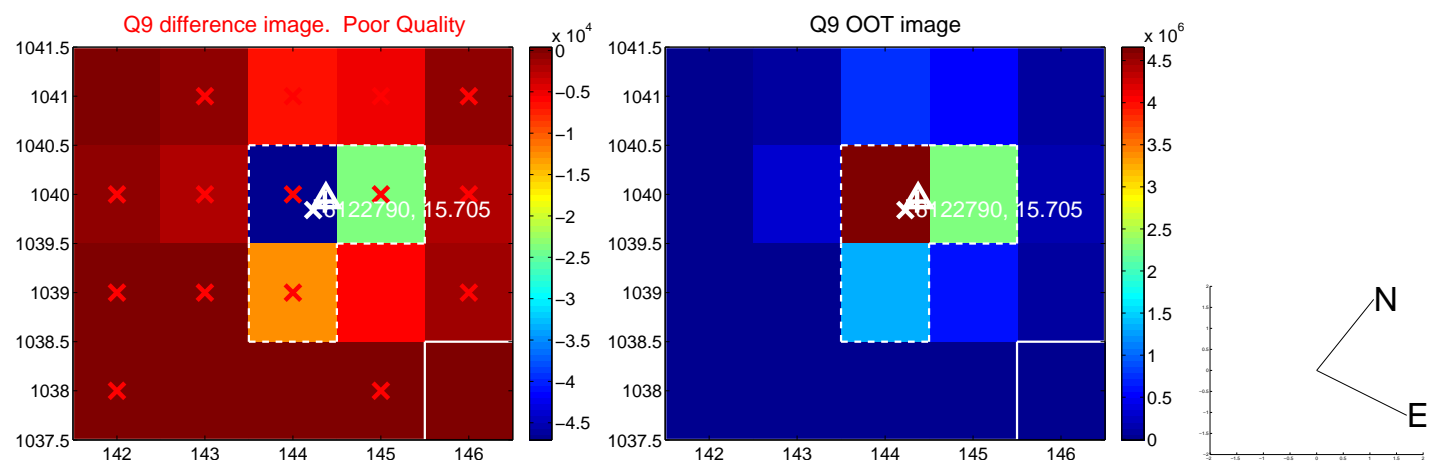
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



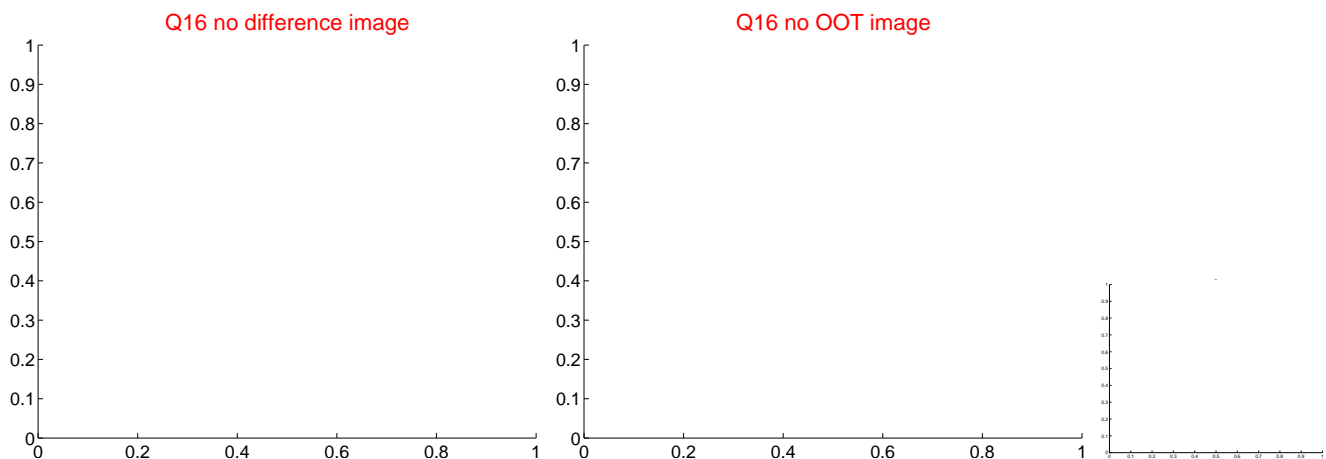
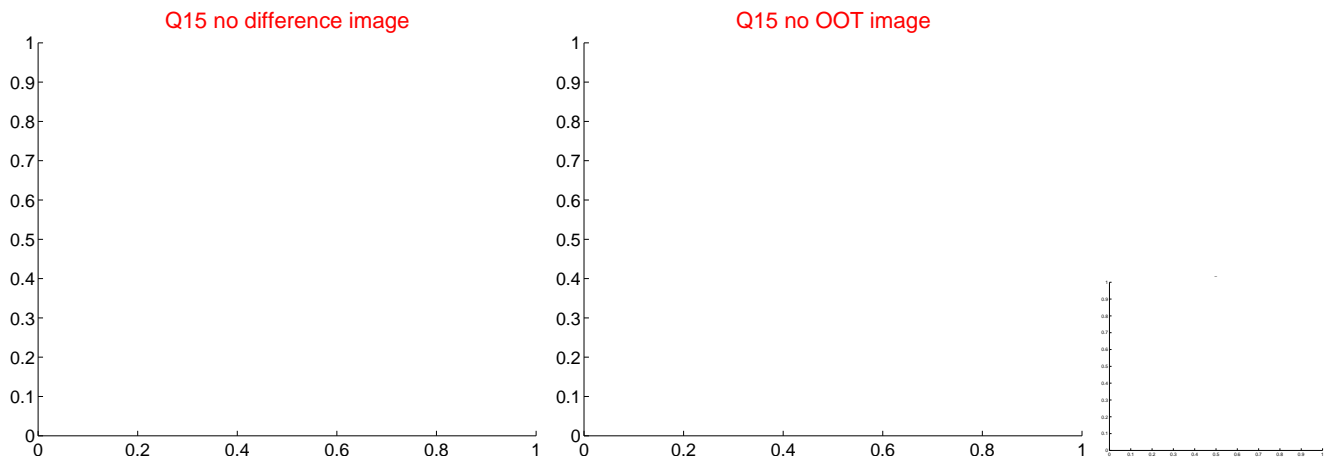
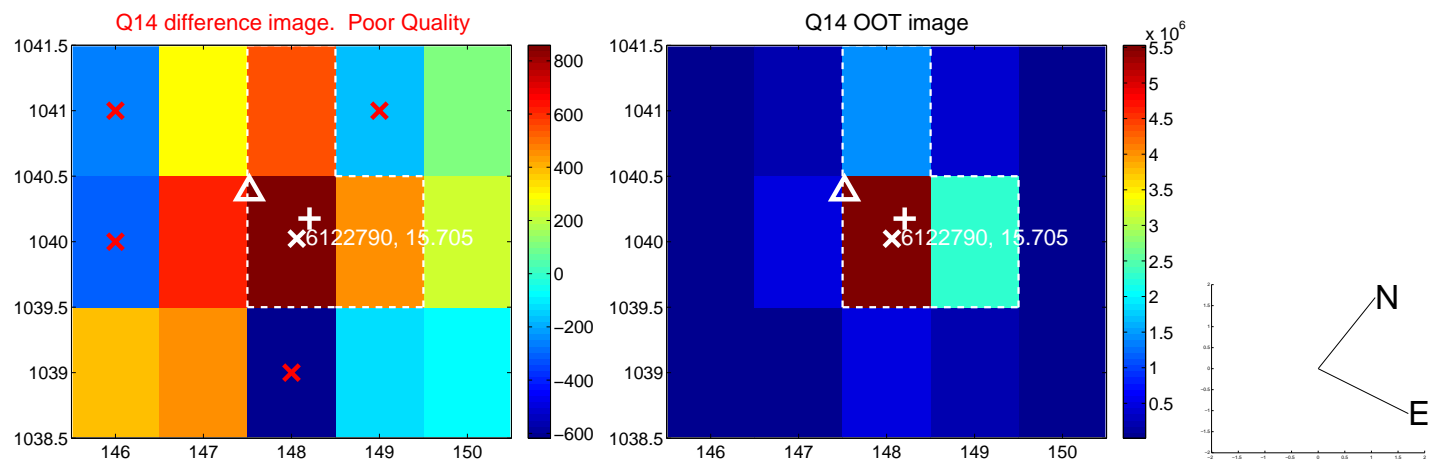
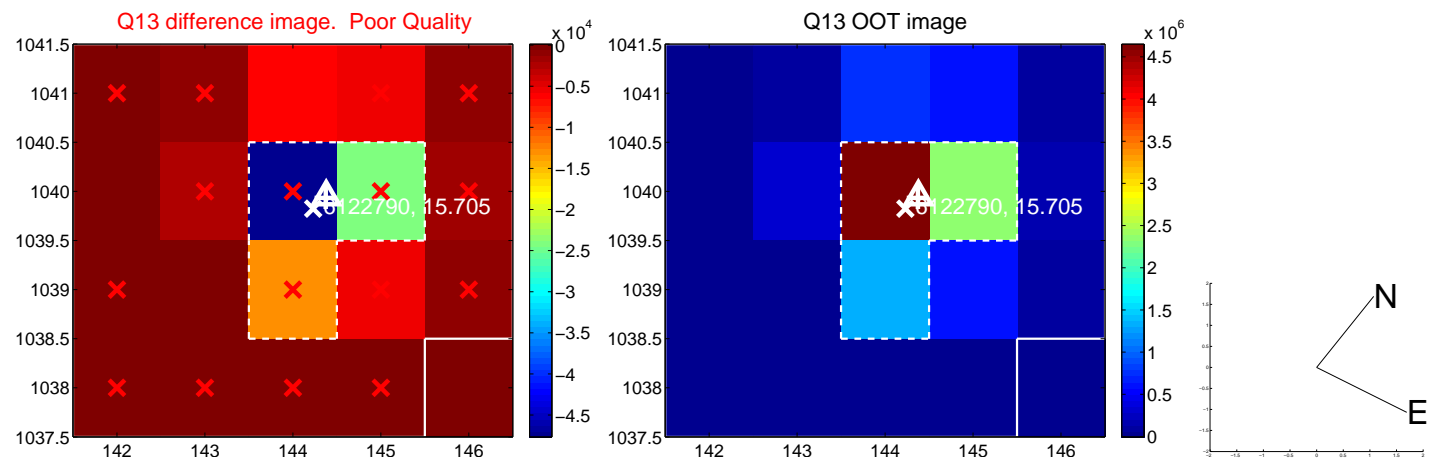
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



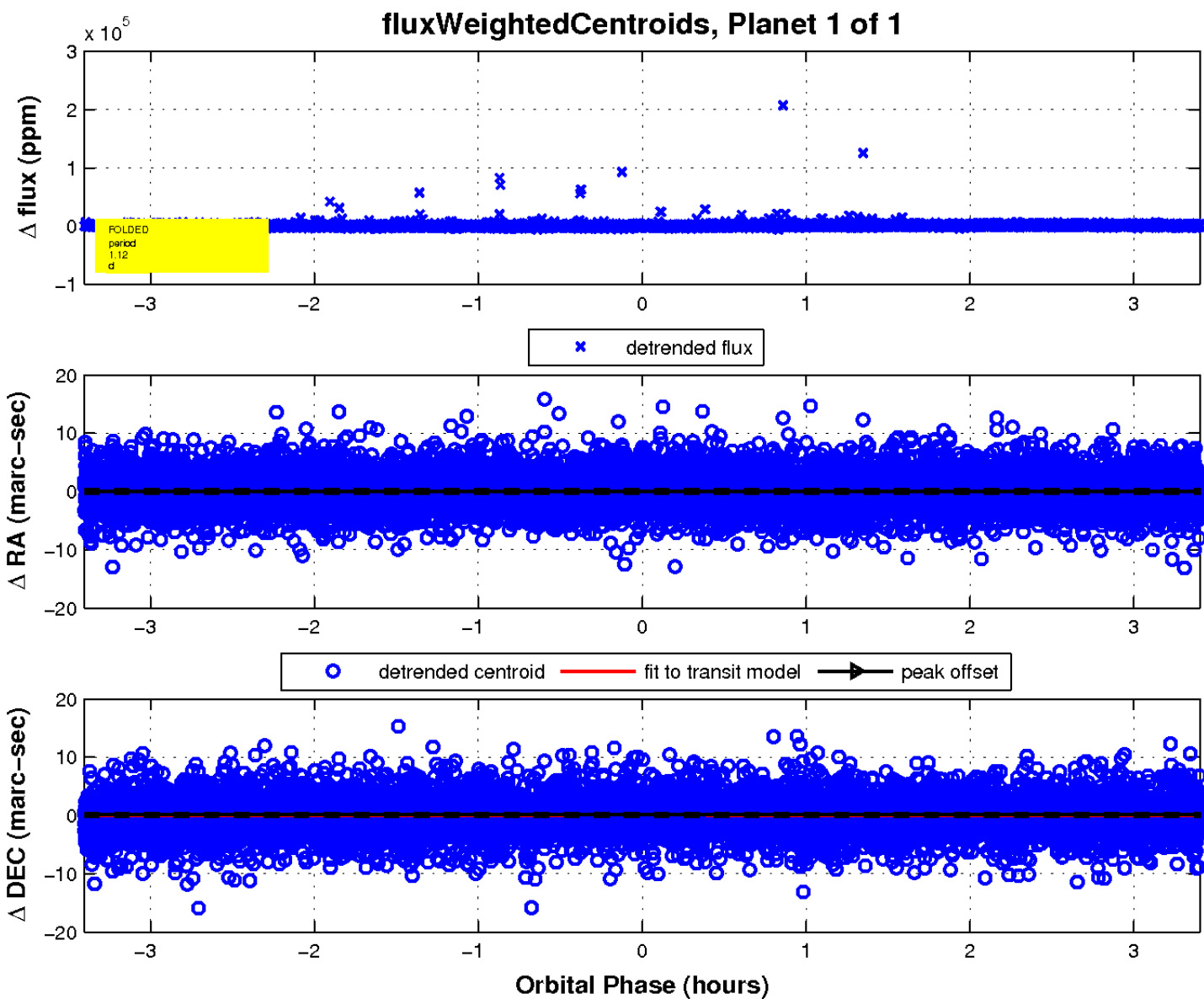
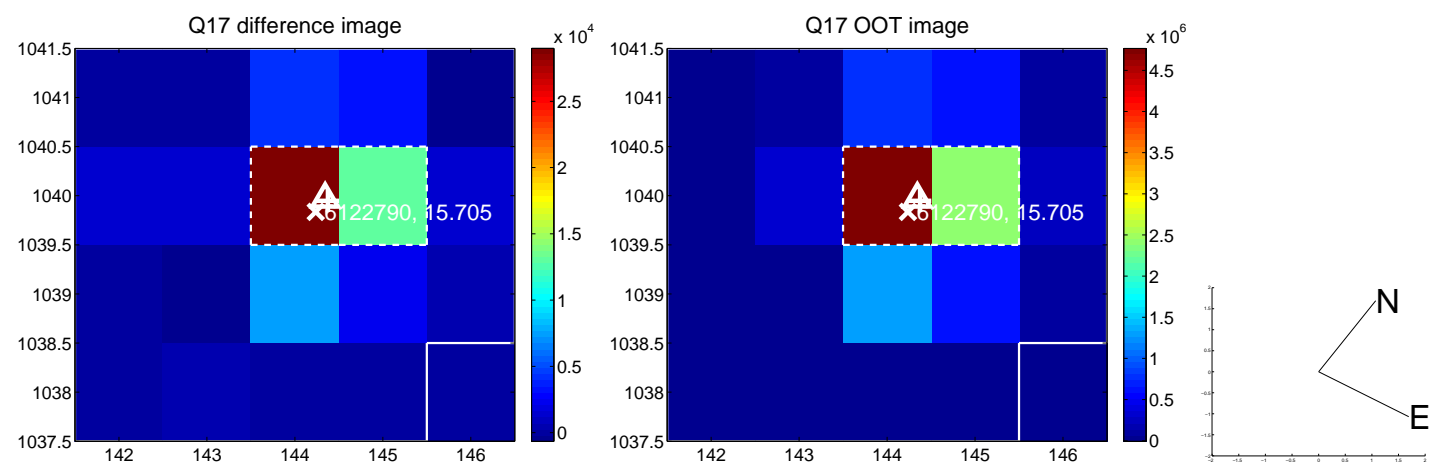
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

