

KIC 006579609

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})
006579609-01	OBS	No	1.830837	131.562078	395.4	6.000	7.8	-1.0	0.86	5792	1.71	901.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006579609-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_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.

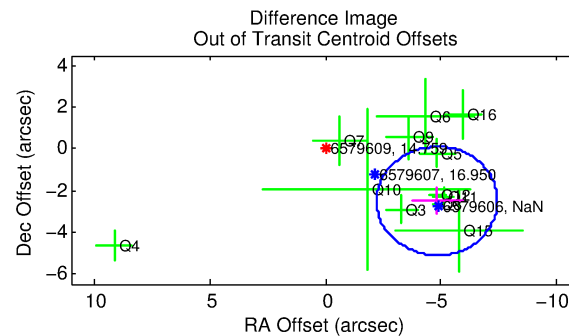
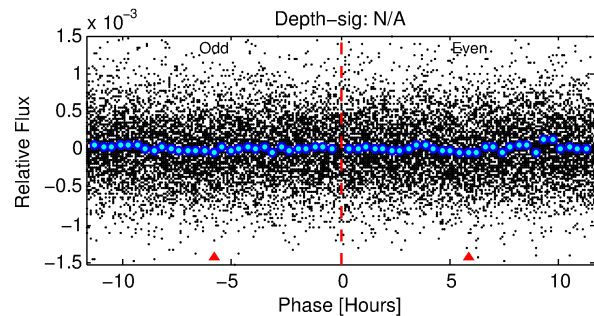
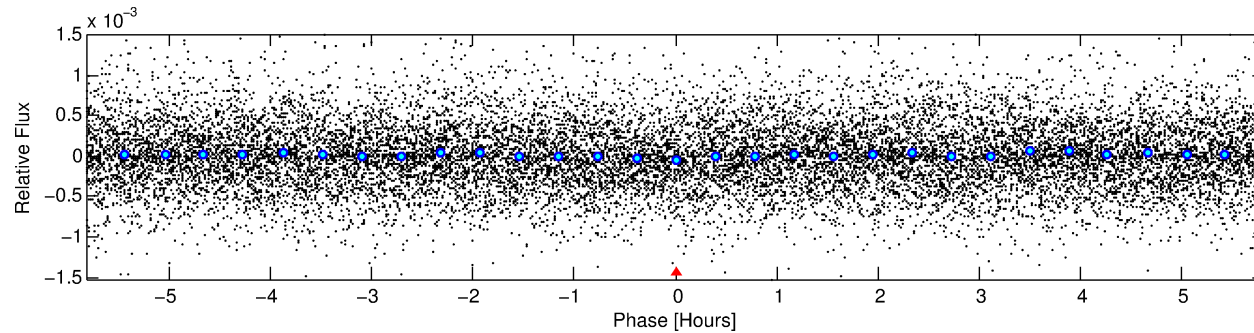
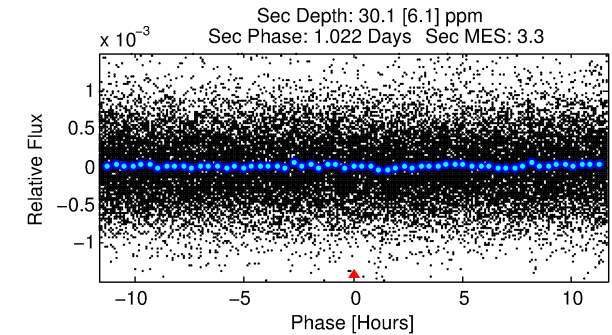
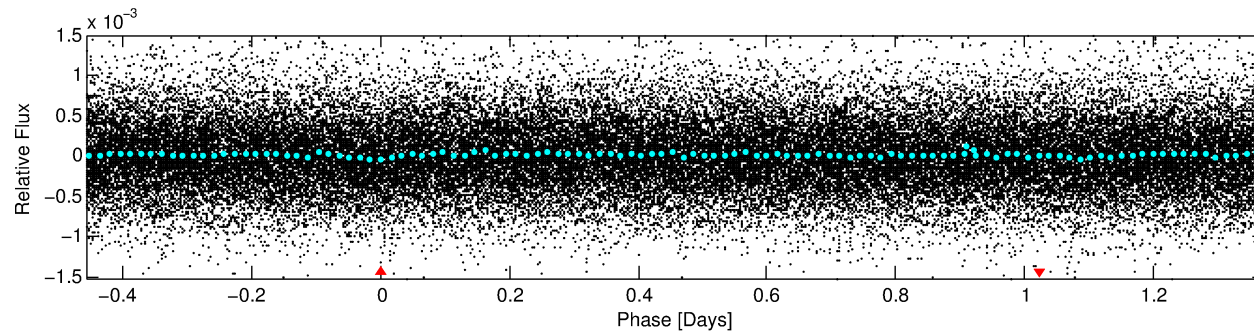
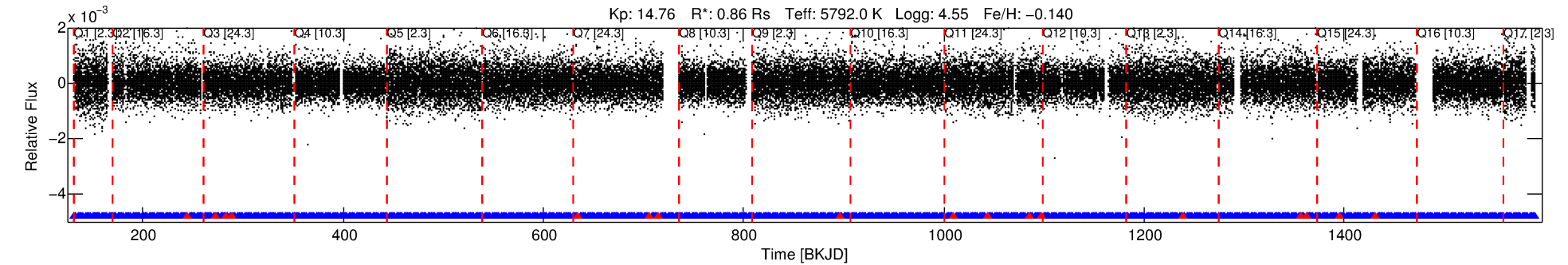
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006579609-01

No Significant Match Found

DV One-Page Summary

KIC: 6579609 Candidate: 1 of 1 Period: 1.831 d



TPS TCE Results:

Period = 1.83084 d
Epoch = 131.5621 BKJD

DV fit results are unavailable

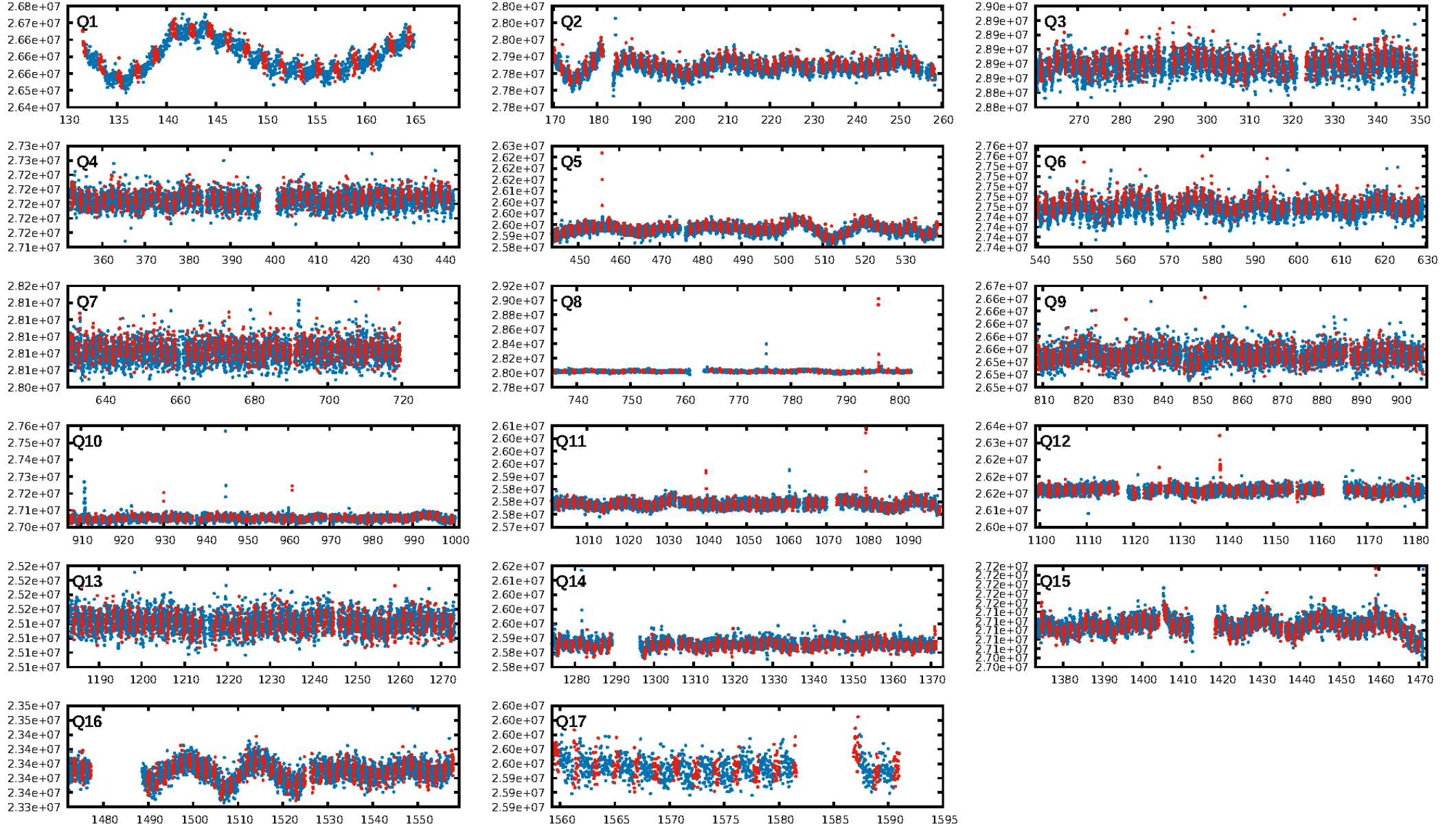
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 9.50e-13
RollingBand-fgt: 0.98 [681/698]
GhostDiagnostic-chr: 0.3748
Centroid-sig: 11.3%
Centroid-so: 26.449 arcsec [1.19σ]
OotOffset-rm: 5.432 arcsec [6.24σ]
KicOffset-rm: 5.126 arcsec [5.41σ]
OotOffset-st: 2/4/4/2 [12]
KicOffset-st: 2/4/4/2 [12]
DiffImageQuality-fgm: 0.42 [5/12]
DiffImageOverlap-fno: 1.00 [17/17]

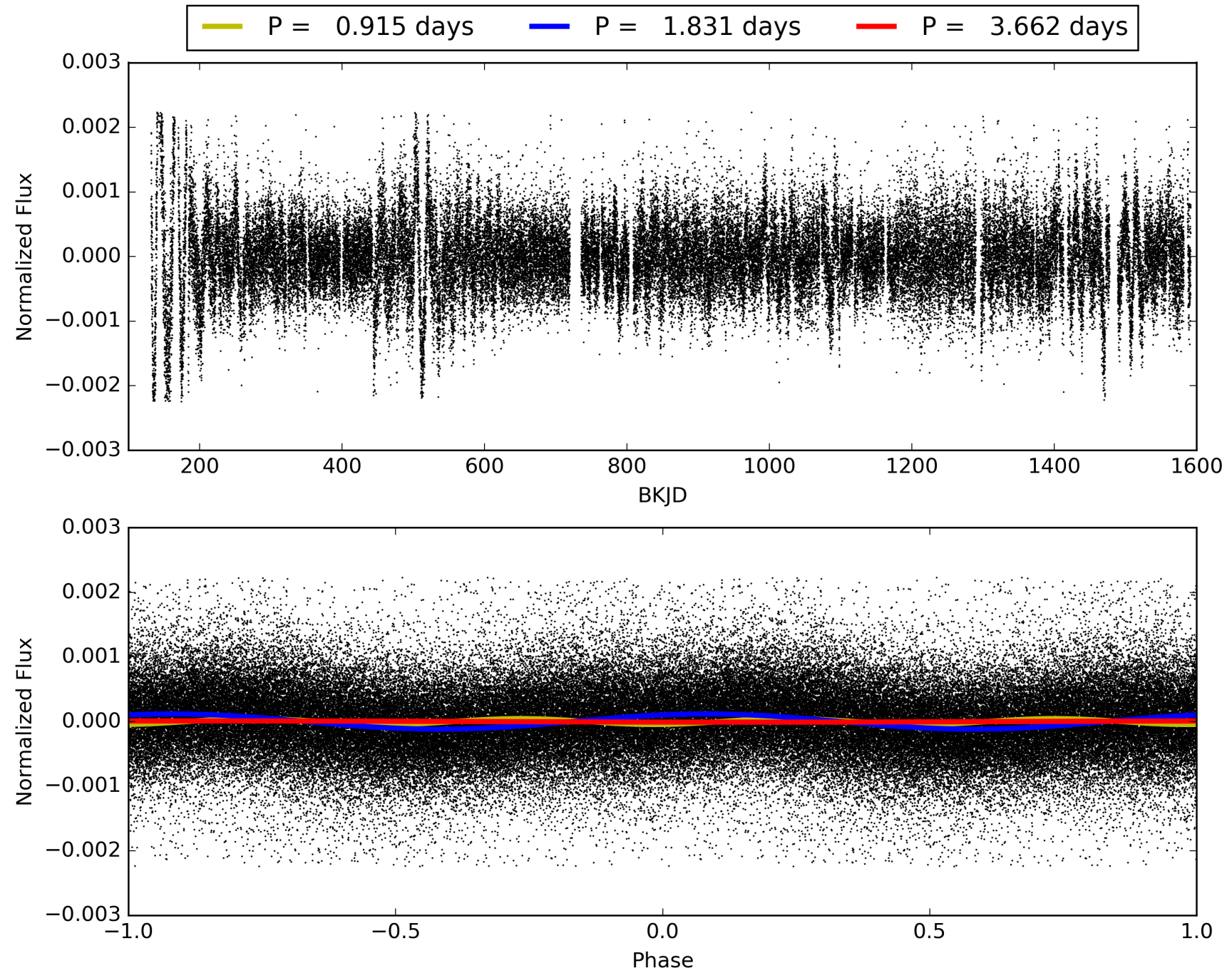
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:50:40 Z

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

TCE 006579609-01, PDC Light Curves

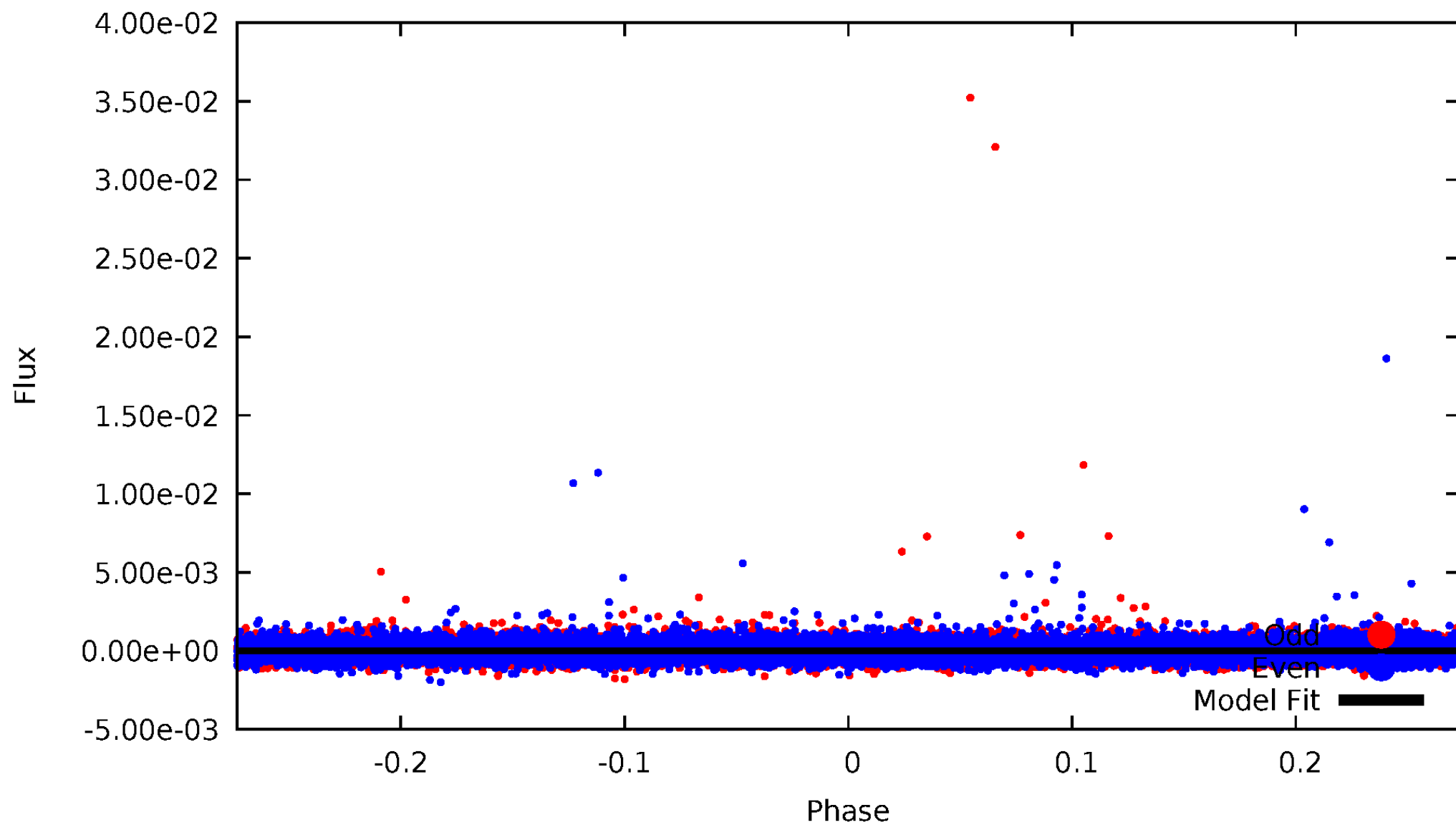


TCE 006579609-01



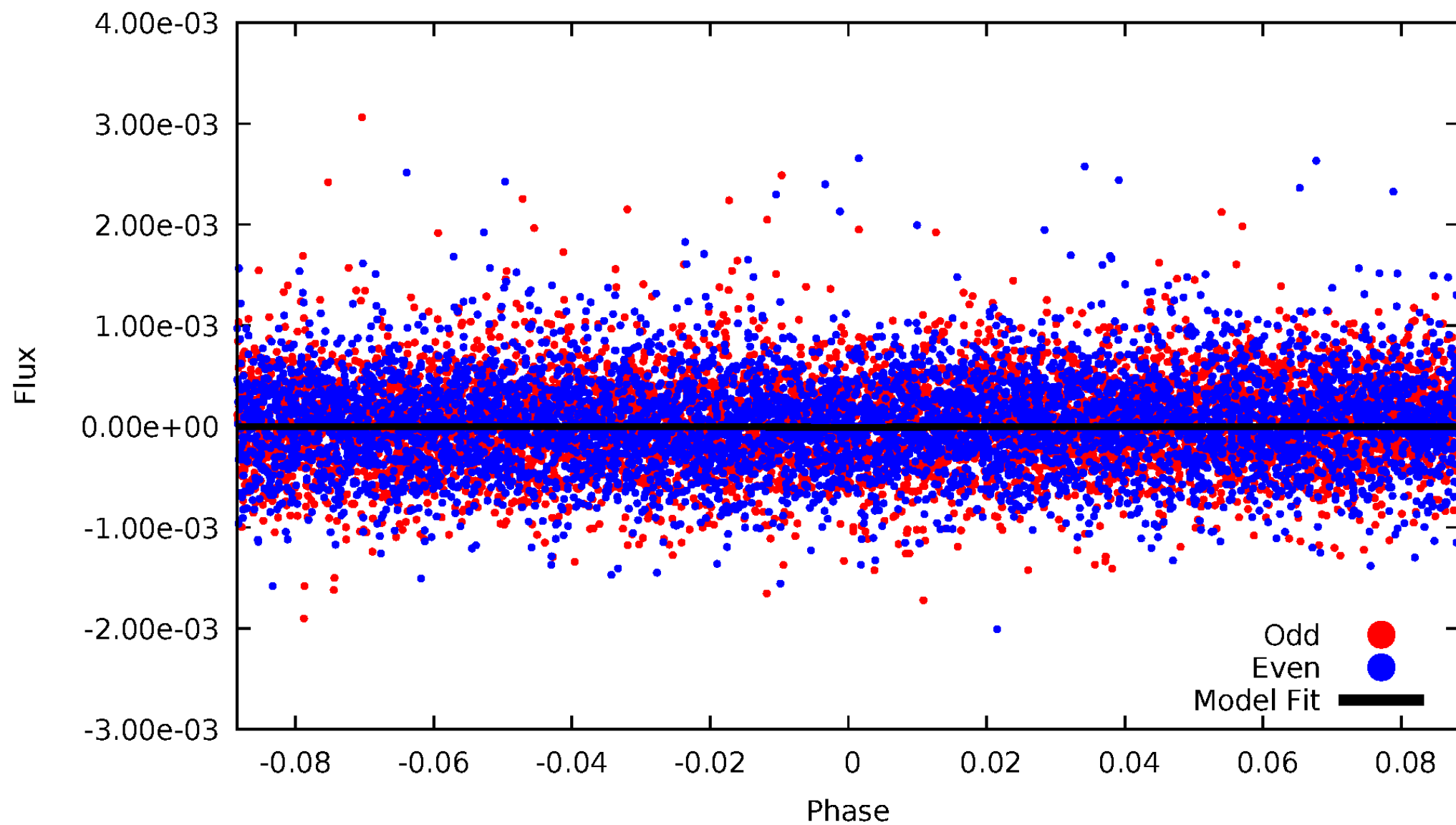
DV Odd/Even

TCE 006579609-01

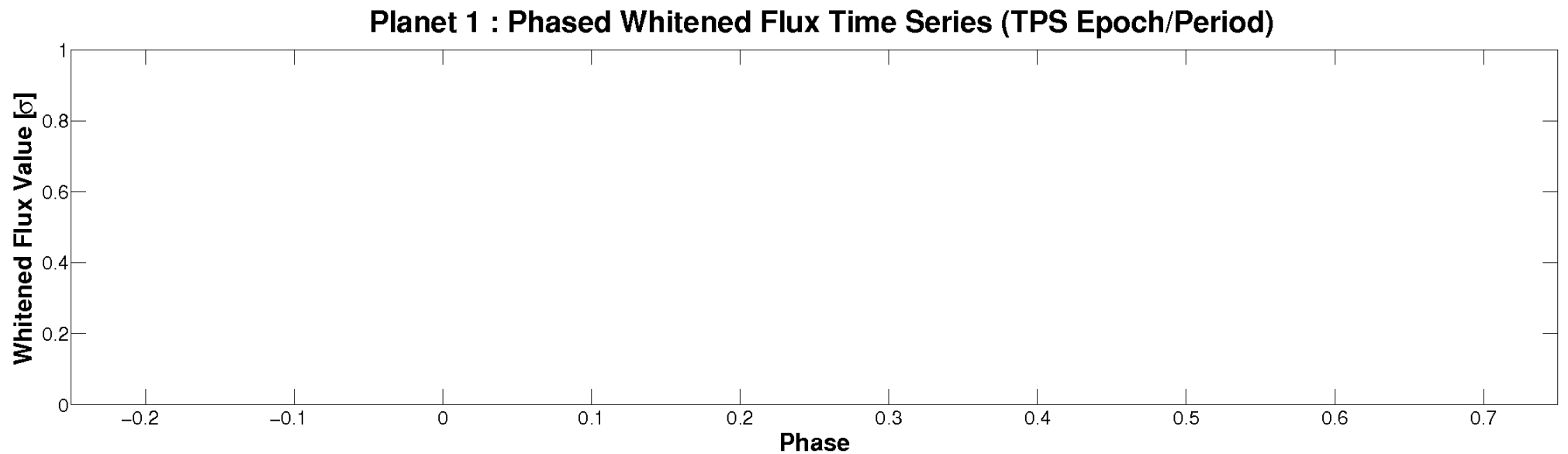
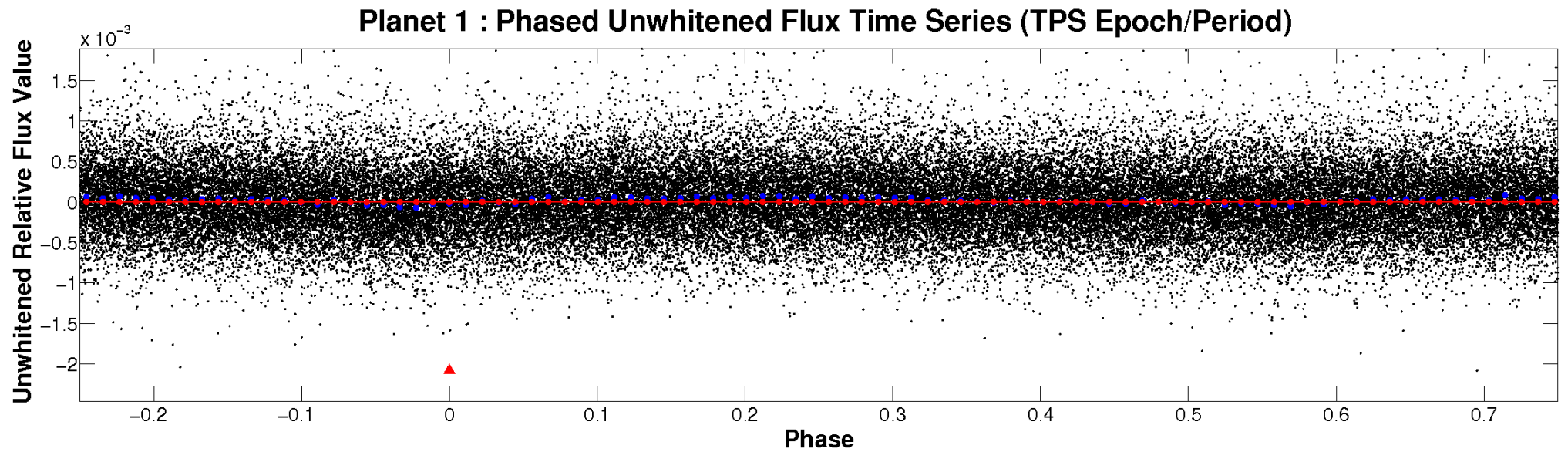


ALT Odd/Even

TCE 006579609-01

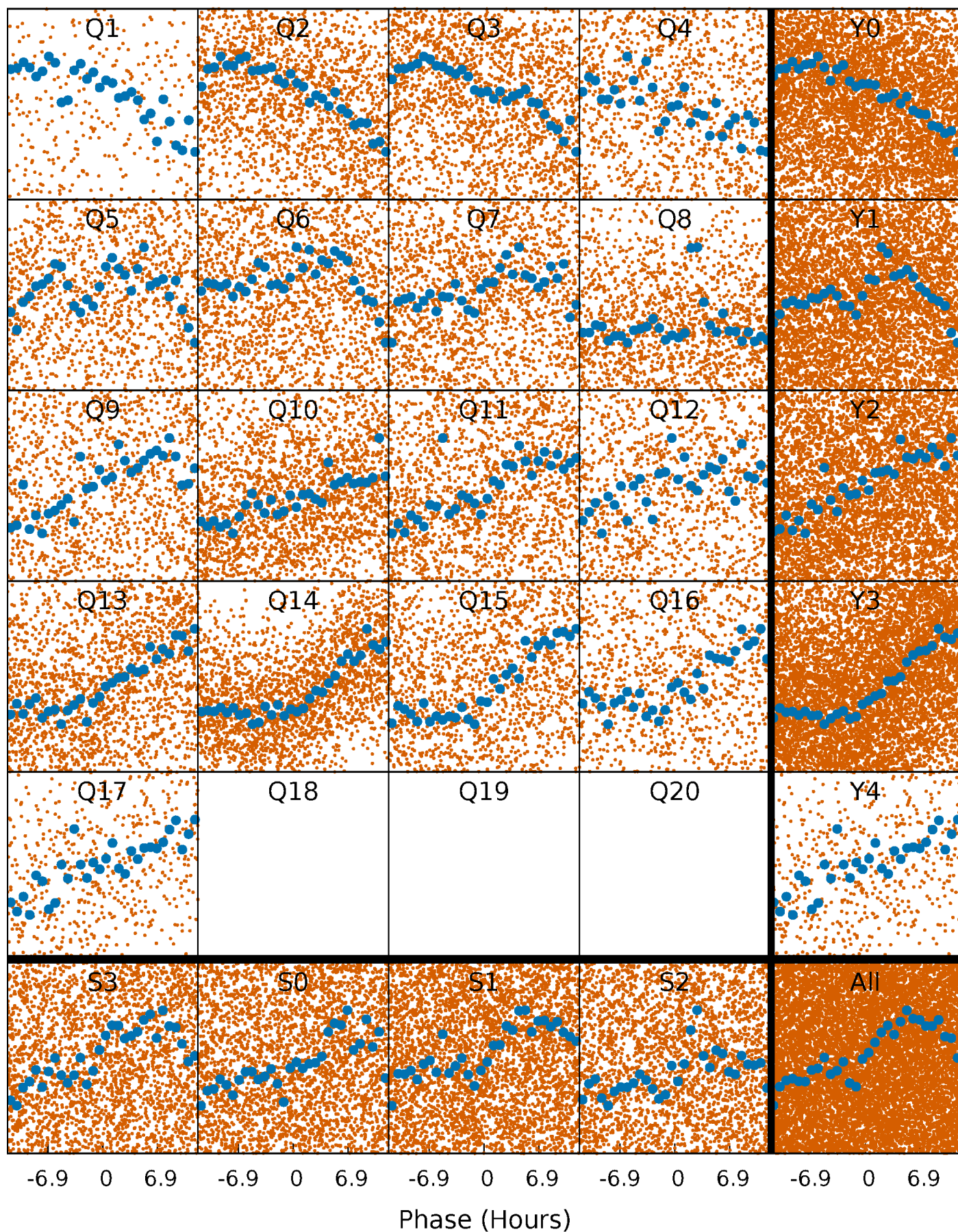


Non-Whitened Vs. Whitened Light Curve



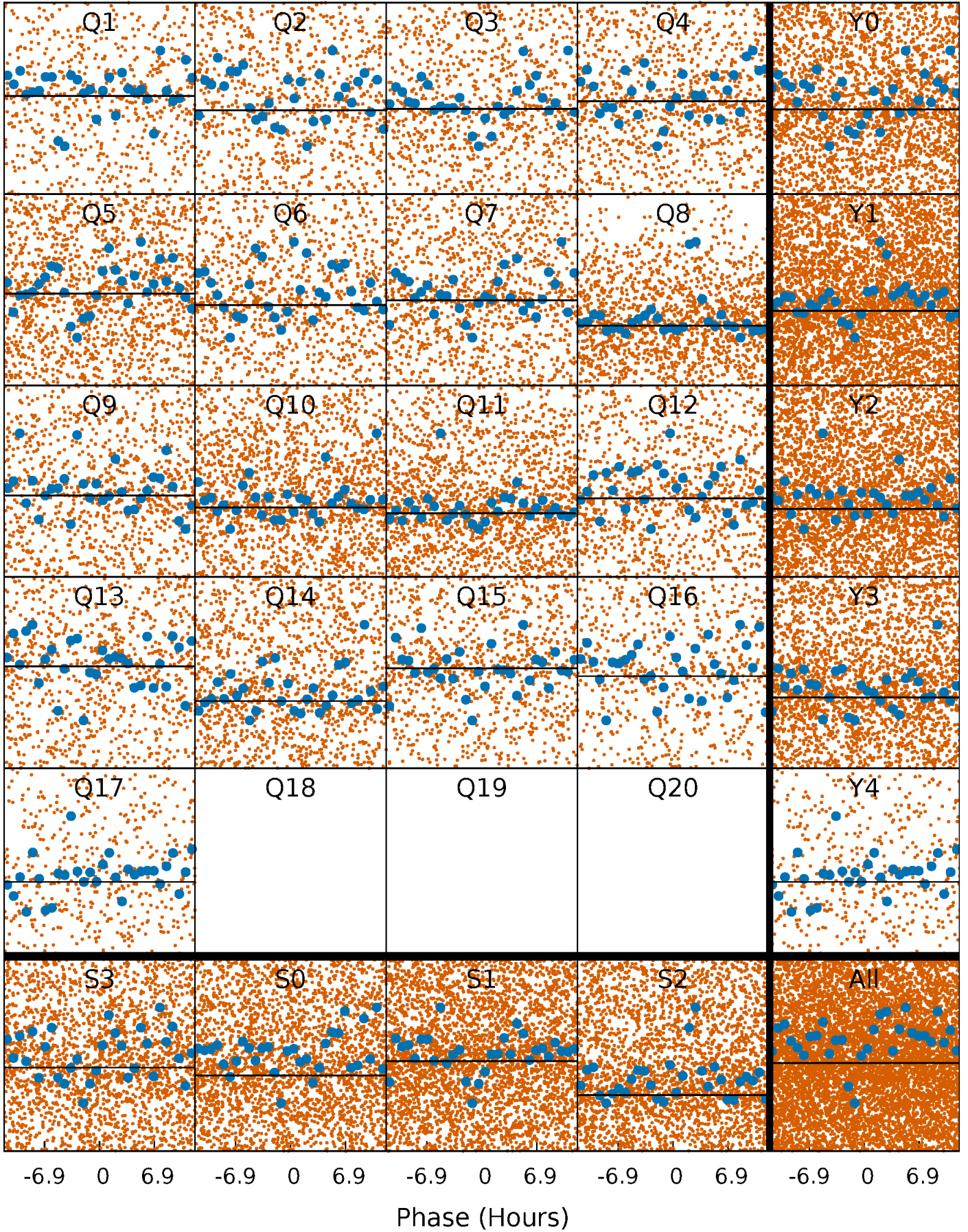
PDC Quarter-Phased Transit Curves

TCE 006579609-01 P= 1.830837 Days $T_0=131.562078$ (BKJD)



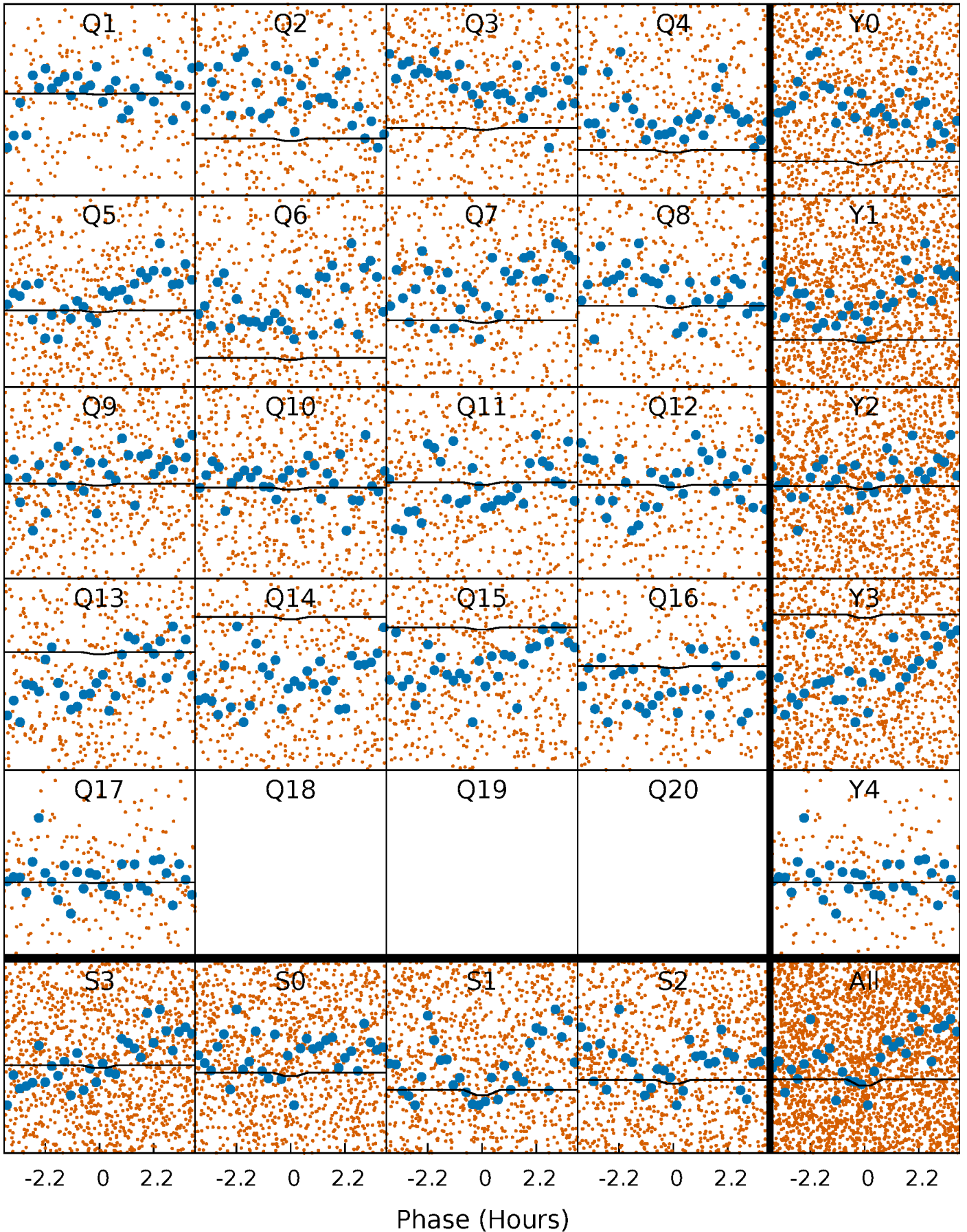
DV Quarter-Phased Transit Curves

TCE 006579609-01 P= 1.830837 Days $T_0=131.562078$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

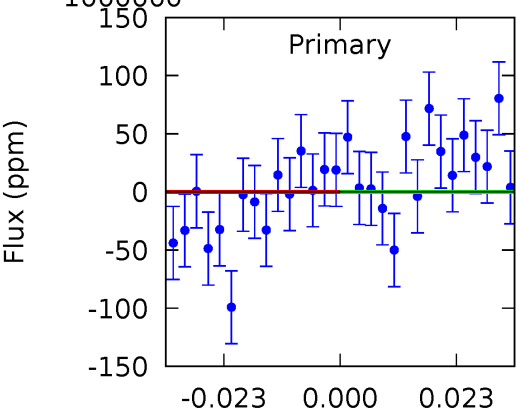
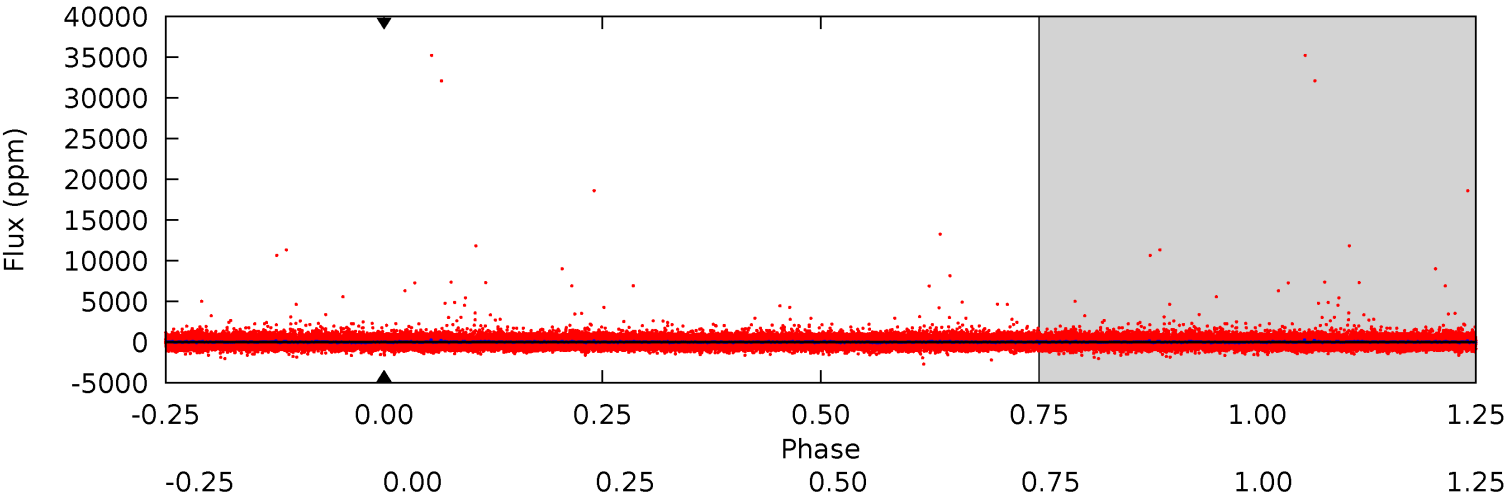
TCE 006579609-01 P= 1.830837 Days $T_0=131.515279$ (BKJD)



DV Model-Shift Uniqueness Test

006579609-01, P = 1.830837 Days, E = 129.731241 Days

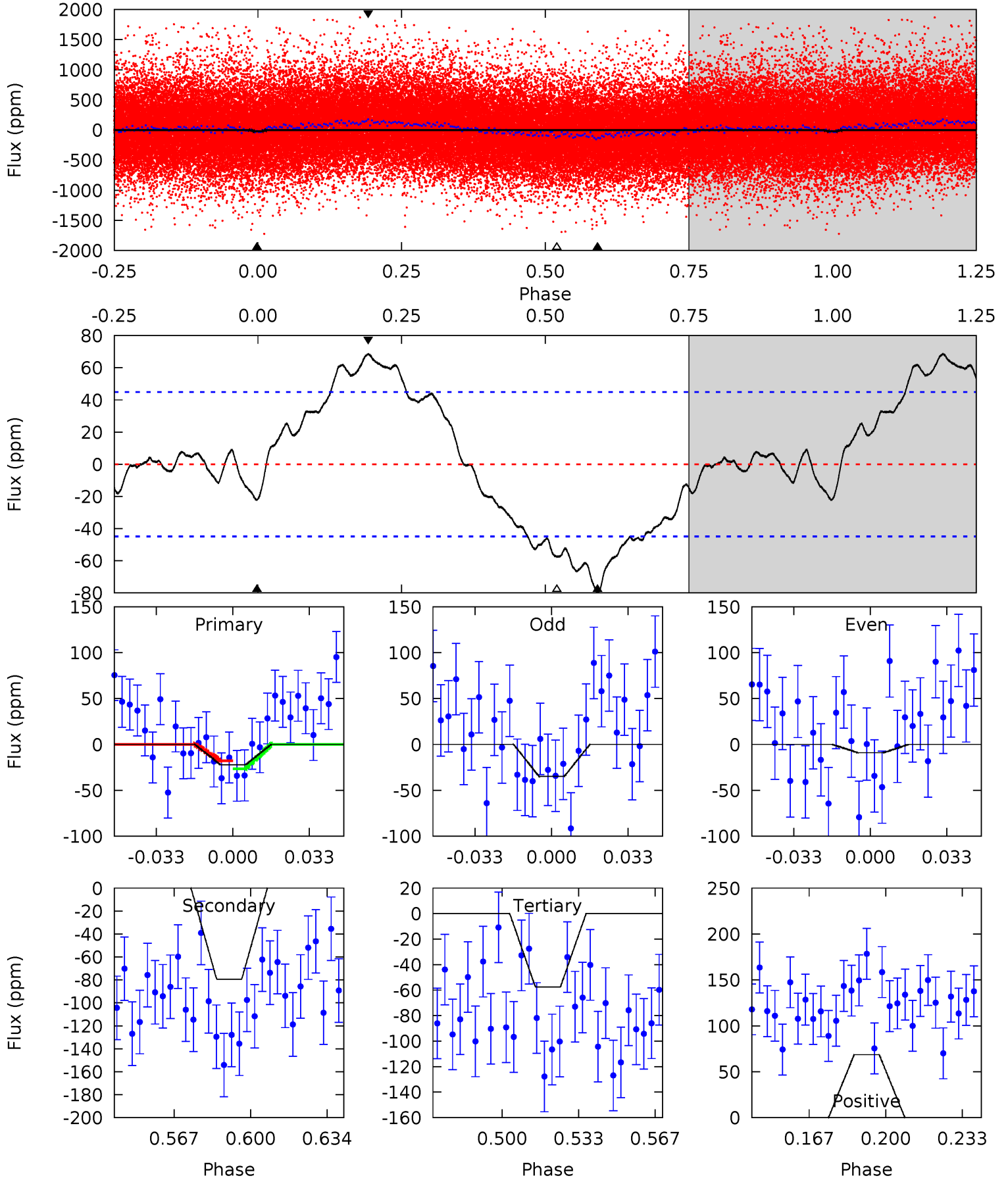
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006579609-01, P = 1.830837 Days, E = 129.684442 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.37	8.47	6.14	7.32	4.79	2.13	3.98	-3.77	-4.95	2.34	1.16	1.38	0.63	0.46	0.46



Stellar Parameters For KIC 006579609

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5792^{+156}_{-156}	$4.547^{+0.036}_{-0.192}$	$-0.140^{+0.300}_{-0.300}$	$0.864^{+0.251}_{-0.078}$	$0.959^{+0.101}_{-0.122}$	$2.094^{+0.408}_{-1.075}$
	+3%/-3%	+1%/-4%	+214%/-214%	+29%/-9%	+11%/-13%	+19%/-51%
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 006579609-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$7.67^{+7.71}_{-5.54}$	2001^{+130}_{-83}	4087^{+18019}_{-25280}	11^{+1641}_{-1582}
Alt.	-79 ± 9	$6.86^{+7.04}_{-4.80}$	2000^{+141}_{-84}	2641^{+1431}_{-4892}	$0.766^{+7.355}_{-0.585}$

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 $A_{obs} \gg 1.0$

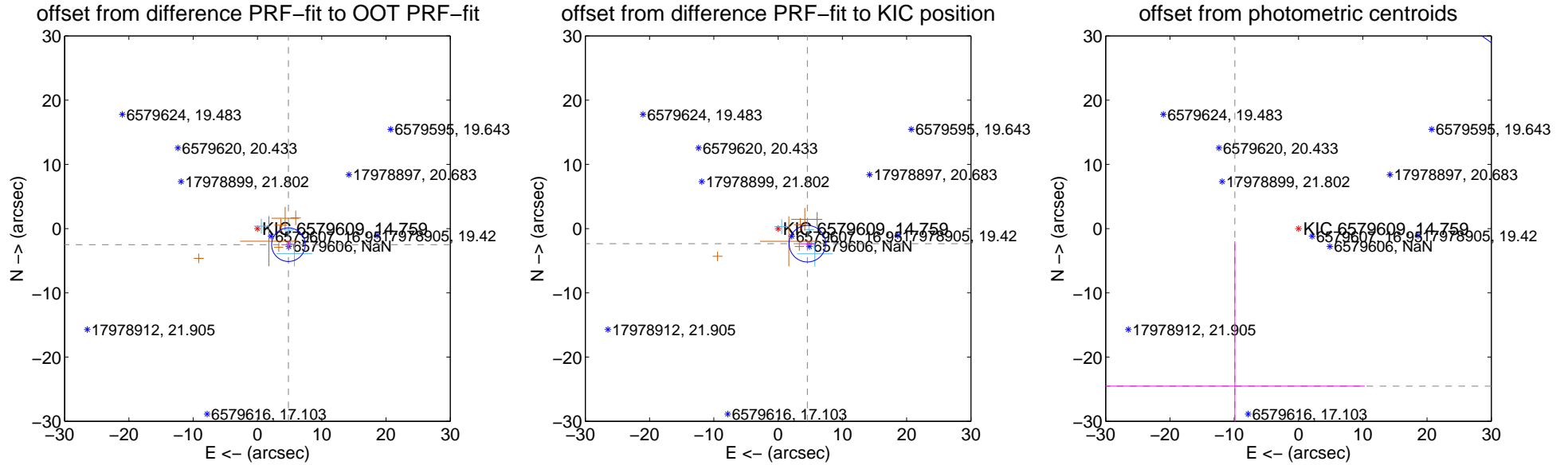
DV Centroid Data

Supplemental centroid analysis for 006579609-01. Kepler magnitude: 14.76. Transit SNR -1.00

There are 5 quarters with good PRF difference image offsets

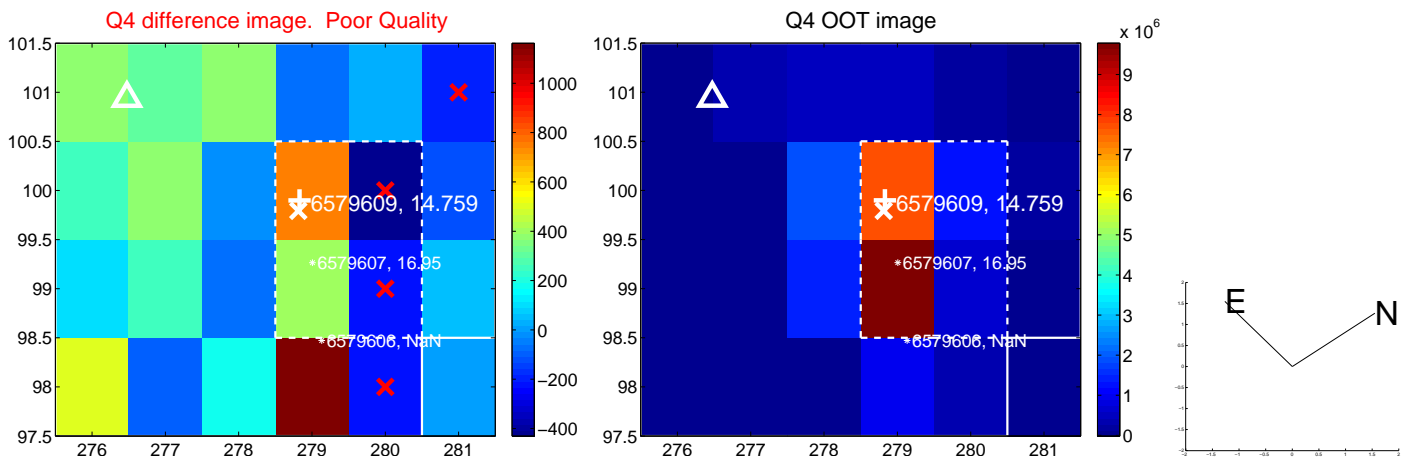
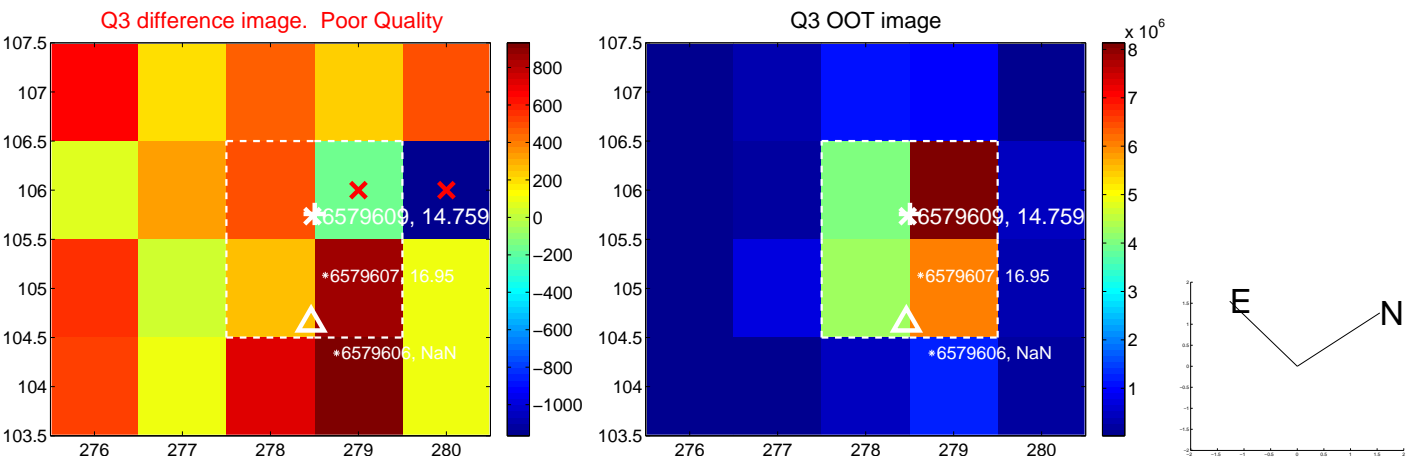
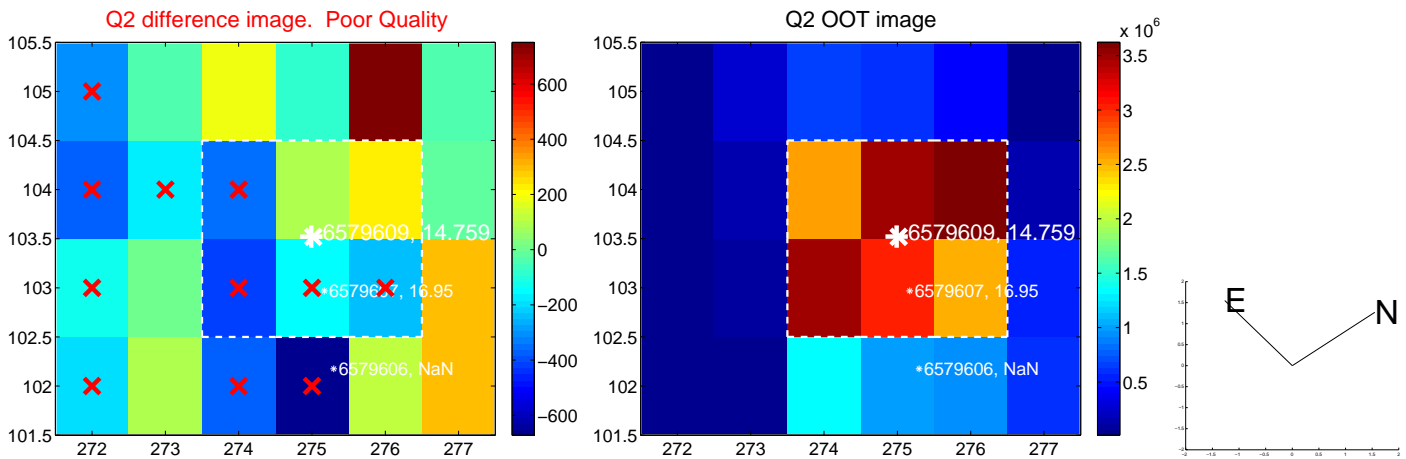
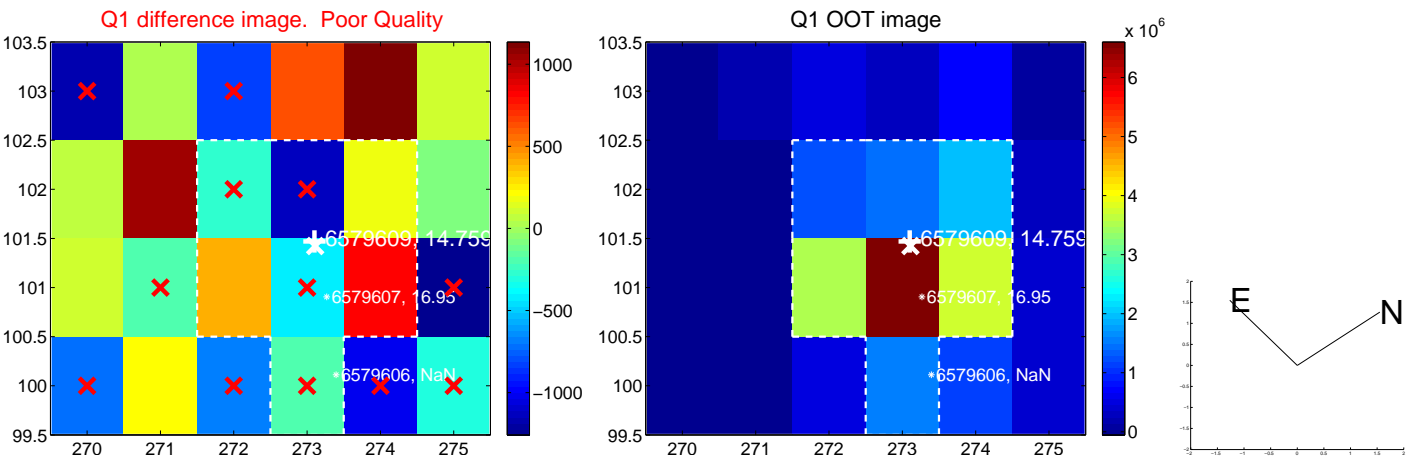
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.432 ± 0.871	6.24	-4.820 ± 1.086	-2.504 ± 0.603
PRF-fit source offset from KIC position	5.126 ± 0.947	5.41	-4.555 ± 1.142	-2.352 ± 0.607
photometric centroid source offset	26.45 ± 22.24	1.19	9.91 ± 20.22	-24.52 ± 22.55

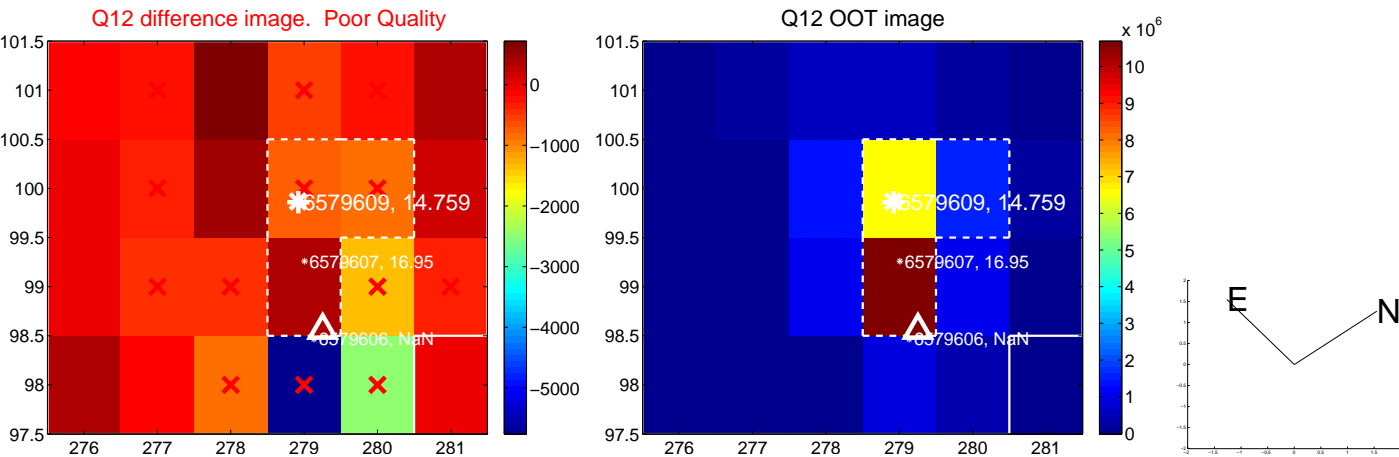
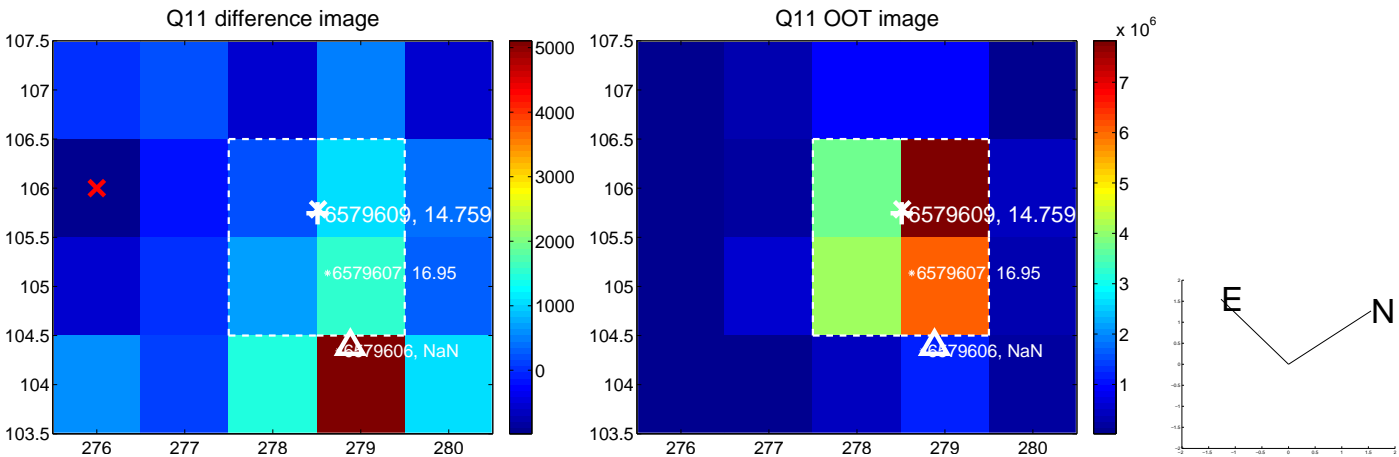
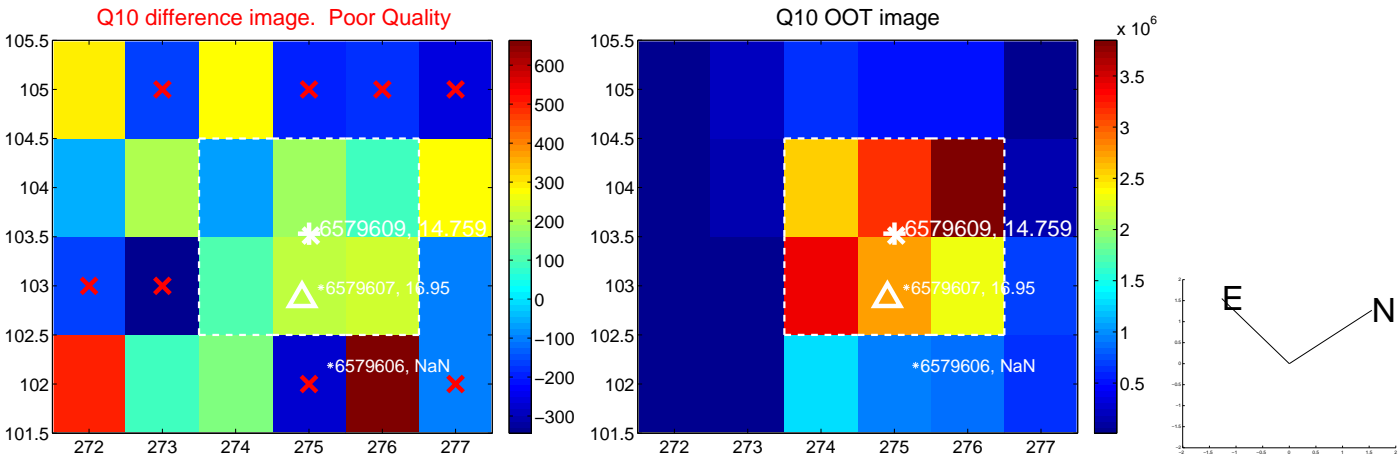
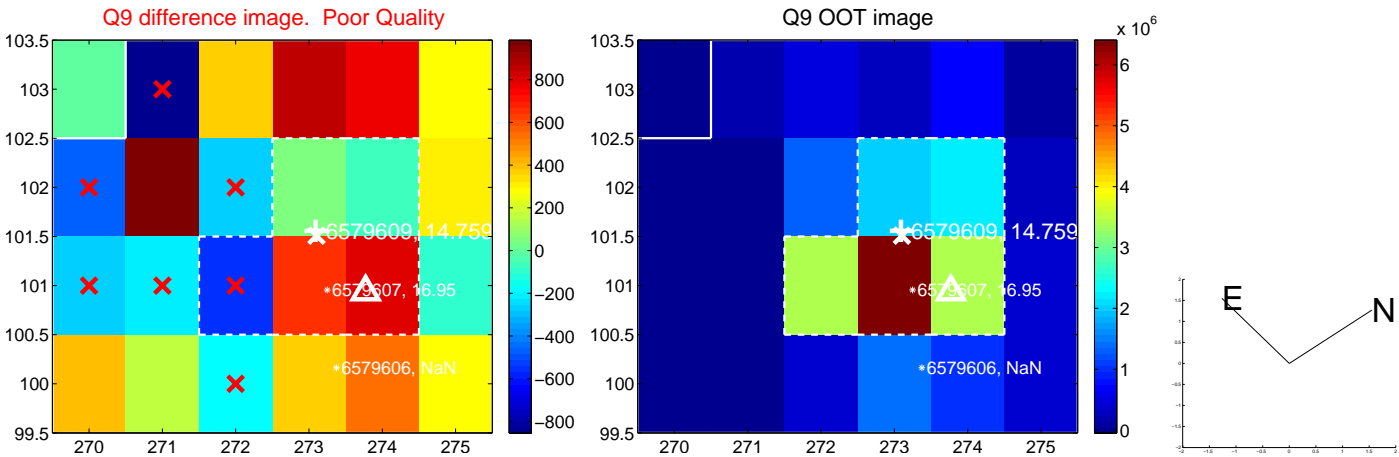


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

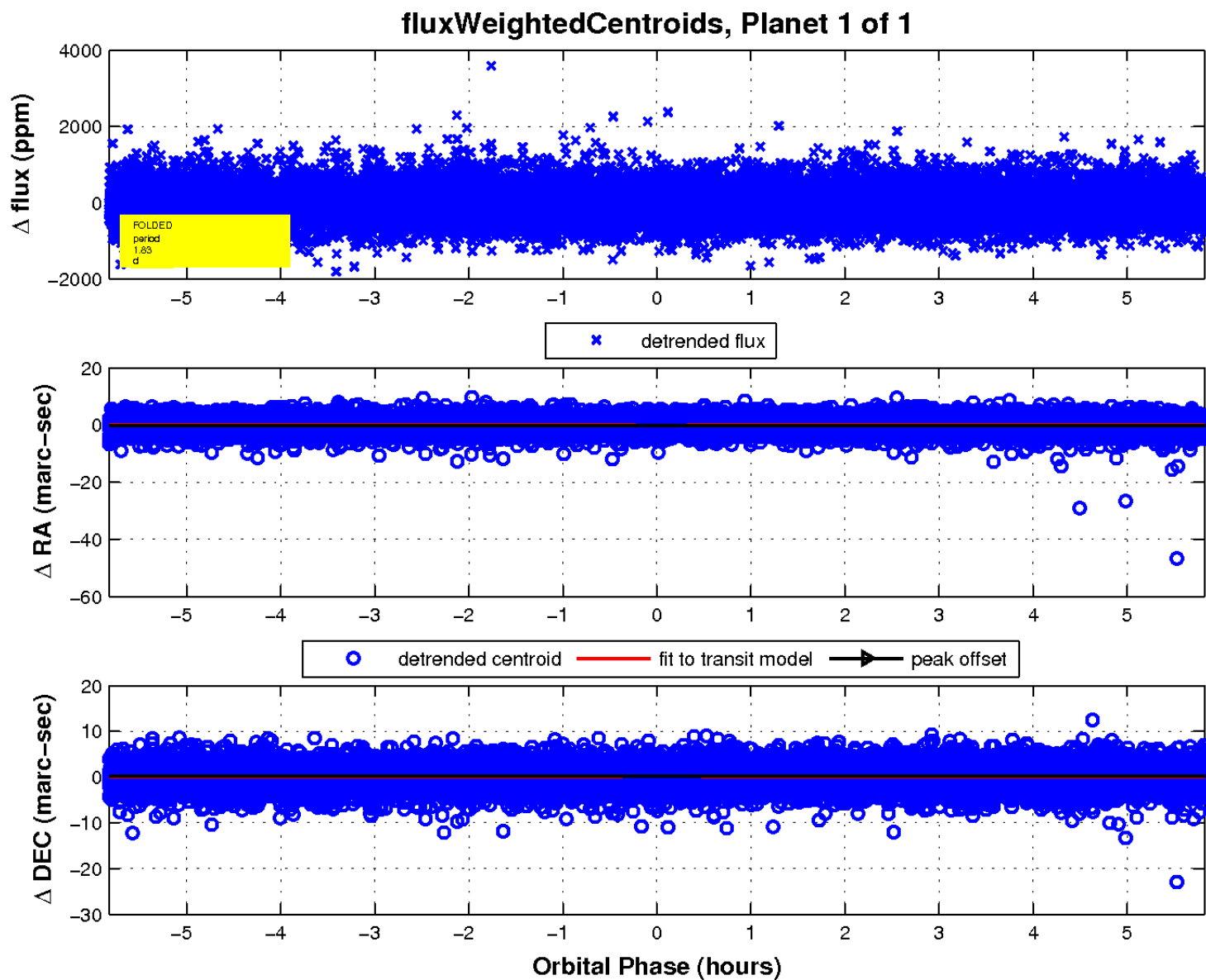
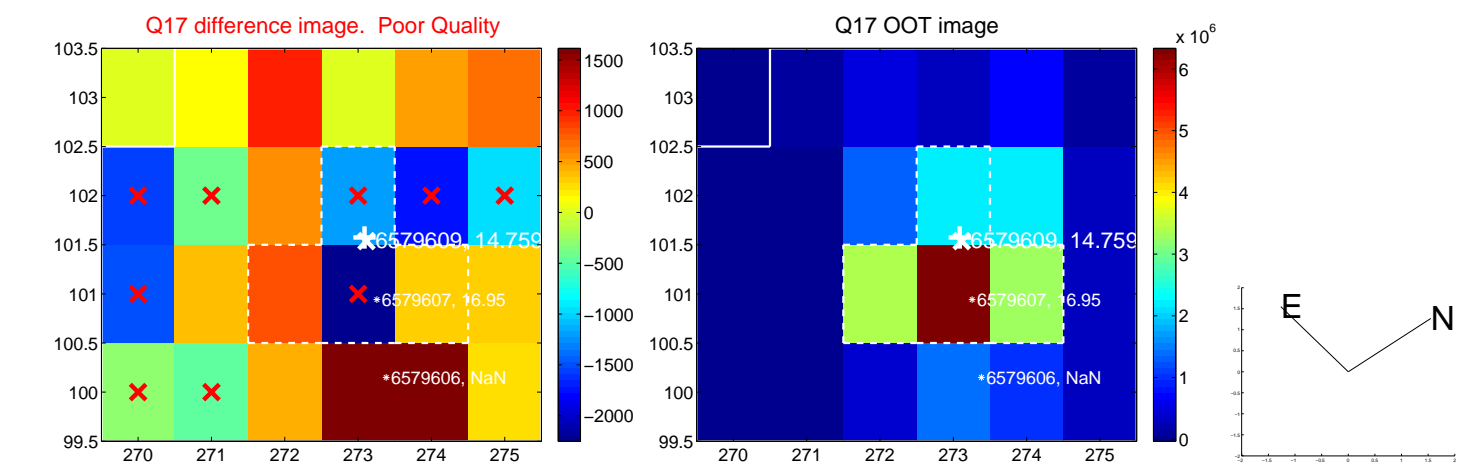
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

