

KIC 006525196

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})
006525196-01	OBS	5293.01	1.710298	131.615955	153073.1	3.973	40705.6	14957.5	1.01	6082	47.45	1703.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006525196-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_DV—MOD_ODDEVEN_ALT—DEEP_V_SHAPED—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 006525196-01

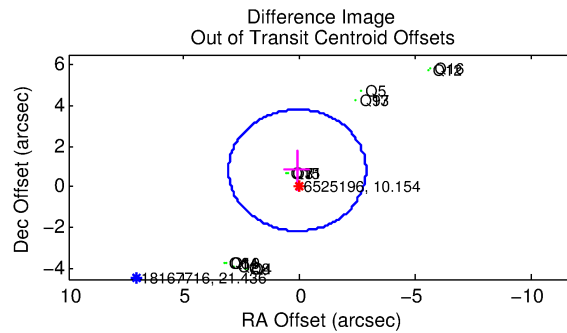
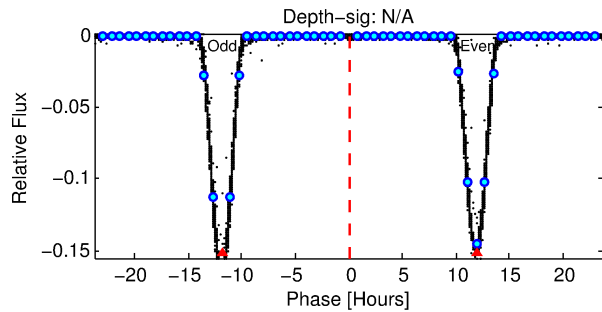
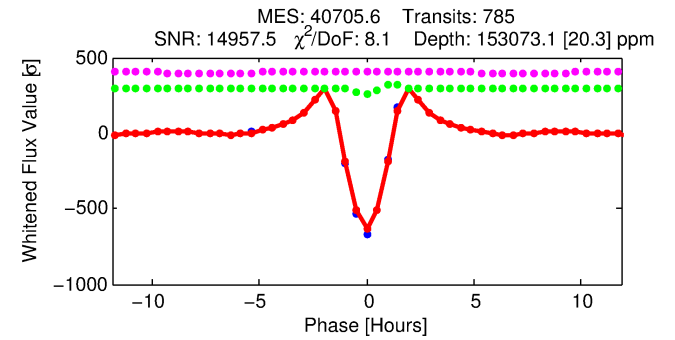
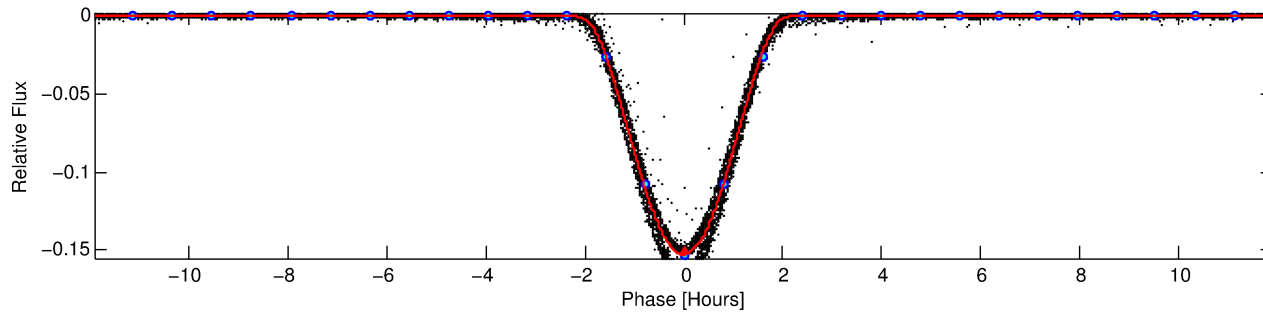
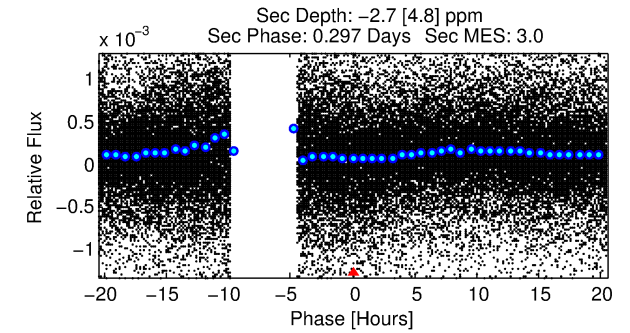
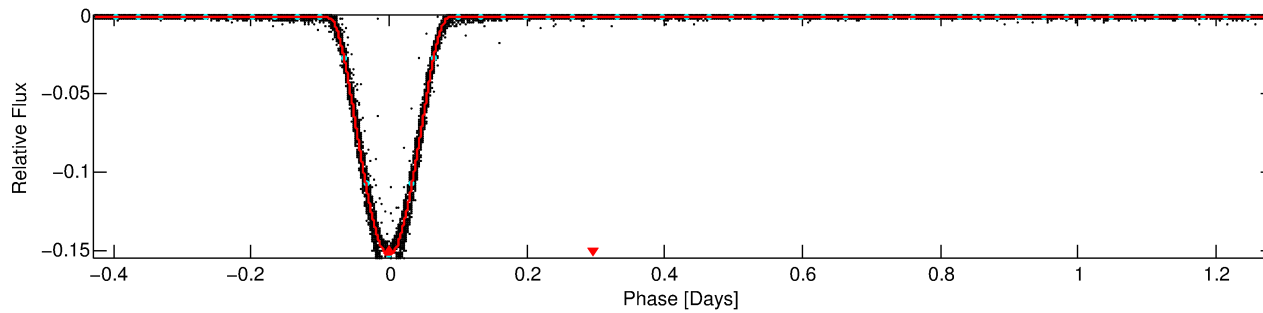
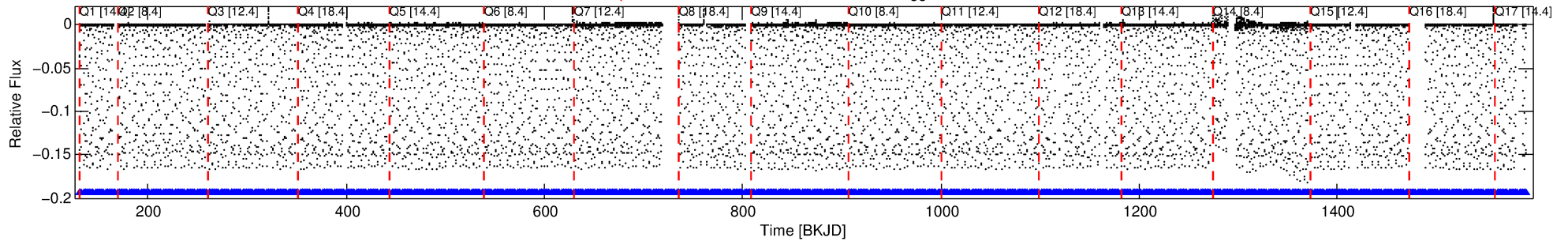
No Significant Match Found

DV One-Page Summary

KIC: 6525196 Candidate: 1 of 1 Period: 1.710 d

KOI: K05293.01 Corr: 0.992

Kp: 10.15 R*: 1.01 Rs Teff: 6082.0 K Logg: 4.38 Fe/H: -0.480



DV Fit Results:

Period = 1.71030 [0.00000] d
Epoch = 131.6160 [0.0000] BKJD
Rp/R* = 0.4323 [0.0005]
a/R* = 4.17 [0.00]
b = 0.74 [0.00]
Seff = 1703.66 [337.69]
Teff = 1638 [81] K
Rp = 47.45 [6.23] Re
a = 0.0270 [0.0033] AU
Ag = N/A
Teffp = N/A

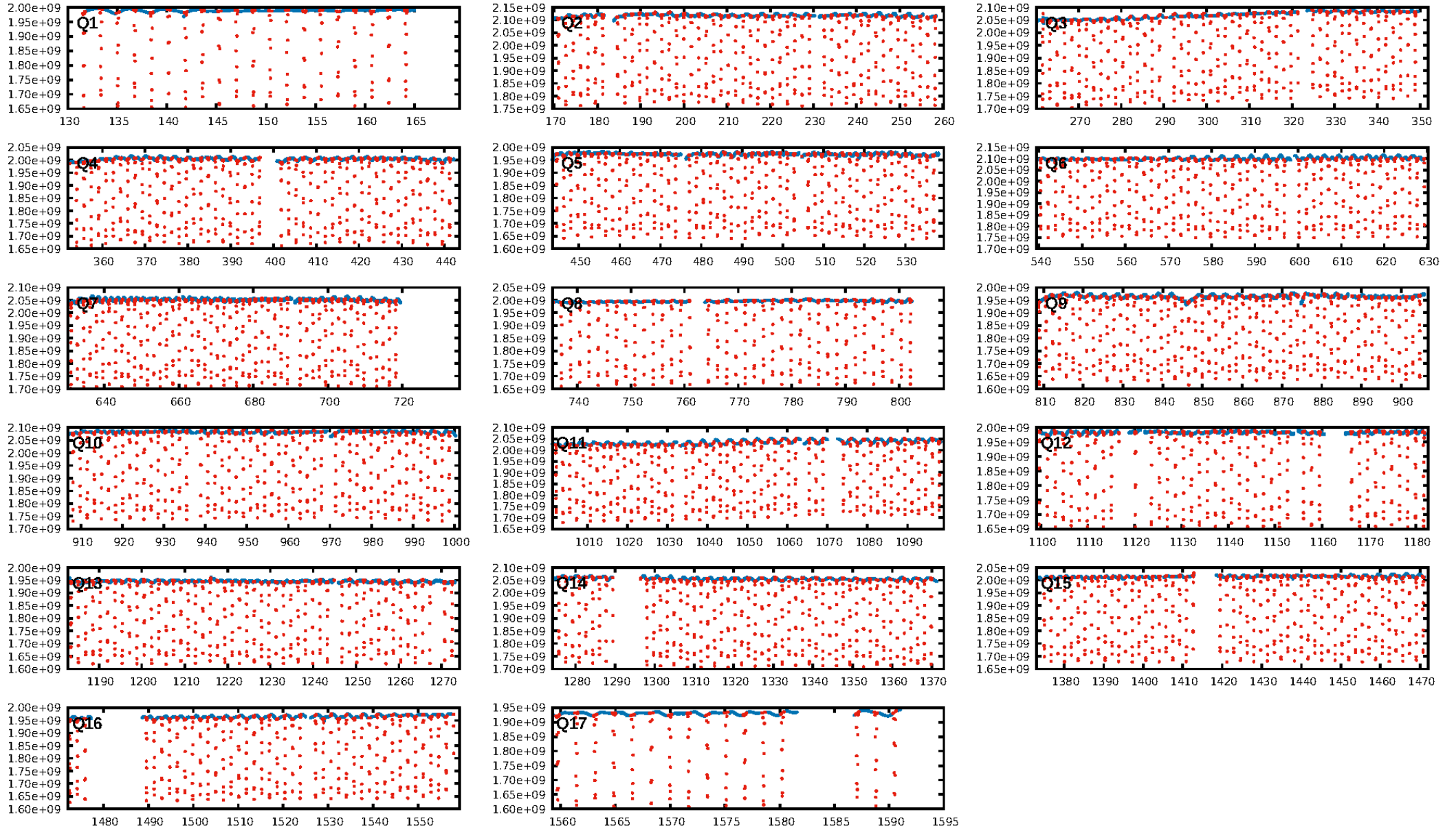
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [749/749]
GhostDiagnostic-chr: 1.853
Centroid-sig: 0.0%
Centroid-so: 0.741 arcsec [4290.15σ]
OotOffset-rm: 0.828 arcsec [0.84σ]
KicOffset-rm: 0.321 arcsec [0.40σ]
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]

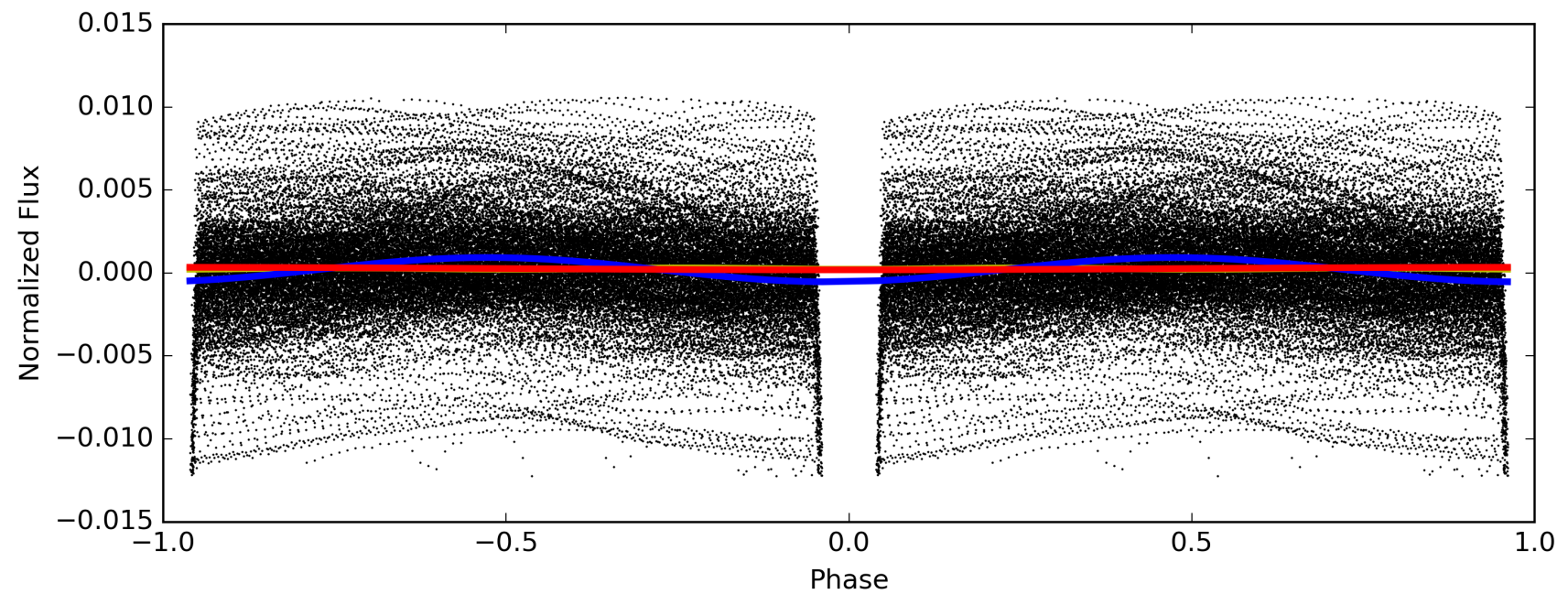
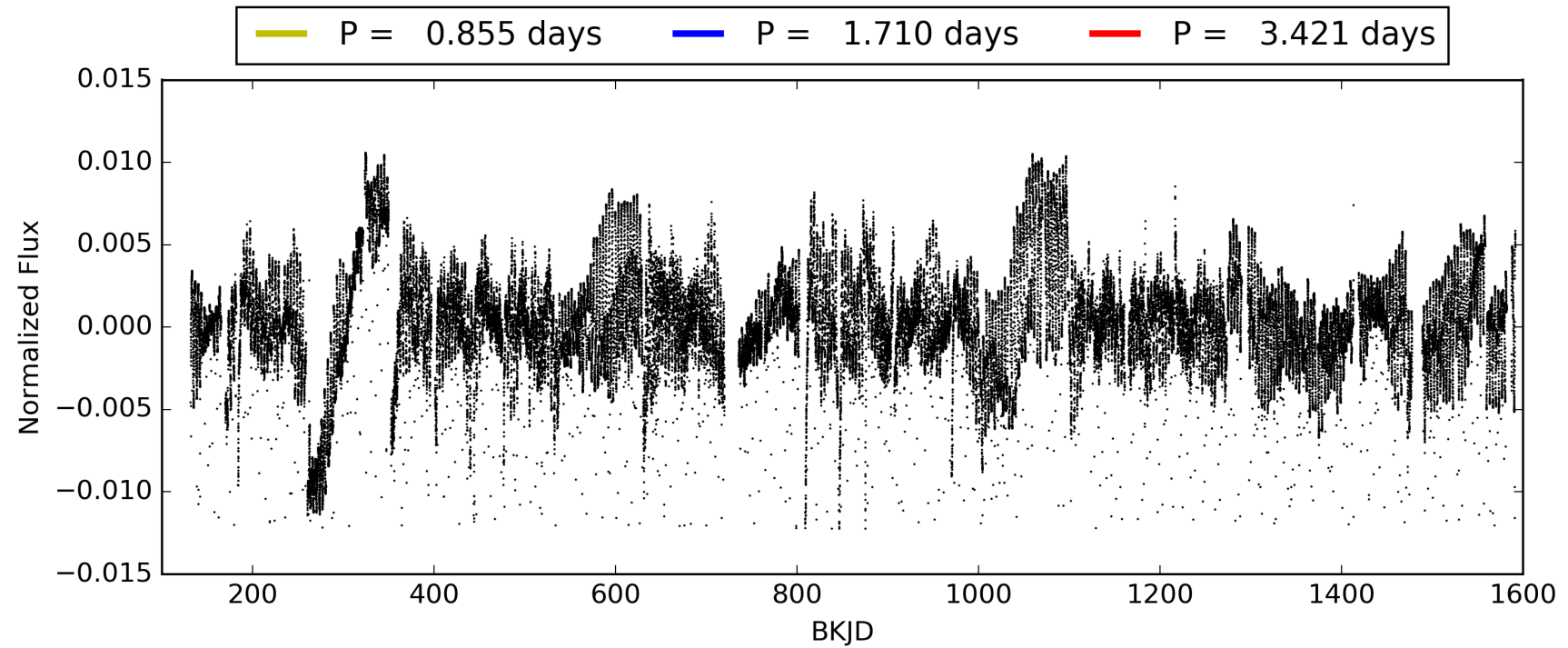
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:58:28 Z

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

TCE 006525196-01, PDC Light Curves

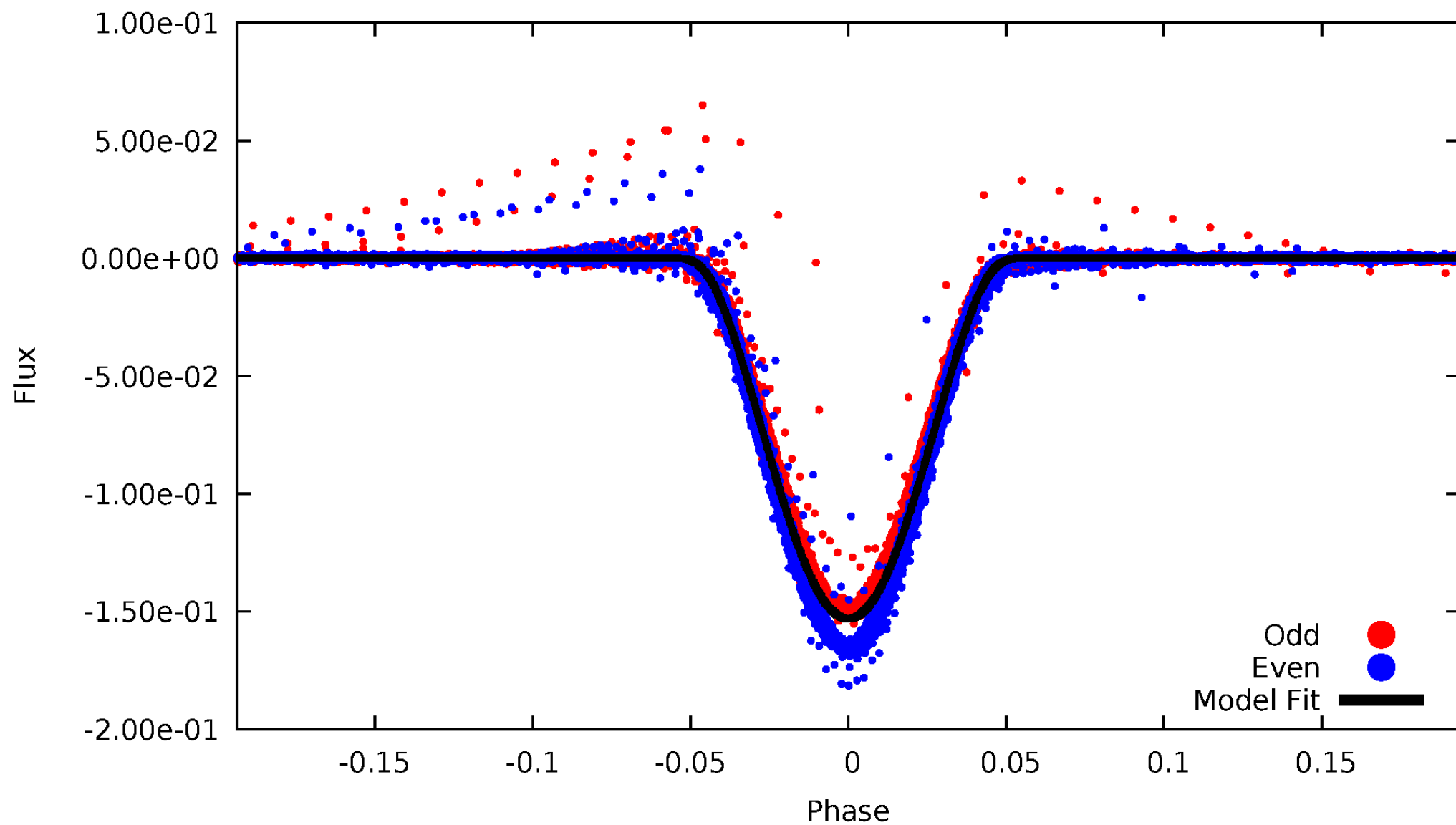


TCE 006525196-01



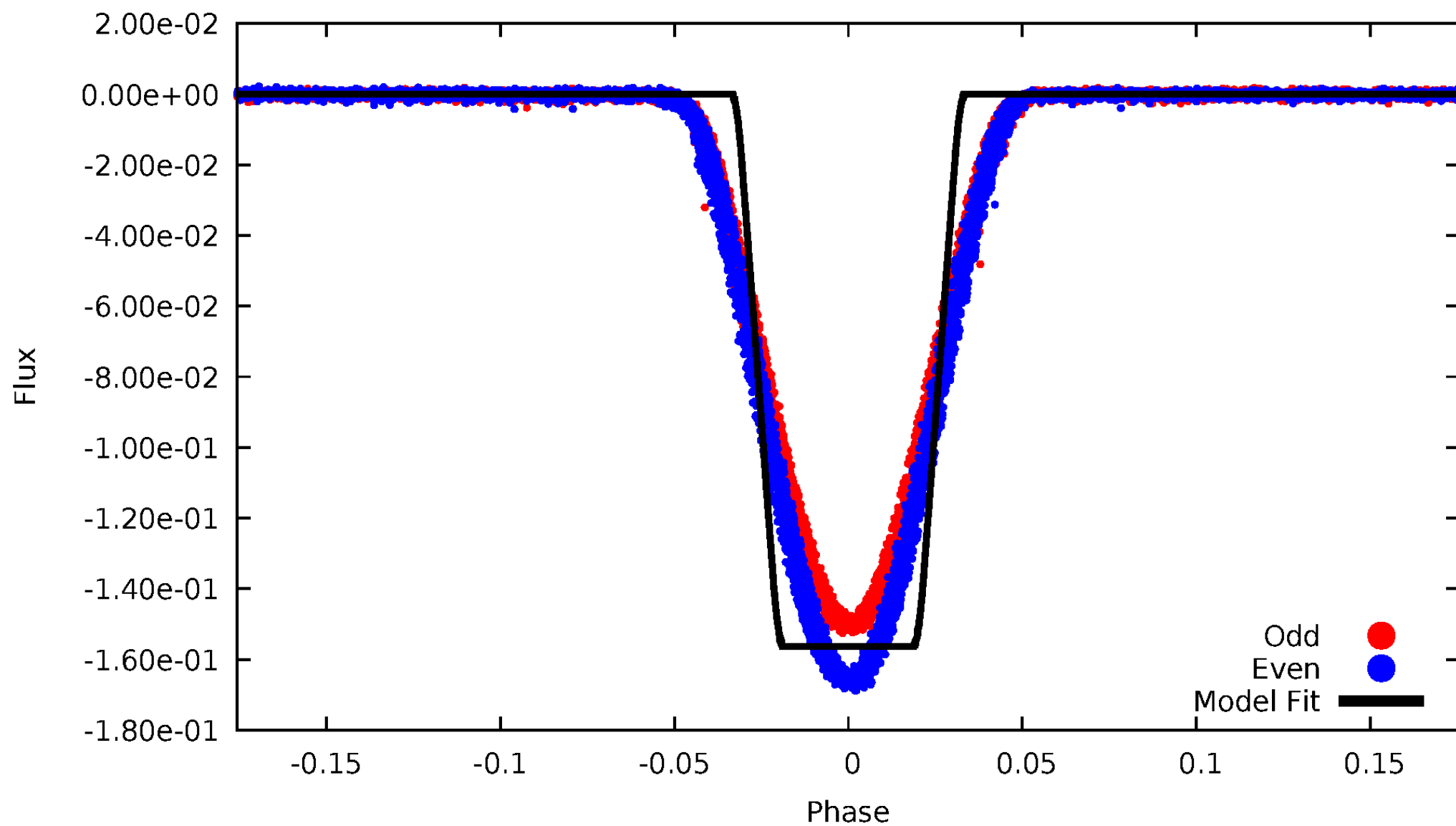
DV Odd/Even

TCE 006525196-01



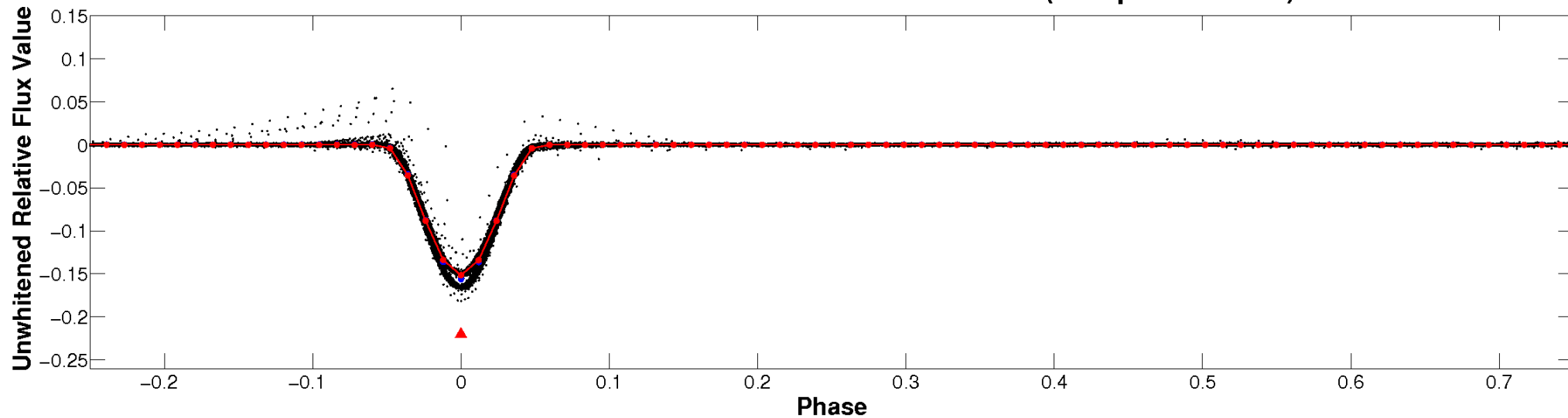
ALT Odd/Even

TCE 006525196-01

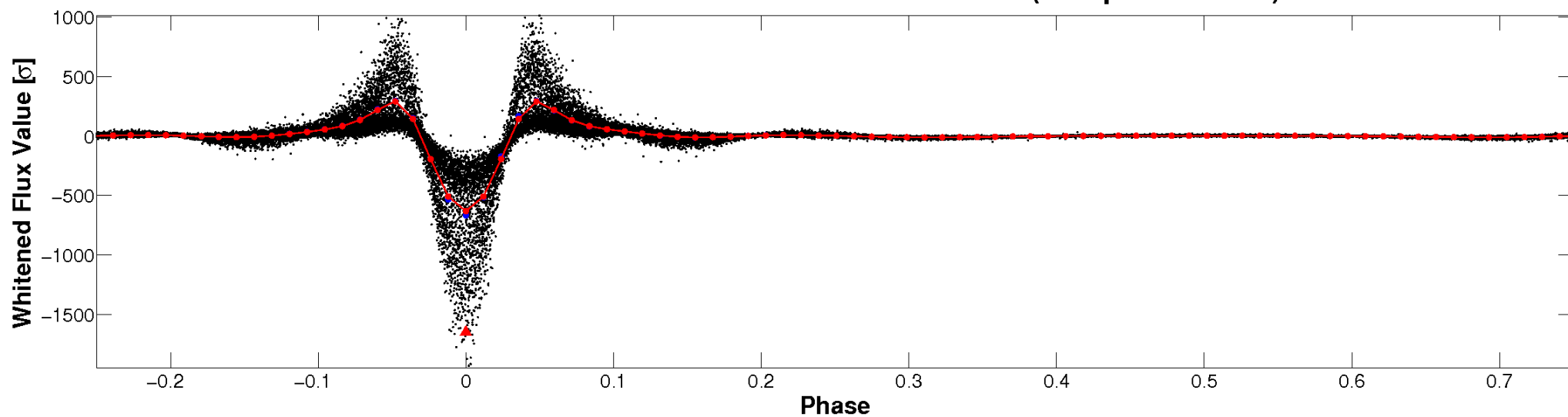


Non-Whitened Vs. Whitened Light Curve

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

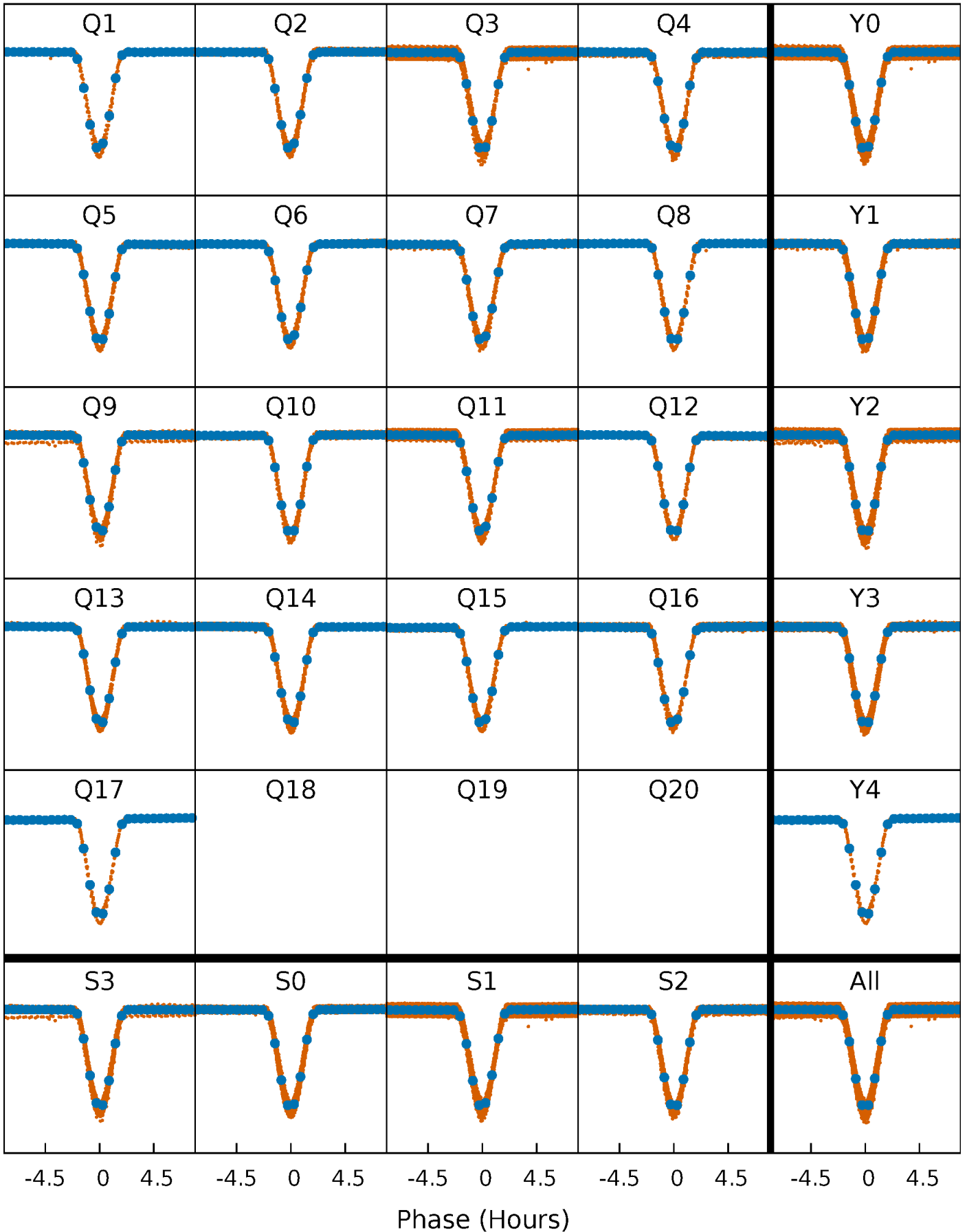


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



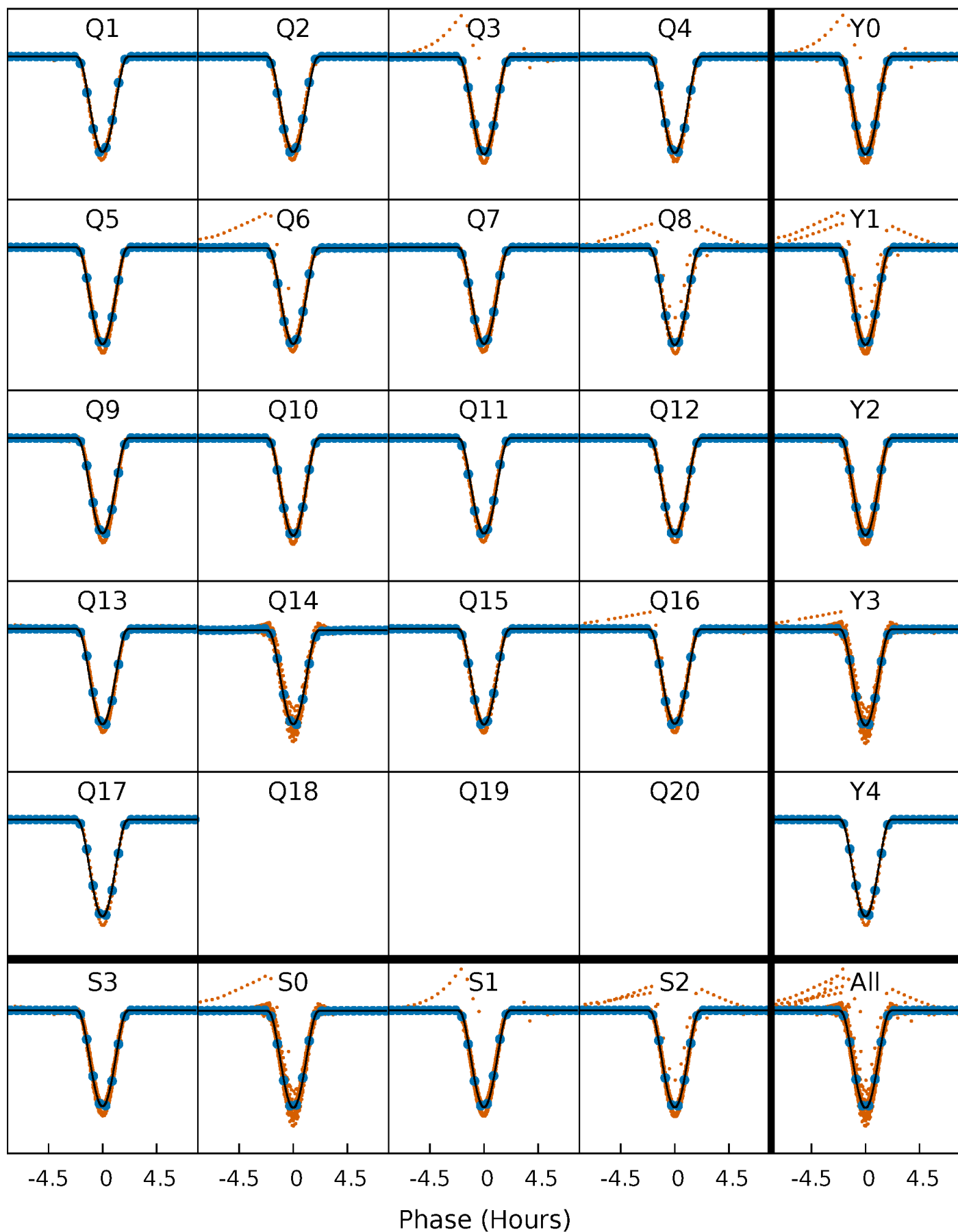
PDC Quarter-Phased Transit Curves

TCE 006525196-01 P= 1.710298 Days $T_0=131.615955$ (BKJD)



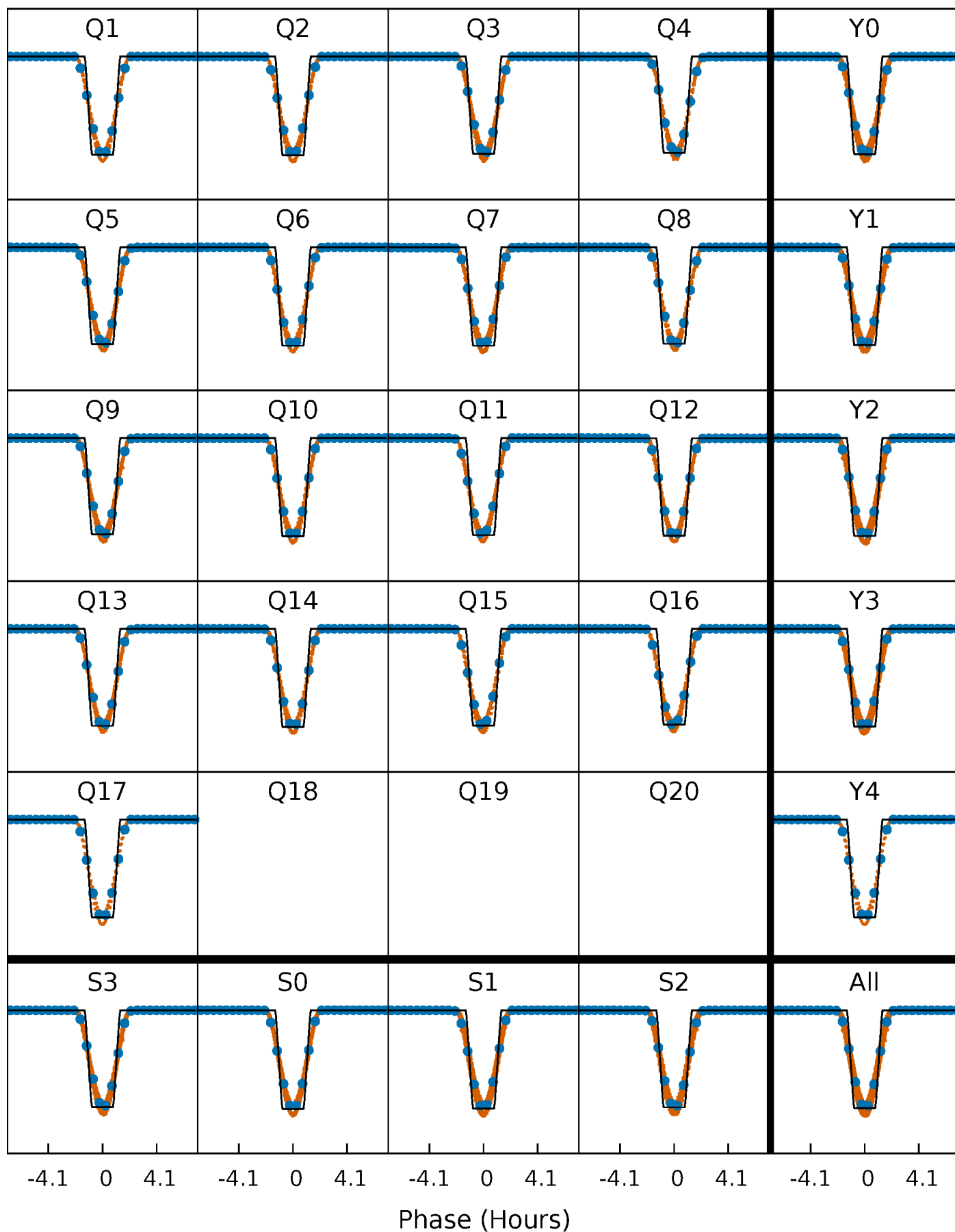
DV Quarter-Phased Transit Curves

TCE 006525196-01 P= 1.710298 Days $T_0=131.615955$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

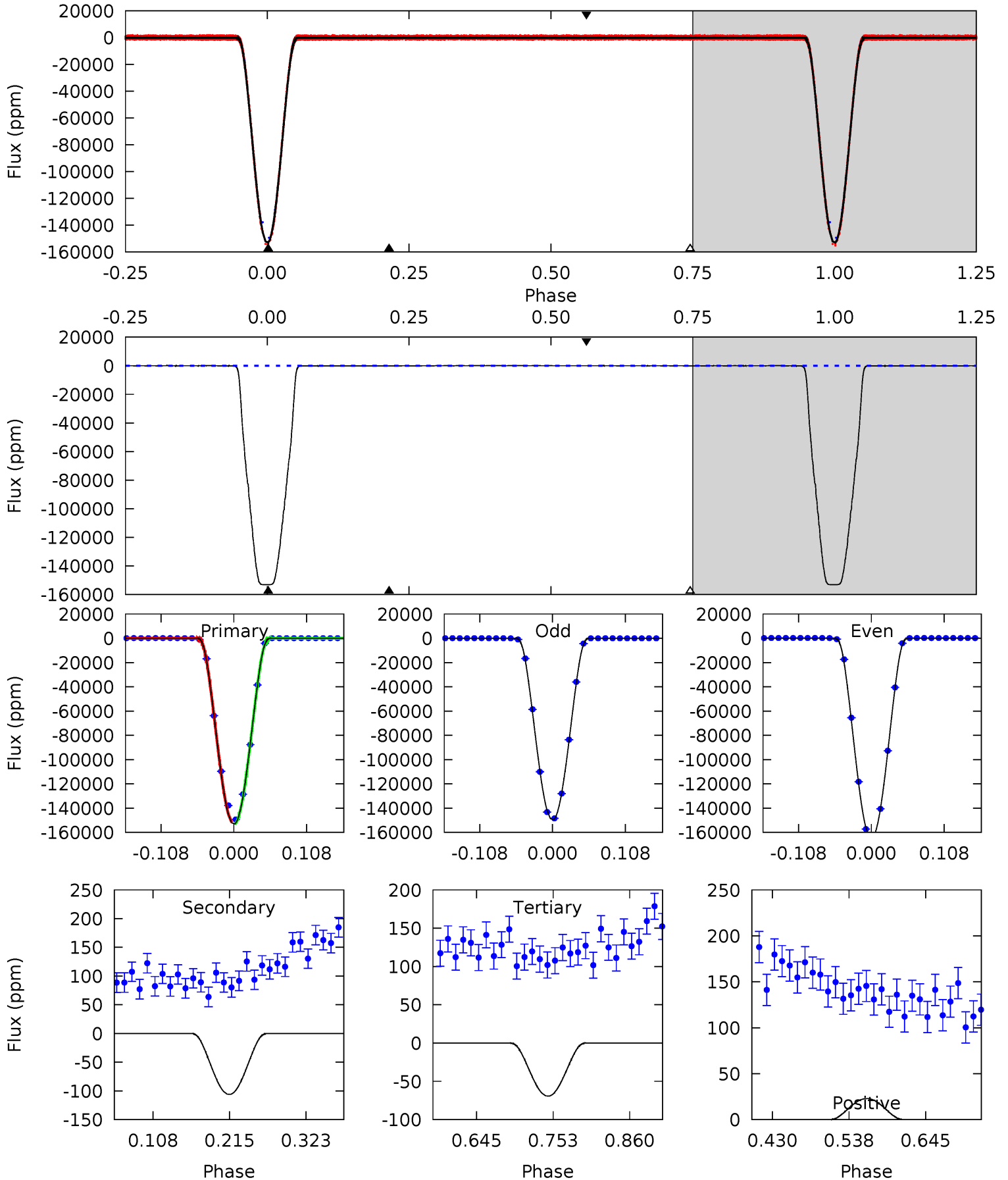
TCE 006525196-01 P= 1.710303 Days $T_0=131.612787$ (BKJD)



DV Model-Shift Uniqueness Test

006525196-01, P = 1.710298 Days, E = 129.905657 Days

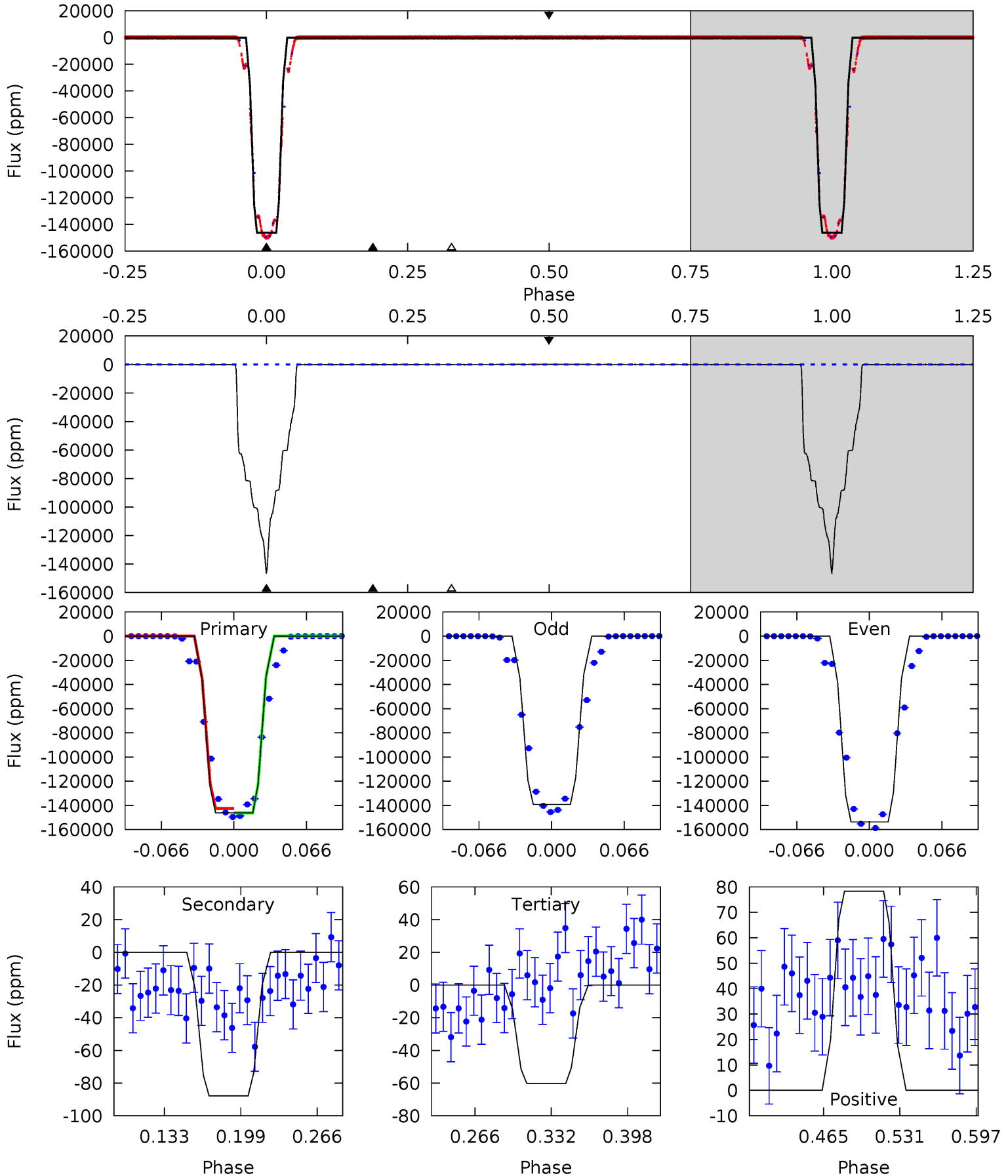
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14166	9.83	6.42	2.12	4.55	1.61	3.39	14160	14164	3.41	7.71	764.7	1.00	0.00	0



Alt Model-Shift Uniqueness Test

006525196-01, P = 1.710303 Days, E = 129.902484 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8791	5.27	3.61	4.71	4.65	1.84	1.69	8787	8786	1.66	0.57	446.9	1.01	0.00	0



Stellar Parameters For KIC 006525196

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6082^{+79}_{-85}	$4.385^{+0.110}_{-0.110}$	$-0.480^{+0.150}_{-0.150}$	$1.006^{+0.132}_{-0.119}$	$0.896^{+0.057}_{-0.051}$	$1.241^{+0.565}_{-0.386}$
	+1%/-1%	+3%/-3%	+31%/-31%	+13%/-12%	+6%/-6%	+46%/-31%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 006525196-01 / KOI 5293.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-106 ± 11	$47.57^{+3.77}_{-3.38}$	2292^{+89}_{-88}	-2651^{+55}_{-55}	$0.019^{+0.003}_{-0.003}$
Alt.	-88 ± 17	$43.35^{+3.68}_{-3.09}$	2292^{+92}_{-93}	-2651^{+60}_{-59}	$0.019^{+0.005}_{-0.004}$

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

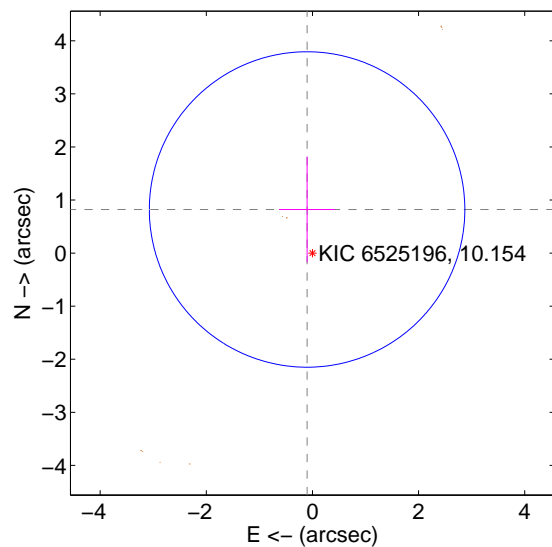
Supplemental centroid analysis for 006525196-01. **Kepler magnitude: 10.15.** Transit SNR 14957.53

There are 0 quarters with good PRF difference image offsets

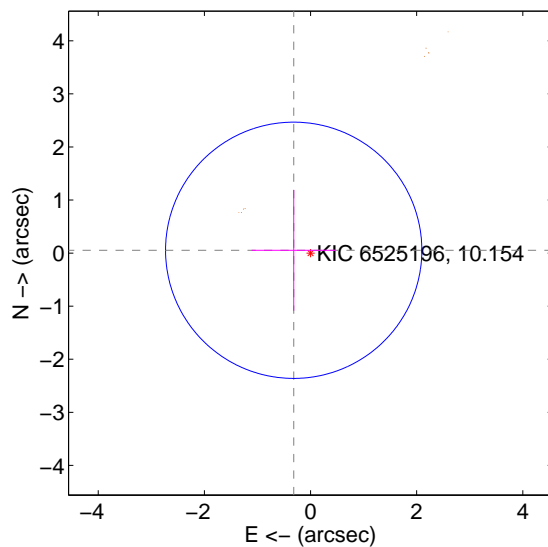
The direct PRF centroid is offset from the target star catalog position by about 0.54 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.828 ± 0.991	0.84	0.101 ± 0.528	0.822 ± 0.996
PRF-fit source offset from KIC position	0.321 ± 0.805	0.40	0.317 ± 0.793	0.053 ± 1.139
photometric centroid source offset	0.74 ± 0.00	4290.15	0.25 ± 0.00	-0.70 ± 0.00

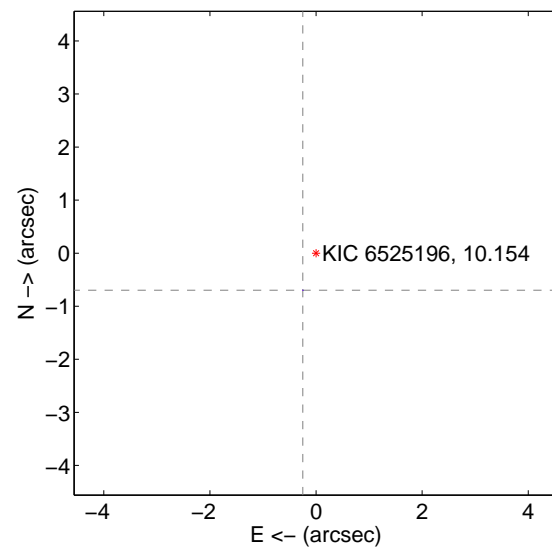
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

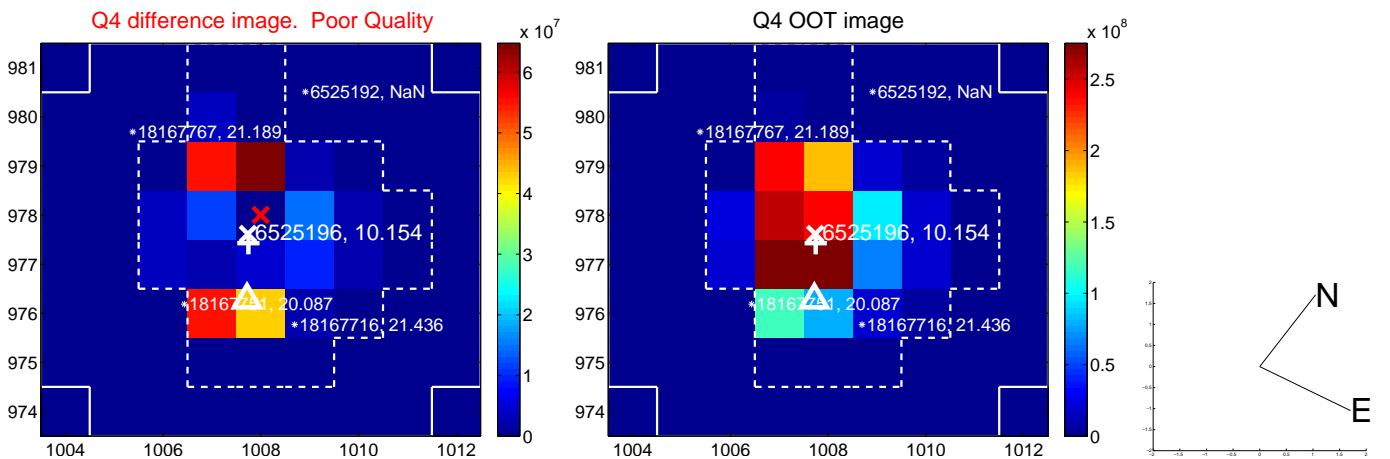
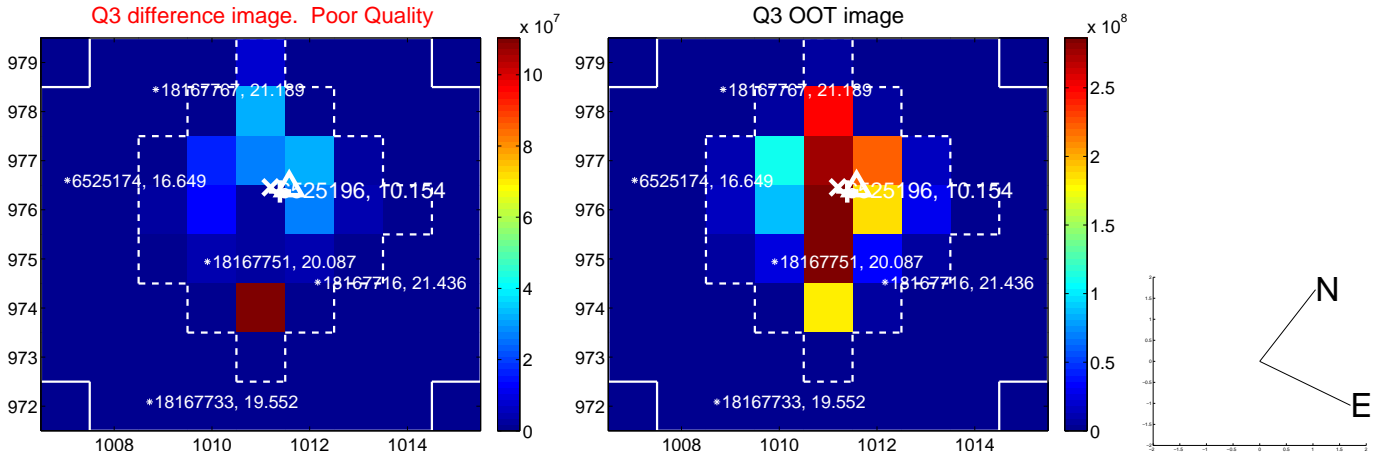
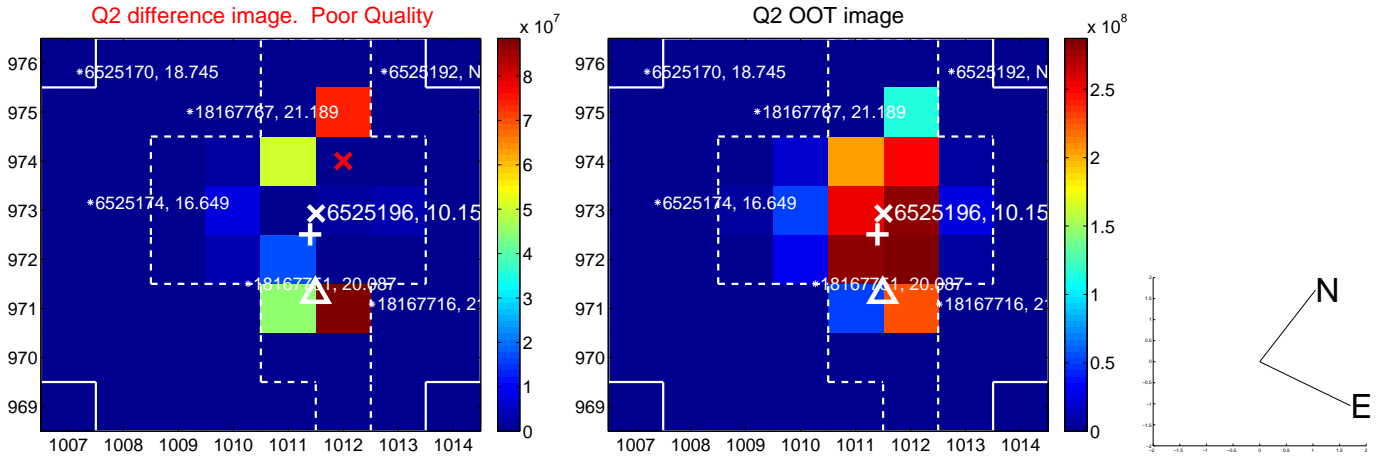
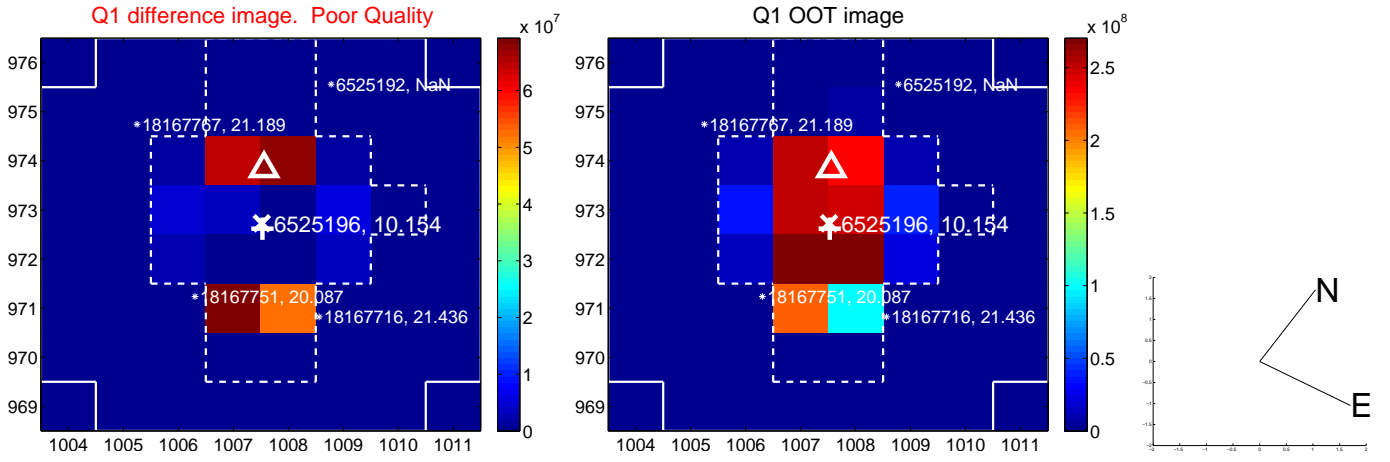


offset from photometric centroids

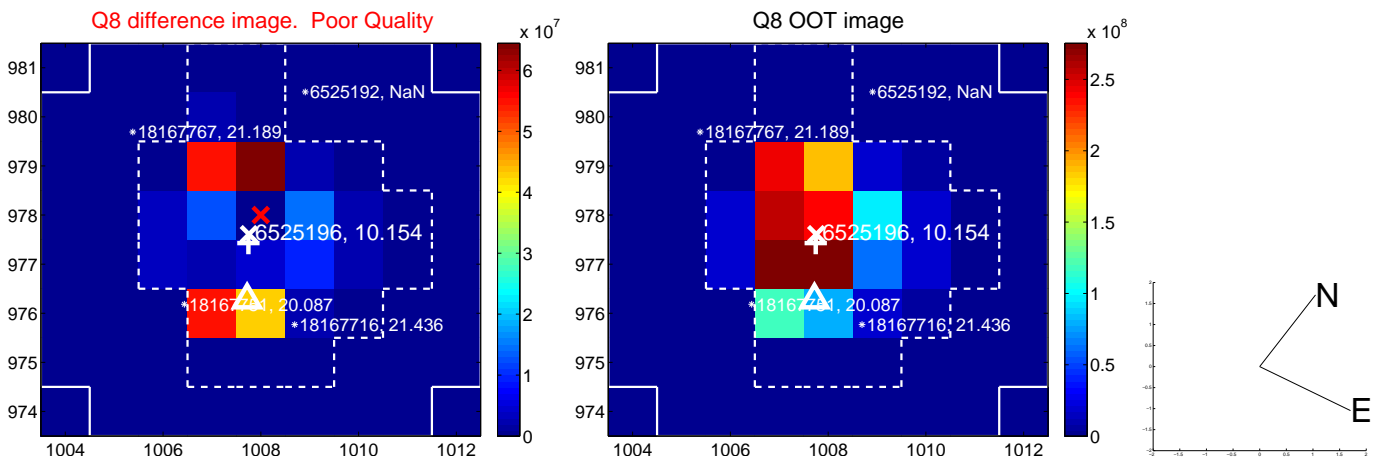
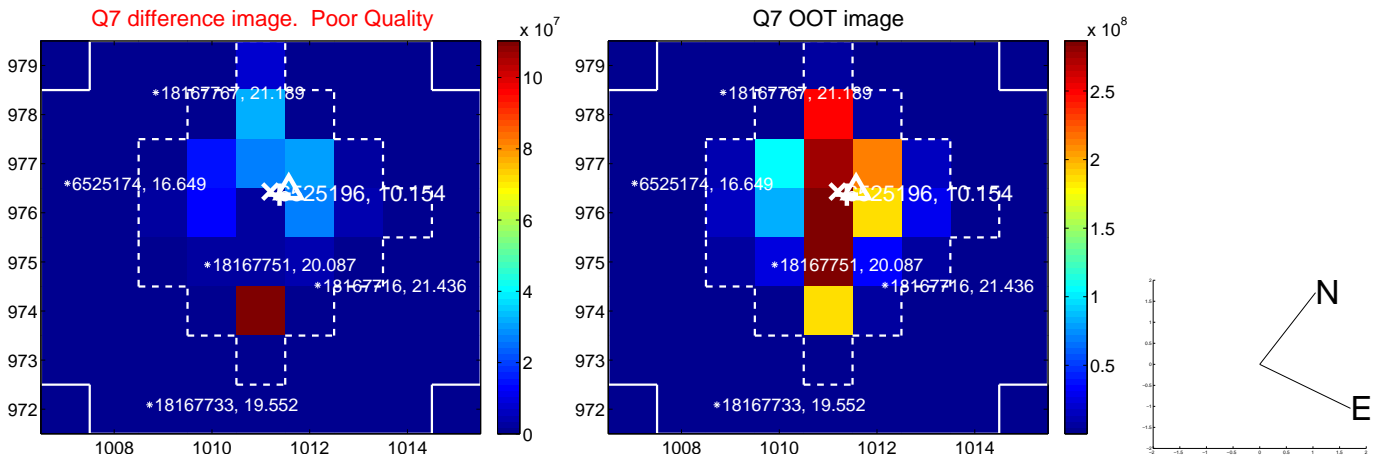
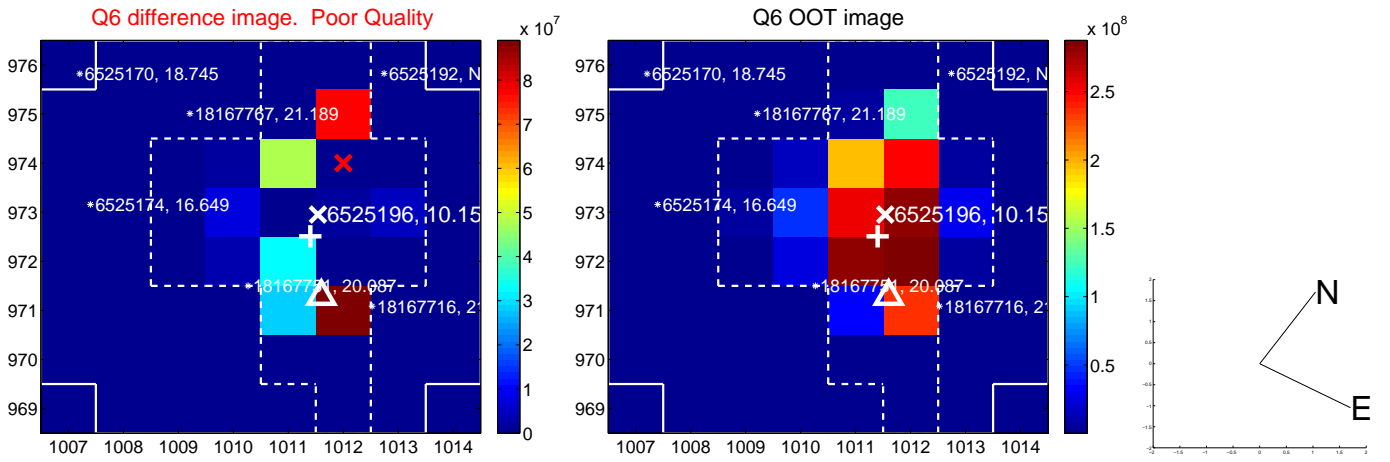
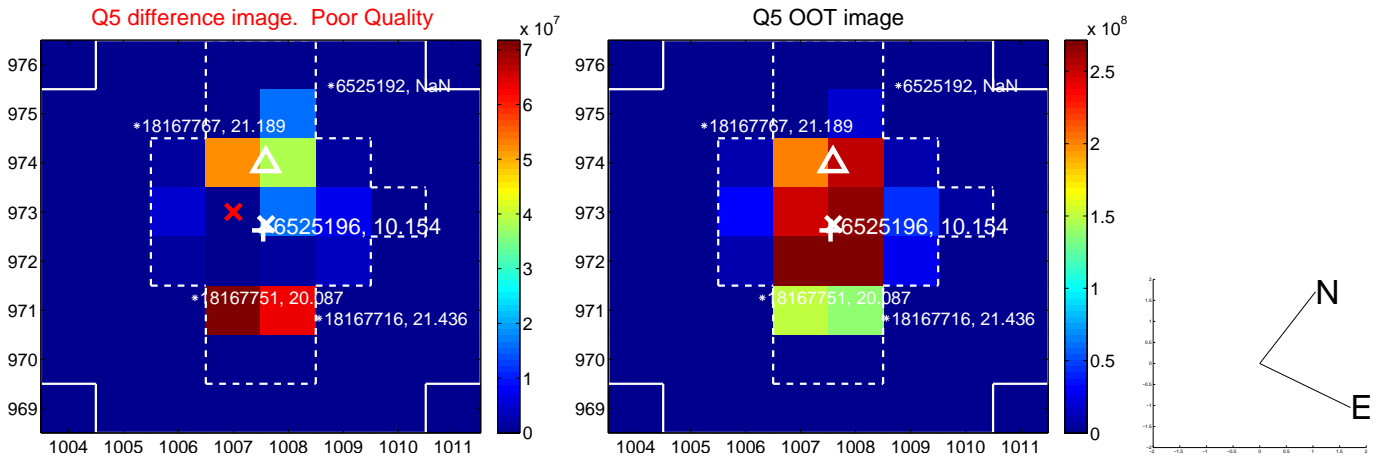


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

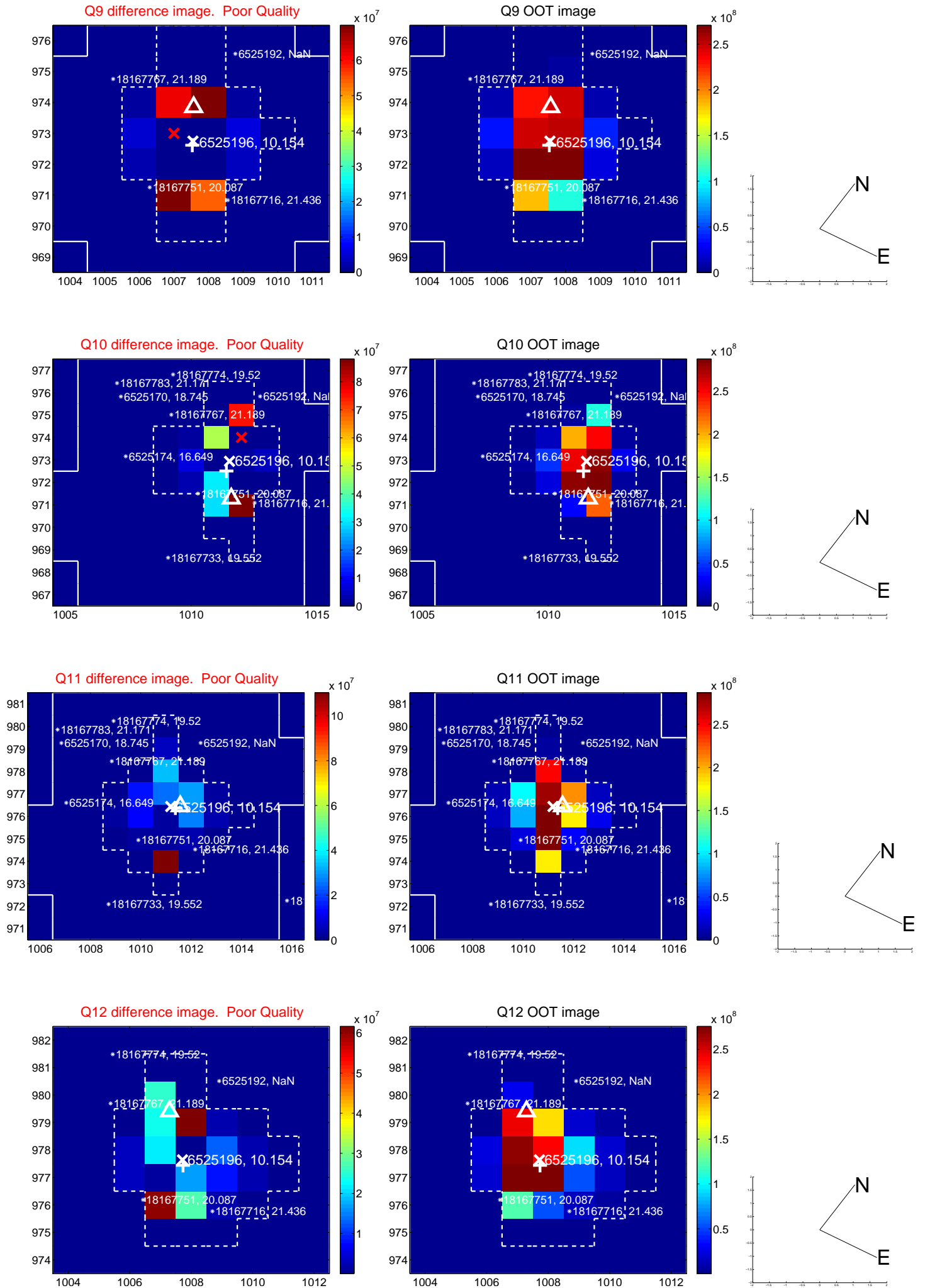
white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



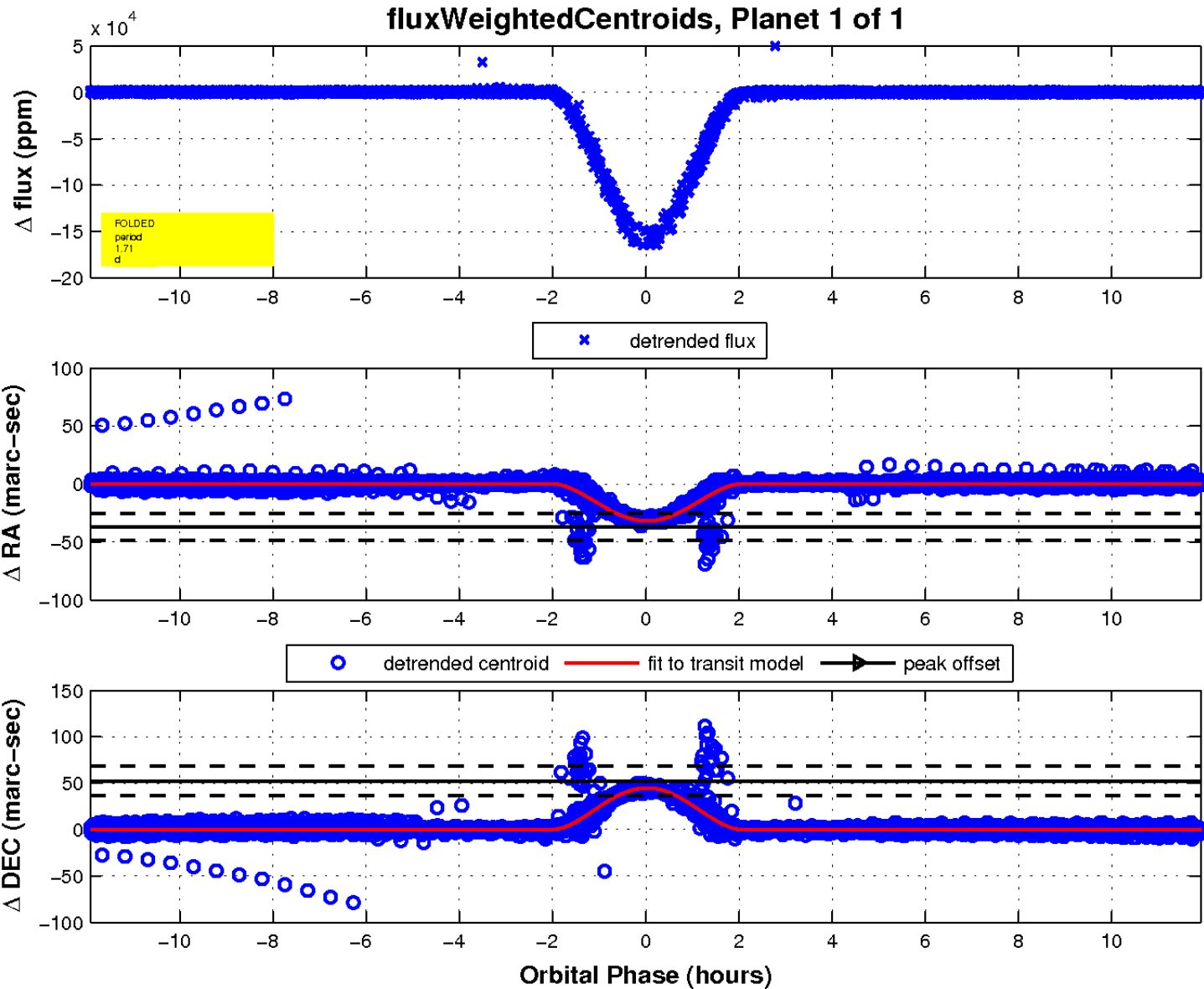
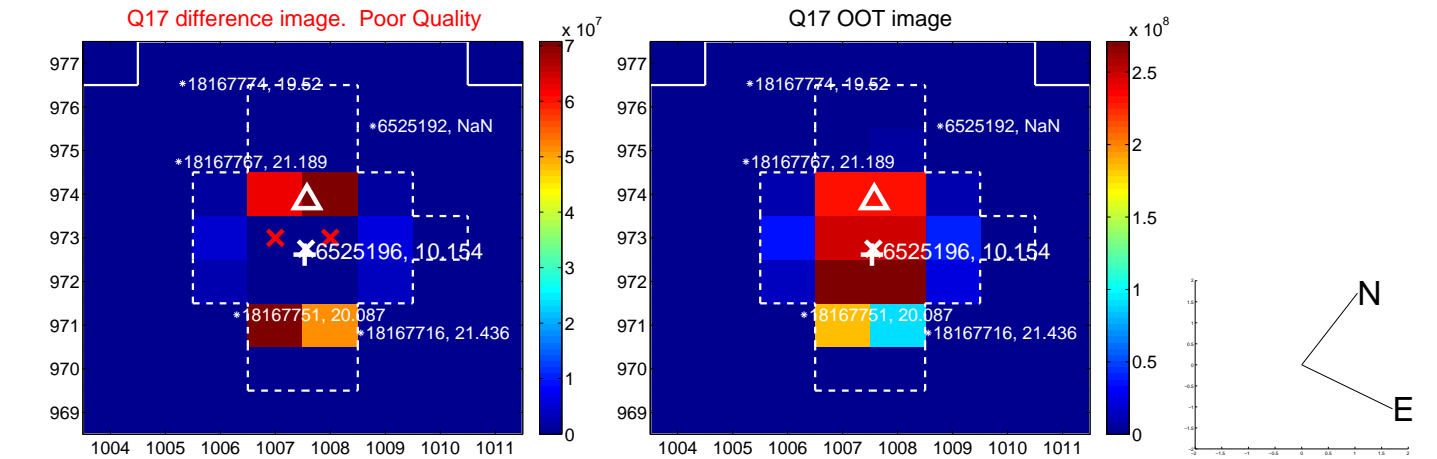
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

