

KIC 007119530

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})
007119530-01	OBS	No	0.596815	131.787683	80.7	1.956	10.9	6.6	6.40	7521	6.73	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007119530-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

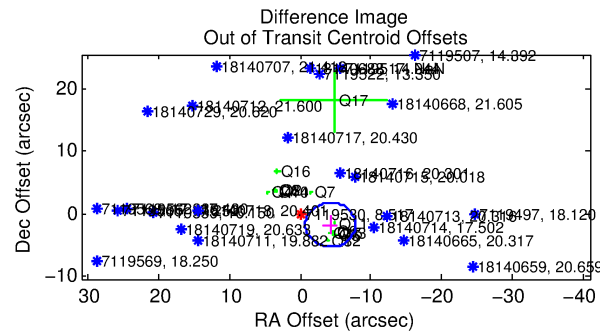
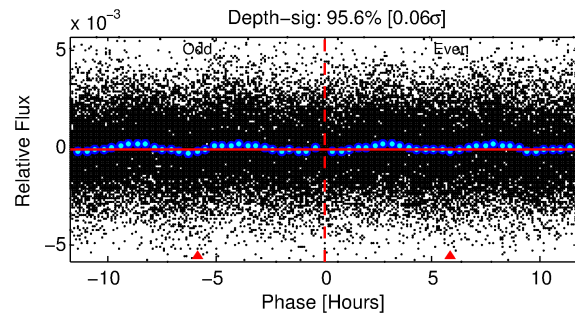
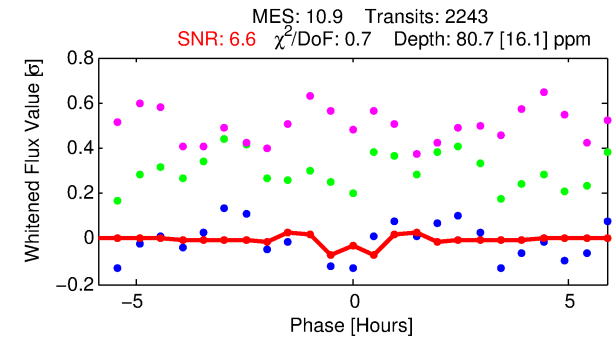
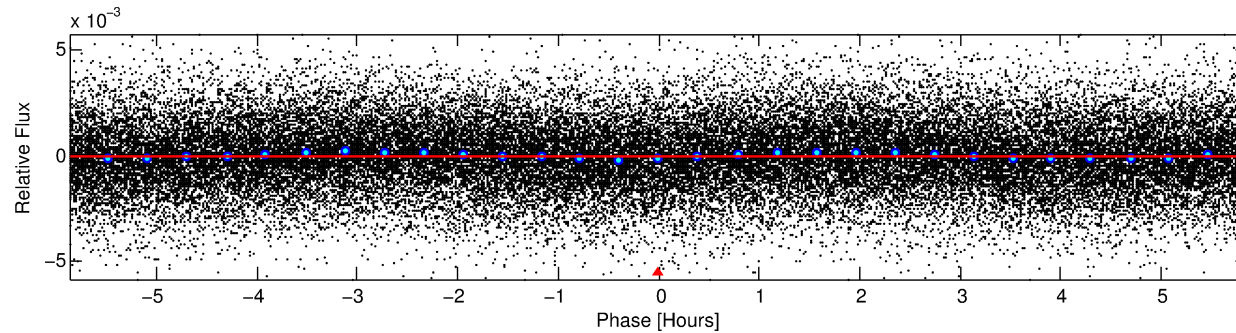
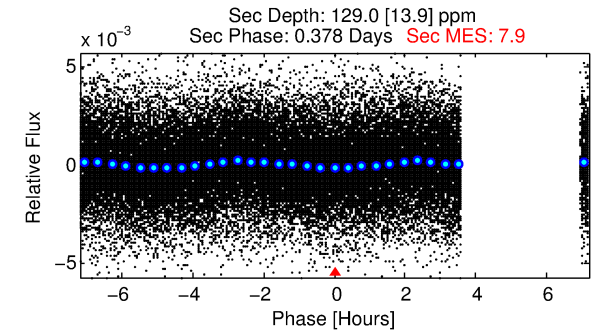
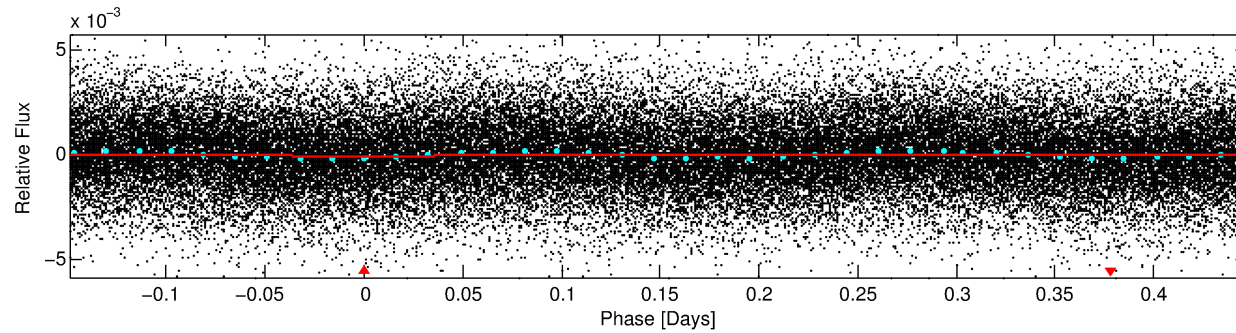
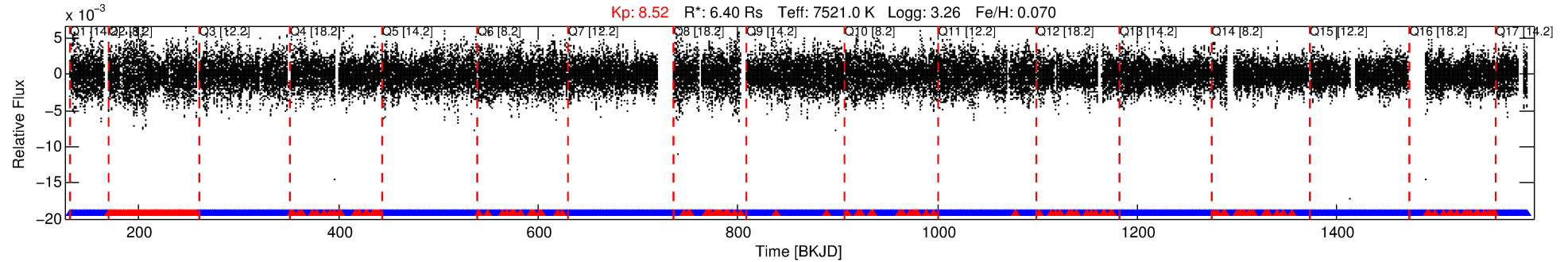
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007119530-01

No Significant Match Found

DV One-Page Summary

KIC: 7119530 Candidate: 1 of 1 Period: 0.597 d



DV Fit Results:

Period = 0.59681 [0.00001] d
Epoch = 131.7877 [0.0014] BKJD
Rp/R* = 0.0096 [0.0026]
a/R* = 1.42 [1.05]
b = 0.90 [0.31]
Seff = N/A
Teq = N/A
Rp = 6.73 [3.44] Re
a = N/A
Ag = N/A
Teffp = N/A

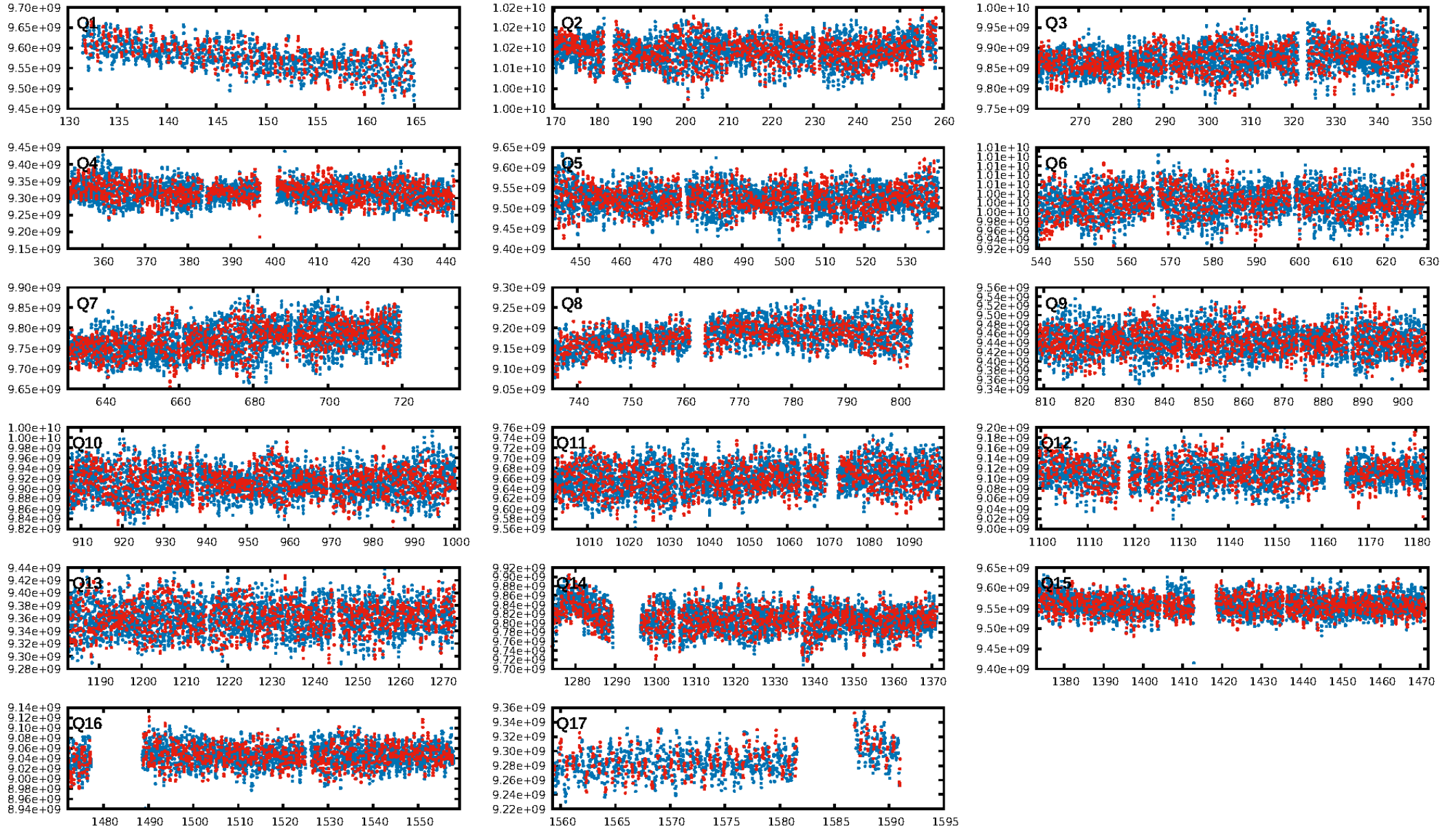
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.20e-30
RollingBand-fgt: 0.87 [1866/2141]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.7%
Centroid-so: 1.566 arcsec [4.28σ]
OotOffset-rm: 4.605 arcsec [3.90σ]
KicOffset-rm: 2.174 arcsec [1.73σ]
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]

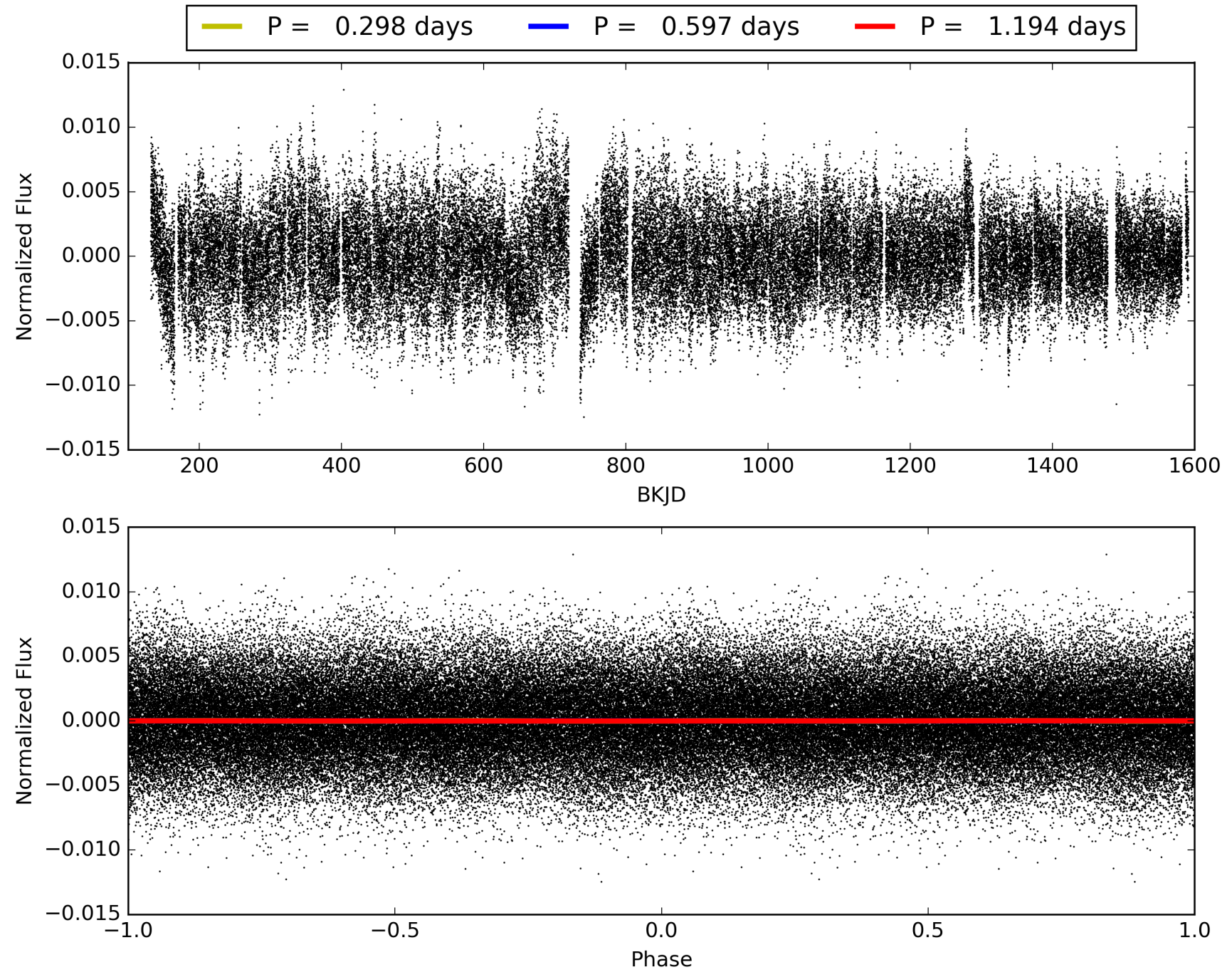
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 13:02:36 Z

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

TCE 007119530-01, PDC Light Curves

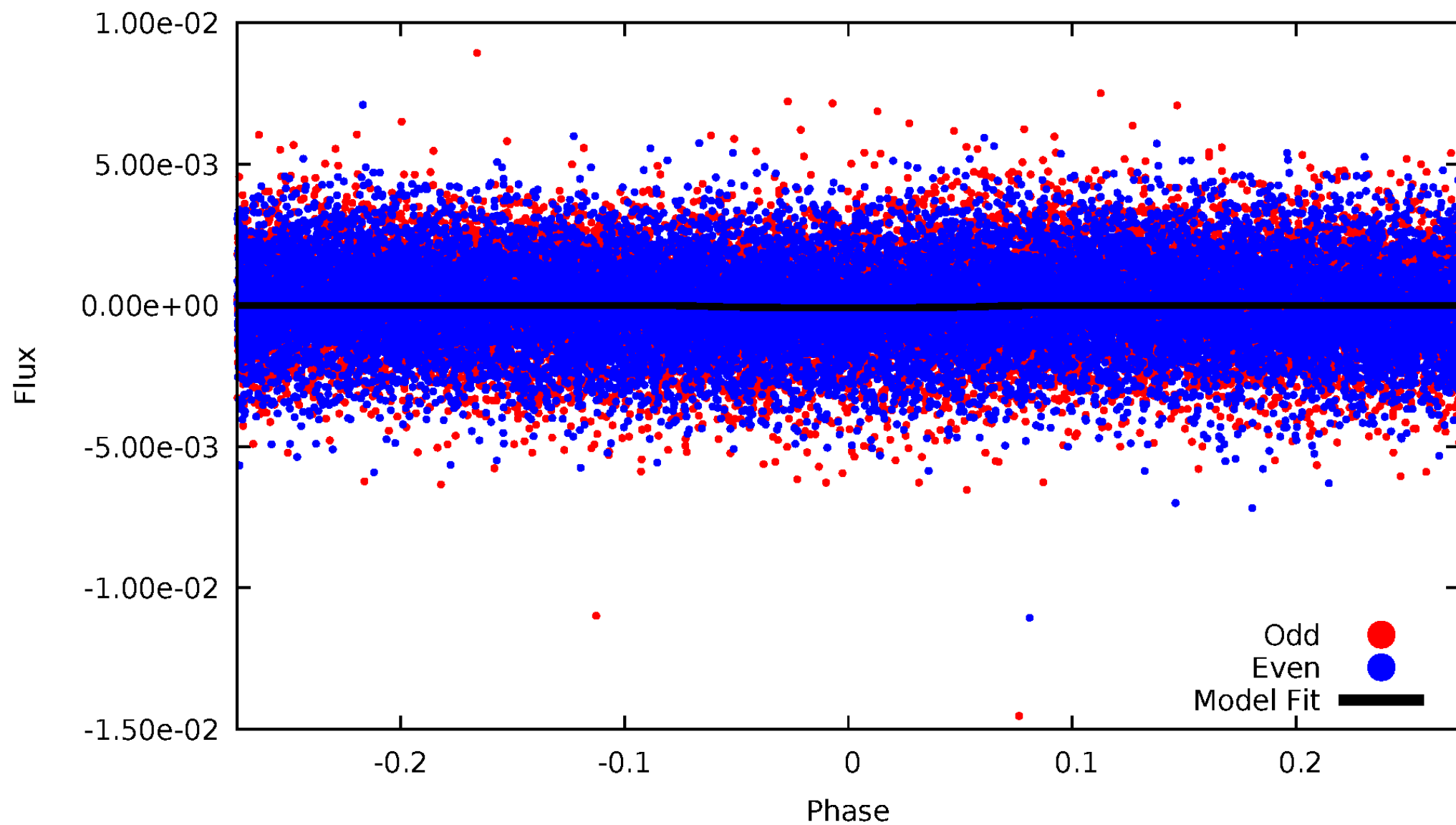


TCE 007119530-01



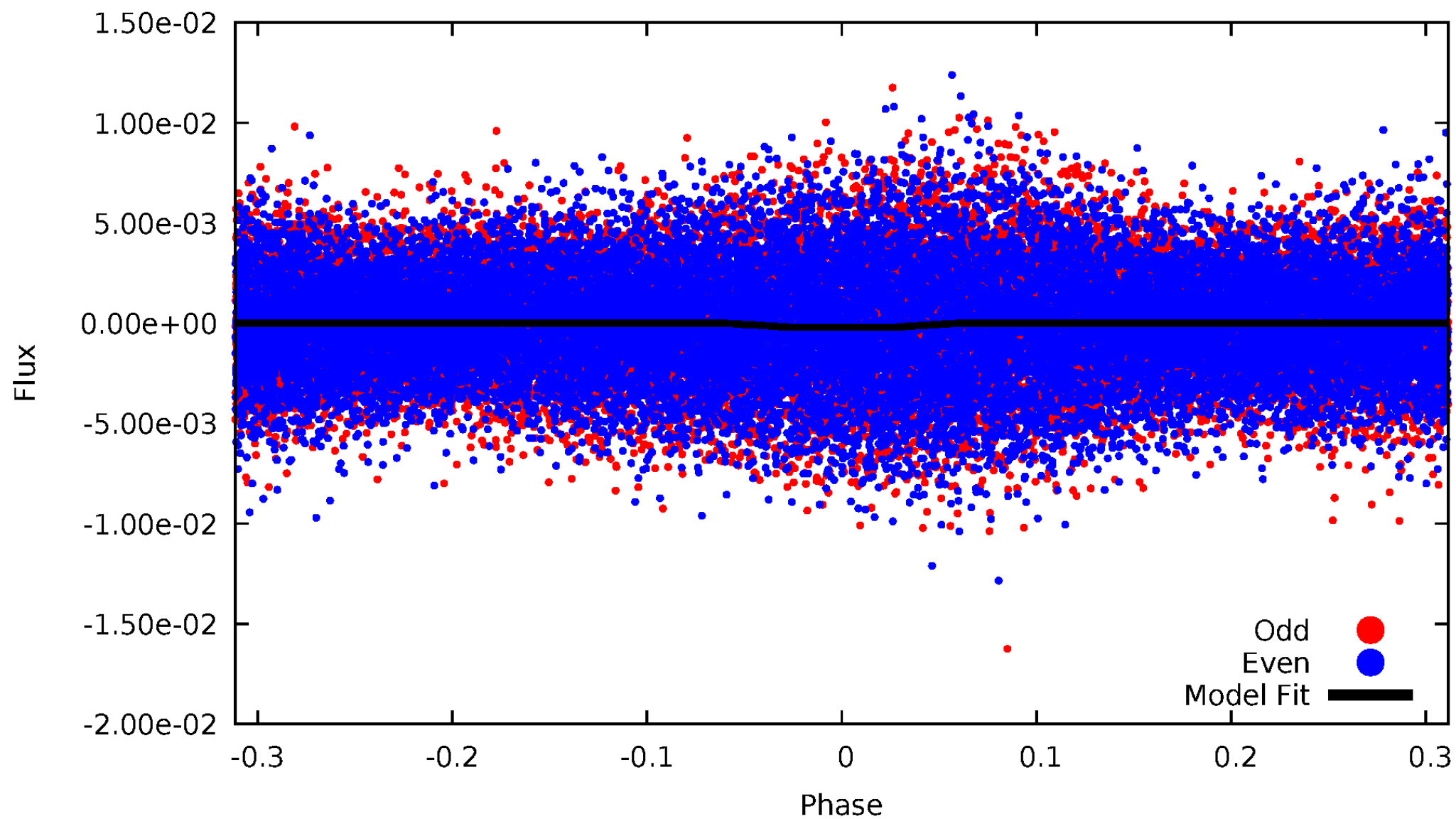
DV Odd/Even

TCE 007119530-01



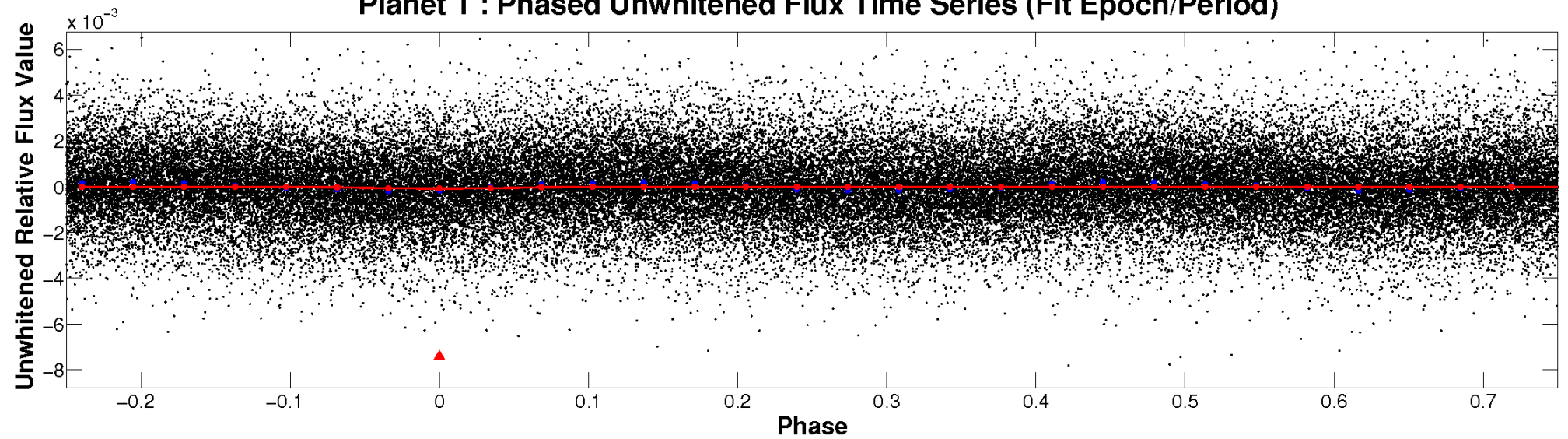
ALT Odd/Even

TCE 007119530-01

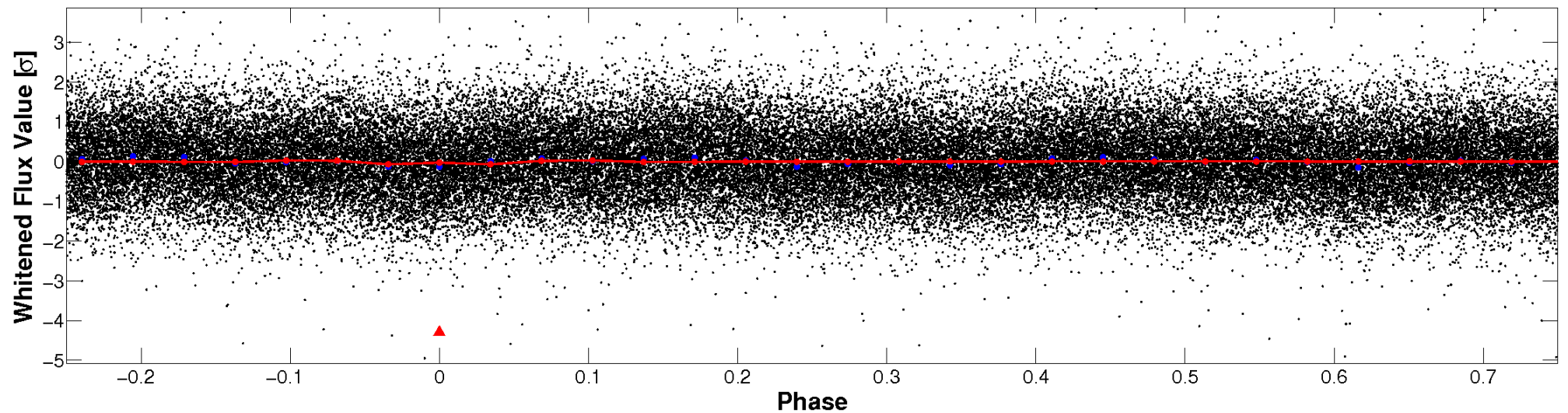


Non-Whitened Vs. Whitened Light Curve

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

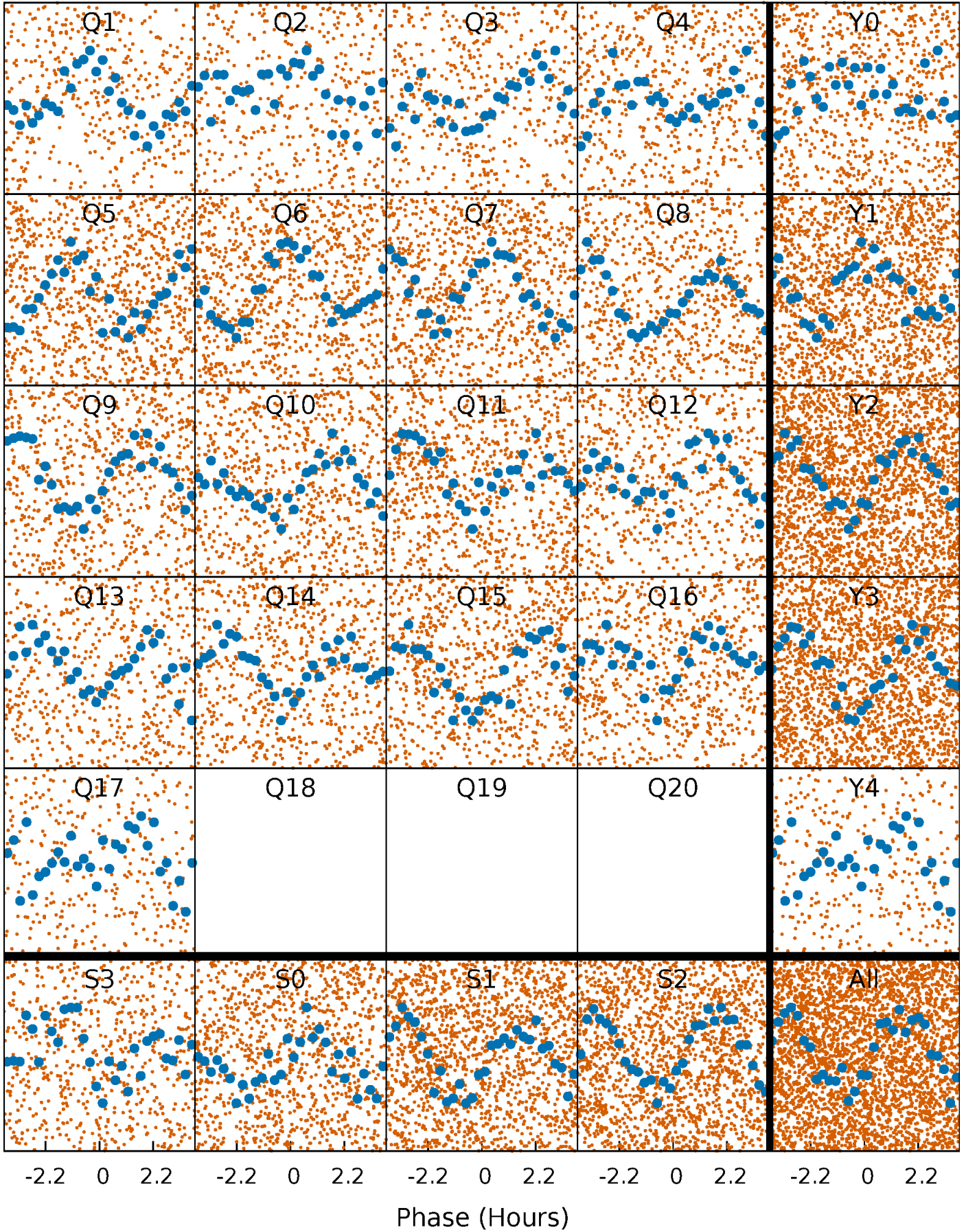


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



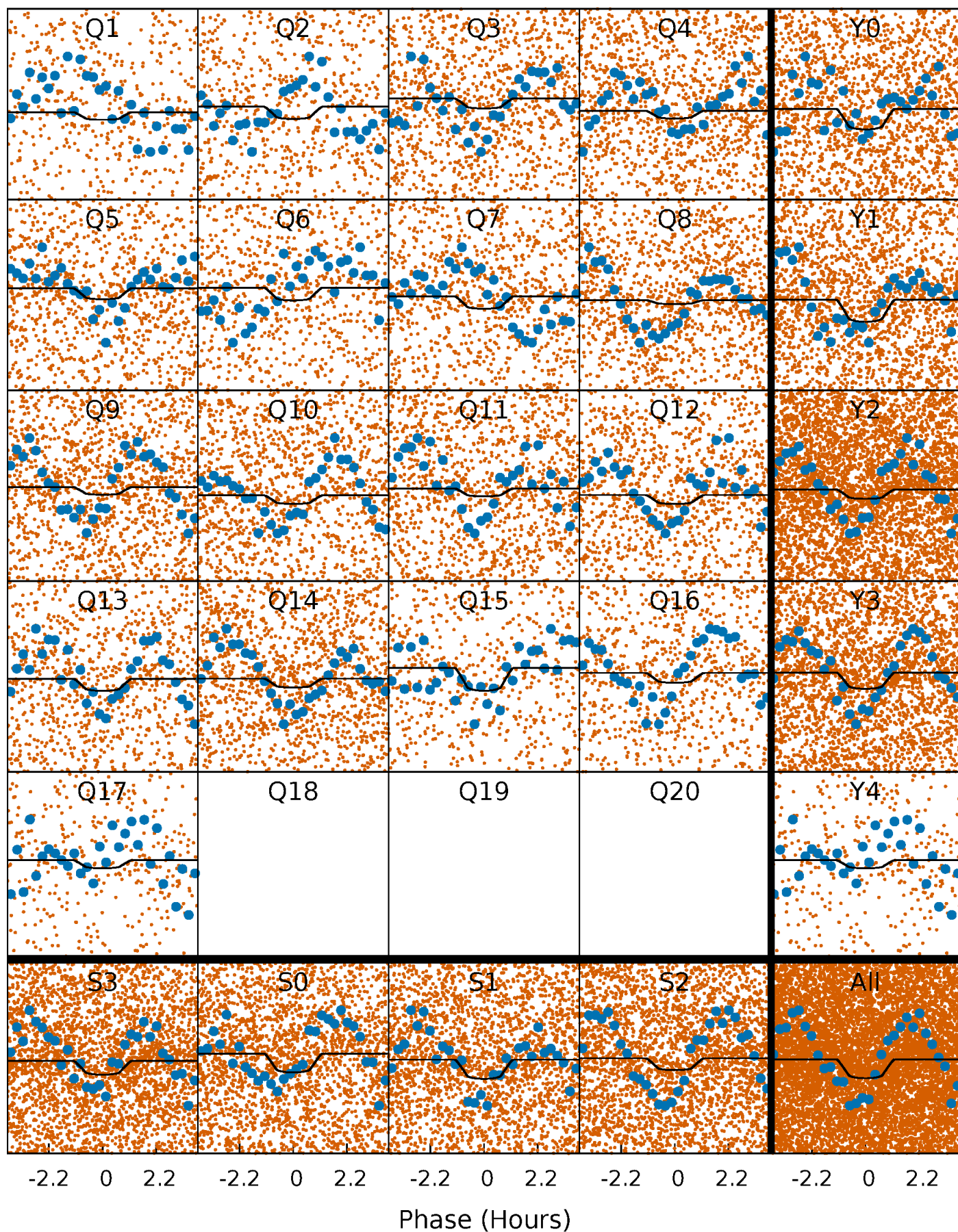
PDC Quarter-Phased Transit Curves

TCE 007119530-01 P= 0.596815 Days $T_0=131.787683$ (BKJD)



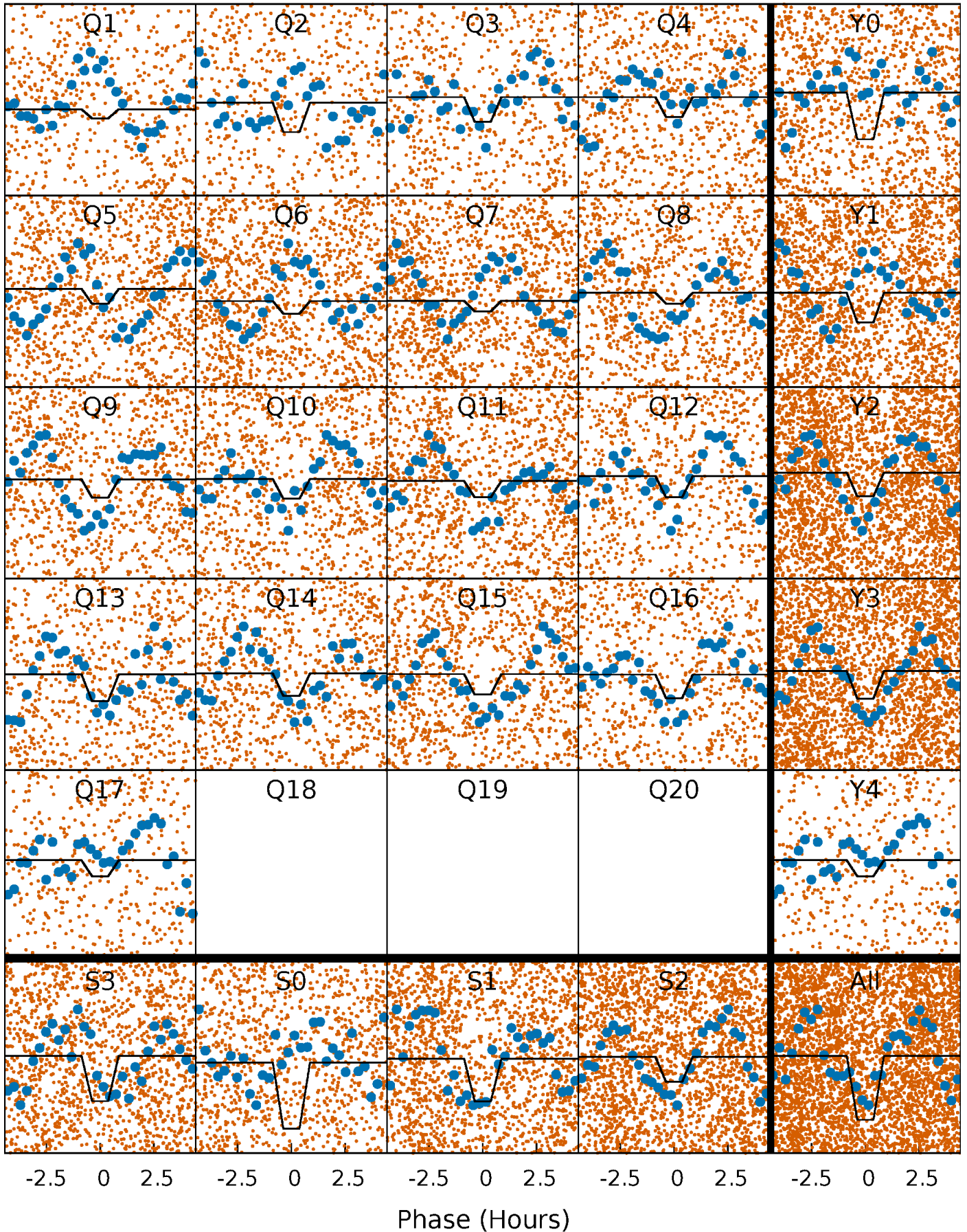
DV Quarter-Phased Transit Curves

TCE 007119530-01 P= 0.596815 Days $T_0=131.787683$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

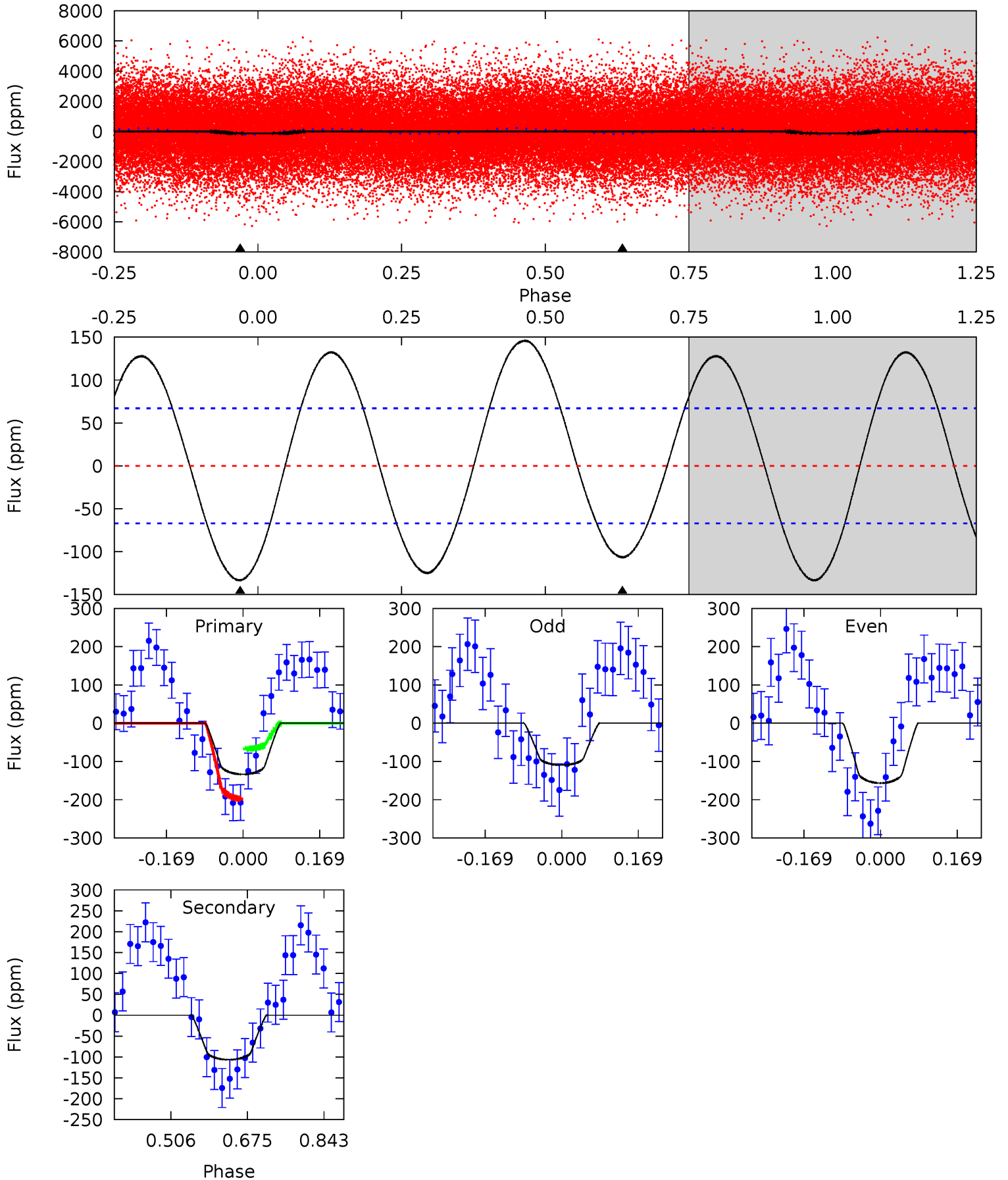
TCE 007119530-01 P= 0.596802 Days $T_0=131.787999$ (BKJD)



DV Model-Shift Uniqueness Test

007119530-01, P = 0.596815 Days, E = 131.190868 Days

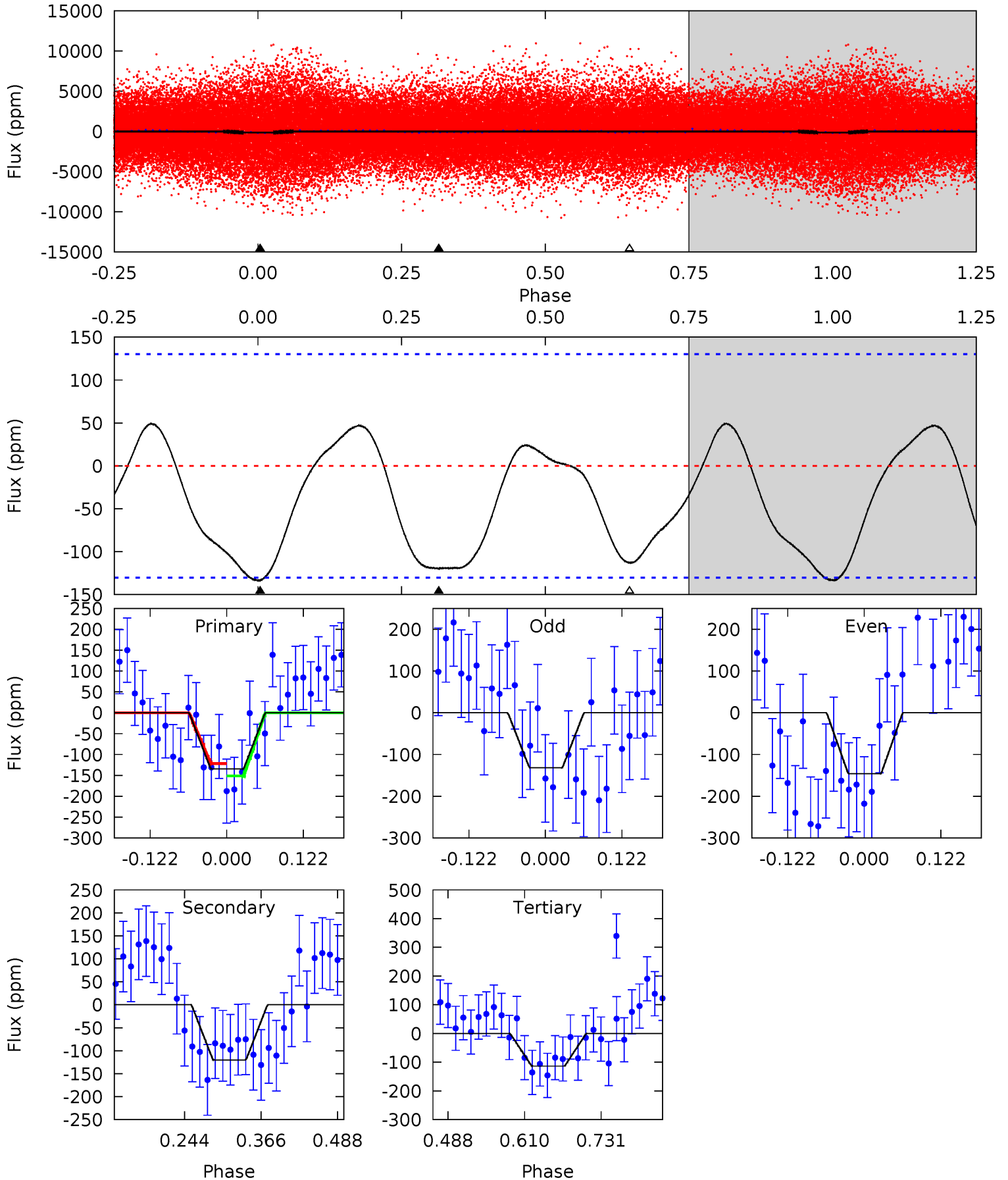
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.87	7.07	0	0	4.45	1.38	6.13	8.87	8.87	7.07	7.07	1.57	0.99	0.52	4.34



Alt Model-Shift Uniqueness Test

007119530-01, P = 0.596802 Days, E = 131.191197 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.67	4.18	3.94	0	4.52	1.55	1.73	0.72	4.67	0.23	4.18	0.24	0.81	0.27	0.54



Stellar Parameters For KIC 007119530

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7521^{+131}_{-187}	$3.258^{+0.400}_{-0.125}$	$0.070^{+0.250}_{-0.150}$	$6.396^{+1.193}_{-2.784}$	$2.702^{+0.266}_{-0.621}$	$0.015^{+0.050}_{-0.005}$
	+2%/-2%	+12%/-4%	+357%/-214%	+19%/-44%	+10%/-23%	+346%/-37%
Source	SPE4	SPE4	SPE4	DSEP		

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

Secondary Eclipse Parameters for KIC 007119530-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-107 ± 15	$6.27^{+2.25}_{-2.22}$	8305^{+506}_{-844}	6219^{+2390}_{-9318}	$0.546^{+0.691}_{-0.251}$
Alt.	-120 ± 29	$9.33^{+2.67}_{-2.41}$	8301^{+513}_{-863}	-3942^{+9427}_{-1746}	$0.274^{+0.213}_{-0.111}$

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

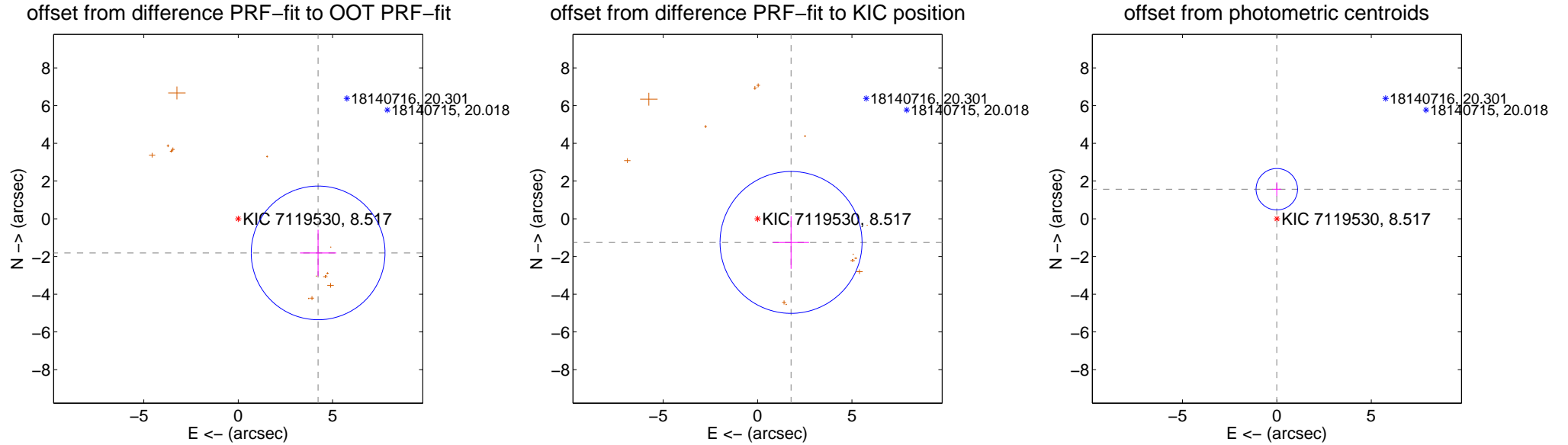
DV Centroid Data

Supplemental centroid analysis for 007119530-01. **Kepler magnitude: 8.52.** Transit SNR 6.62

There are 0 quarters with good PRF difference image offsets

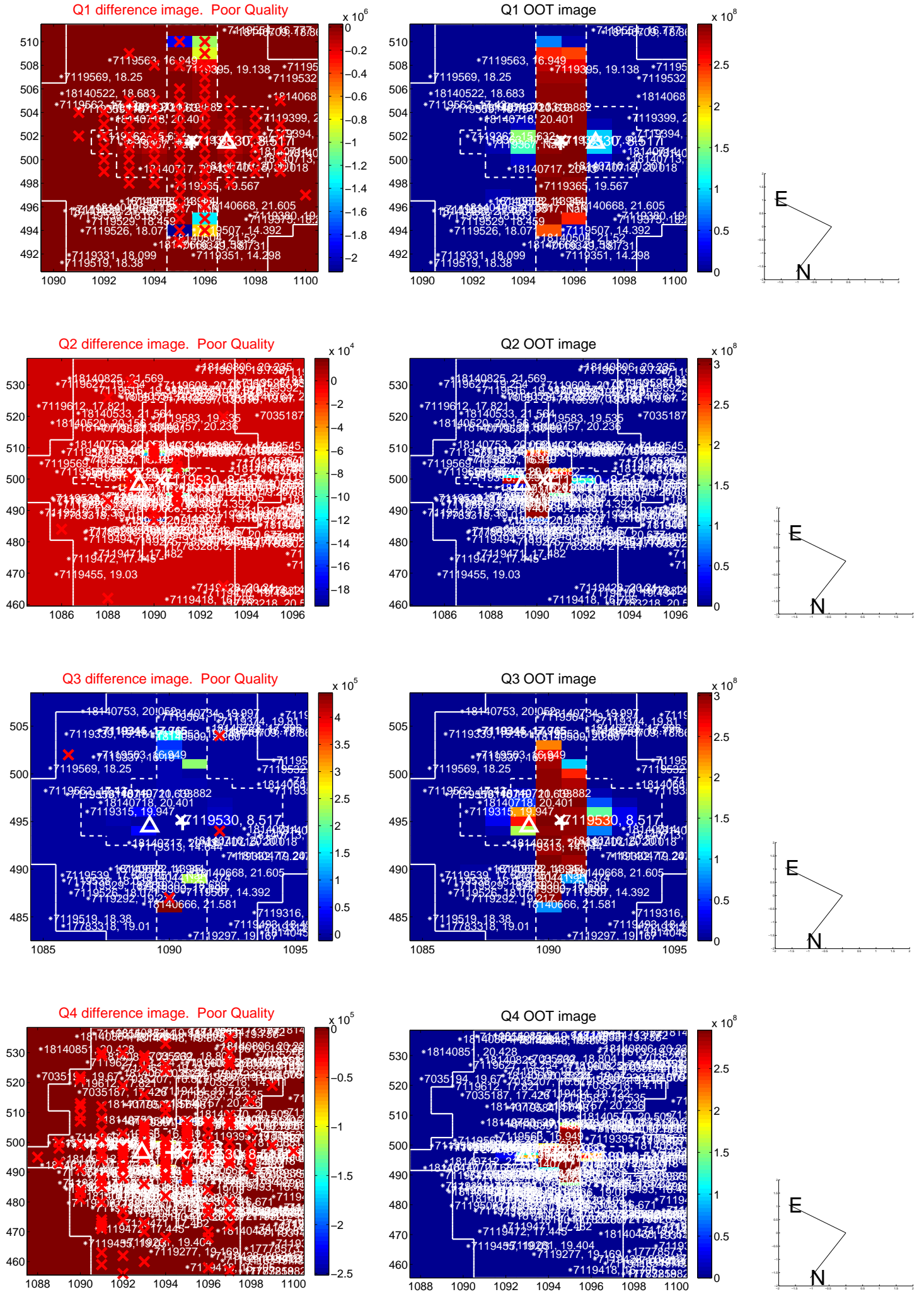
The direct PRF centroid is offset from the target star catalog position by about 0.96 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.605 ± 1.182	3.90	-4.235 ± 0.960	-1.810 ± 1.229
PRF-fit source offset from KIC position	2.174 ± 1.254	1.73	-1.775 ± 0.955	-1.255 ± 1.398
photometric centroid source offset	1.57 ± 0.37	4.28	0.01 ± 0.23	1.57 ± 0.37

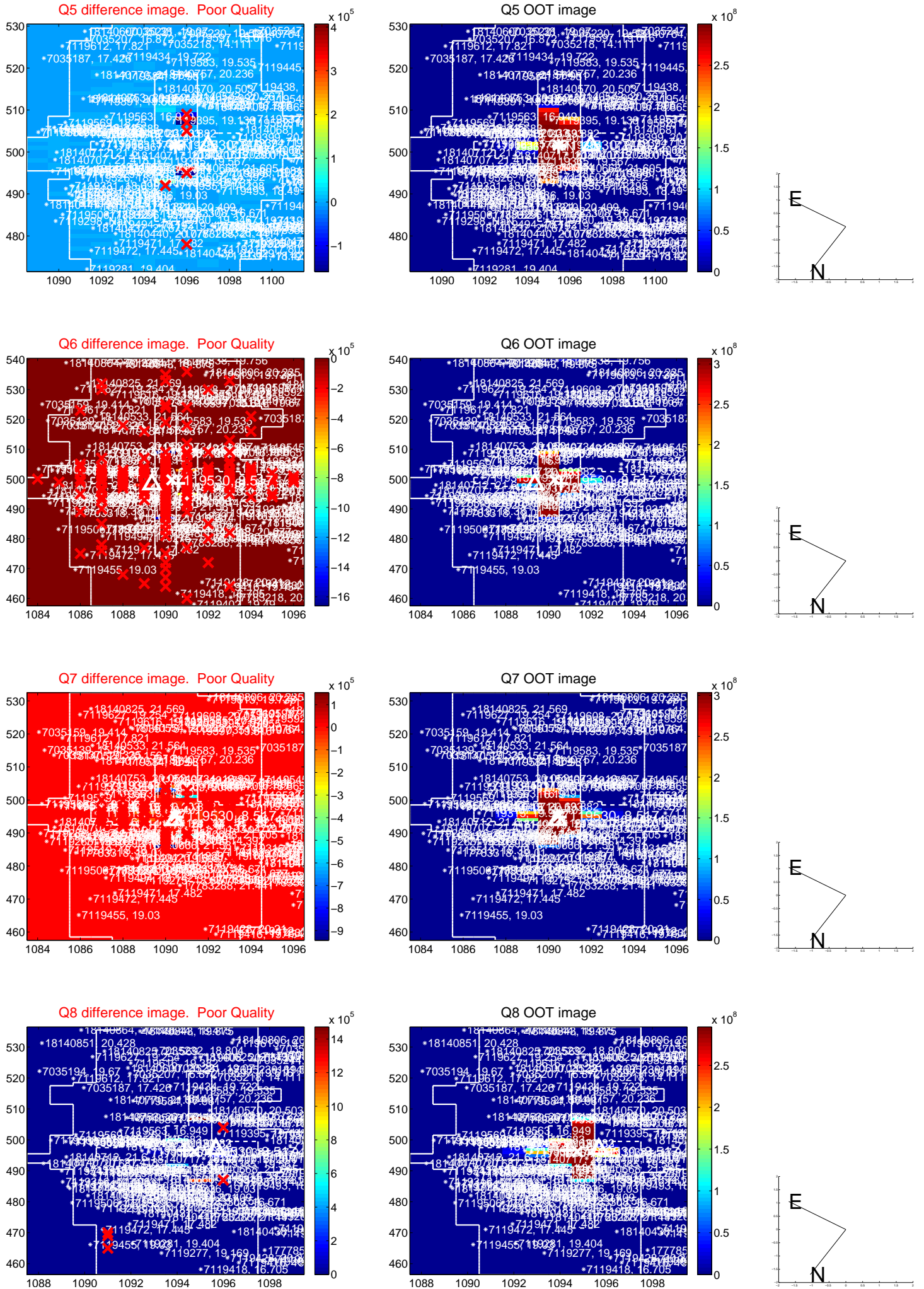


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

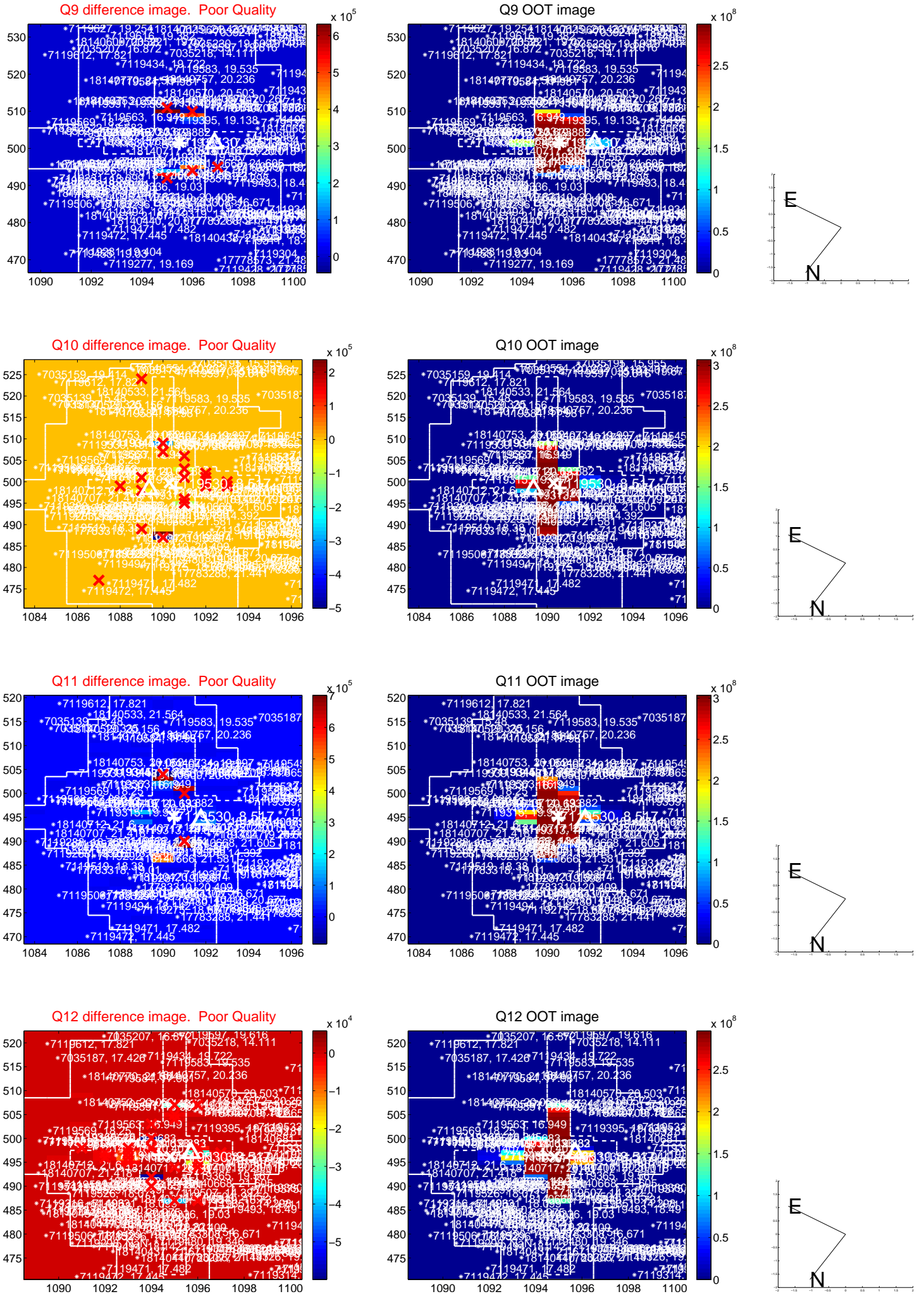
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



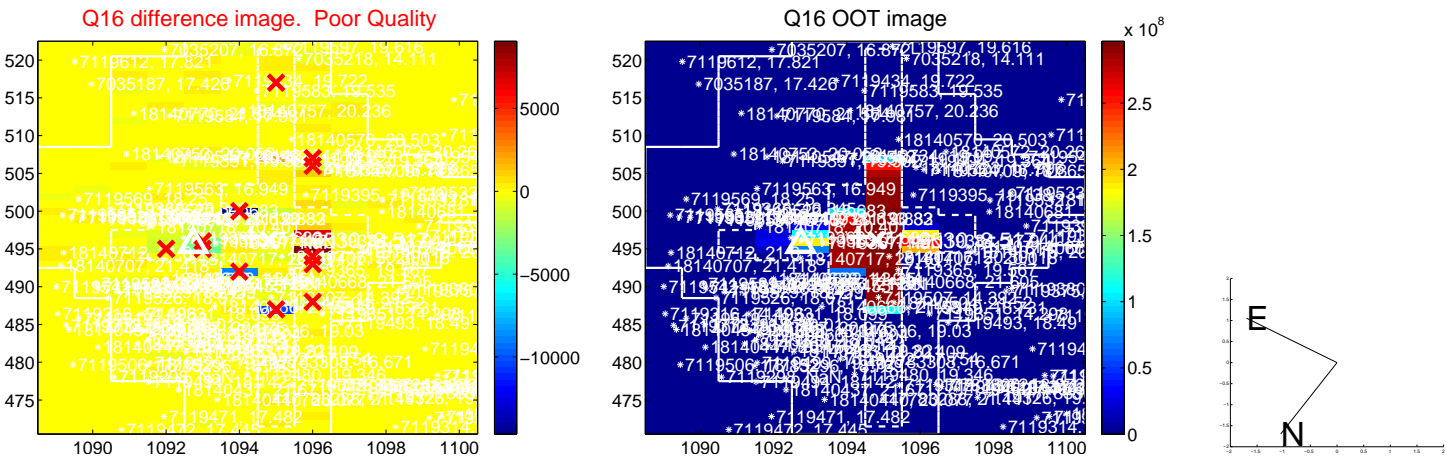
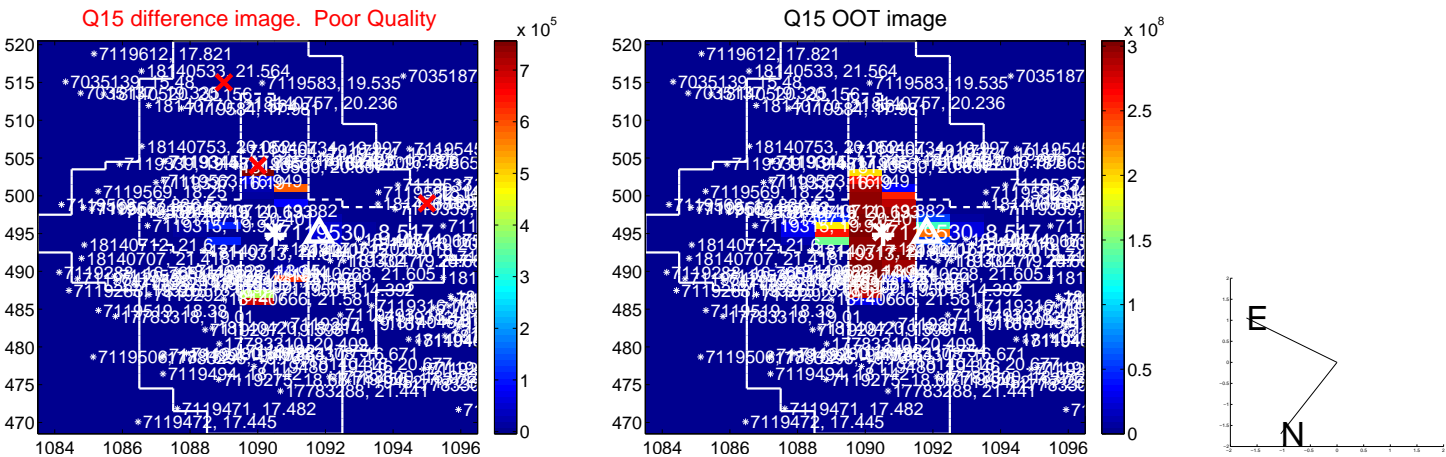
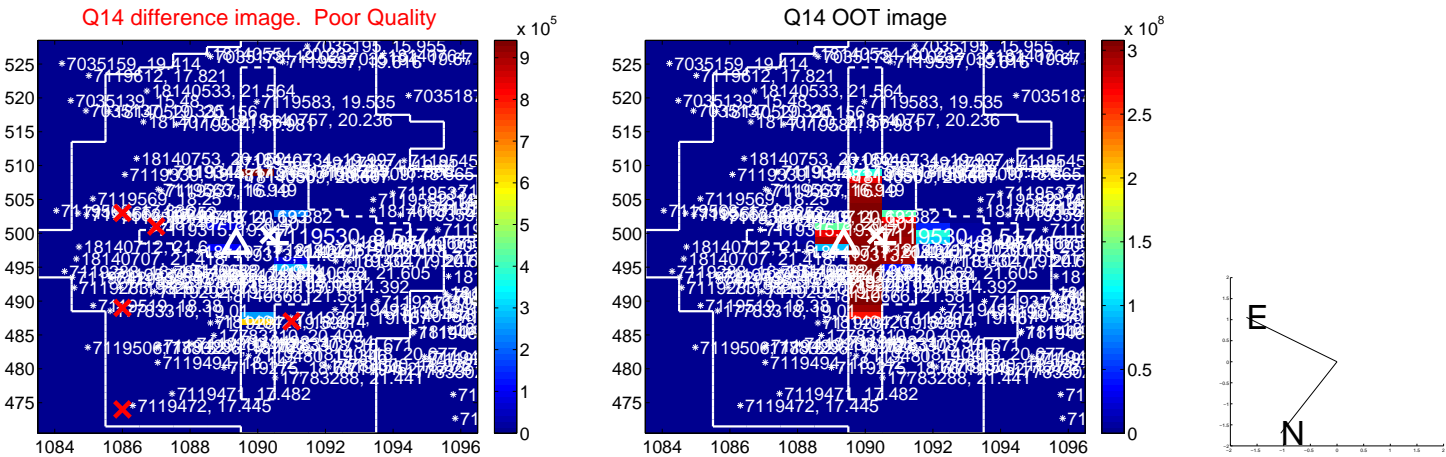
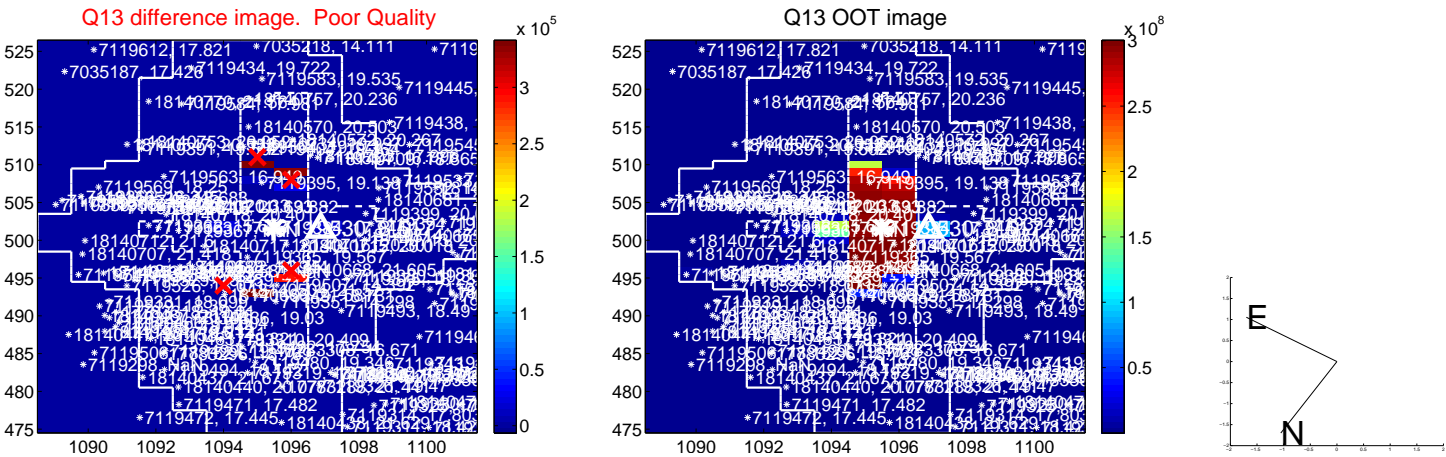
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



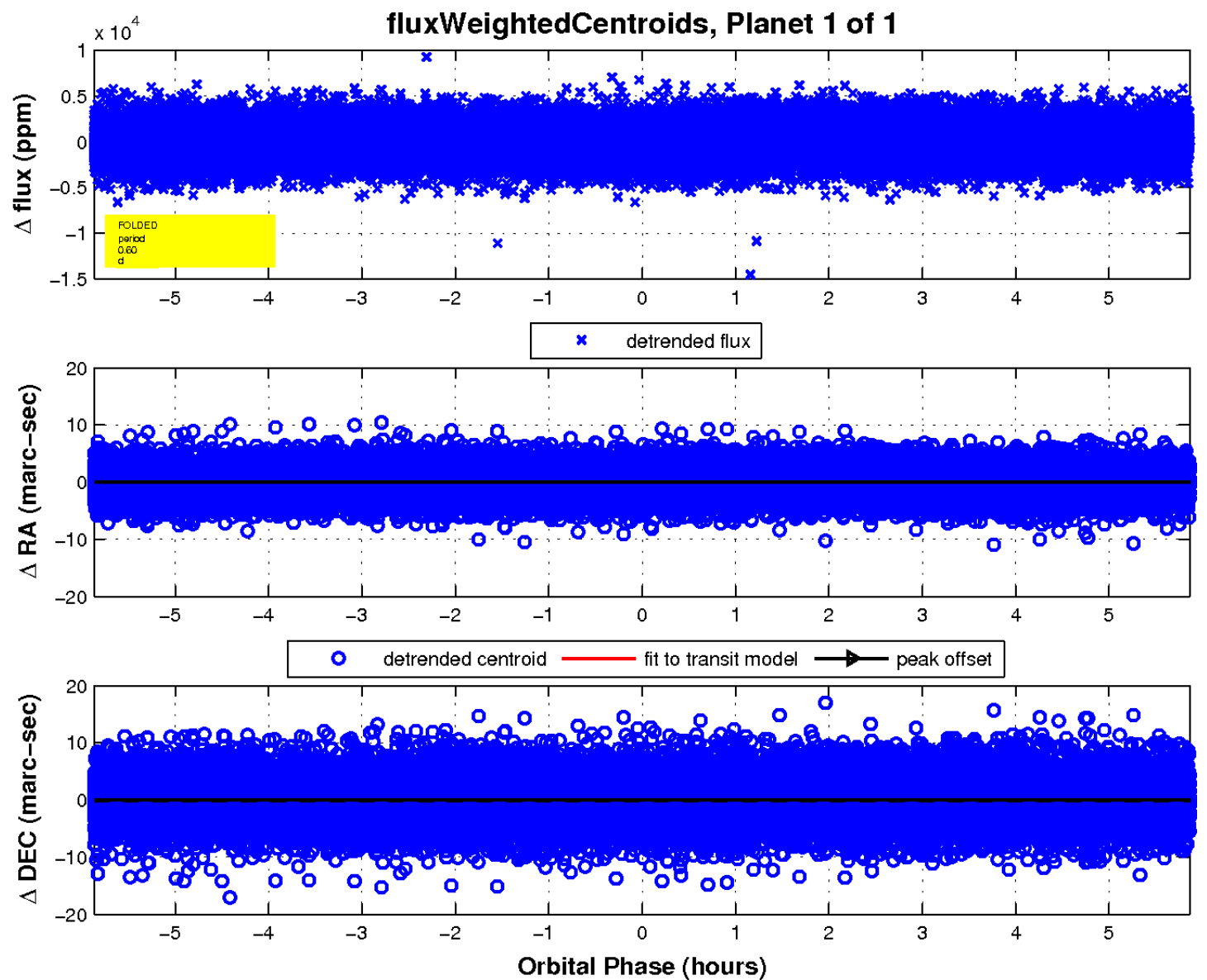
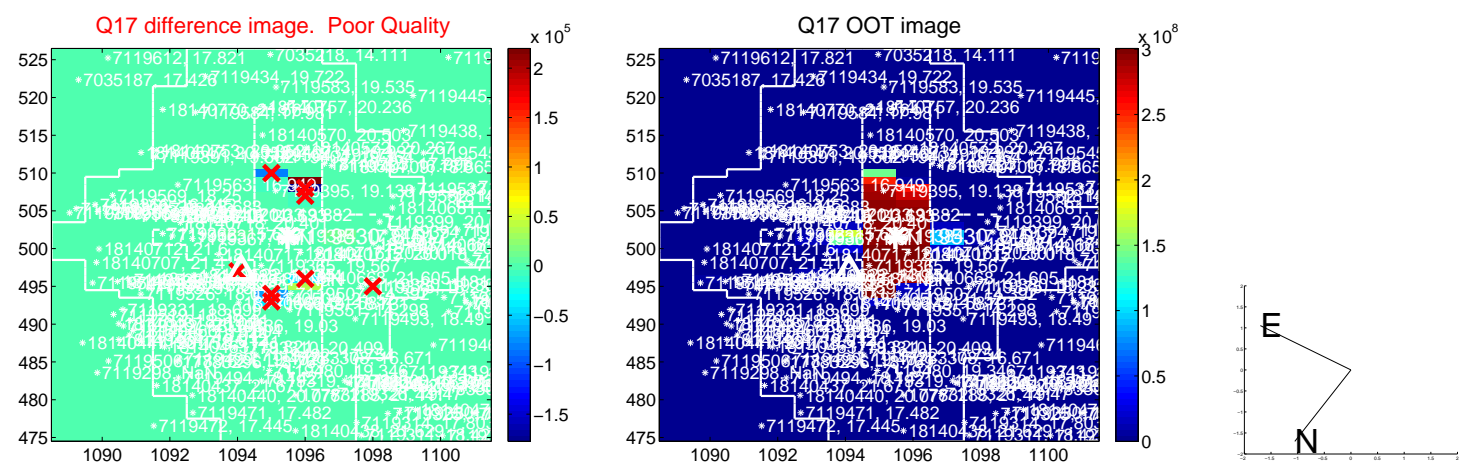
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



UKIRT Image

Declination

