

KIC 005652071

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})
005652071-01	OBS	No	1.020492	132.241328	29.8	9.143	13.3	3.3	10.15	4785	5.87	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005652071-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_UNCERTAIN

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

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

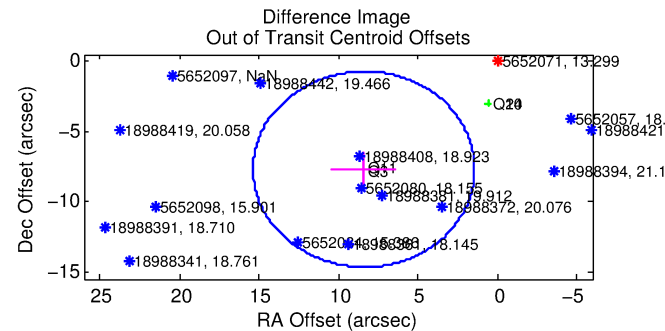
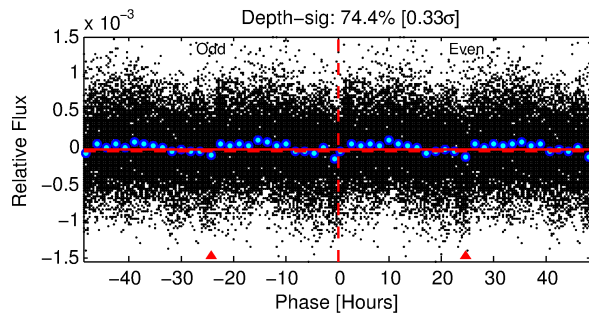
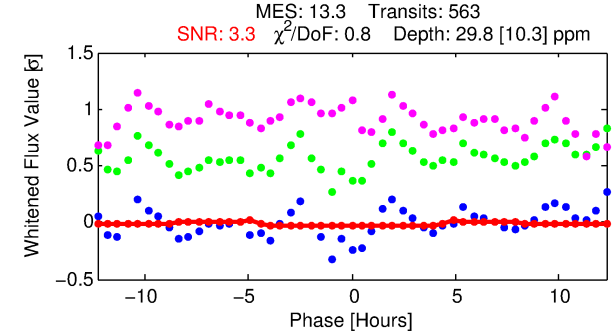
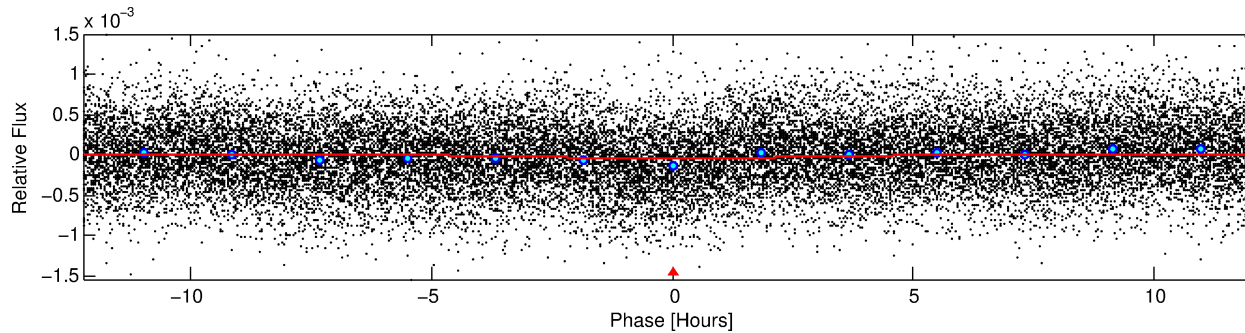
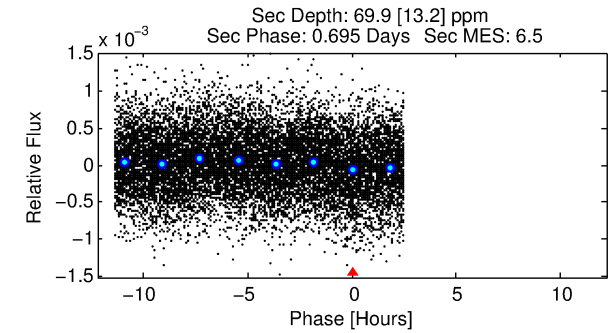
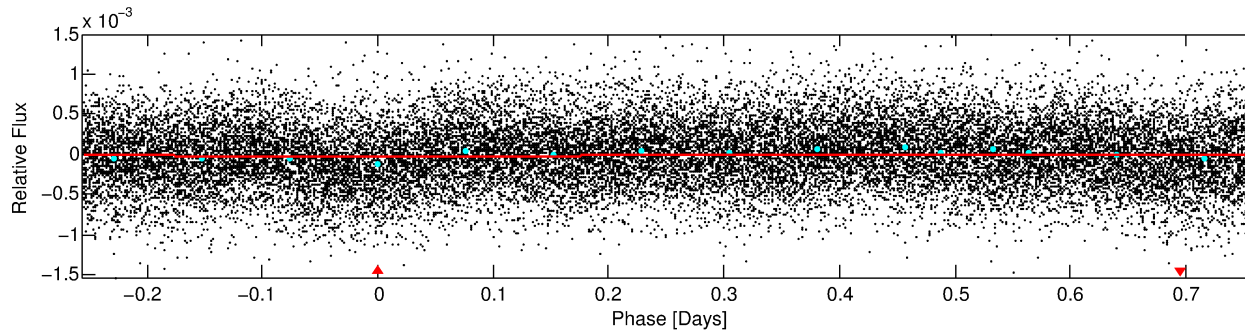
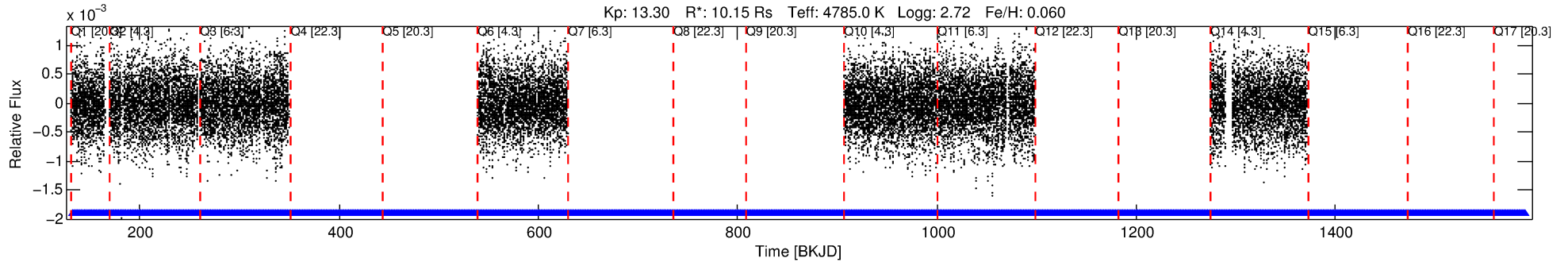
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005652071-01

No Significant Match Found

DV One-Page Summary

KIC: 5652071 Candidate: 1 of 1 Period: 1.020 d



DV Fit Results:

Period = 1.02049 [0.00005] d
Epoch = 132.2413 [0.0102] BKJD
Rp/R* = 0.0053 [0.0052]
b = 0.68 [2.73]
Seff = N/A
Teq = N/A
Rp = 5.87 [6.07] Re
a = N/A
Ag = N/A
Teffp = N/A

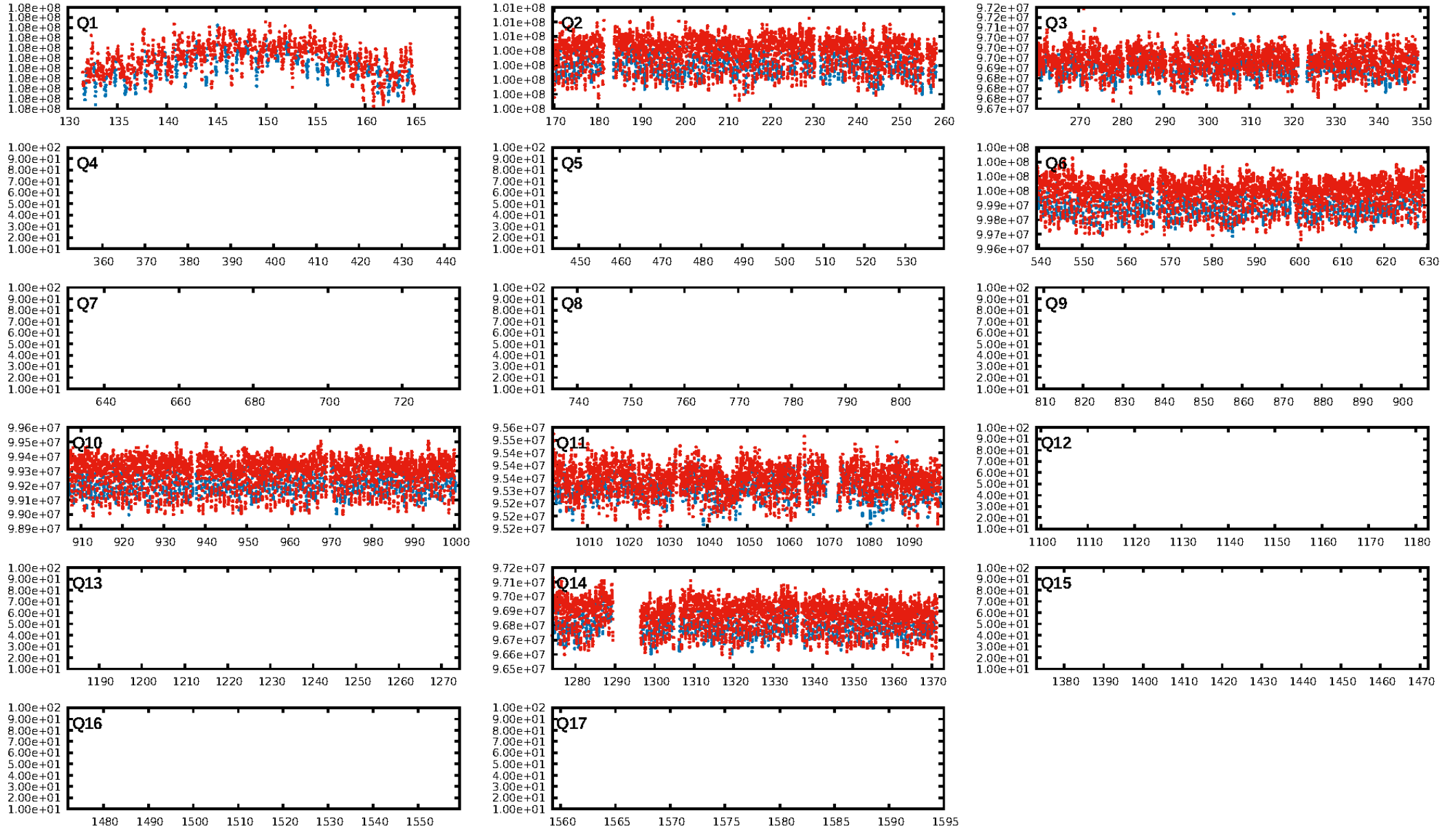
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [530/530]
GhostDiagnostic-chr: 1.218
Centroid-sig: 55.2%
Centroid-so: 1.030 arcsec [0.93σ]
OotOffset-rm: 11.374 arcsec [4.90σ]
KicOffset-rm: 11.398 arcsec [5.37σ]
OotOffset-st: 3/2/0/0 [5]
KicOffset-st: 3/2/0/0 [5]
DiffImageQuality-fgm: 0.40 [2/5]
DiffImageOverlap-fno: 1.00 [7/7]

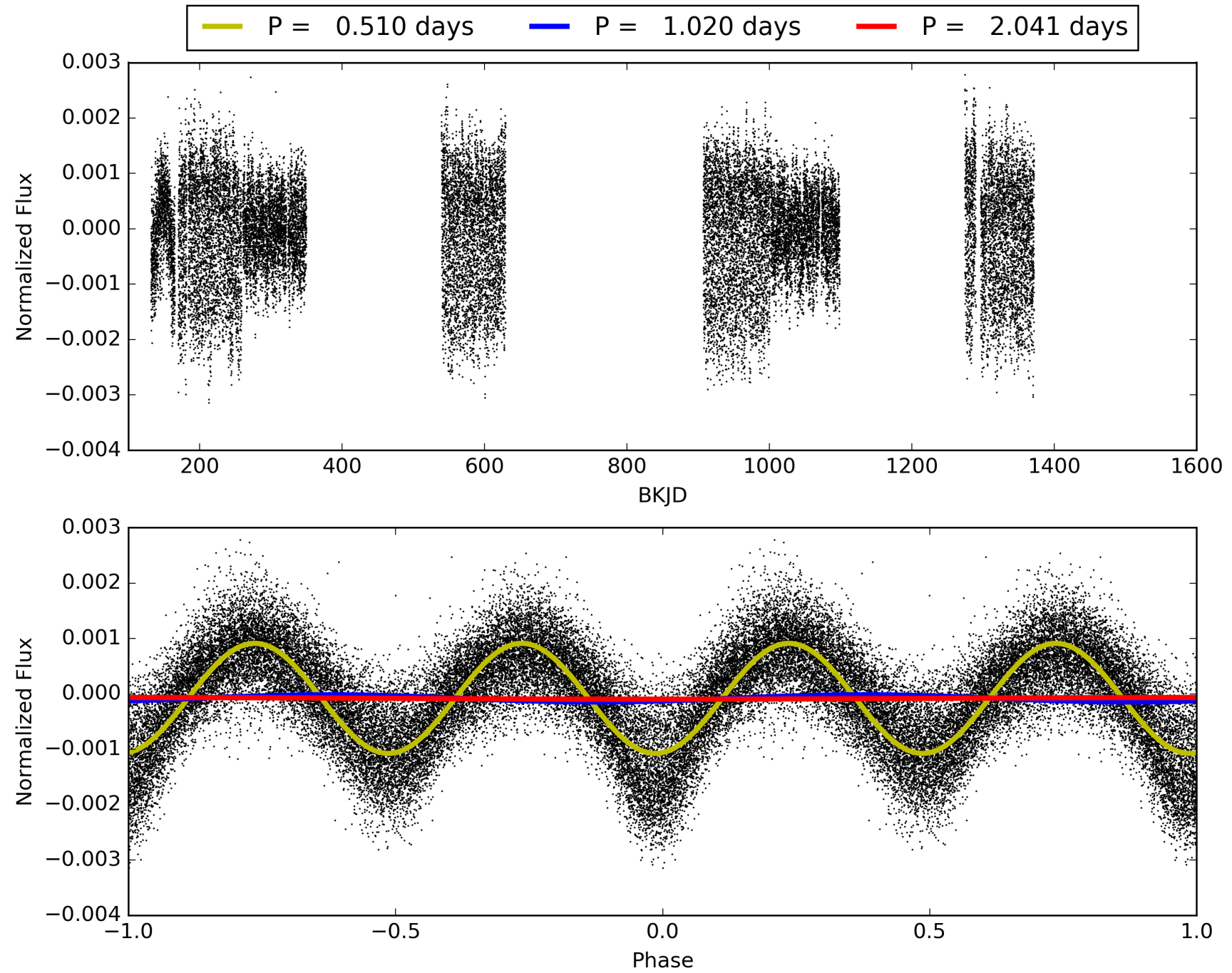
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:38:08 Z

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

TCE 005652071-01, PDC Light Curves

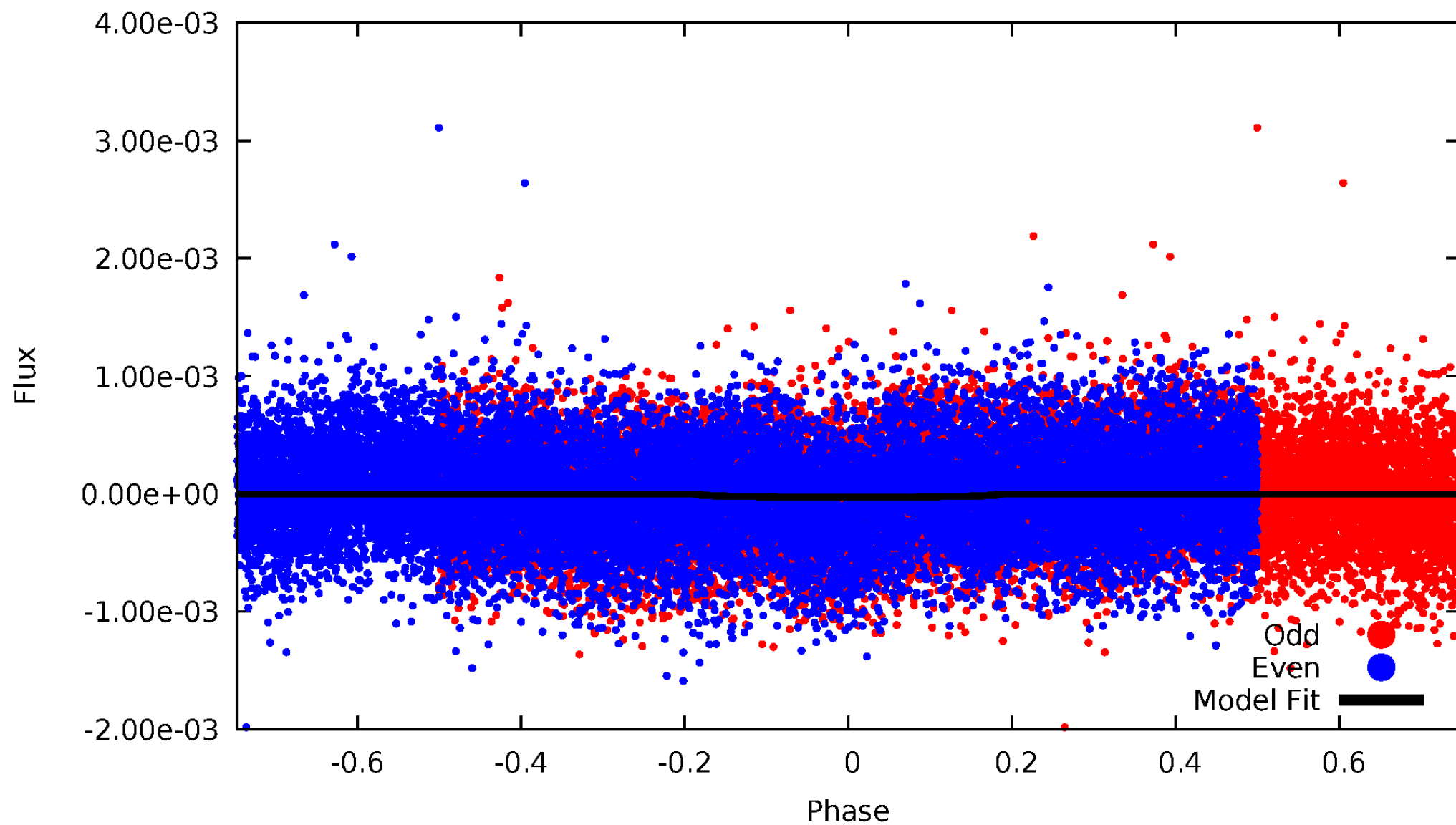


TCE 005652071-01



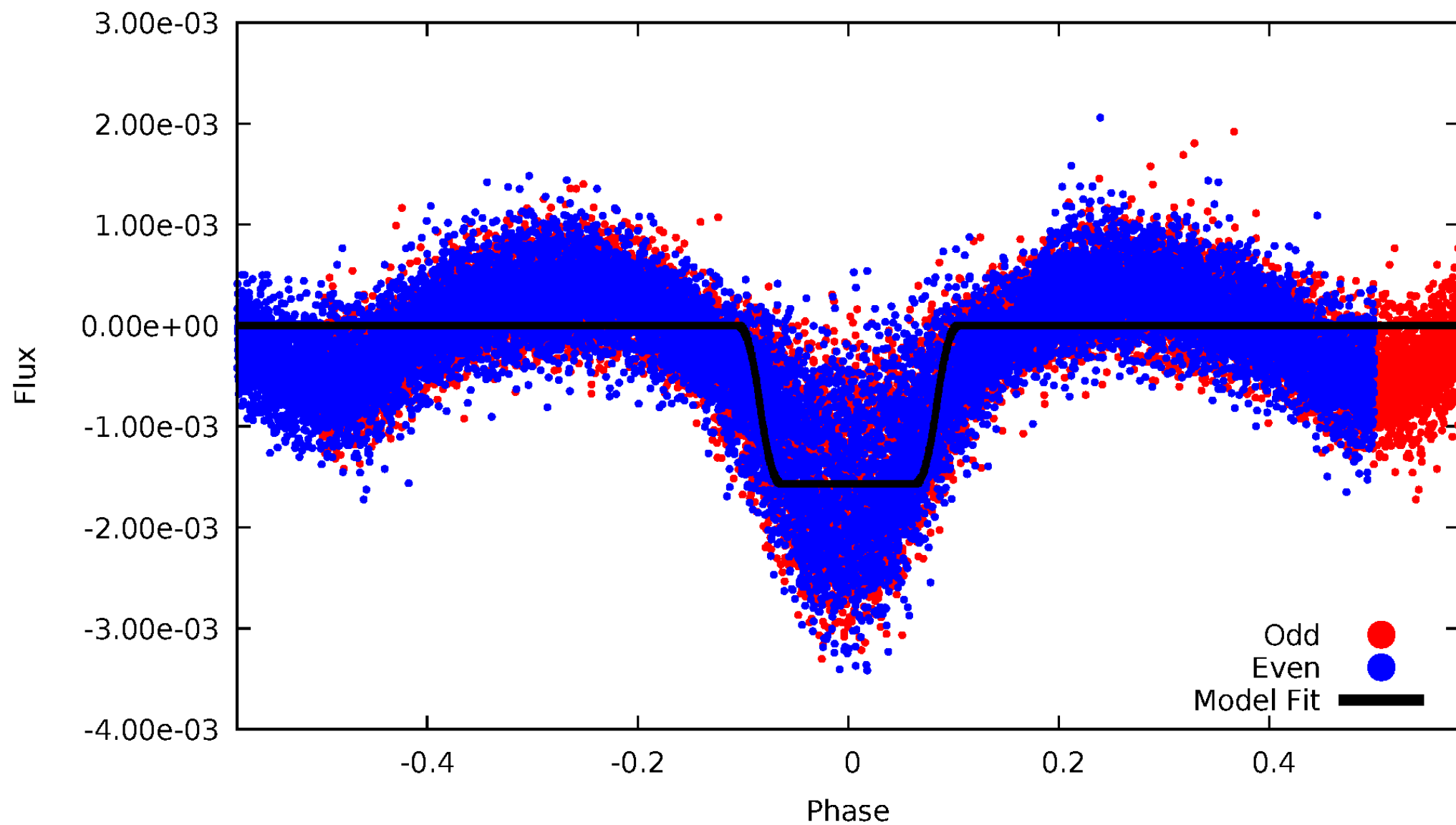
DV Odd/Even

TCE 005652071-01

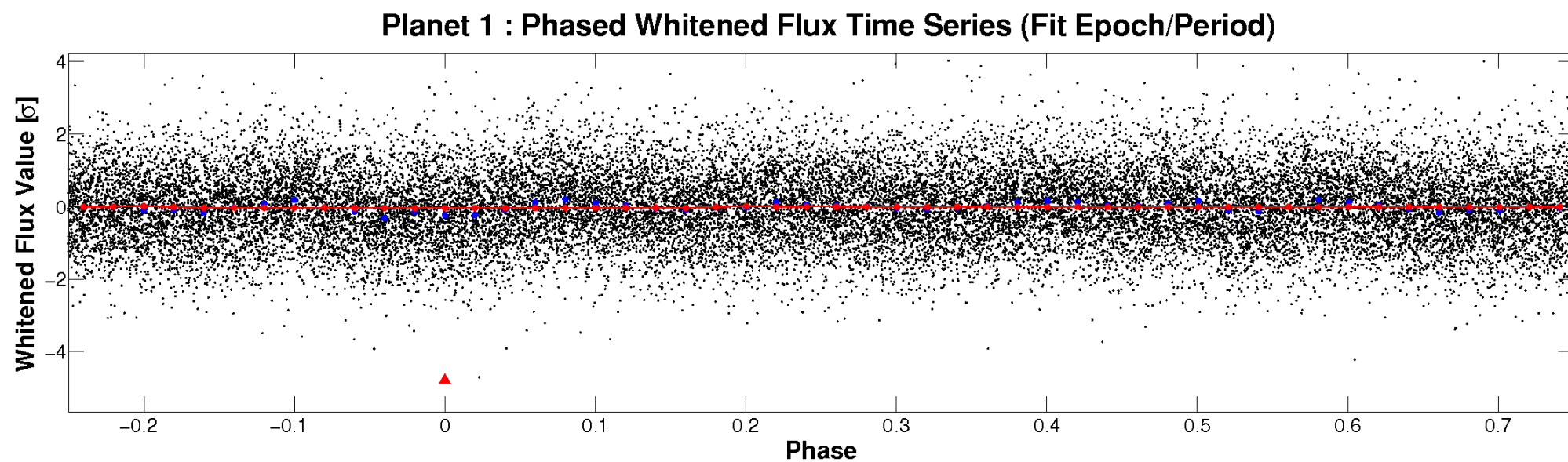
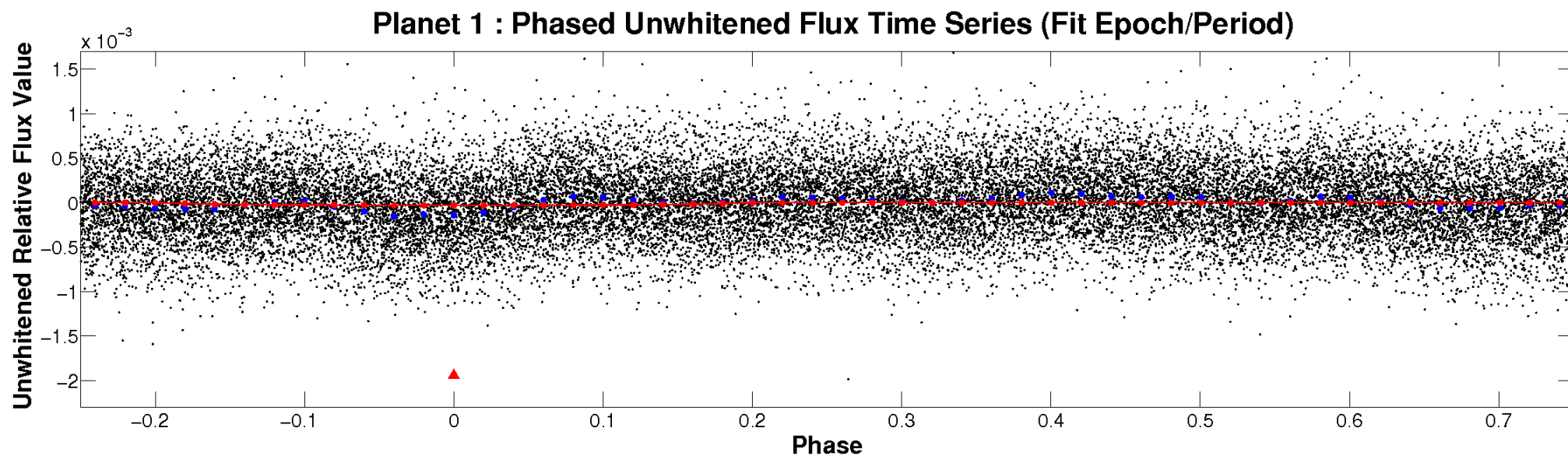


ALT Odd/Even

TCE 005652071-01

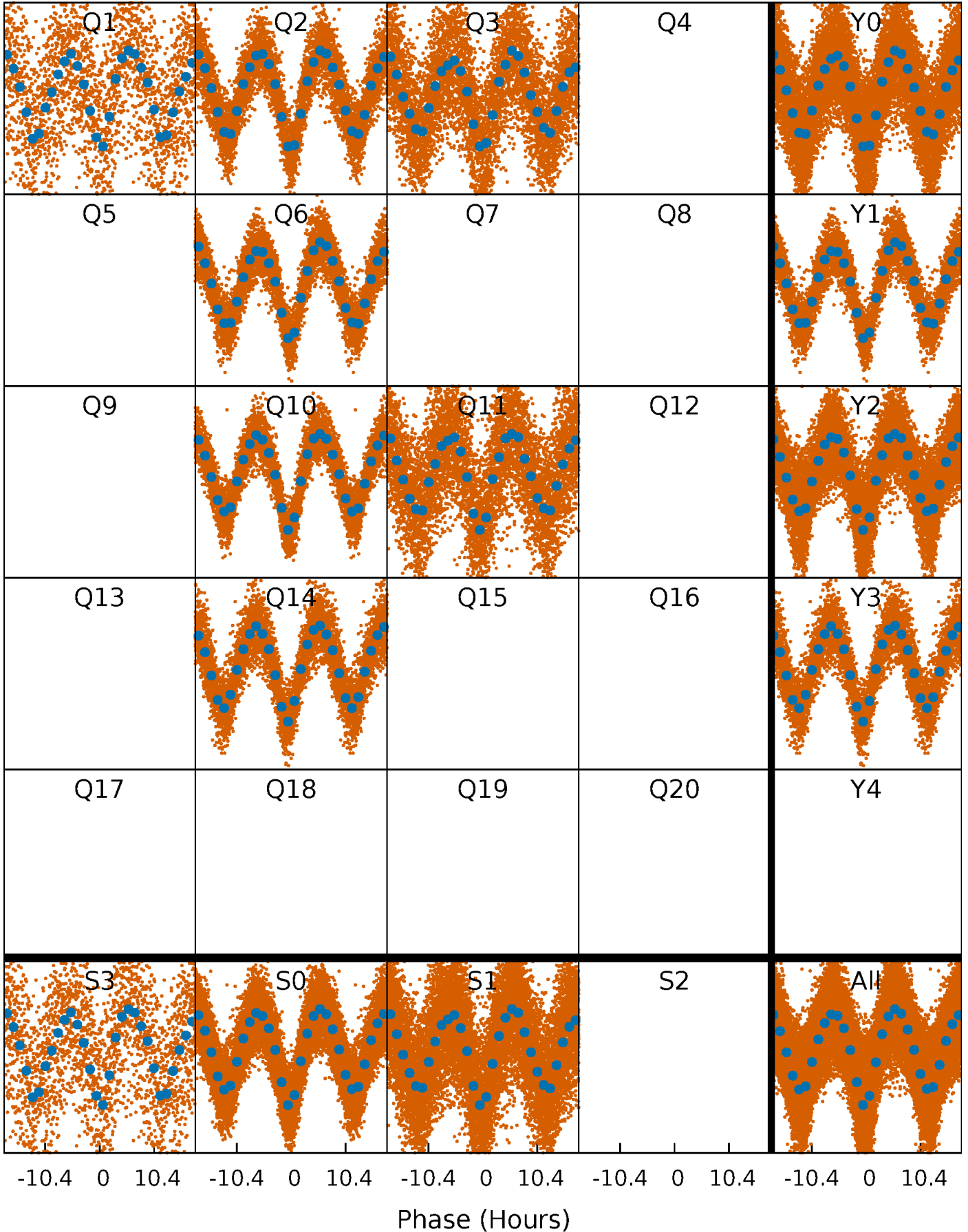


Non-Whitened Vs. Whitened Light Curve



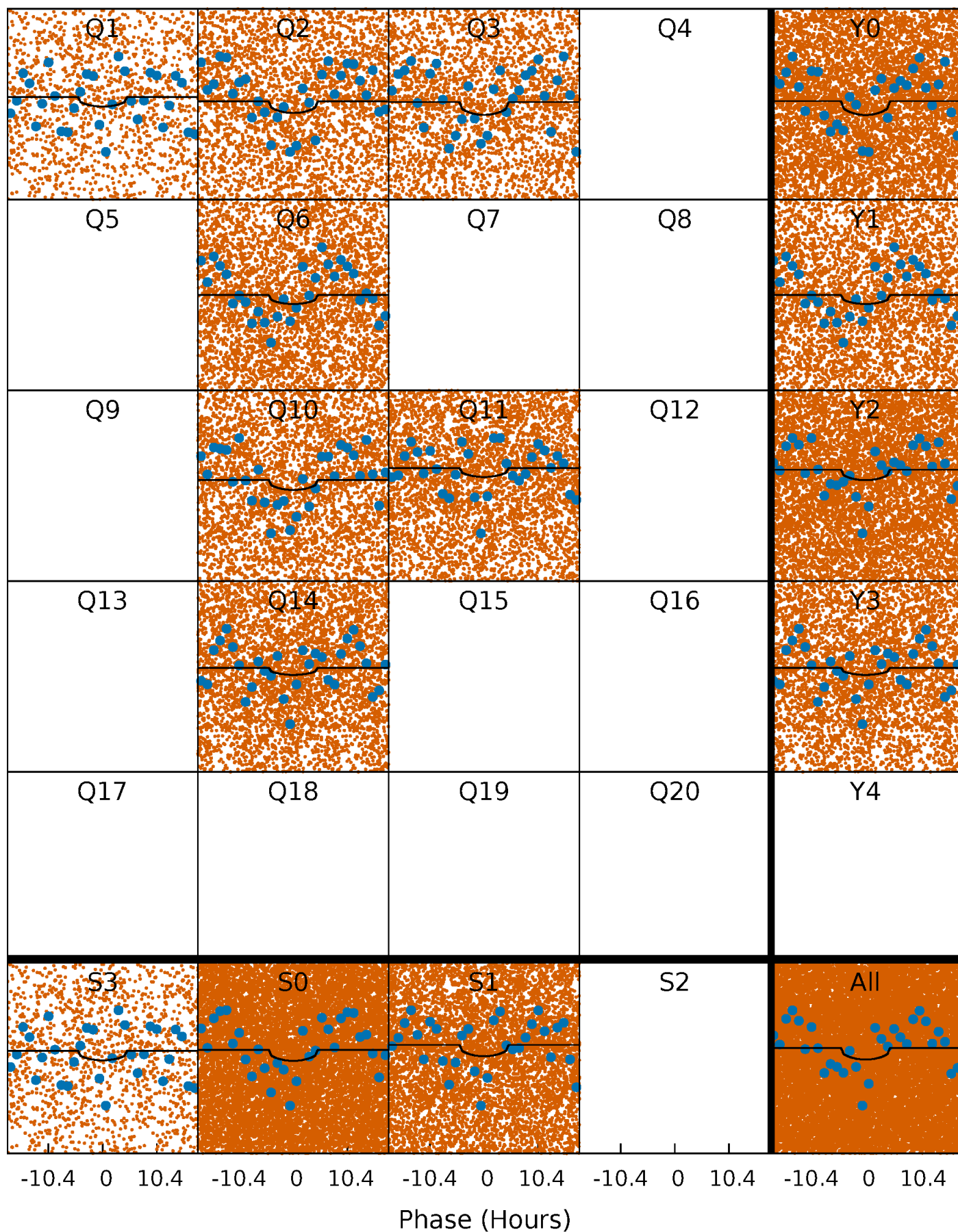
PDC Quarter-Phased Transit Curves

TCE 005652071-01 P= 1.020492 Days $T_0=132.241328$ (BKJD)



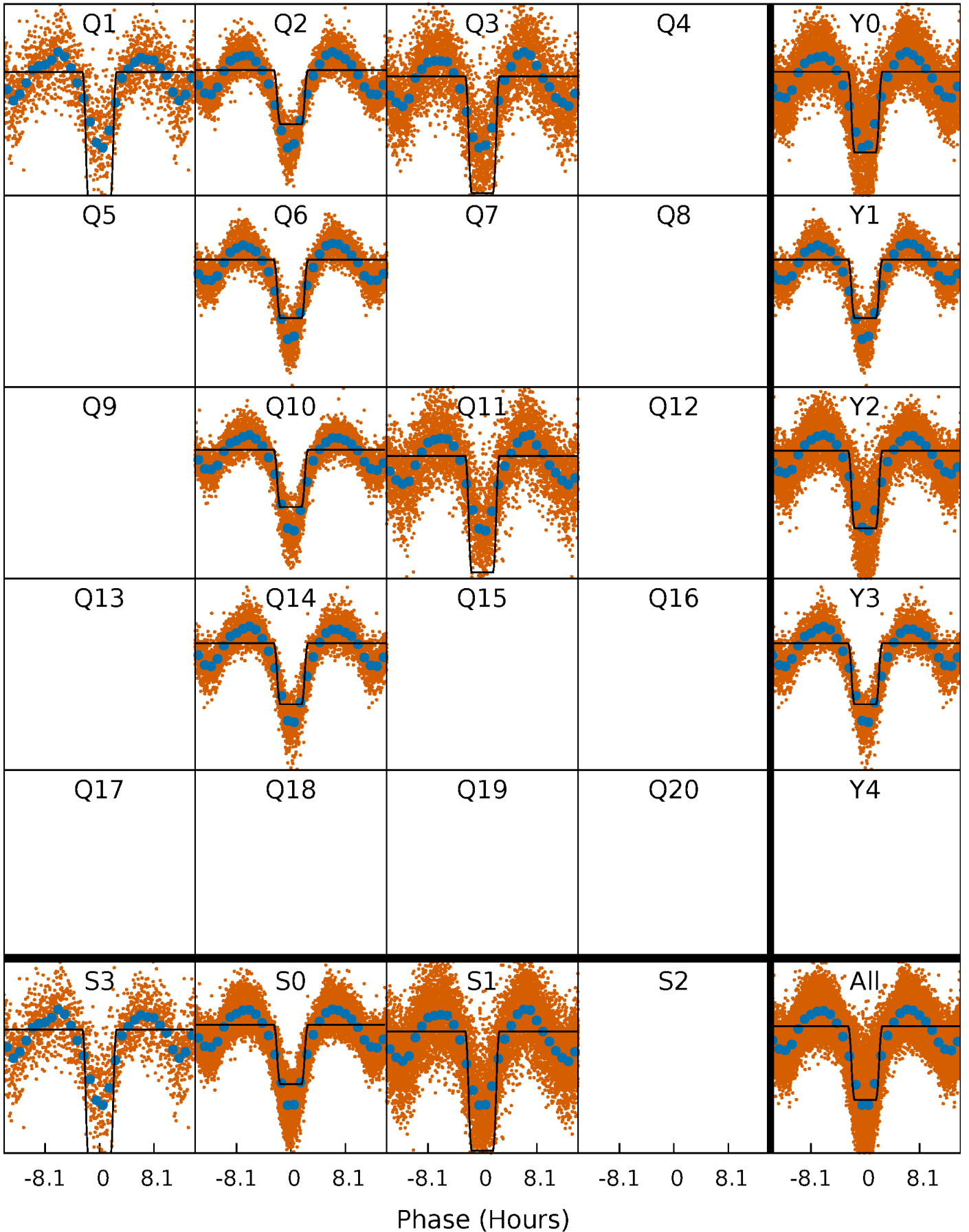
DV Quarter-Phased Transit Curves

TCE 005652071-01 P= 1.020492 Days $T_0=132.241328$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

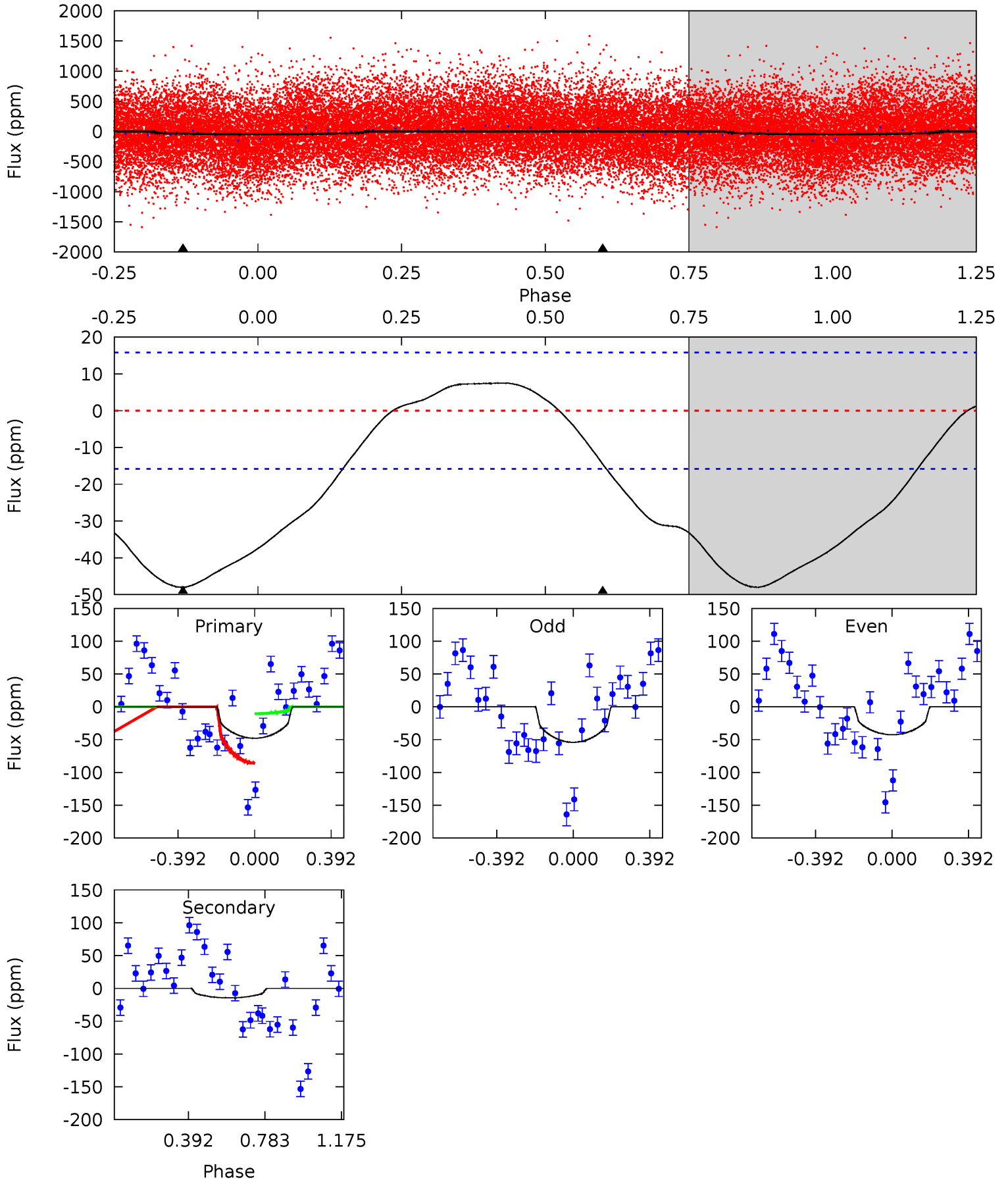
TCE 005652071-01 P= 1.020458 Days $T_0=132.248719$ (BKJD)



DV Model-Shift Uniqueness Test

005652071-01, P = 1.020492 Days, E = 131.220836 Days

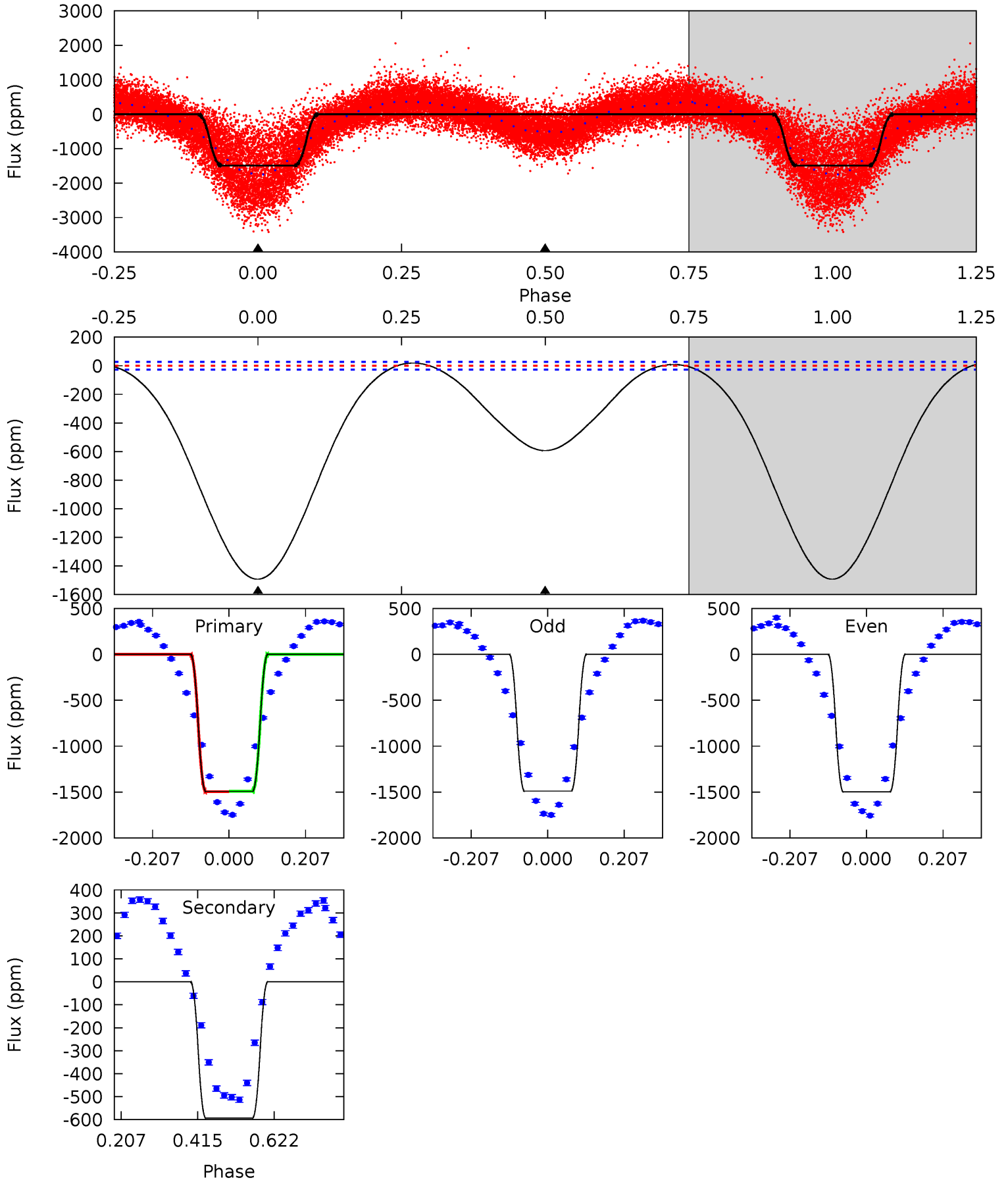
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	3.93	0	0	4.27	0.86	0.91	13.0	13.0	3.93	3.93	1.56	1.04	0.14	10.0



Alt Model-Shift Uniqueness Test

005652071-01, P = 1.020458 Days, E = 131.228261 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
245.9	97.8	0	0	4.41	1.26	5.26	245.9	245.9	97.8	97.8	0.62	0.93	0.01	0.45



Stellar Parameters For KIC 005652071

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4785^{+56}_{-92}	$2.717^{+0.180}_{-0.135}$	$0.060^{+0.100}_{-0.200}$	$10.151^{+2.052}_{-3.335}$	$1.958^{+0.843}_{-0.766}$	$0.003^{+0.003}_{-0.001}$
	+1%/-2%	+7%/-5%	+167%/-333%	+20%/-33%	+43%/-39%	+122%/-35%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 005652071-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-15 ± 4	$7.02^{+5.71}_{-4.71}$	5919^{+325}_{-363}	-4369^{+9691}_{-435}	$0.097^{+0.763}_{-0.066}$
Alt.	-593 ± 6	$44.48^{+9.41}_{-9.12}$	5937^{+357}_{-345}	-4424^{+371}_{-308}	$0.107^{+0.047}_{-0.032}$

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

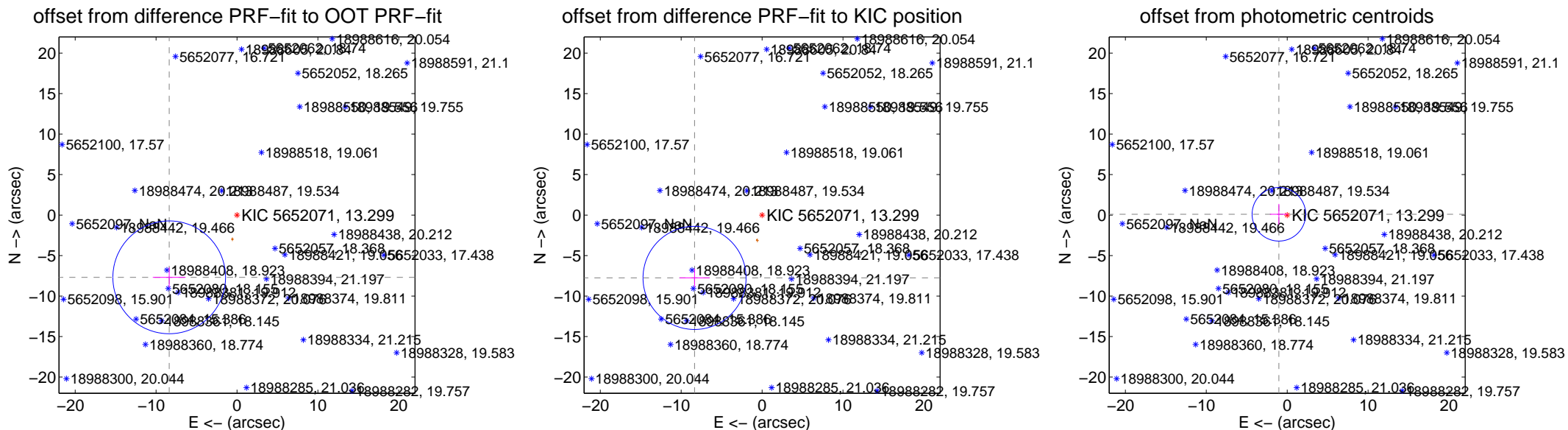
DV Centroid Data

Supplemental centroid analysis for 005652071-01. Kepler magnitude: 13.30. Transit SNR 3.28

There are 2 quarters with good PRF difference image offsets

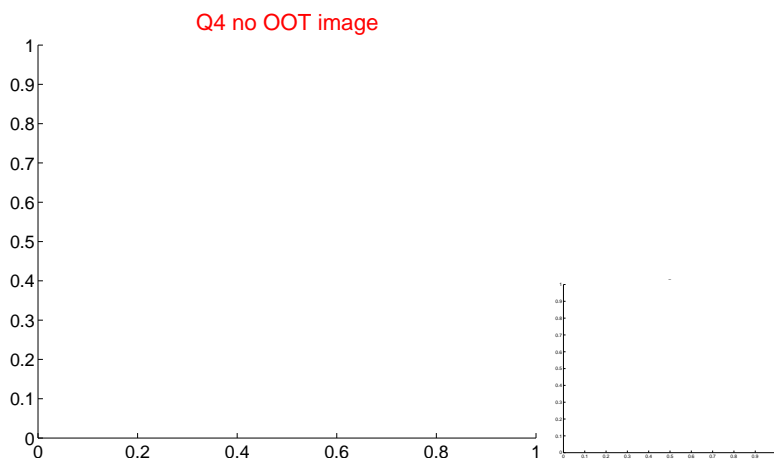
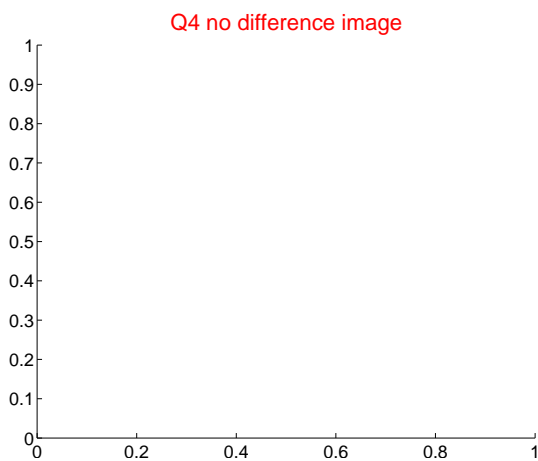
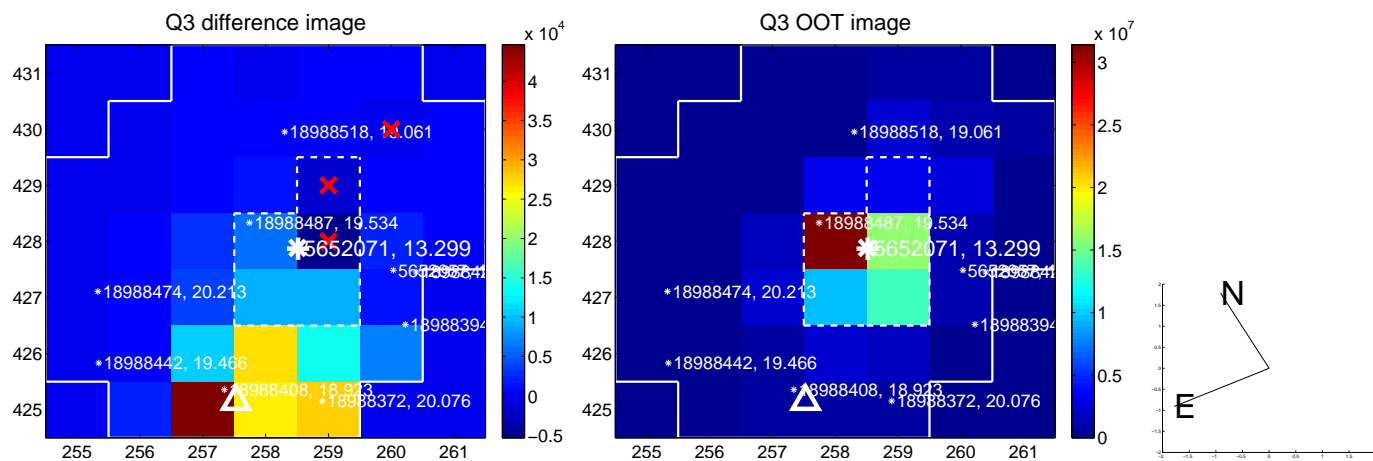
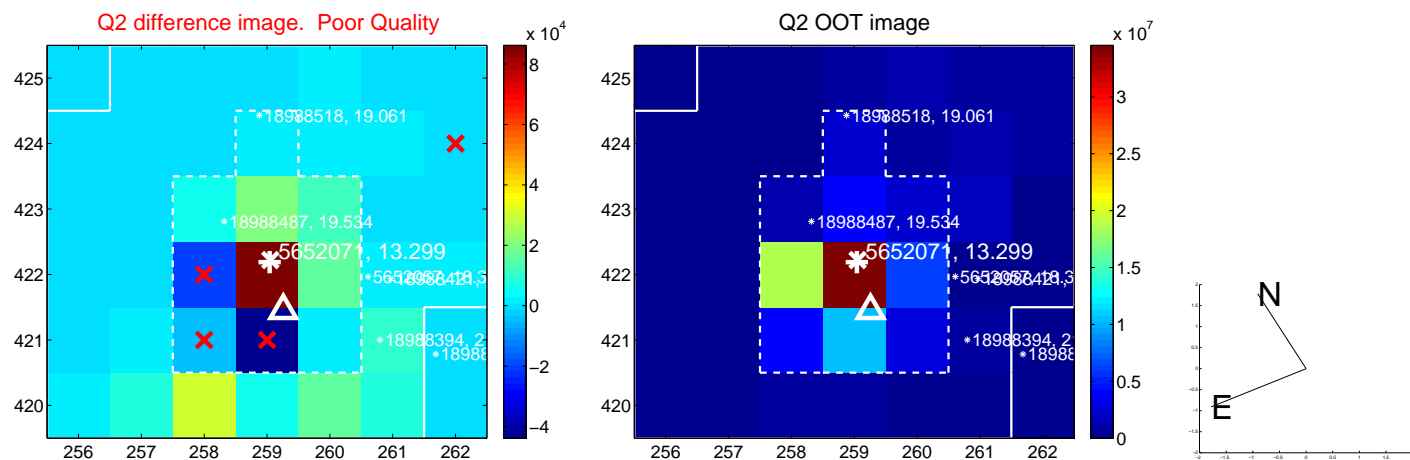
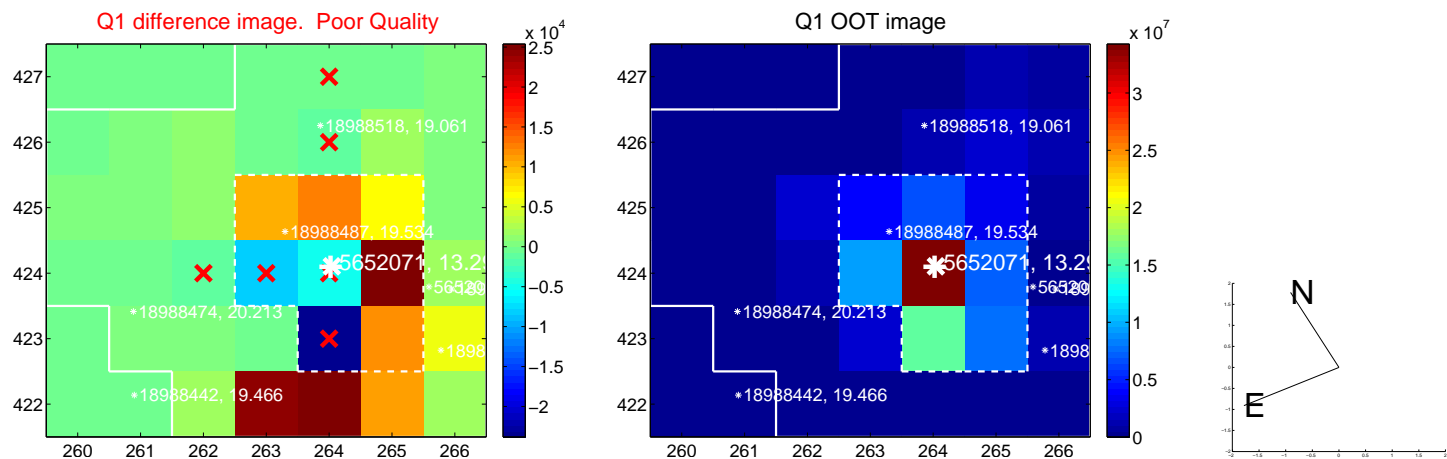
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	11.374 \pm 2.322	4.90	8.381 \pm 2.025	-7.689 \pm 1.230
PRF-fit source offset from KIC position	11.398 \pm 2.124	5.37	8.351 \pm 1.863	-7.758 \pm 1.118
photometric centroid source offset	1.03 \pm 1.10	0.93	1.03 \pm 1.10	0.10 \pm 1.28

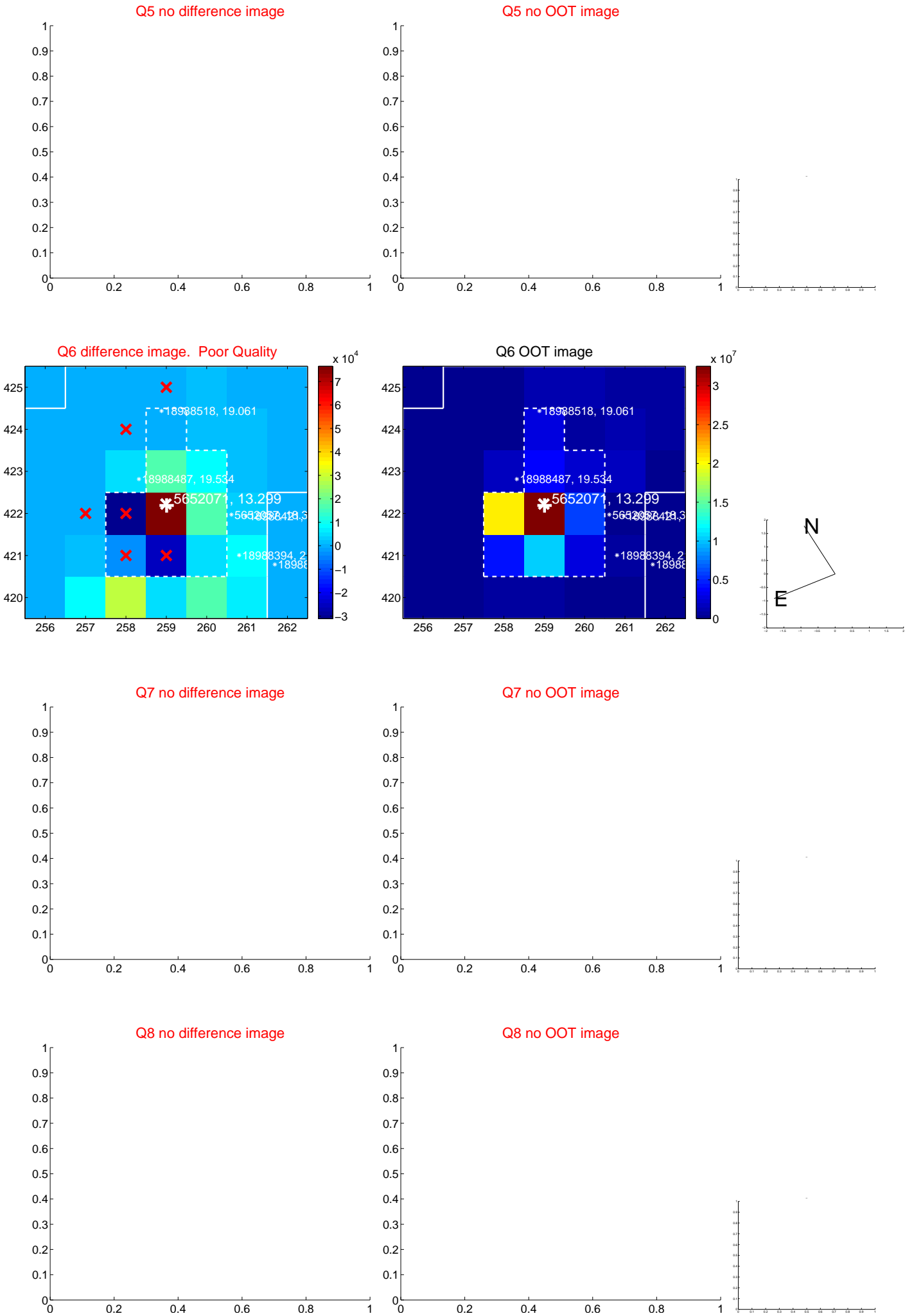


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

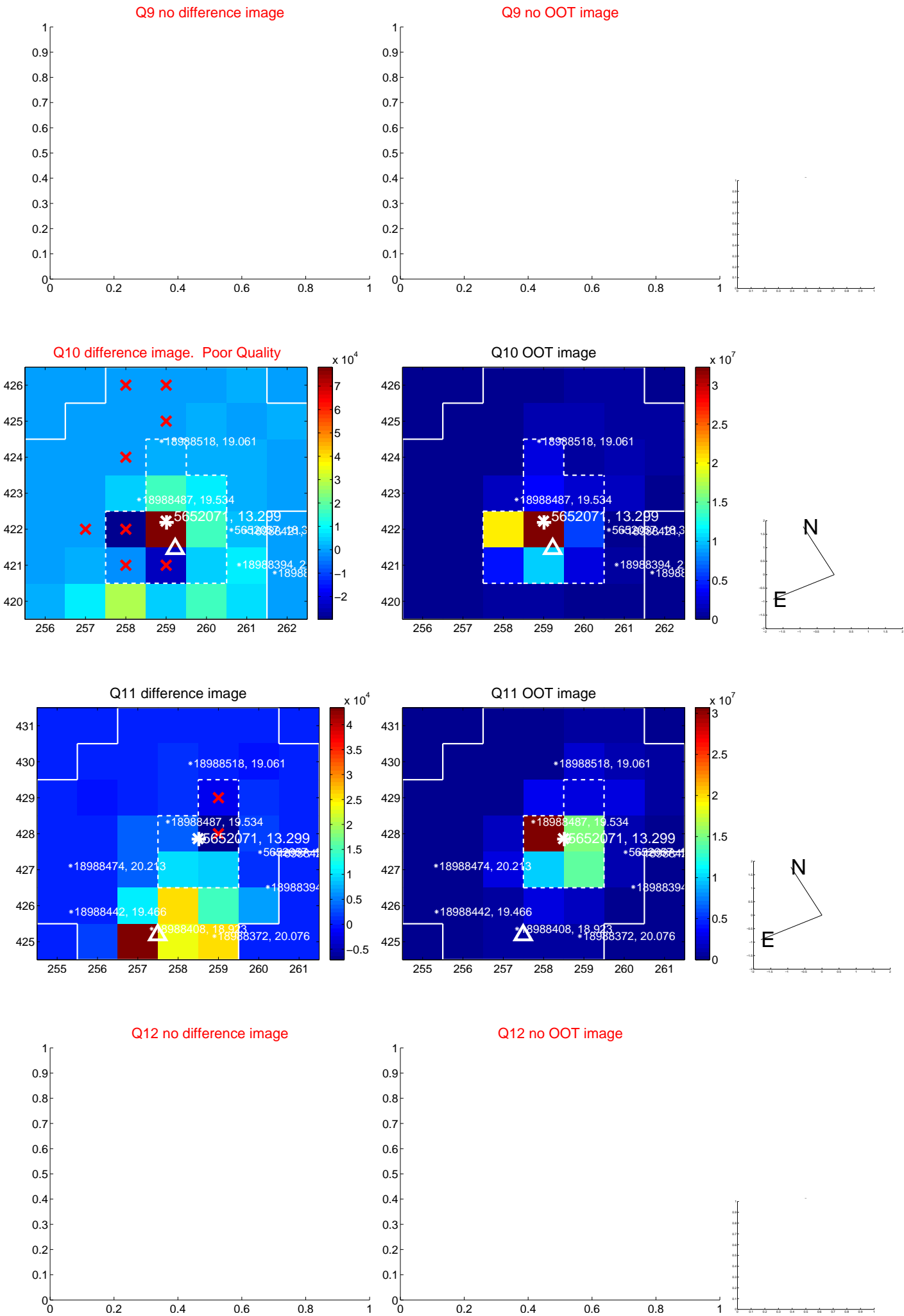
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



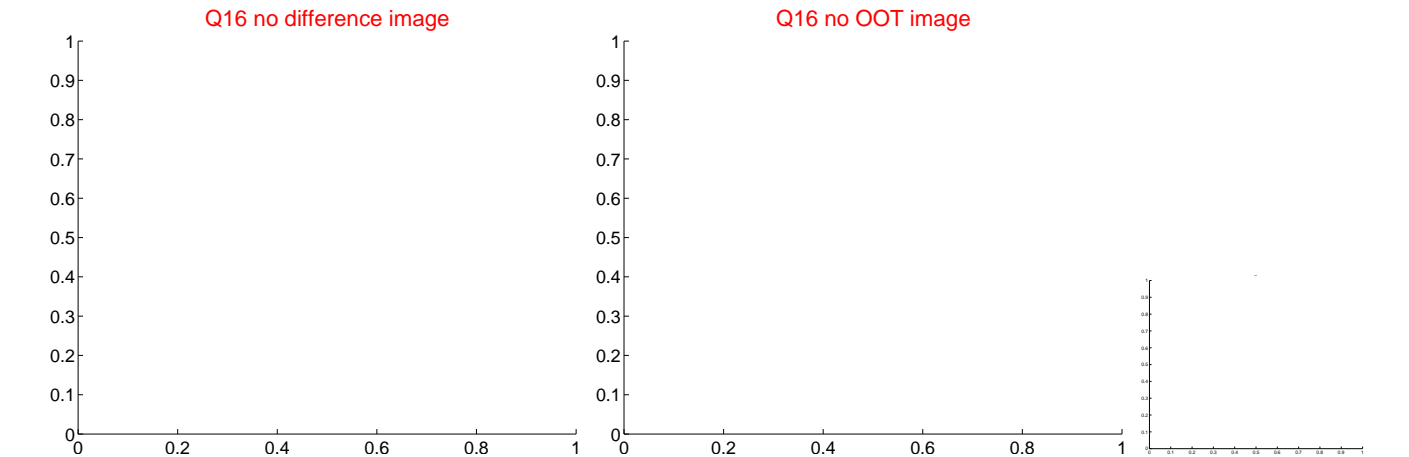
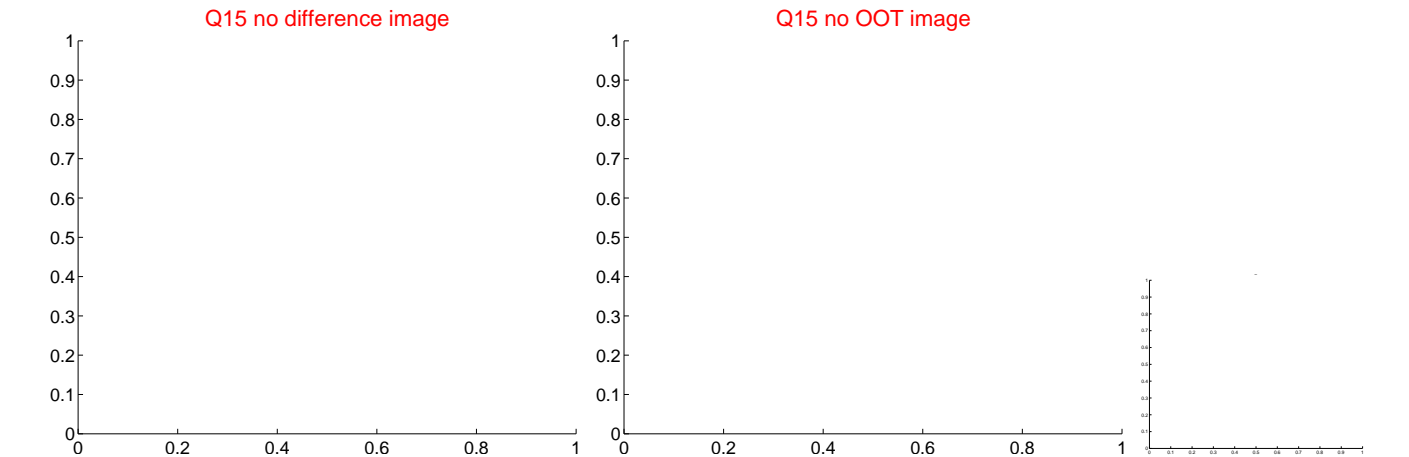
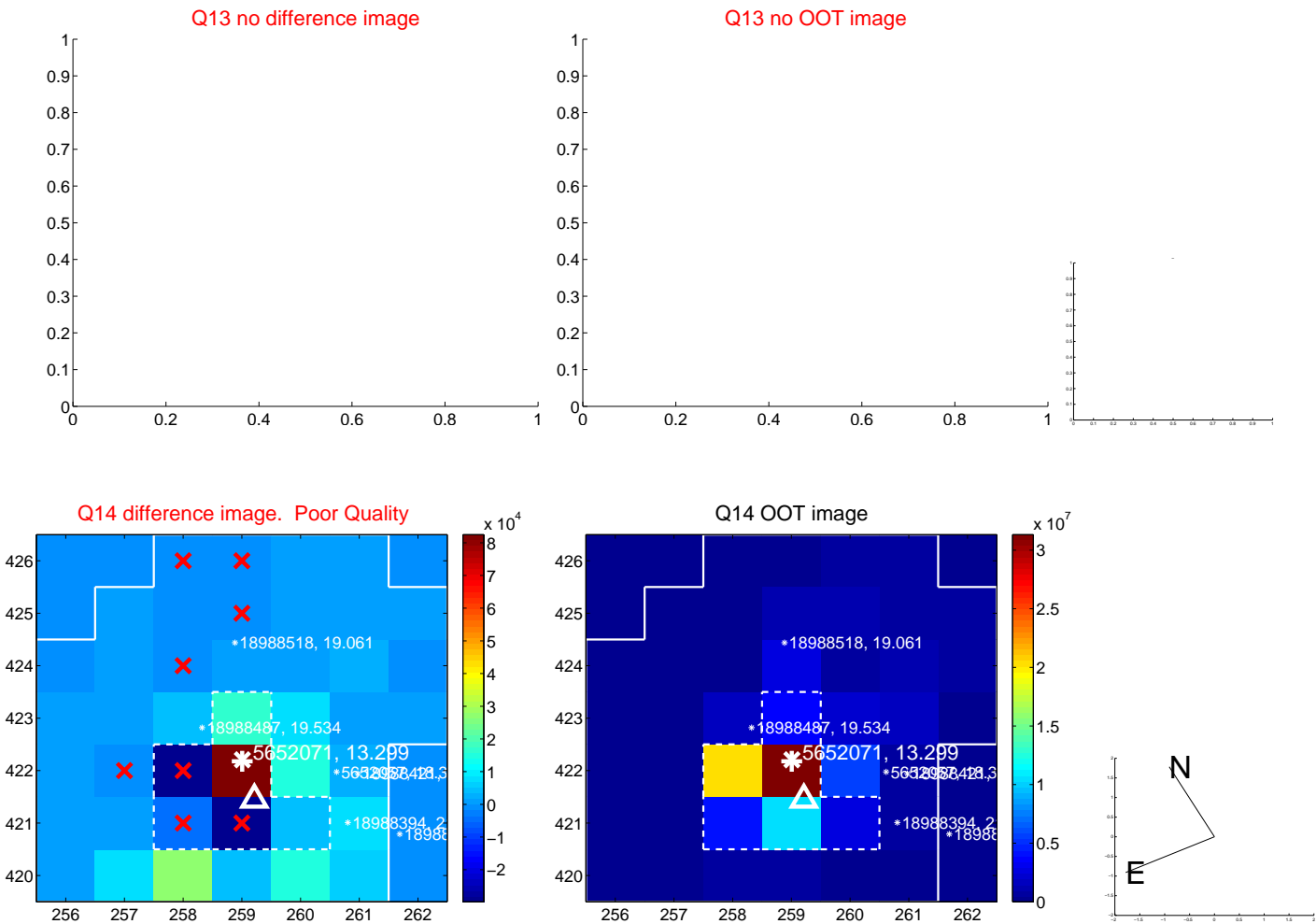
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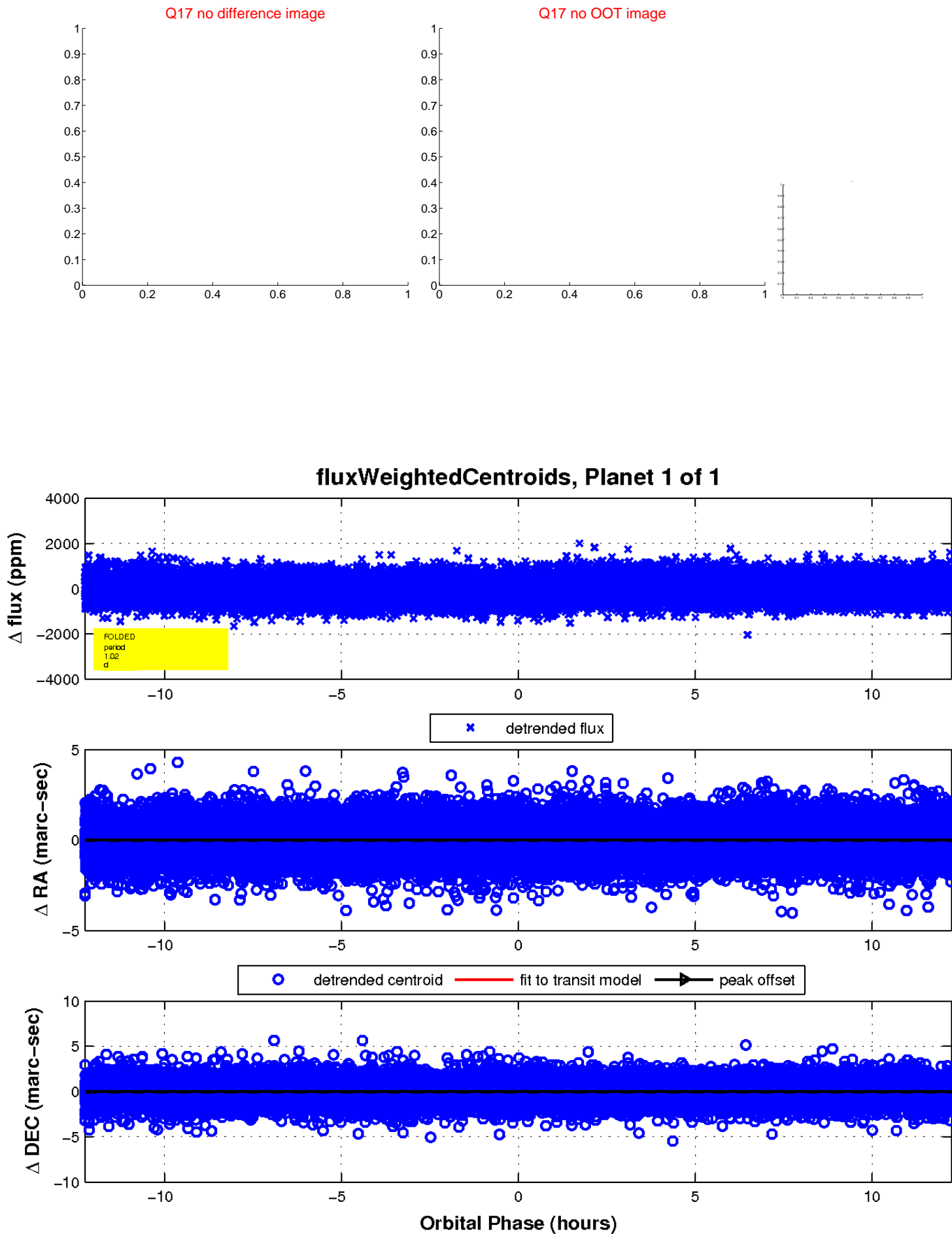
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UKIRT Image

Declination

