

KIC 006130500

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})
006130500-01	OBS	No	2.256289	131.510994	175.3	7.500	11.2	-1.0	1.90	7801	2.56	7425.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006130500-01	OBS	FP	0.00	1	0	0	0	LPP_DV LPP_ALT CENT_NOFITS

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

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

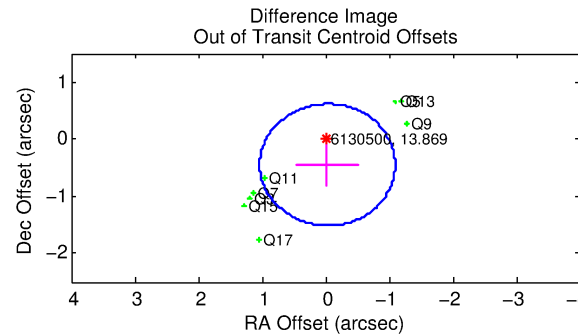
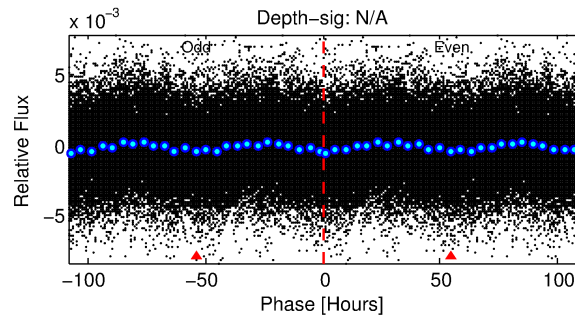
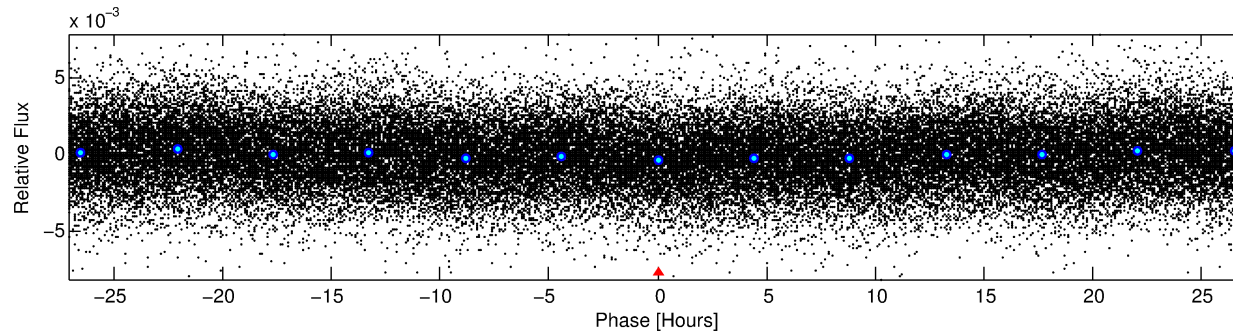
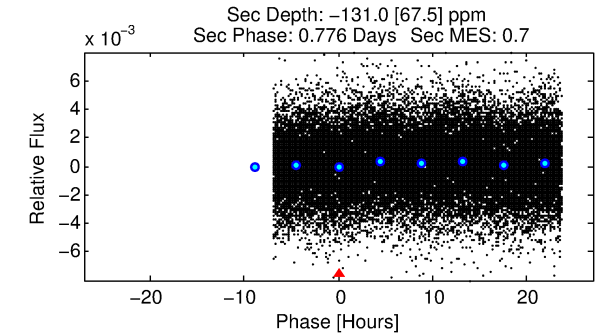
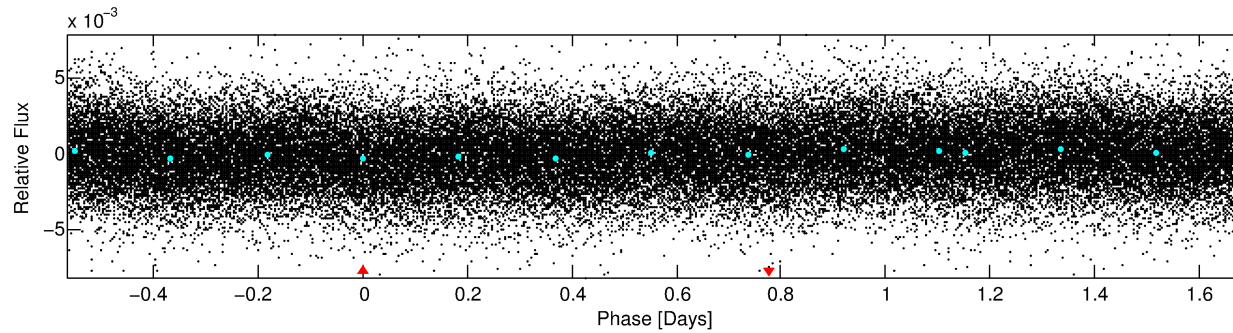
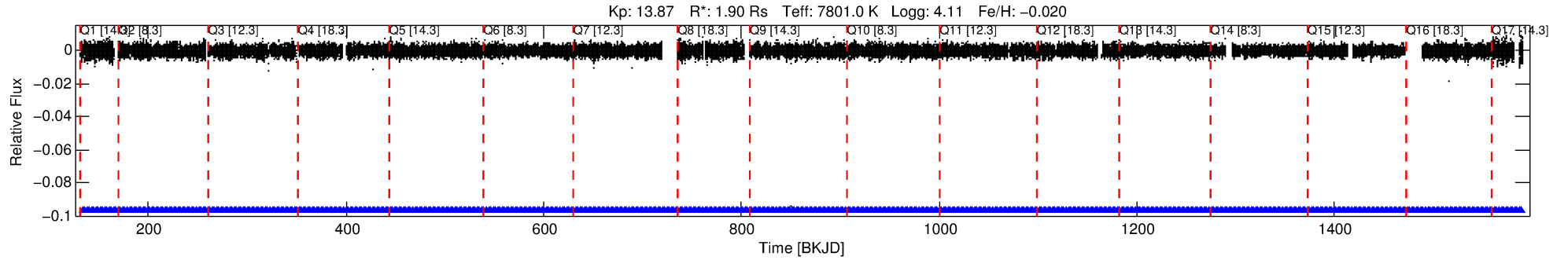
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006130500-01

No Significant Match Found

DV One-Page Summary

KIC: 6130500 Candidate: 1 of 1 Period: 2.256 d



TPS TCE Results:

Period = 2.25629 d
Epoch = 131.5110 BKJD

DV fit results are unavailable

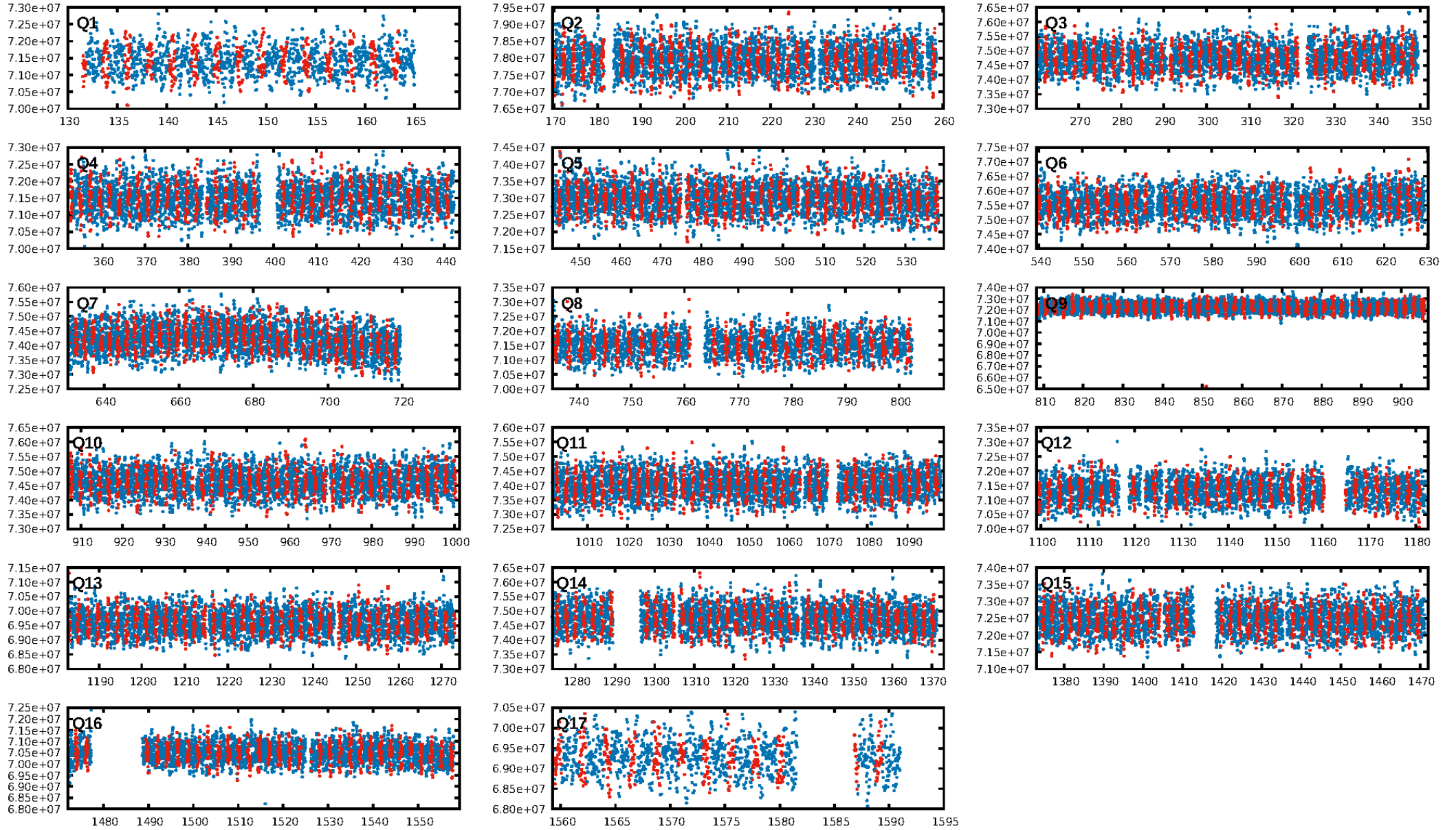
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.08e-31
RollingBand-fgt: 1.00 [585/585]
GhostDiagnostic-chr: 1.653
Centroid-sig: 0.0%
Centroid-so: 0.049 arcsec [0.60σ]
OotOffset-rm: 0.450 arcsec [1.27σ]
KicOffset-rm: 0.504 arcsec [1.37σ]
OotOffset-st: 0/4/0/4 [8]
KicOffset-st: 0/4/0/4 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [17/17]

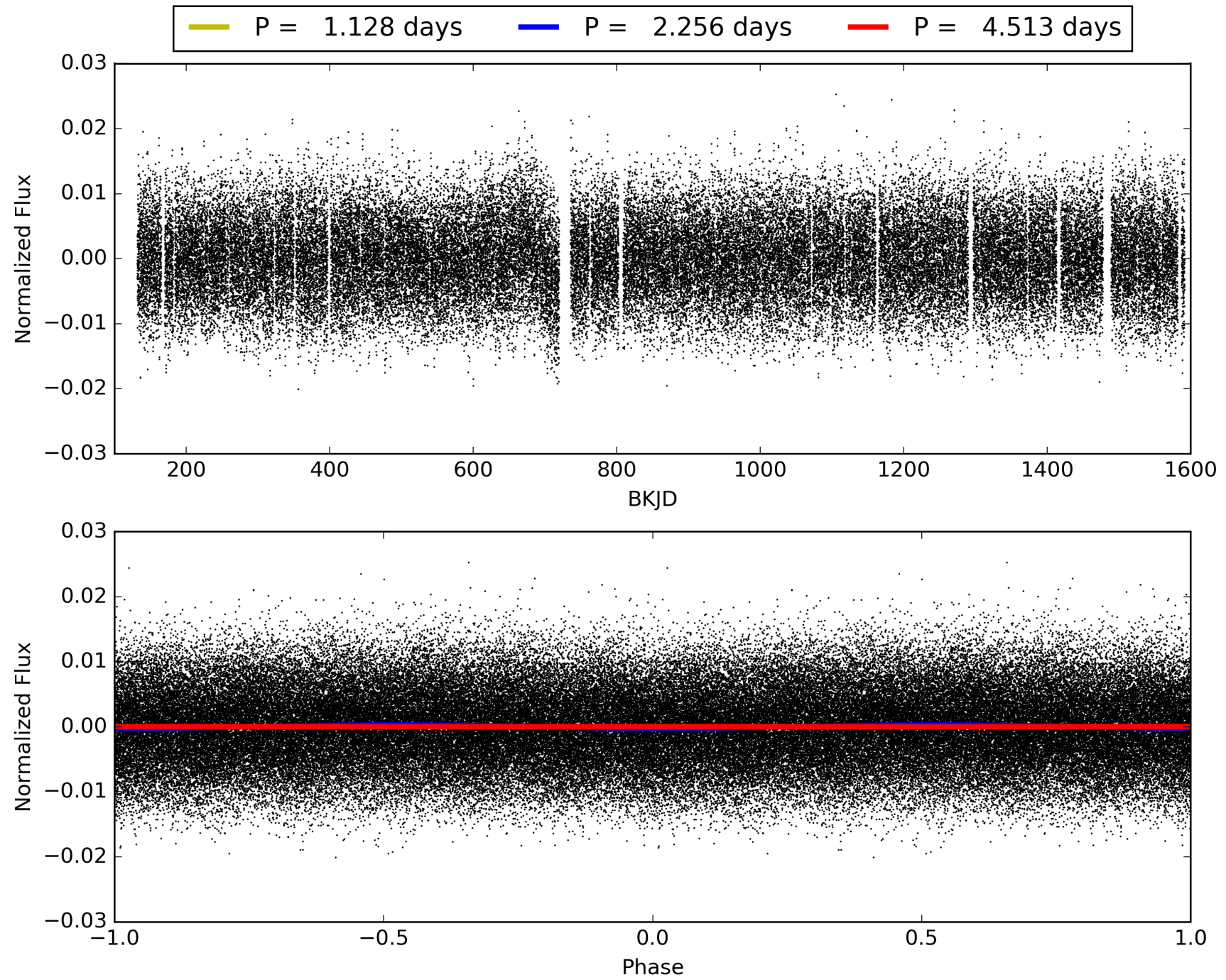
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:10:21 Z

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

TCE 006130500-01, PDC Light Curves

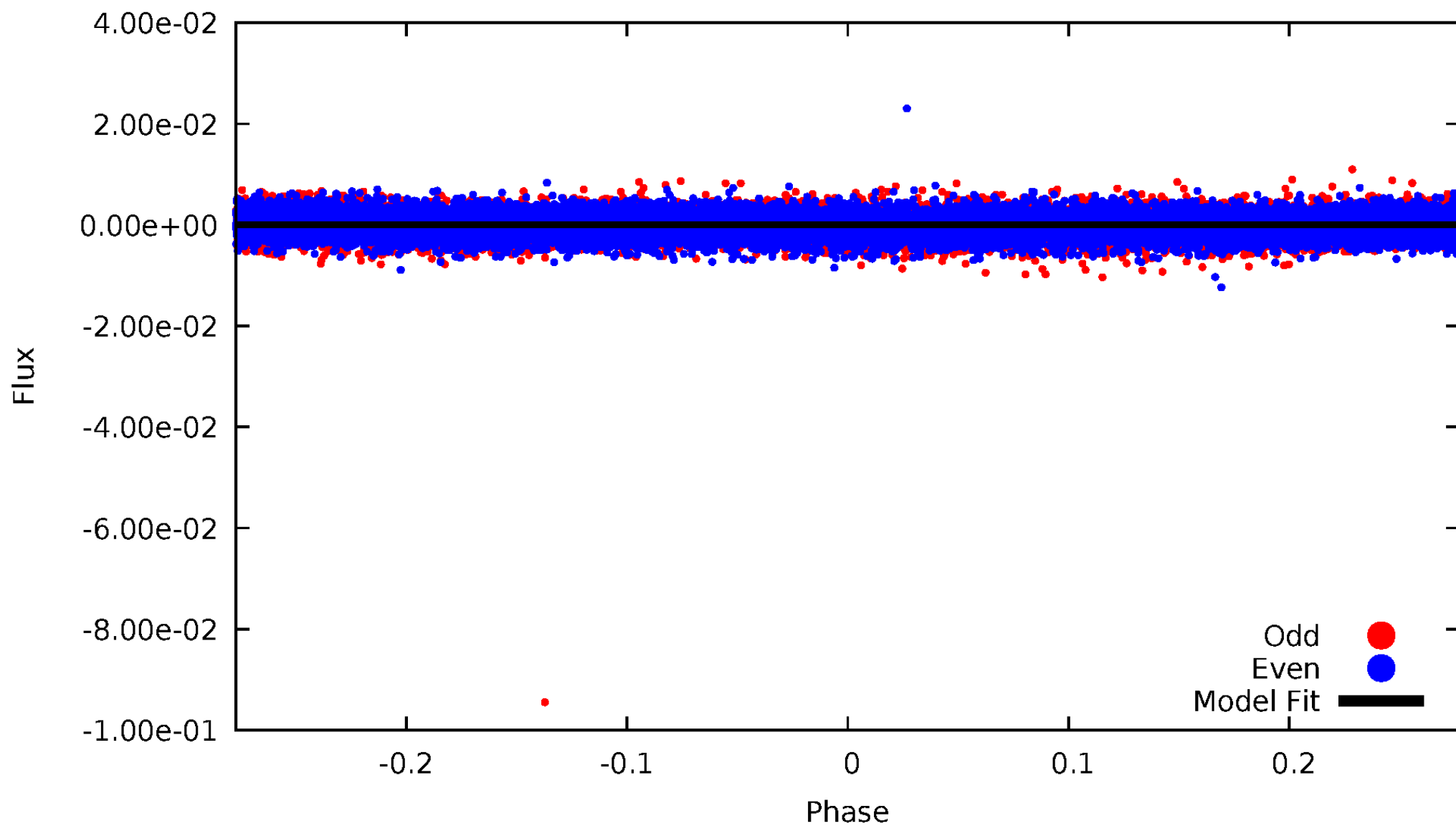


TCE 006130500-01



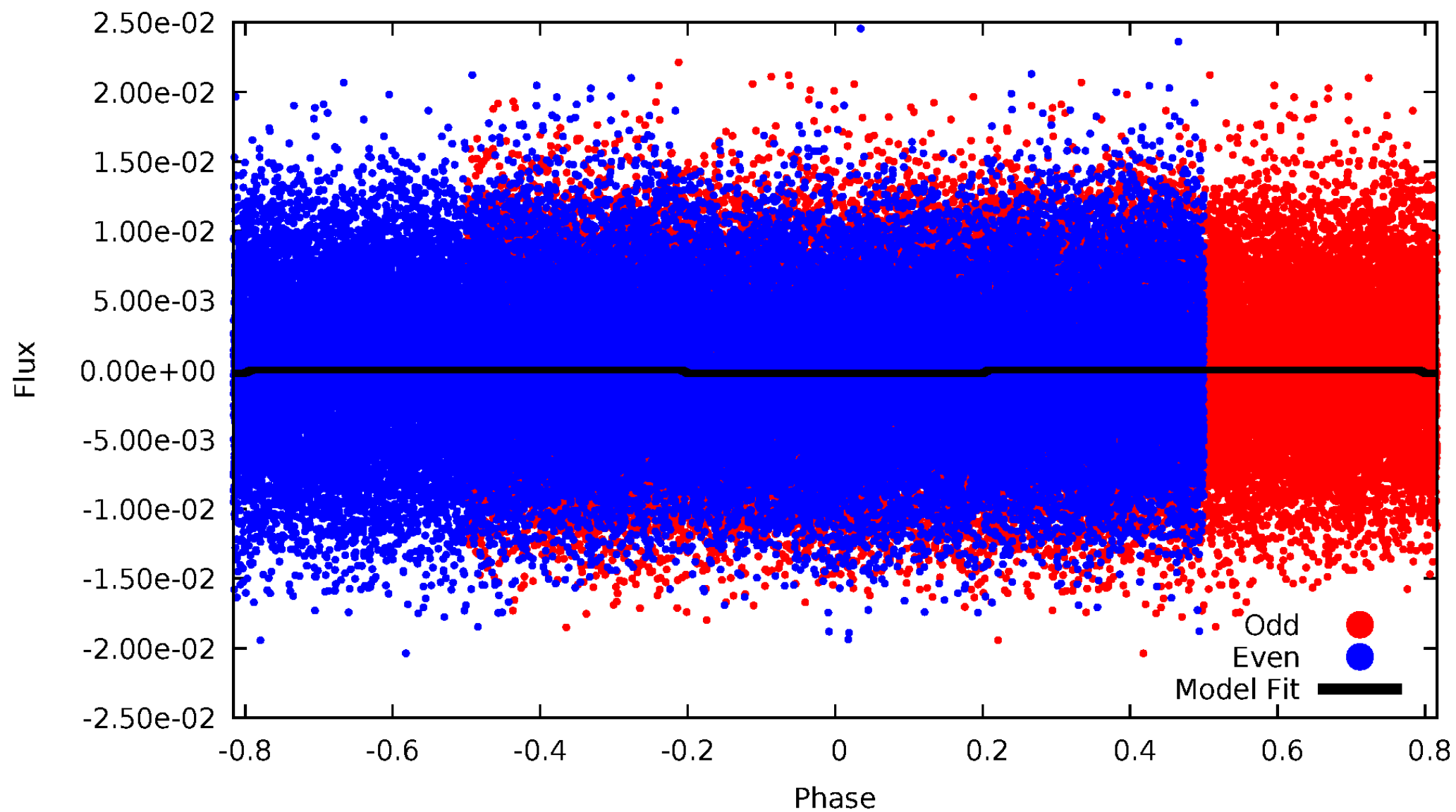
DV Odd/Even

TCE 006130500-01

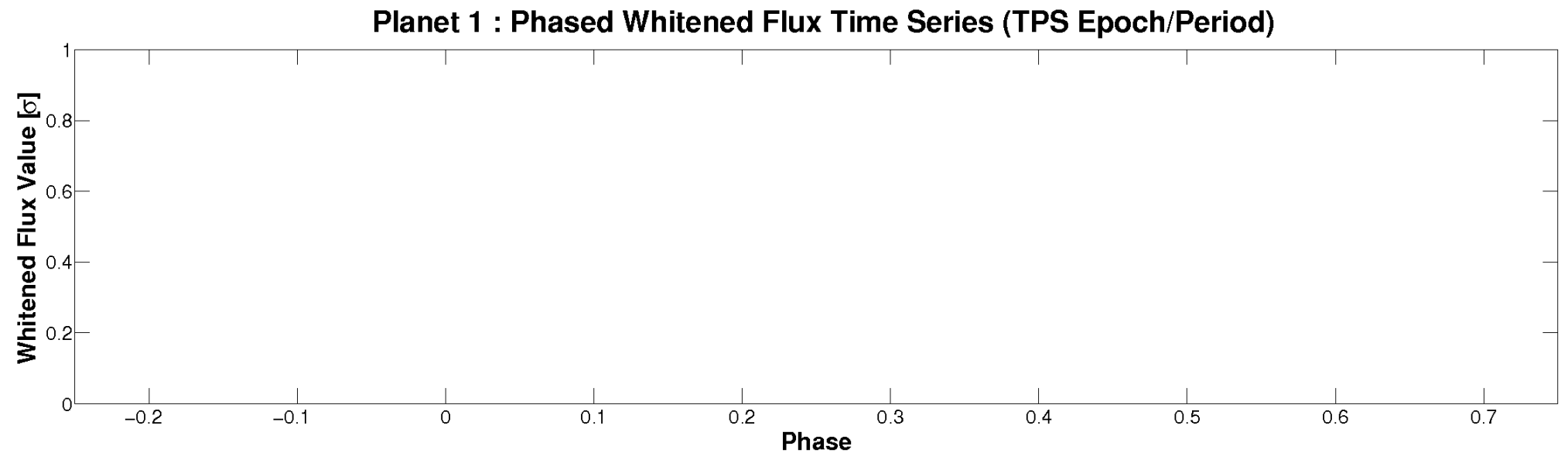
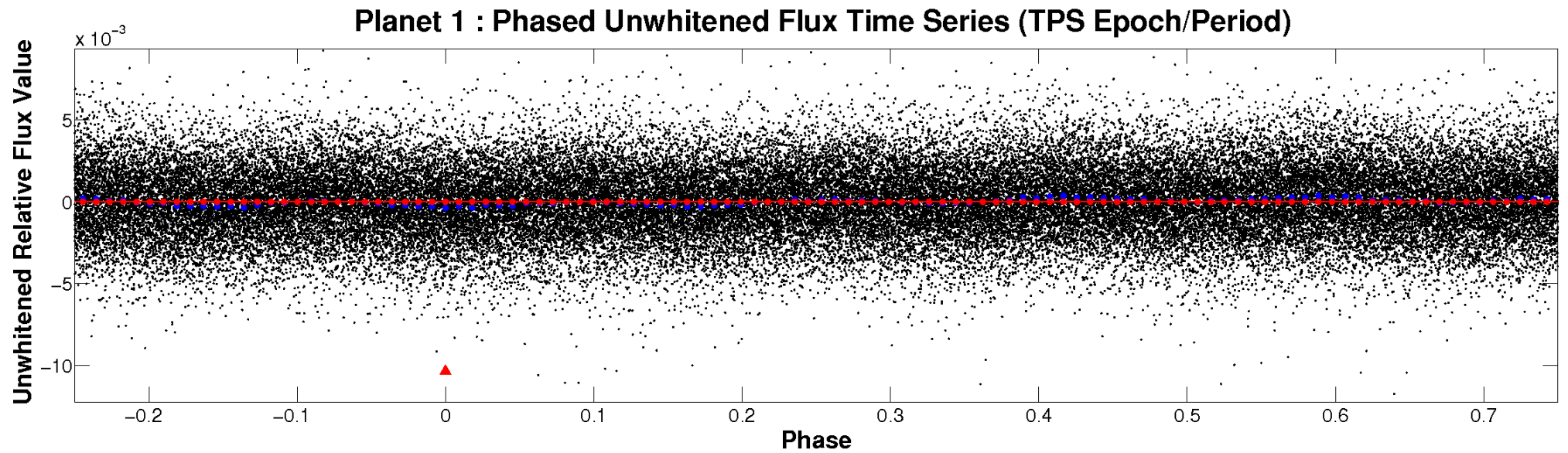


ALT Odd/Even

TCE 006130500-01

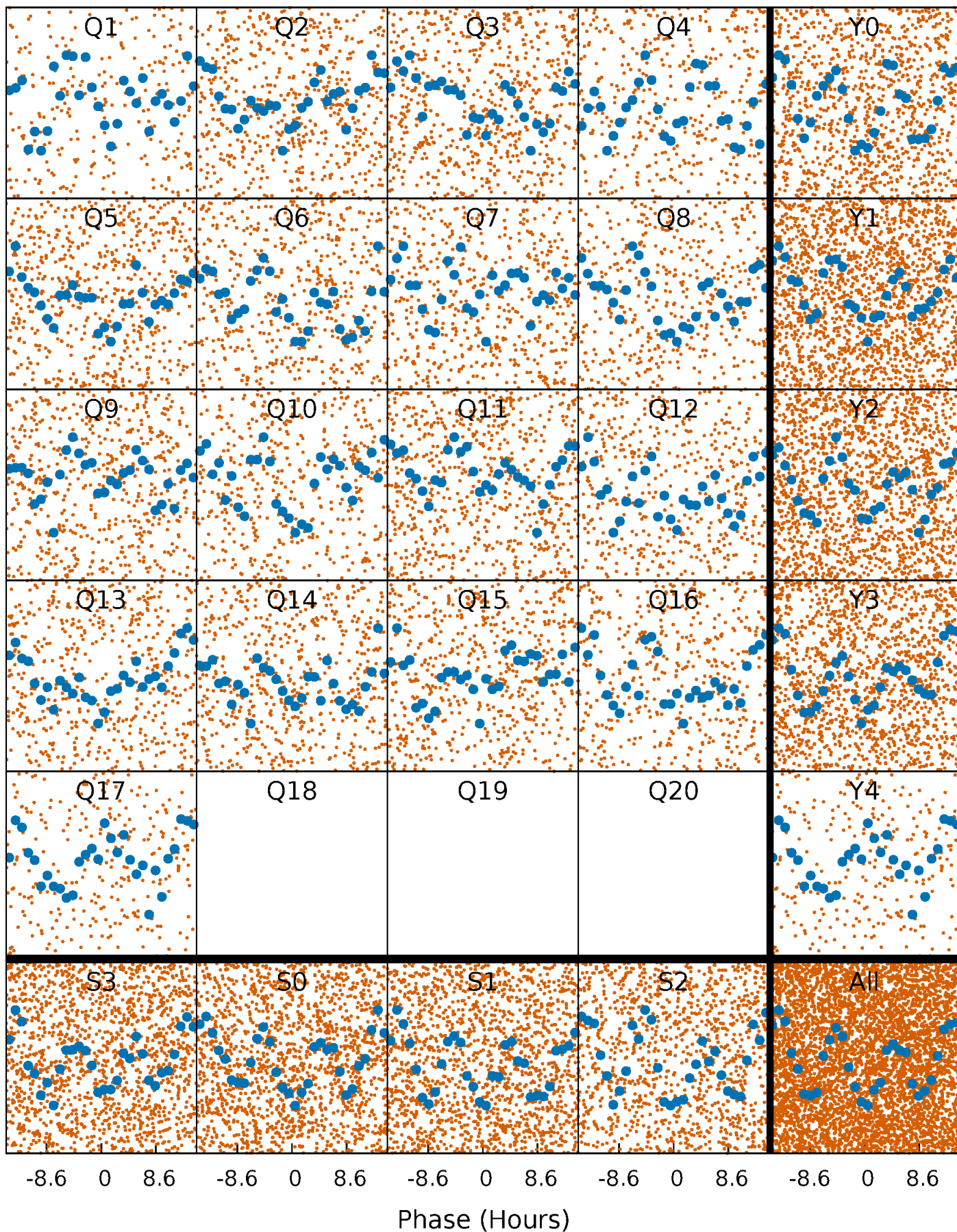


Non-Whitened Vs. Whitened Light Curve



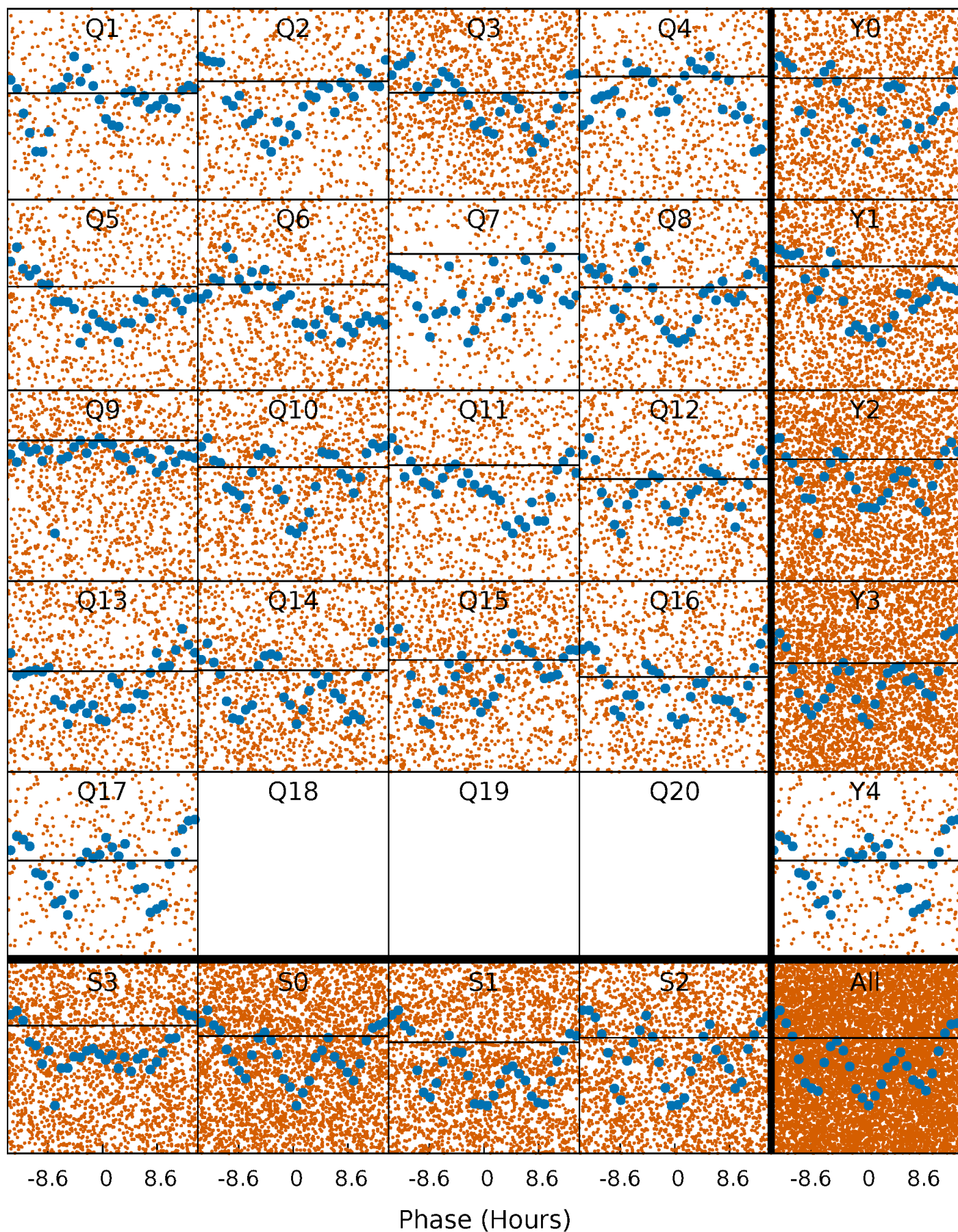
PDC Quarter-Phased Transit Curves

TCE 006130500-01 P= 2.256289 Days $T_0=131.510994$ (BKJD)



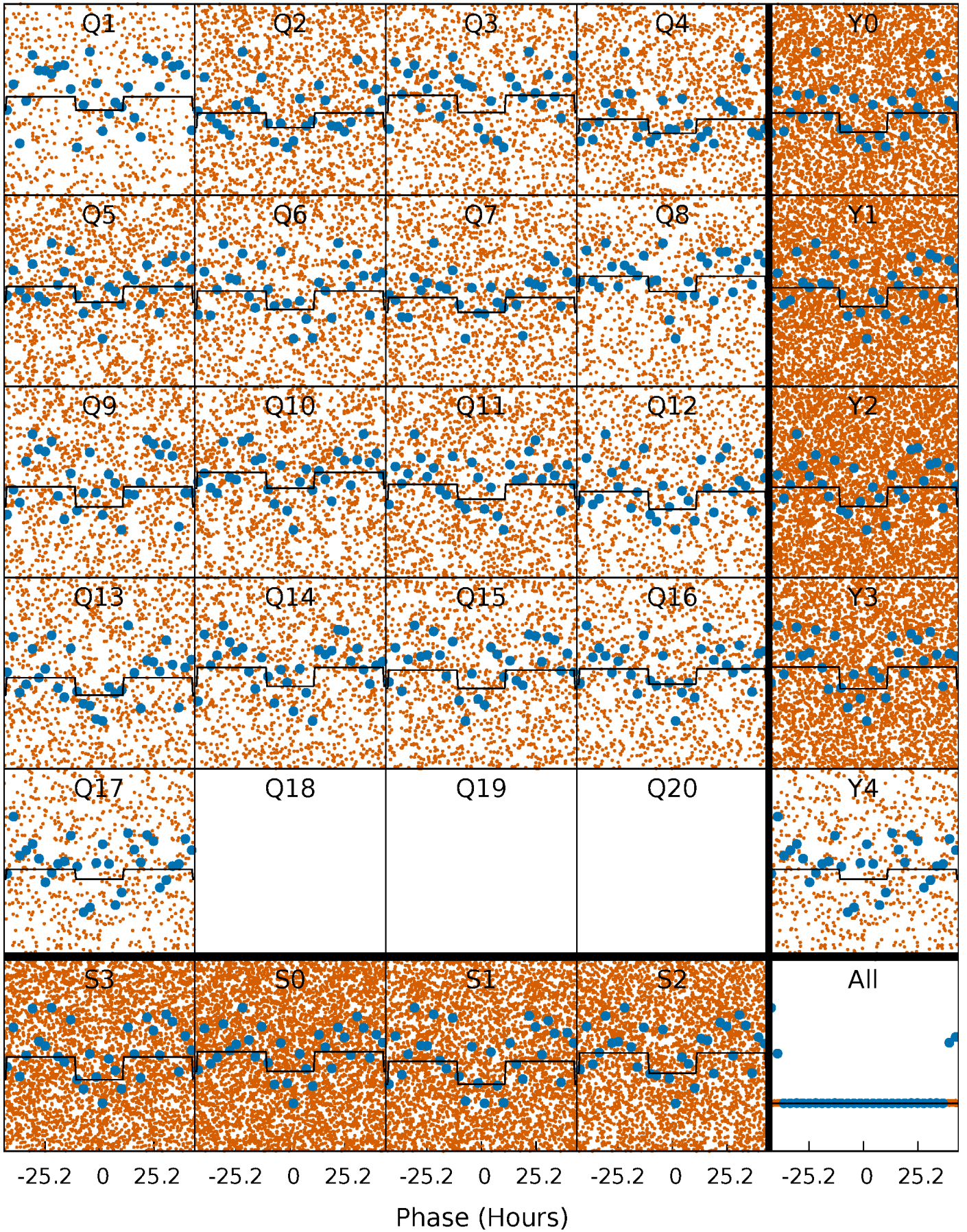
DV Quarter-Phased Transit Curves

TCE 006130500-01 P= 2.256289 Days $T_0=131.510994$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

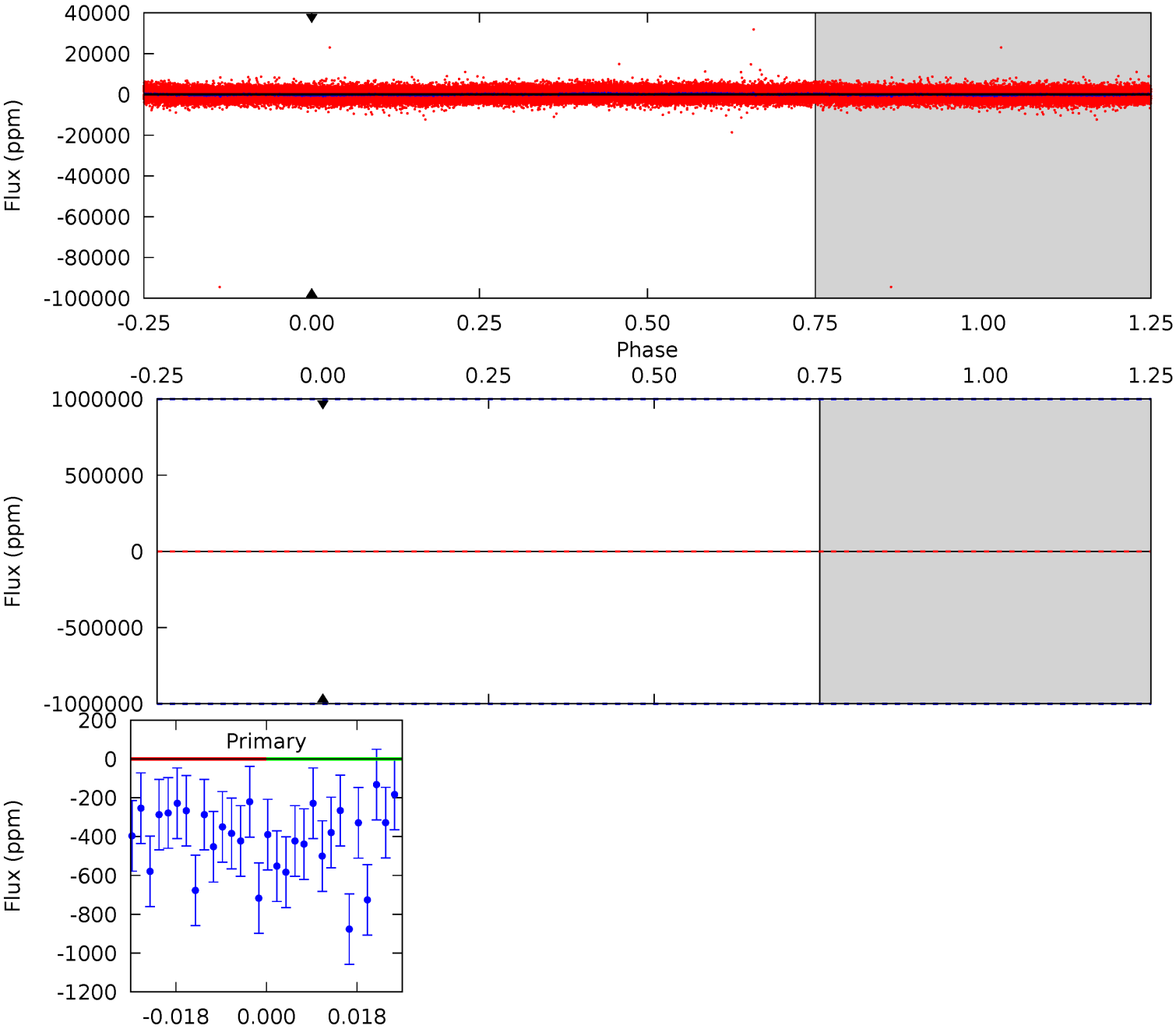
TCE 006130500-01 P= 2.256289 Days $T_0=133.749984$ (BKJD)



DV Model-Shift Uniqueness Test

006130500-01, P = 2.256289 Days, E = 131.510994 Days

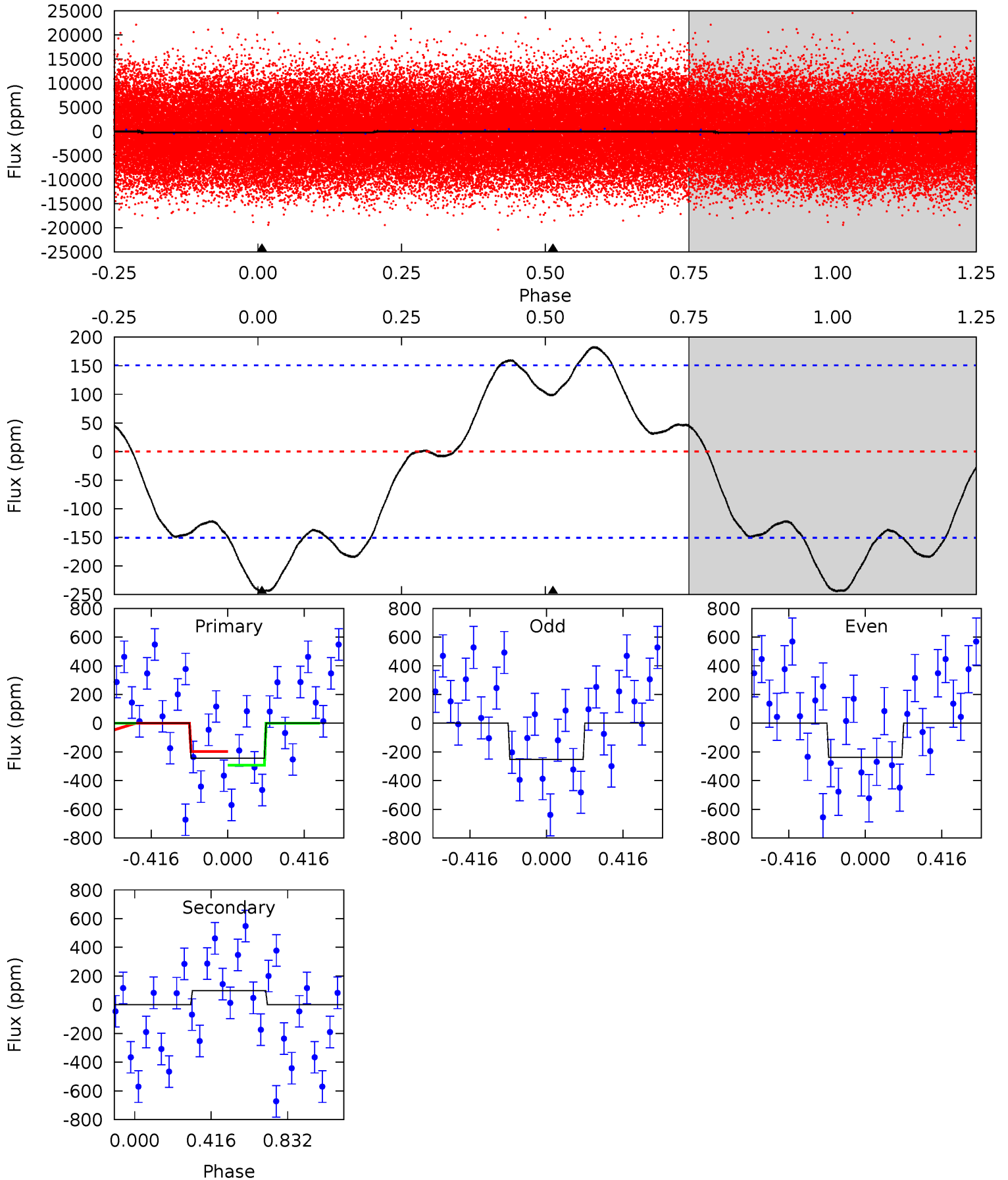
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006130500-01, P = 2.256289 Days, E = 131.493695 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.89	-2.78	0	0	4.26	0.81	0.85	6.89	6.89	-2.78	-2.78	0.19	1.11	0.43	1.33



Stellar Parameters For KIC 006130500

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7801^{+214}_{-322}	$4.111^{+0.131}_{-0.160}$	$-0.020^{+0.200}_{-0.400}$	$1.904^{+0.476}_{-0.389}$	$1.709^{+0.194}_{-0.267}$	$0.349^{+0.233}_{-0.163}$
	+3%/-4%	+3%/-4%	+1000%/-2000%	+25%/-20%	+11%/-16%	+67%/-47%
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 006130500-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$15.02^{+15.50}_{-10.47}$	3311^{+243}_{-196}	-4437^{+57445}_{-38873}	$-2.506^{+830.256}_{-619.064}$
Alt.	99 ± 35	$14.61^{+16.25}_{-9.83}$	3316^{+215}_{-211}	-3691^{+337}_{-1435}	$-0.385^{+0.304}_{-3.527}$

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

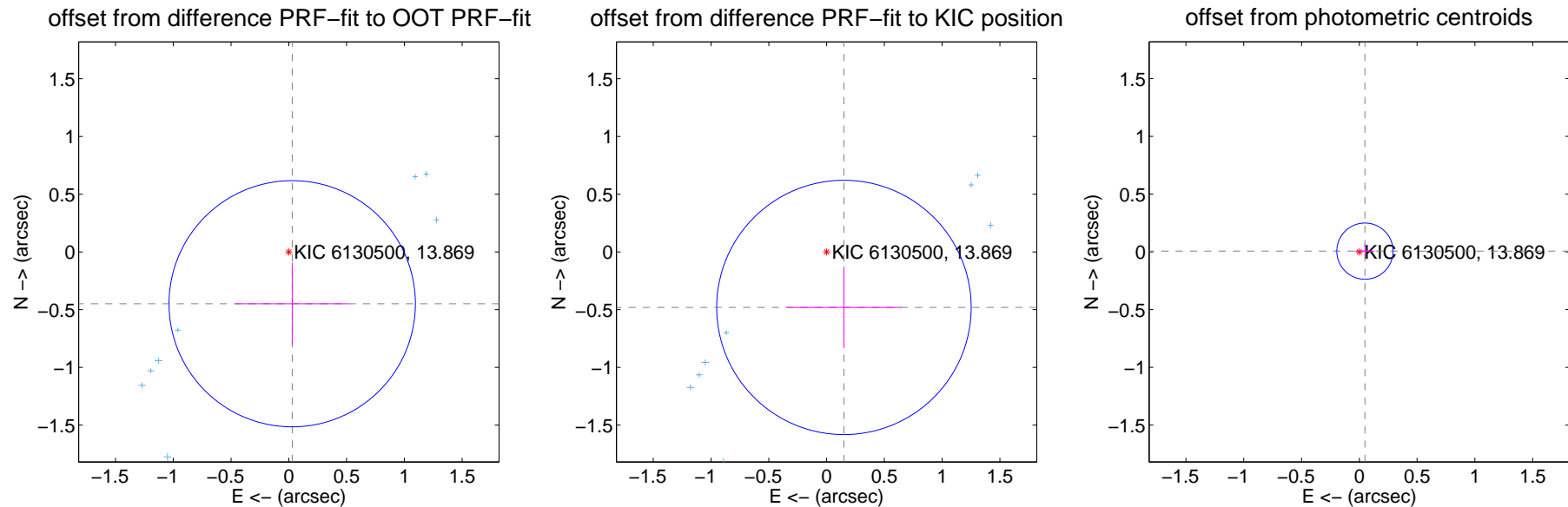
DV Centroid Data

Supplemental centroid analysis for 006130500-01. Kepler magnitude: 13.87. Transit SNR -1.00

There are 8 quarters with good PRF difference image offsets

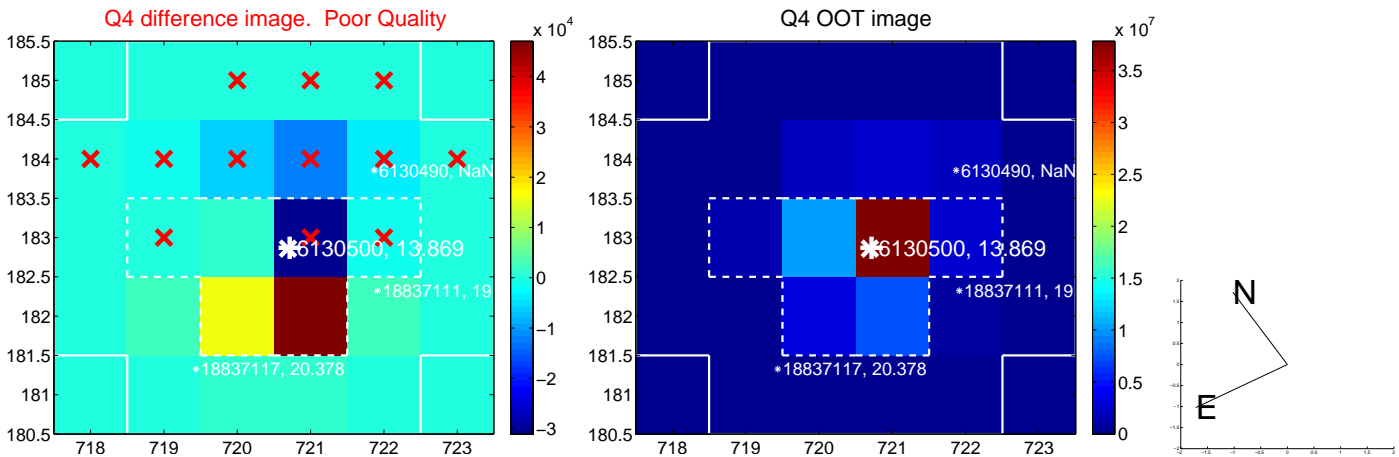
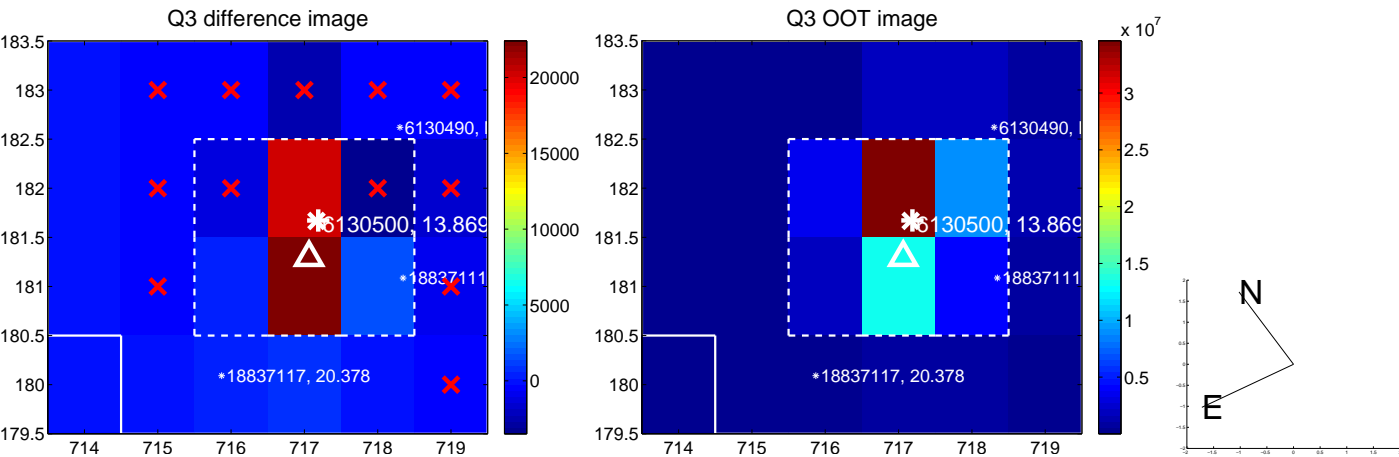
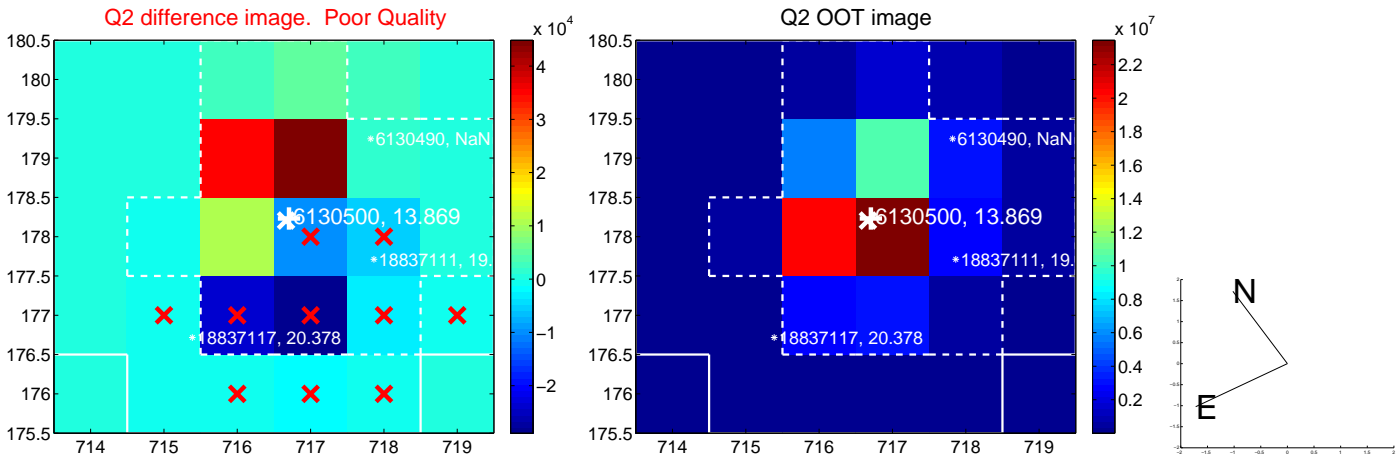
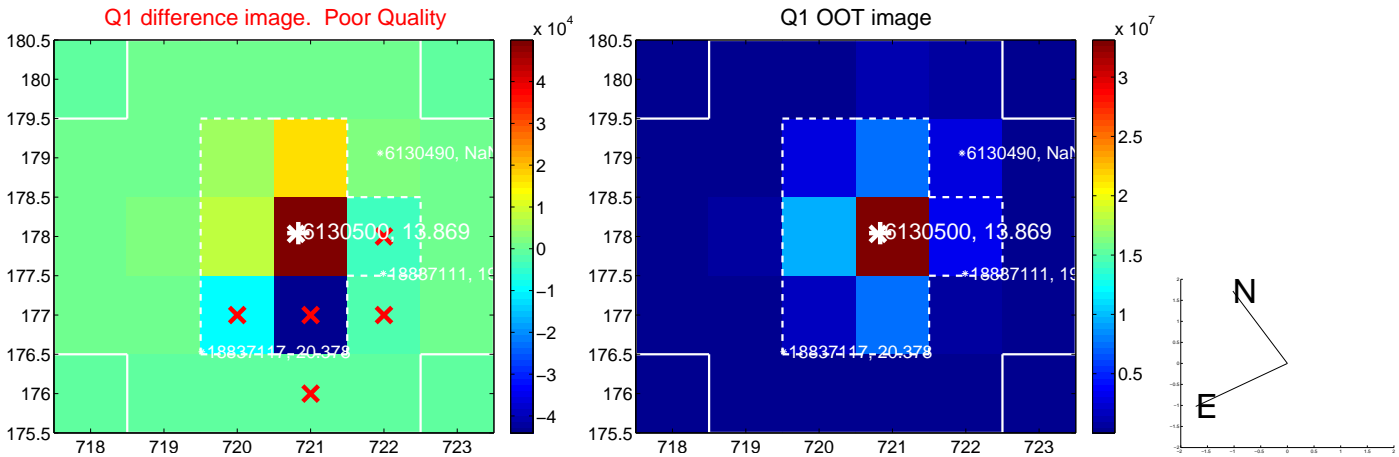
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.450 ± 0.355	1.27	-0.029 ± 0.492	-0.449 ± 0.355
PRF-fit source offset from KIC position	0.504 ± 0.367	1.37	-0.150 ± 0.499	-0.481 ± 0.351
photometric centroid source offset	0.05 ± 0.08	0.60	-0.05 ± 0.08	0.01 ± 0.06

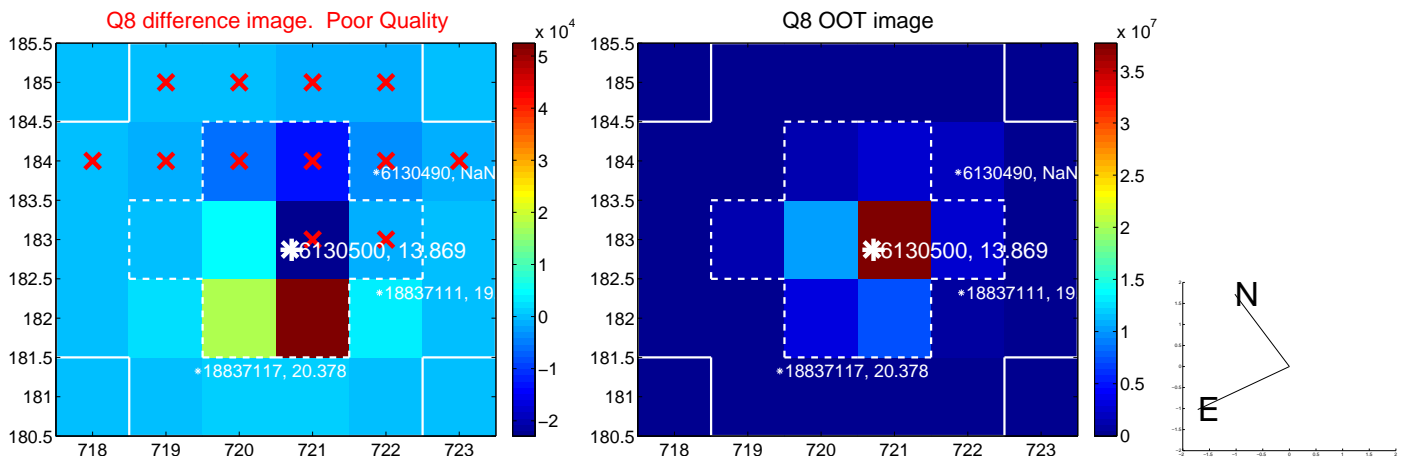
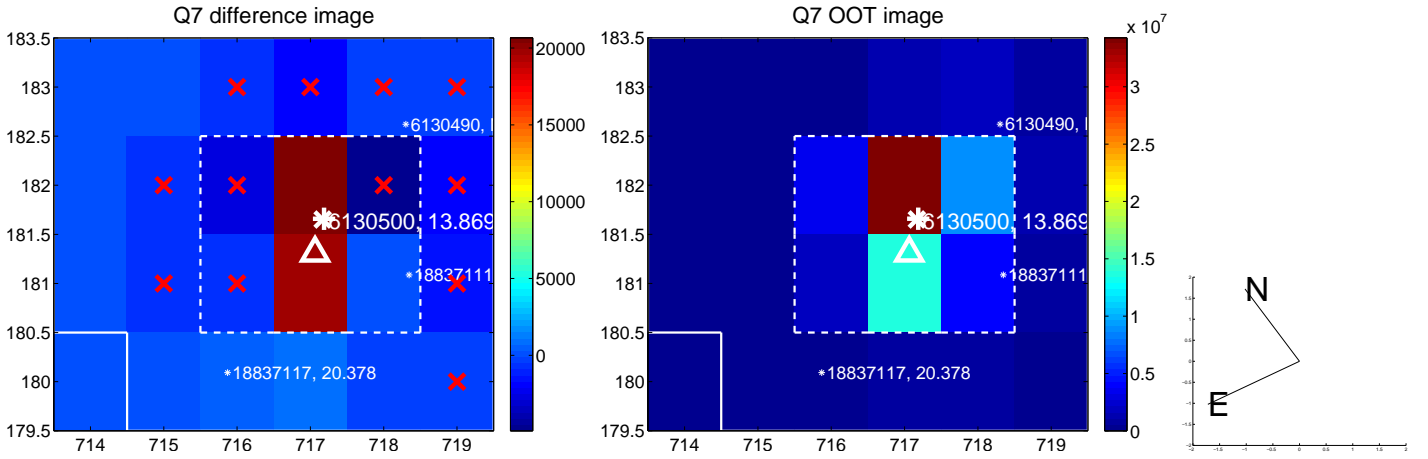
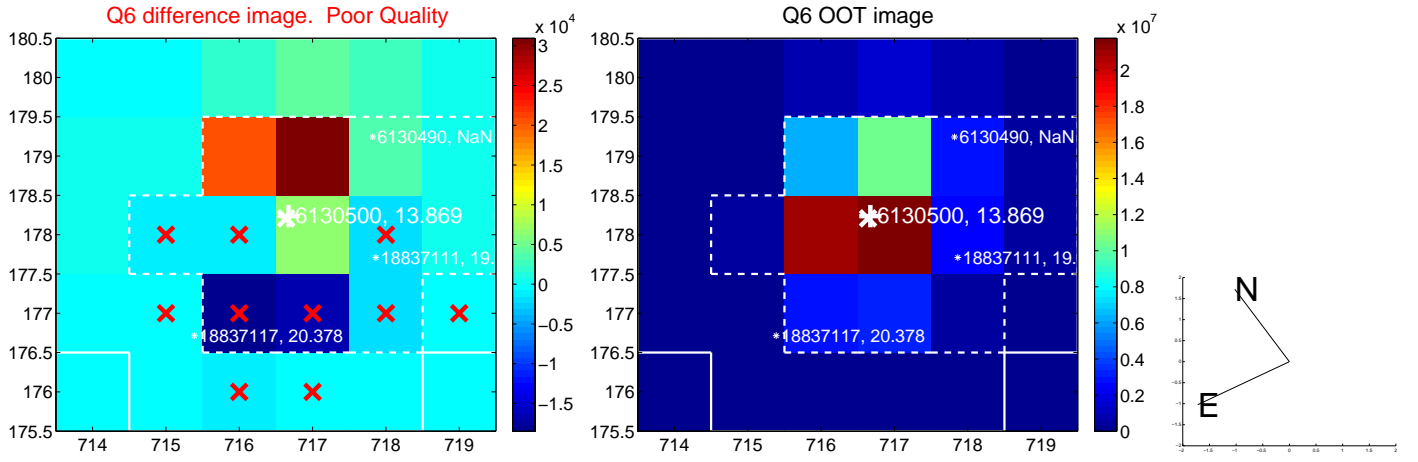
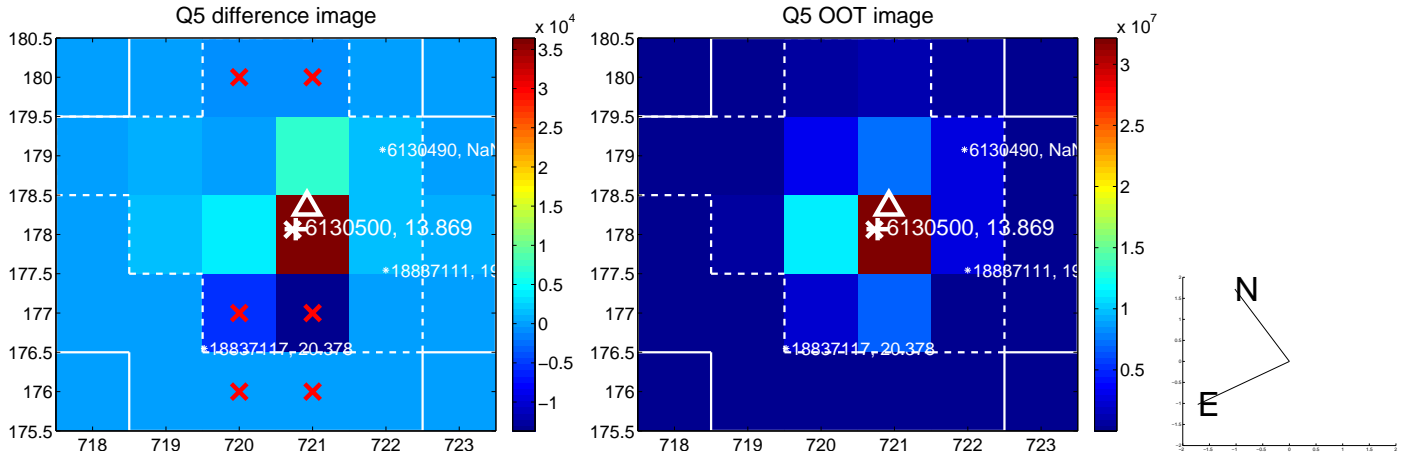


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

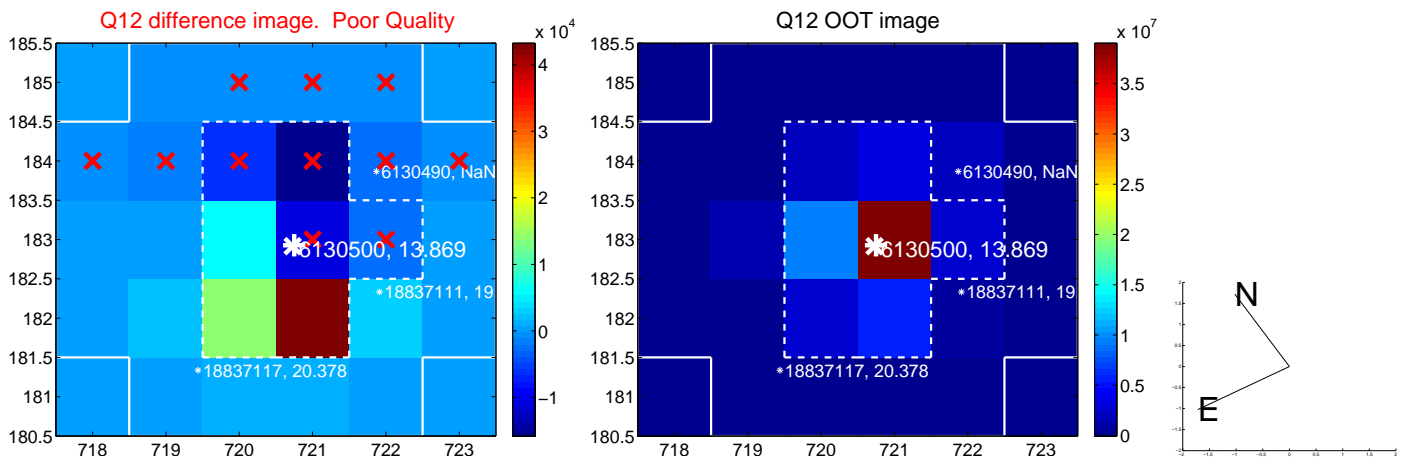
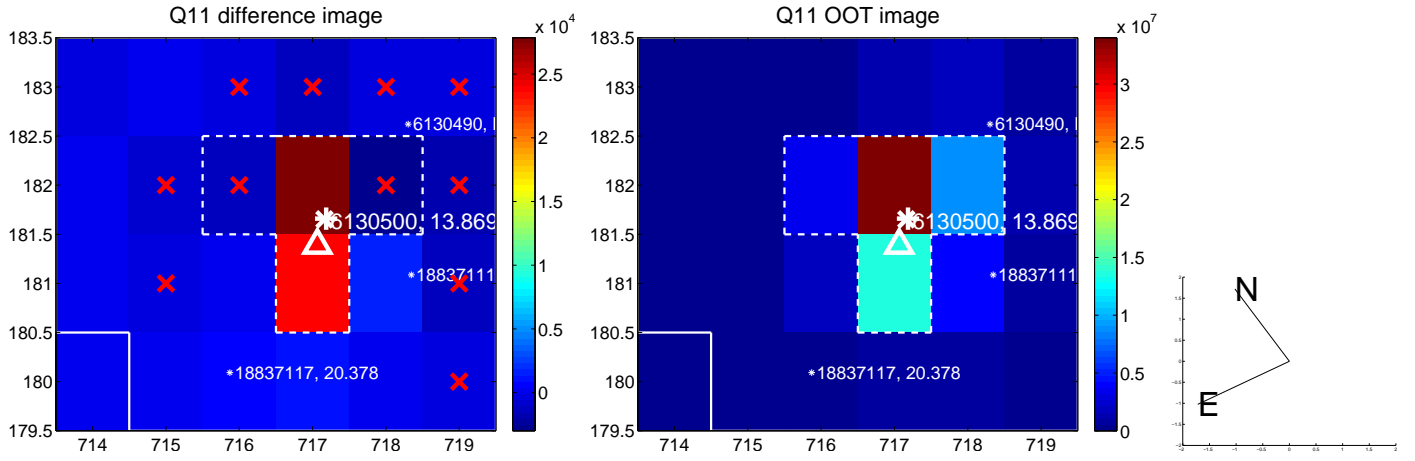
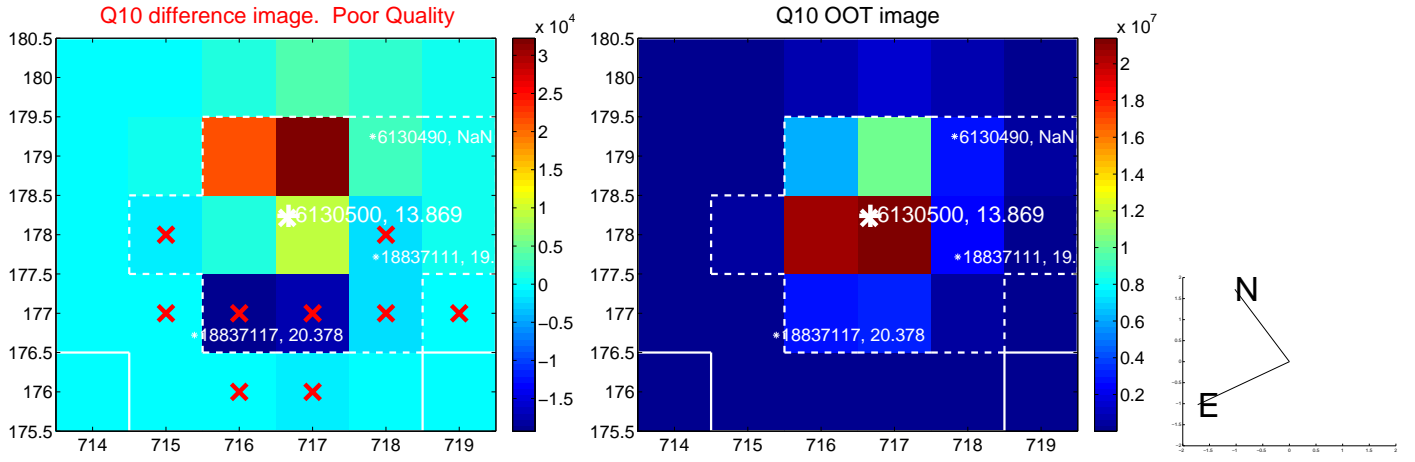
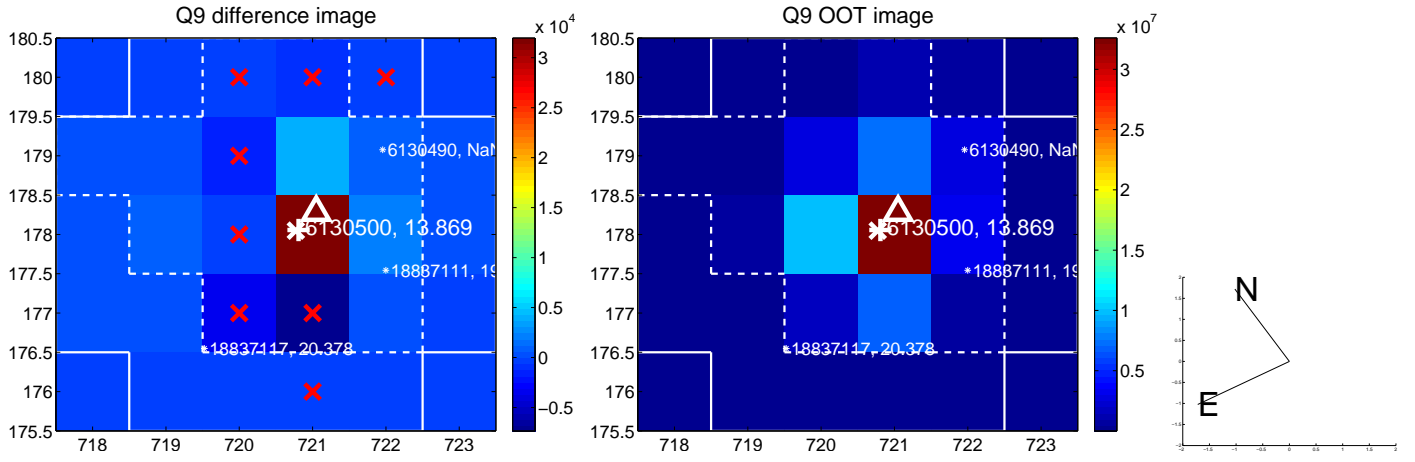
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



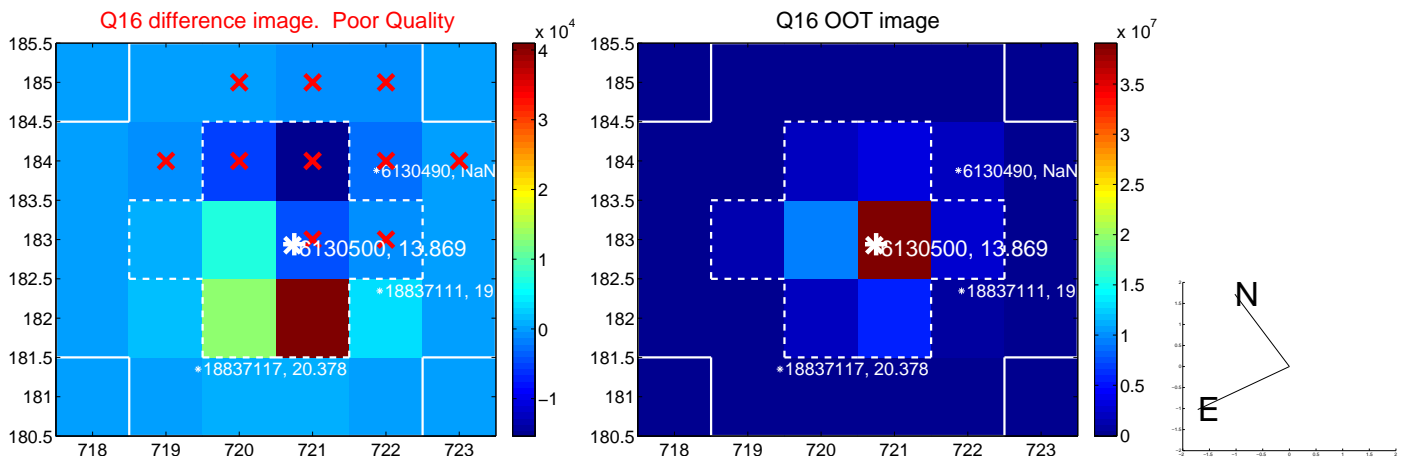
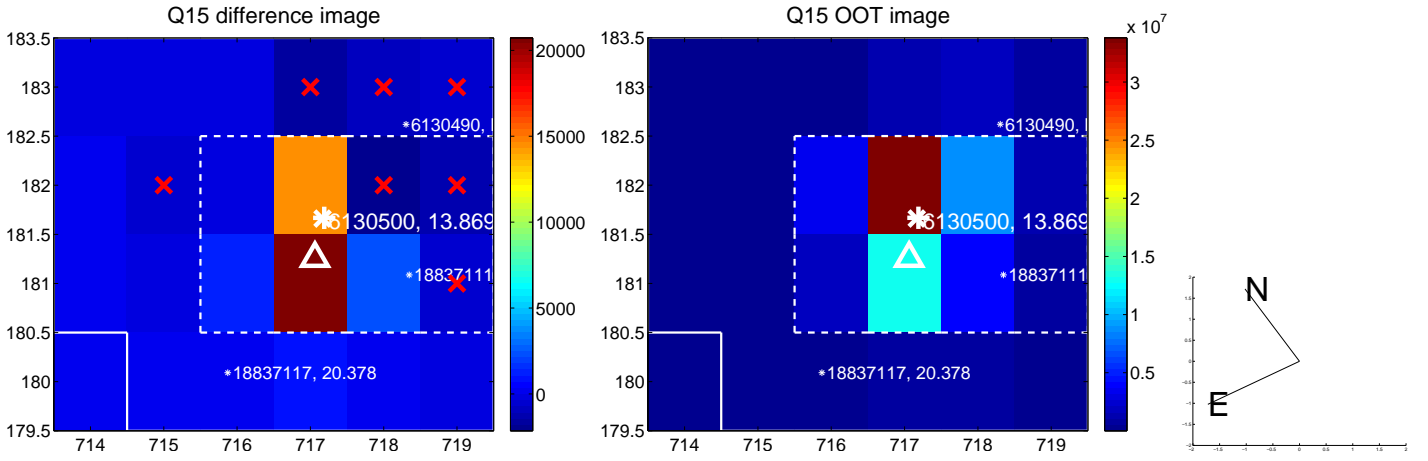
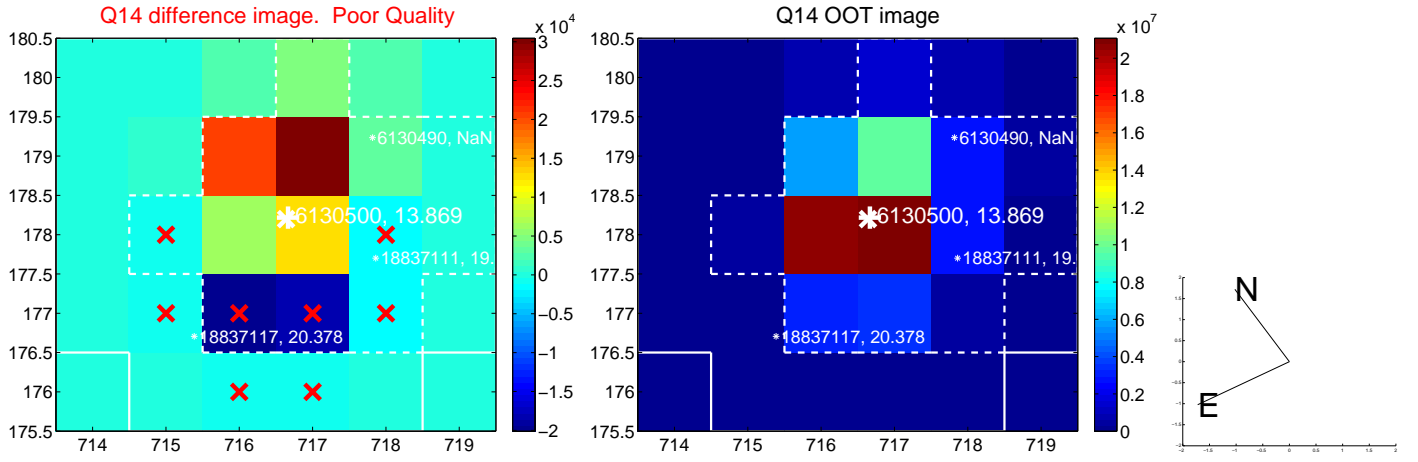
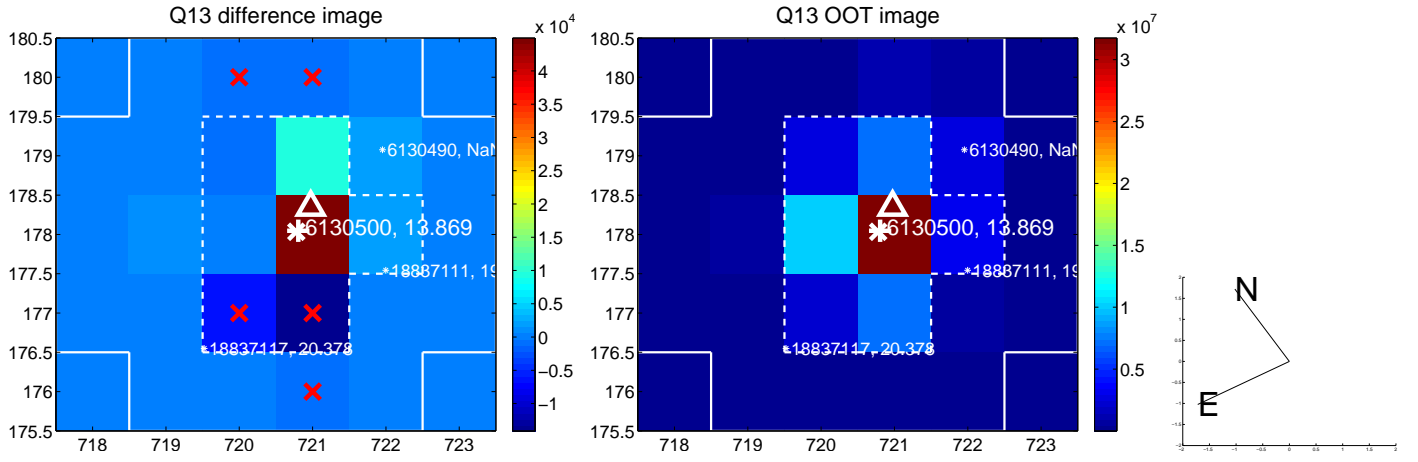
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



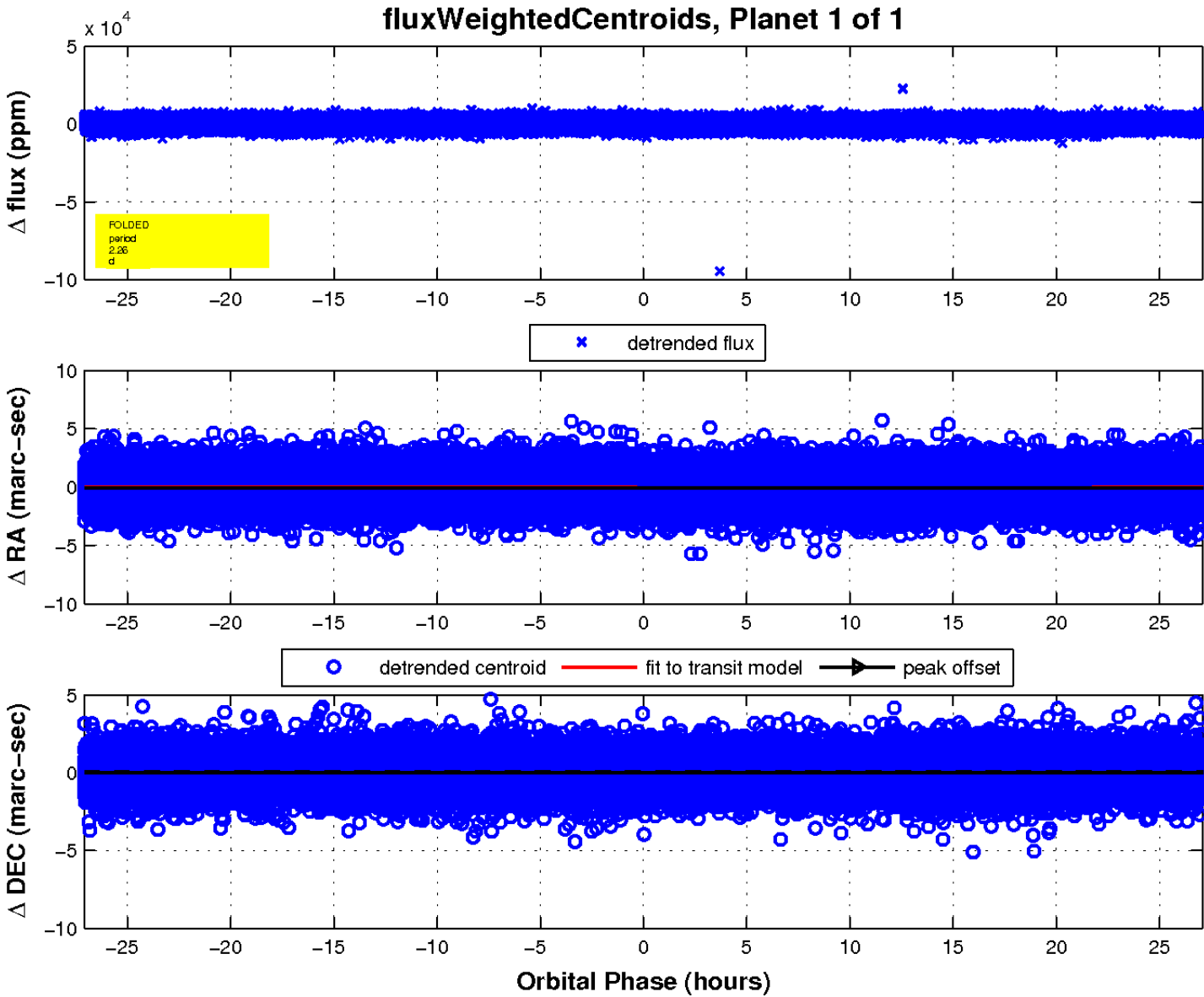
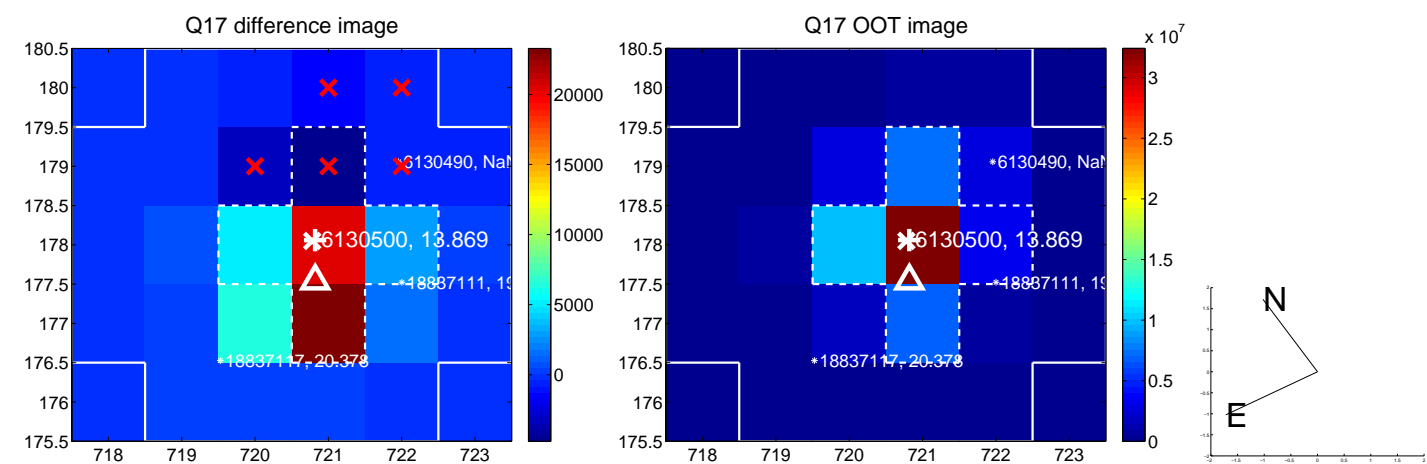
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

