

KIC 003869322

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})
003869322-01	OBS	No	1.556384	131.725896	11.3	14.554	8.2	8.8	1.56	7274	0.53	6489.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003869322-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_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.

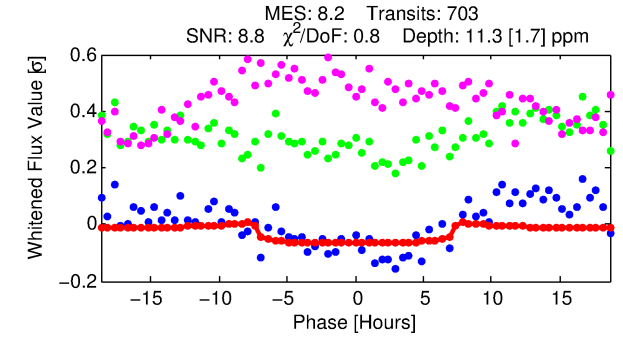
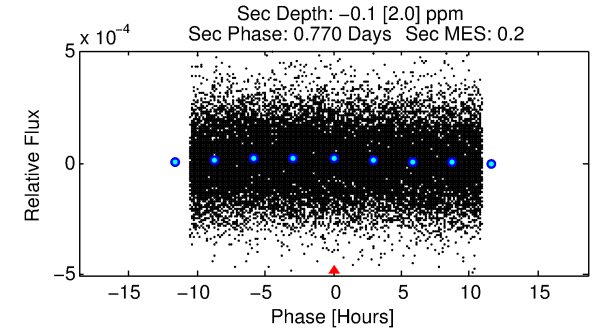
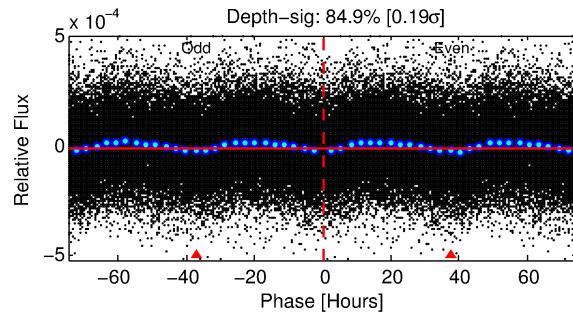
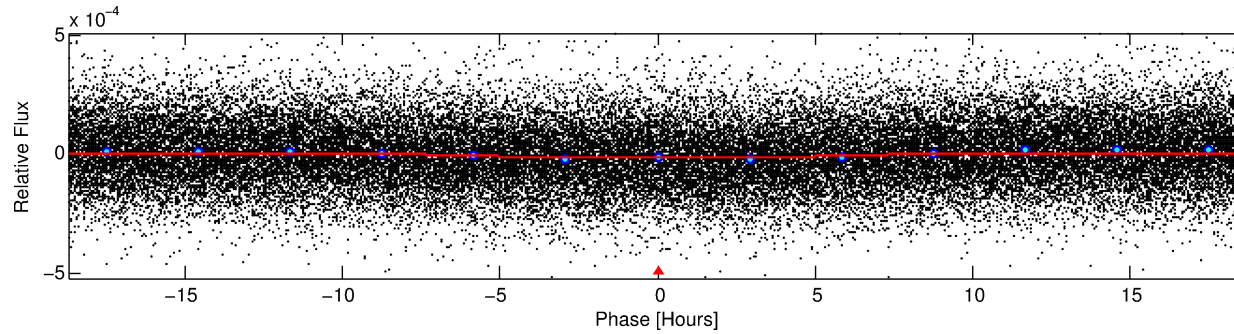
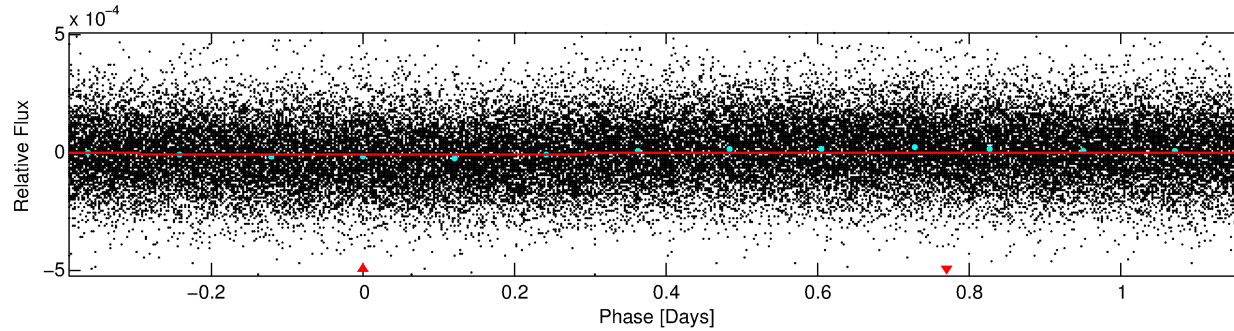
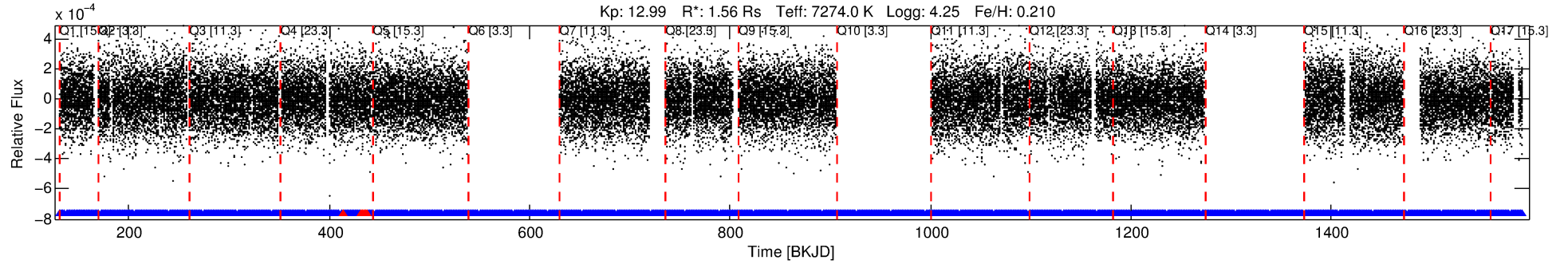
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003869322-01

No Significant Match Found

DV One-Page Summary

KIC: 3869322 Candidate: 1 of 1 Period: 1.556 d



DV Fit Results:

Period = 1.55638 [0.00004] d
Epoch = 131.7259 [0.0123] BKJD
Rp/R* = 0.0031 [0.0037]
a/R* = 1.07 [0.92]
b = 0.01 [540.52]
Seff = 6489.48 [3071.39]
Teq = 2289 [271] K
Rp = 0.53 [0.67] Re
a = 0.0306 [0.0094] AU
Ag = N/A
Teffp = N/A

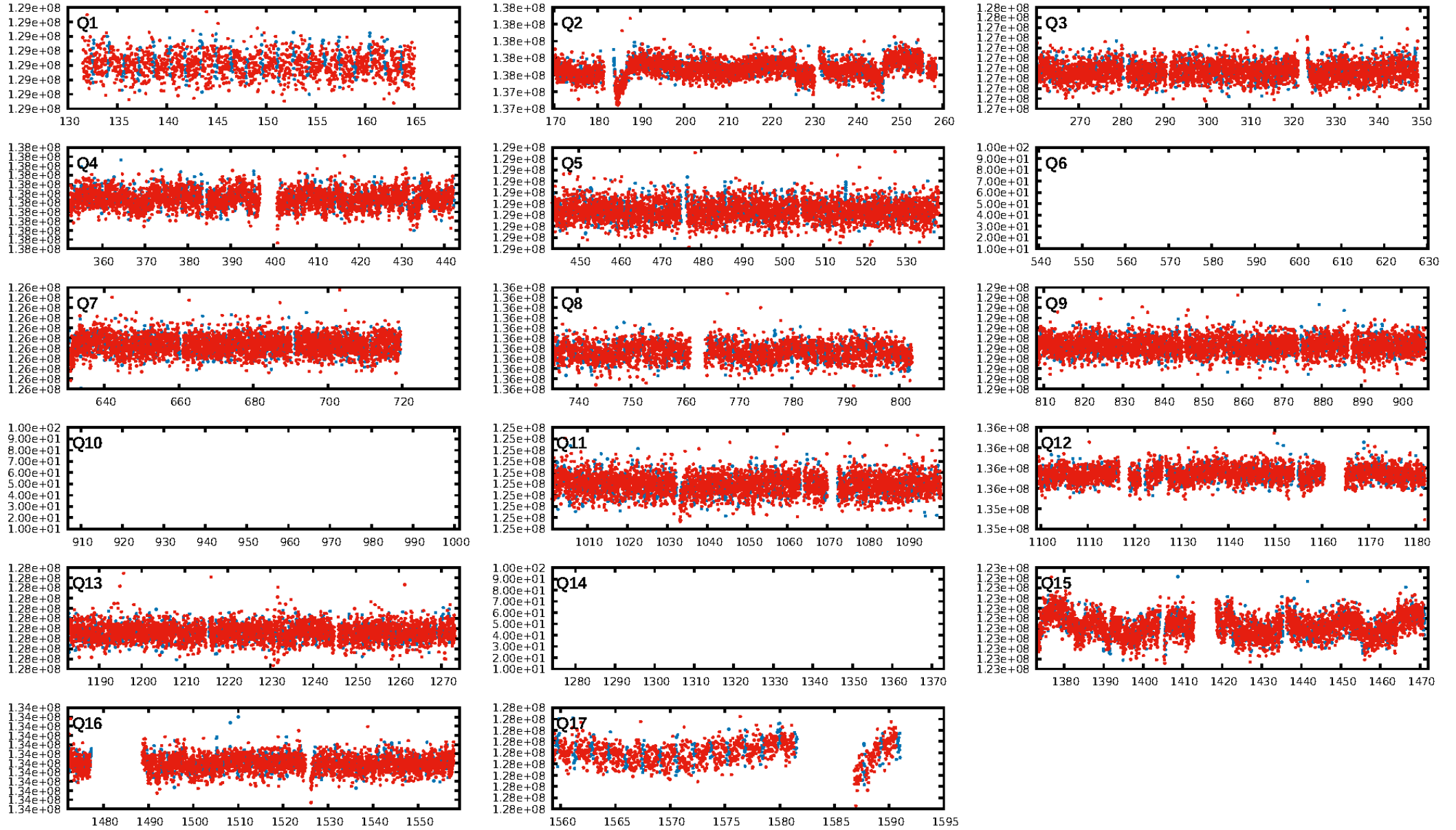
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [658/664]
GhostDiagnostic-chr: -21.49
Centroid-sig: 0.2%
Centroid-so: 3.037 arcsec [2.18σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [14/14]

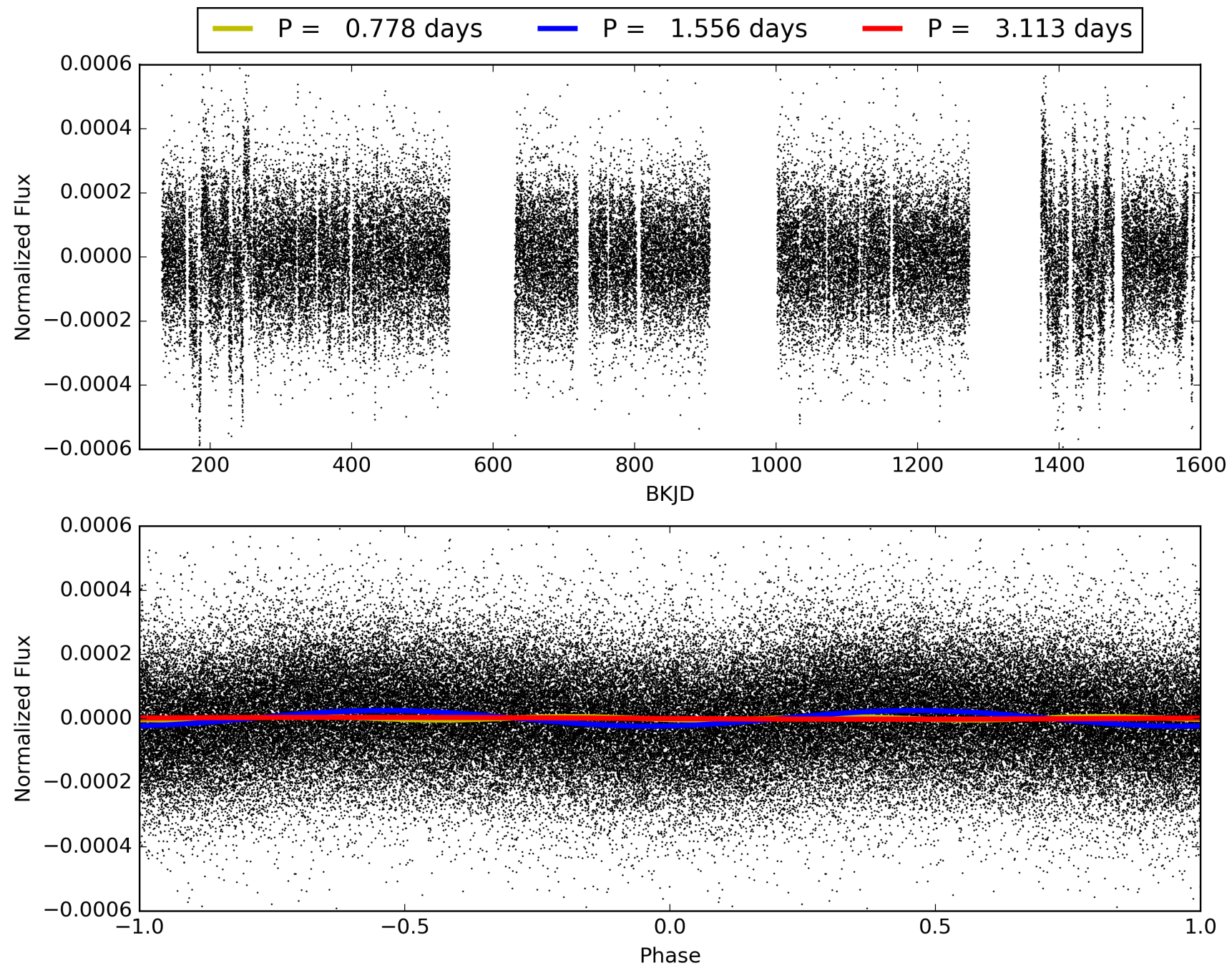
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:51:43 Z

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

TCE 003869322-01, PDC Light Curves

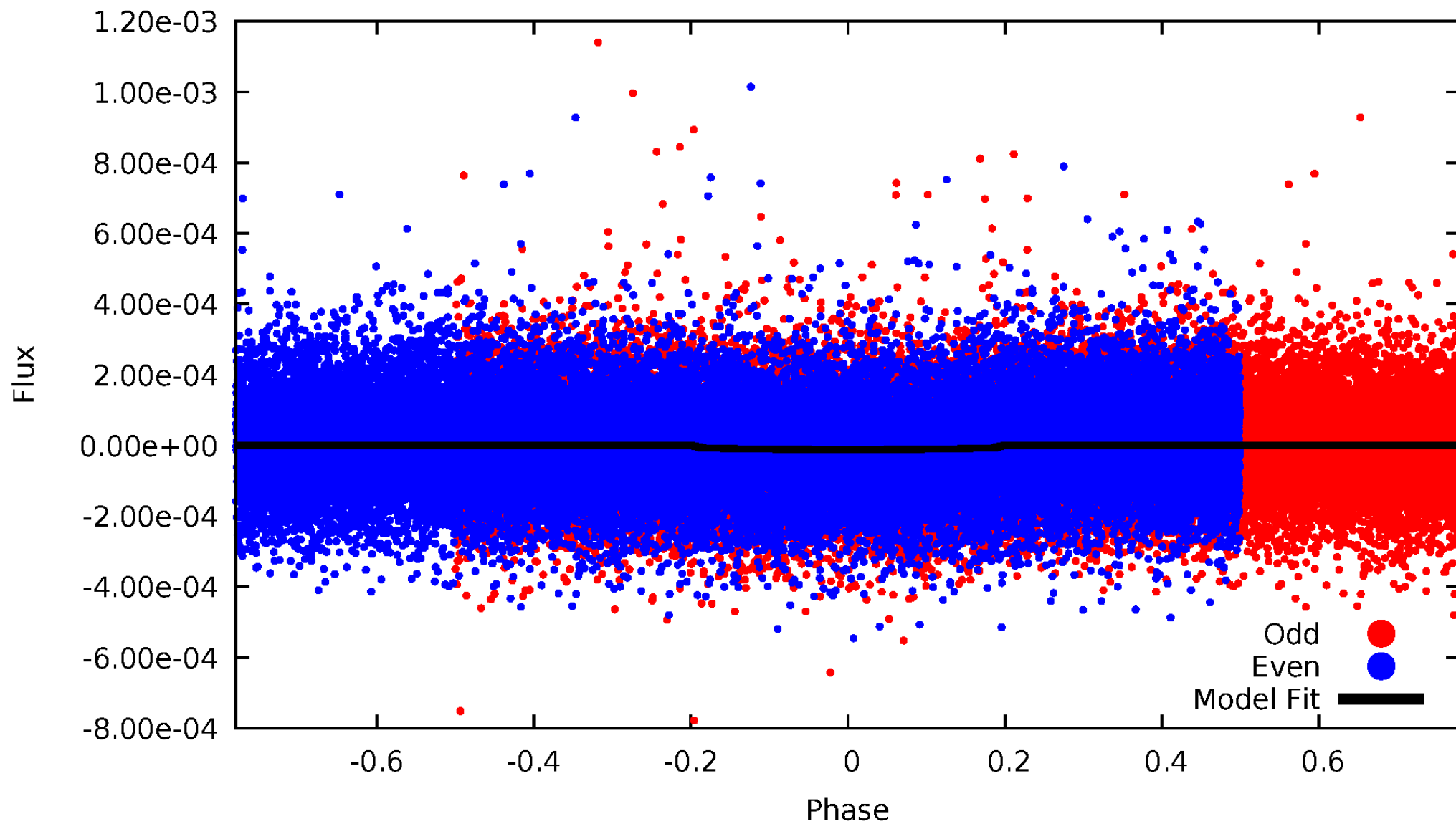


TCE 003869322-01



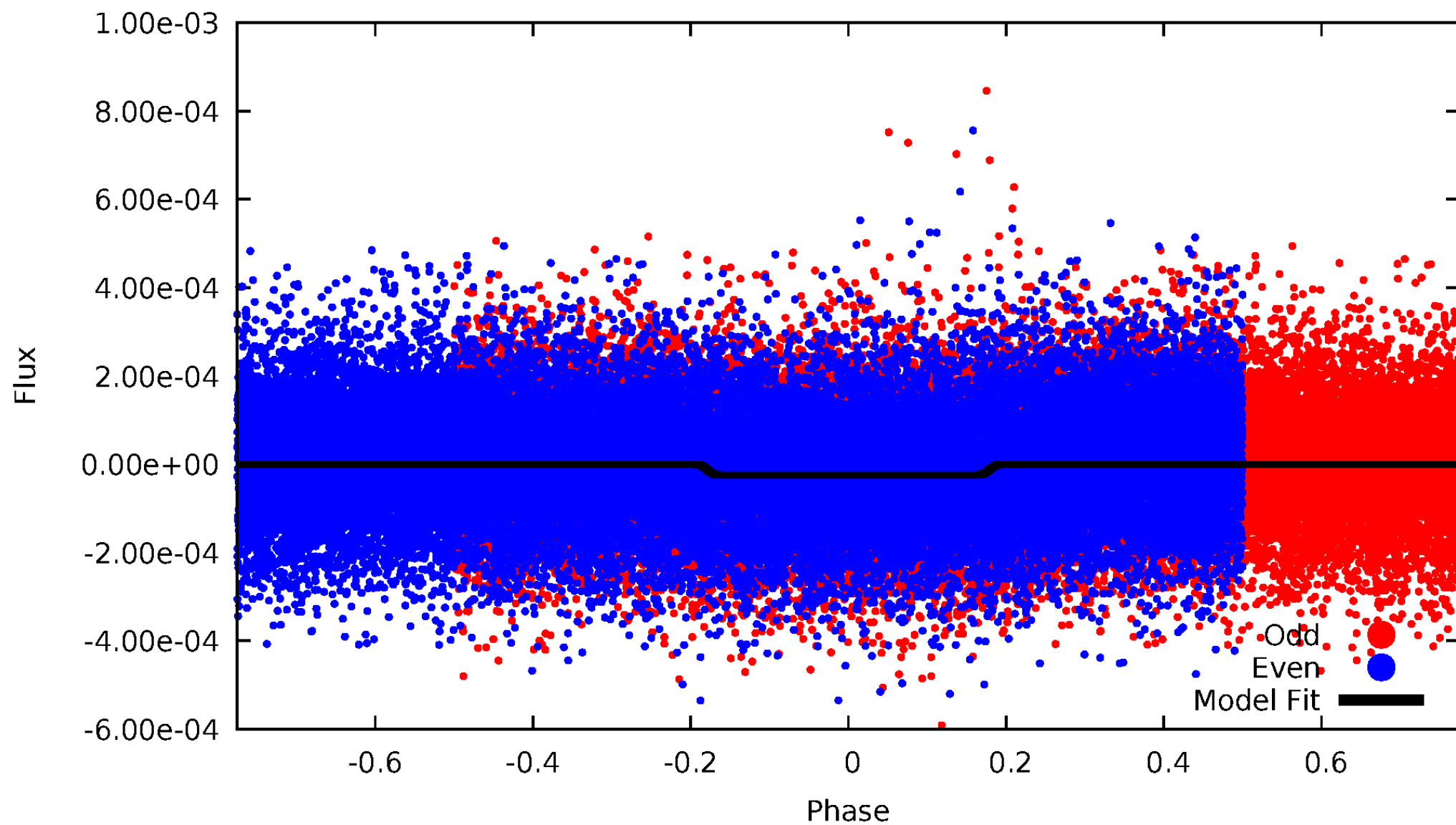
DV Odd/Even

TCE 003869322-01



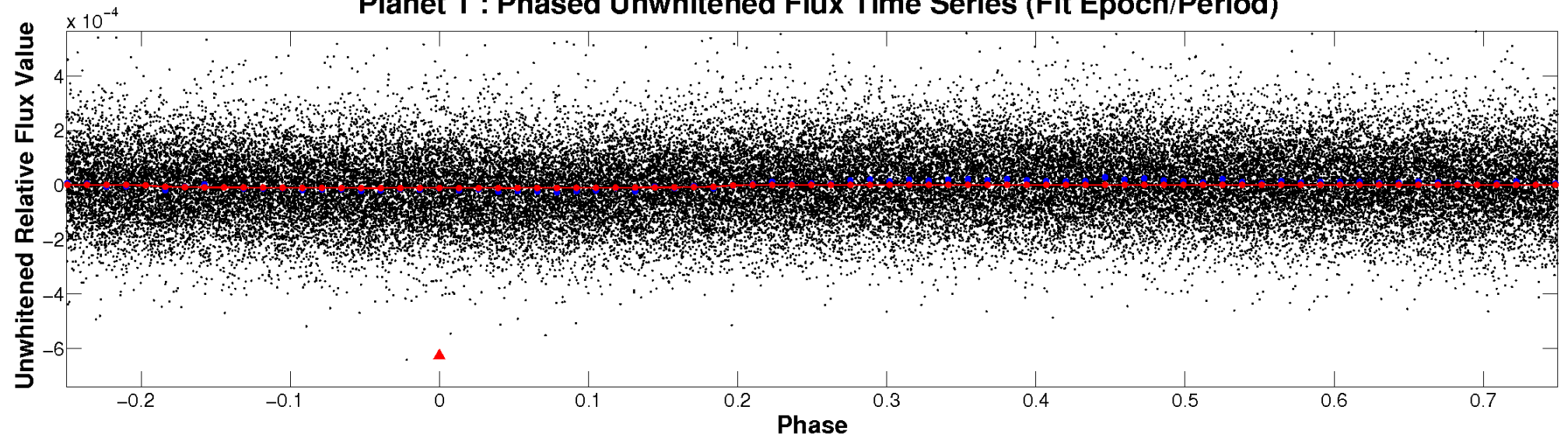
ALT Odd/Even

TCE 003869322-01

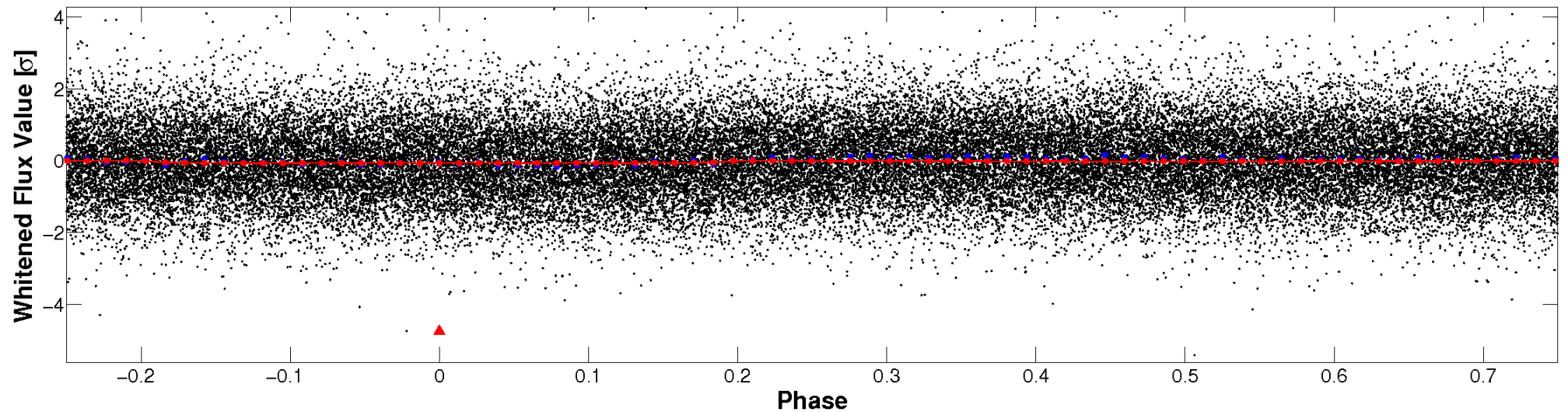


Non-Whitened Vs. Whitened Light Curve

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

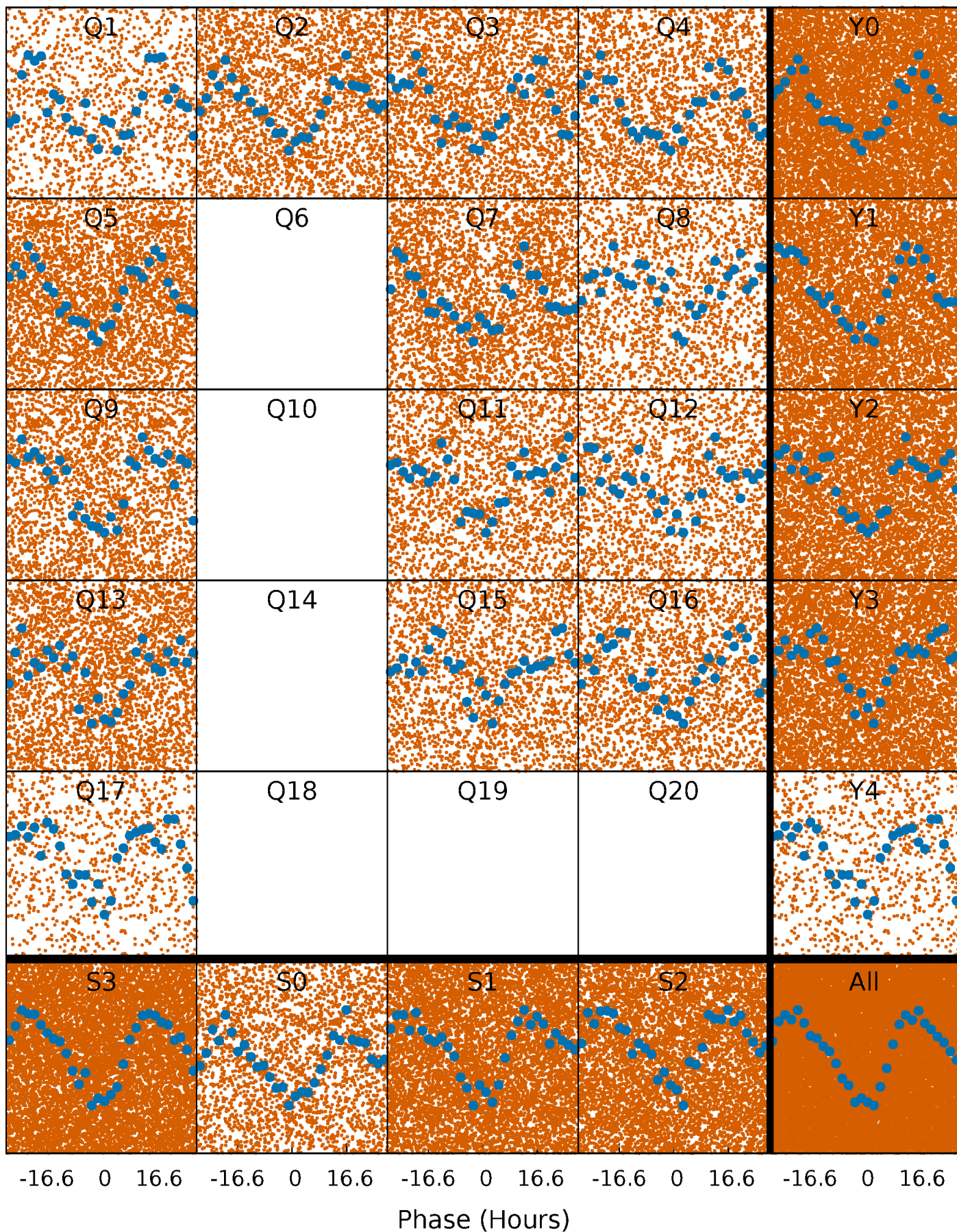


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



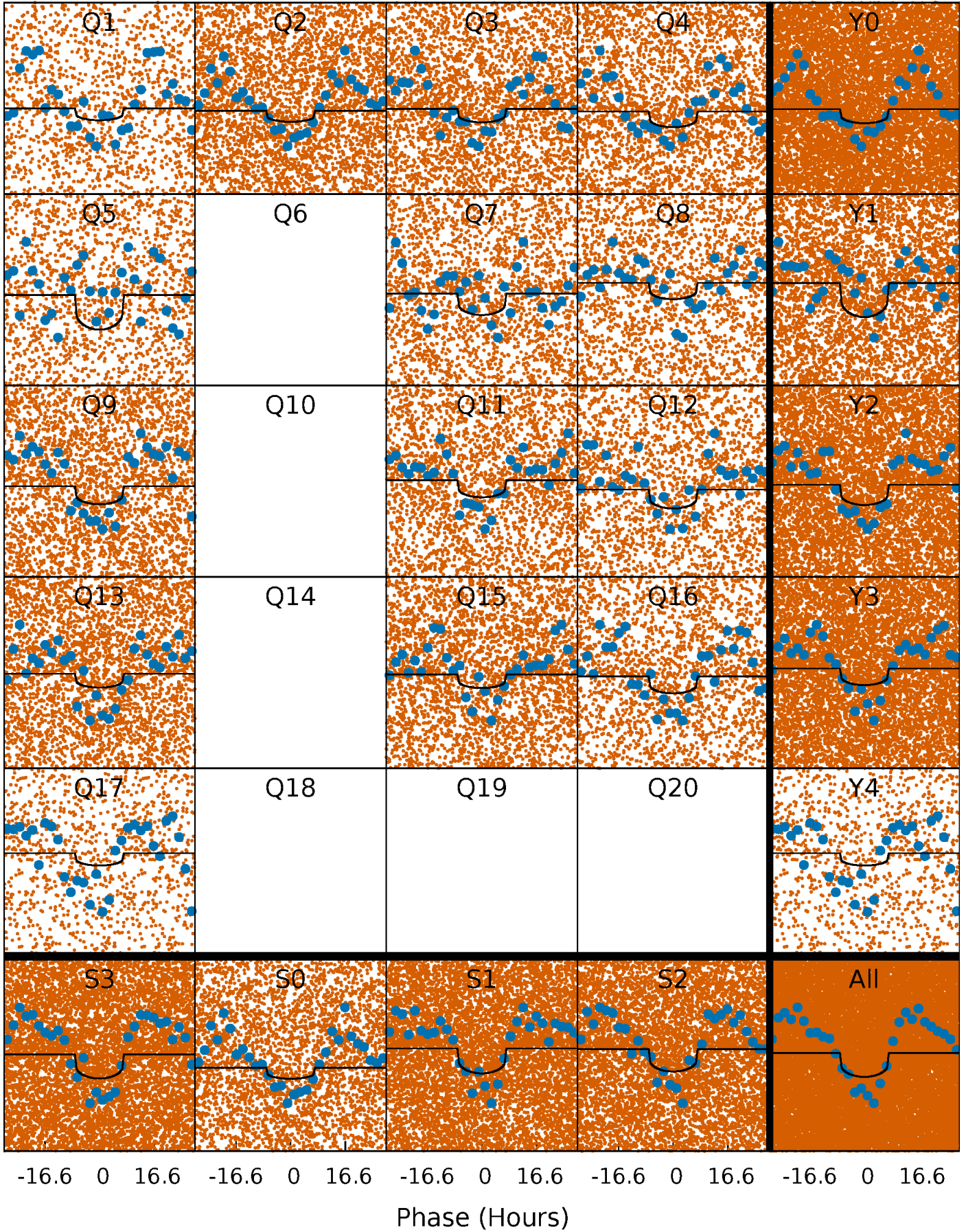
PDC Quarter-Phased Transit Curves

TCE 003869322-01 P= 1.556384 Days $T_0=131.725896$ (BKJD)



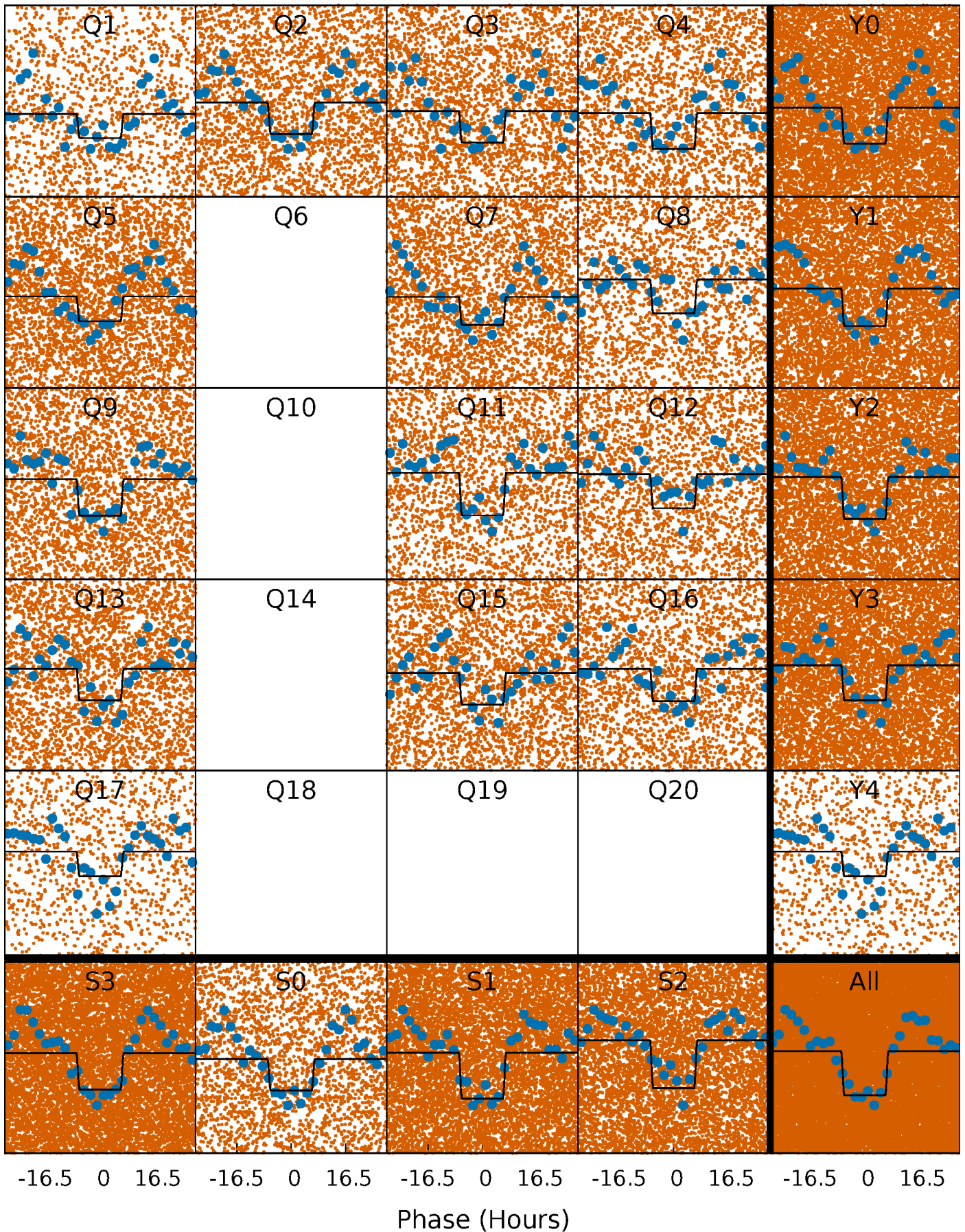
DV Quarter-Phased Transit Curves

TCE 003869322-01 P= 1.556384 Days $T_0=131.725896$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

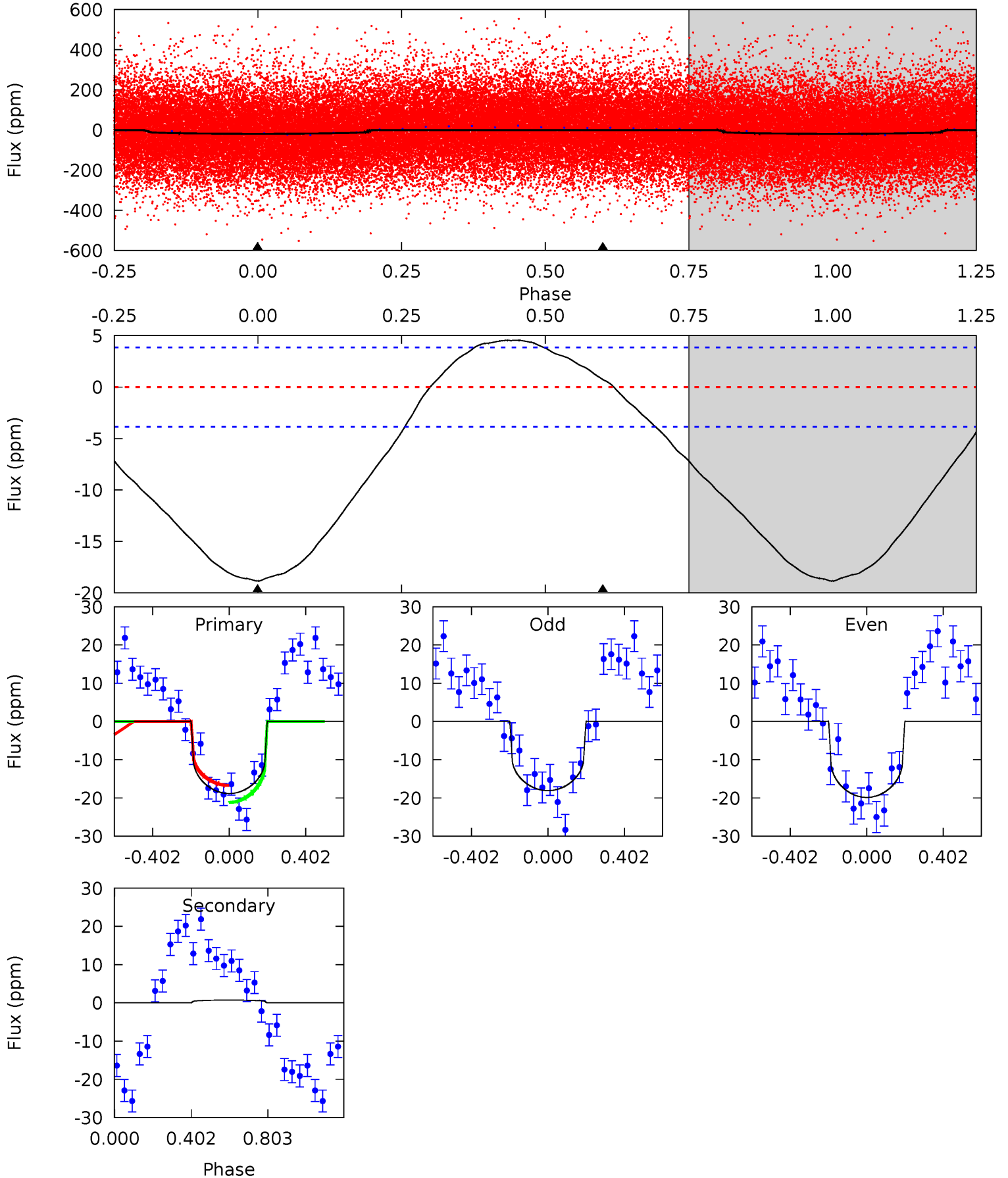
TCE 003869322-01 P= 1.556244 Days $T_0=131.767011$ (BKJD)



DV Model-Shift Uniqueness Test

003869322-01, P = 1.556384 Days, E = 130.169512 Days

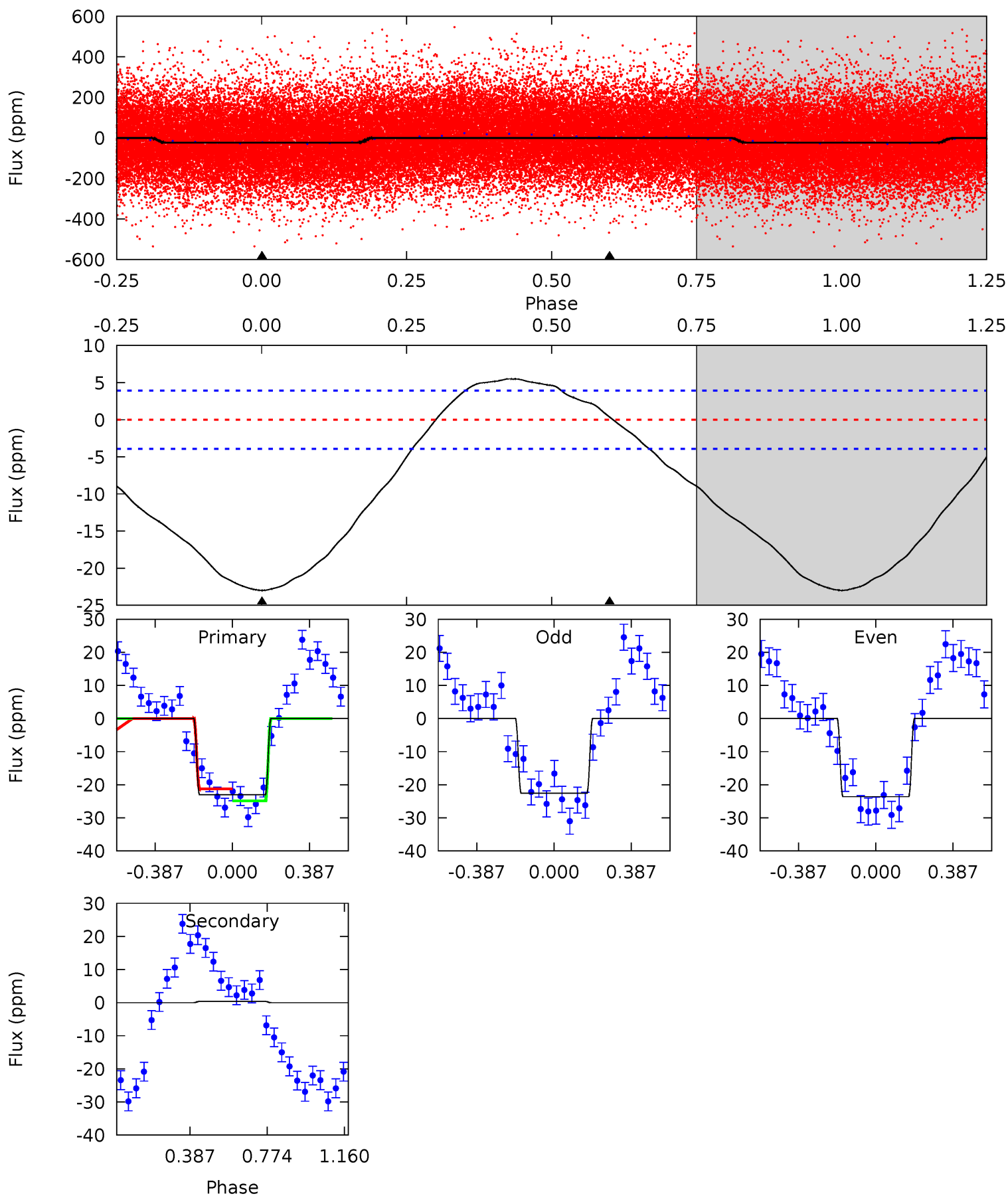
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.8	-0.81	0	0	4.26	0.84	2.38	20.8	20.8	-0.81	-0.81	0.98	1.11	0.19	2.49



Alt Model-Shift Uniqueness Test

003869322-01, P = 1.556244 Days, E = 130.210767 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.1	-0.39	0	0	4.27	0.87	2.83	25.1	25.1	-0.39	-0.39	0.55	1.02	0.19	2.02



Stellar Parameters For KIC 003869322

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7274^{+200}_{-343}	$4.252^{+0.058}_{-0.232}$	$0.210^{+0.150}_{-0.400}$	$1.558^{+0.580}_{-0.193}$	$1.592^{+0.211}_{-0.211}$	$0.593^{+0.195}_{-0.342}$
	+3%/-5%	+1%/-5%	+71%/-190%	+37%/-12%	+13%/-13%	+33%/-58%
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 003869322-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	1 ± 1	$0.75^{+0.63}_{-0.48}$	3253^{+281}_{-182}	-3779^{+802}_{-1437}	$-0.447^{+0.599}_{-3.750}$
Alt.	0 ± 1	$0.99^{+0.69}_{-0.54}$	3277^{+280}_{-194}	-3435^{+6038}_{-827}	$-0.122^{+0.487}_{-1.025}$

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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

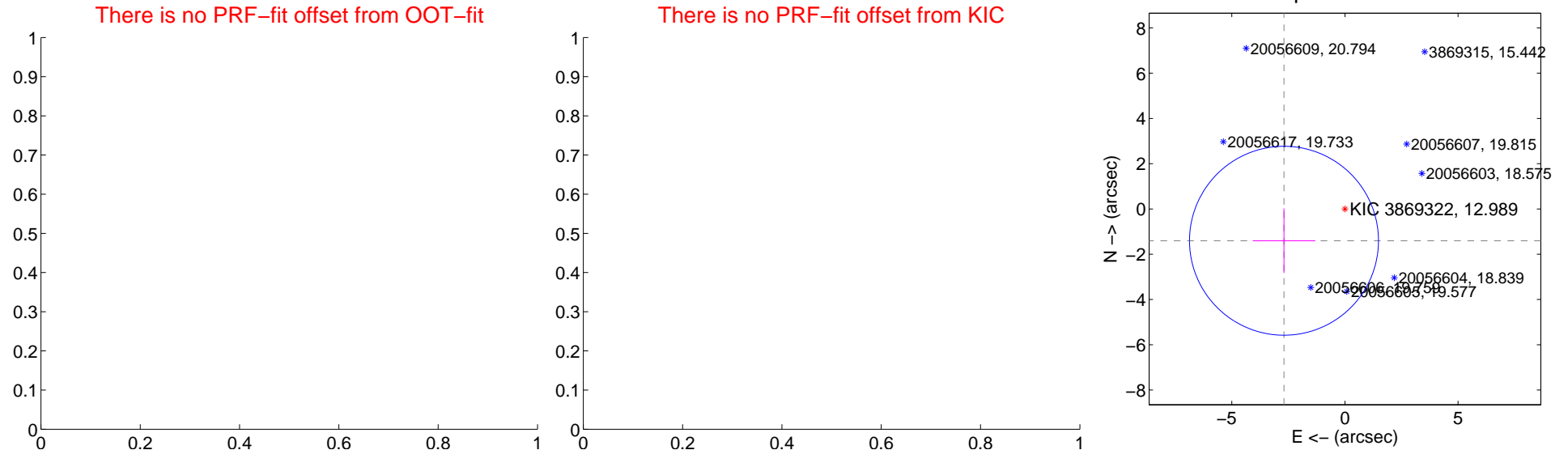
DV Centroid Data

Supplemental centroid analysis for 003869322-01. Kepler magnitude: 12.99. Transit SNR 8.77

There are 0 quarters with good PRF difference image offsets

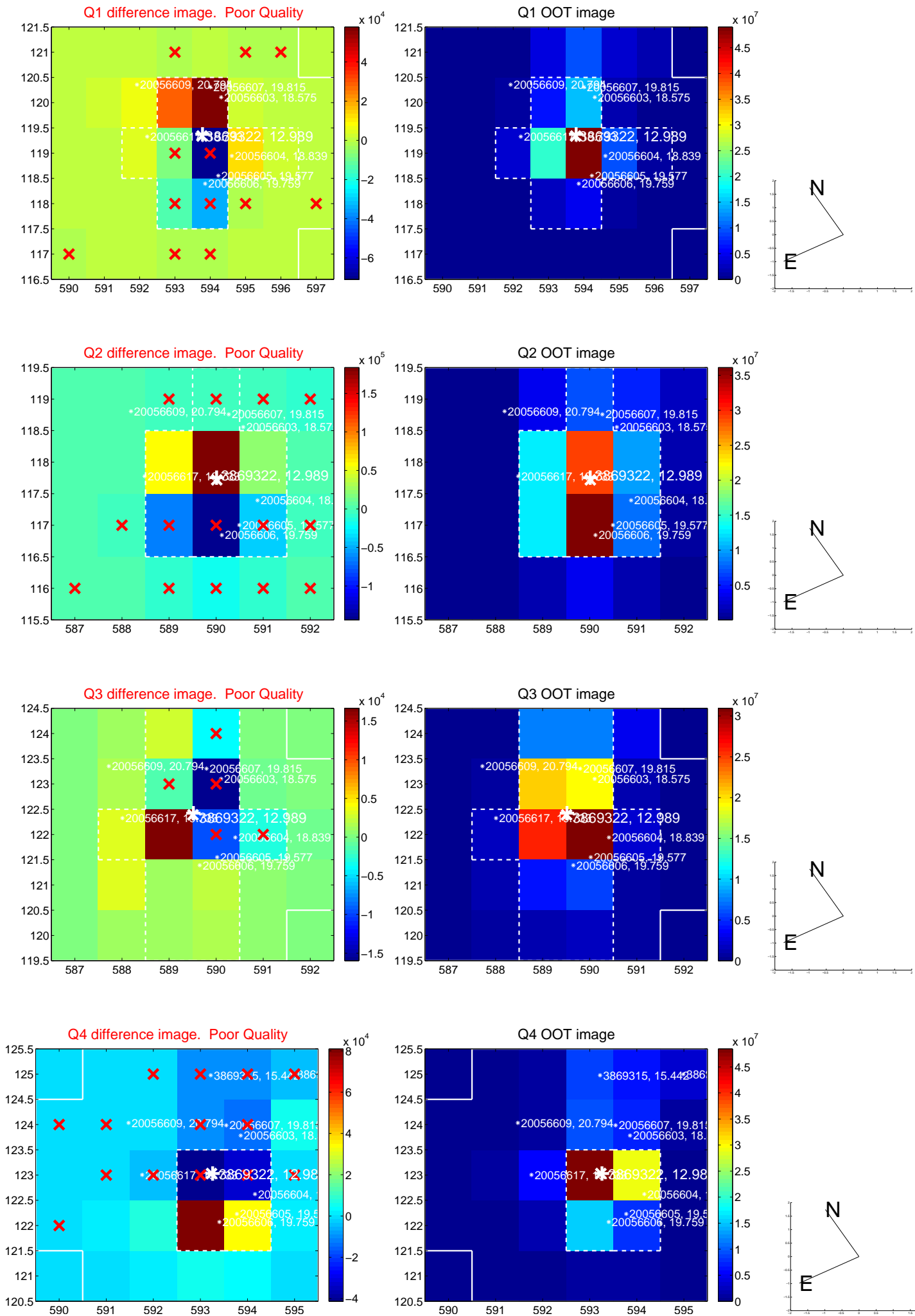
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	3.04 ± 1.39	2.18	2.69 ± 1.38	-1.40 ± 1.43

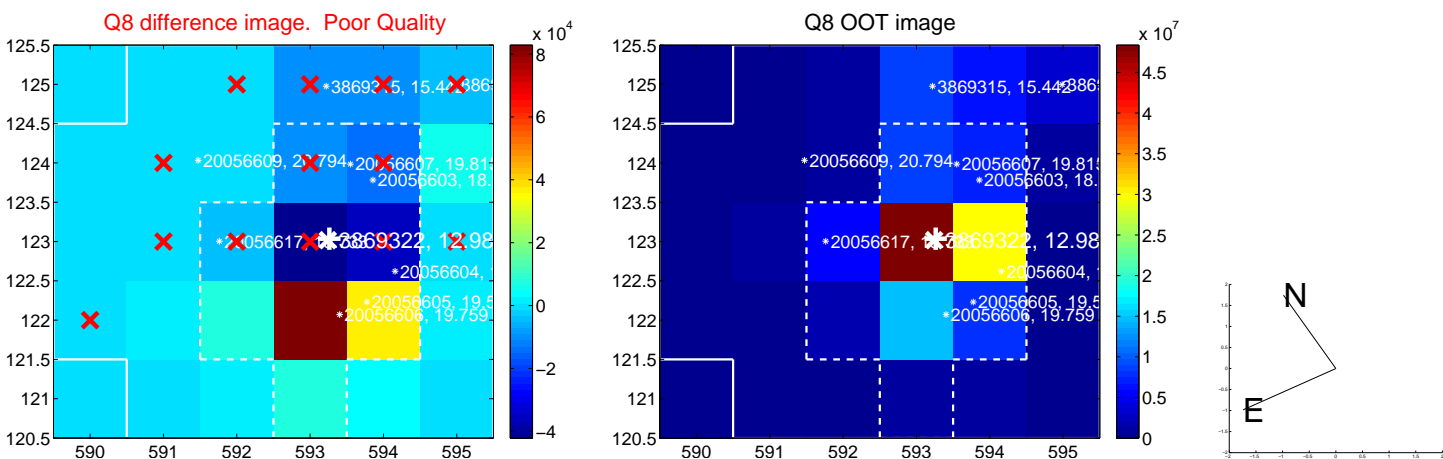
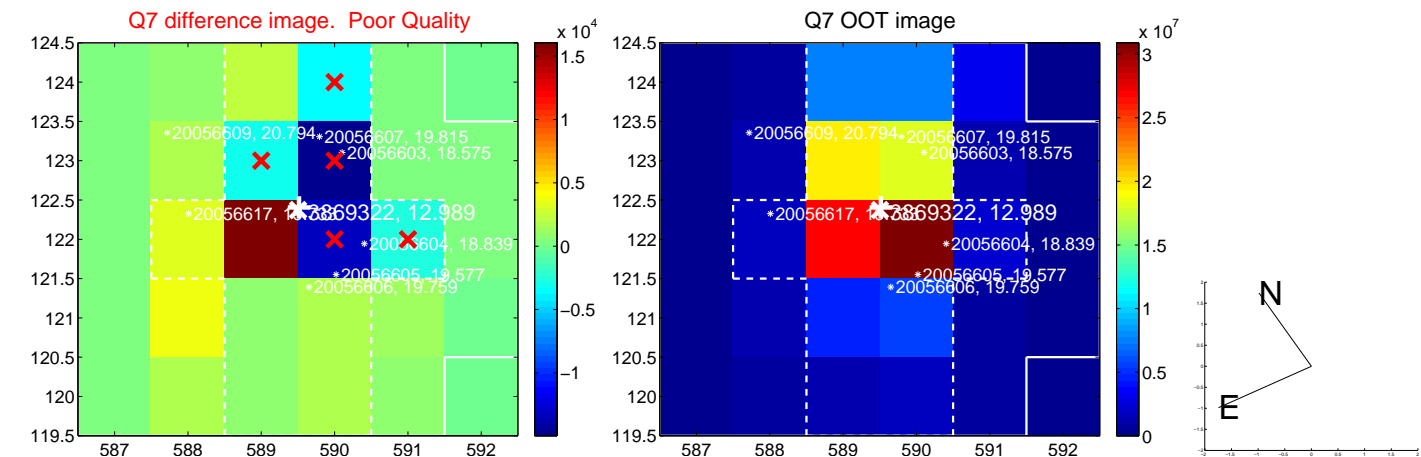
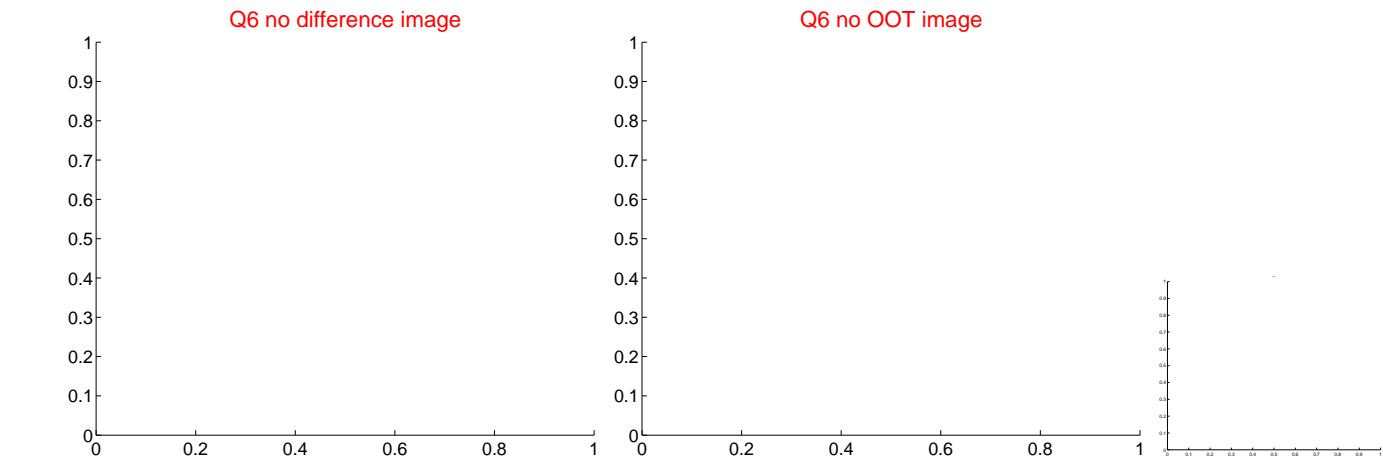
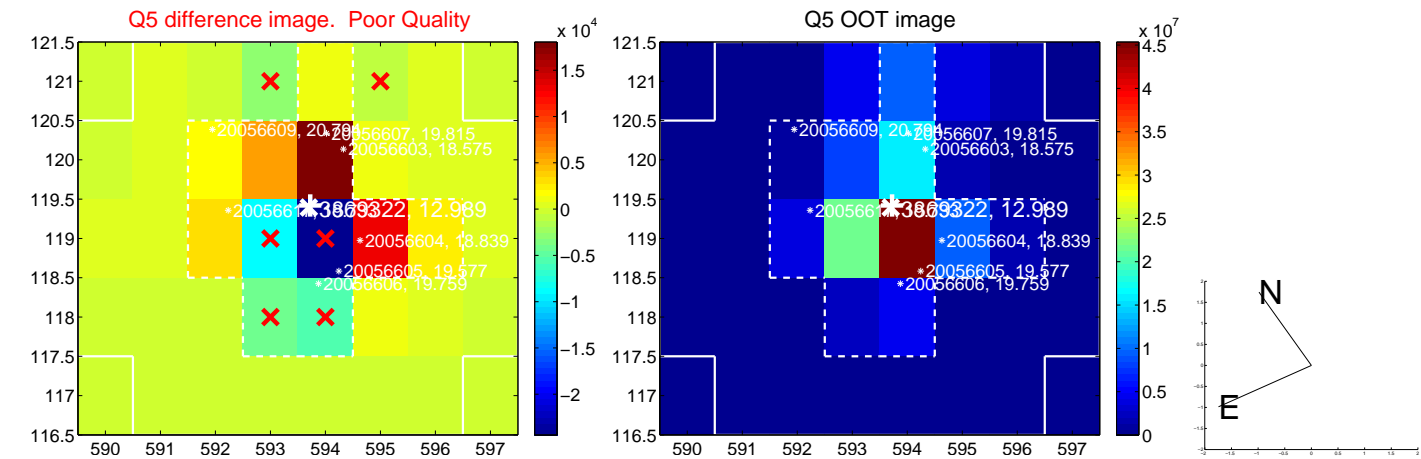


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

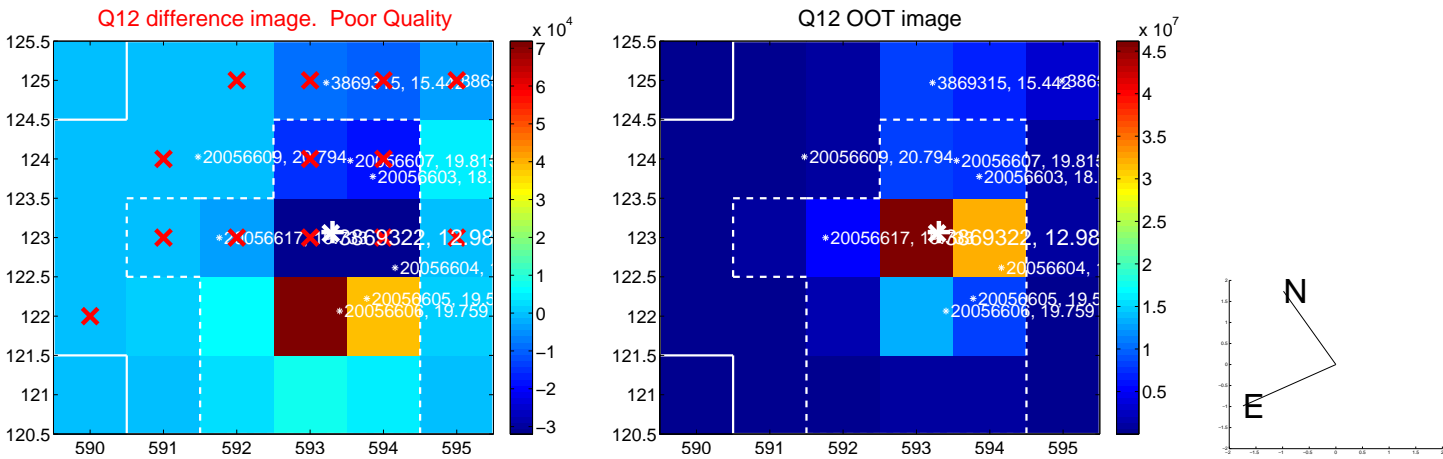
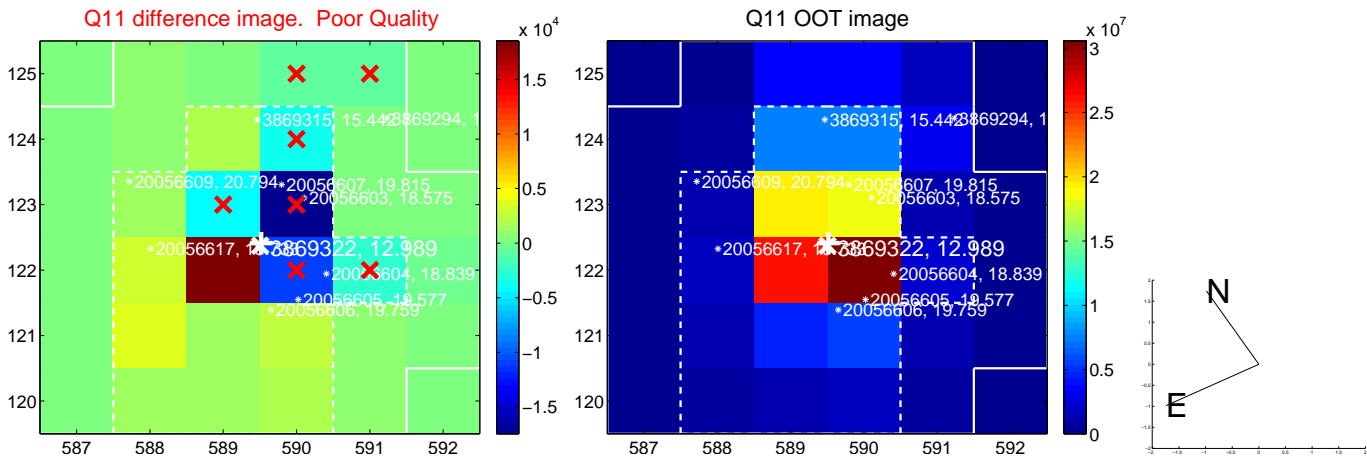
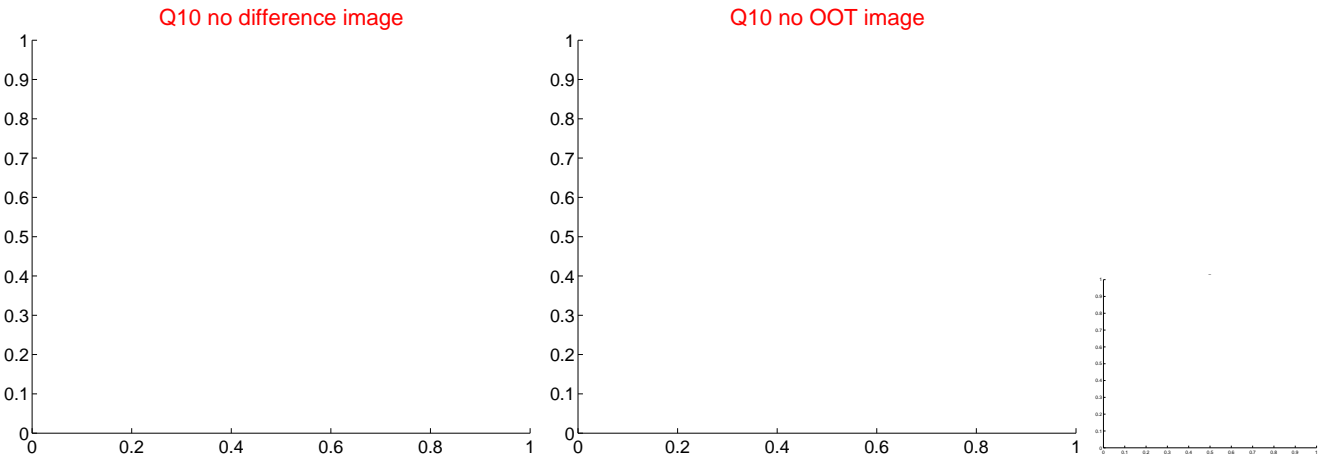
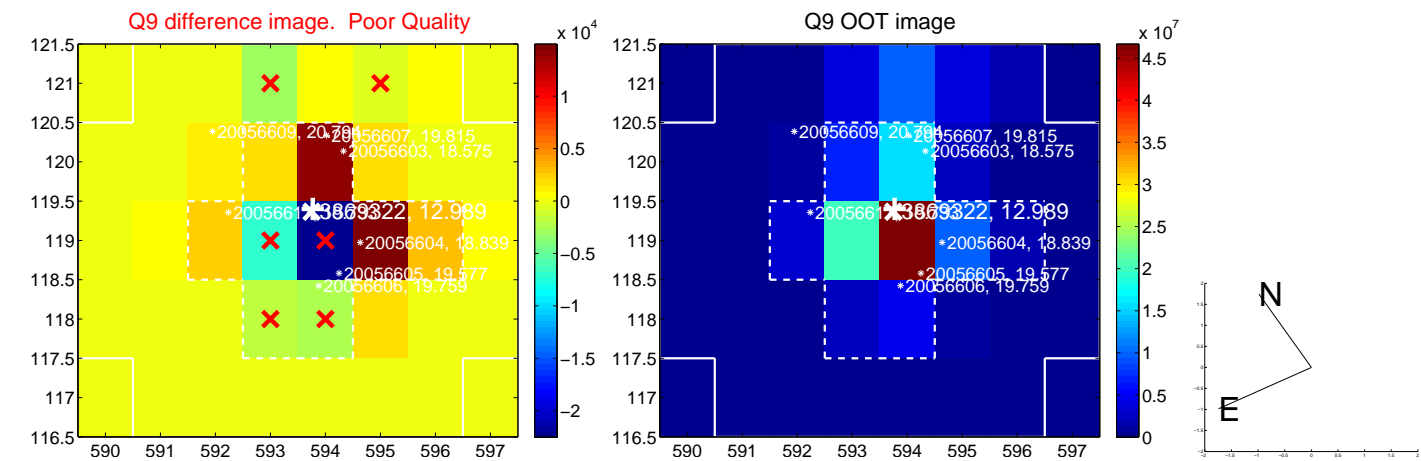
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



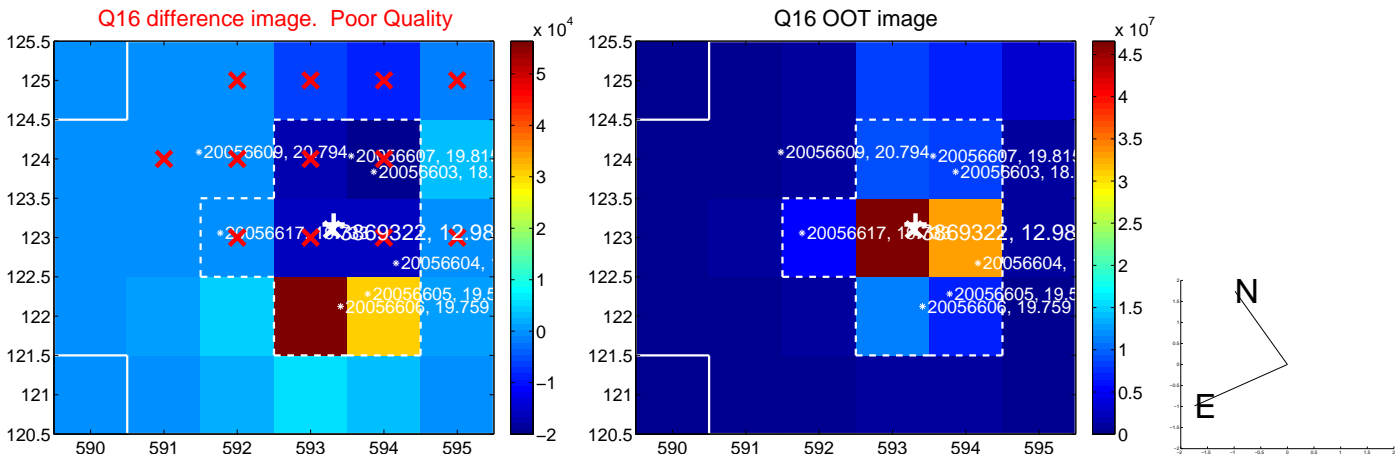
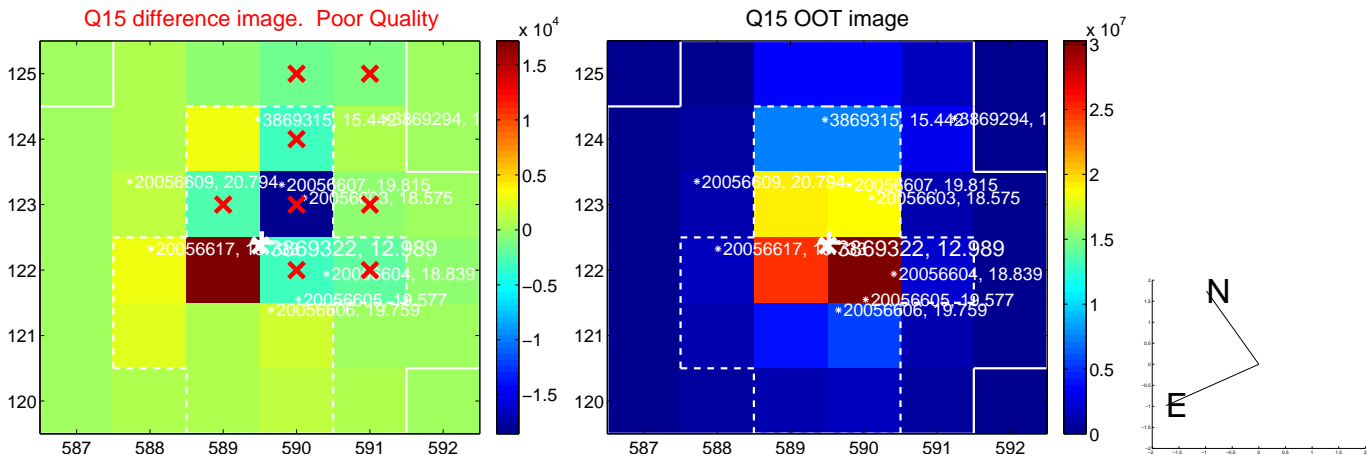
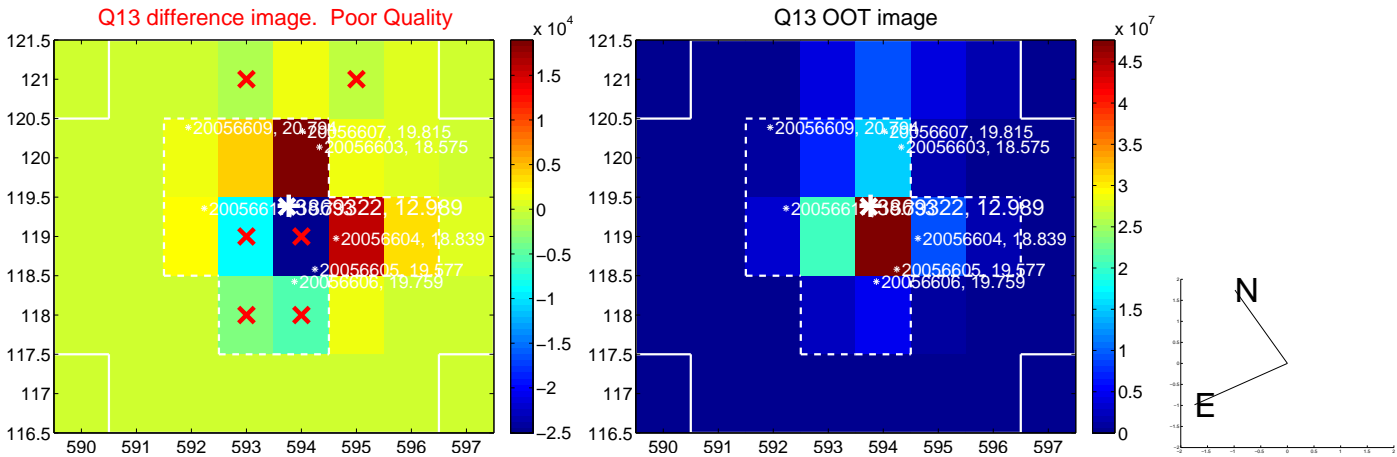
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



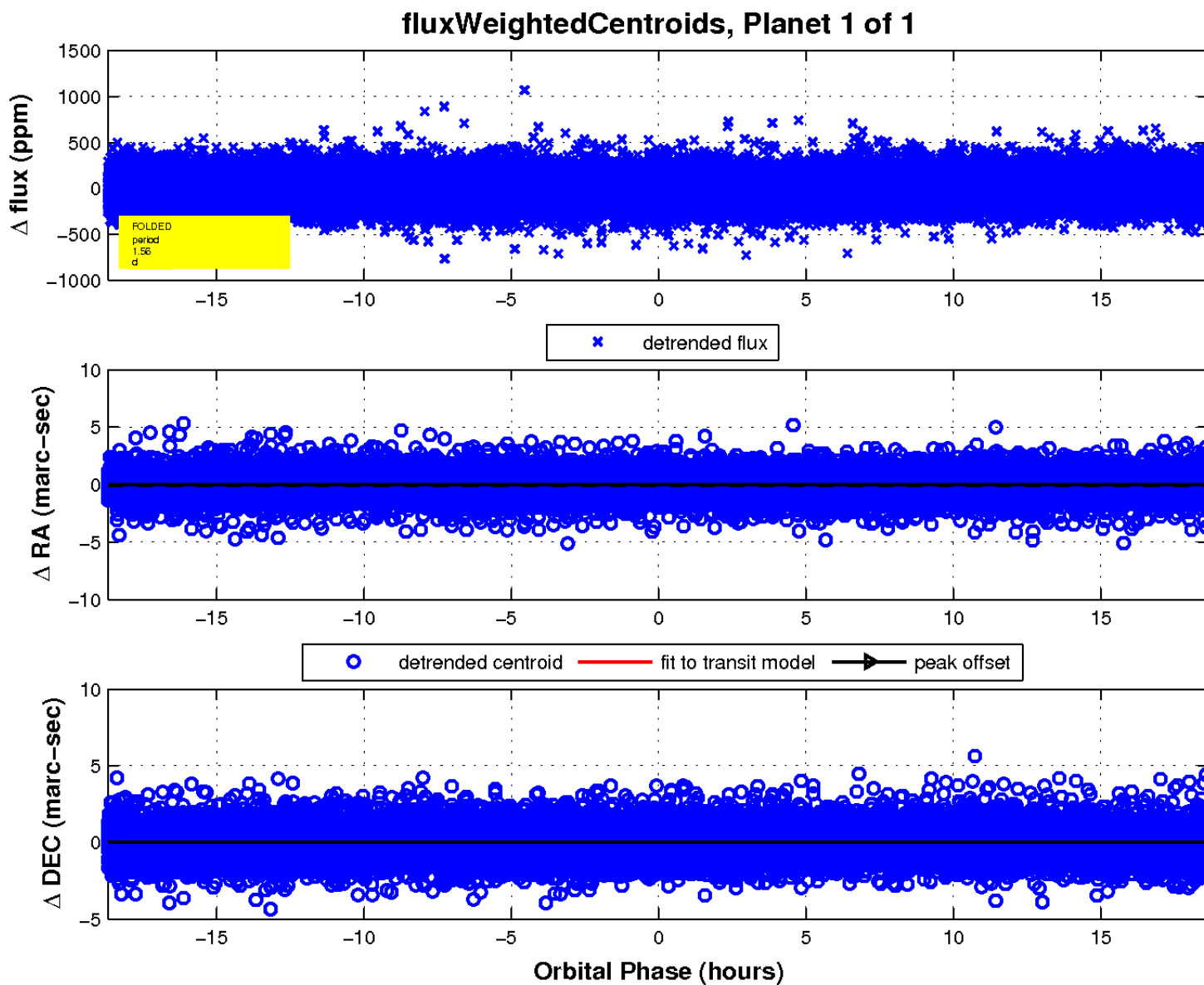
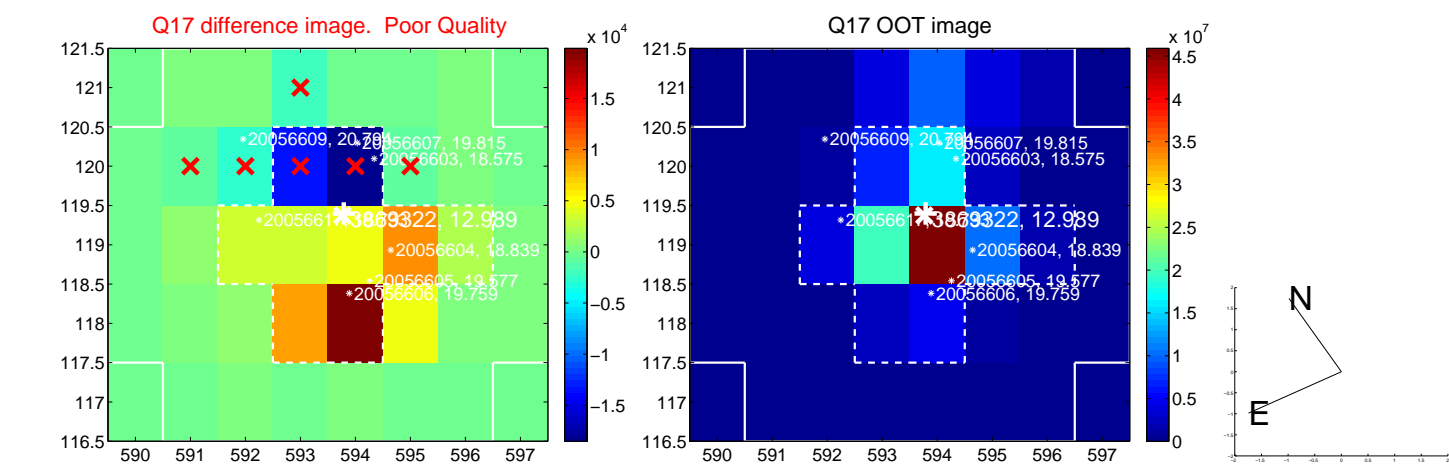
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

