

KIC 011124203

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})
011124203-01	OBS	No	0.958988	132.153950	571.0	6.640	52.1	19.8	0.42	3601	1.51	127.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011124203-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV

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

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

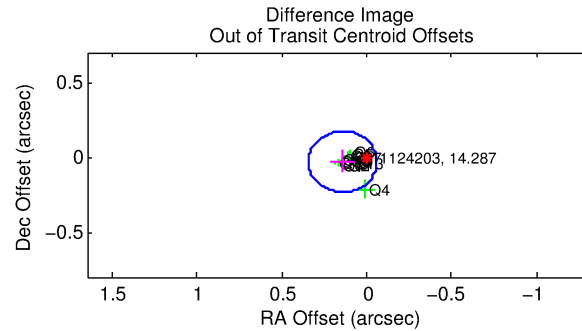
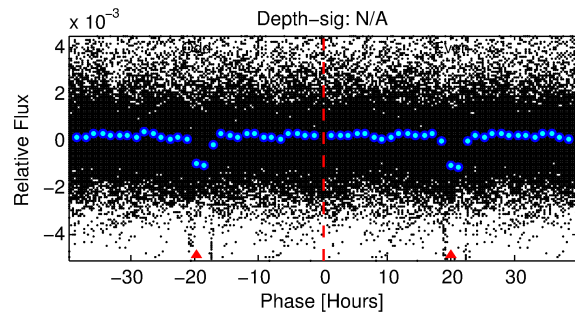
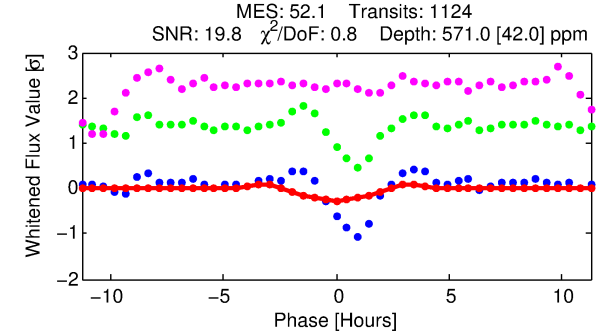
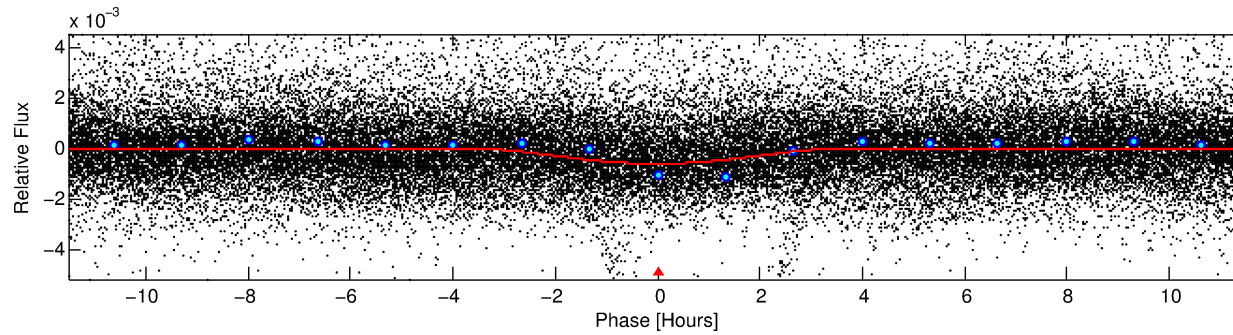
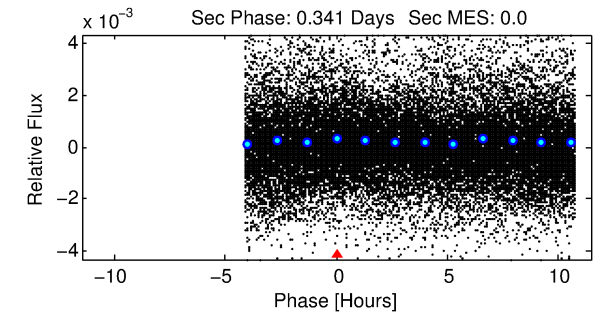
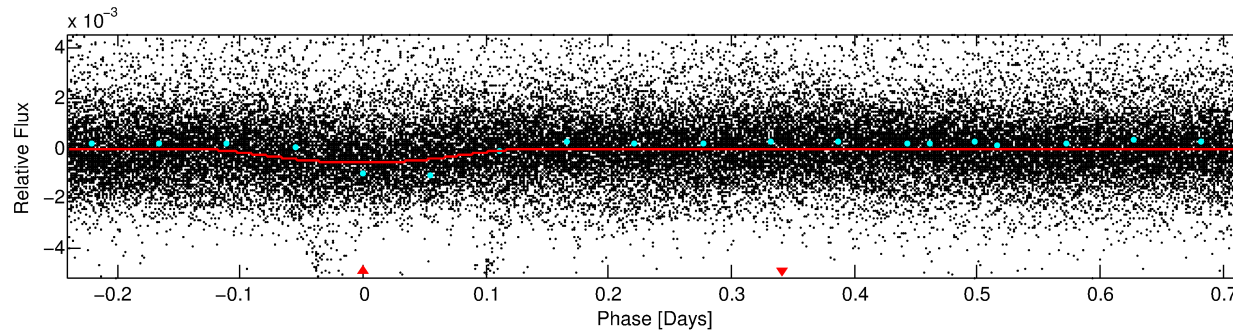
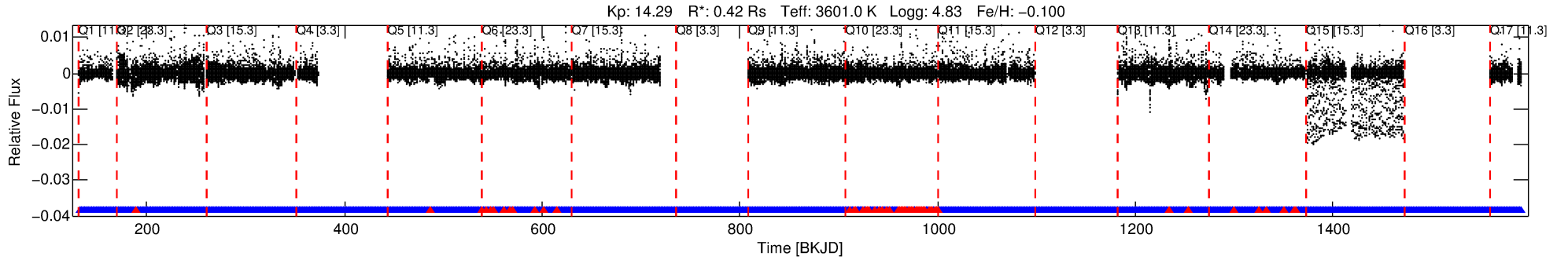
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011124203-01

No Significant Match Found

DV One-Page Summary

KIC: 11124203 Candidate: 1 of 1 Period: 0.959 d



DV Fit Results:

Period = 0.95899 [0.00001] d
Epoch = 132.1540 [0.0029] BKJD
Rp/R* = 0.0330 [0.0052]
a/R* = 1.06 [0.00]
b = 0.98 [0.01]
Seff = 127.74 [16.14]
Teff = 857 [27] K
Rp = 1.51 [0.29] Re
a = 0.0144 [0.0012] AU
Ag = N/A
Teffp = N/A

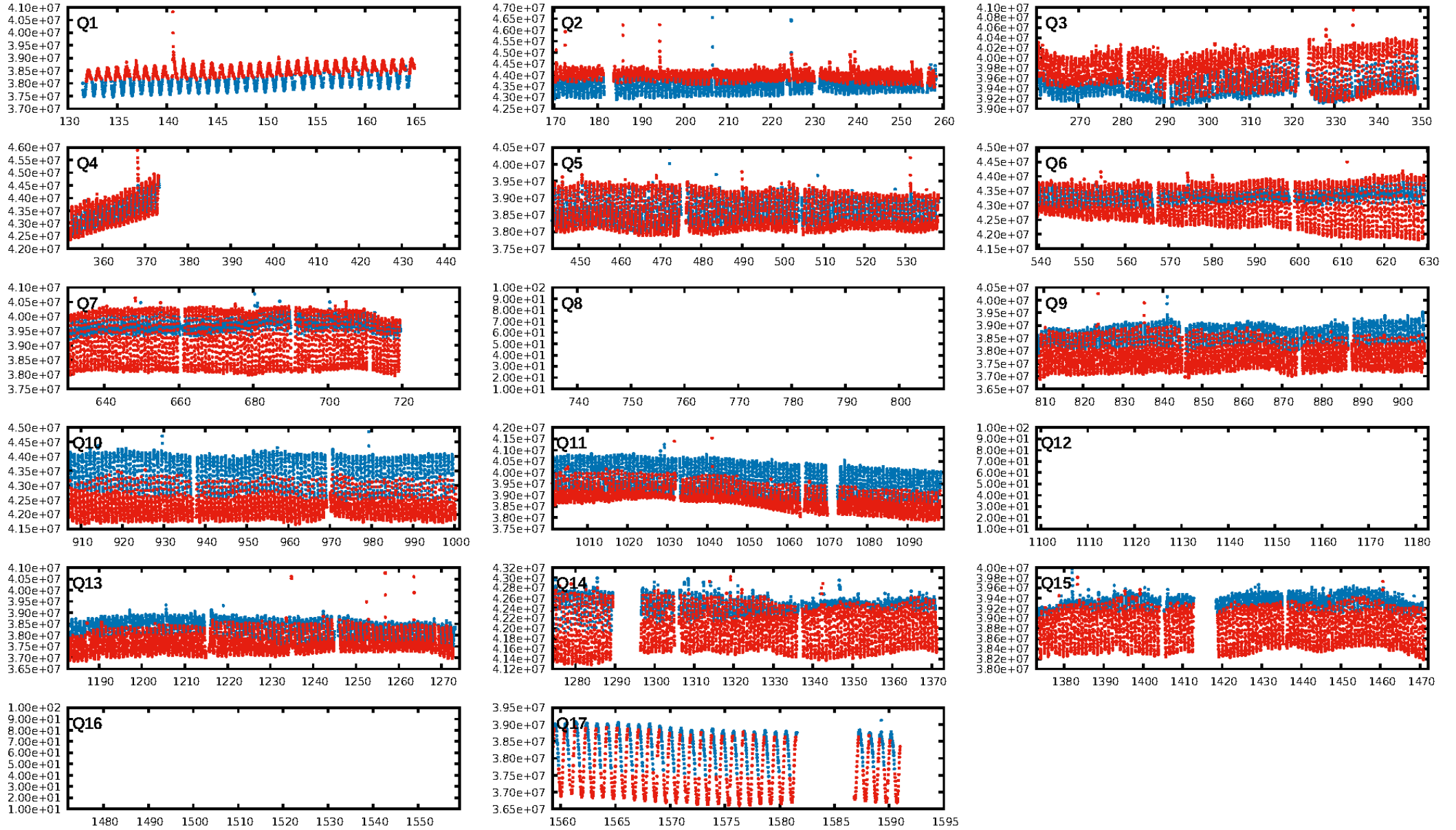
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.94 [973/1038]
GhostDiagnostic-chr: 6.014
Centroid-sig: 0.0%
Centroid-so: 0.616 arcsec [6.21σ]
OotOffset-rm: 0.147 arcsec [2.18σ]
KicOffset-rm: 0.342 arcsec [4.82σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.71 [10/14]
DiffImageOverlap-fno: 1.00 [14/14]

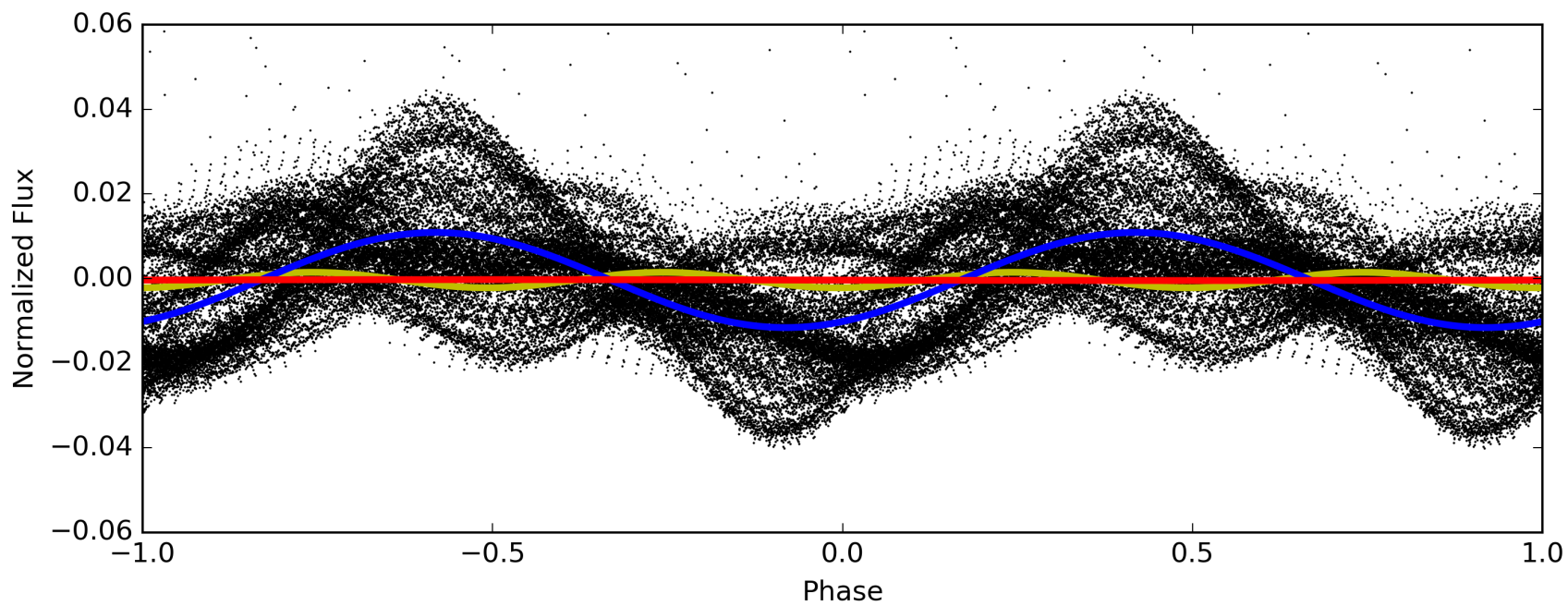
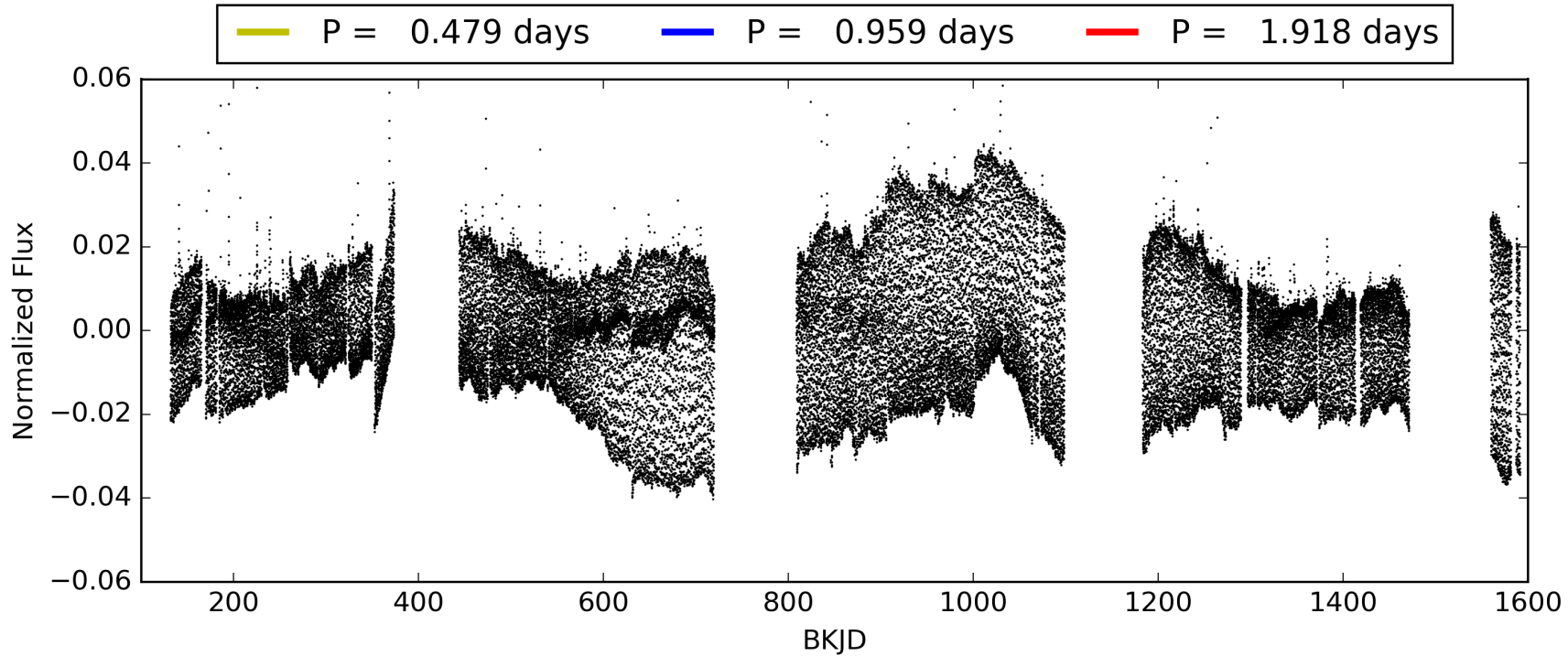
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:37:55 Z

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

TCE 011124203-01, PDC Light Curves

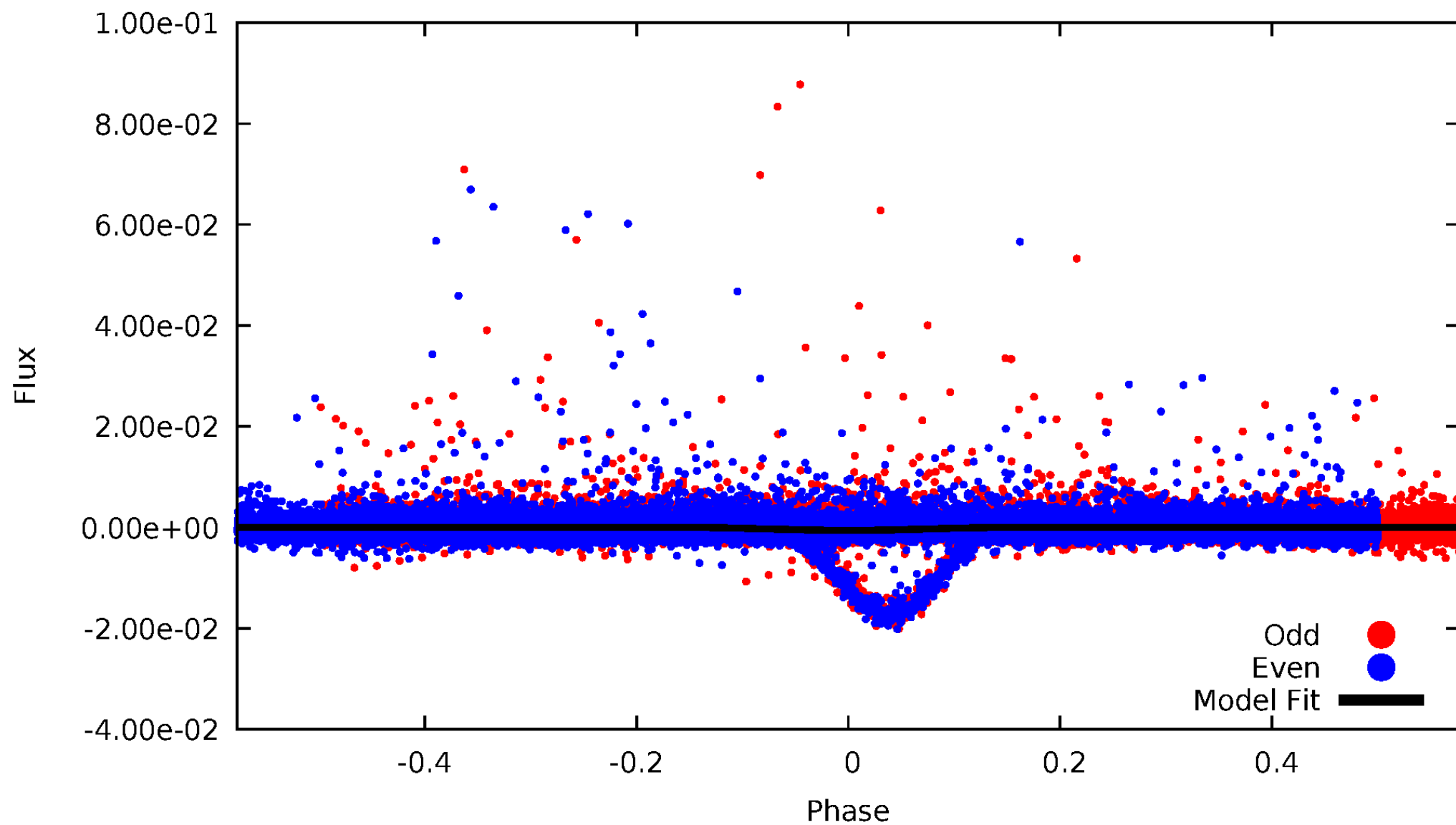


TCE 011124203-01



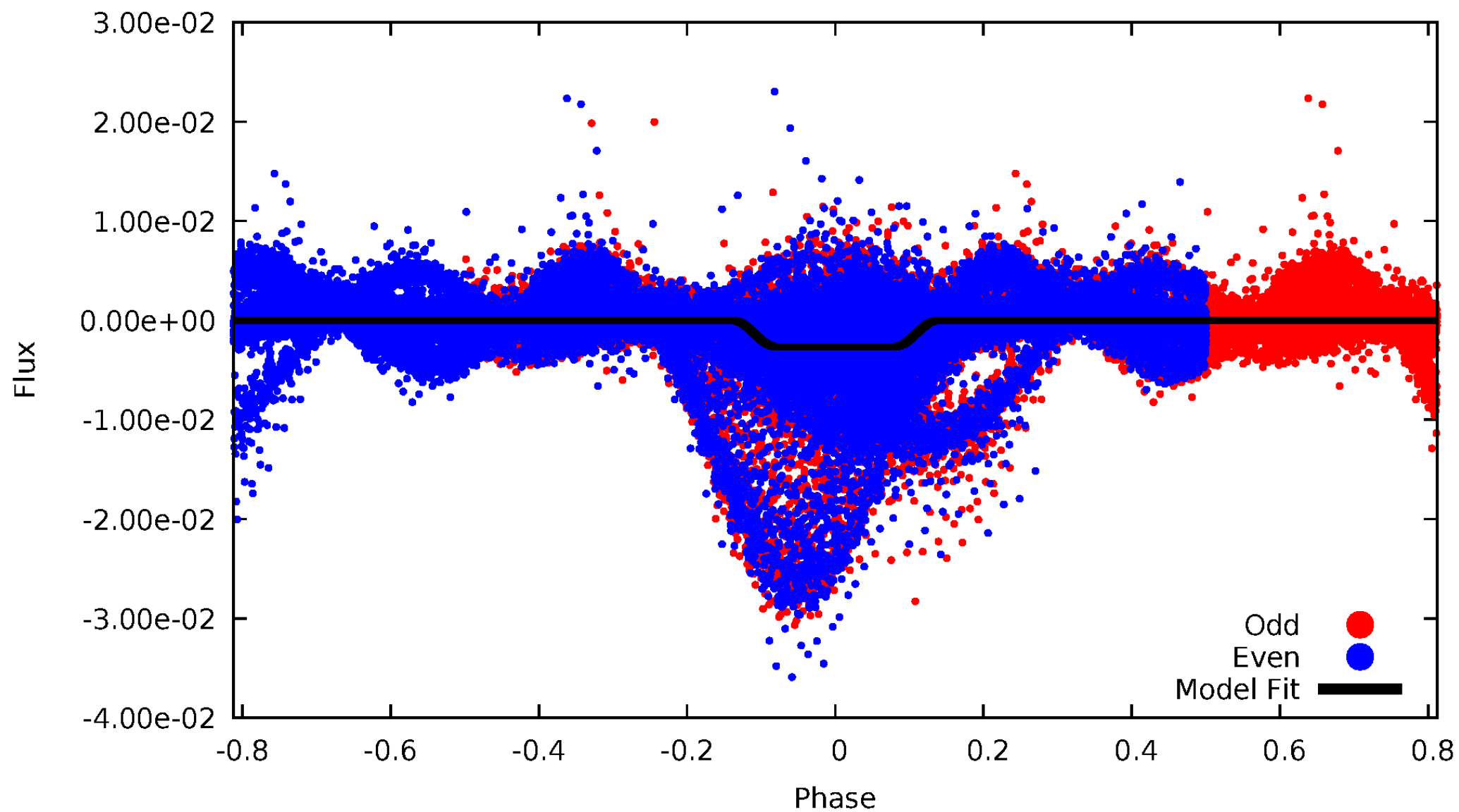
DV Odd/Even

TCE 011124203-01

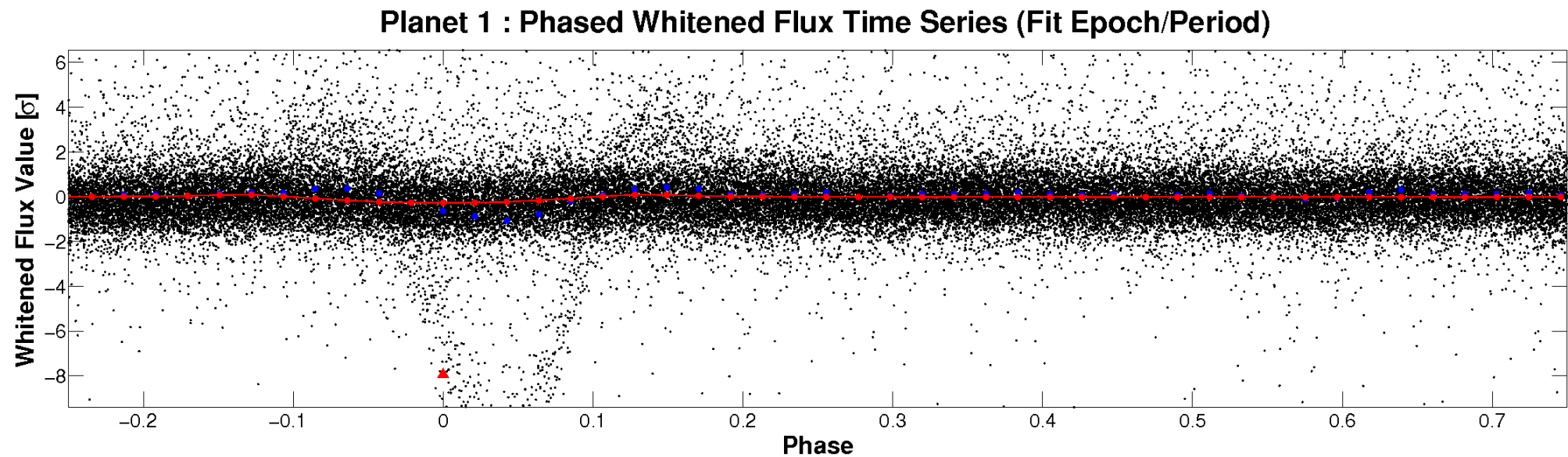
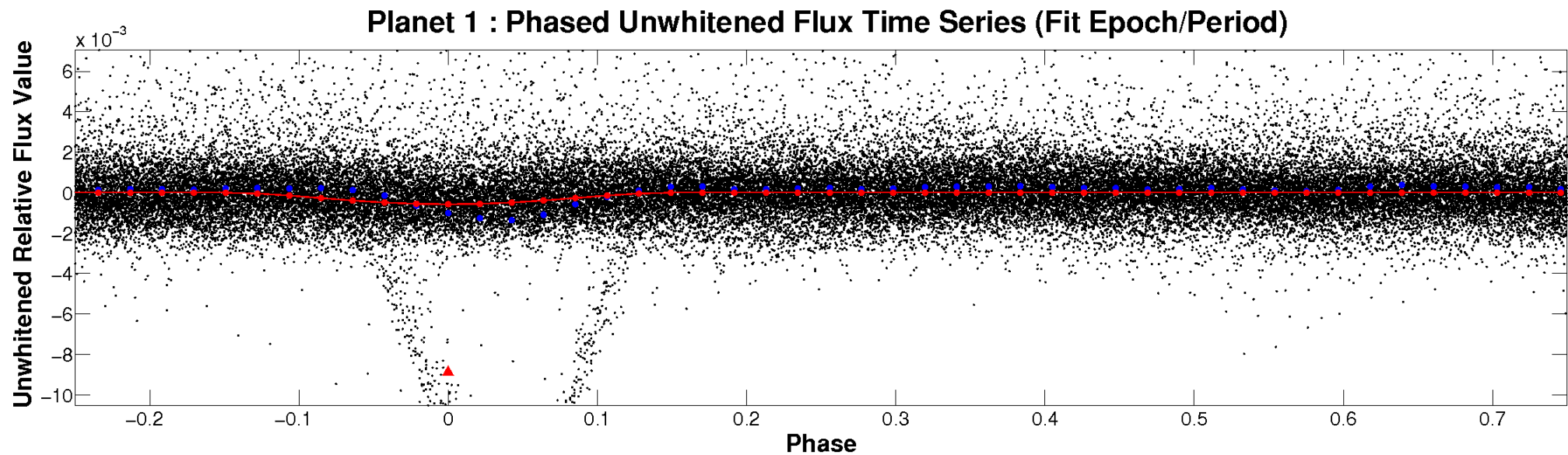


ALT Odd/Even

TCE 011124203-01

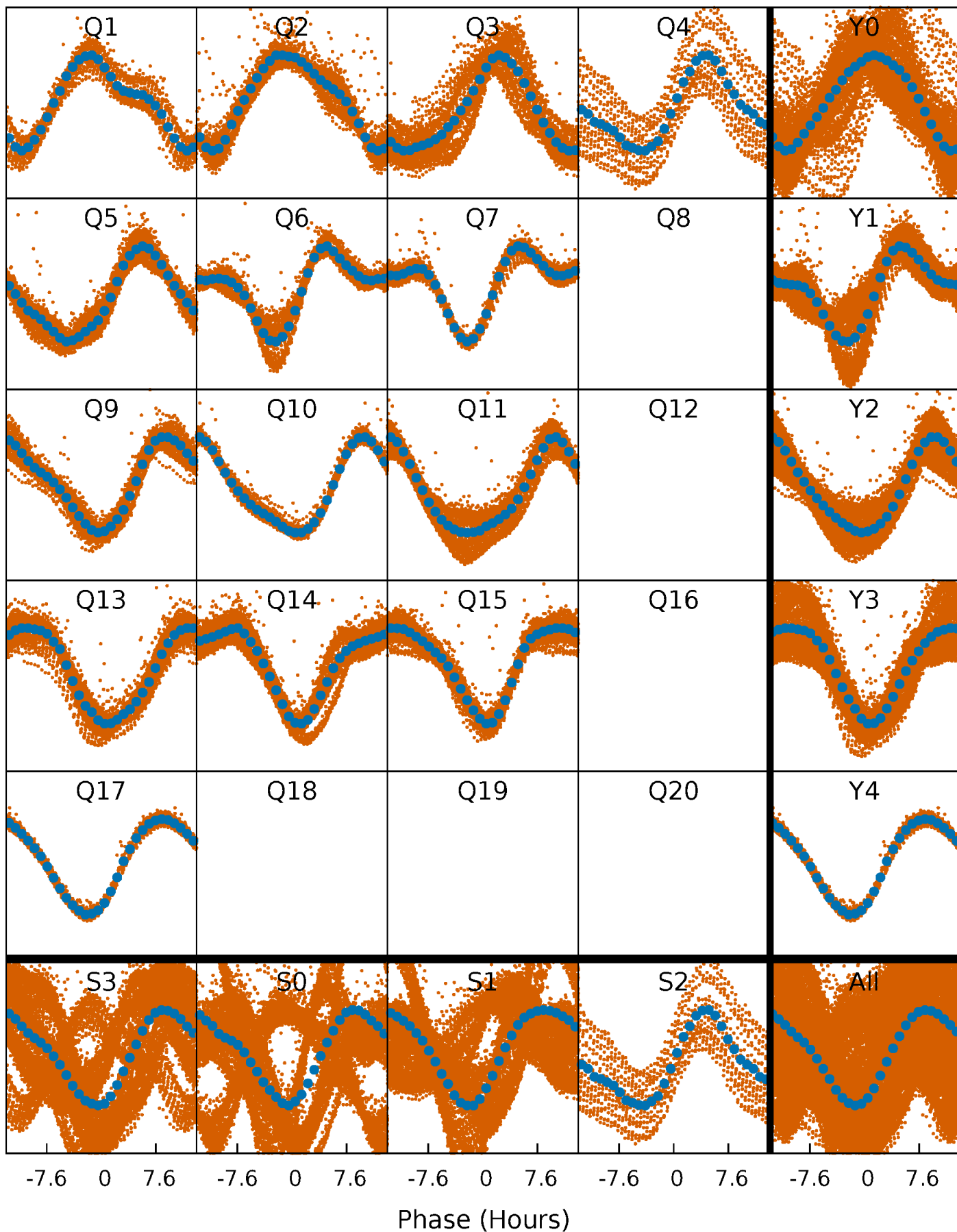


Non-Whitened Vs. Whitened Light Curve



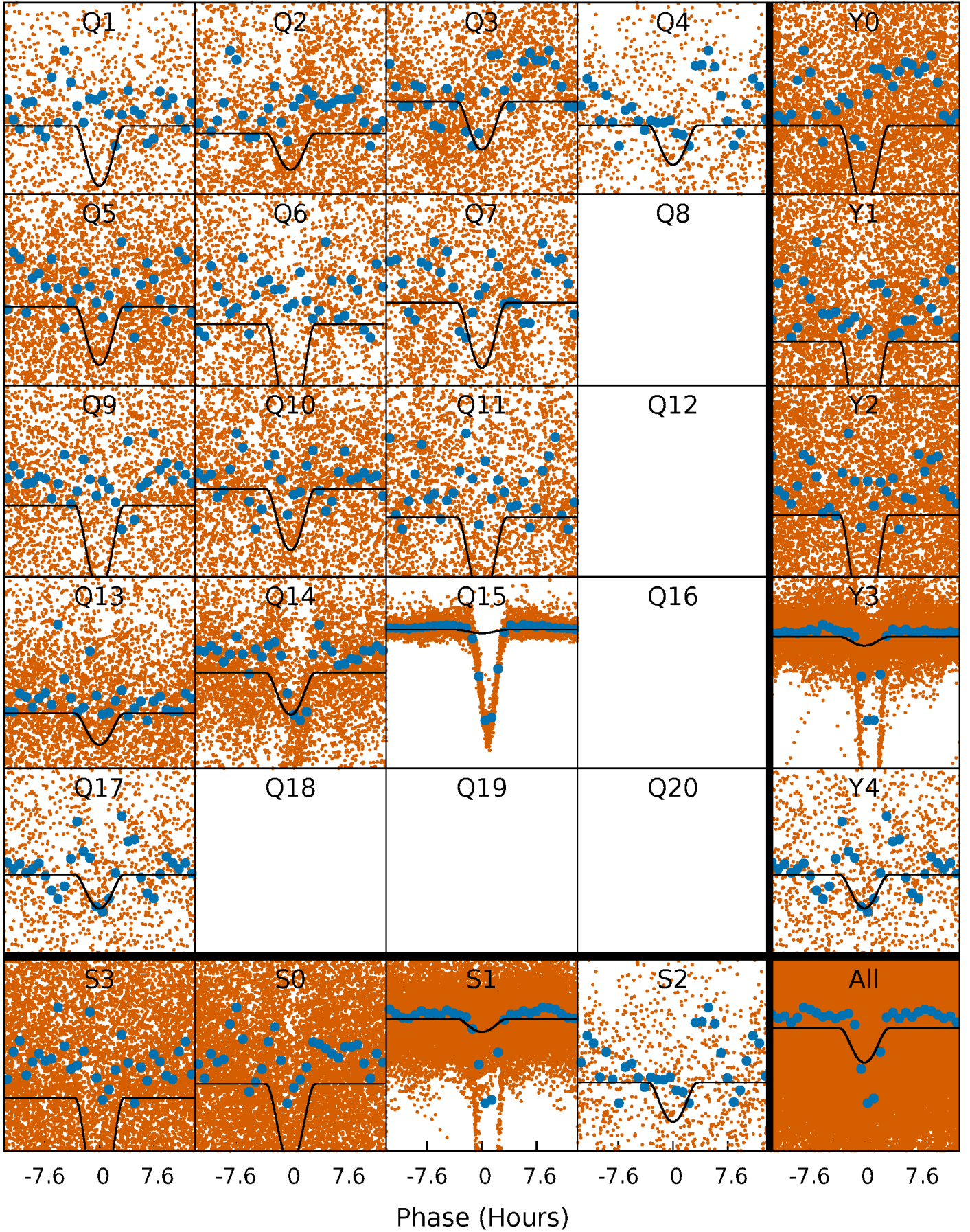
PDC Quarter-Phased Transit Curves

TCE 011124203-01 P= 0.958988 Days $T_0=132.153950$ (BKJD)



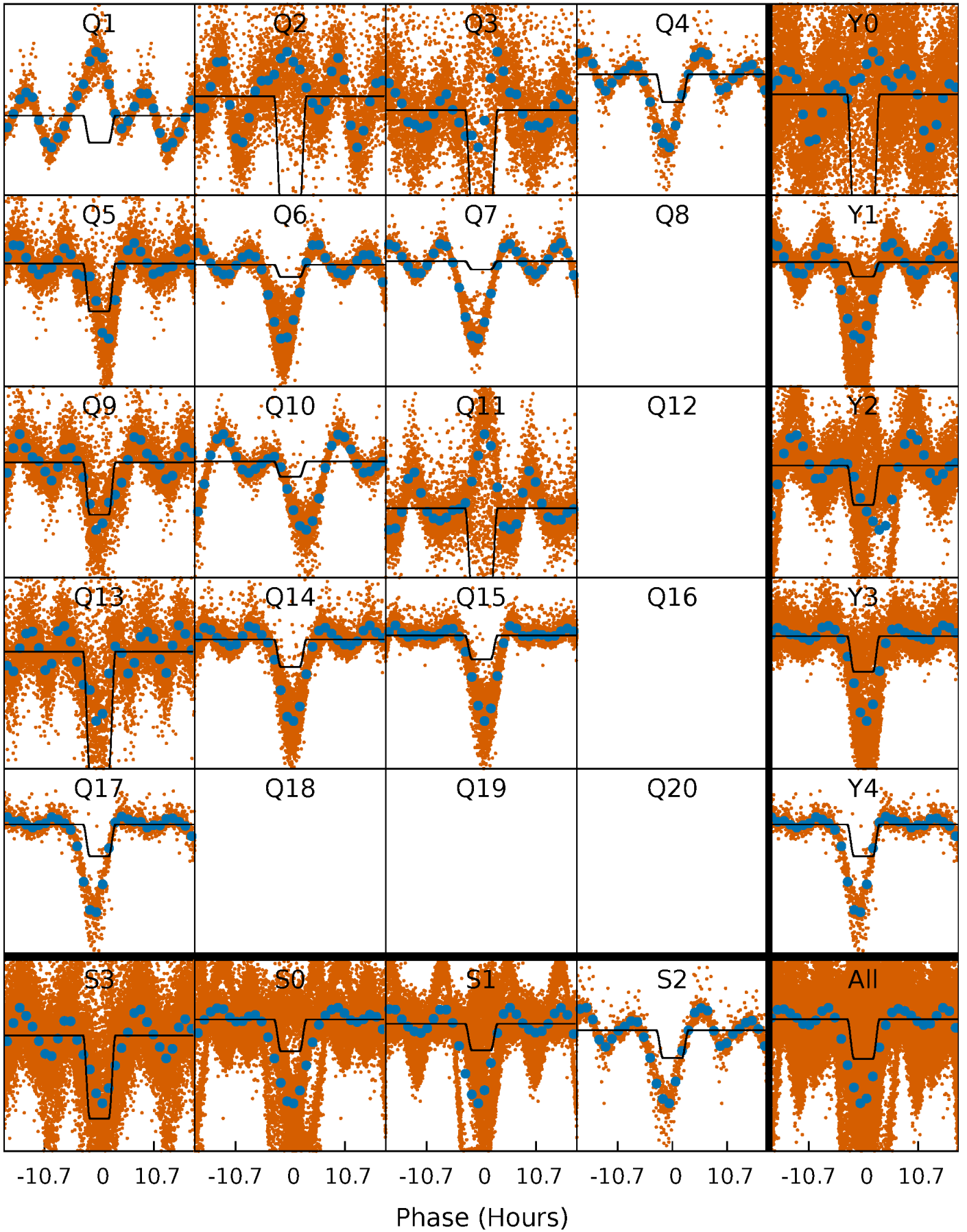
DV Quarter-Phased Transit Curves

TCE 011124203-01 P= 0.958988 Days $T_0=132.153950$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

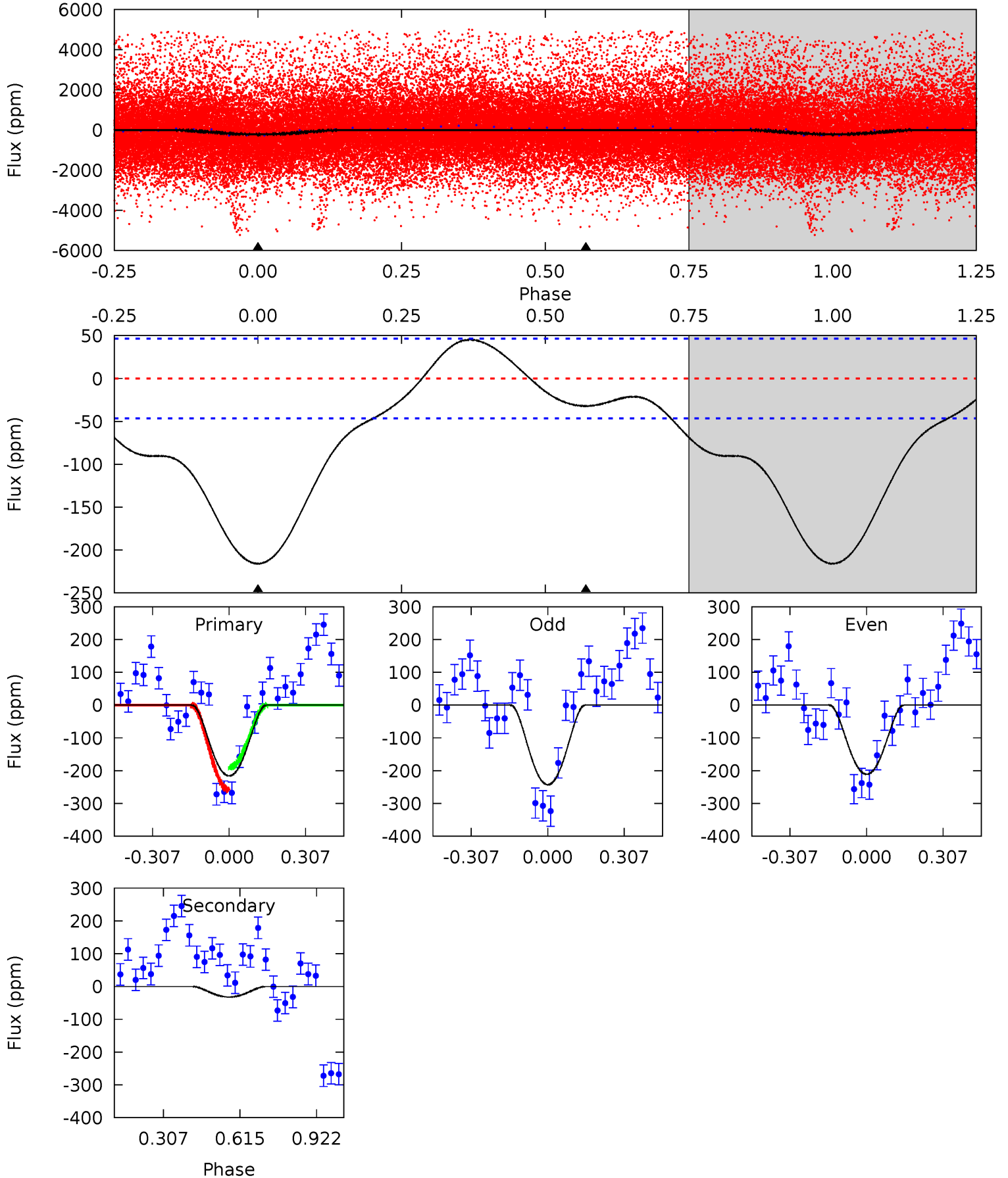
TCE 011124203-01 P= 0.959055 Days $T_0=132.093884$ (BKJD)



DV Model-Shift Uniqueness Test

011124203-01, P = 0.958988 Days, E = 131.194962 Days

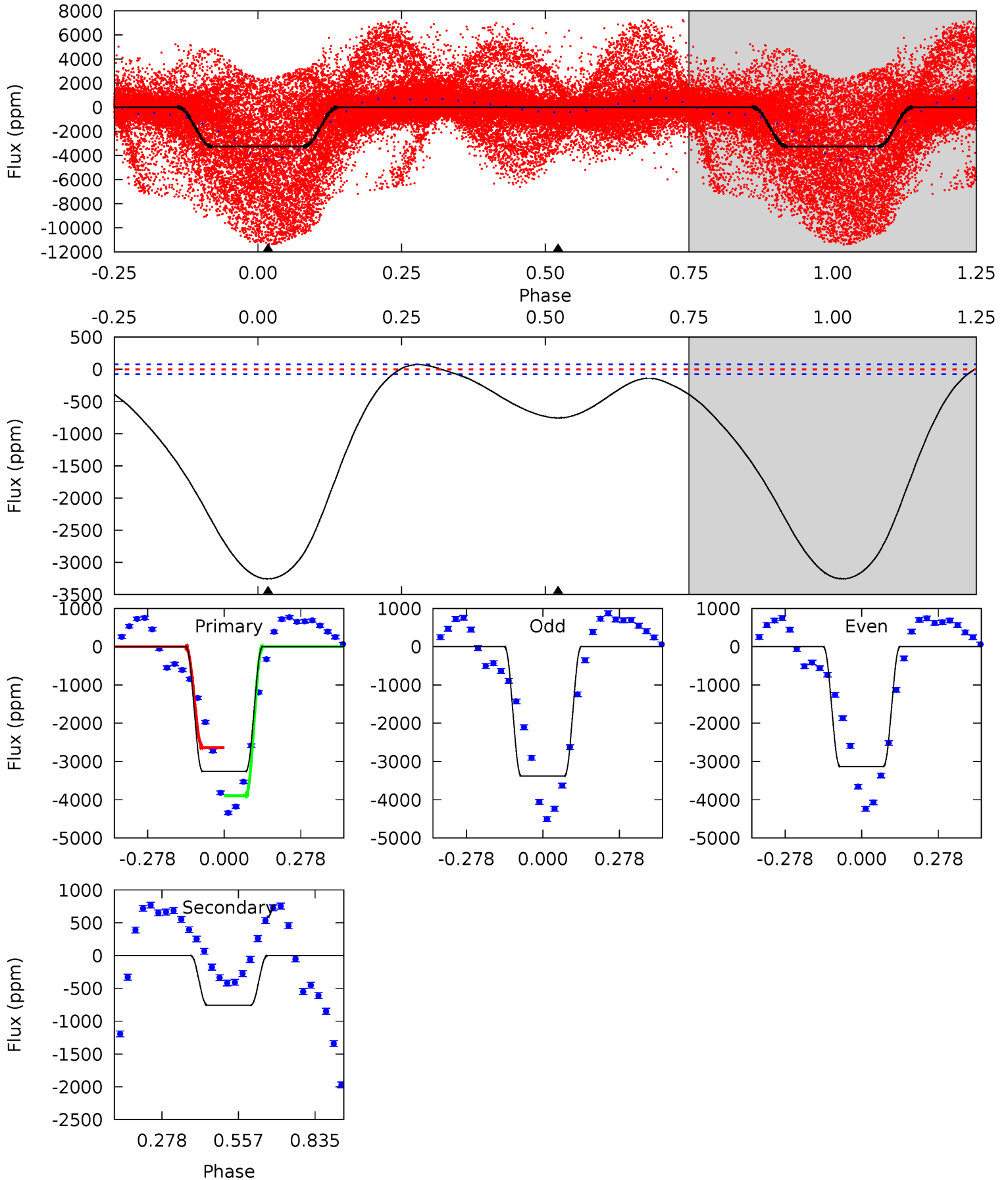
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.1	3.00	0	0	4.32	1.02	1.97	20.1	20.1	3.00	3.00	1.49	2.61	0.17	3.23



Alt Model-Shift Uniqueness Test

011124203-01, P = 0.959055 Days, E = 131.134829 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
184.7	42.9	0	0	4.35	1.08	17.0	184.7	184.7	42.9	42.9	7.06	1.32	0.02	29.3



Stellar Parameters For KIC 011124203

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3601^{+58}_{-65}	$4.830^{+0.048}_{-0.032}$	$-0.100^{+0.100}_{-0.100}$	$0.420^{+0.034}_{-0.046}$	$0.435^{+0.036}_{-0.045}$	$8.284^{+2.198}_{-1.203}$
	+2%/-2%	+1%/-1%	+100%/-100%	+8%/-11%	+8%/-10%	+27%/-15%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 011124203-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-32 ± 11	$1.50^{+0.25}_{-0.25}$	1193^{+28}_{-30}	2195^{+132}_{-149}	$1.652^{+0.963}_{-0.661}$
Alt.	-756 ± 18	$2.33^{+0.27}_{-0.25}$	1195^{+27}_{-29}	2974^{+104}_{-88}	16^{+4}_{-3}

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

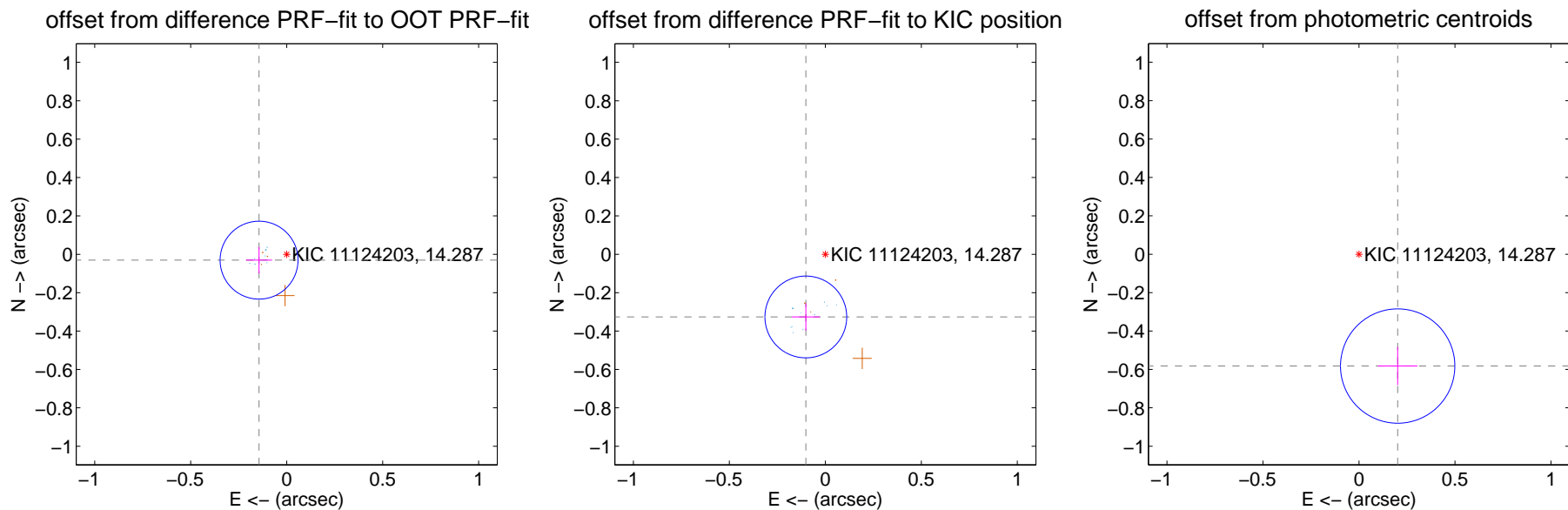
DV Centroid Data

Supplemental centroid analysis for 011124203-01. Kepler magnitude: 14.29. Transit SNR 19.85

There are 10 quarters with good PRF difference image offsets

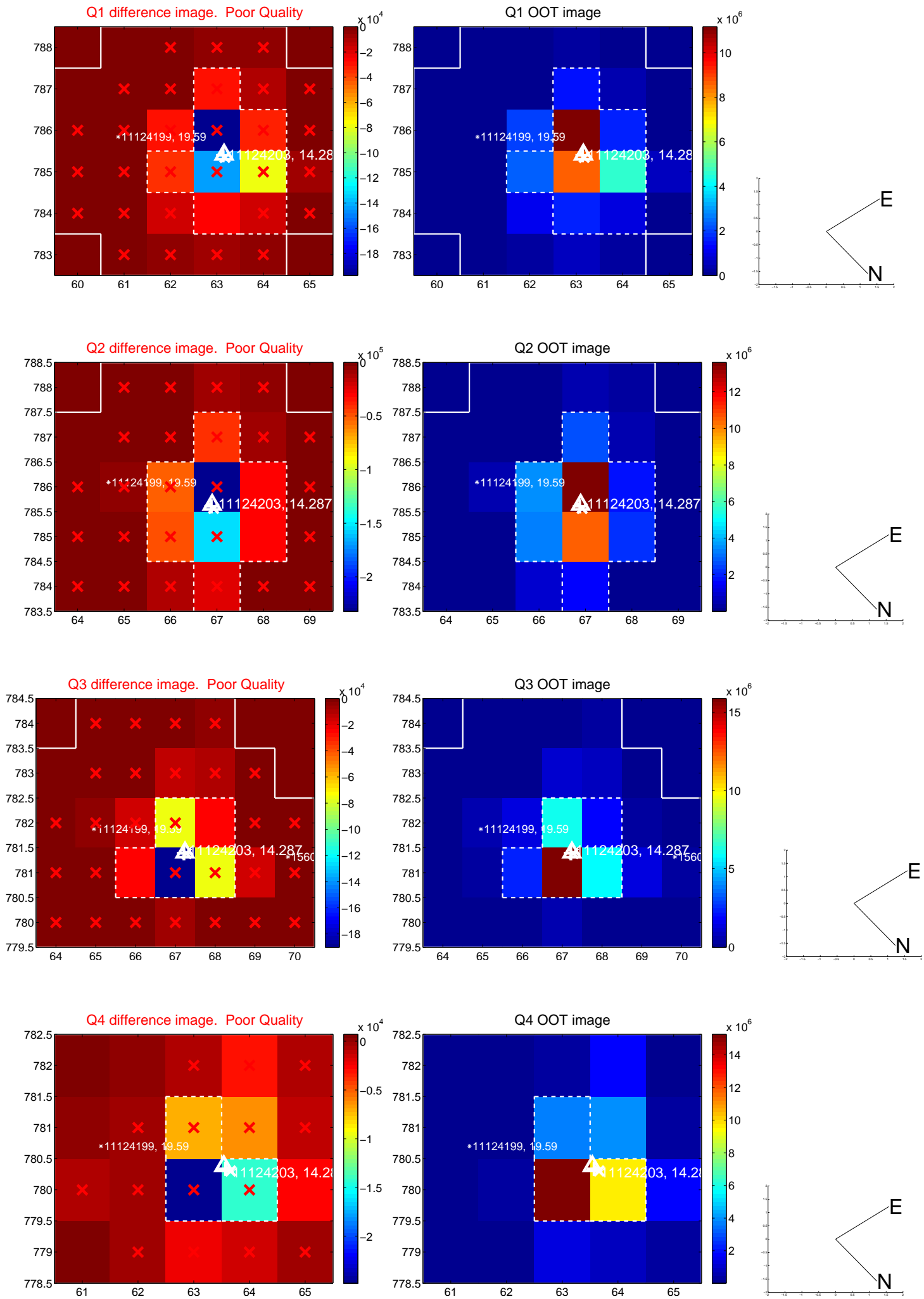
The direct PRF centroid is offset from the target star catalog position by about 0.38 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.147 ± 0.068	2.18	0.144 ± 0.068	-0.031 ± 0.069
PRF-fit source offset from KIC position	0.342 ± 0.071	4.82	0.102 ± 0.072	-0.326 ± 0.071
photometric centroid source offset	0.62 ± 0.10	6.21	-0.20 ± 0.10	-0.58 ± 0.10

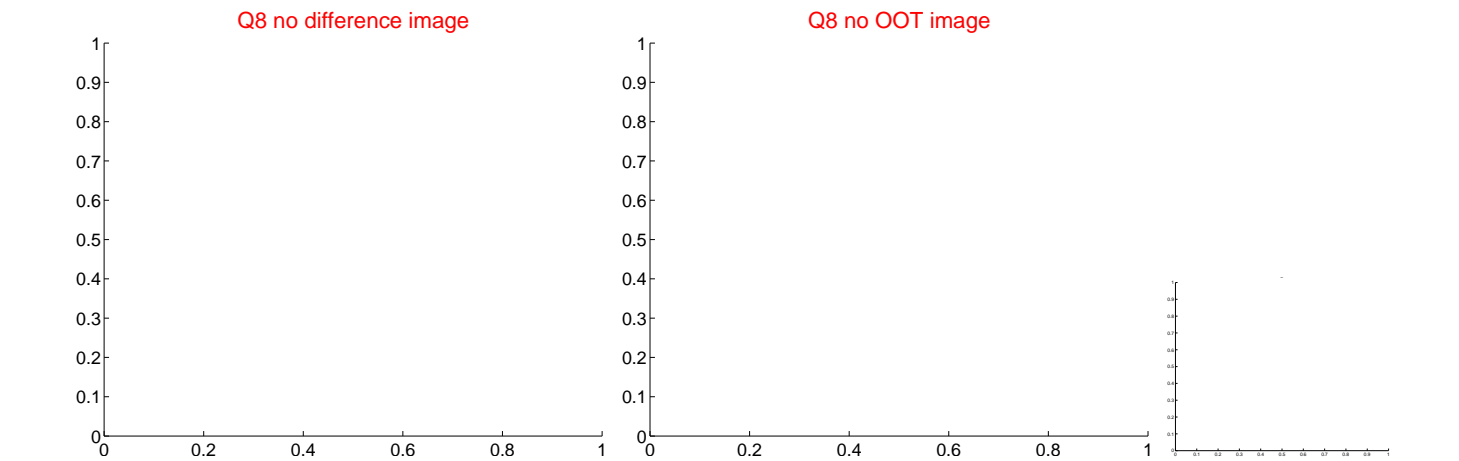
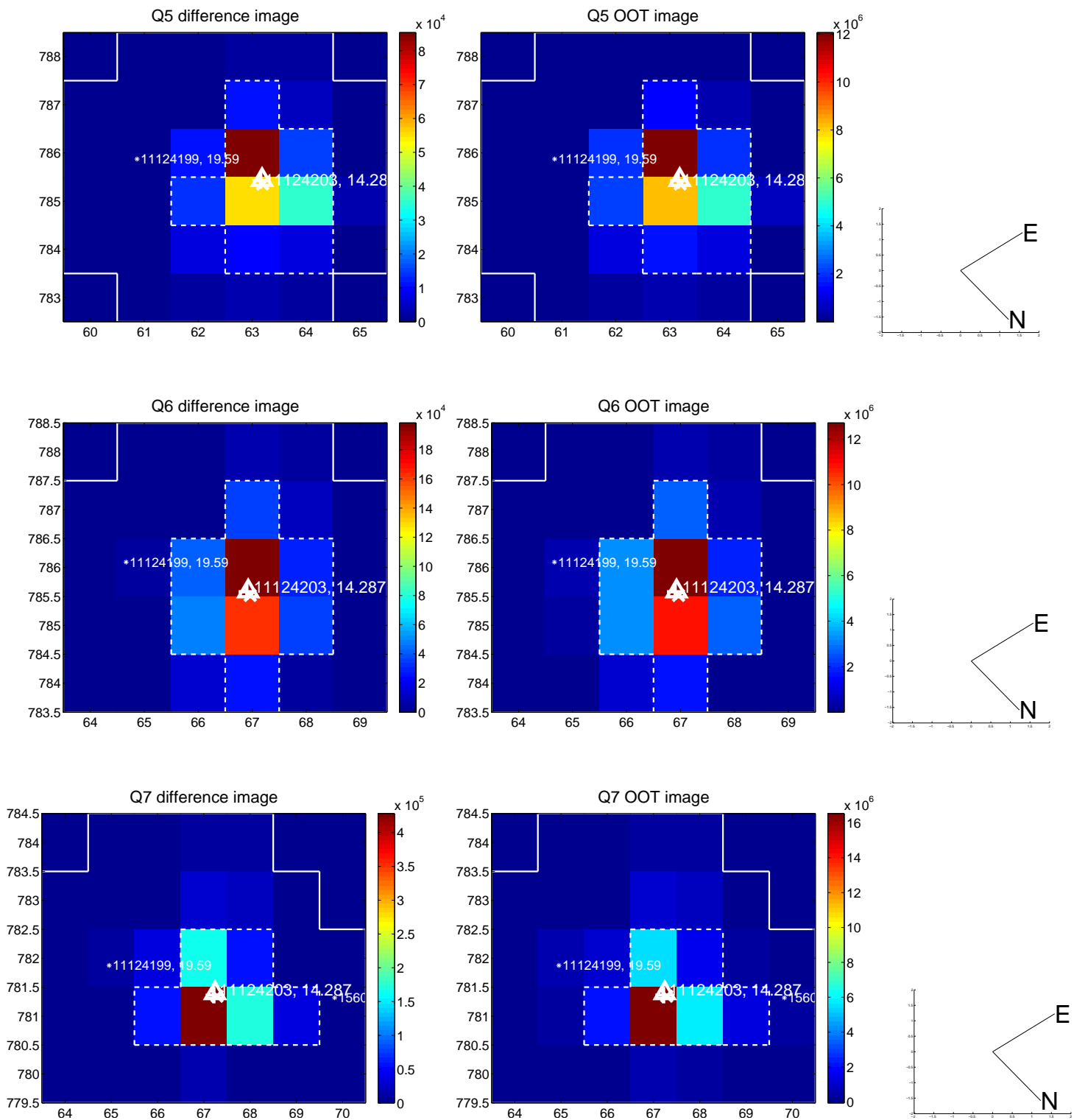


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

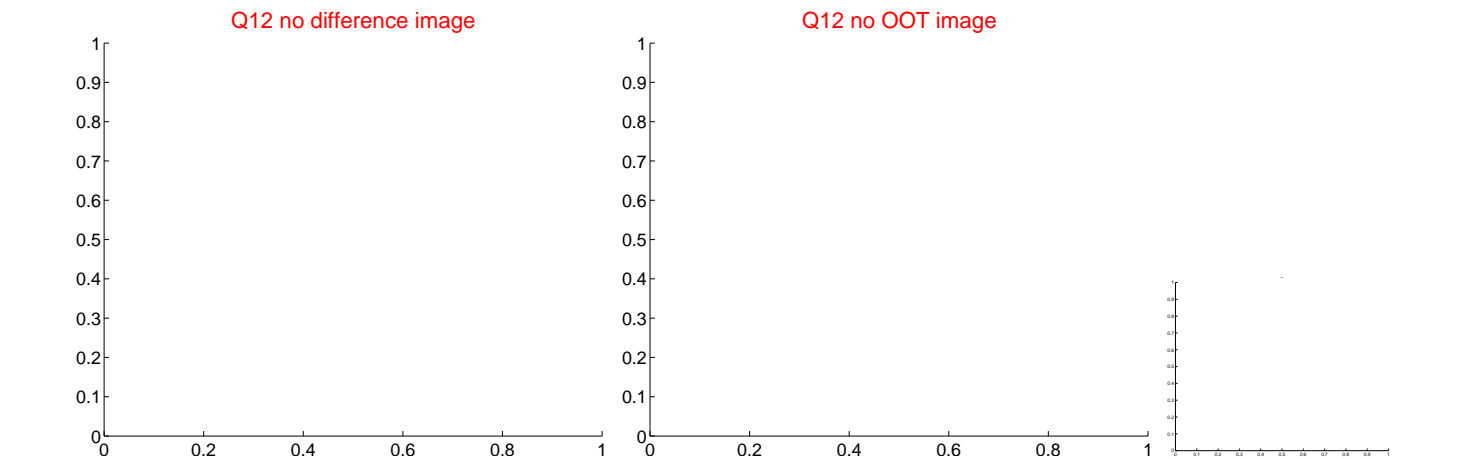
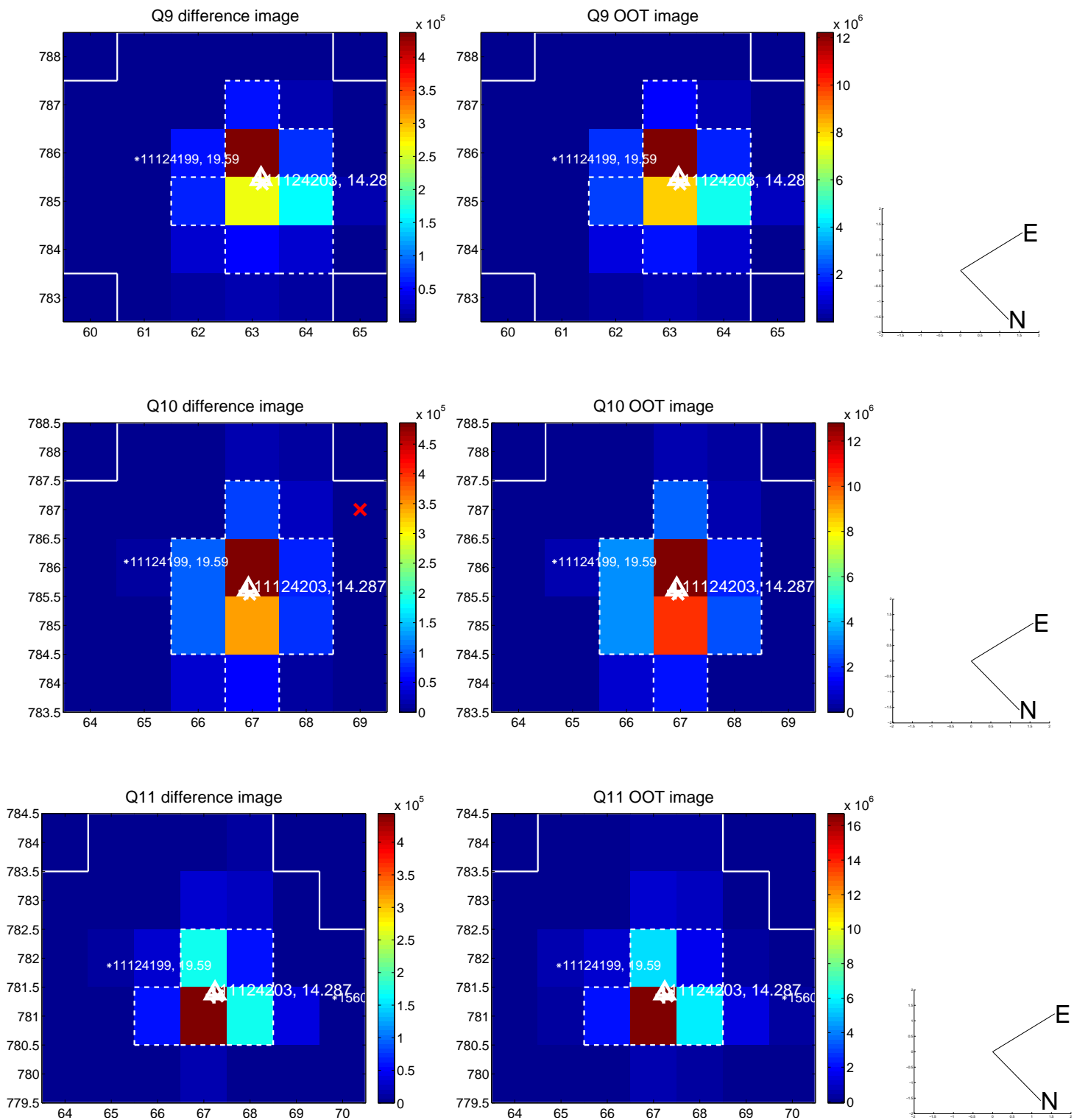
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



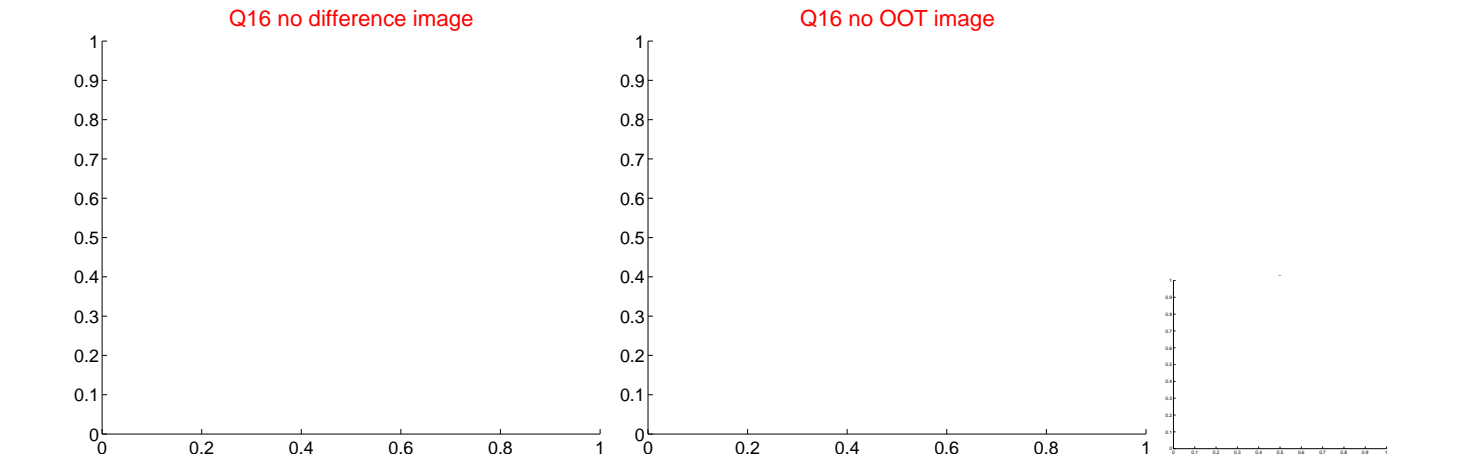
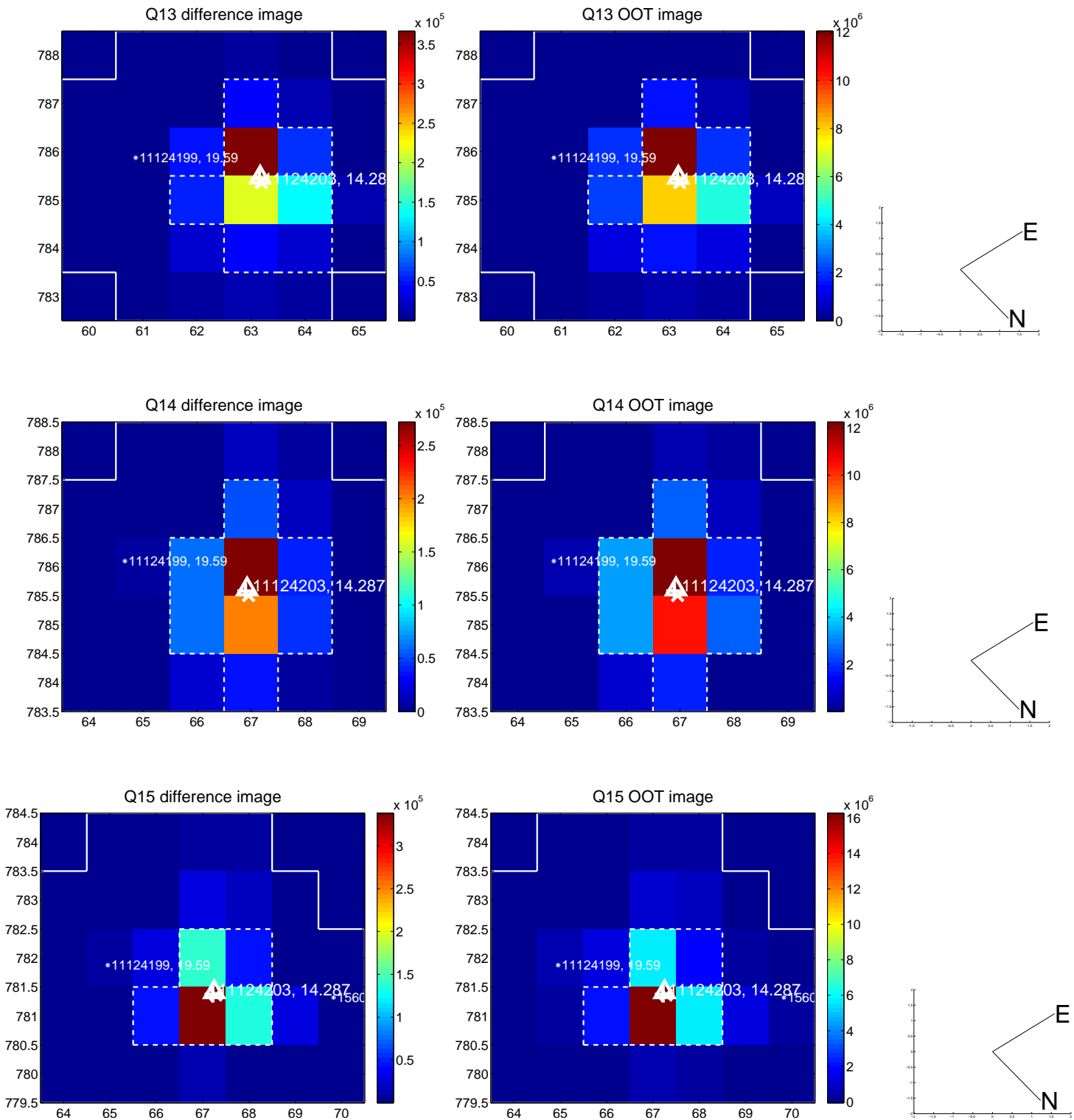
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



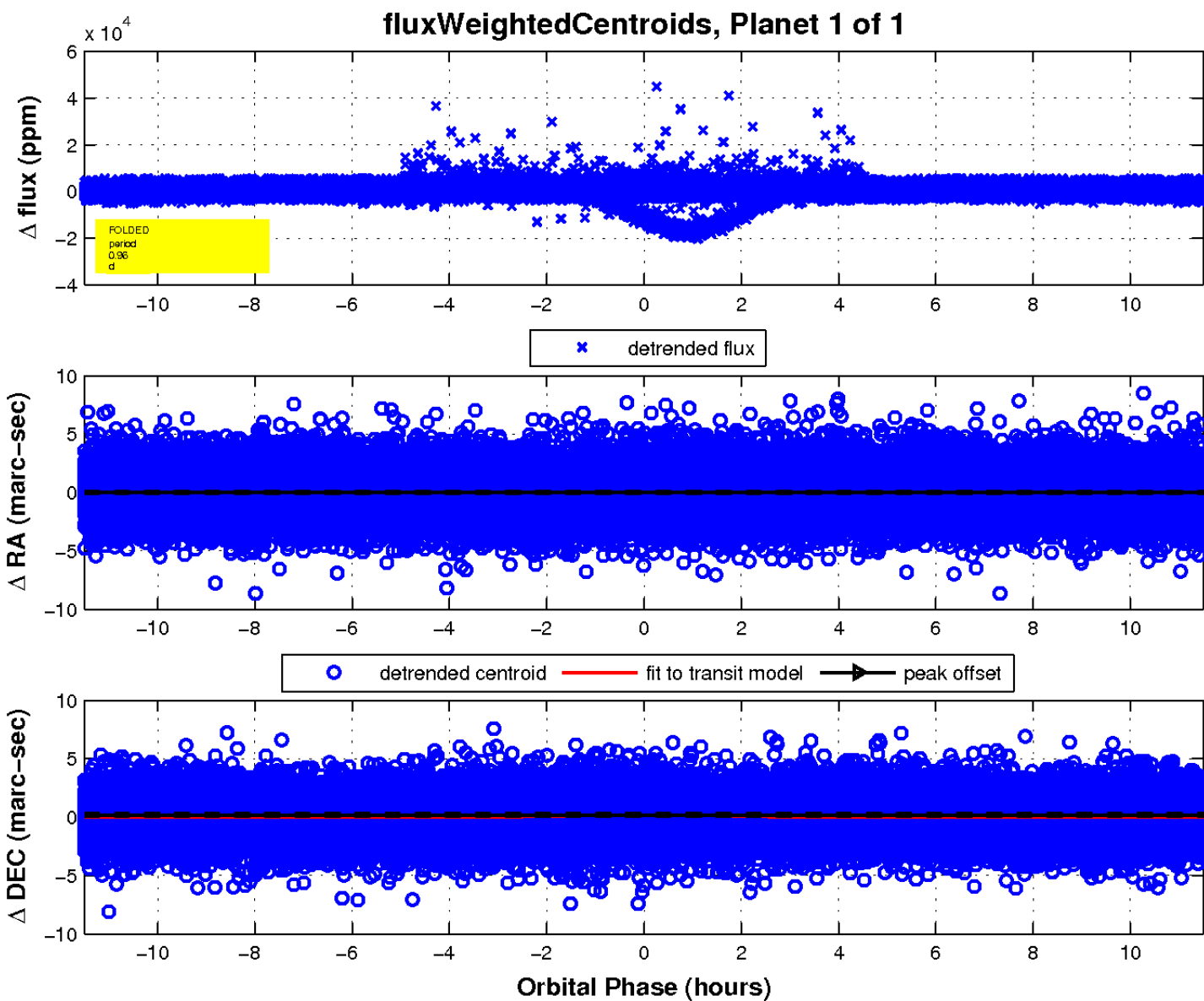
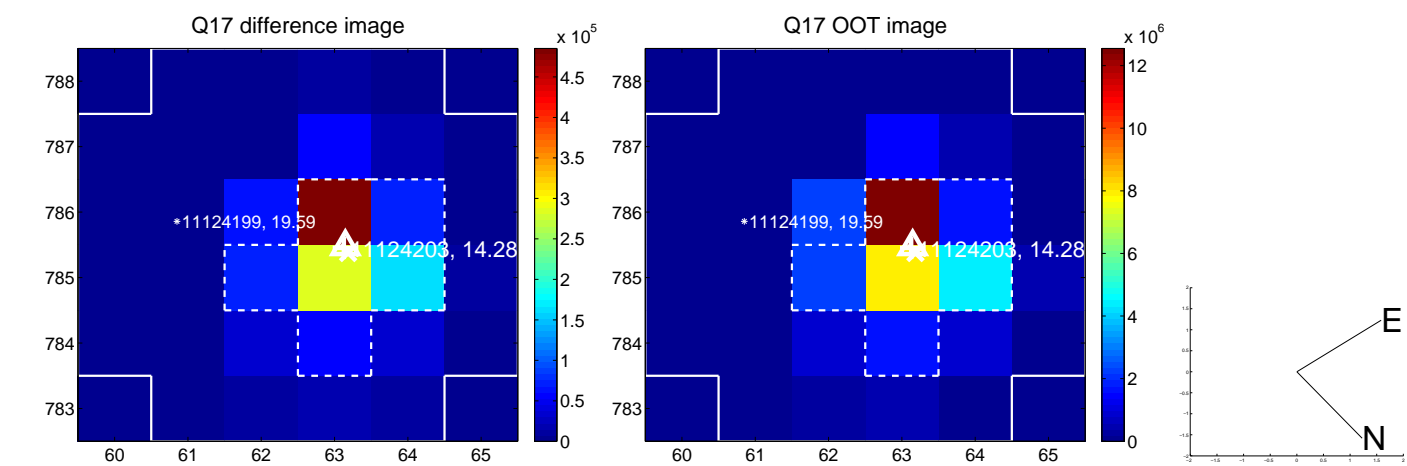
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UKIRT Image

