

KIC 007341467

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})
007341467-01	OBS	No	431.647807	559.071585	295.2	18.160	8.3	8.0	0.90	5819	1.63	0.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007341467-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—INCONSISTENT_TRANS—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.

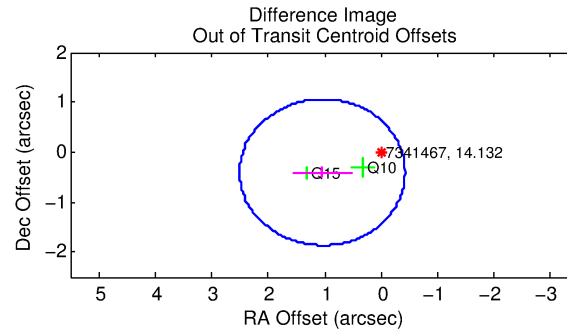
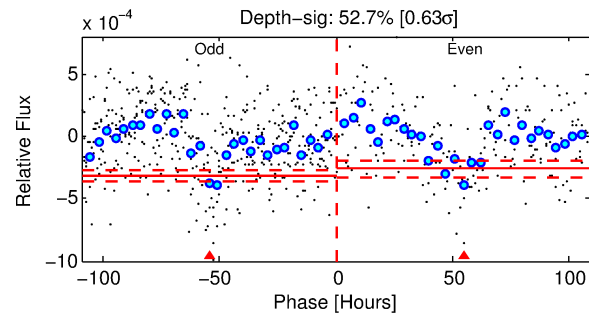
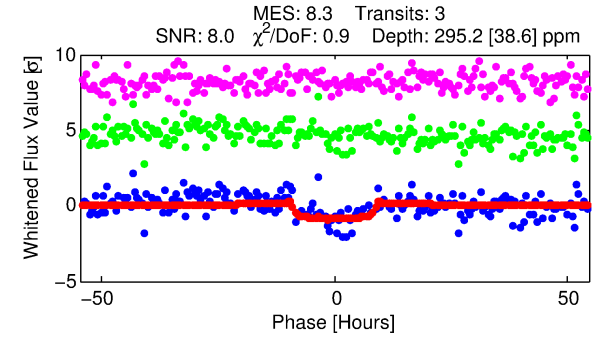
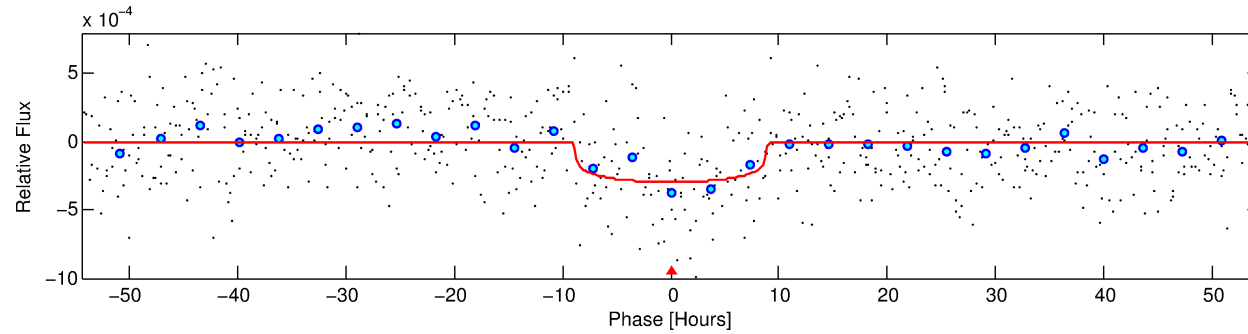
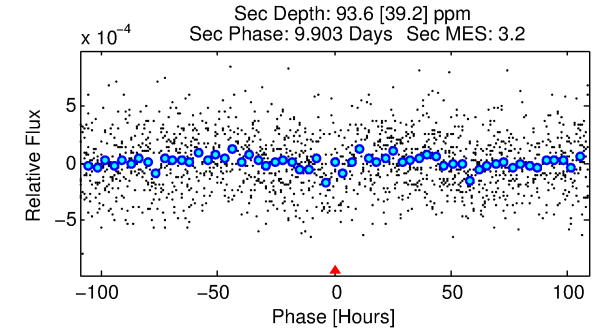
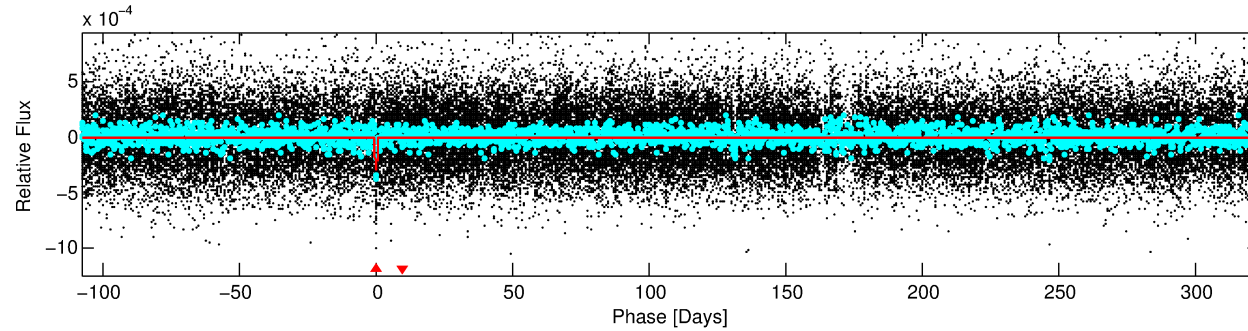
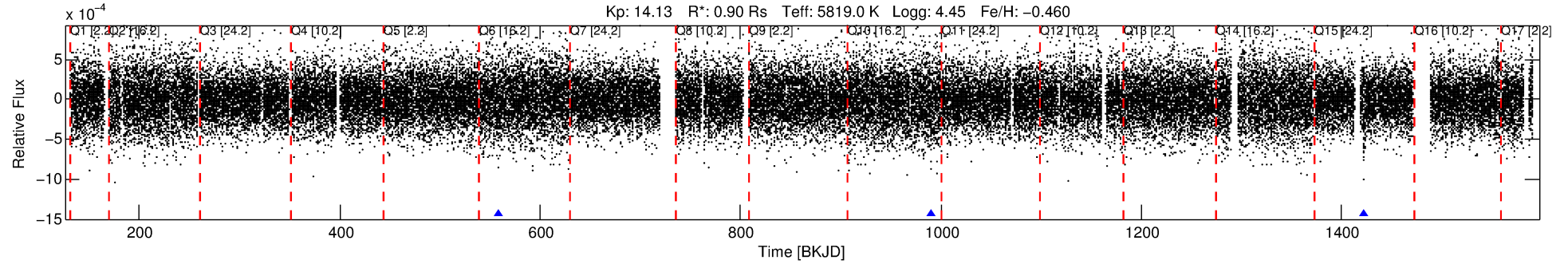
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007341467-01

No Significant Match Found

DV One-Page Summary

KIC: 7341467 Candidate: 1 of 1 Period: 431.648 d



DV Fit Results:

Period = 431.64781 [0.01735] d
Epoch = 559.0716 [0.0253] BKJD
Rp/R* = 0.0167 [0.0072]
a/R* = 140.14 [286.11]
b = 0.66 [1.75]
Seff = 0.75 [0.25]
Teq = 237 [20] K
Rp = 1.63 [0.82] Re
a = 1.0495 [0.2288] AU
Ag = 21457.76 [21609.83] [0.99σ]
Teffp = 4436 [1069] K [3.93σ]

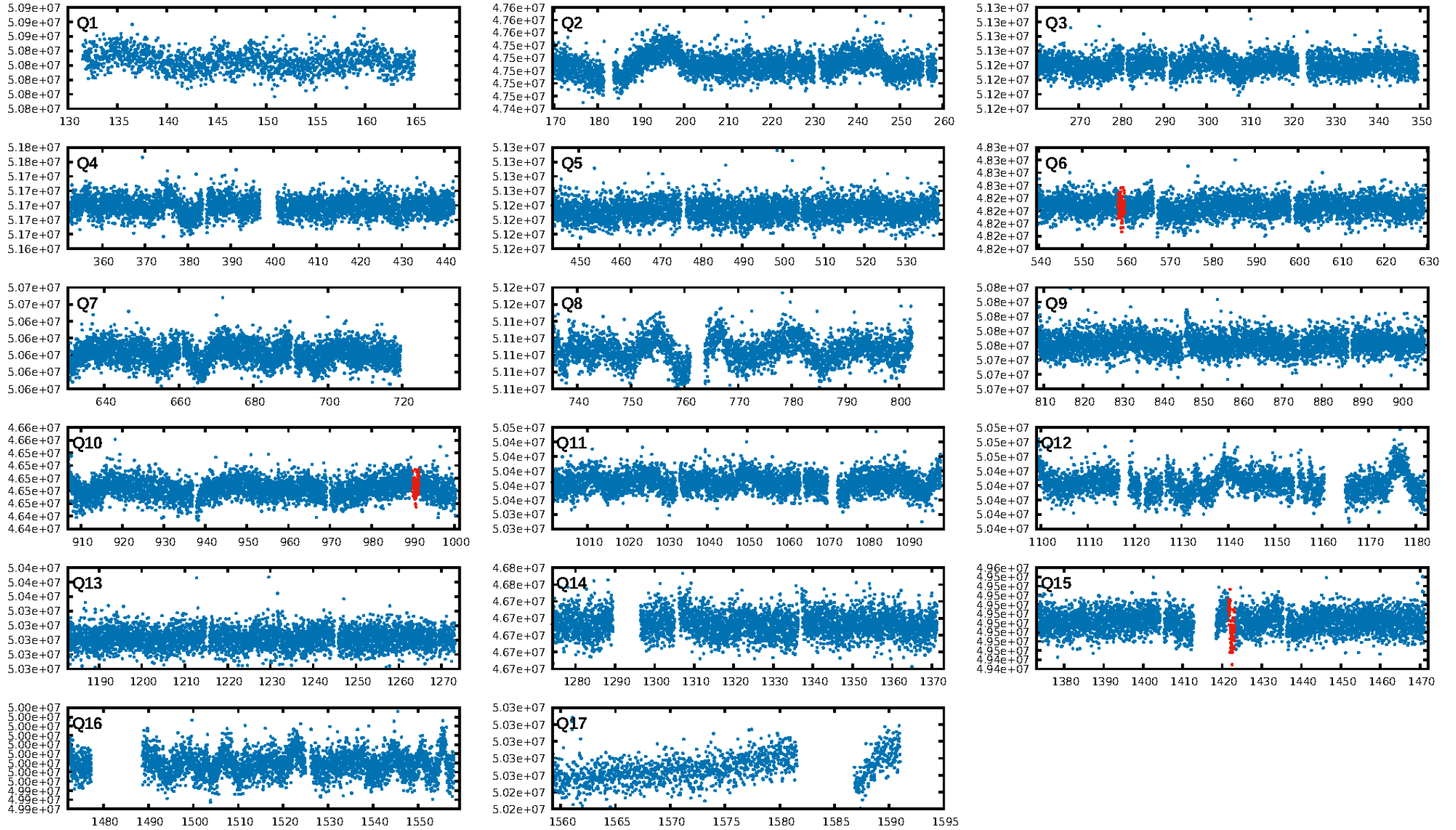
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.9%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.12e-16
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.221
Centroid-sig: 30.1%
Centroid-so: 1.628 arcsec [0.92σ]
OotOffset-rm: 1.115 arcsec [2.28σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-rm: 1.031 arcsec [1.88σ]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

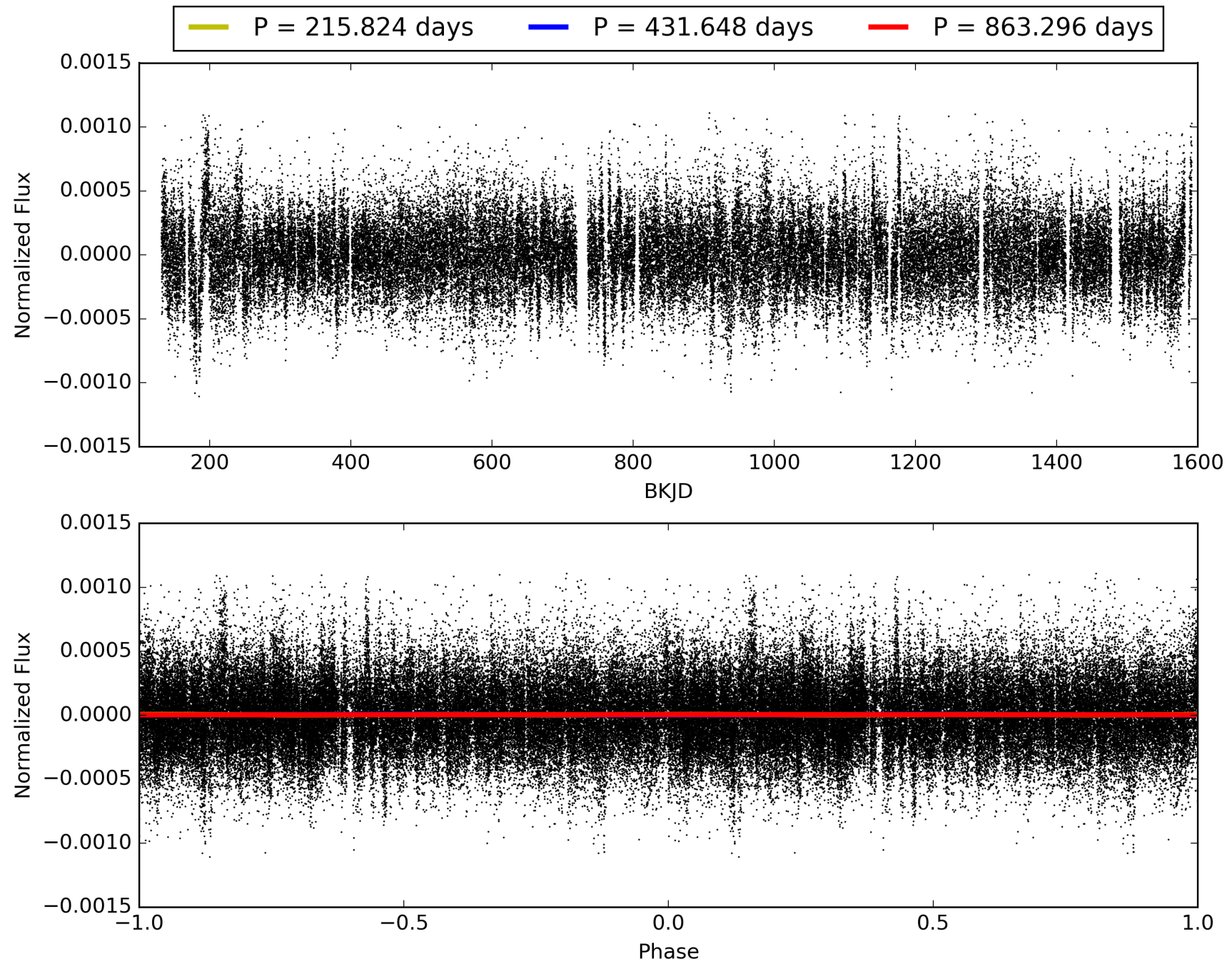
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:22:42 Z

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

TCE 007341467-01, PDC Light Curves

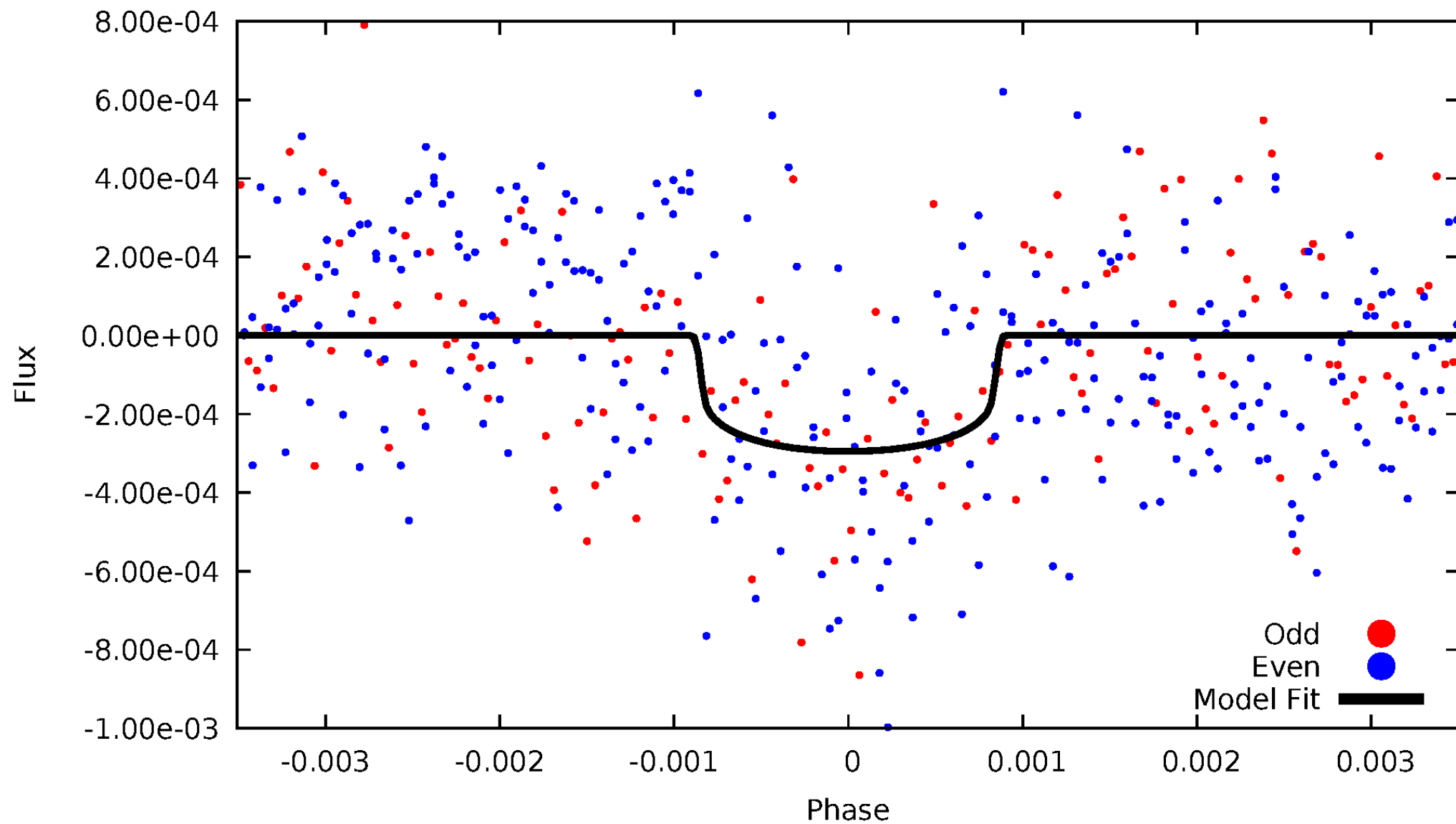


TCE 007341467-01



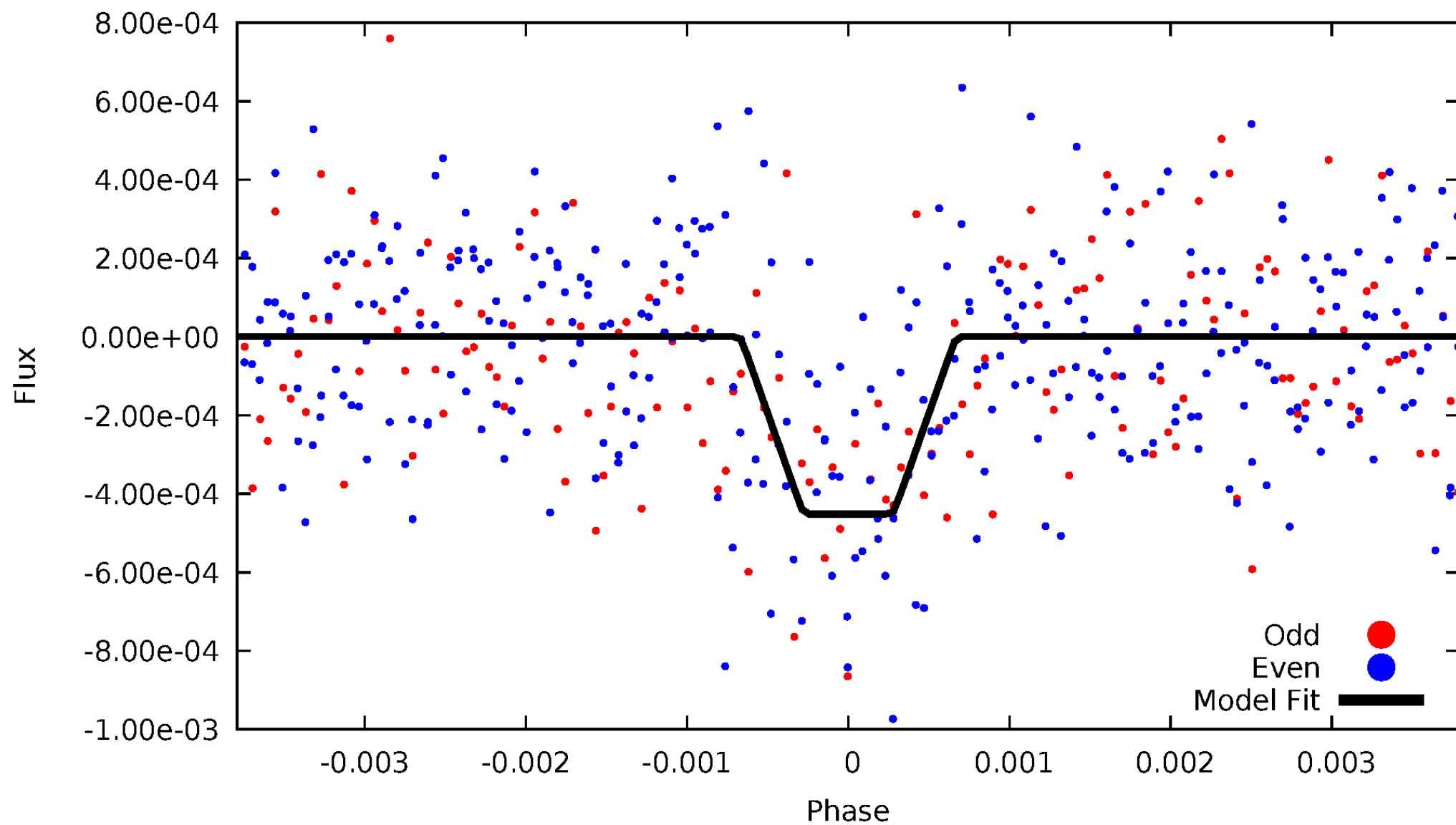
DV Odd/Even

TCE 007341467-01

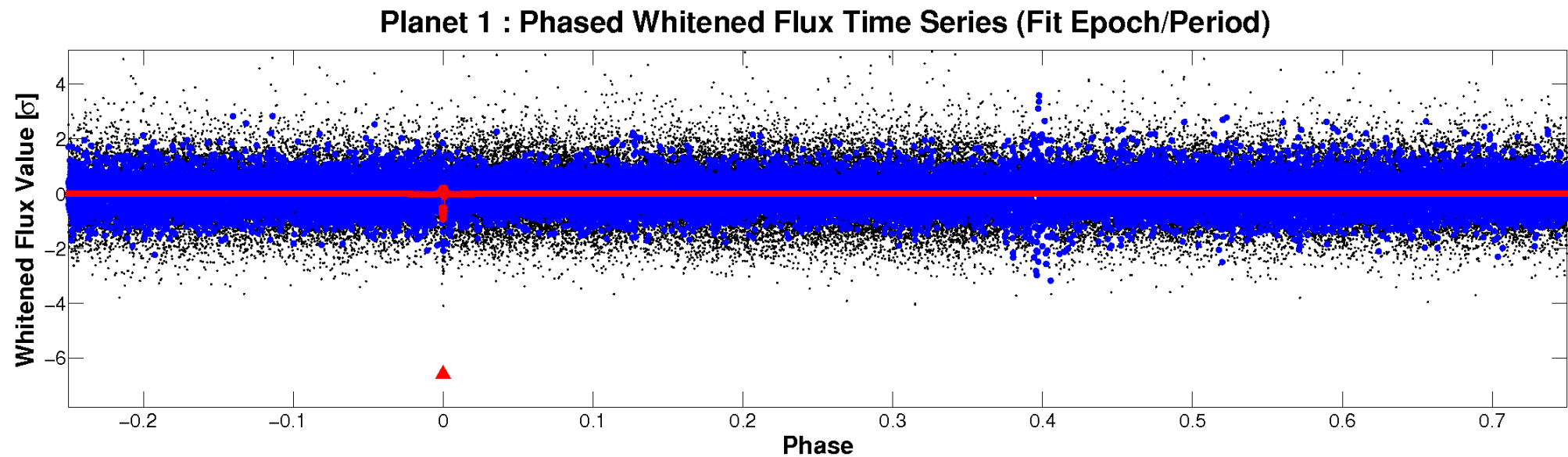
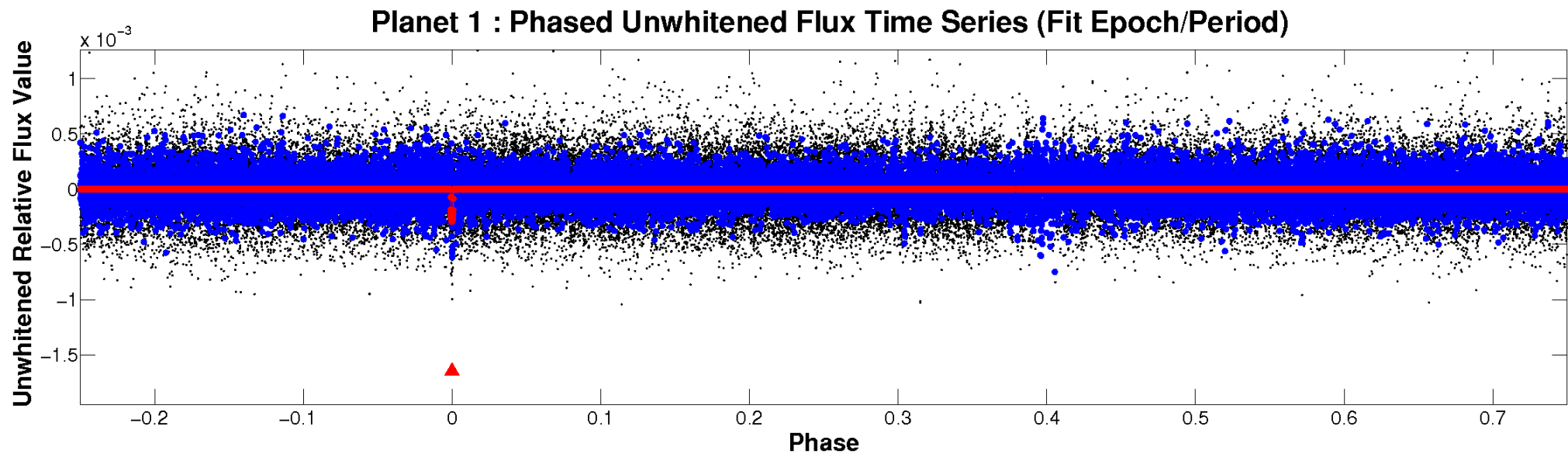


ALT Odd/Even

TCE 007341467-01

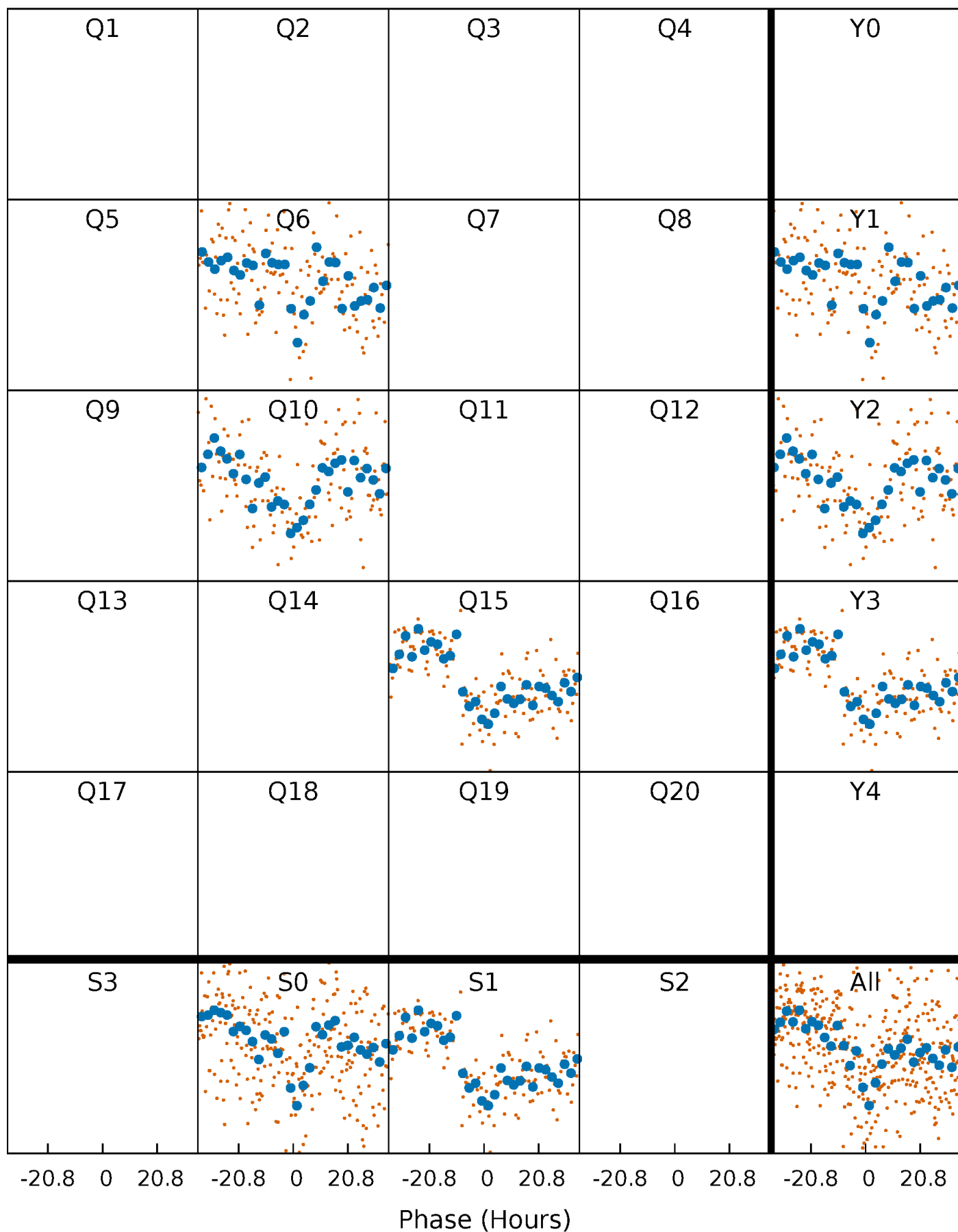


Non-Whitened Vs. Whitened Light Curve



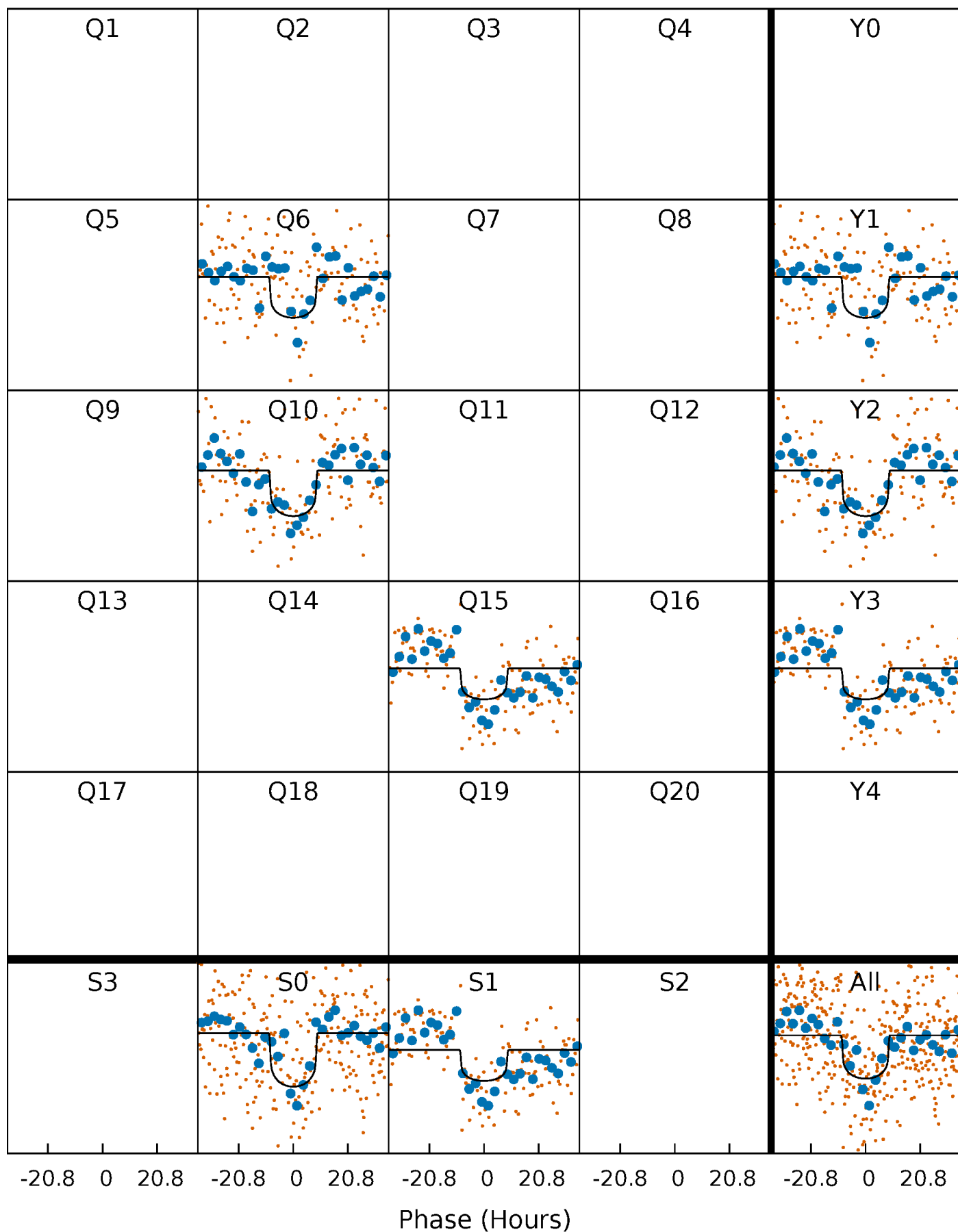
PDC Quarter-Phased Transit Curves

TCE 007341467-01 P=431.647807 Days $T_0=559.071585$ (BKJD)



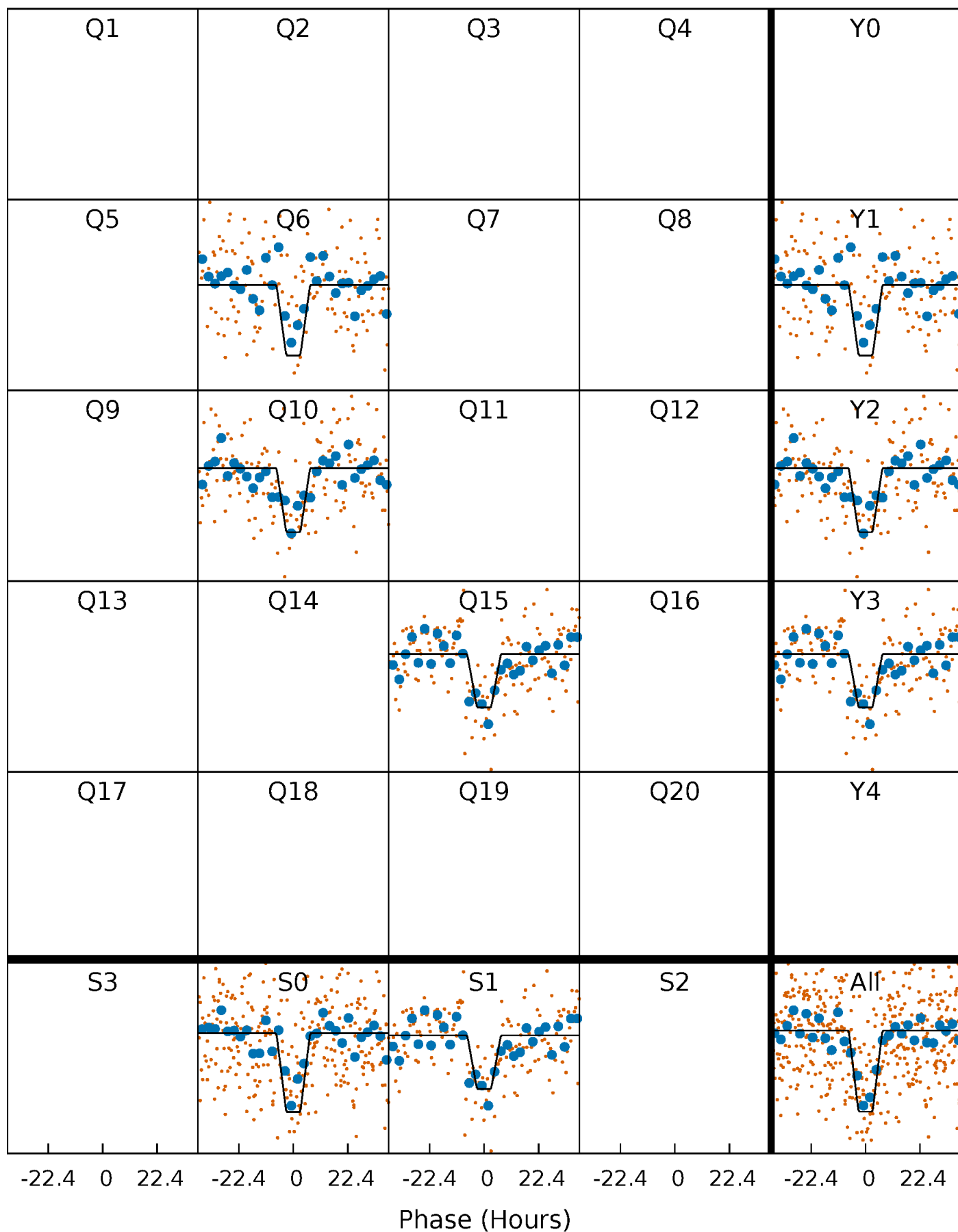
DV Quarter-Phased Transit Curves

TCE 007341467-01 P=431.647807 Days $T_0=559.071585$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

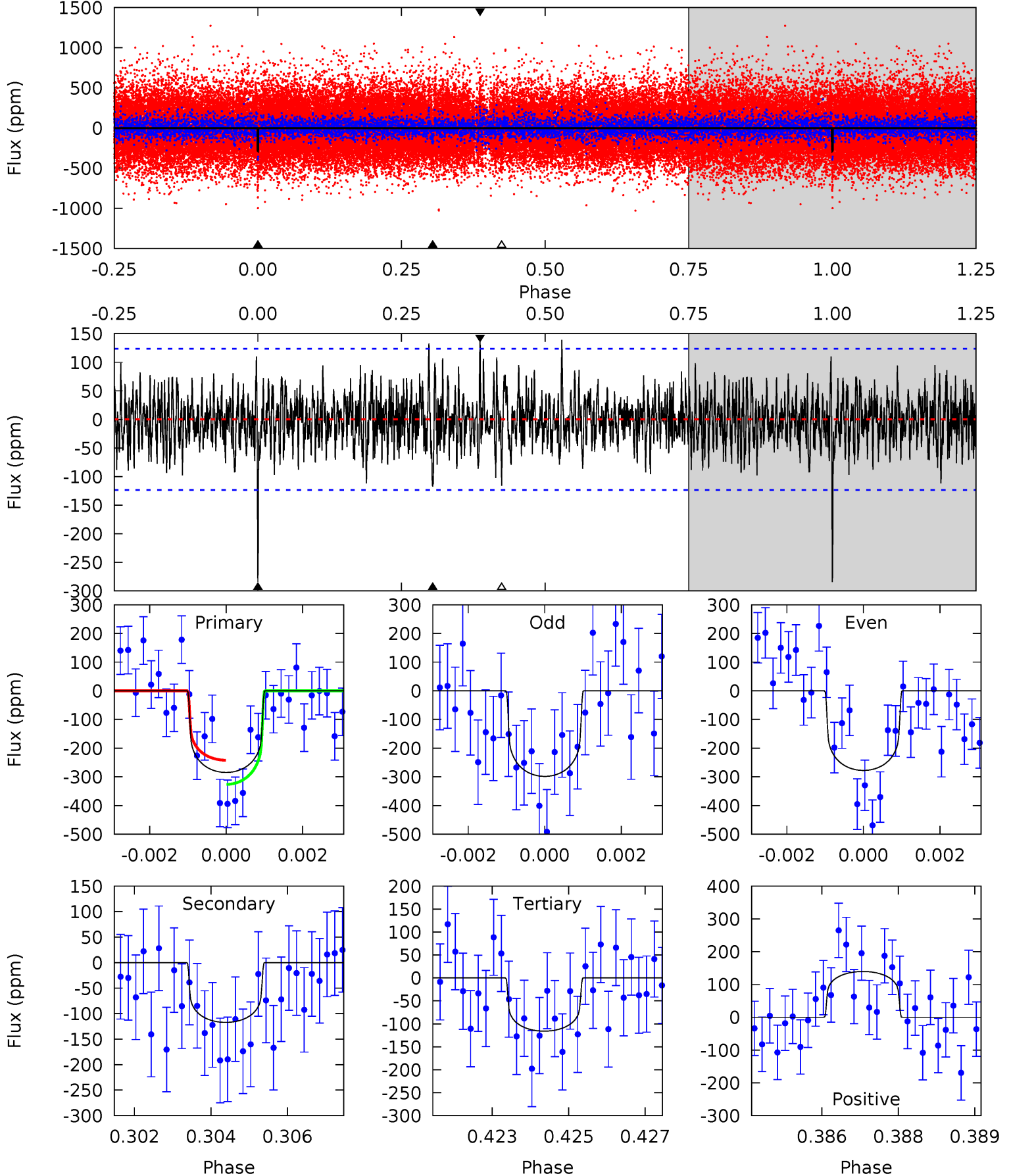
TCE 007341467-01 P=431.597654 Days $T_0=559.150319$ (BKJD)



DV Model-Shift Uniqueness Test

007341467-01, P = 431.647807 Days, E = 127.423778 Days

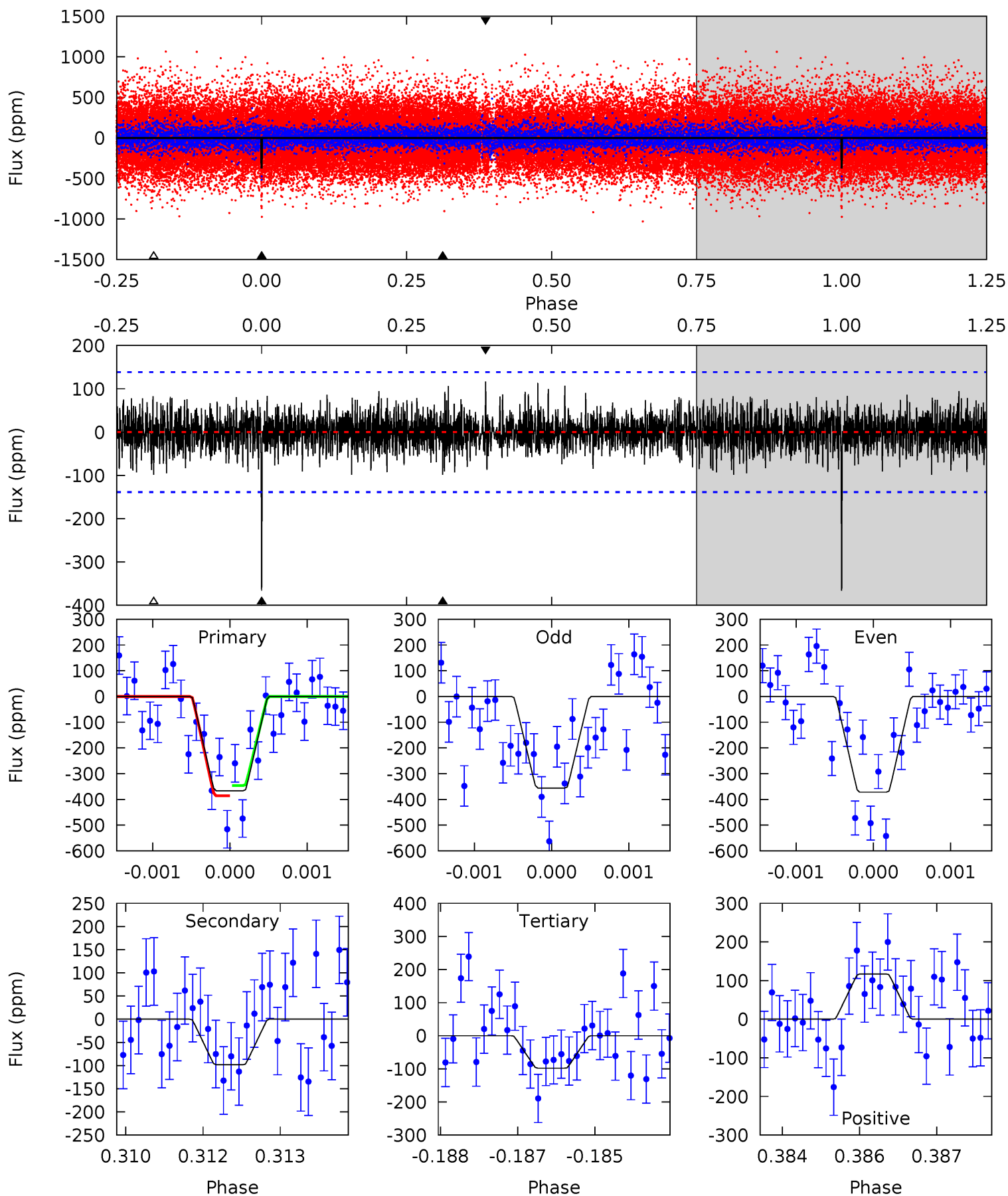
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	5.07	5.02	6.04	5.35	3.13	1.56	7.30	6.28	0.05	-0.97	0.42	0.95	0.33	1.82



Alt Model-Shift Uniqueness Test

007341467-01, P = 431.597654 Days, E = 127.552665 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	3.82	3.82	4.55	5.39	3.20	1.18	10.4	9.72	0.01	-0.73	0.30	1.03	0.24	0.77



Stellar Parameters For KIC 007341467

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5819^{+158}_{-158}	$4.452^{+0.112}_{-0.168}$	$-0.460^{+0.300}_{-0.300}$	$0.895^{+0.236}_{-0.127}$	$0.826^{+0.108}_{-0.063}$	$1.624^{+0.797}_{-0.727}$
	+3%/-3%	+3%/-4%	+65%/-65%	+26%/-14%	+13%/-8%	+49%/-45%
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 007341467-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-117 ± 23	$1.63^{+0.80}_{-0.68}$	333^{+22}_{-18}	4793^{+1391}_{-686}	25765^{+50971}_{-14747}
Alt.	-98 ± 26	$2.13^{+0.75}_{-0.77}$	332^{+23}_{-16}	4208^{+774}_{-473}	13513^{+16447}_{-7074}

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

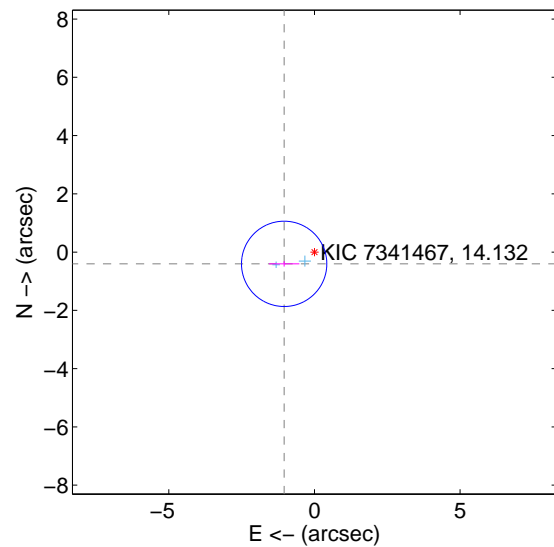
Supplemental centroid analysis for 007341467-01. Kepler magnitude: 14.13. Transit SNR 8.00

There are 2 quarters with good PRF difference image offsets

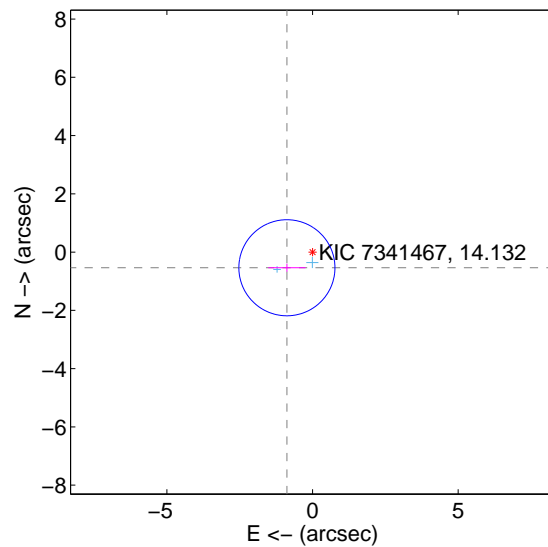
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.115 ± 0.488	2.28	1.040 ± 0.522	-0.403 ± 0.092
PRF-fit source offset from KIC position	1.031 ± 0.550	1.88	0.880 ± 0.639	-0.538 ± 0.138
photometric centroid source offset	1.63 ± 1.76	0.92	1.58 ± 1.76	0.38 ± 1.84

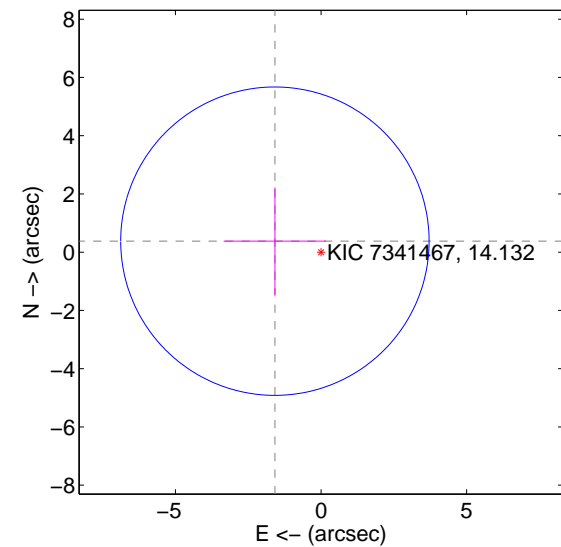
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

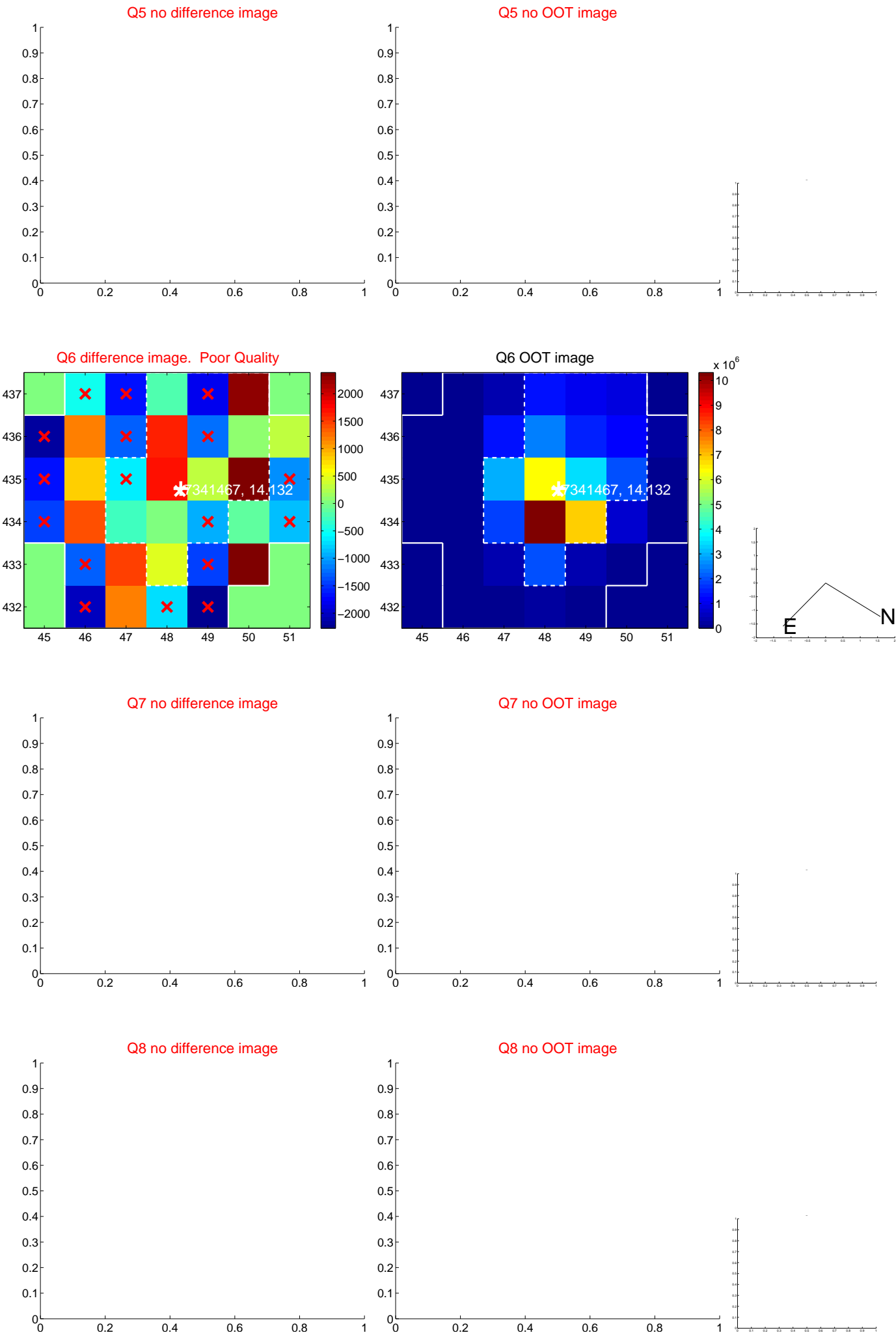


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

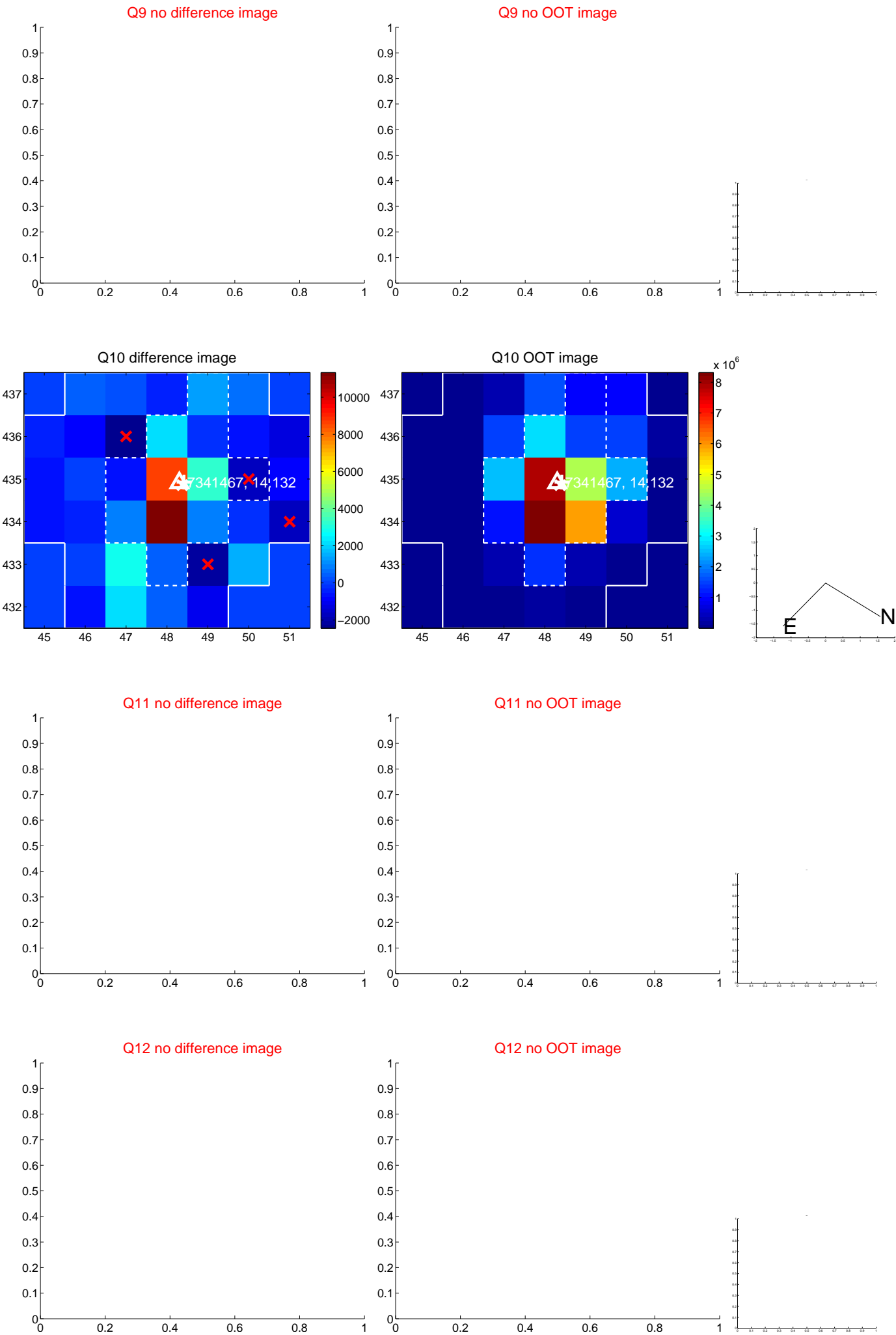
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



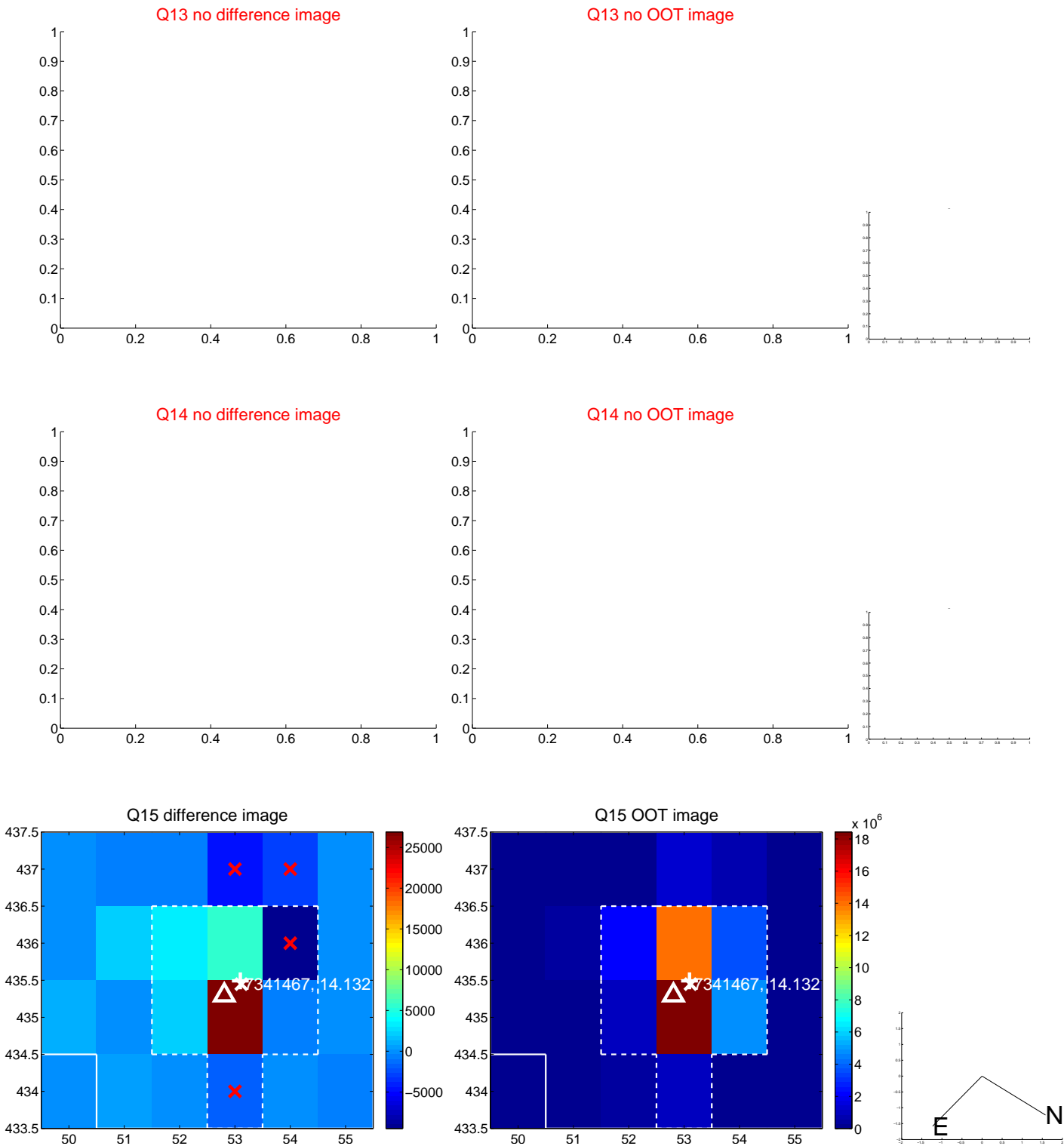
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



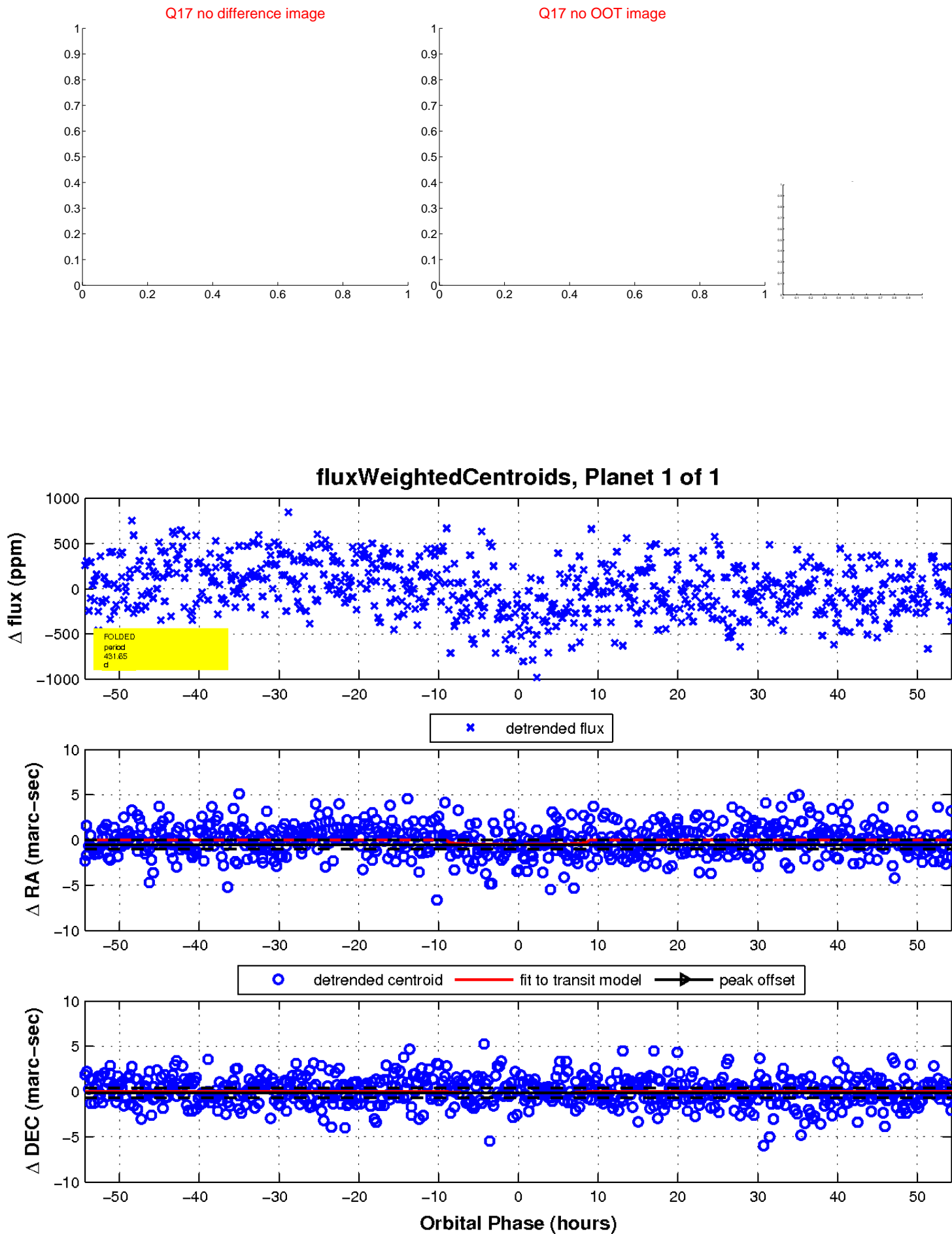
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

