

KIC 001161345

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})
001161345-01	OBS	0984.01	4.287651	133.417057	850.3	1.319	116.7	114.9	0.81	5296	3.71	186.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001161345-01	OBS	PC	0.71	0	0	0	0	NO_COMMENT

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.

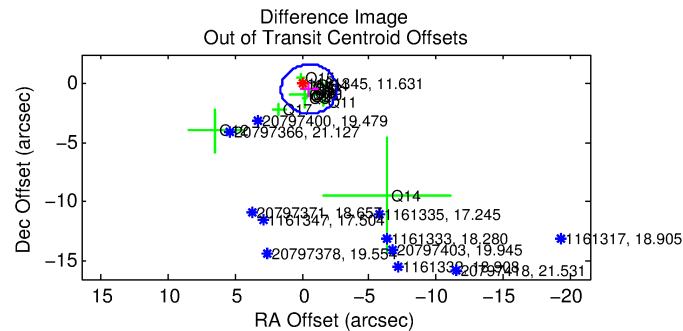
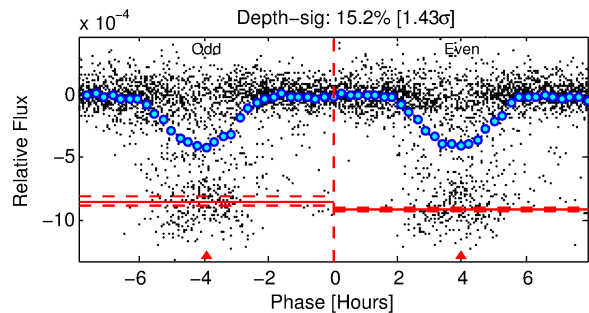
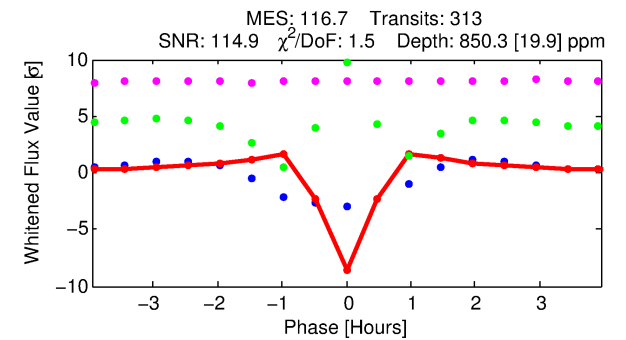
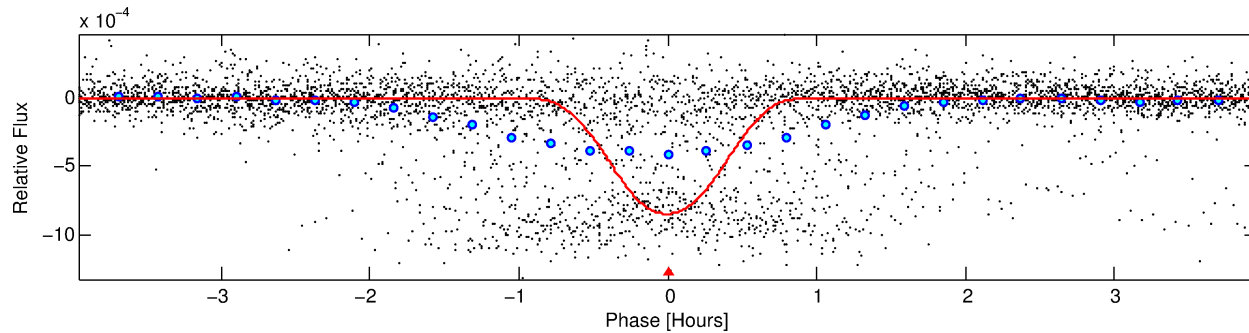
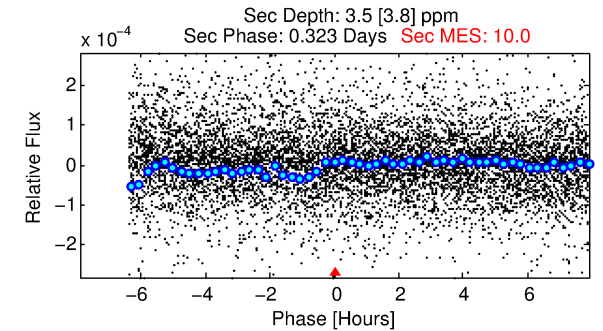
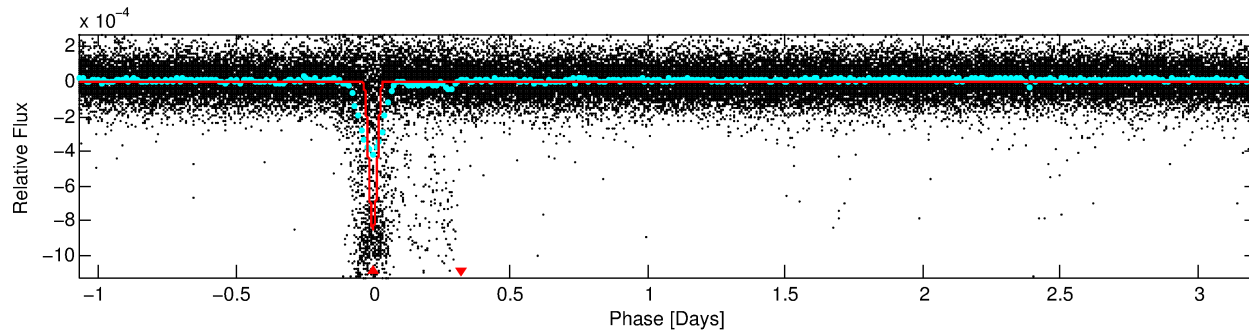
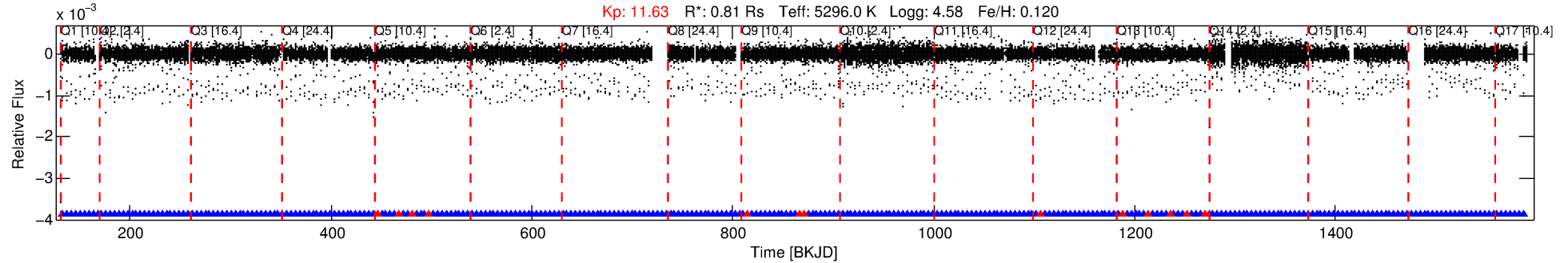
Ephemeris Match Information For 001161345-01

No Significant Match Found

DV One-Page Summary

KIC: 1161345 Candidate: 1 of 1 Period: 4.288 d

KOI: K00984 Corr: No Ephemeris Match



DV Fit Results:

Period = 4.28765 [0.00000] d
Epoch = 133.4171 [0.0002] BKJD
Rp/R* = 0.0417 [0.0093]
a/R* = 9.08 [0.91]
b = 0.98 [0.02]
Seff = 186.42 [30.97]
Teq = 942 [39] K
Rp = 3.71 [0.90] Re
a = 0.0501 [0.0046] AU
Ag = 0.35 [0.42] [-1.54 σ]
Teffp = 1122 [334] K [0.53 σ]

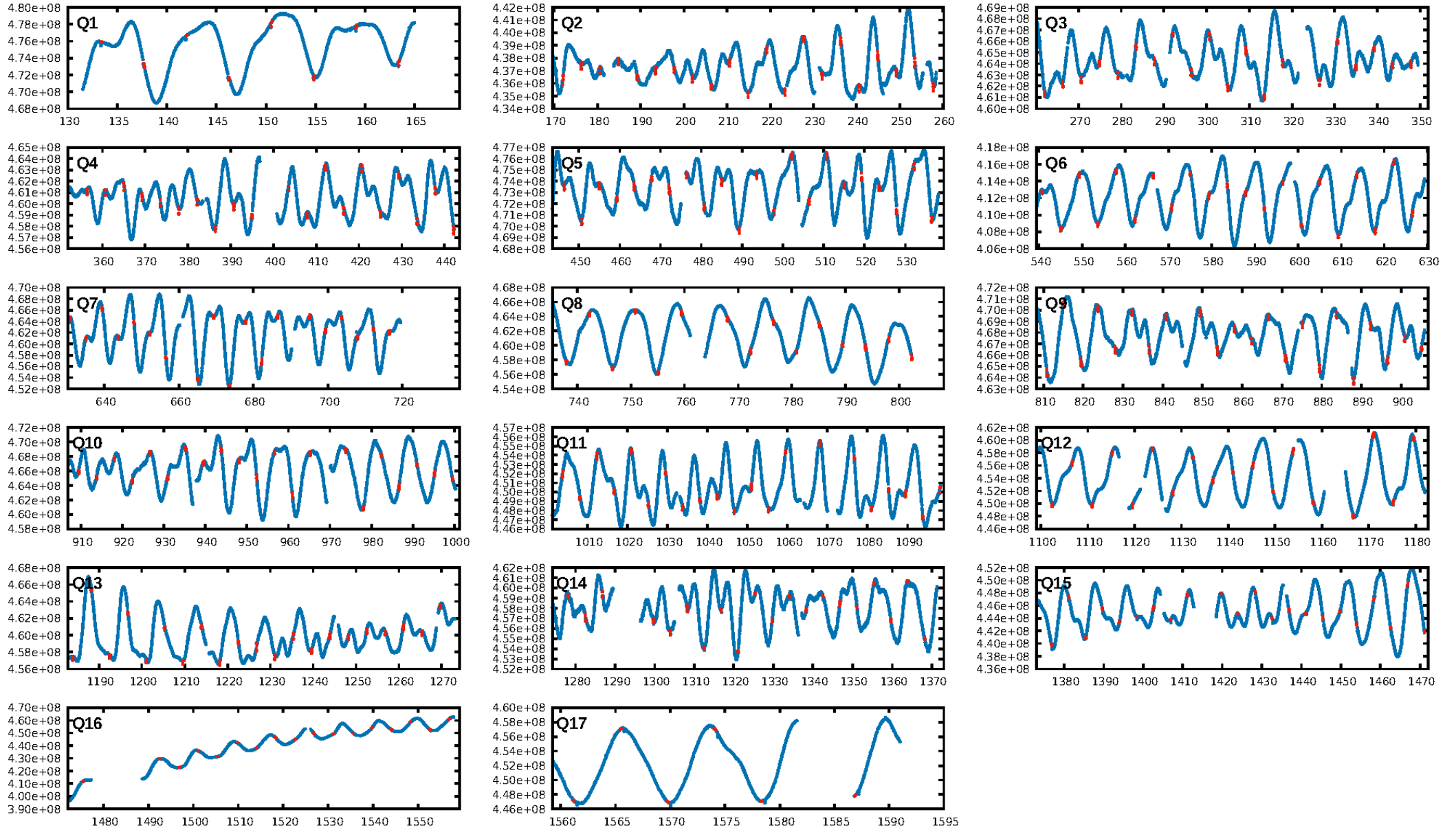
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.96 [286/299]
GhostDiagnostic-chr: 2.55
Centroid-sig: 0.0%
Centroid-so: 0.574 arcsec [6.19 σ]
OotOffset-rm: 0.677 arcsec [0.97 σ]
KicOffset-rm: 0.801 arcsec [1.30 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.69 [11/16]
DiffImageOverlap-fno: 1.00 [17/17]

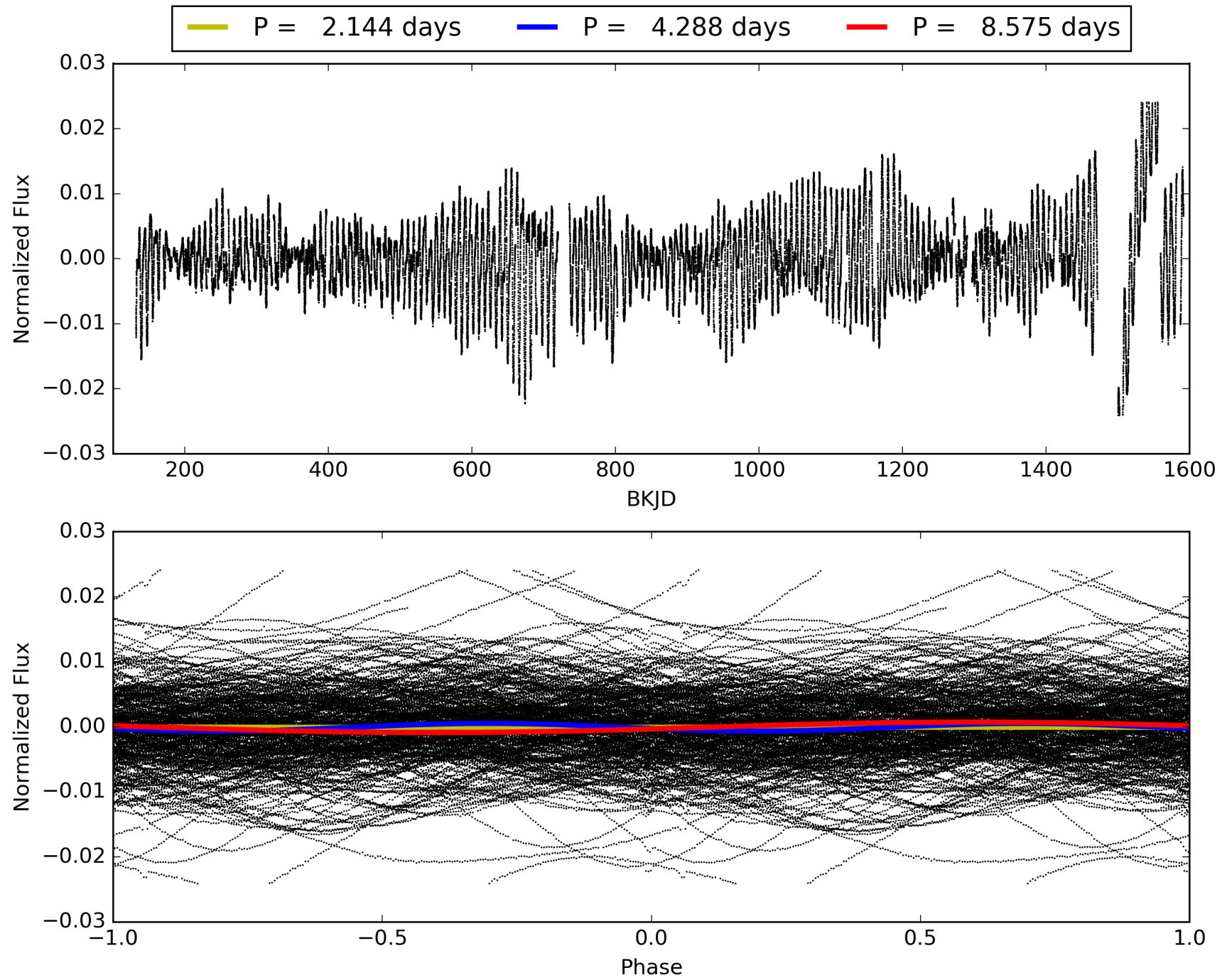
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 10:15:01 Z

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

TCE 001161345-01, PDC Light Curves

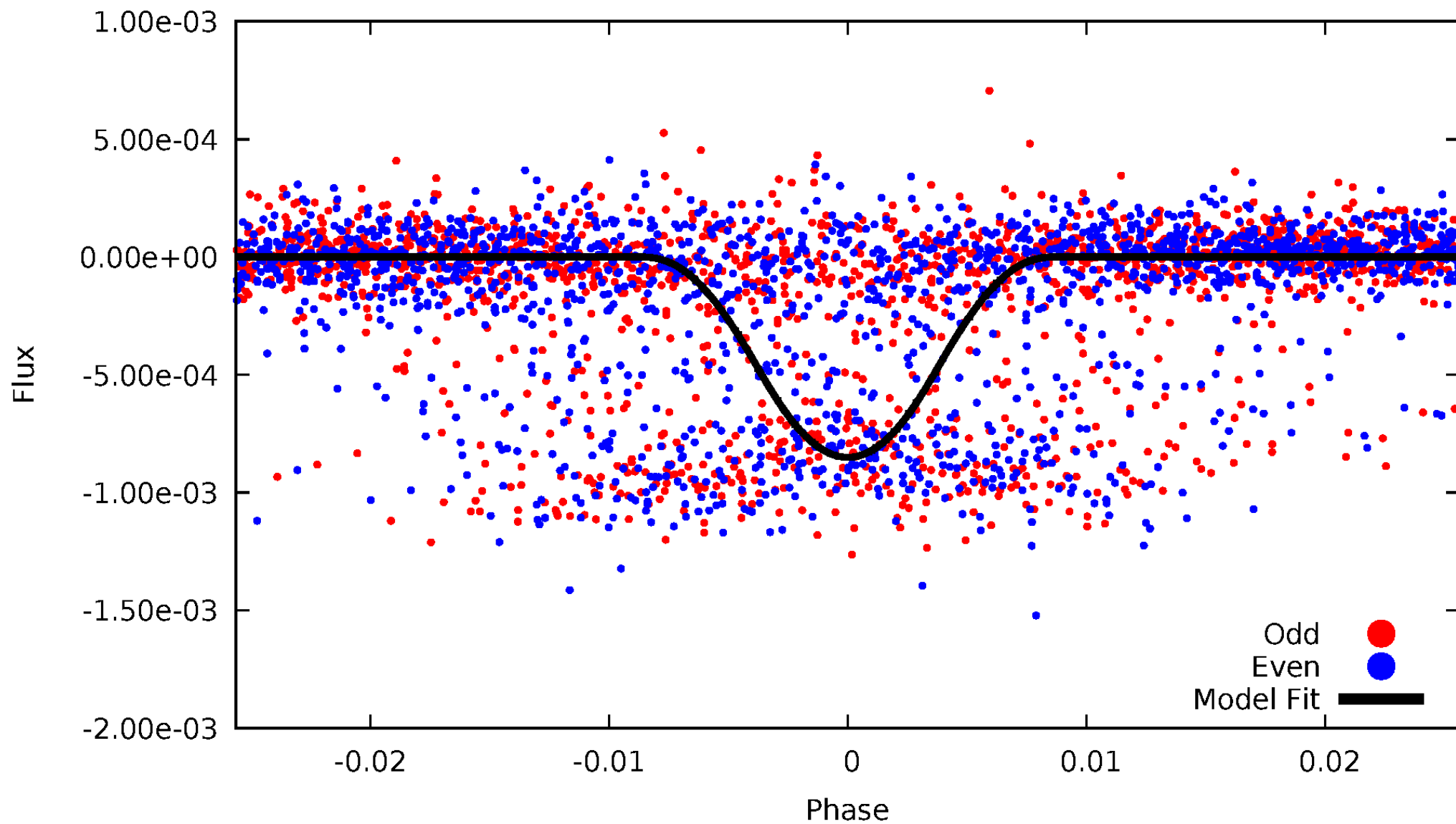


TCE 001161345-01



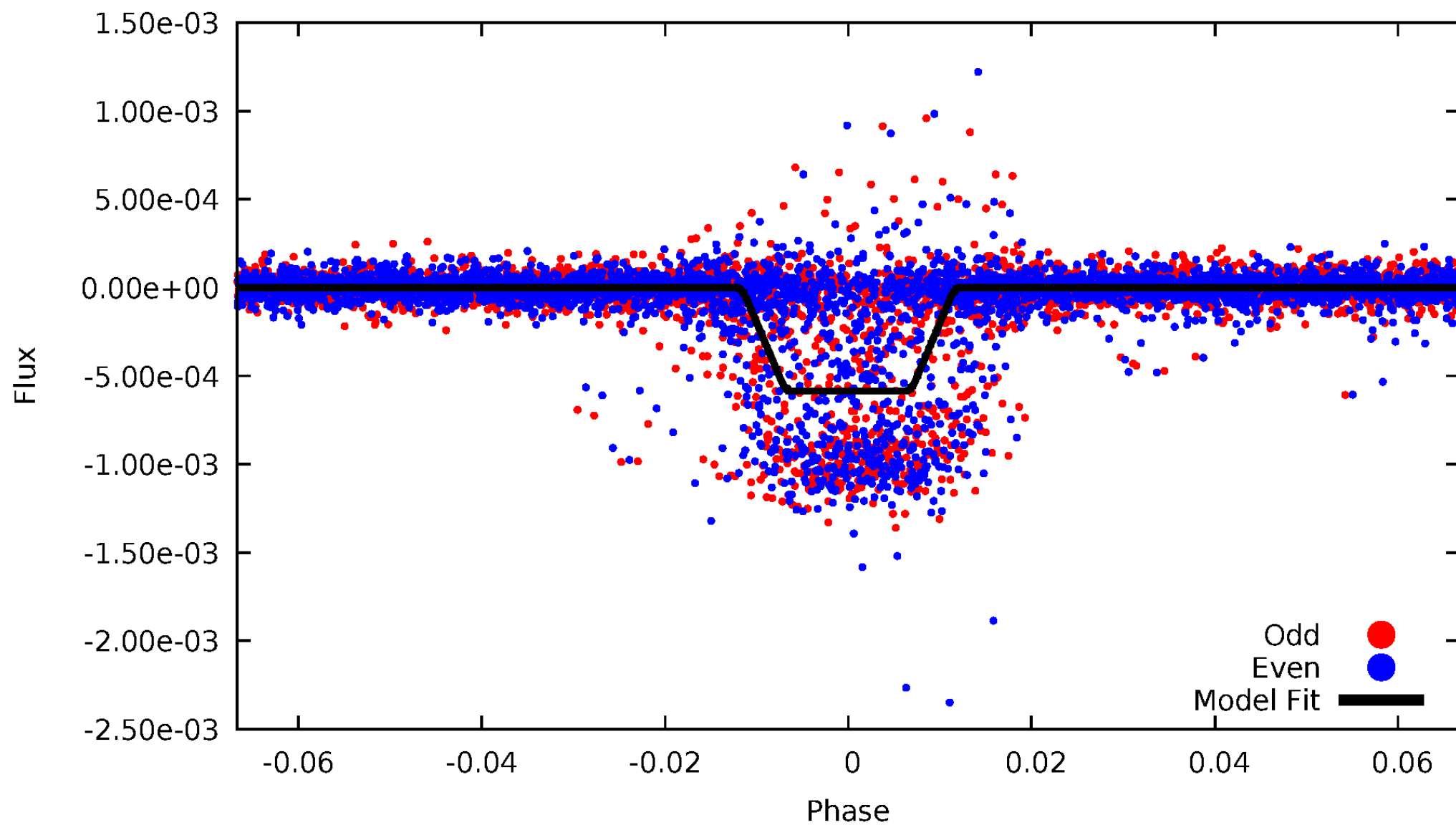
DV Odd/Even

TCE 001161345-01

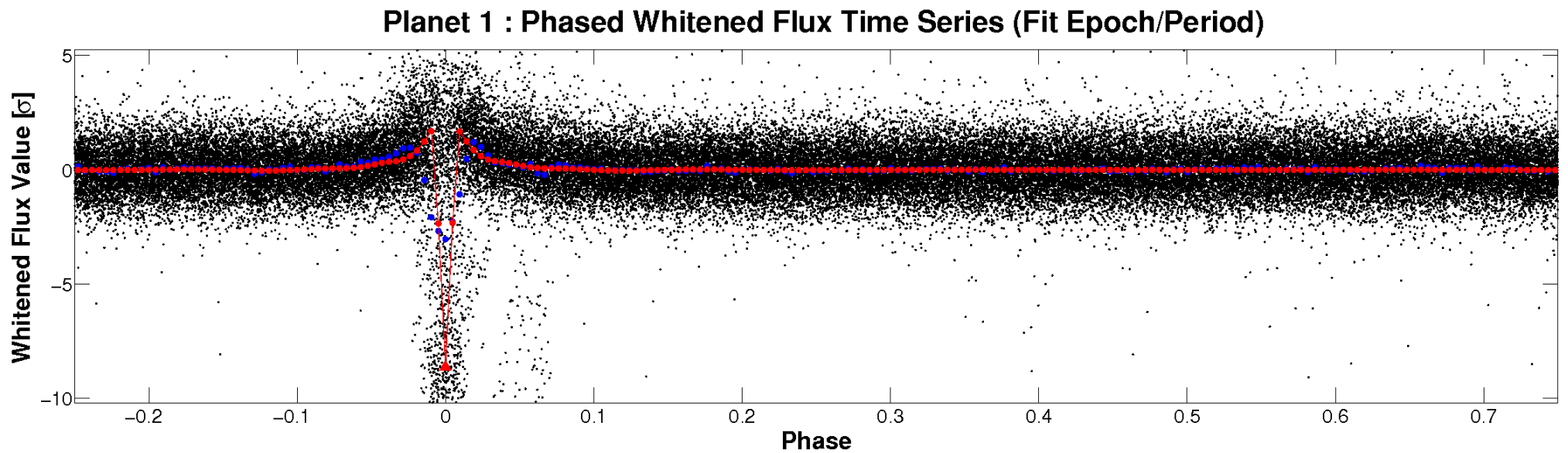
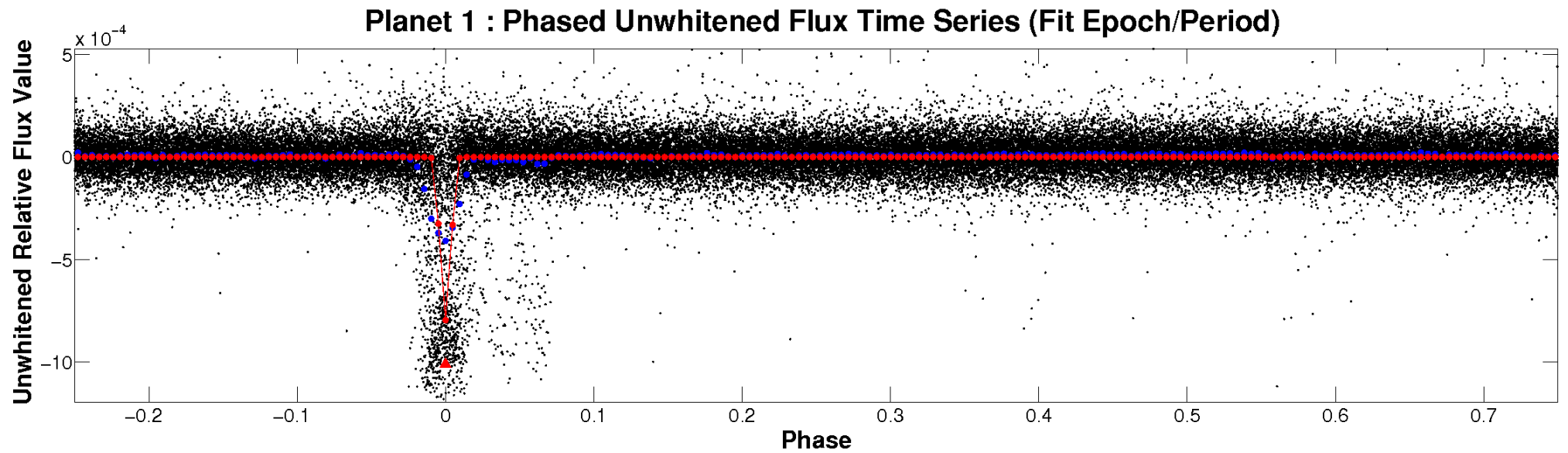


ALT Odd/Even

TCE 001161345-01

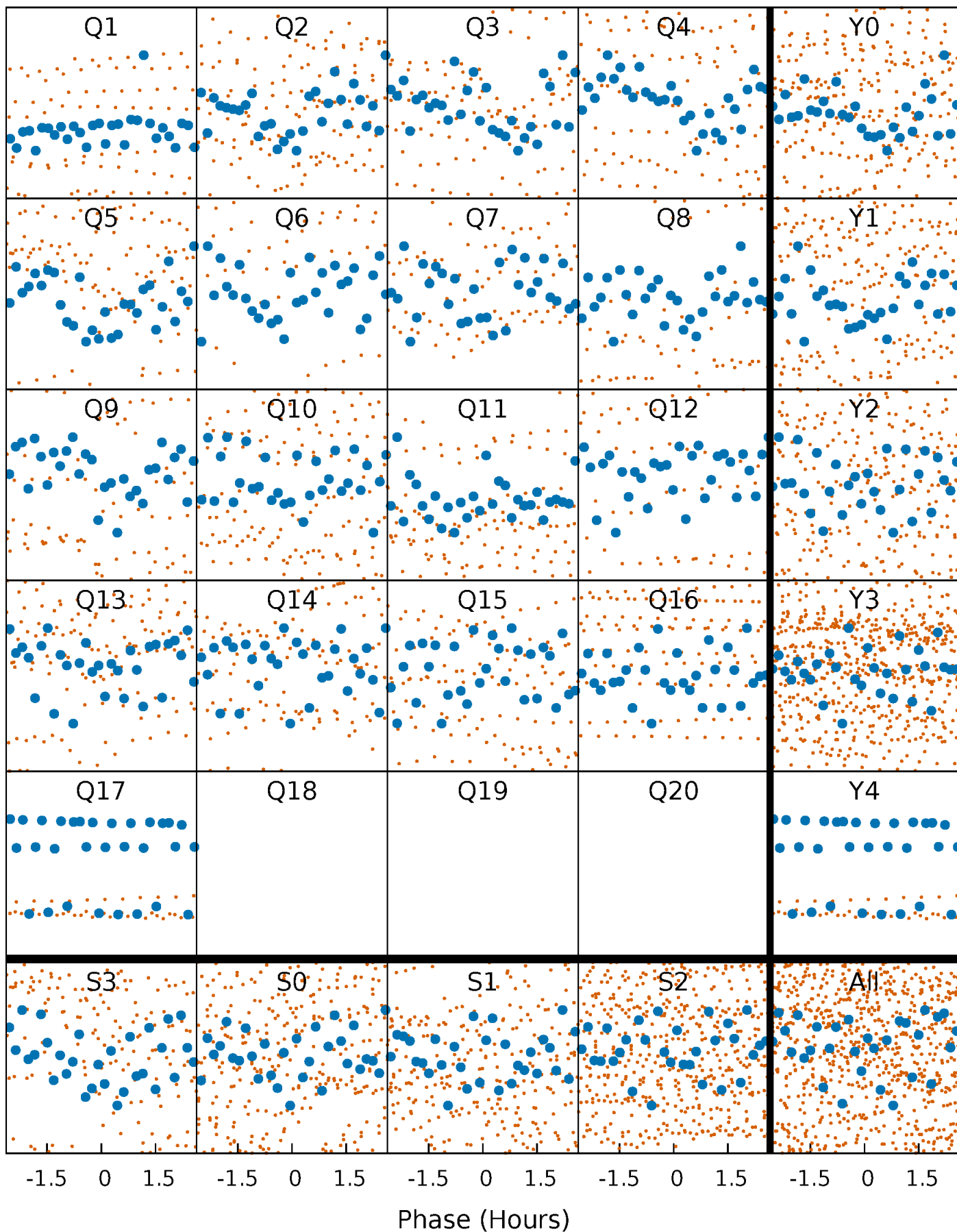


Non-Whitened Vs. Whitened Light Curve



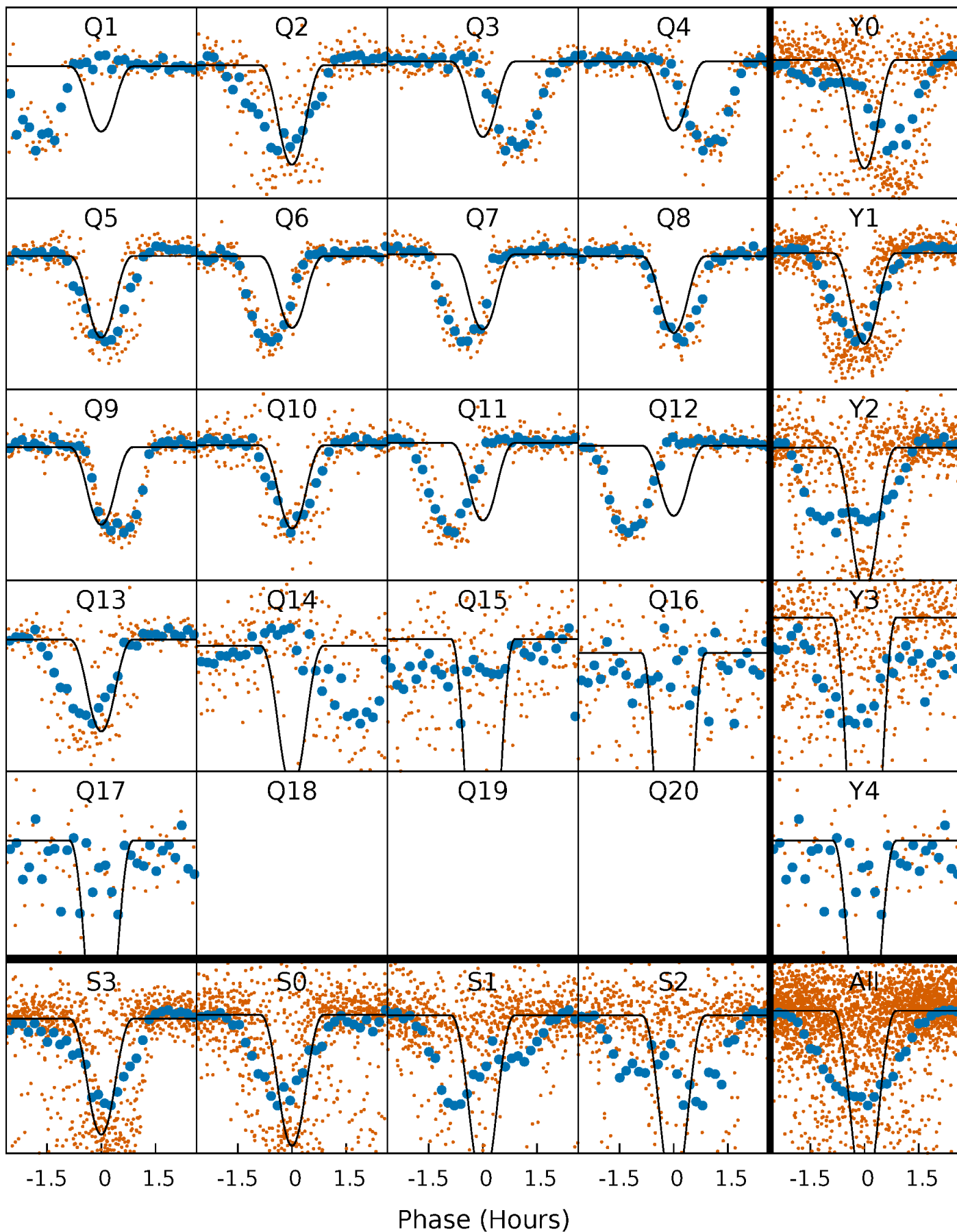
PDC Quarter-Phased Transit Curves

TCE 001161345-01 P= 4.287651 Days $T_0=133.417057$ (BKJD)



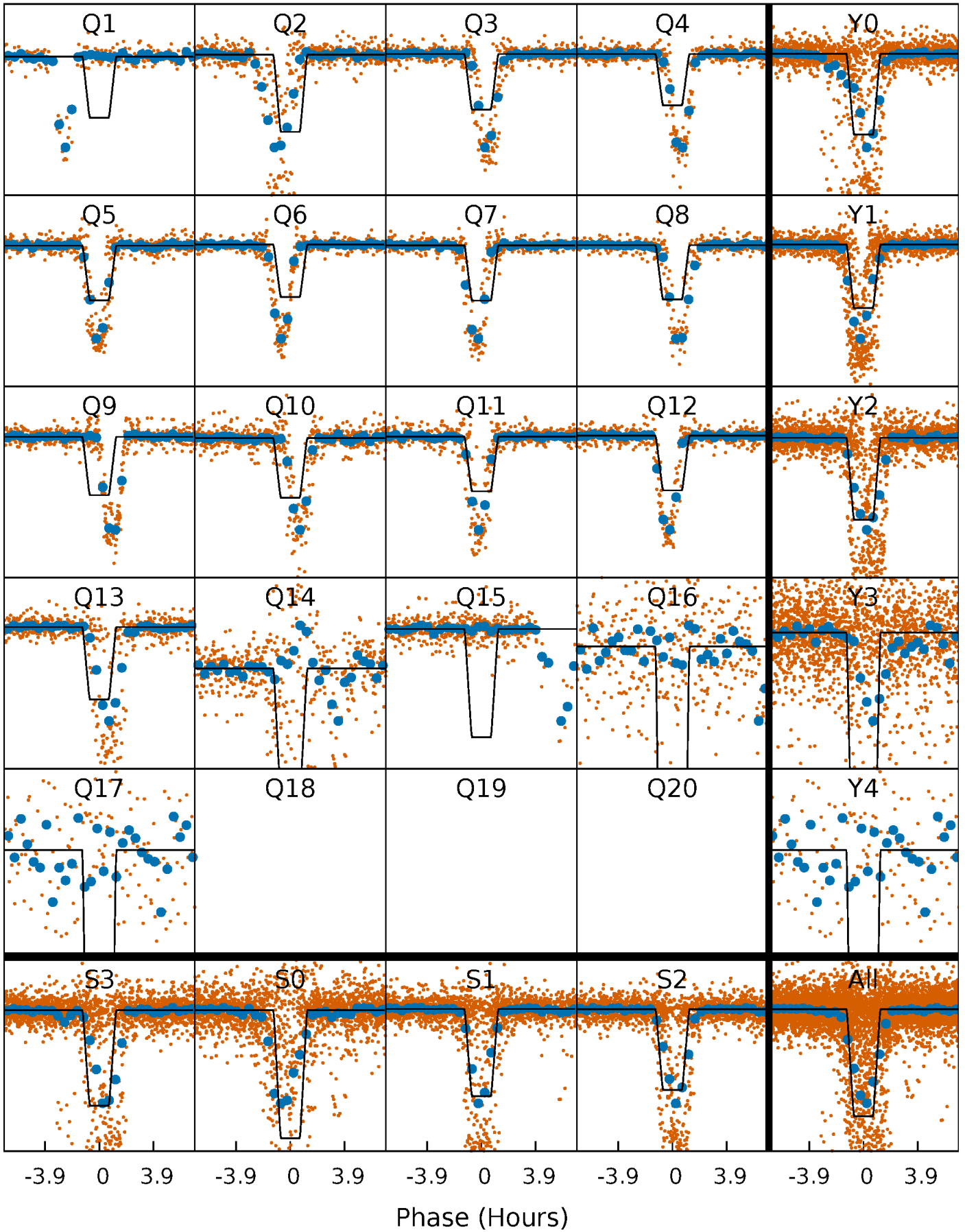
DV Quarter-Phased Transit Curves

TCE 001161345-01 P= 4.287651 Days $T_0=133.417057$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

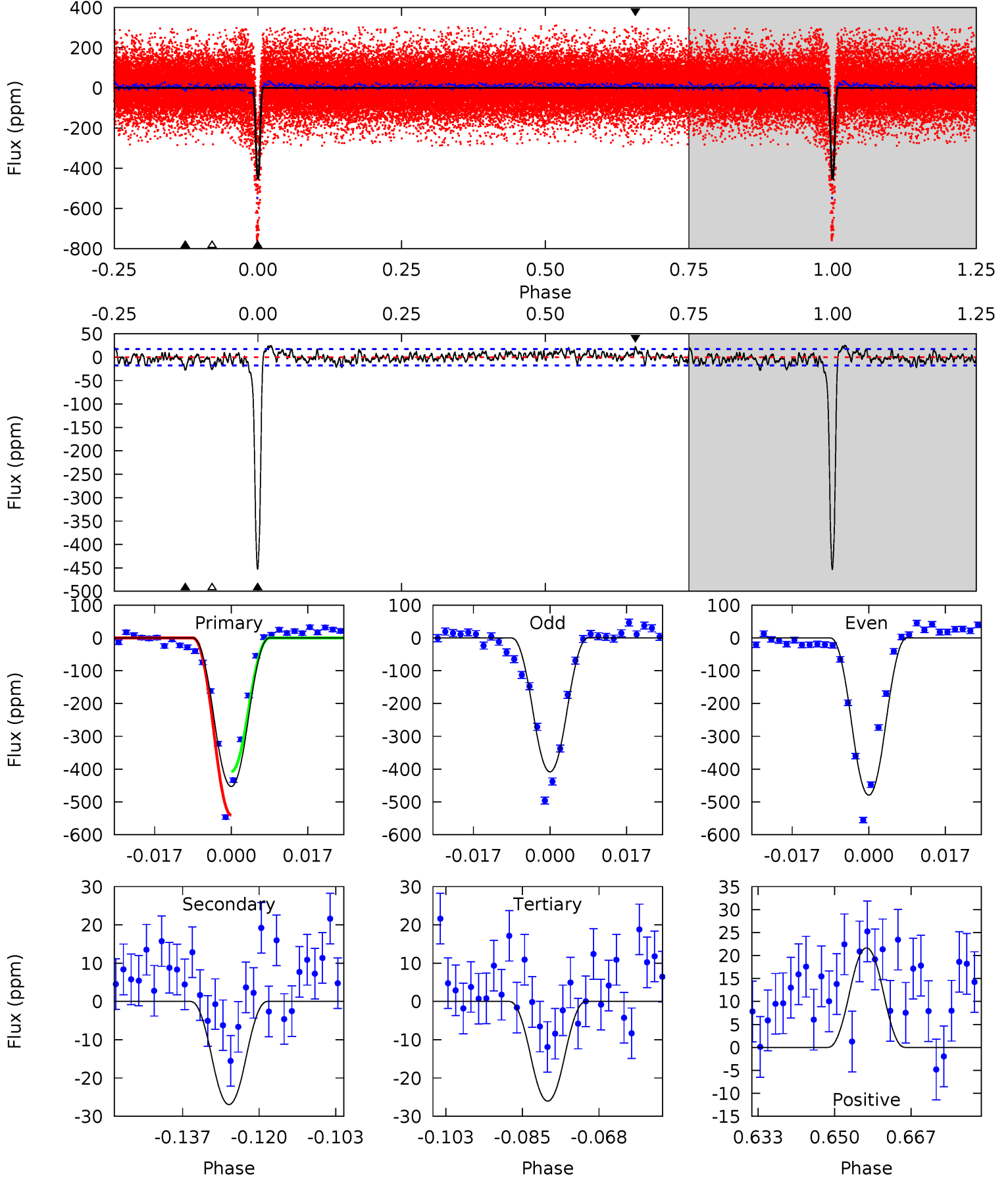
TCE 001161345-01 P= 4.287353 Days $T_0=133.449381$ (BKJD)



DV Model-Shift Uniqueness Test

001161345-01, P = 4.287651 Days, E = 129.129406 Days

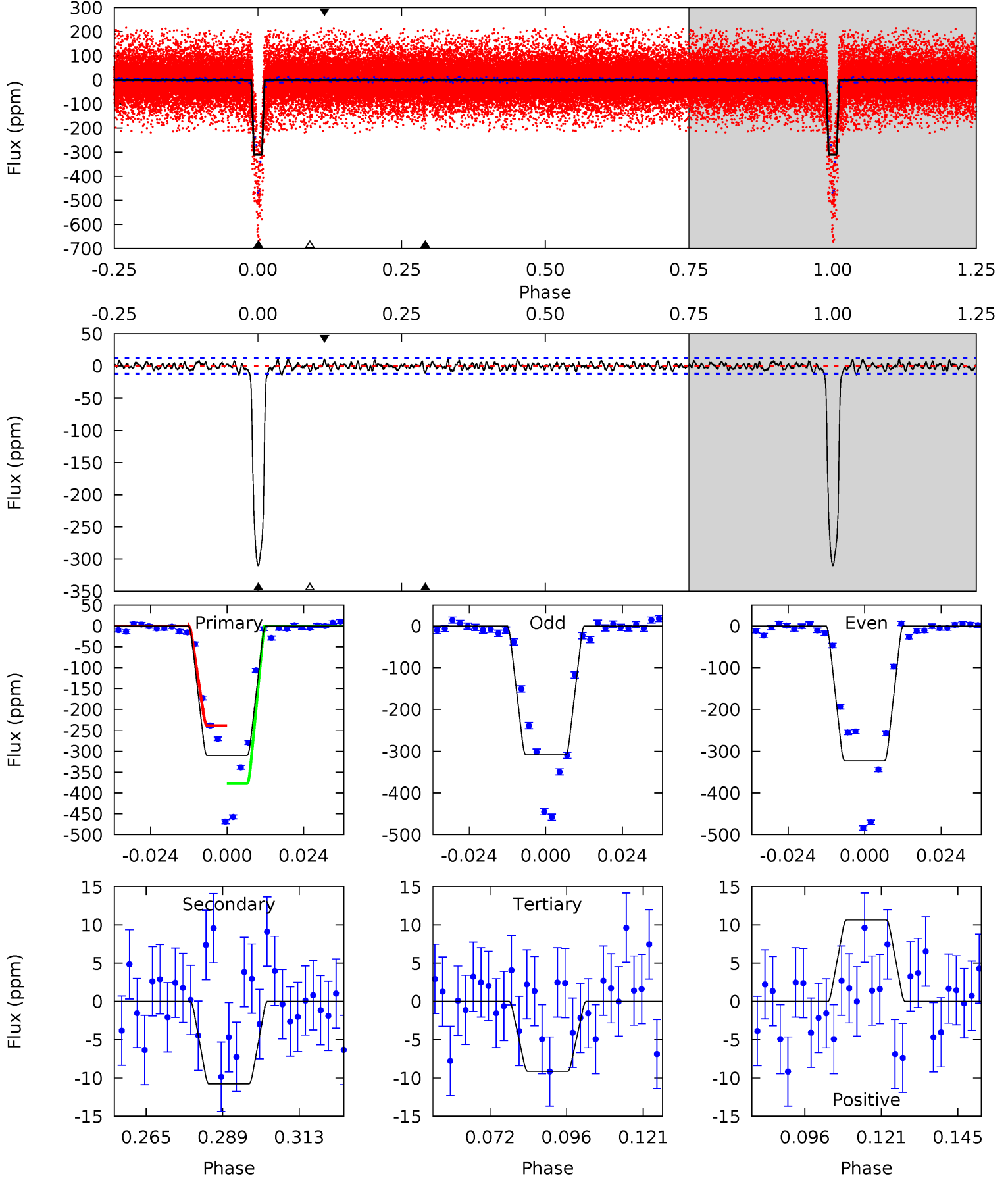
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
127.4	7.57	7.32	6.09	4.92	2.38	2.20	120.1	121.3	0.25	1.48	9.84	0.91	0.05	18.5



Alt Model-Shift Uniqueness Test

001161345-01, P = 4.287353 Days, E = 129.162028 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
119.8	4.16	3.53	4.11	4.85	2.26	1.47	116.3	115.7	0.63	0.05	2.66	0.82	0.03	0



Stellar Parameters For KIC 001161345

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5296^{+105}_{-105}	$4.576^{+0.015}_{-0.085}$	$0.120^{+0.150}_{-0.150}$	$0.815^{+0.080}_{-0.034}$	$0.911^{+0.036}_{-0.064}$	$2.373^{+0.181}_{-0.605}$
	+2%/-2%	+0%/-2%	+125%/-125%	+10%/-4%	+4%/-7%	+8%/-26%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 001161345-01 / KOI 0984.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-27 ± 4	$3.73^{+0.90}_{-0.88}$	1333^{+41}_{-35}	2618^{+208}_{-166}	$2.612^{+1.882}_{-0.974}$
Alt.	-11 ± 3	$2.17^{+0.84}_{-0.84}$	1333^{+41}_{-35}	2675^{+435}_{-265}	$3.073^{+5.332}_{-1.581}$

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

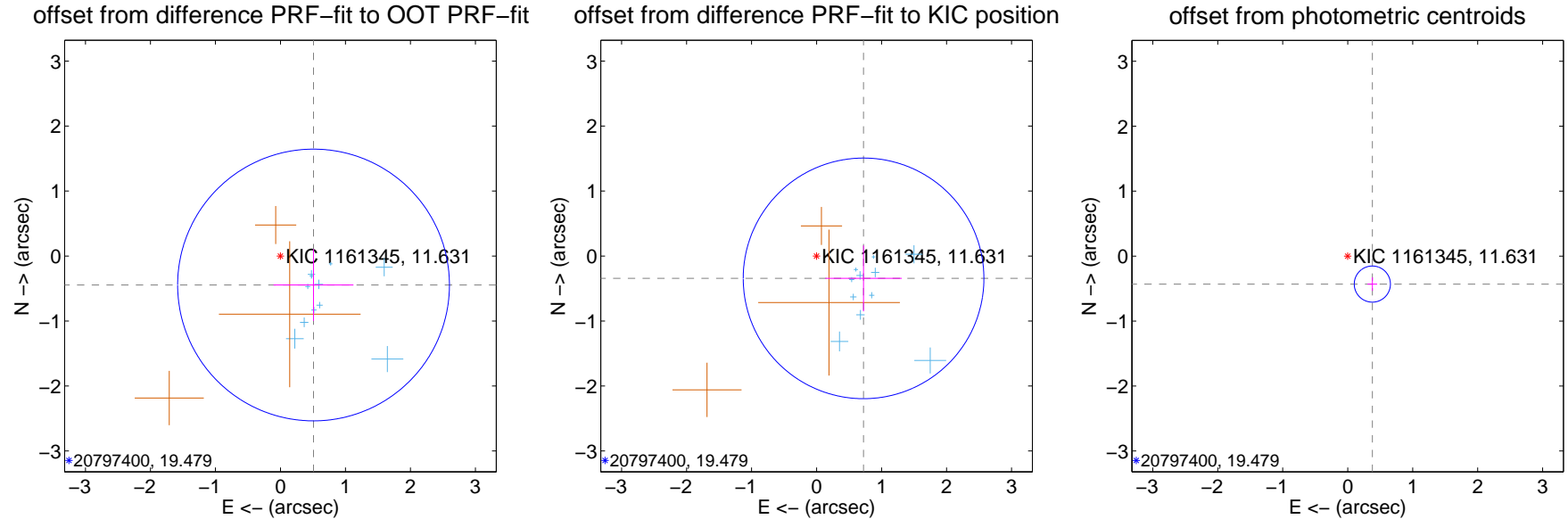
DV Centroid Data

Supplemental centroid analysis for 001161345-01. **Kepler magnitude: 11.63.** Transit SNR 114.91

There are 11 quarters with good PRF difference image offsets

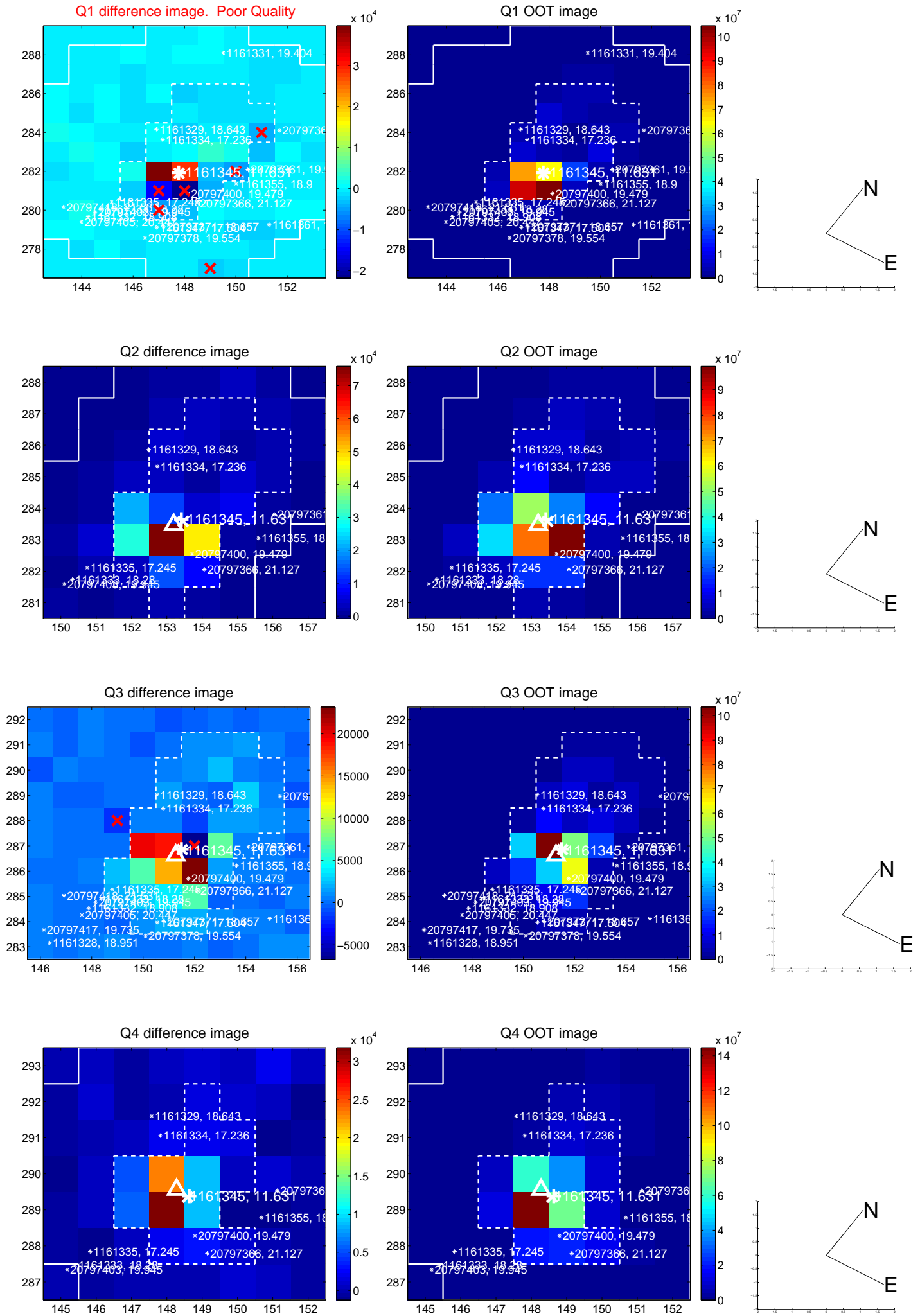
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.677 ± 0.697	0.97	-0.509 ± 0.615	-0.446 ± 0.552
PRF-fit source offset from KIC position	0.801 ± 0.617	1.30	-0.723 ± 0.588	-0.344 ± 0.507
photometric centroid source offset	0.57 ± 0.09	6.19	-0.38 ± 0.07	-0.43 ± 0.10

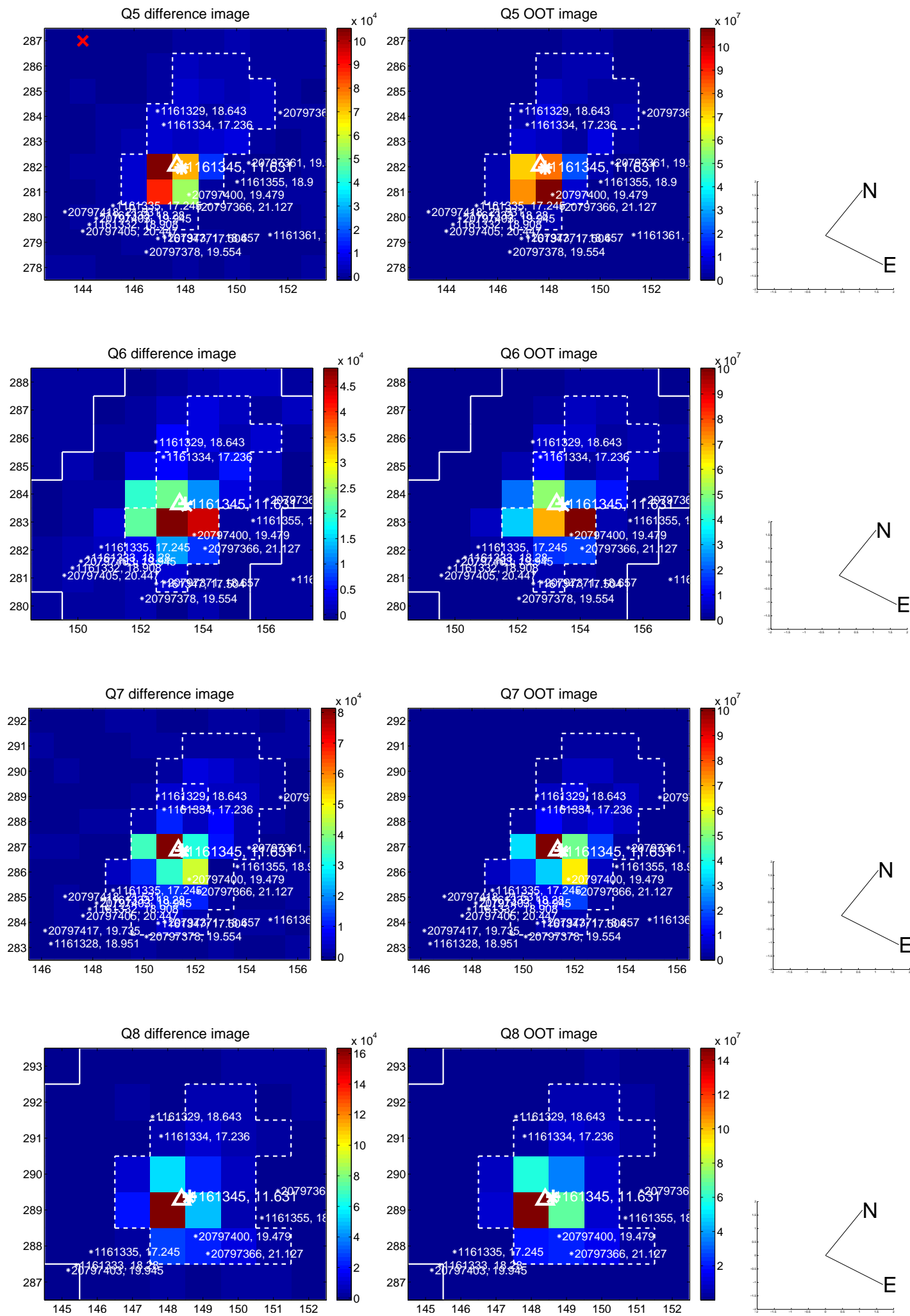


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

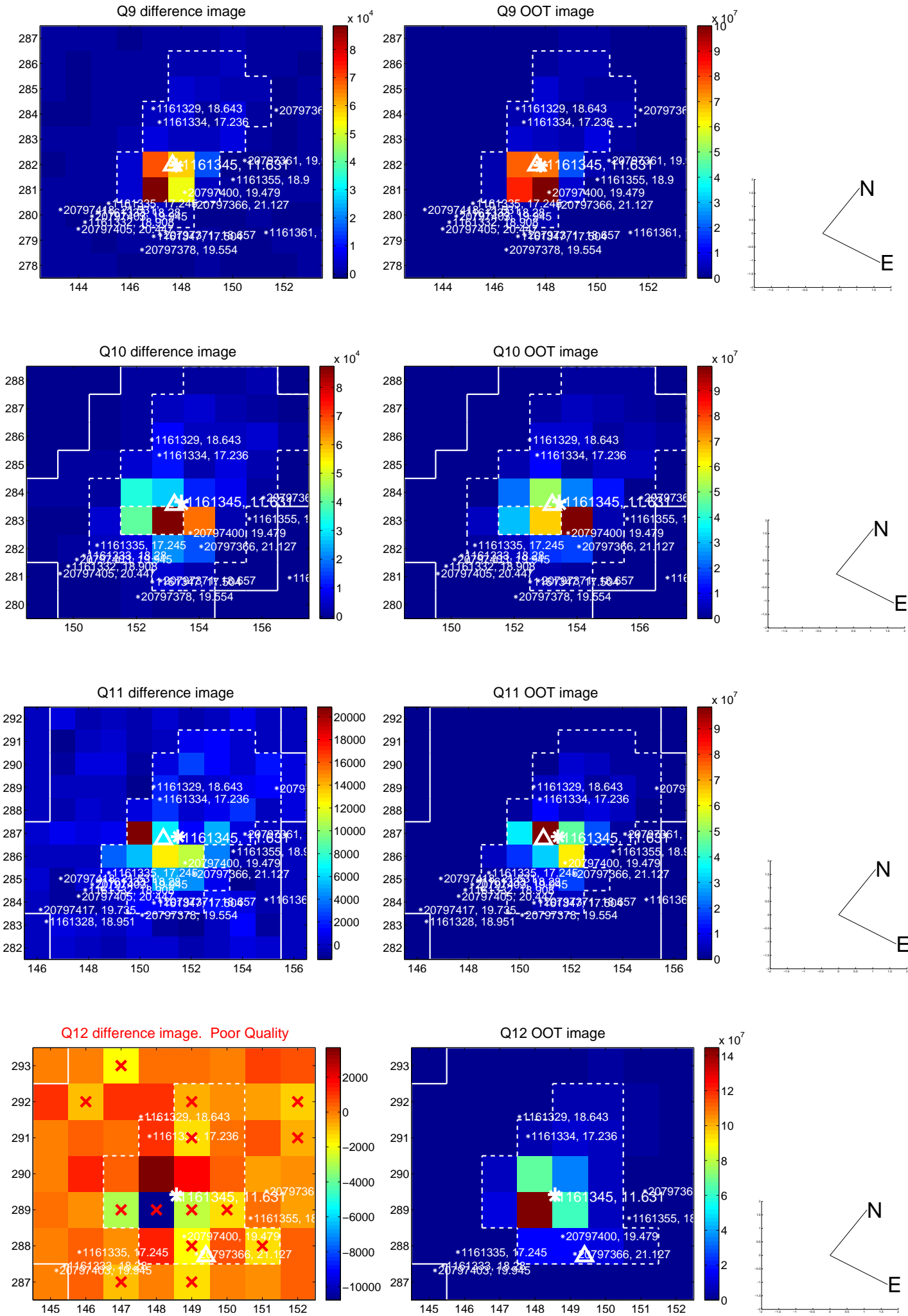
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



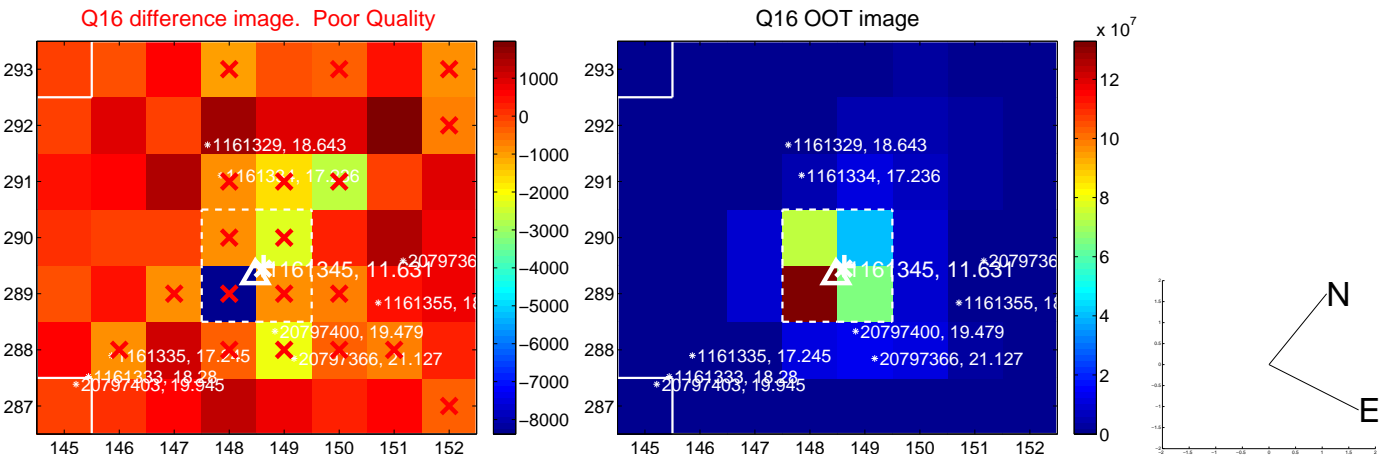
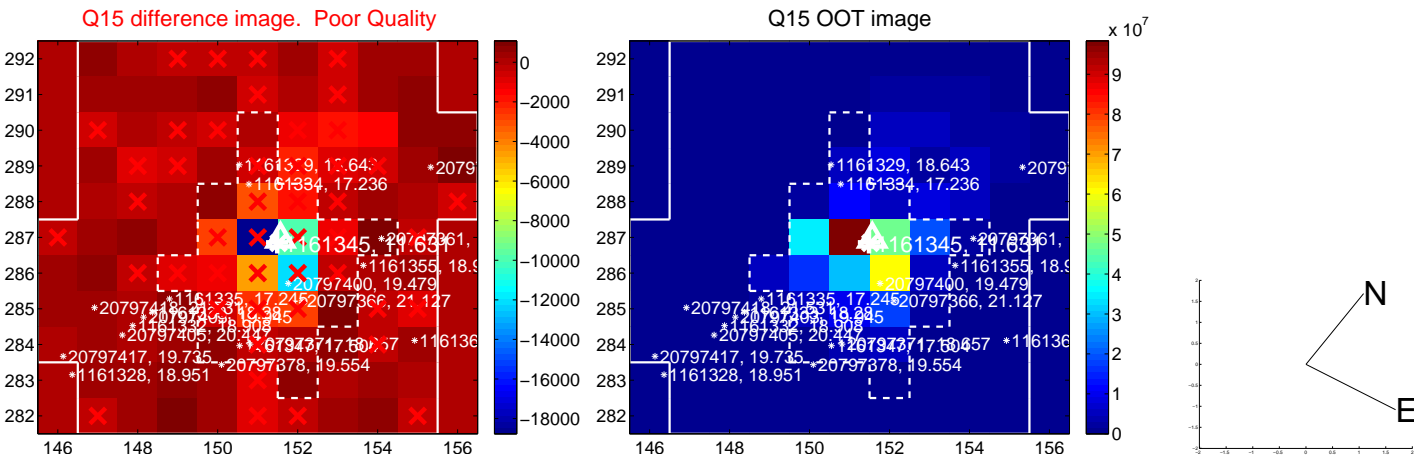
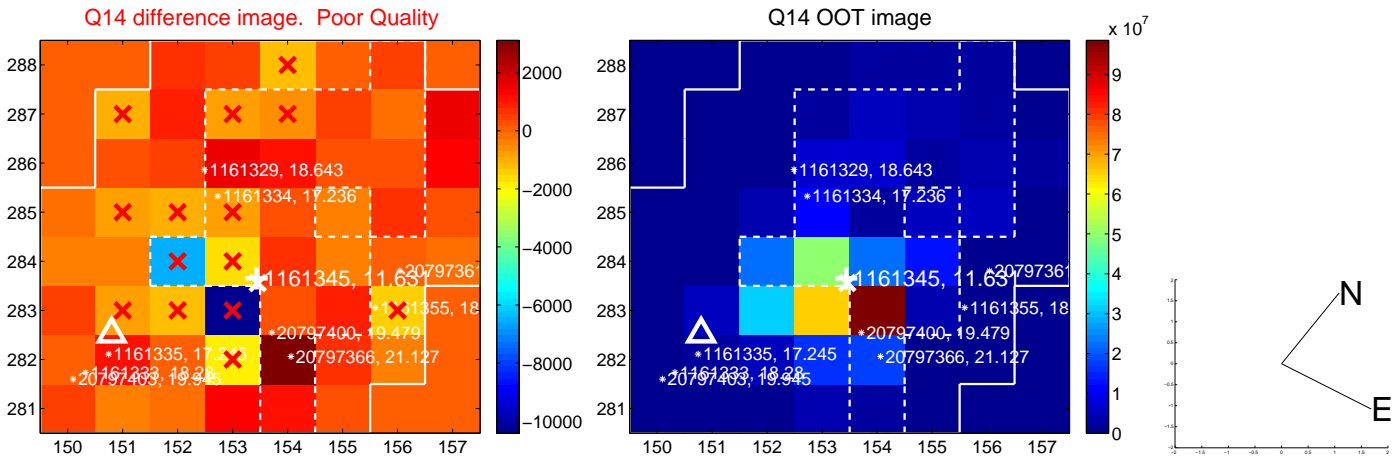
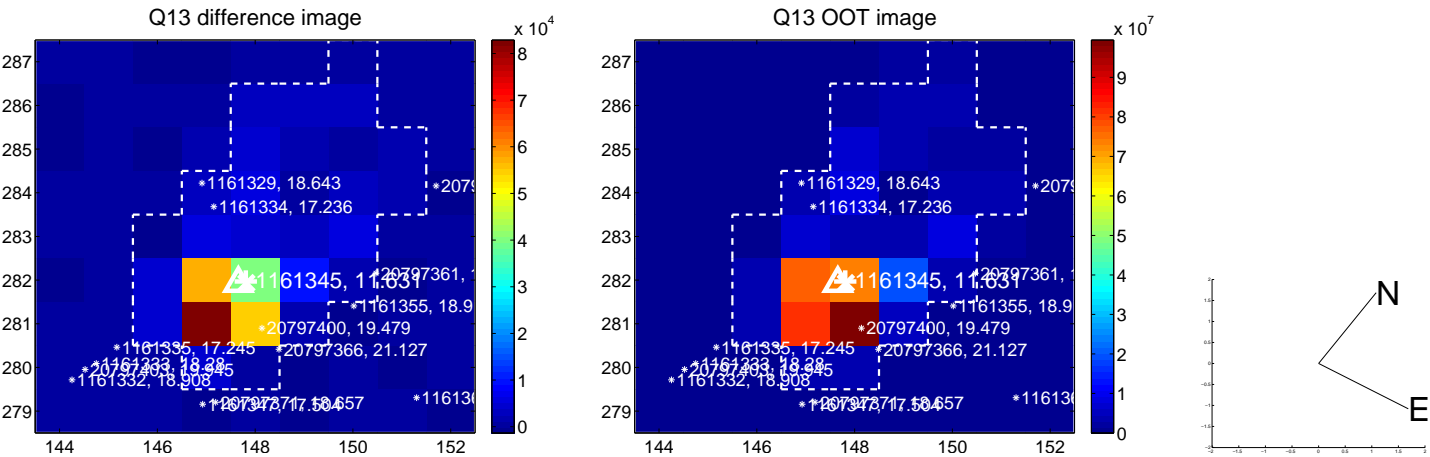
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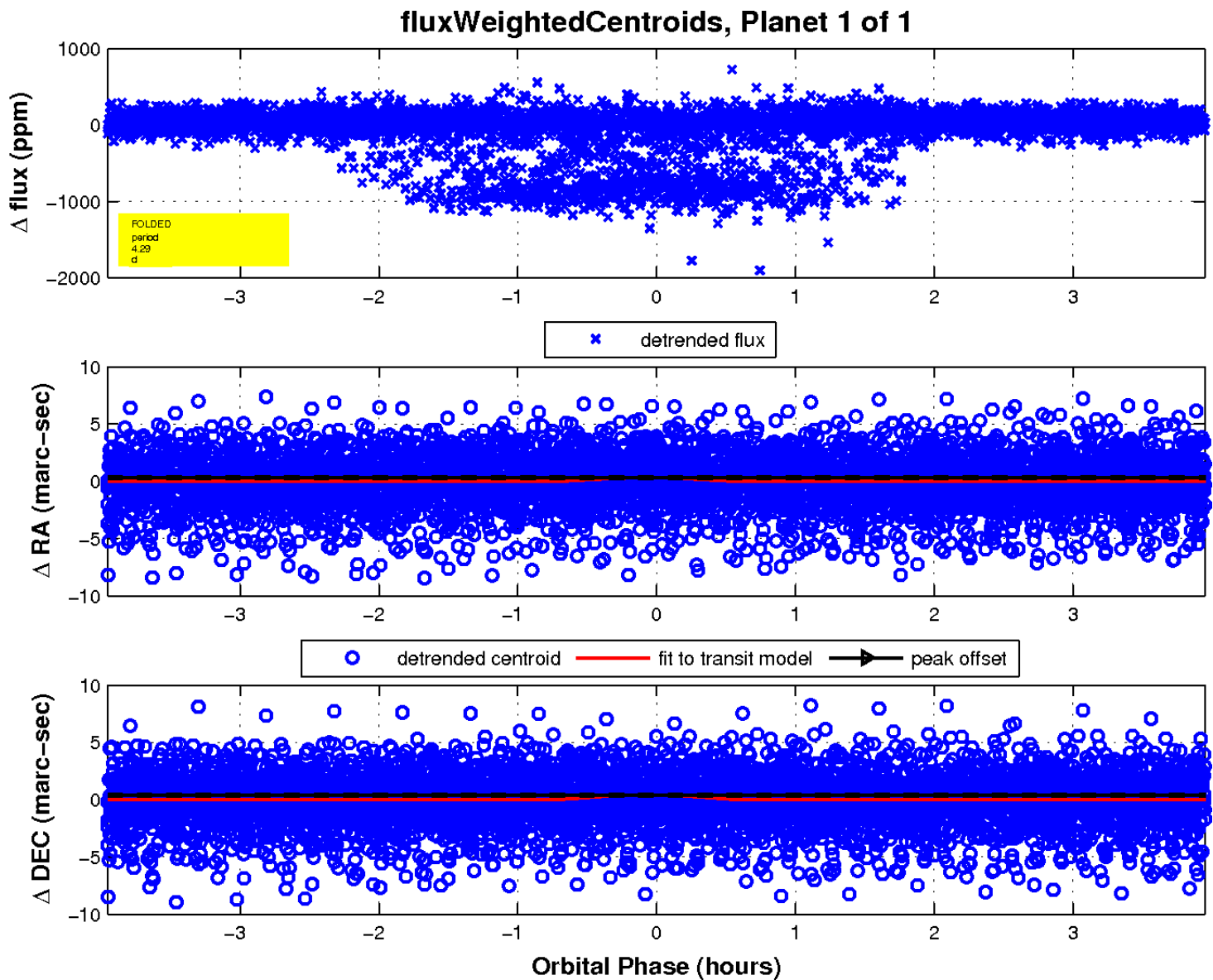
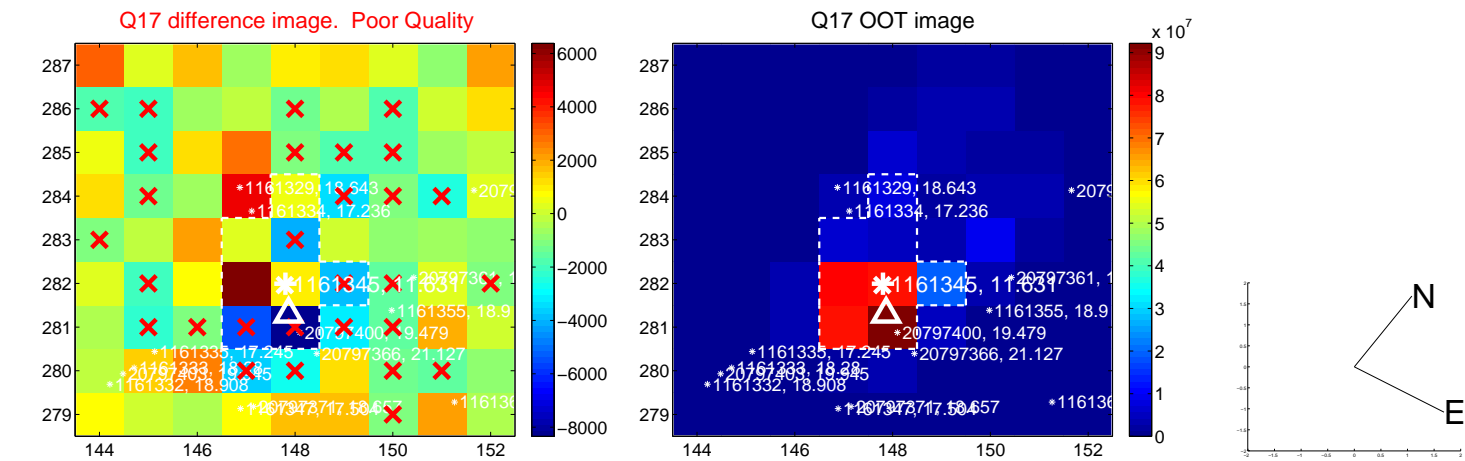
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UKIRT Image

Declination

