

KIC 007337049

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})
007337049-01	OBS	No	1.264646	131.728362	87.1	2.526	9.3	7.9	1.57	6853	1.70	9188.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007337049-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

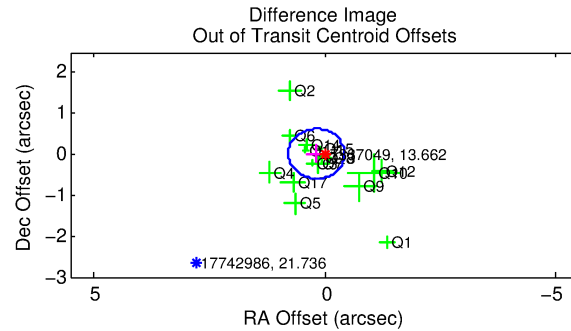
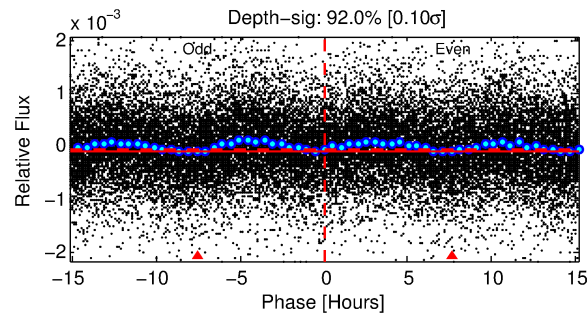
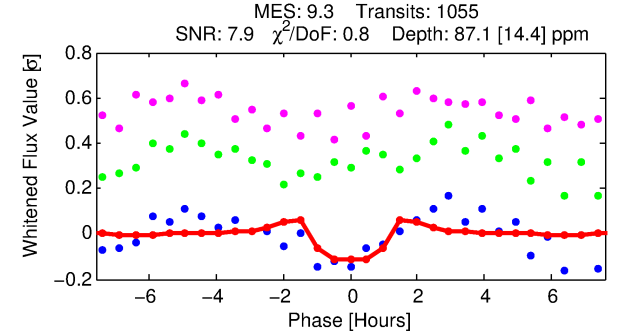
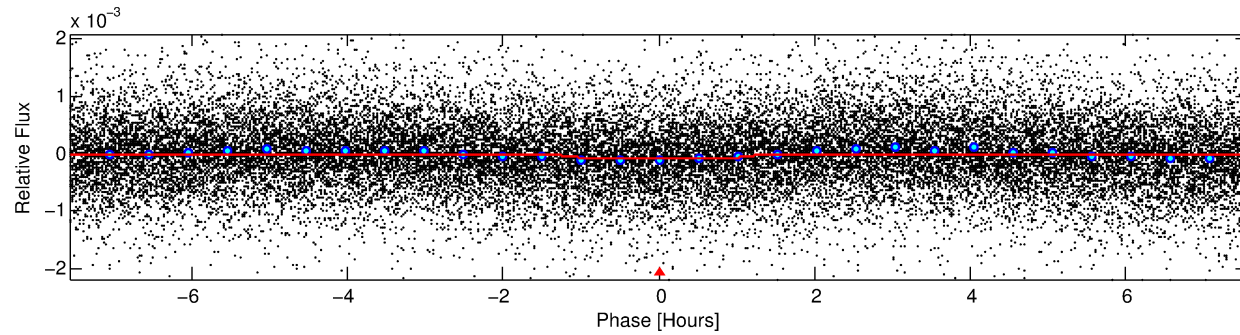
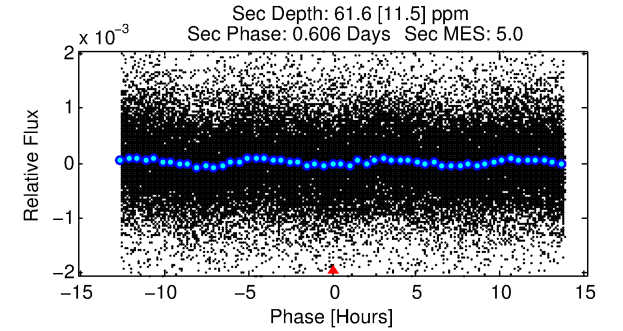
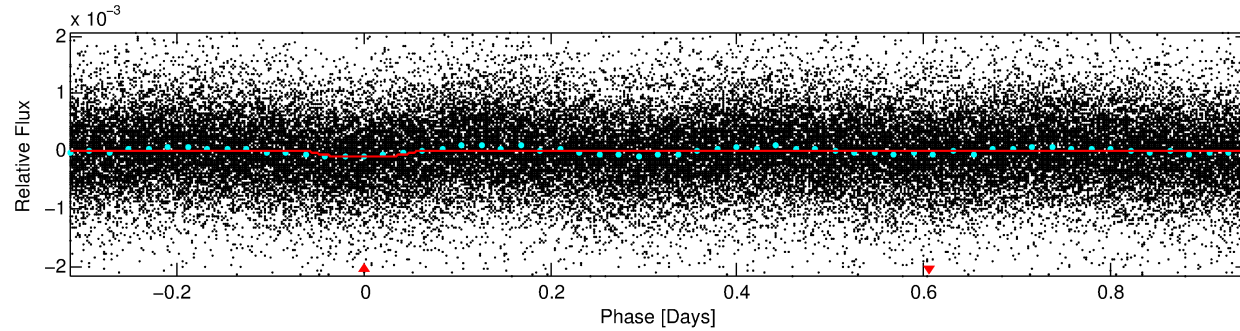
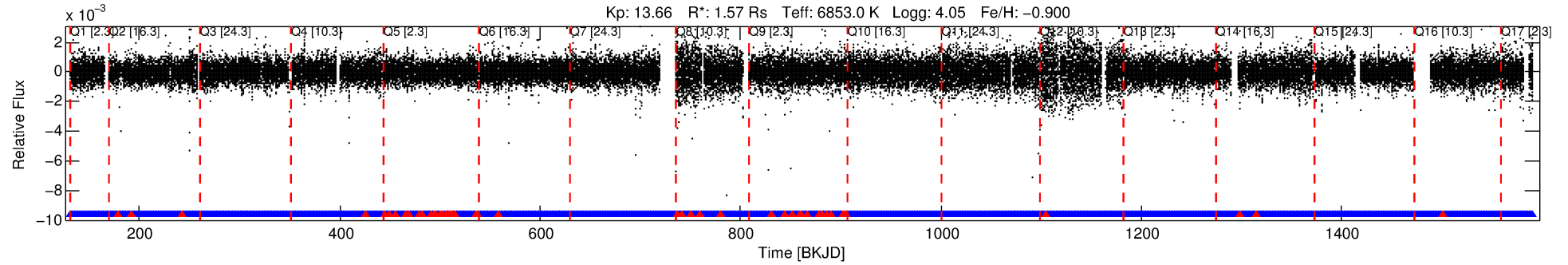
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007337049-01

No Significant Match Found

DV One-Page Summary

KIC: 7337049 Candidate: 1 of 1 Period: 1.265 d



DV Fit Results:

Period = 1.26465 [0.00001] d
Epoch = 131.7284 [0.0028] BKJD
Rp/R* = 0.0099 [0.0044]
a/R* = 2.02 [4.00]
b = 0.90 [0.59]
Seff = 9188.46 [5466.09]
Teq = 2497 [371] K
Rp = 1.70 [0.96] Re
a = 0.0230 [0.0081] AU
Ag = 6.22 [6.68] [0.78σ]
Teffp = 6096 [1402] K [2.48σ]

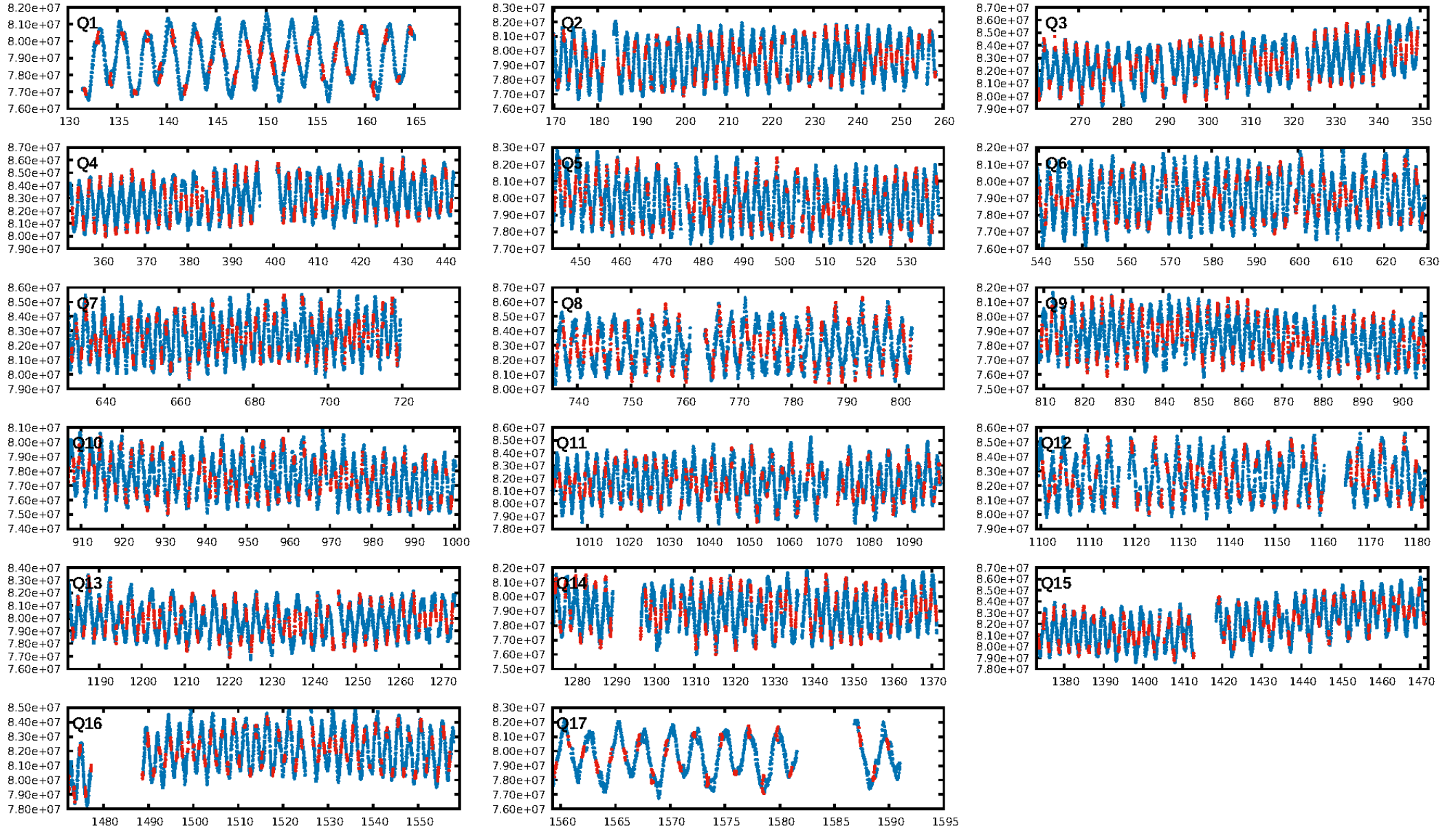
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.92e-17
RollingBand-fgt: 0.95 [960/1007]
GhostDiagnostic-chr: 0.8429
Centroid-sig: 37.3%
Centroid-so: 0.763 arcsec [1.60σ]
OotOffset-rm: 0.182 arcsec [0.89σ]
OotOffset-st: 4/4/3/5 [16]
KicOffset-rm: 0.137 arcsec [0.62σ]
KicOffset-st: 4/4/3/5 [16]
DiffImageQuality-fgm: 0.62 [10/16]
DiffImageOverlap-fno: 1.00 [17/17]

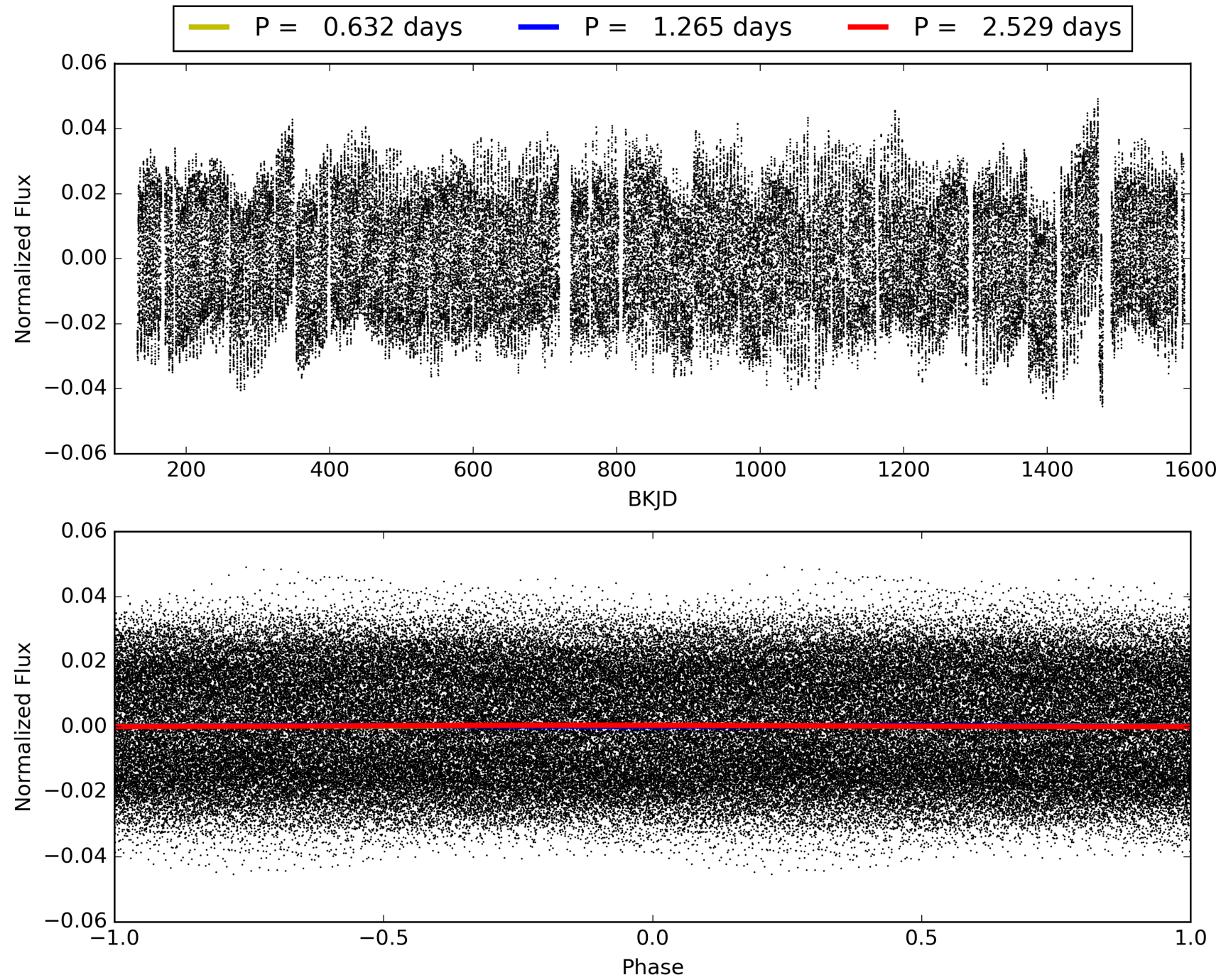
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:18:44 Z

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

TCE 007337049-01, PDC Light Curves

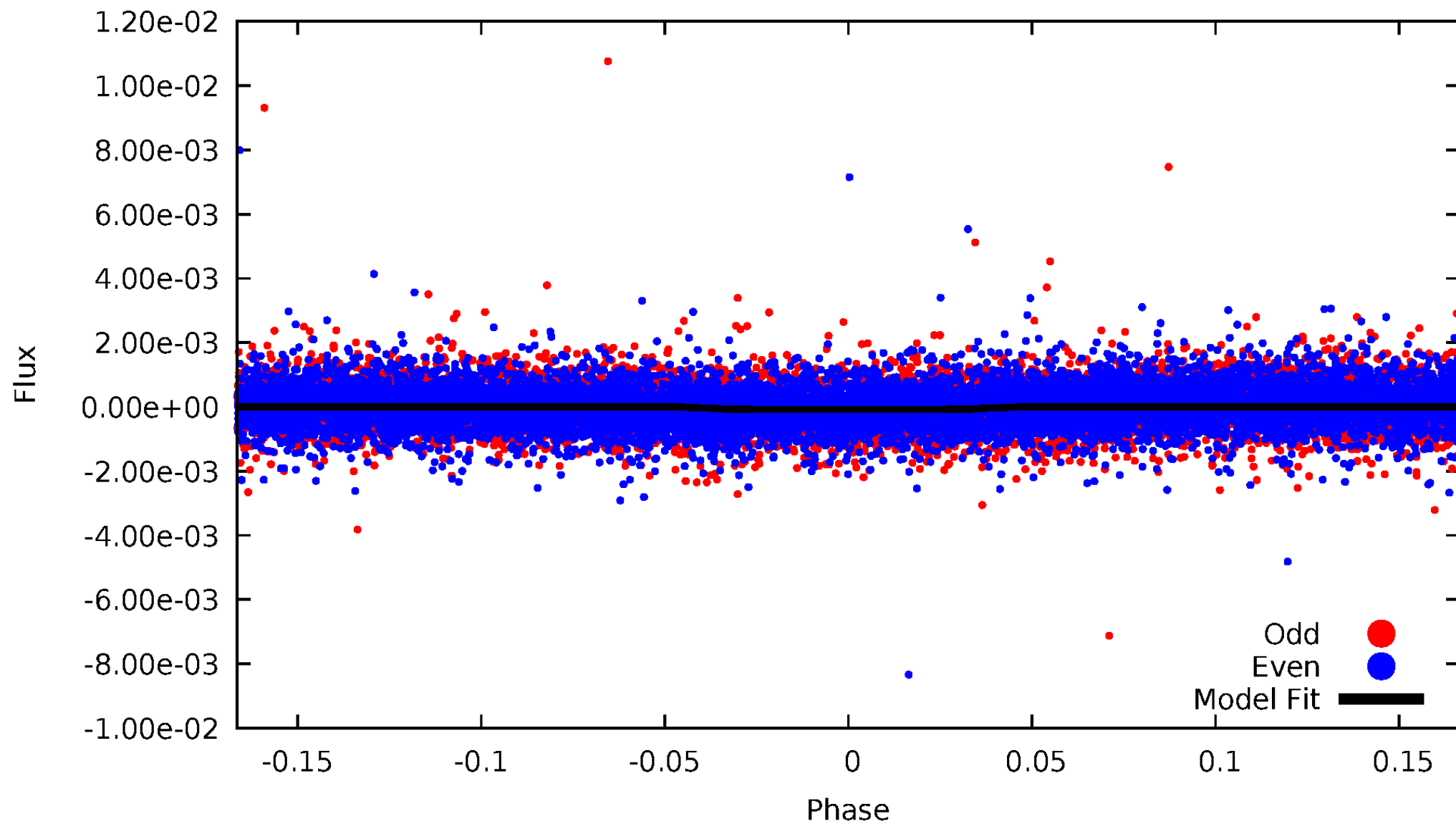


TCE 007337049-01



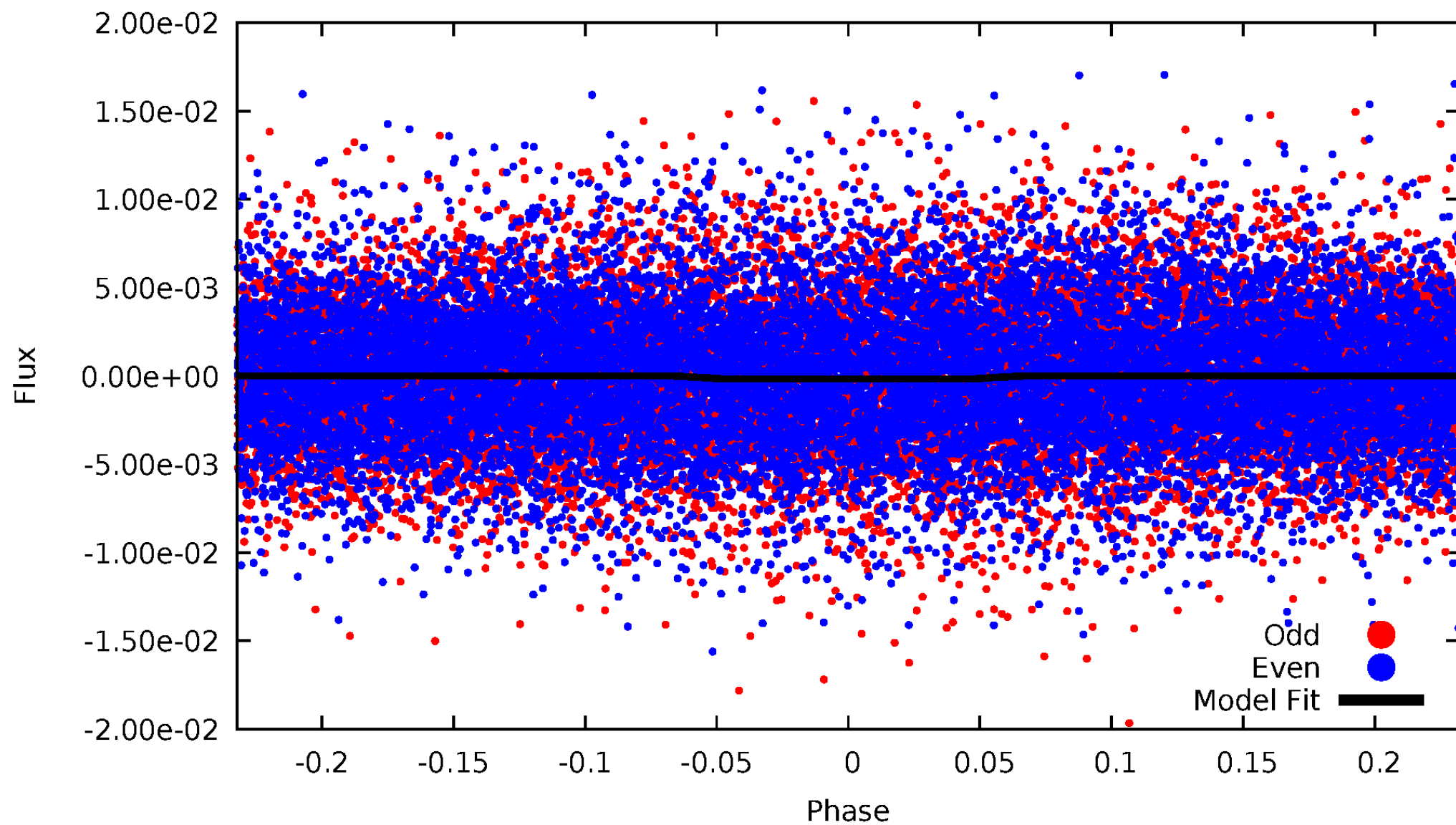
DV Odd/Even

TCE 007337049-01



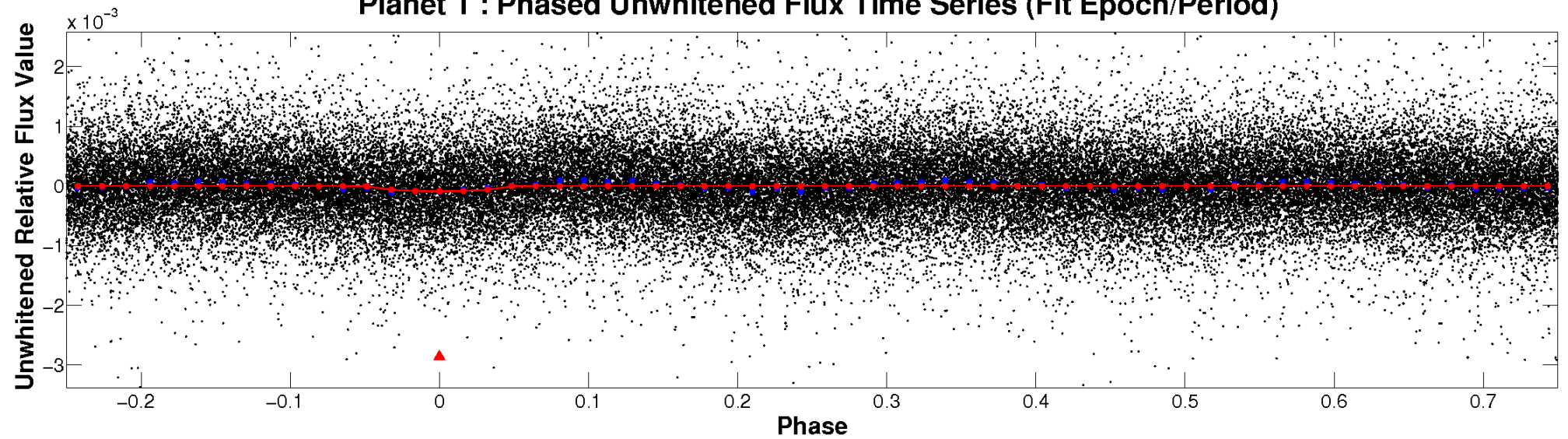
ALT Odd/Even

TCE 007337049-01

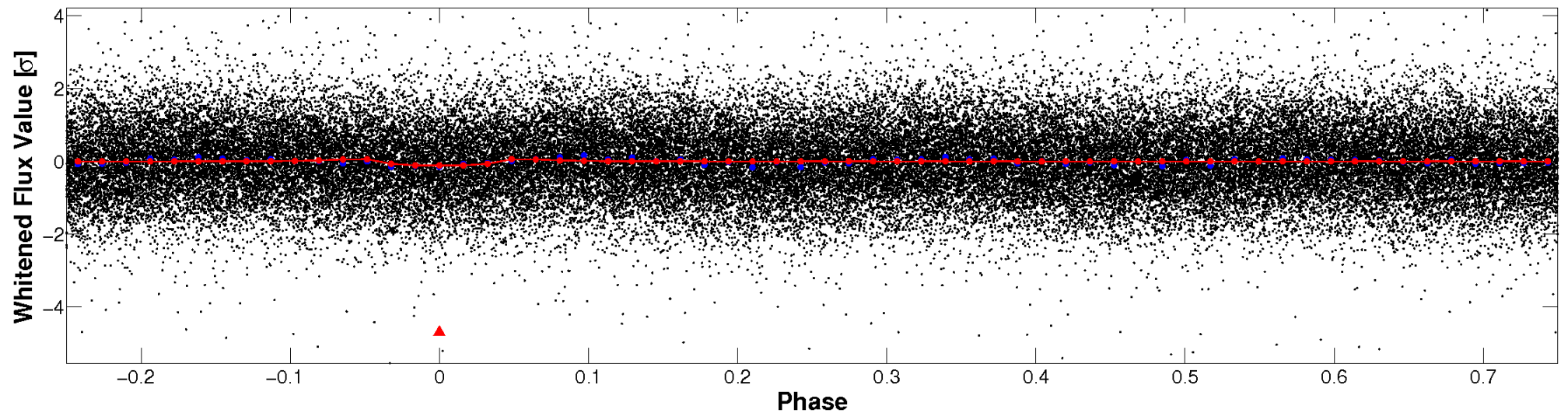


Non-Whitened Vs. Whitened Light Curve

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

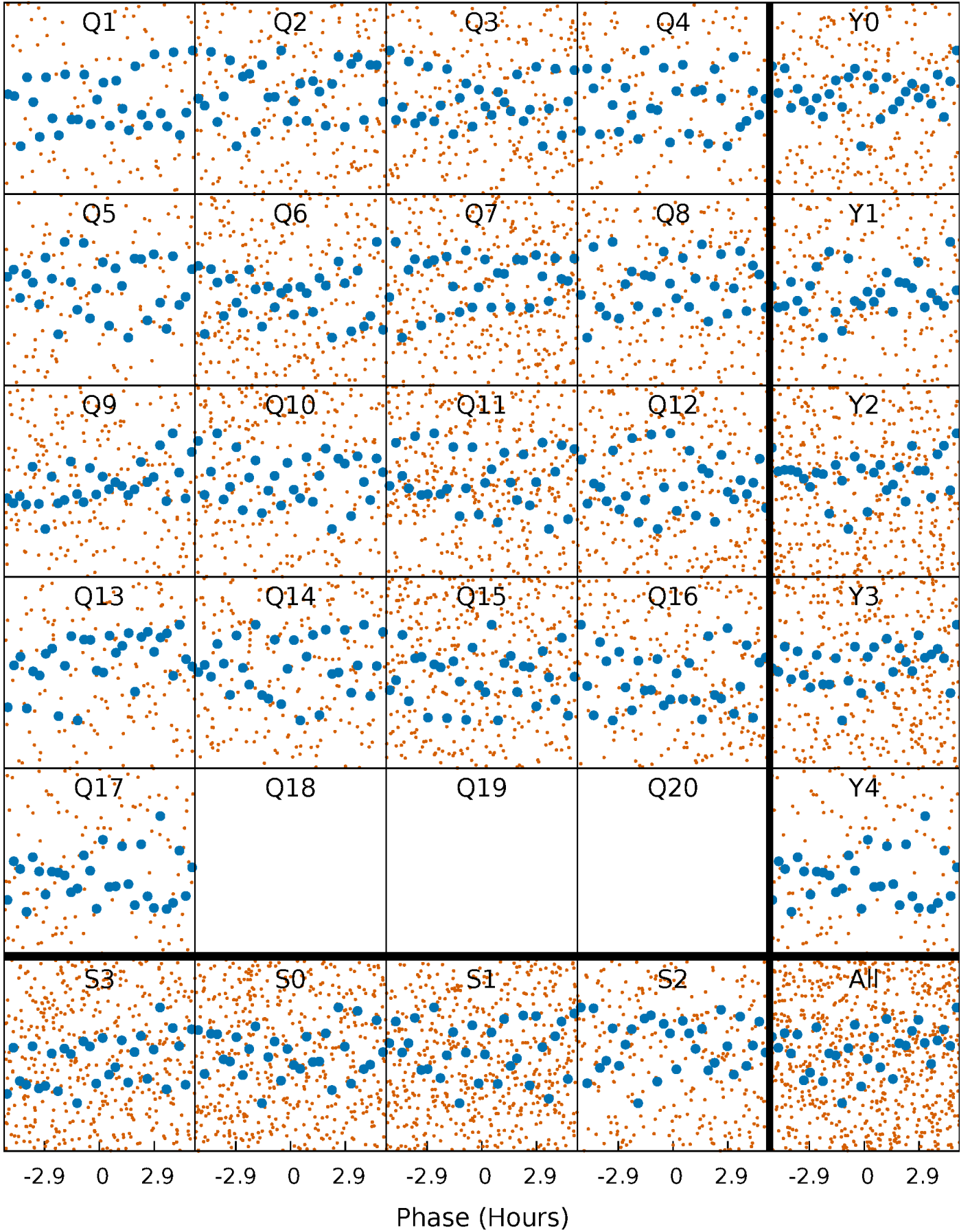


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



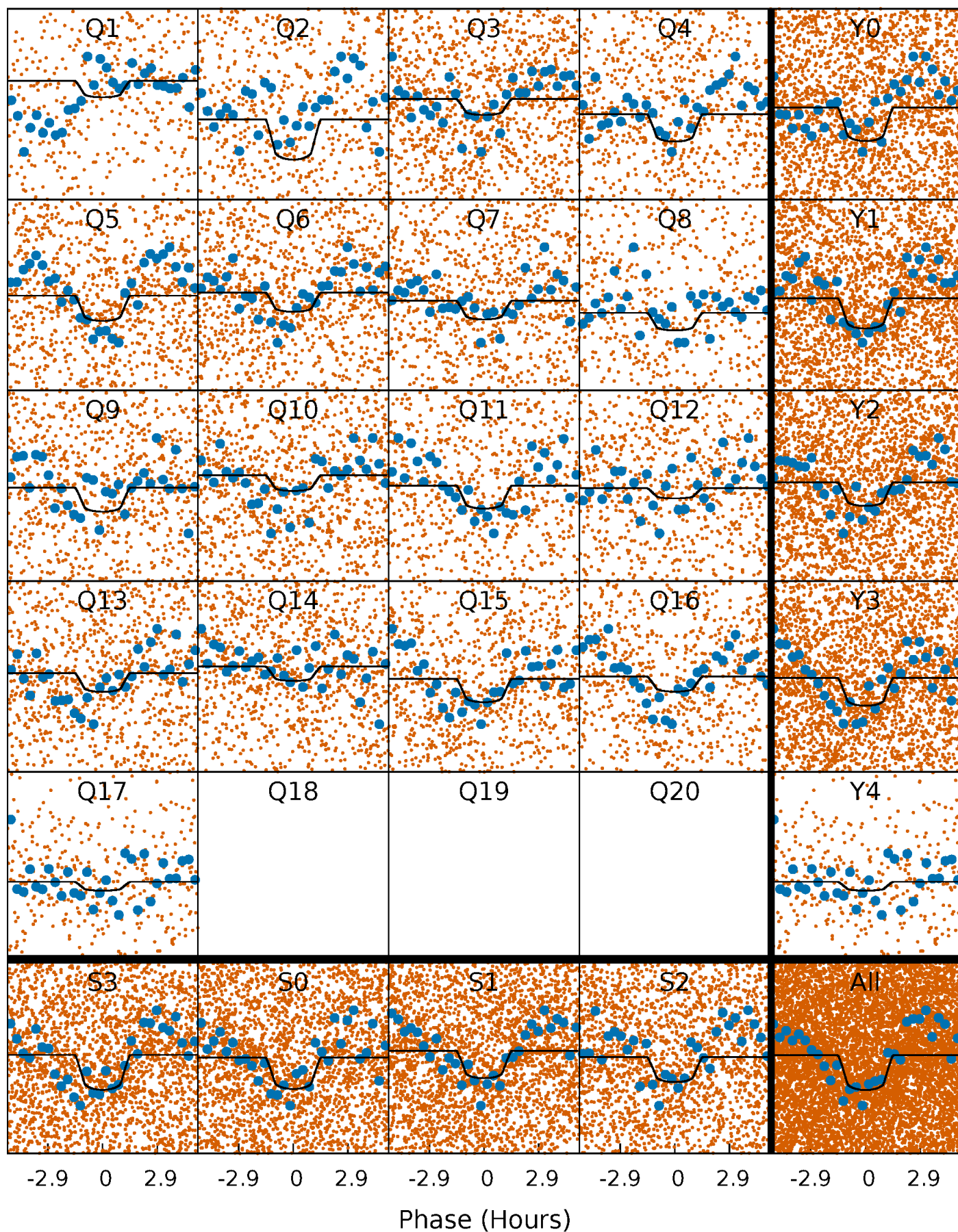
PDC Quarter-Phased Transit Curves

TCE 007337049-01 P= 1.264646 Days $T_0=131.728362$ (BKJD)



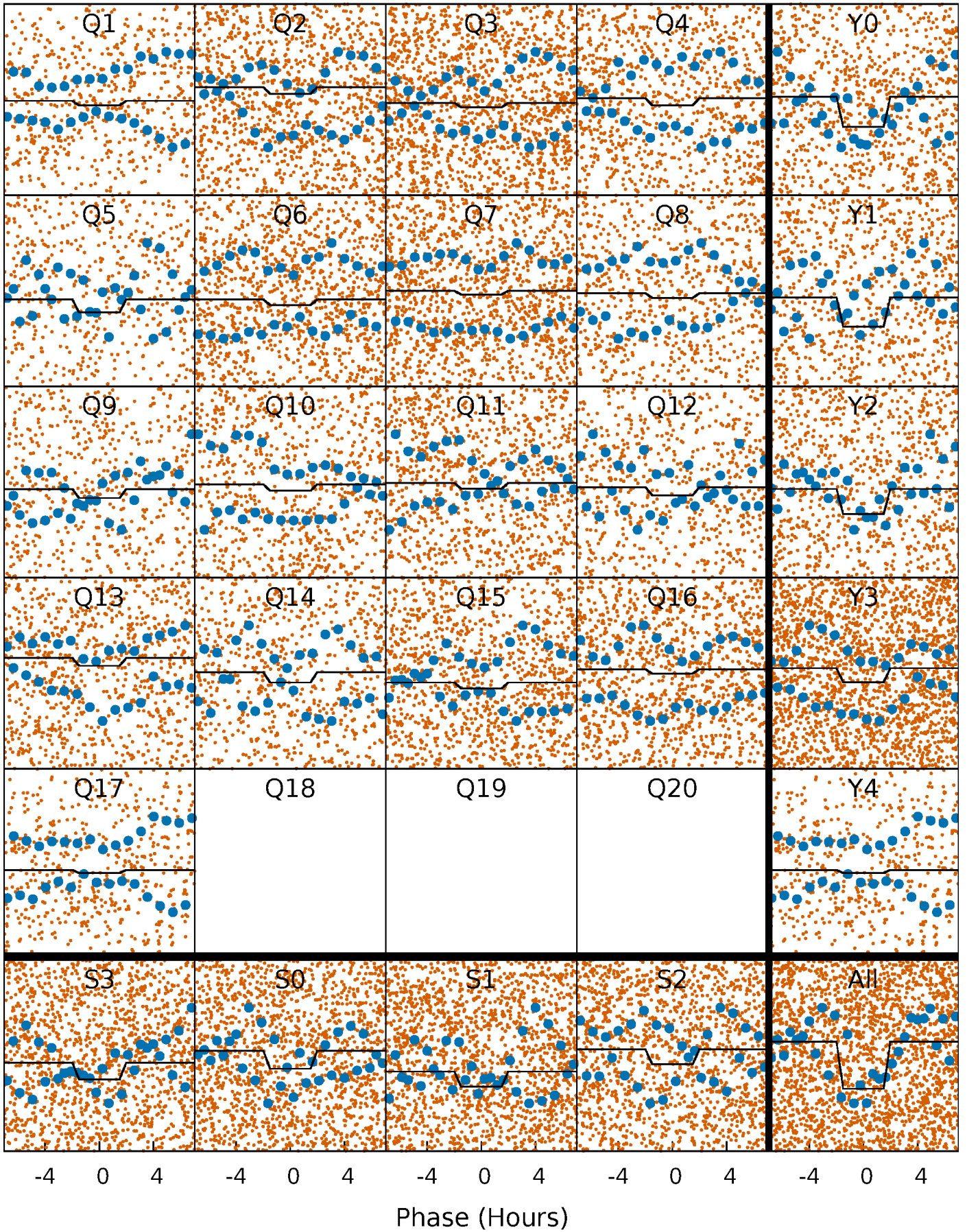
DV Quarter-Phased Transit Curves

TCE 007337049-01 P= 1.264646 Days $T_0=131.728362$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

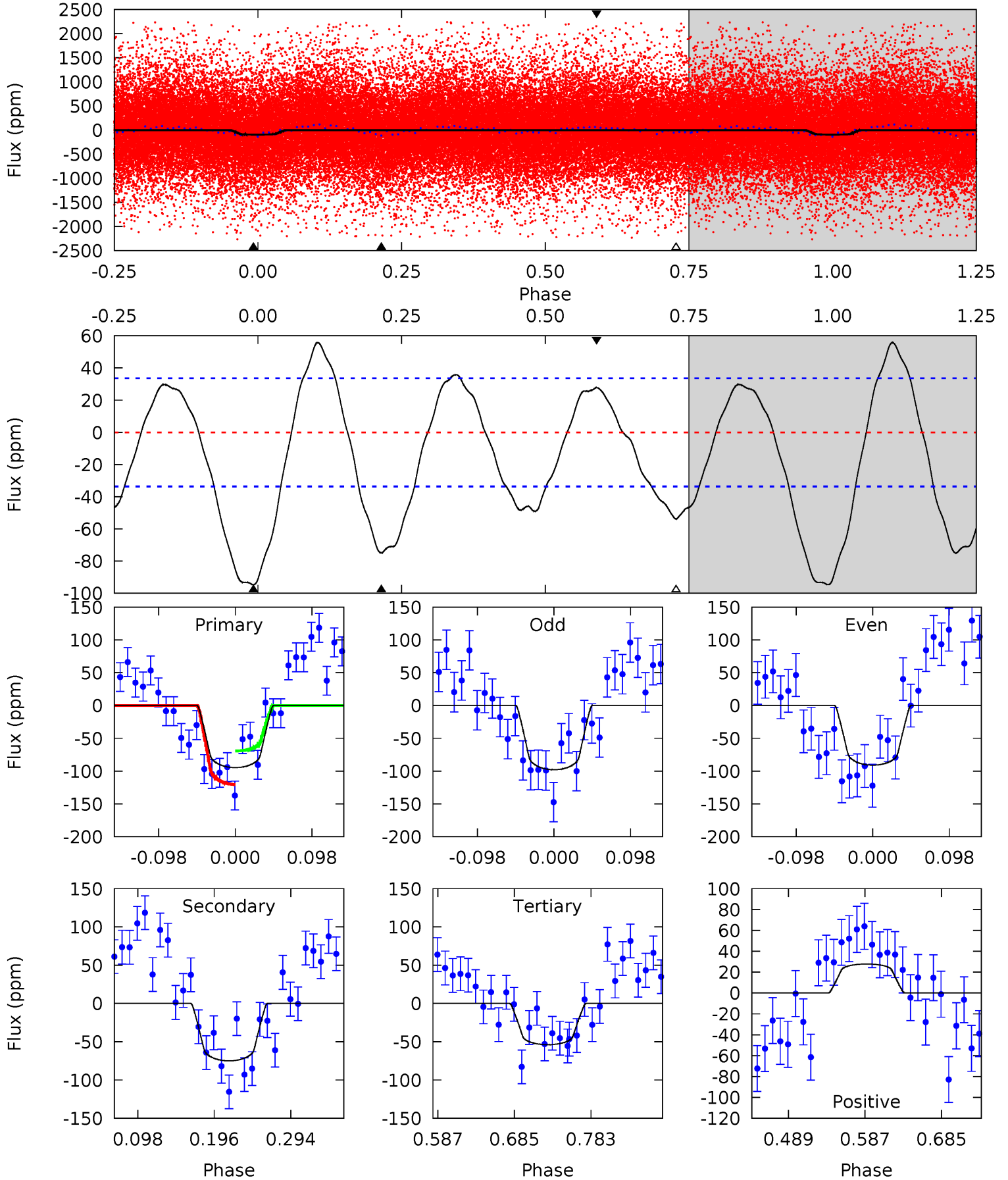
TCE 007337049-01 P= 1.264583 Days $T_0=131.729886$ (BKJD)



DV Model-Shift Uniqueness Test

007337049-01, P = 1.264646 Days, E = 130.463716 Days

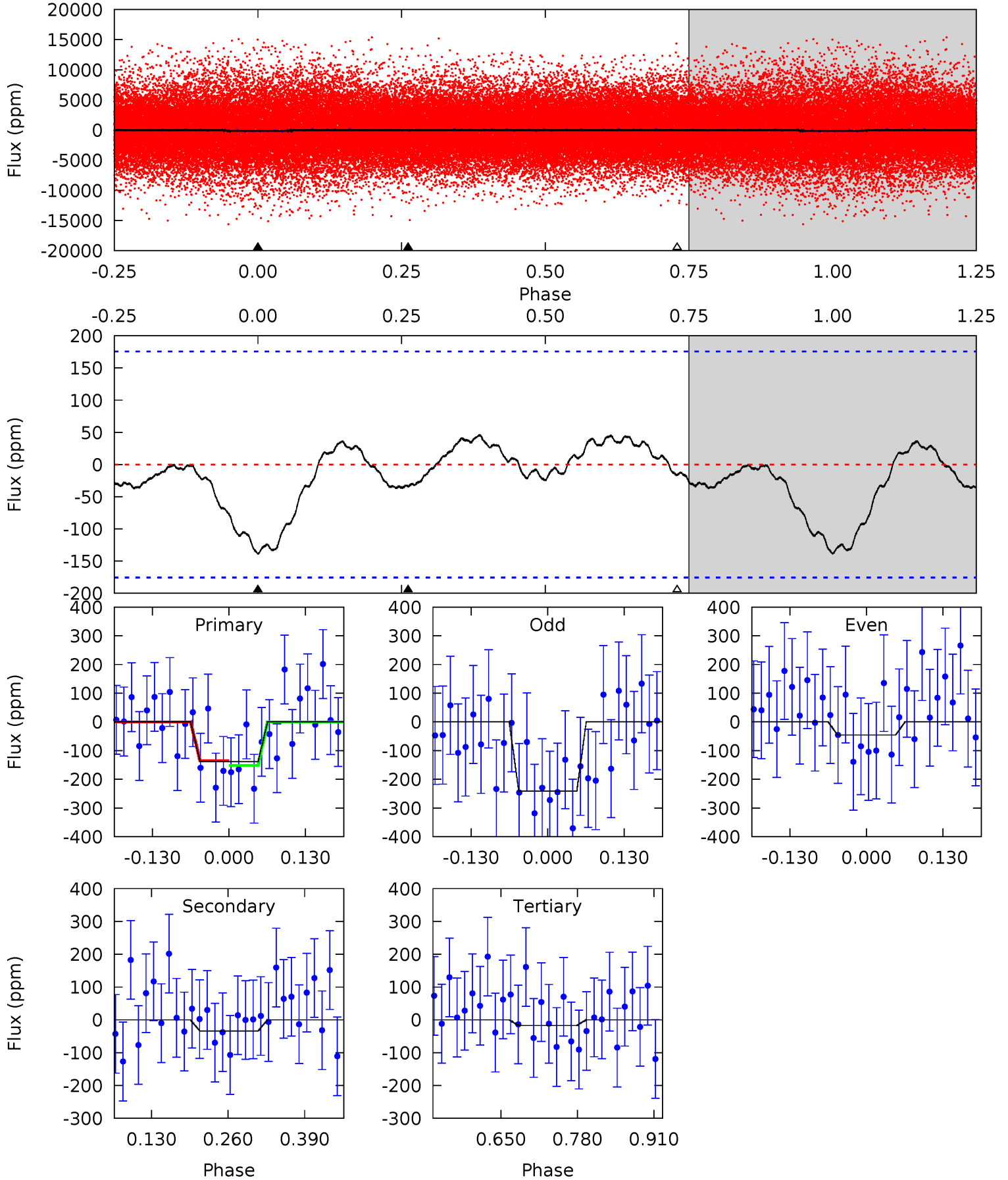
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	10.2	7.32	3.78	4.57	1.66	4.20	5.55	9.09	2.87	6.41	0.47	1.12	0.37	3.49



Alt Model-Shift Uniqueness Test

007337049-01, P = 1.264583 Days, E = 130.465303 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.56	0.88	0.44	0	4.51	1.51	0.61	3.12	3.56	0.44	0.88	2.45	0.75	0.25	0.21



Stellar Parameters For KIC 007337049

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6853^{+191}_{-263}	$4.054^{+0.343}_{-0.147}$	$-0.900^{+0.300}_{-0.300}$	$1.571^{+0.362}_{-0.543}$	$1.020^{+0.117}_{-0.105}$	$0.371^{+0.844}_{-0.159}$
	+3%/-4%	+8%/-4%	+33%/-33%	+23%/-35%	+11%/-10%	+228%/-43%
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 007337049-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-75 ± 7	$1.66^{+0.84}_{-0.75}$	3445^{+271}_{-349}	6199^{+2489}_{-1054}	$7.934^{+17.963}_{-4.446}$
Alt.	-34 ± 39	$2.05^{+0.78}_{-0.75}$	3437^{+255}_{-318}	4553^{+1517}_{-7982}	$2.188^{+5.432}_{-2.262}$

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 $A_{obs} \gg 1.0$

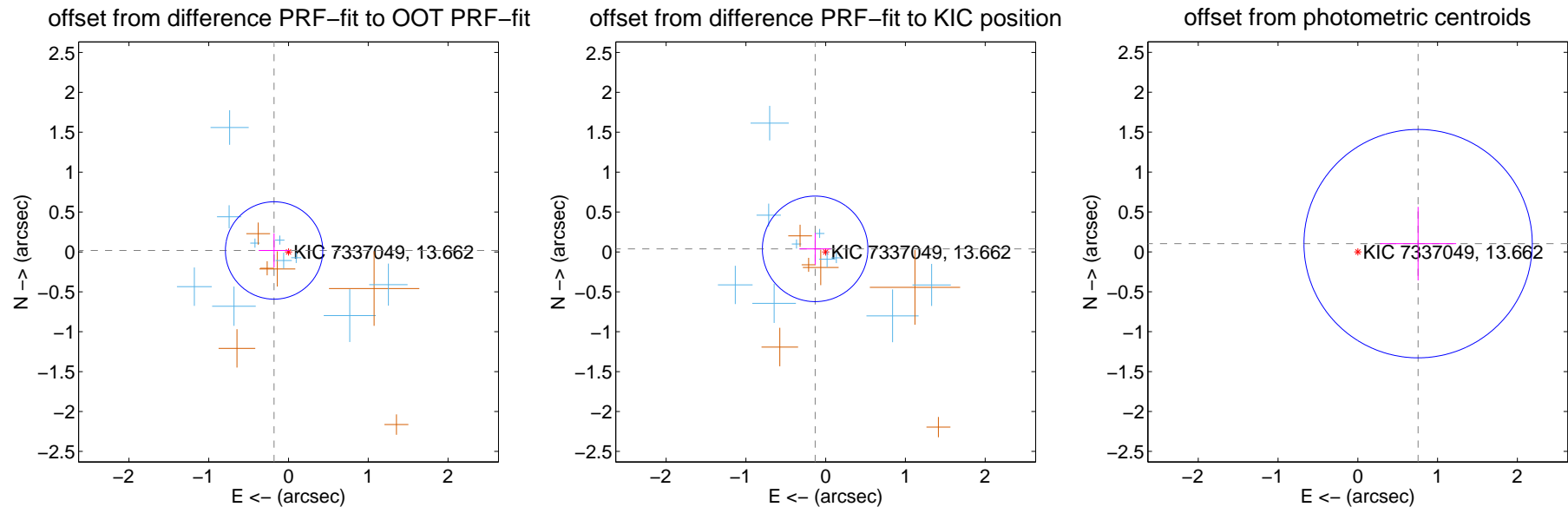
DV Centroid Data

Supplemental centroid analysis for 007337049-01. Kepler magnitude: 13.66. Transit SNR 7.93

There are 10 quarters with good PRF difference image offsets

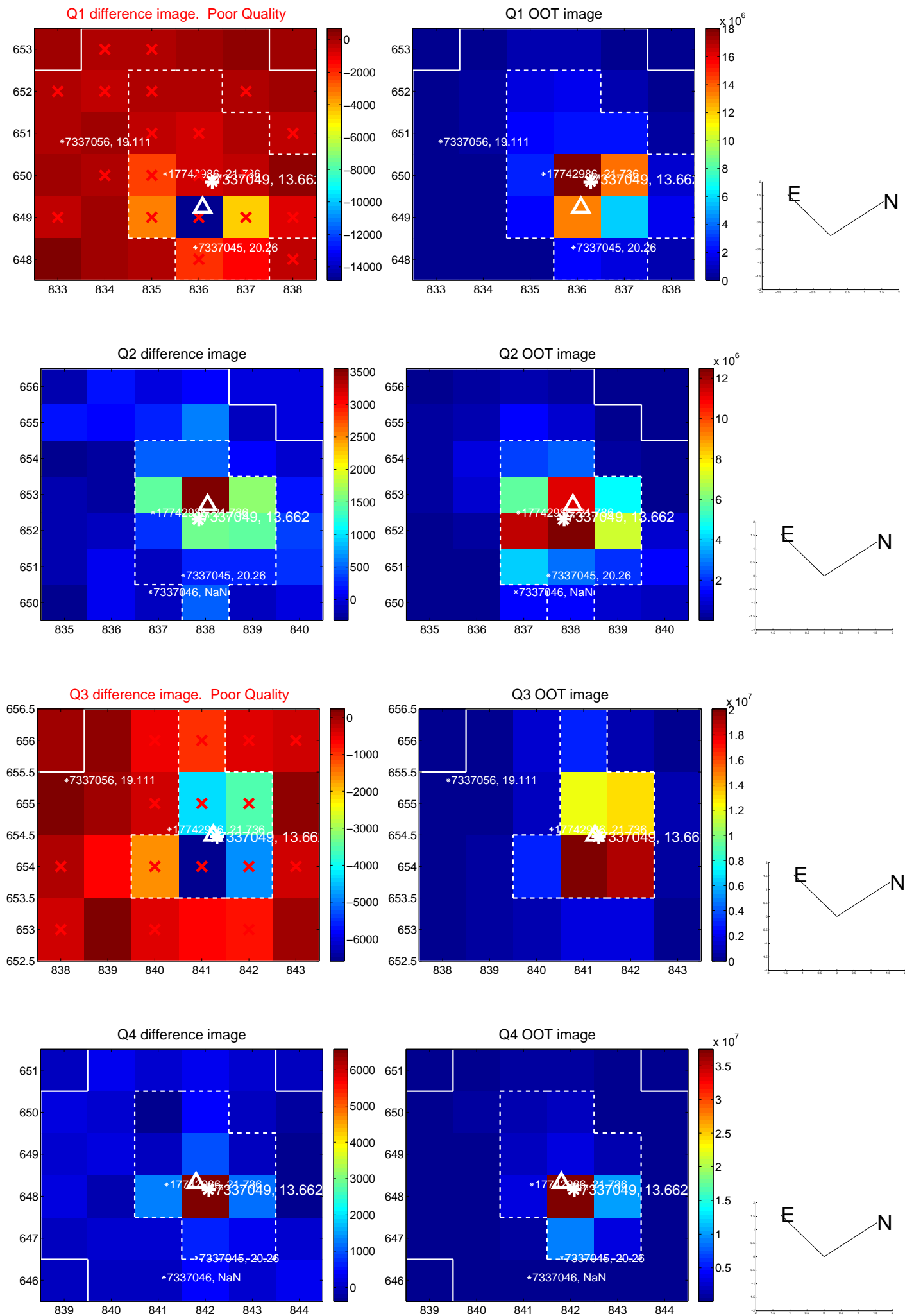
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.182 ± 0.203	0.89	0.181 ± 0.193	0.018 ± 0.213
PRF-fit source offset from KIC position	0.137 ± 0.220	0.62	0.132 ± 0.196	0.038 ± 0.200
photometric centroid source offset	0.76 ± 0.48	1.60	-0.76 ± 0.48	0.10 ± 0.46

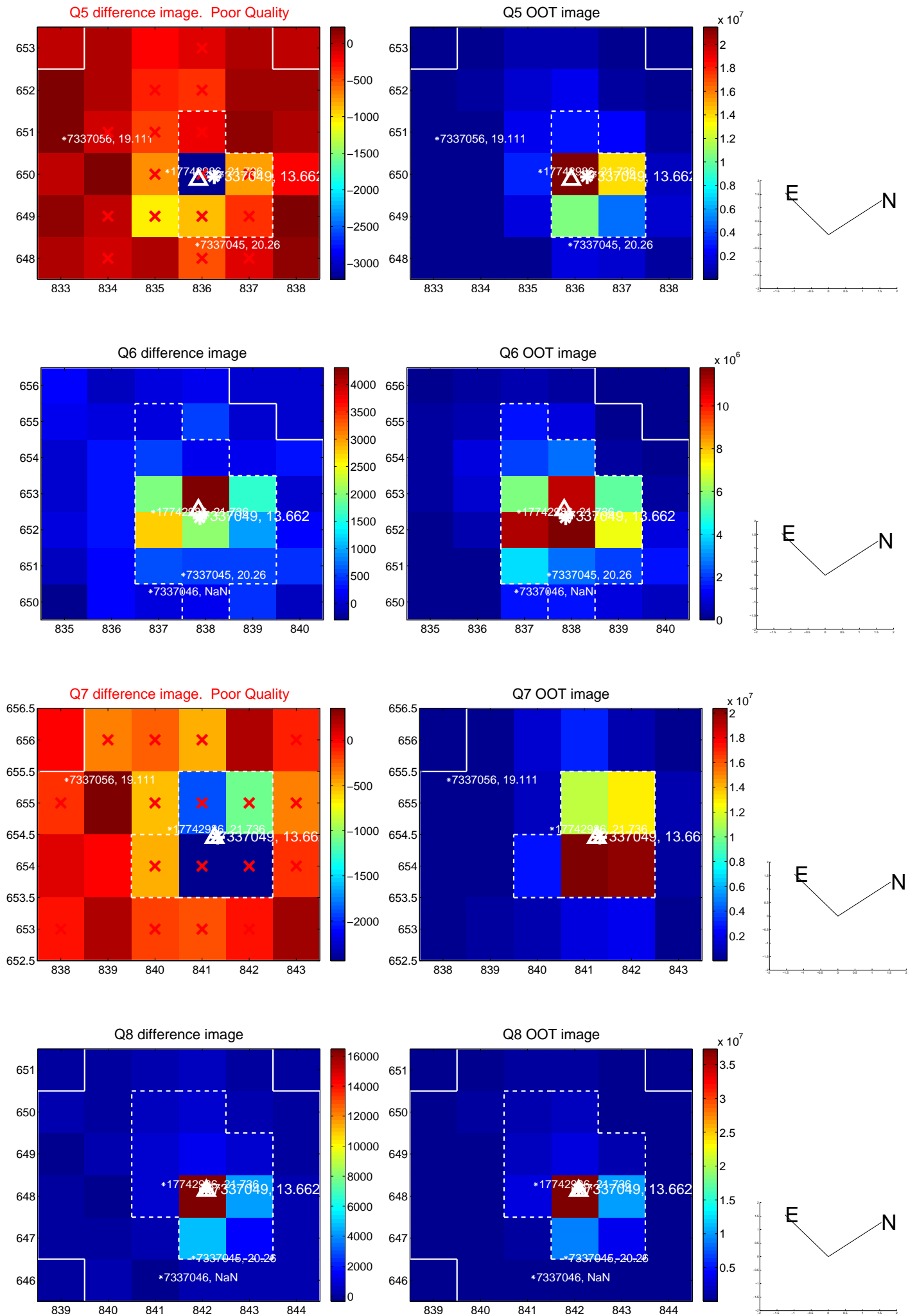


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

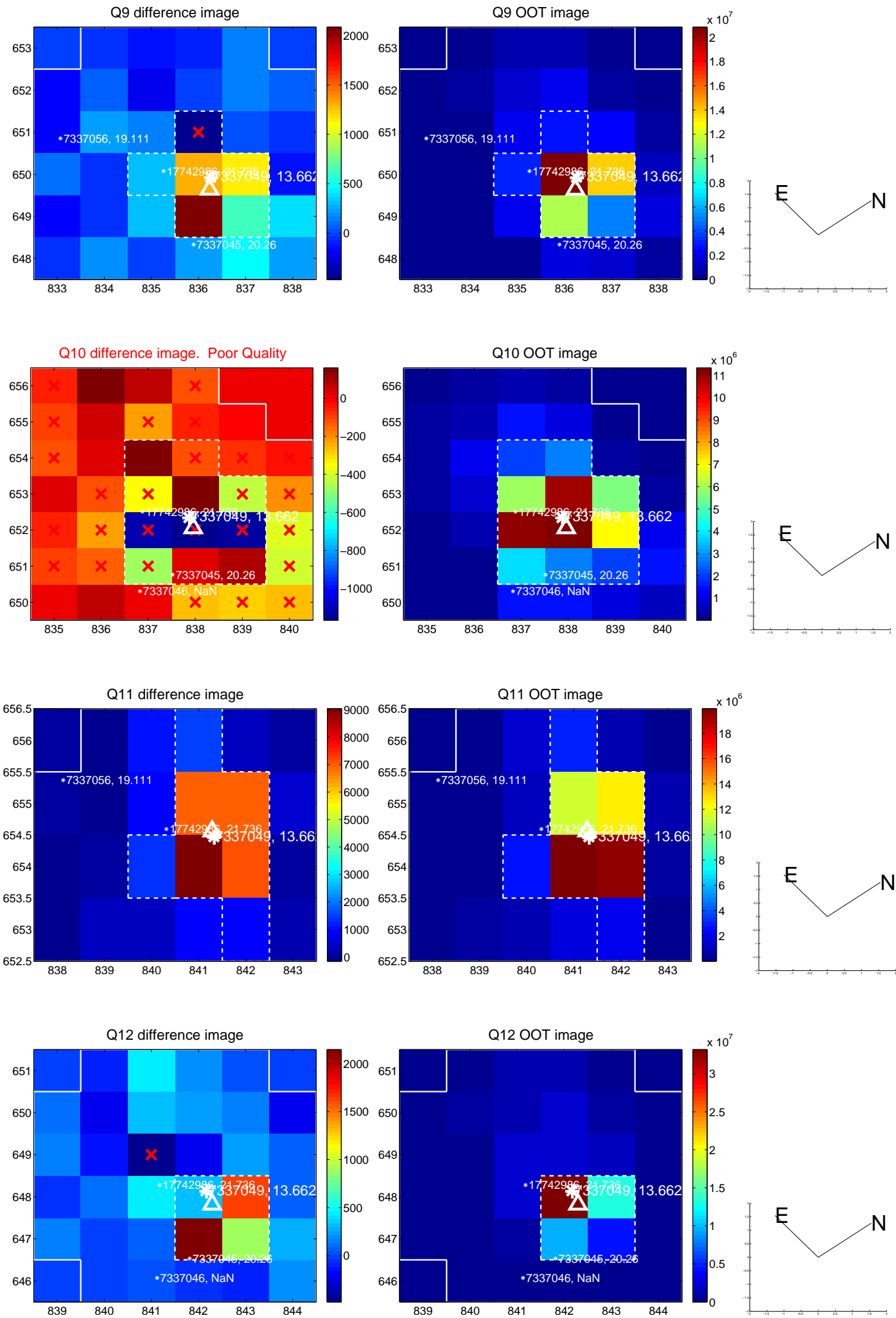
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



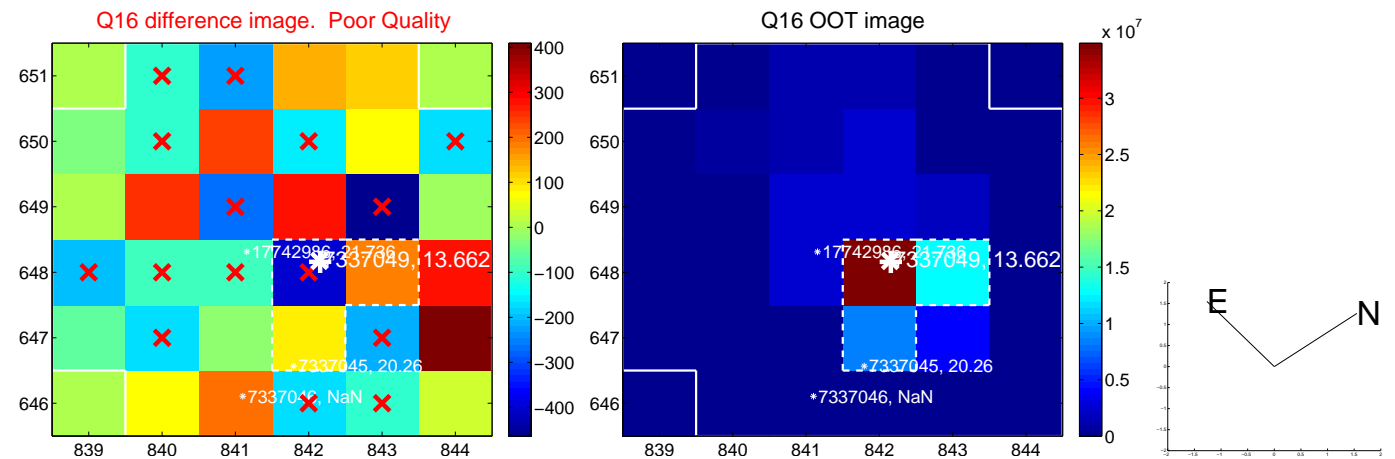
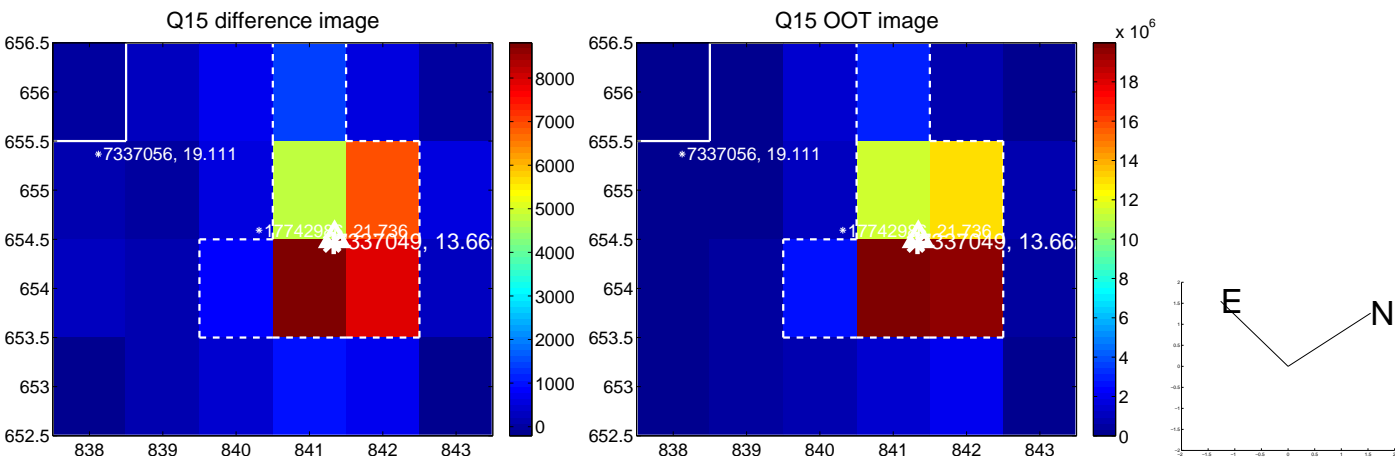
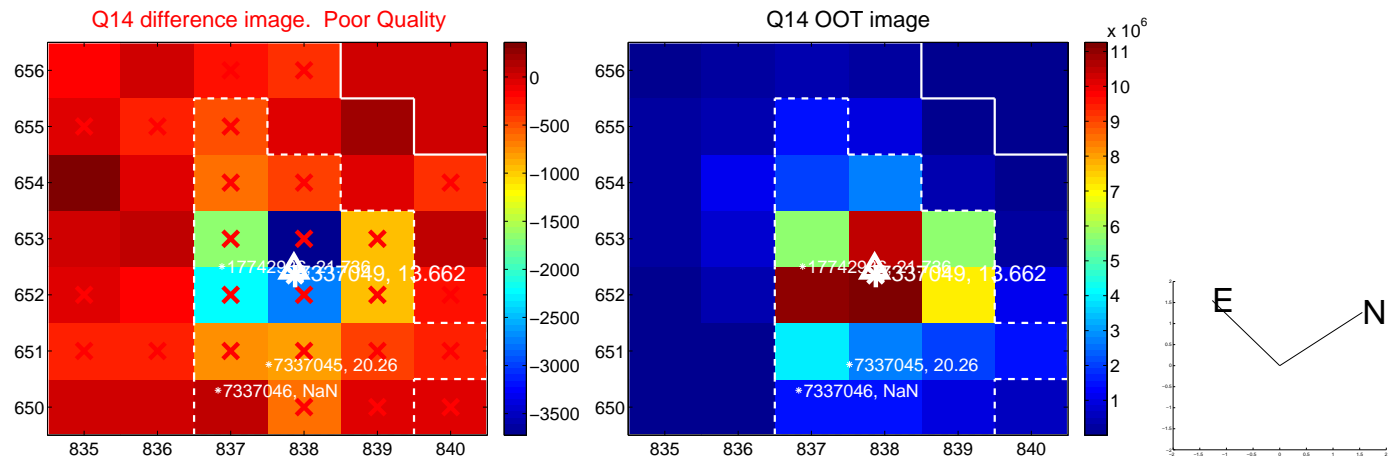
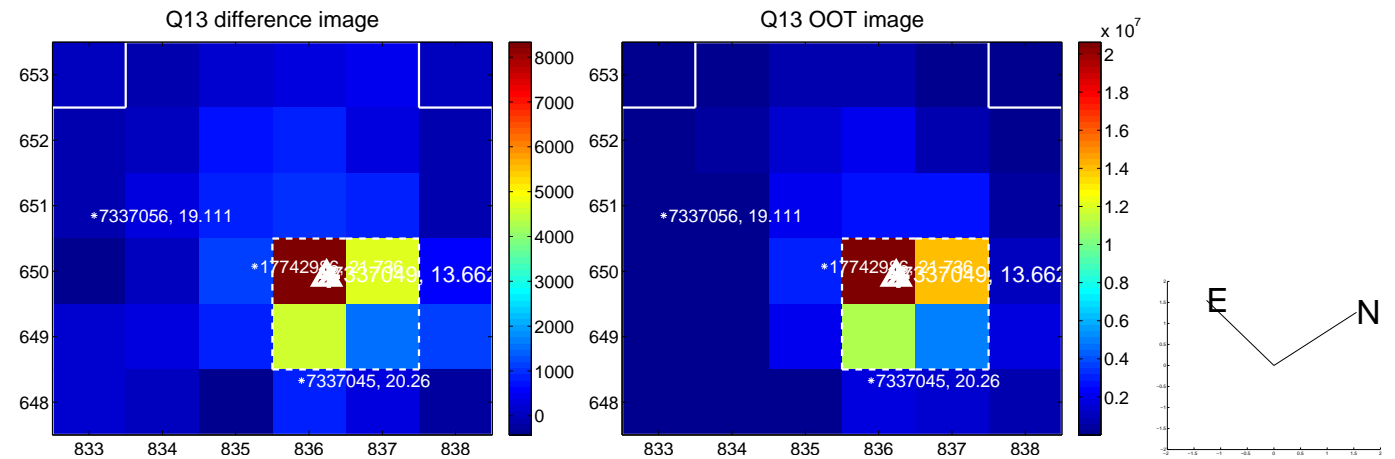
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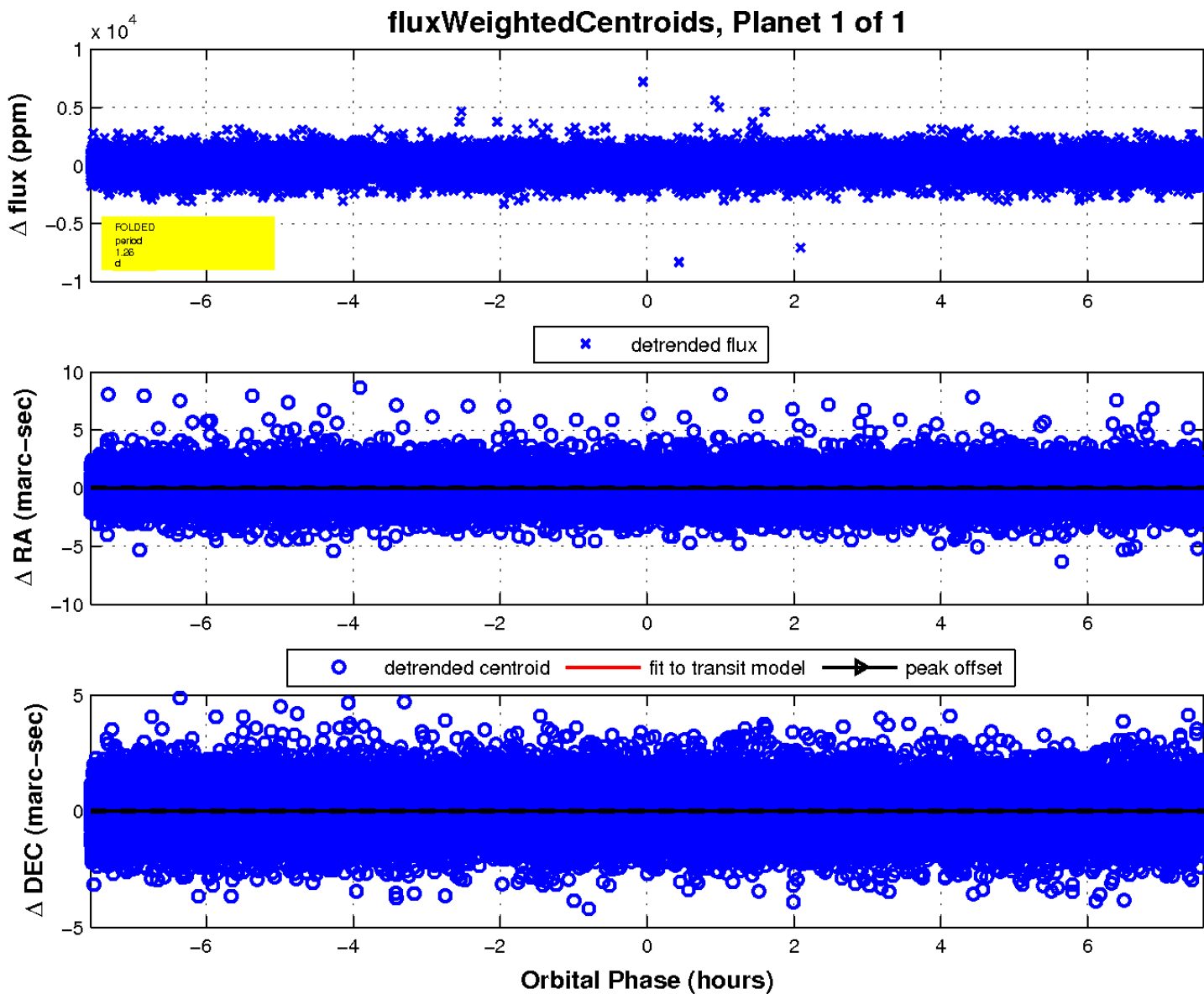
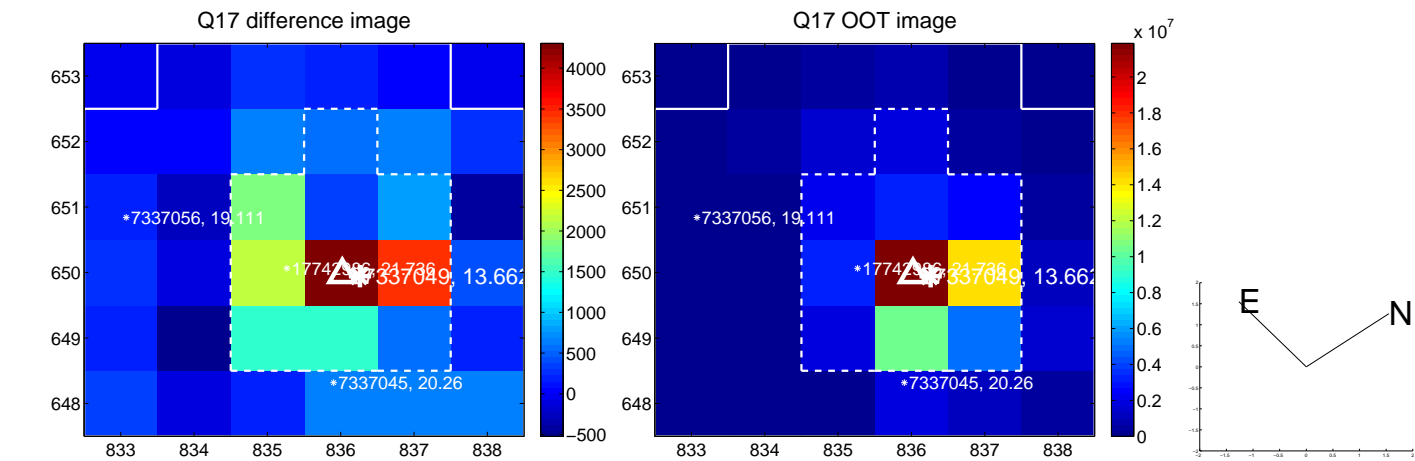
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UKIRT Image

