

KIC 011411670

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})
011411670-01	OBS	No	0.610250	131.762601	9.3	5.748	8.1	8.0	2.09	9573	0.65	95635.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011411670-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_MEAS

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

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

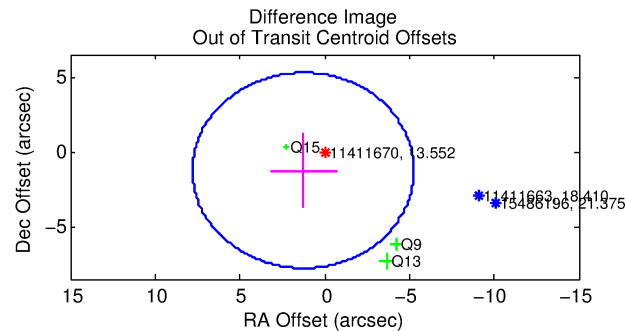
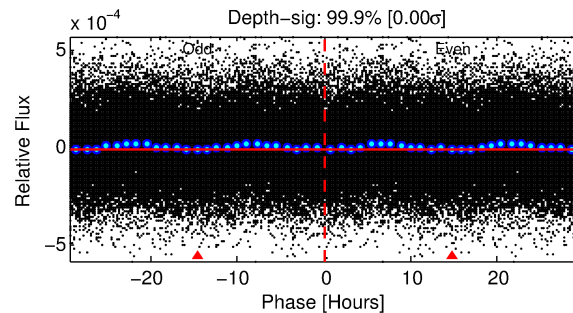
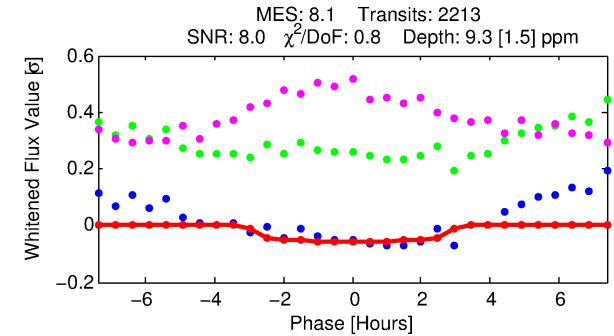
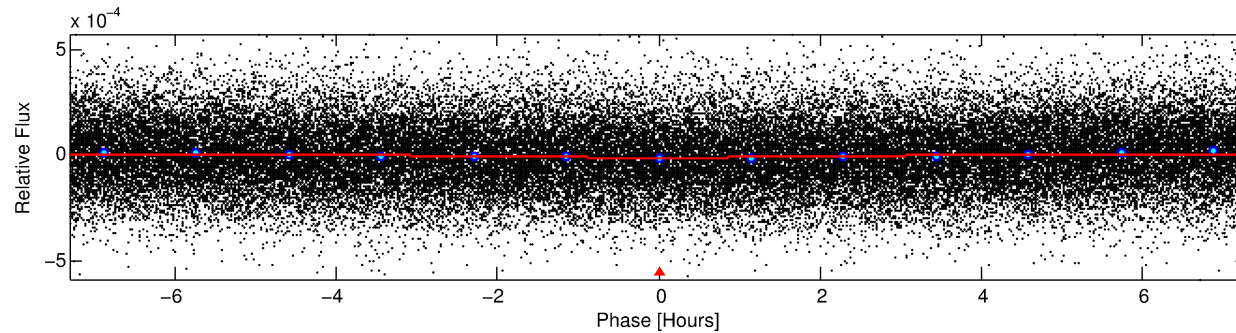
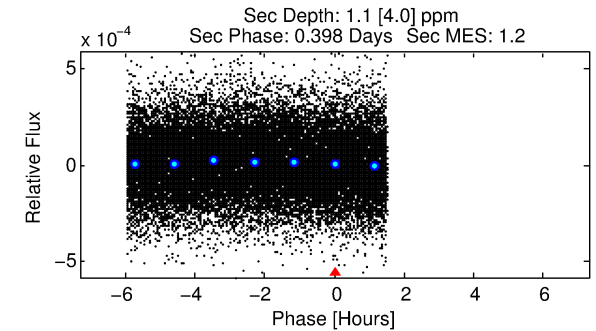
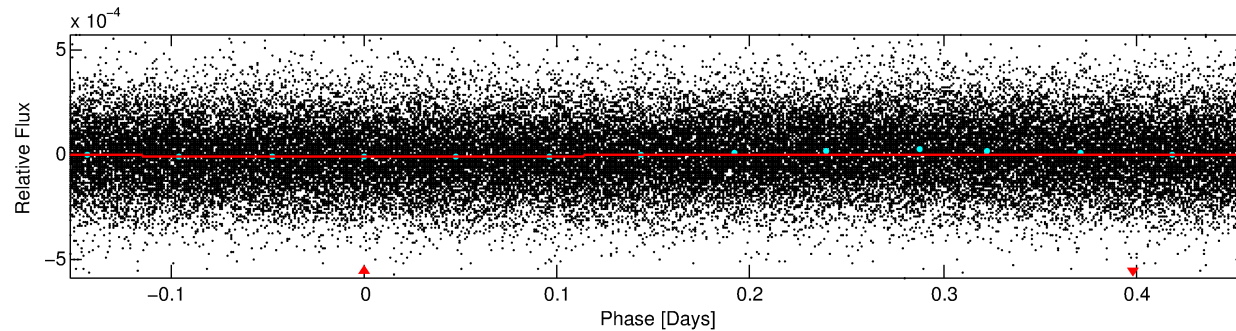
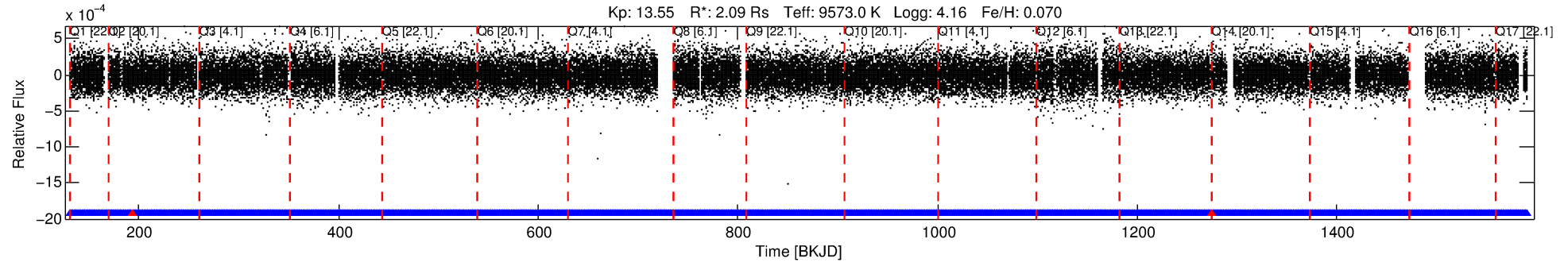
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011411670-01

No Significant Match Found

DV One-Page Summary

KIC: 11411670 Candidate: 1 of 1 Period: 0.610 d



DV Fit Results:

Period = 0.61025 [0.00001] d
Epoch = 131.7626 [0.0072] BKJD
Rp/R* = 0.0029 [0.0027]
a/R* = 1.06 [0.79]
b = 0.10 [66.99]
Seff = 95635.46 [42632.84]
Teq = 4484 [500] K
Rp = 0.65 [0.67] Re
a = 0.0185 [0.0056] AU
Ag = 0.51 [2.02] [-0.24σ]
Teffp = 5844 [5830] K [0.23σ]

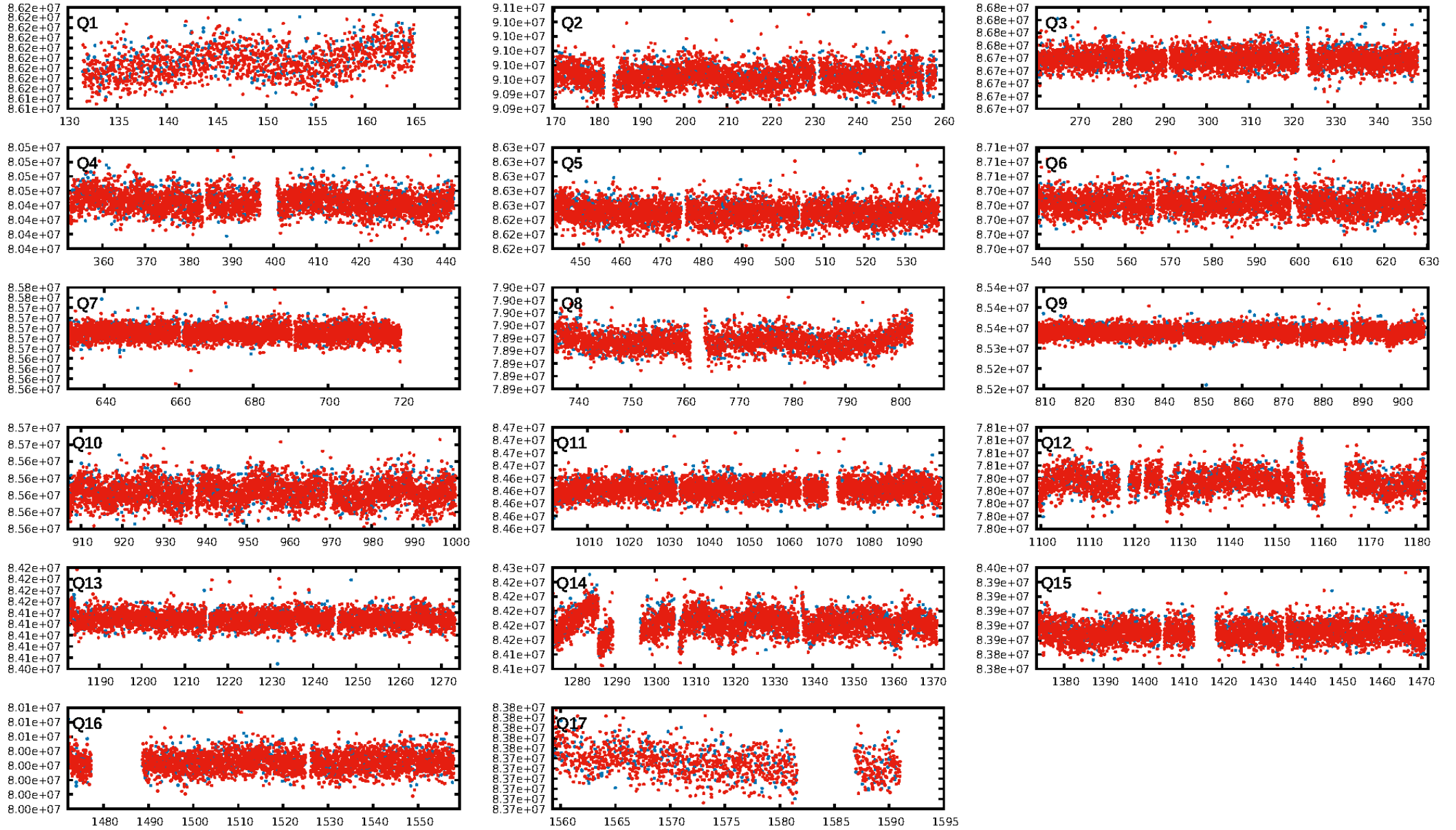
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2112/2114]
GhostDiagnostic-chr: 2.268
Centroid-sig: 28.1%
Centroid-so: 1.725 arcsec [1.12σ]
OotOffset-rm: 1.780 arcsec [0.82σ]
OotOffset-st: 0/1/0/2 [3]
KicOffset-rm: 1.804 arcsec [0.81σ]
KicOffset-st: 0/1/0/2 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [17/17]

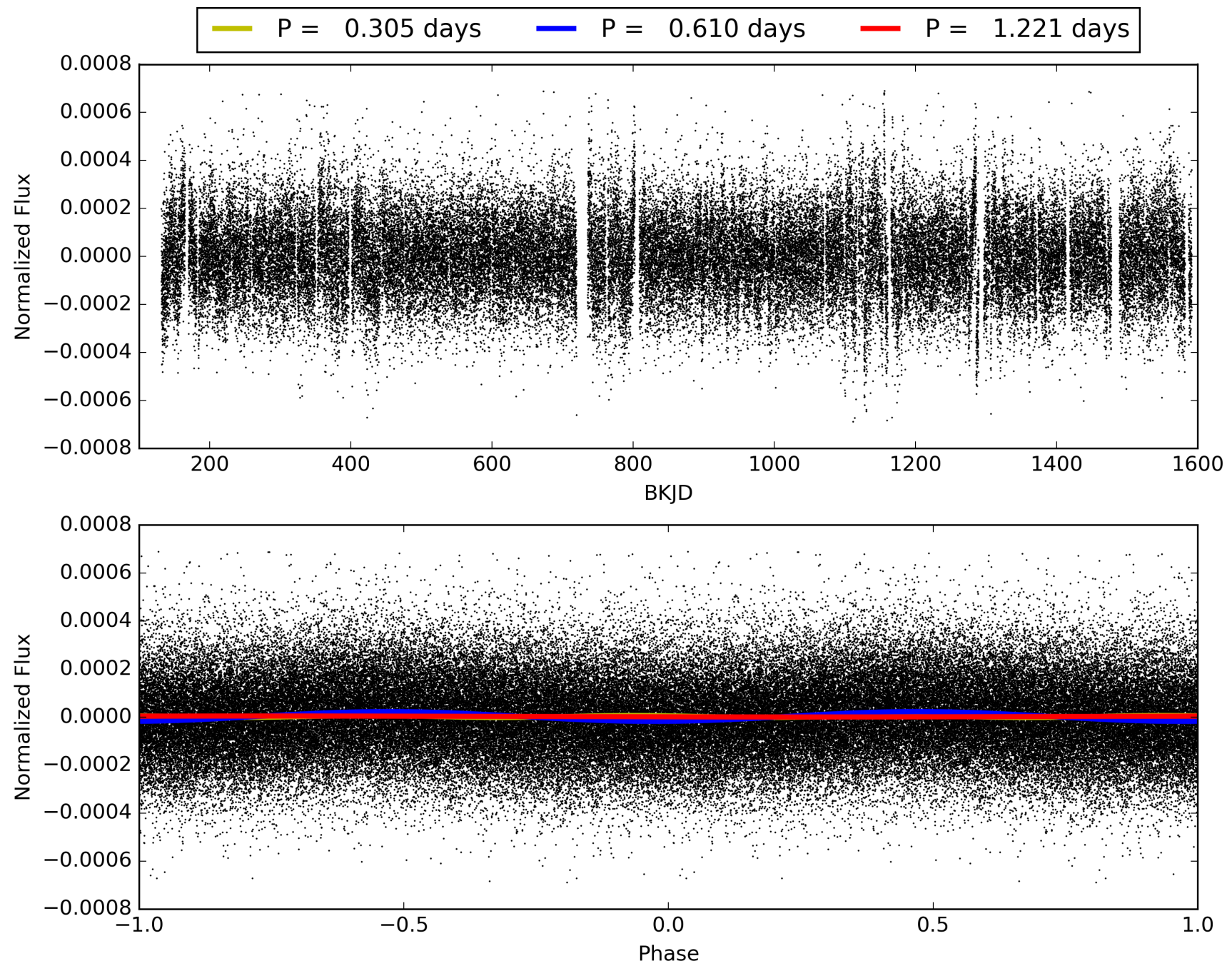
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:14:30 Z

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

TCE 011411670-01, PDC Light Curves

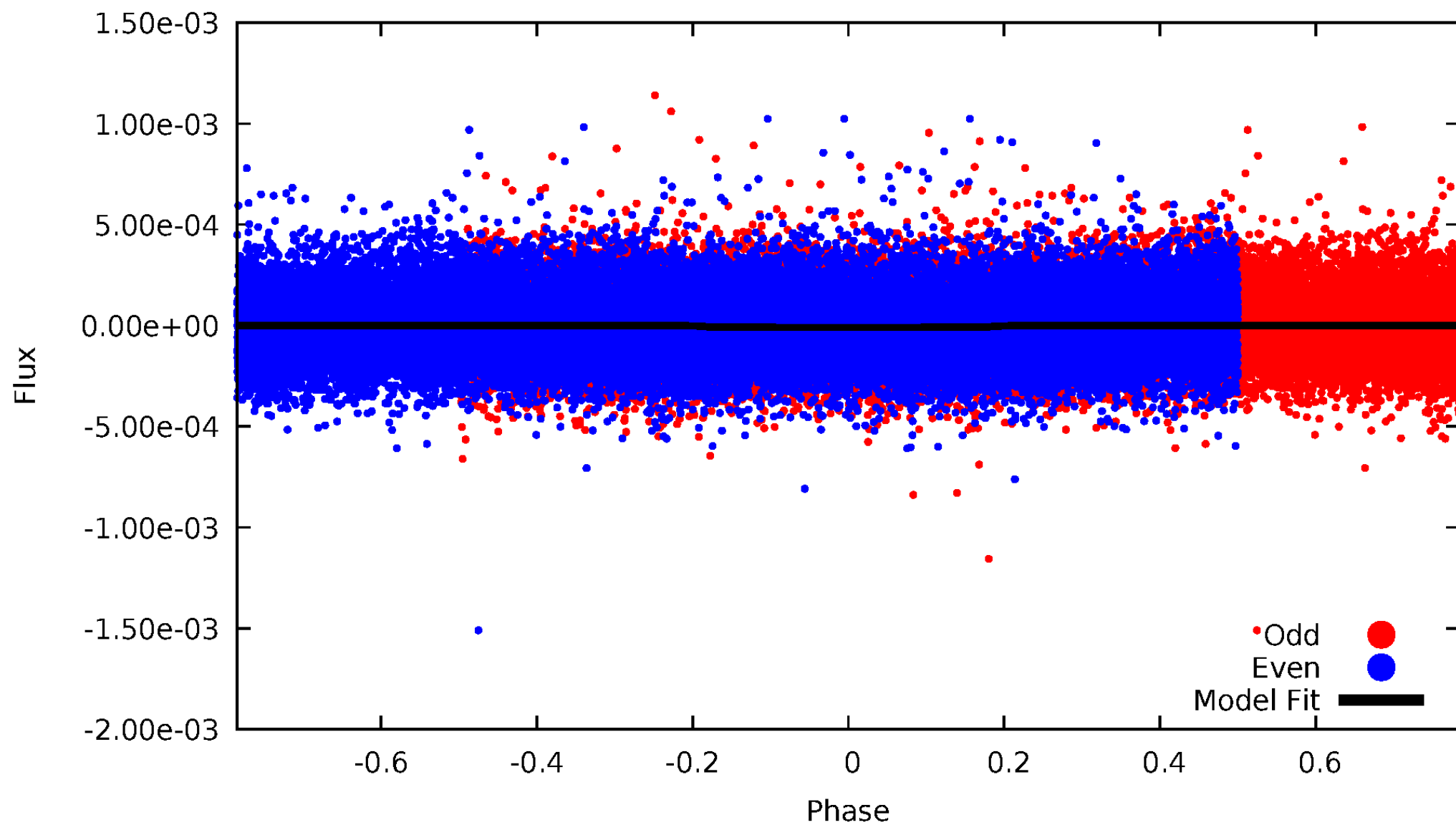


TCE 011411670-01



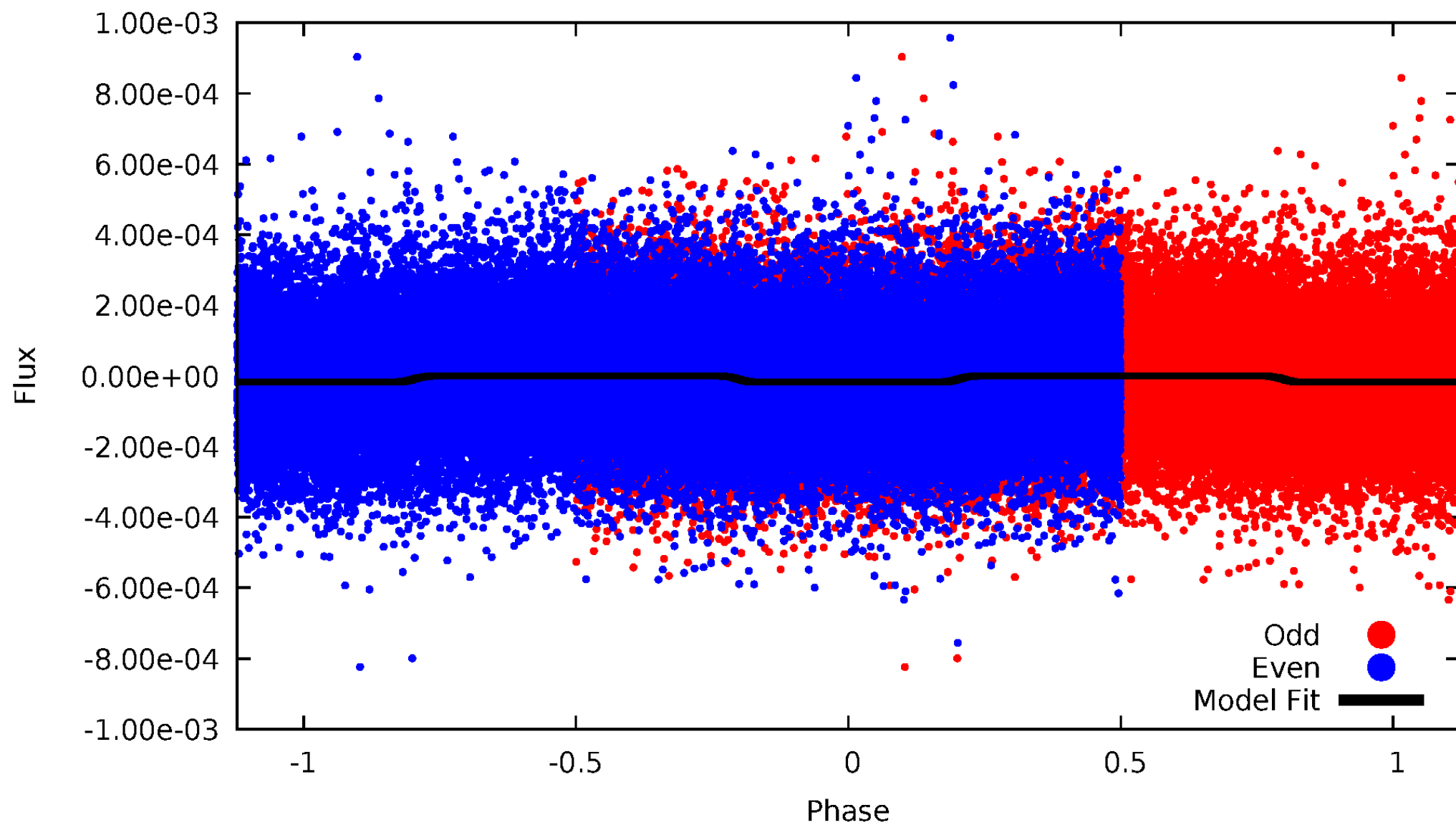
DV Odd/Even

TCE 011411670-01



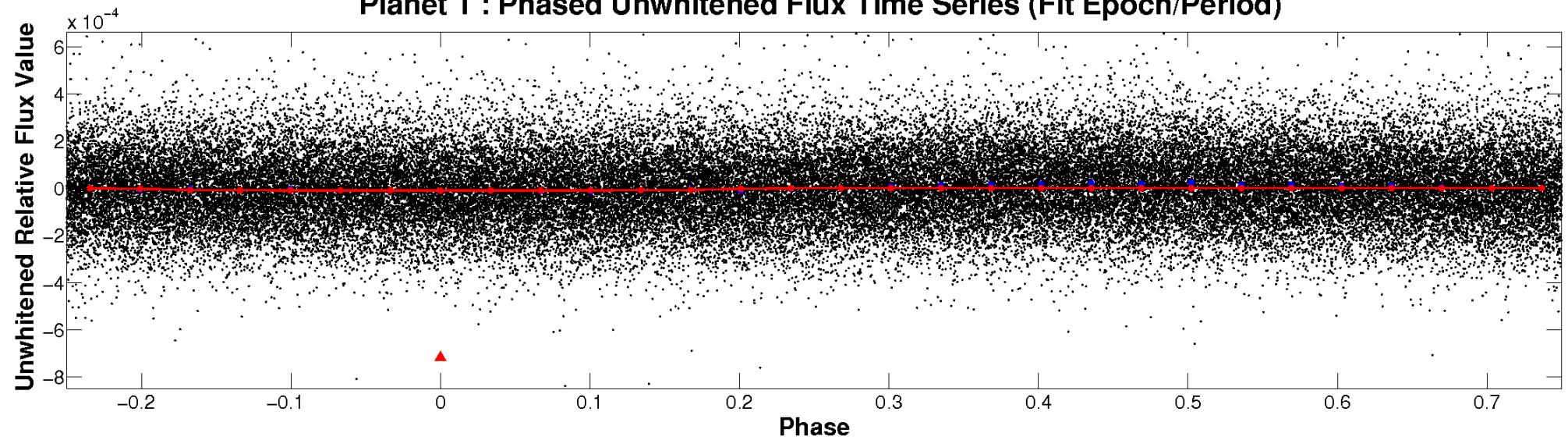
ALT Odd/Even

TCE 011411670-01

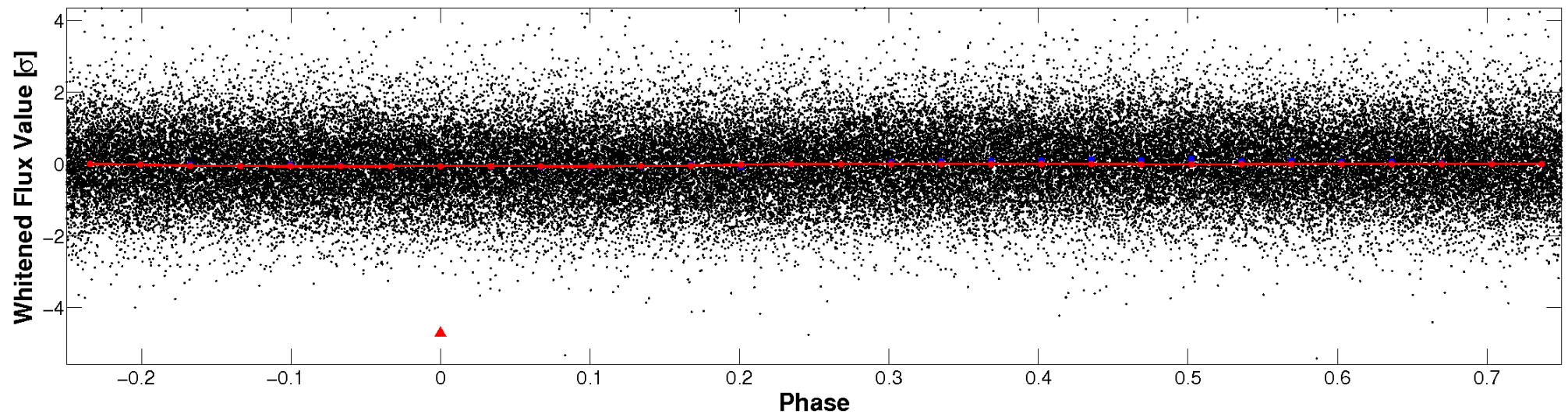


Non-Whitened Vs. Whitened Light Curve

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

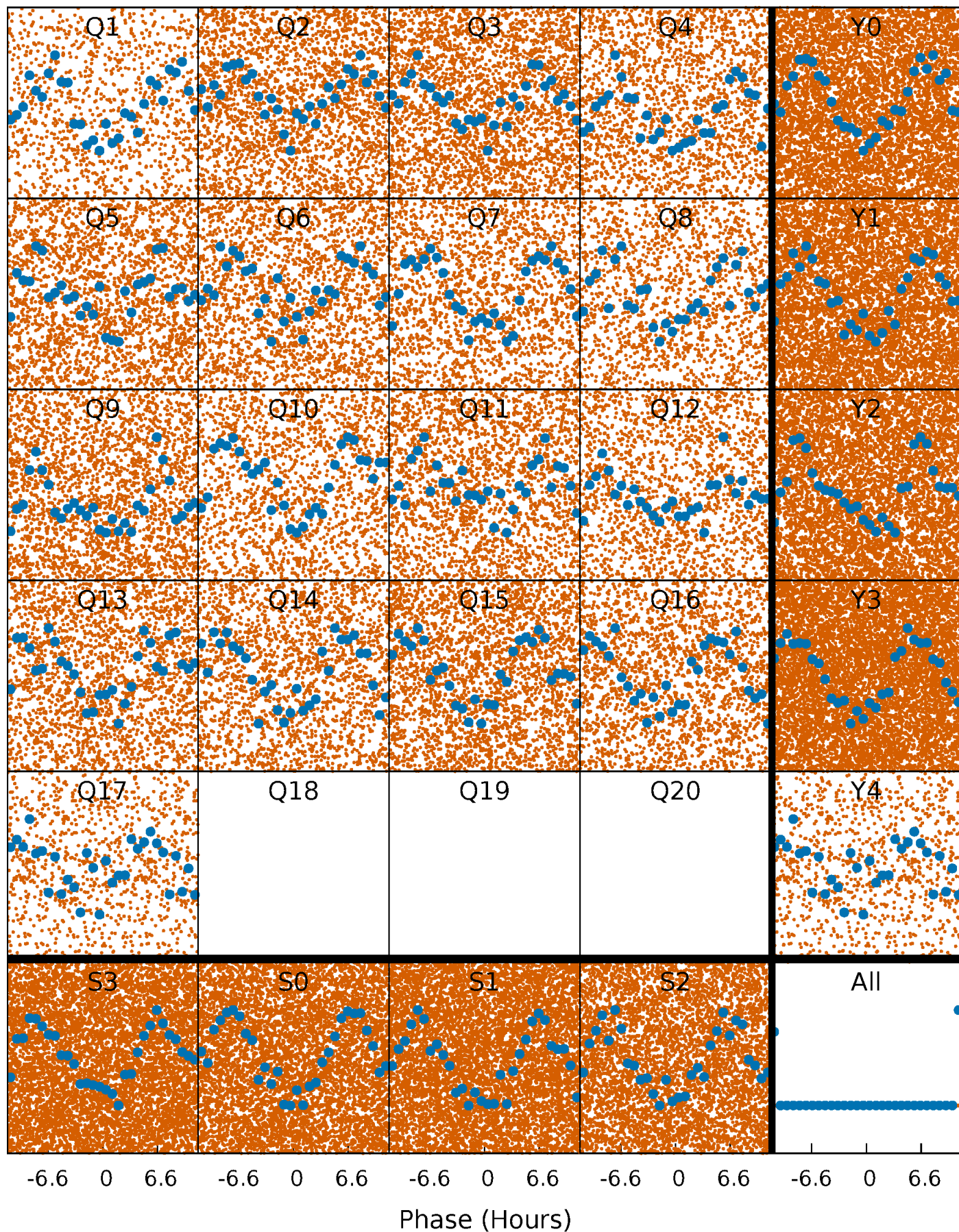


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



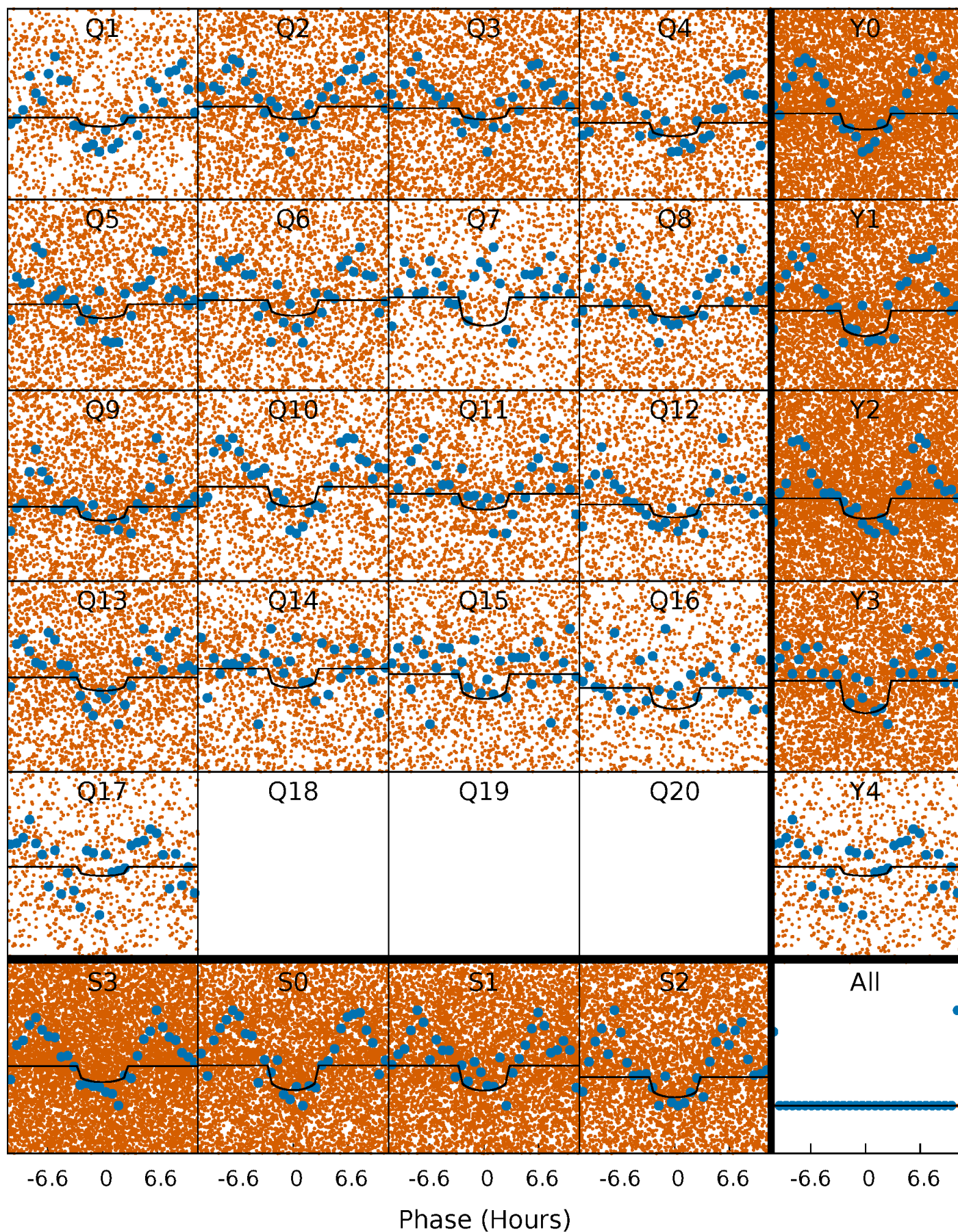
PDC Quarter-Phased Transit Curves

TCE 011411670-01 P= 0.610250 Days $T_0=131.762601$ (BKJD)



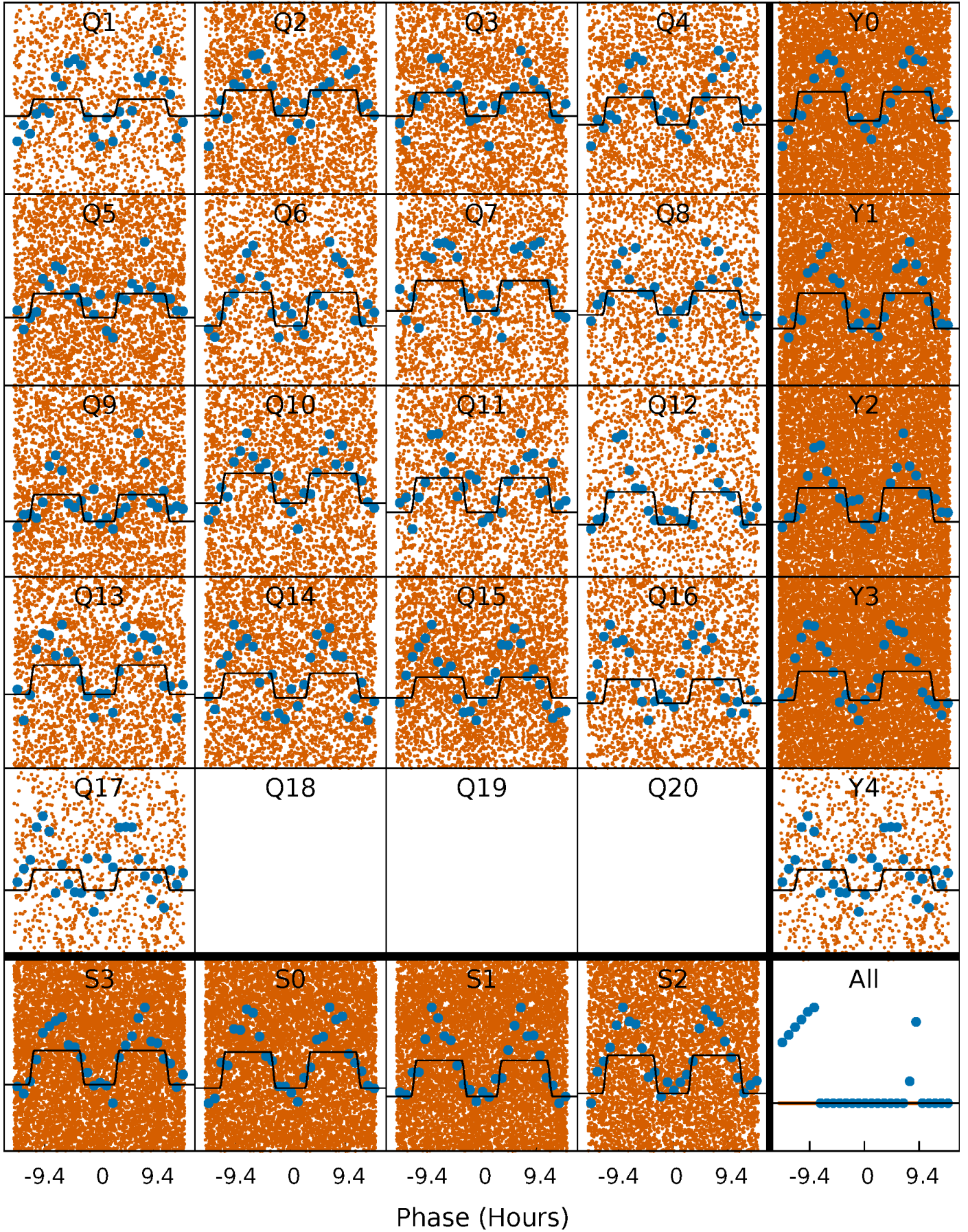
DV Quarter-Phased Transit Curves

TCE 011411670-01 P= 0.610250 Days $T_0=131.762601$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

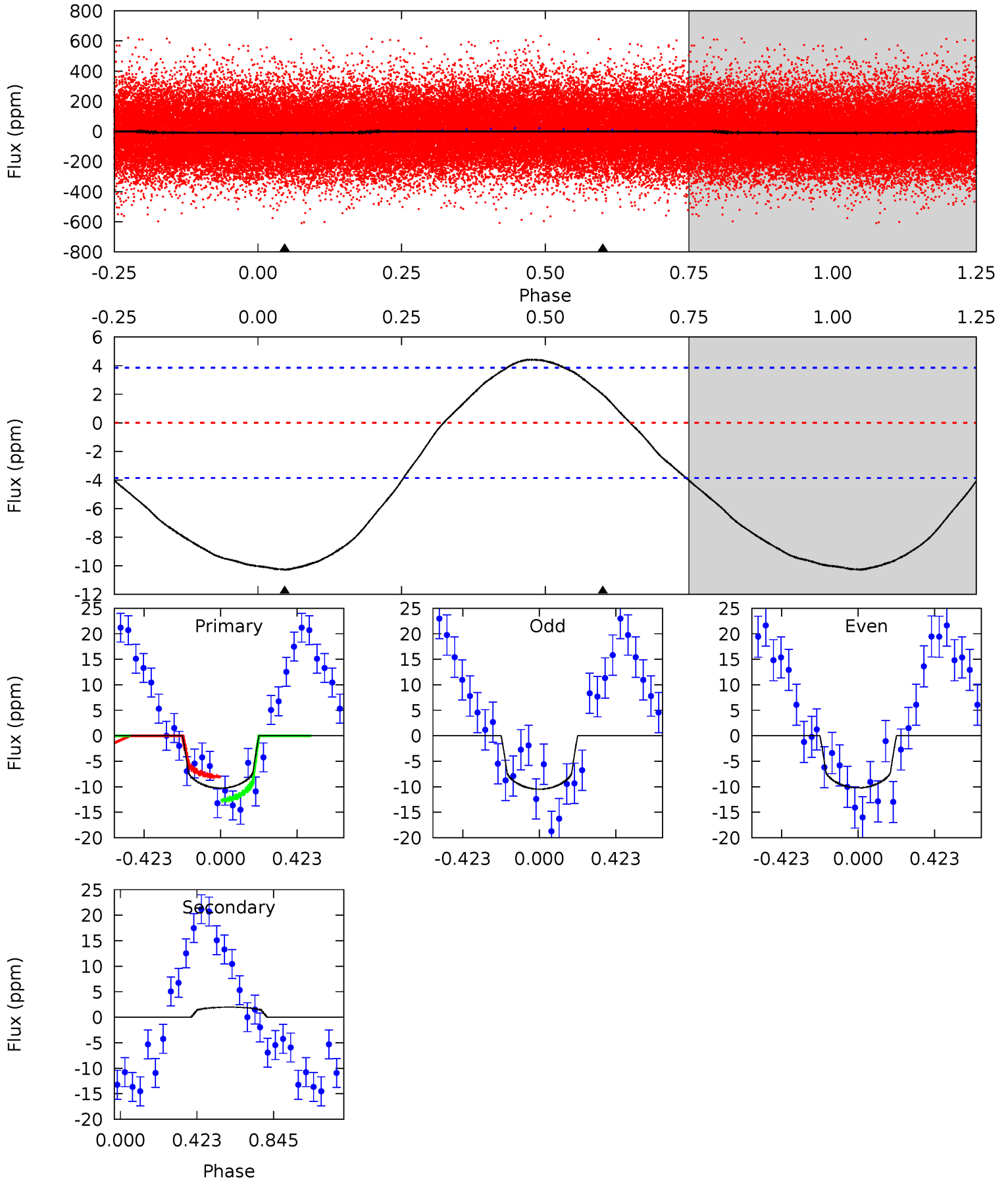
TCE 011411670-01 P= 0.610283 Days $T_0=131.715267$ (BKJD)



DV Model-Shift Uniqueness Test

011411670-01, P = 0.610250 Days, E = 131.152351 Days

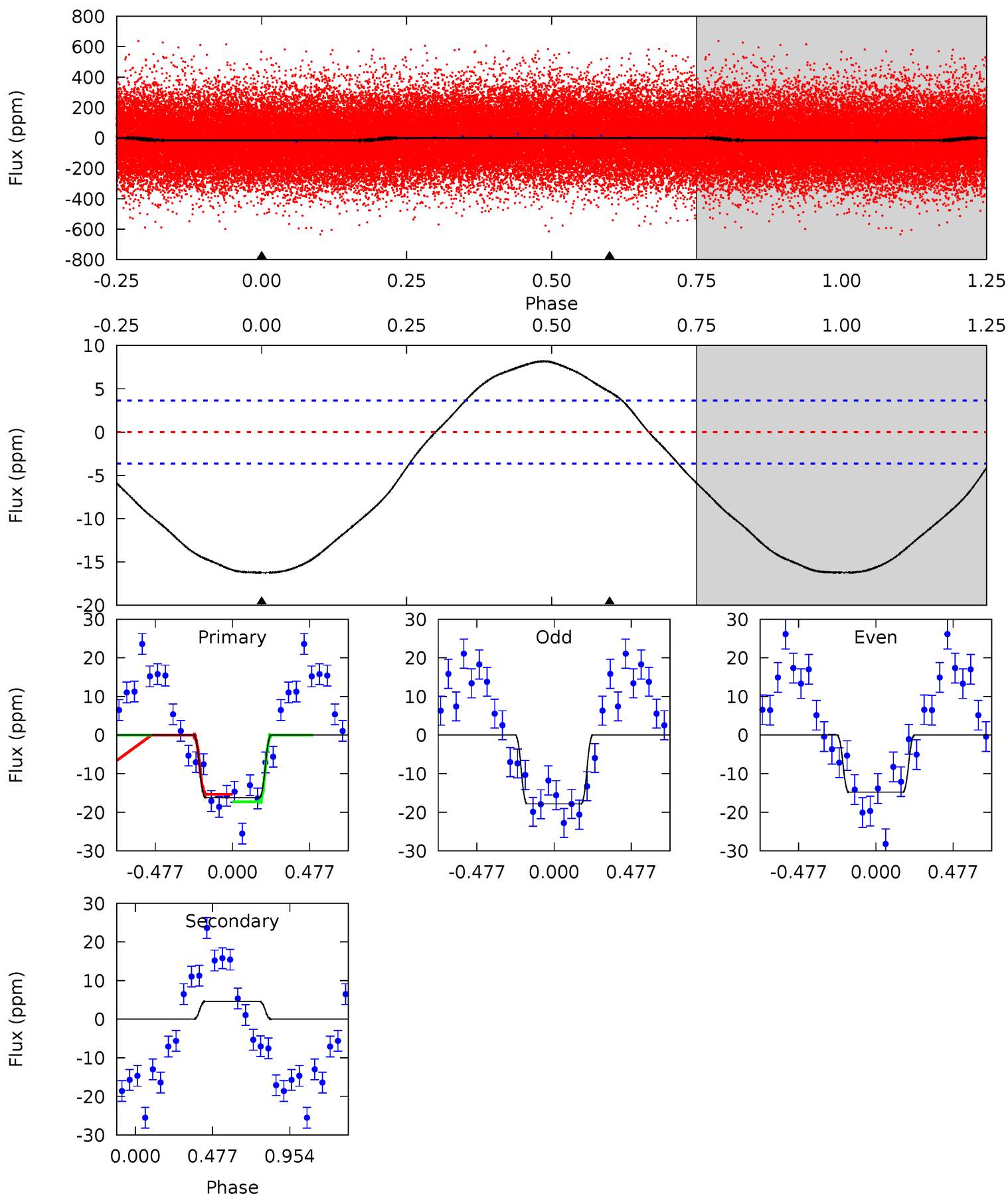
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	-2.19	0	0	4.25	0.80	1.52	11.3	11.3	-2.19	-2.19	0.14	0.92	0.30	2.50



Alt Model-Shift Uniqueness Test

011411670-01, P = 0.610283 Days, E = 131.104984 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.8	-5.39	0	0	4.23	0.71	2.58	18.8	18.8	-5.39	-5.39	1.77	0.95	0.34	1.15



Stellar Parameters For KIC 011411670

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9573^{+272}_{-428}	$4.155^{+0.148}_{-0.204}$	$0.070^{+0.150}_{-0.600}$	$2.086^{+0.820}_{-0.547}$	$2.266^{+0.415}_{-0.622}$	$0.352^{+0.336}_{-0.199}$
	+3%/-4%	+4%/-5%	+214%/-857%	+39%/-26%	+18%/-27%	+96%/-56%
Source	KIC0	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 011411670-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	2 ± 1	$0.78^{+0.59}_{-0.50}$	6270^{+572}_{-451}	-6298^{+904}_{-3991}	$-0.536^{+0.378}_{-3.527}$
Alt.	5 ± 1	$1.01^{+0.67}_{-0.54}$	6295^{+507}_{-498}	-6760^{+1020}_{-3535}	$-0.836^{+0.544}_{-3.185}$

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 $A_{obs} \gg 1.0$

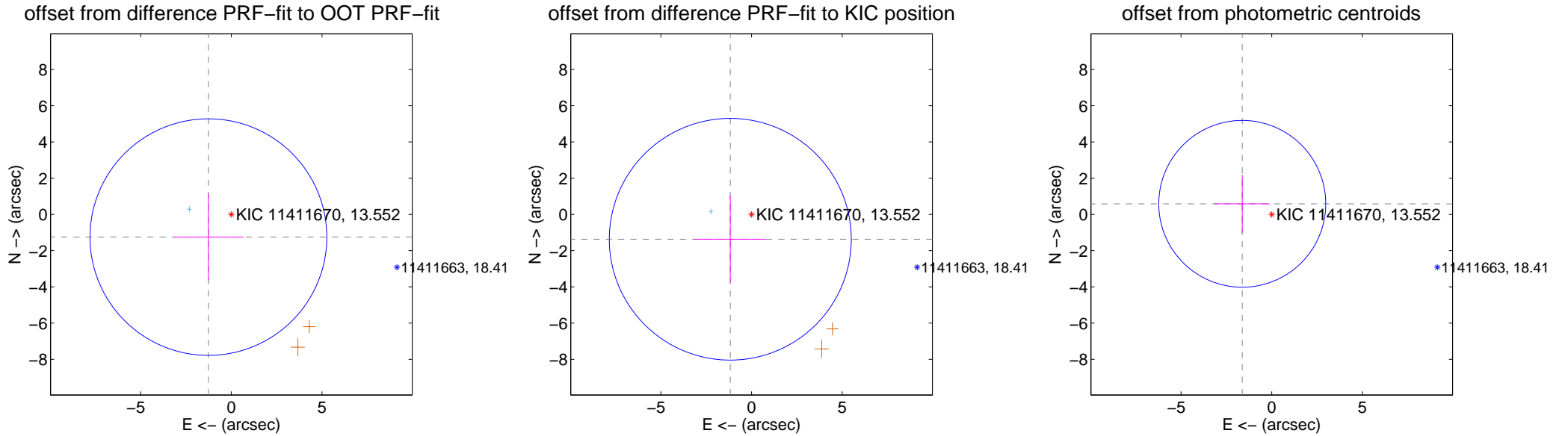
DV Centroid Data

Supplemental centroid analysis for 011411670-01. Kepler magnitude: 13.55. Transit SNR 8.03

There are 1 quarters with good PRF difference image offsets

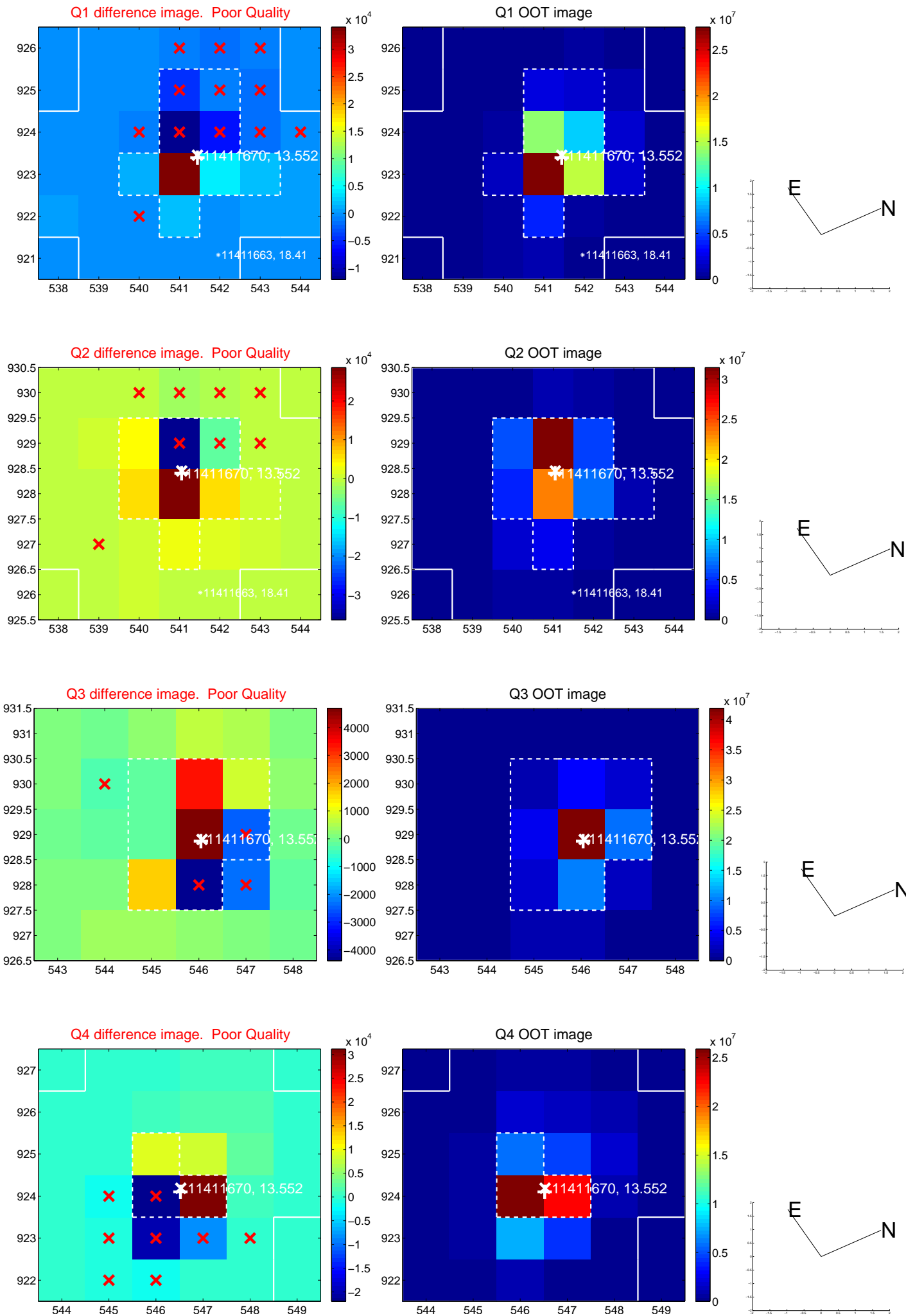
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.780 ± 2.176	0.82	1.265 ± 1.933	-1.253 ± 2.398
PRF-fit source offset from KIC position	1.804 ± 2.223	0.81	1.172 ± 1.968	-1.372 ± 2.392
photometric centroid source offset	1.73 ± 1.53	1.12	1.62 ± 1.52	0.58 ± 1.61

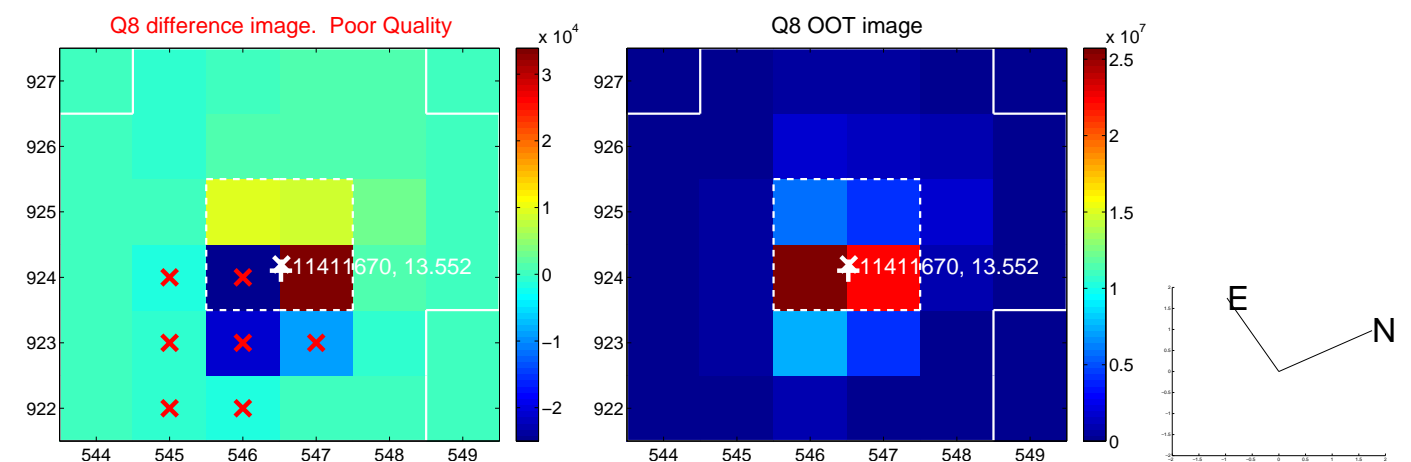
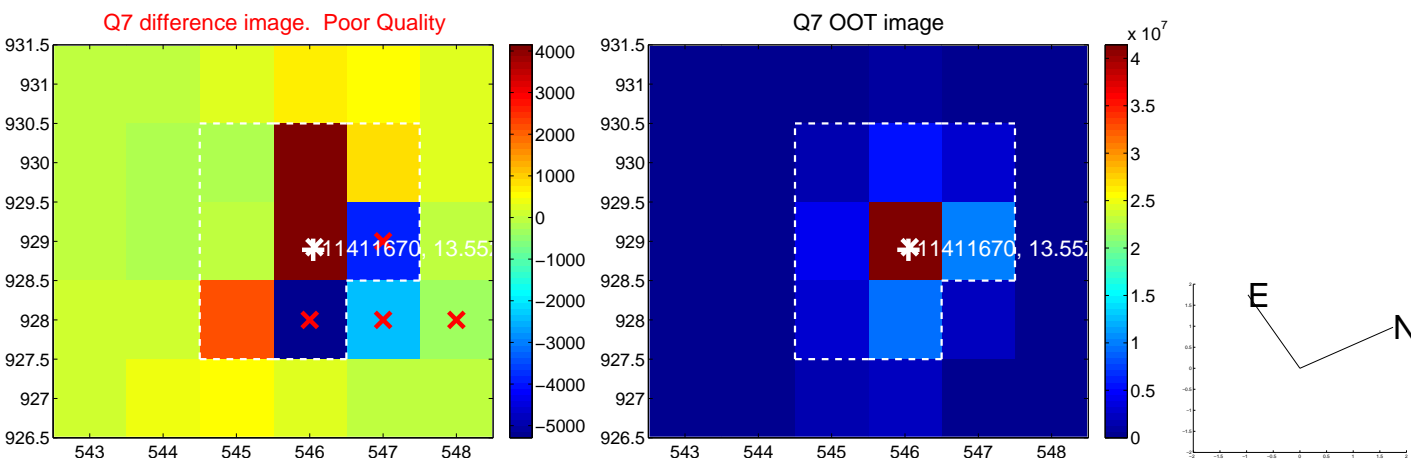
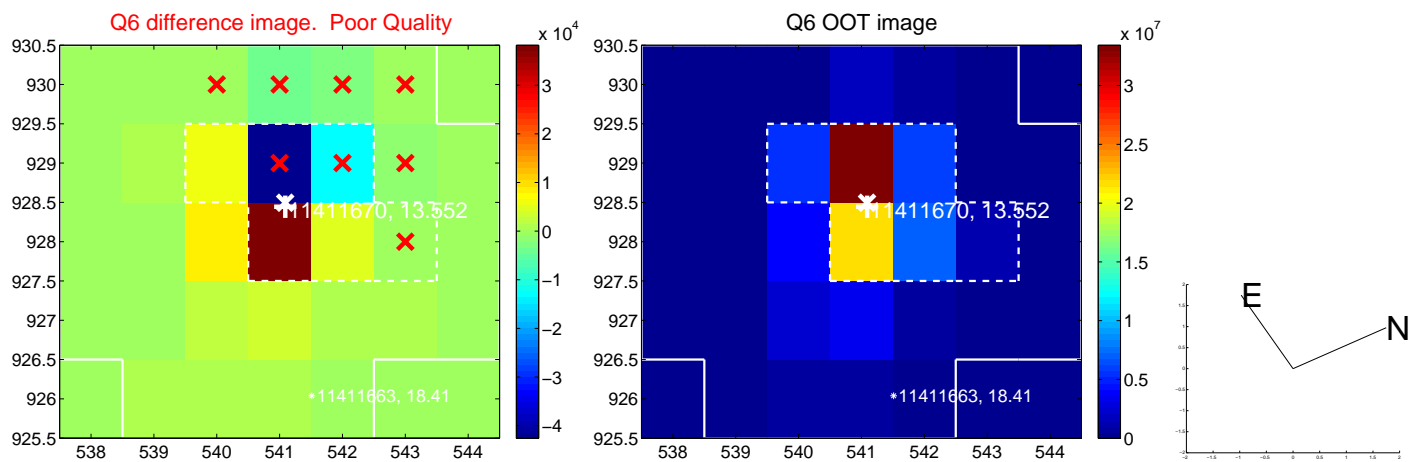
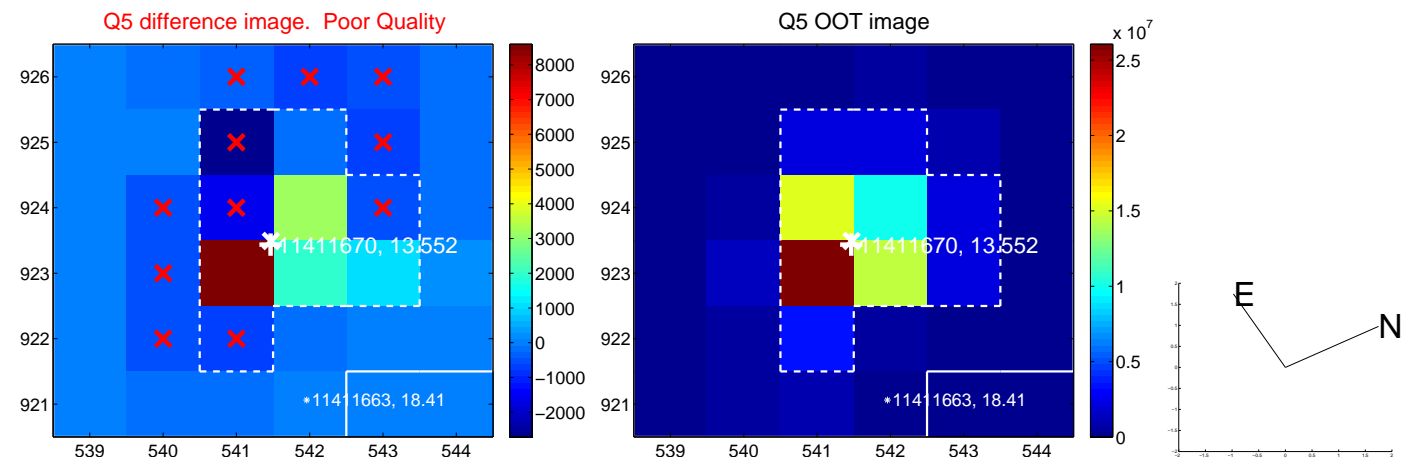


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

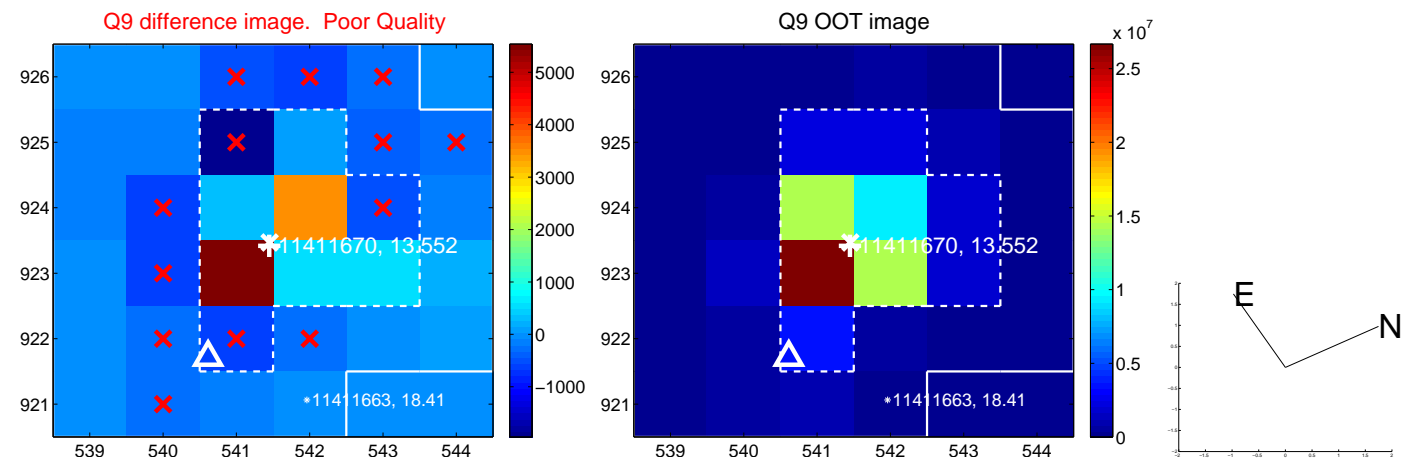
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



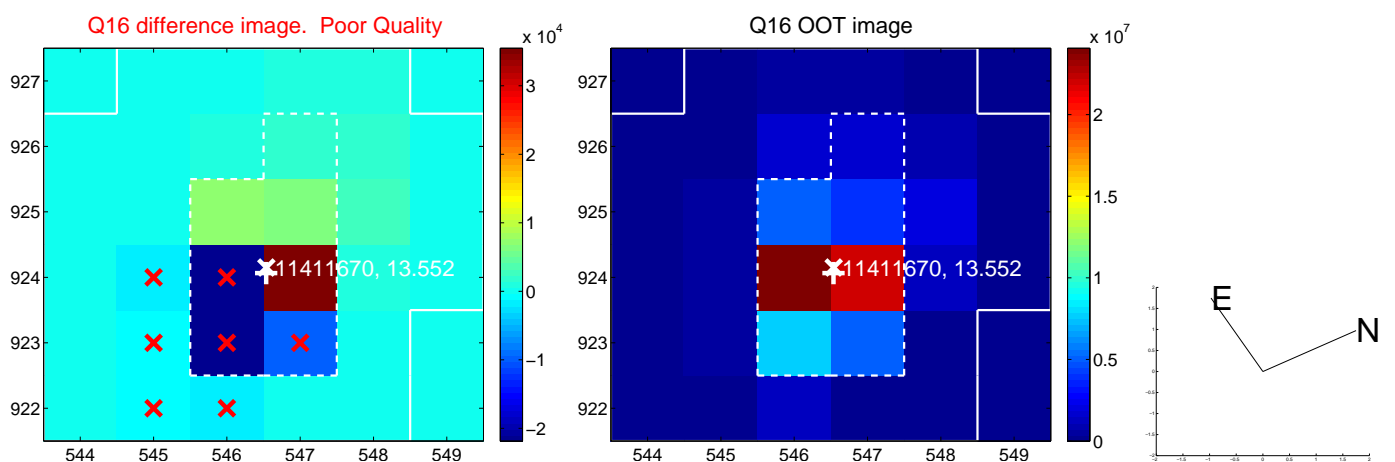
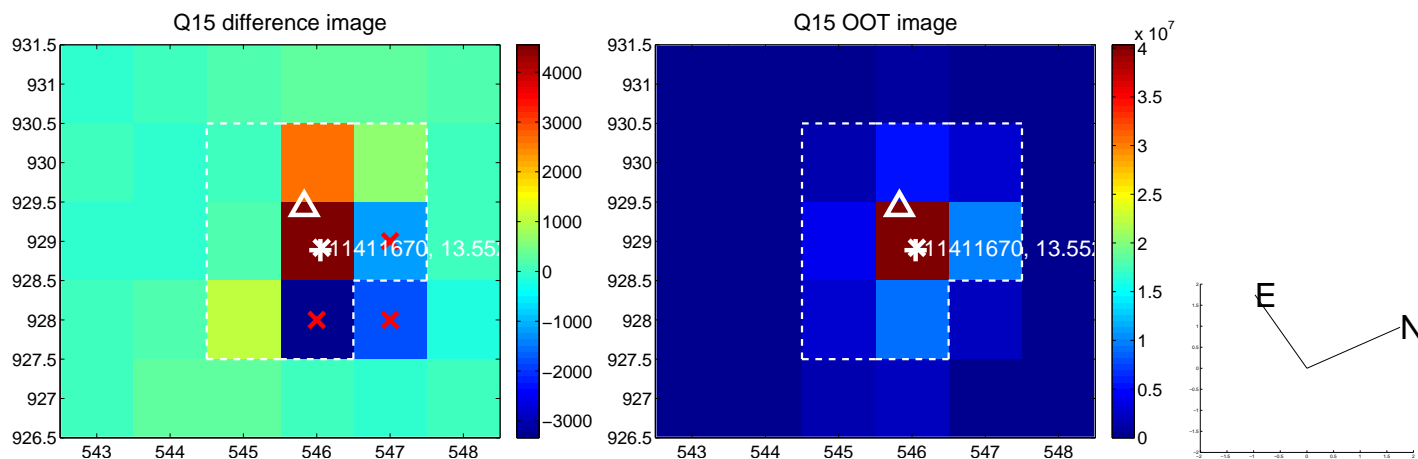
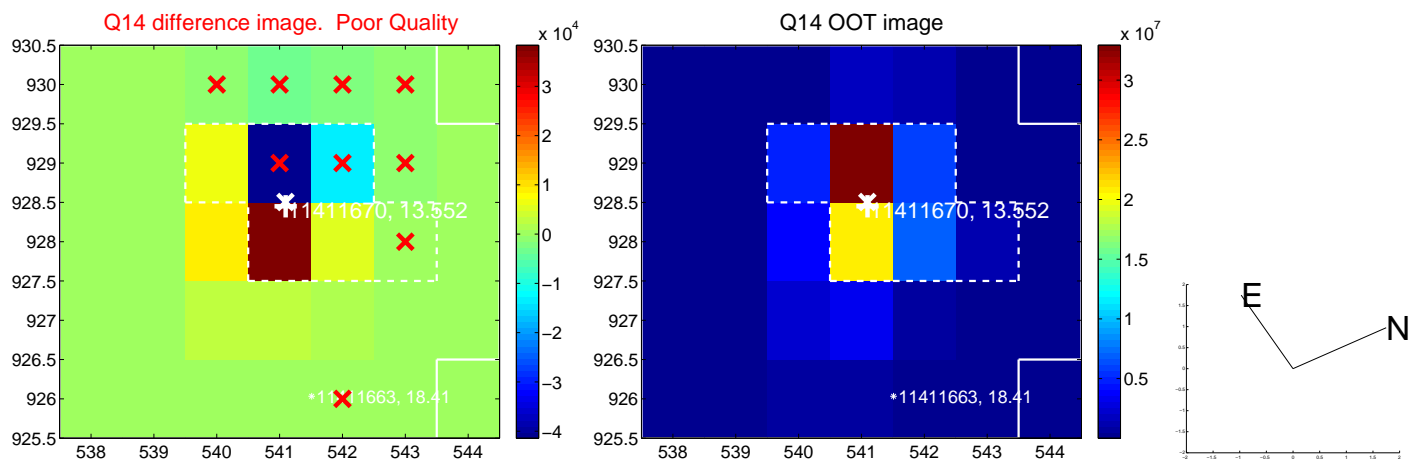
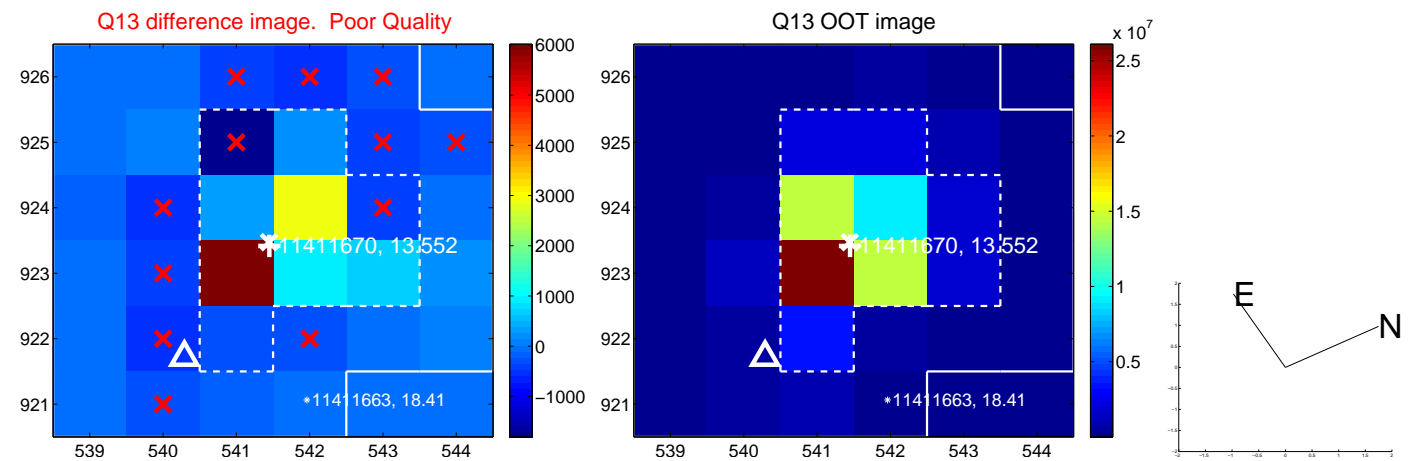
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



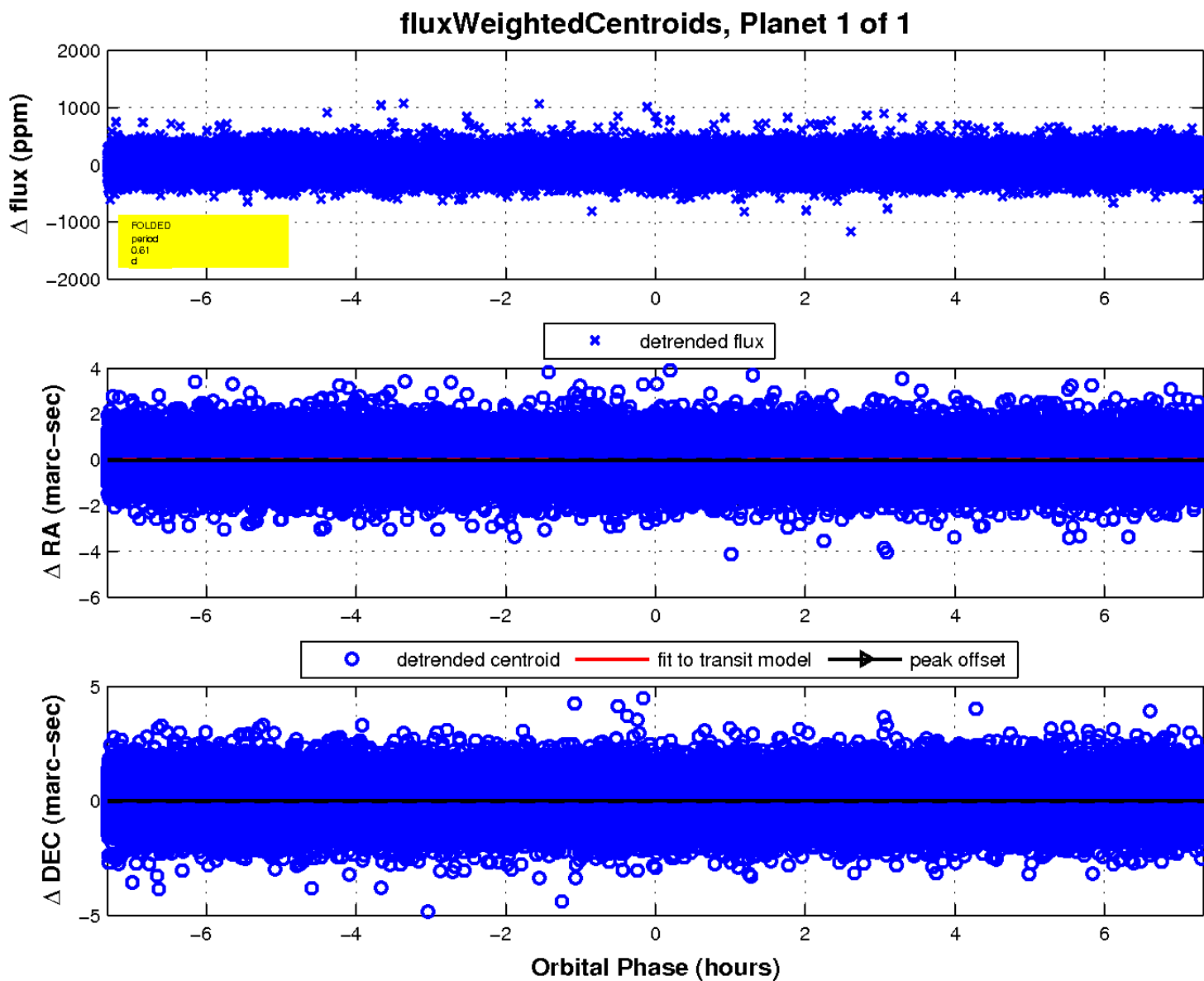
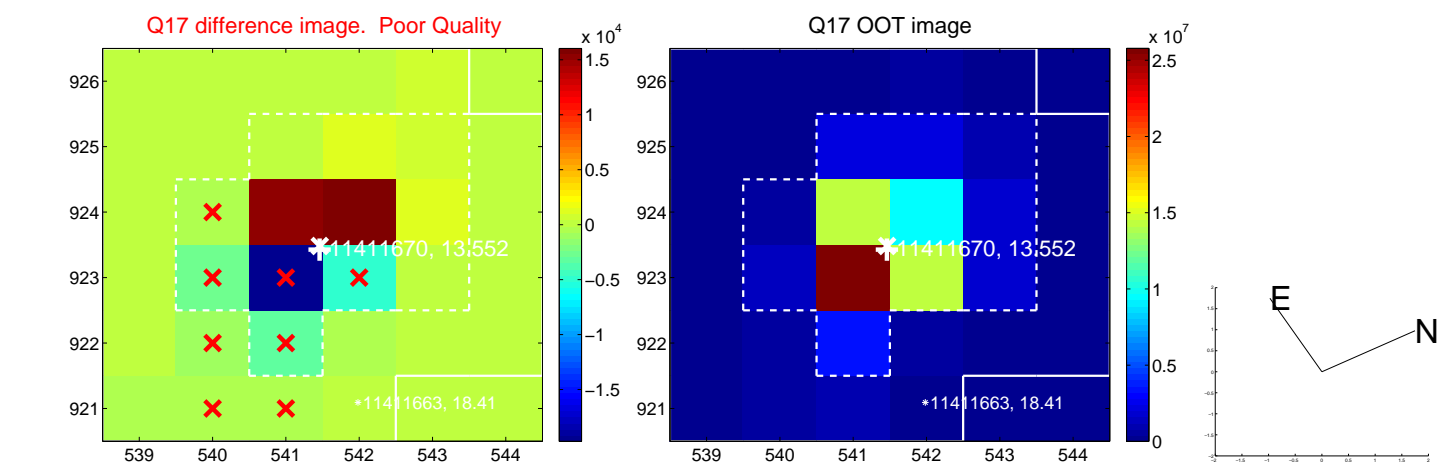
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UKIRT Image

Declination

