

KIC 005648823

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})
005648823-01	OBS	No	0.565510	132.103286	4.5	5.365	8.1	5.3	2.06	7368	0.45	47298.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005648823-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

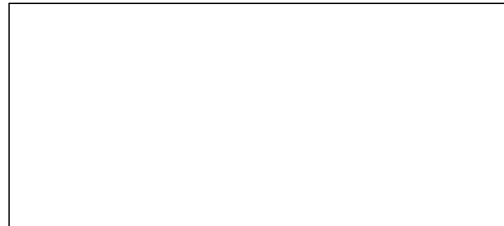
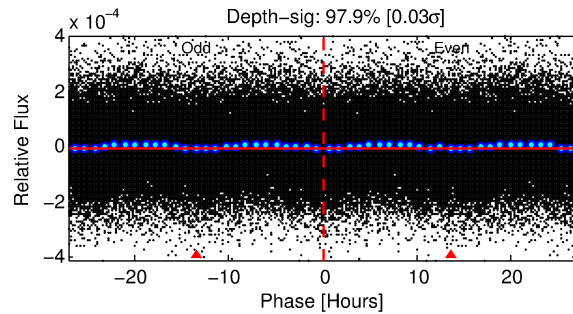
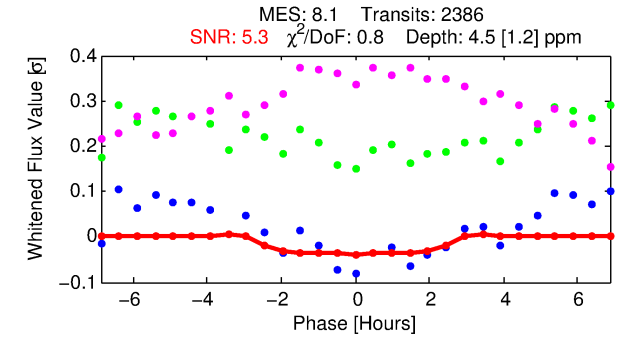
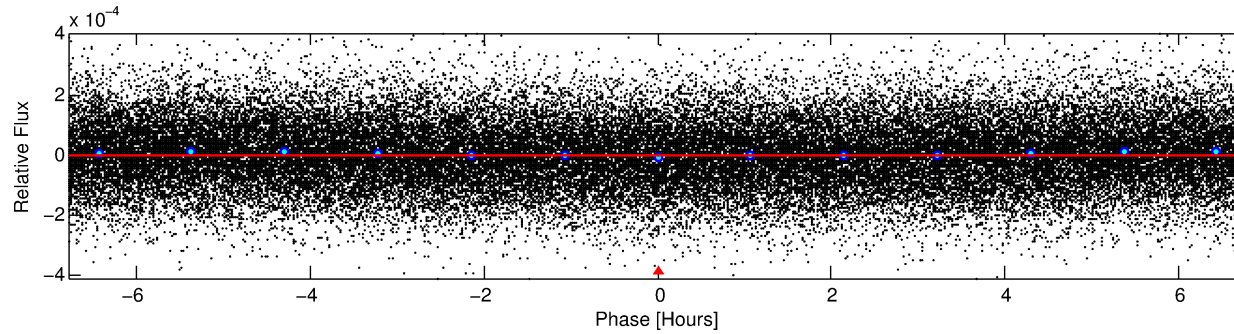
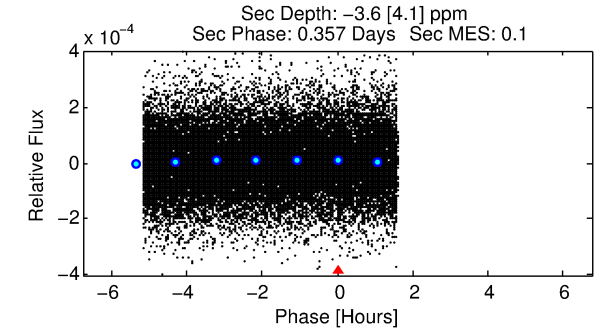
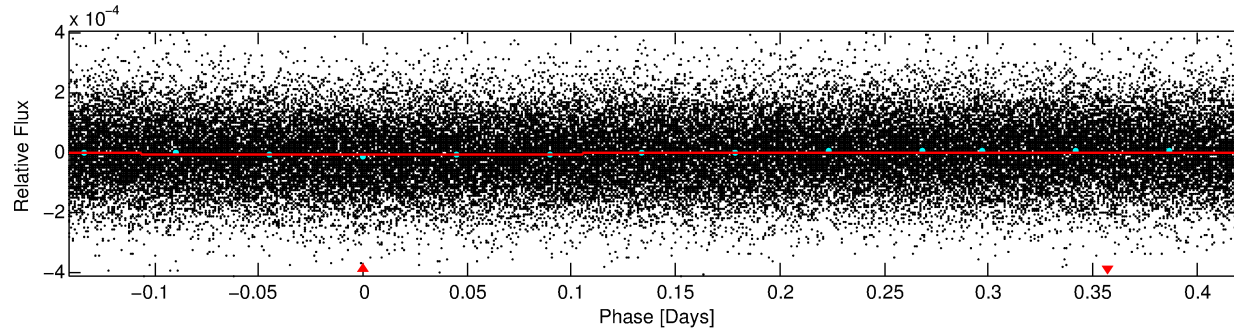
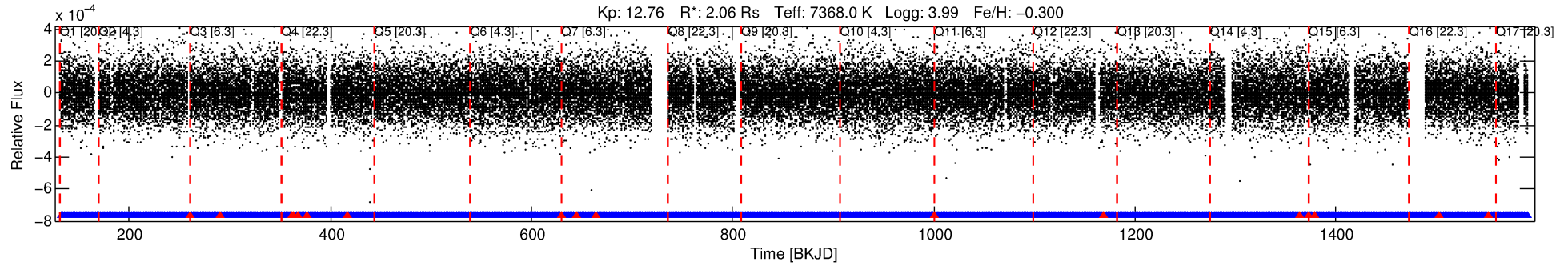
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005648823-01

No Significant Match Found

DV One-Page Summary

KIC: 5648823 Candidate: 1 of 1 Period: 0.566 d



DV Fit Results:

Period = 0.56551 [0.00002] d
Epoch = 132.1033 [0.0103] BKJD
Rp/R* = 0.0020 [0.0037]
a/R* = 1.06 [1.27]
b = 0.08 [140.84]
Seff = 47298.31 [22564.32]
Teff = 3760 [448] K
Rp = 0.45 [0.85] Re
a = 0.0154 [0.0044] AU
Ag = N/A
Teffp = N/A

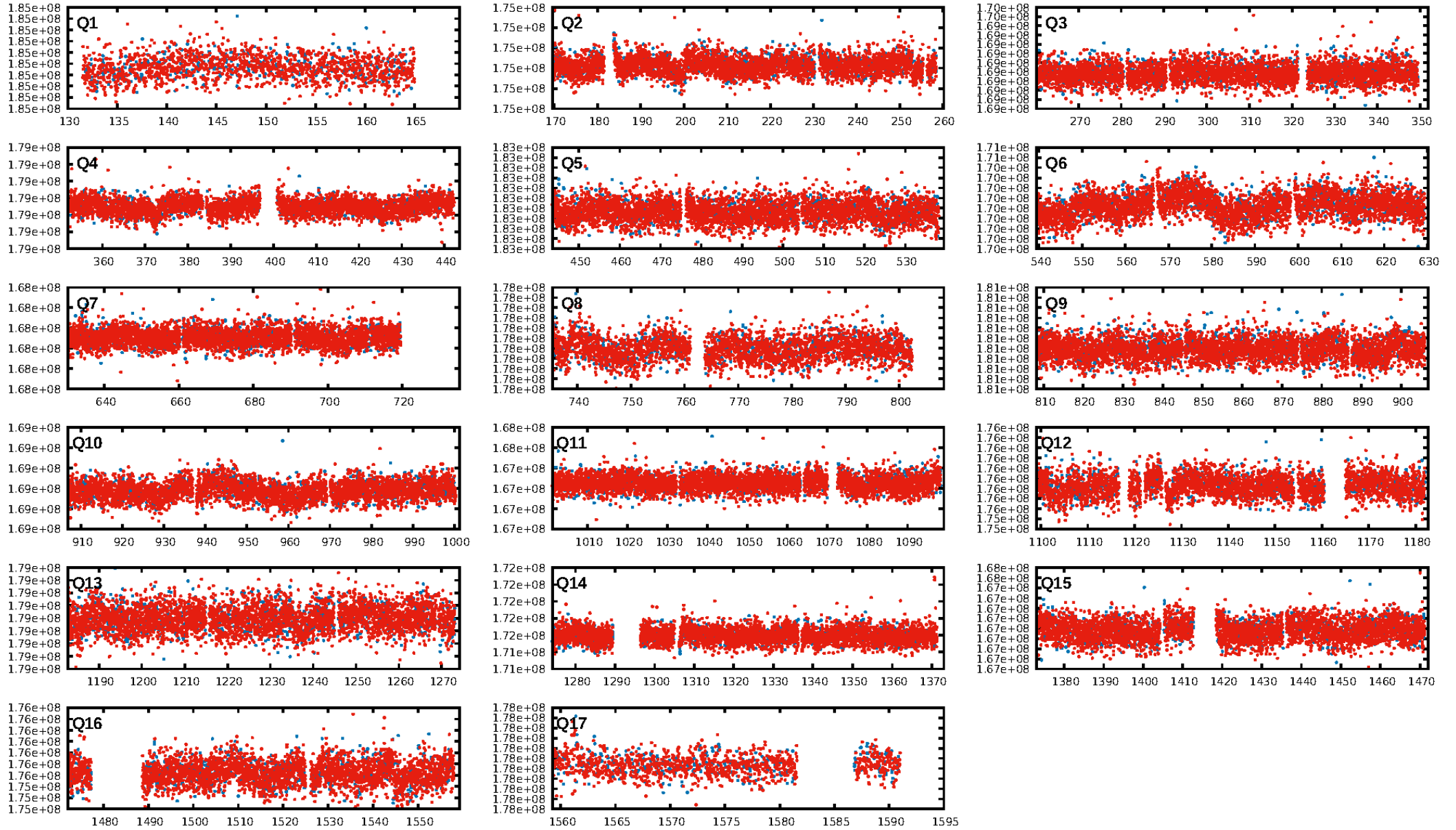
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [2261/2278]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

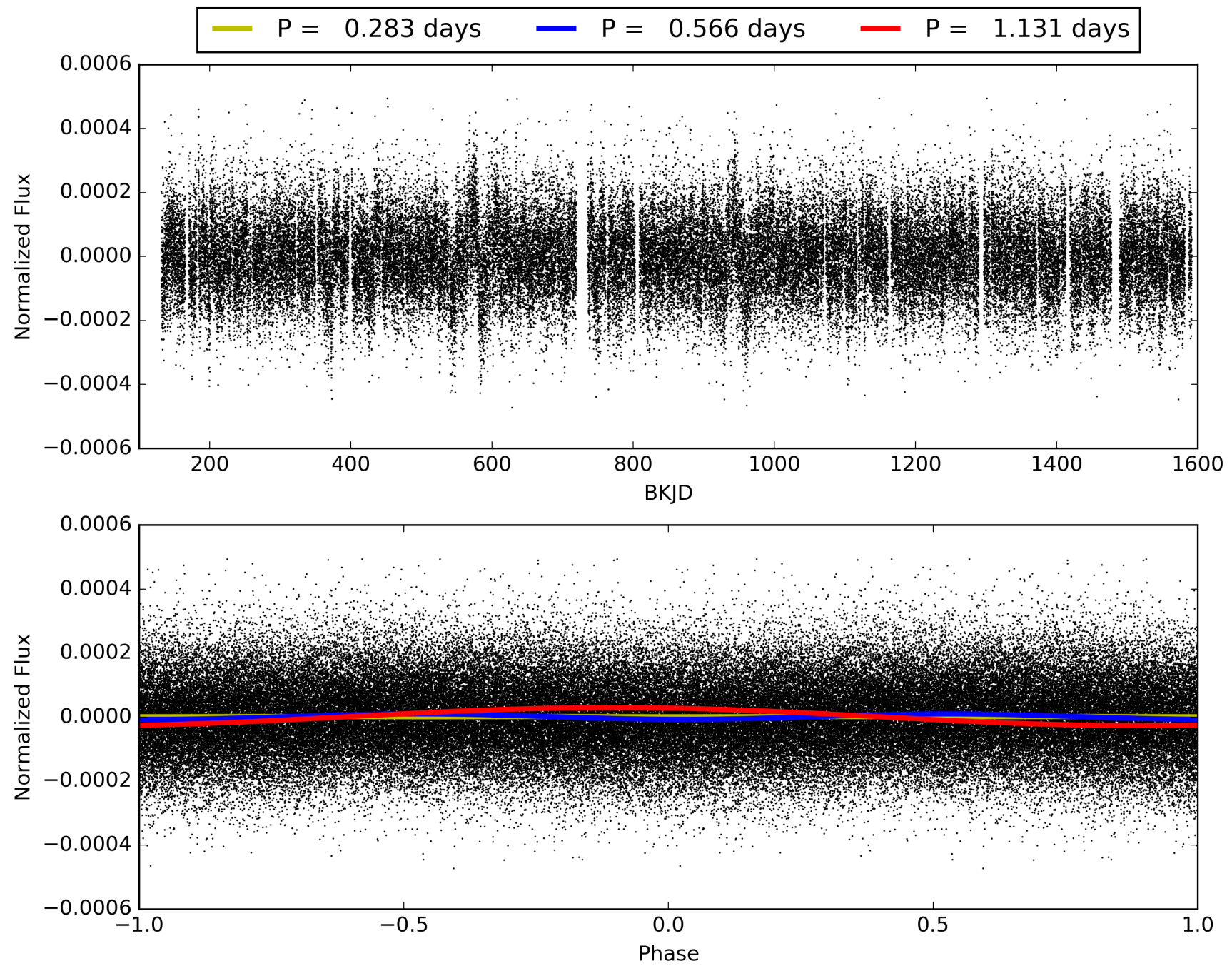
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:25:30 Z

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

TCE 005648823-01, PDC Light Curves

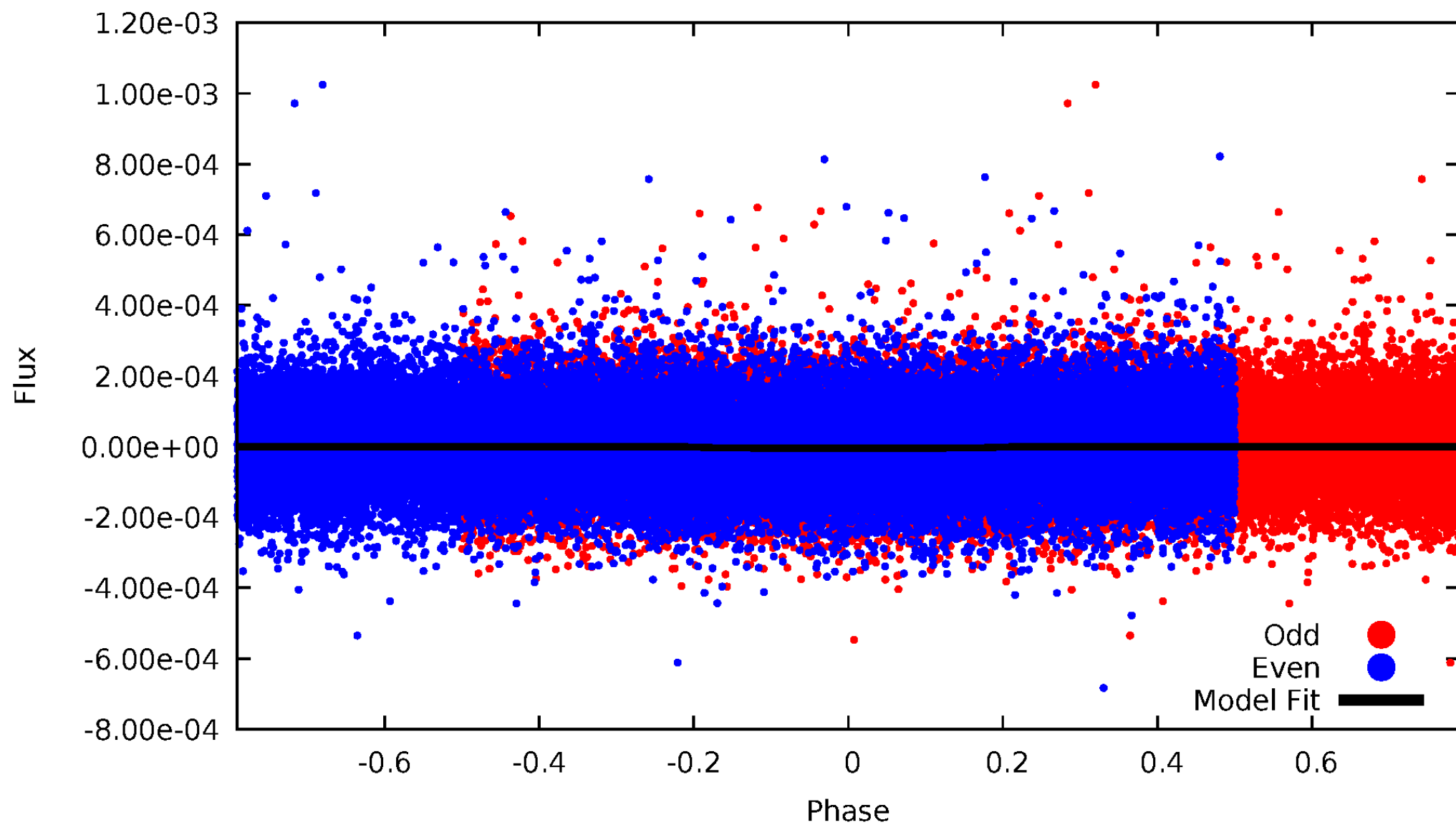


TCE 005648823-01



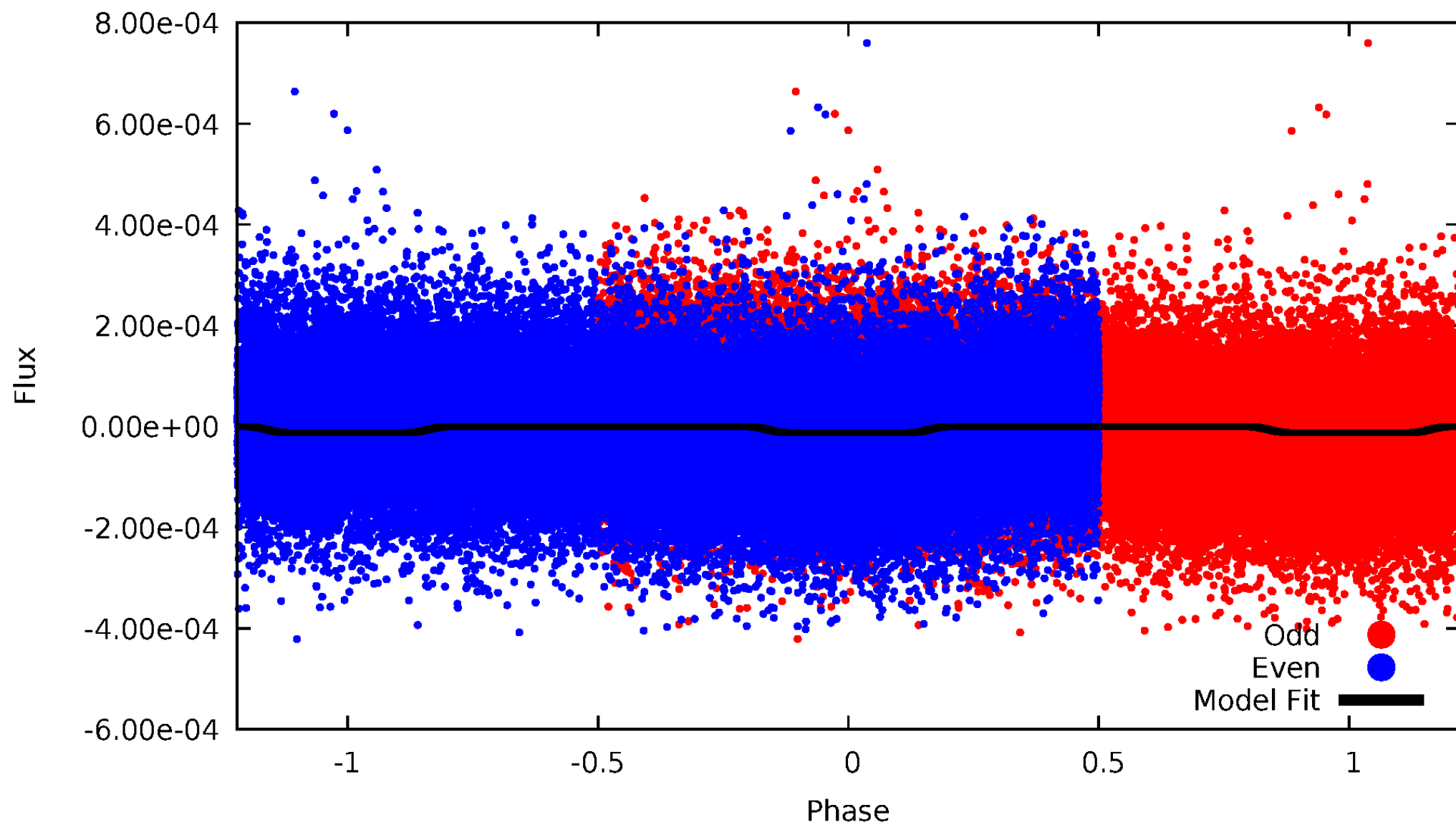
DV Odd/Even

TCE 005648823-01



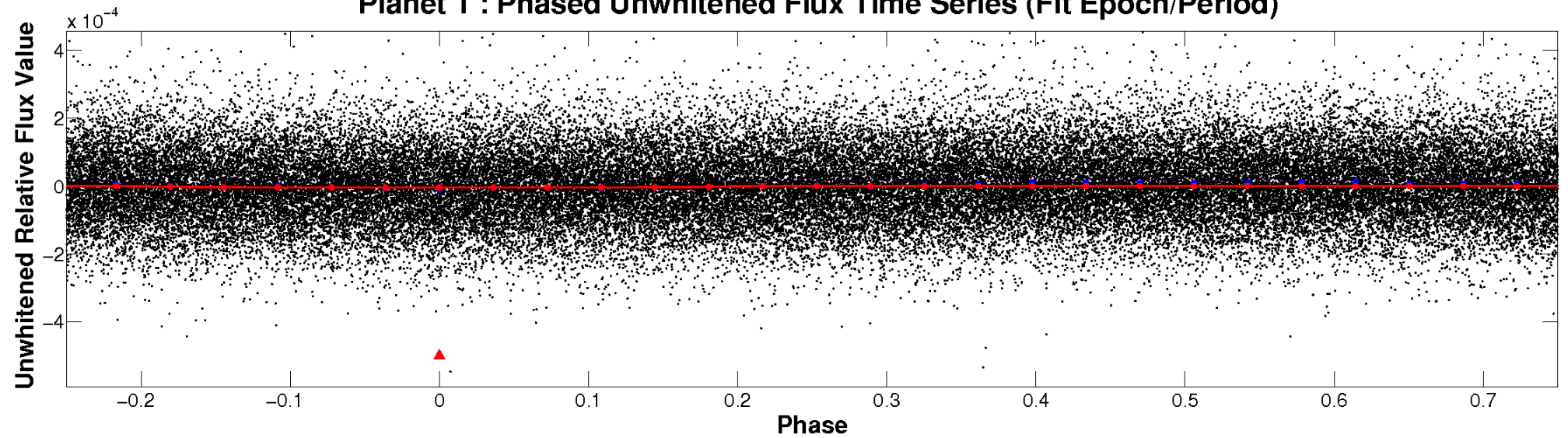
ALT Odd/Even

TCE 005648823-01

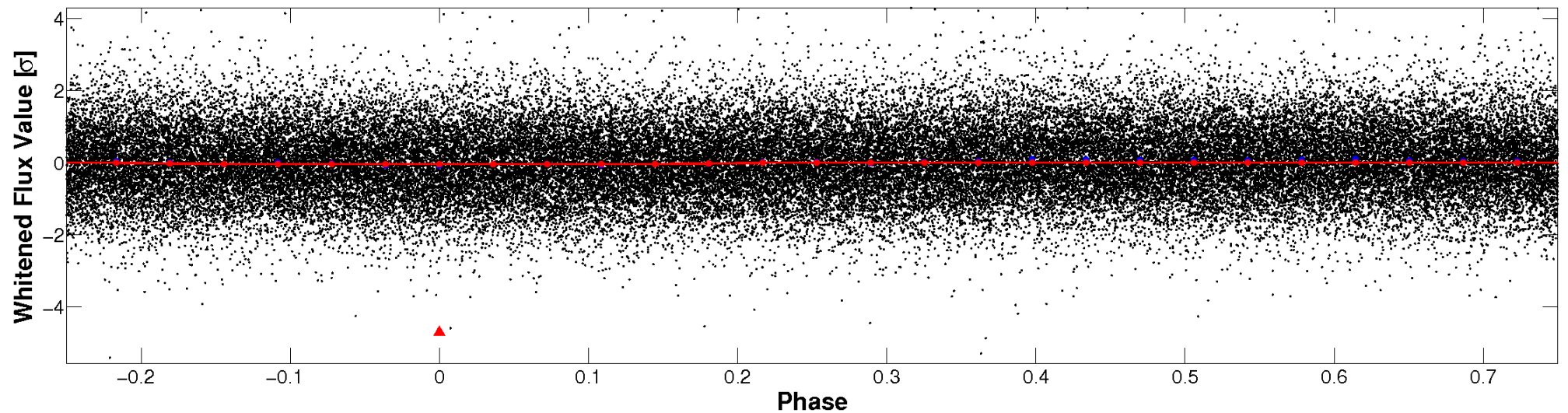


Non-Whitened Vs. Whitened Light Curve

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

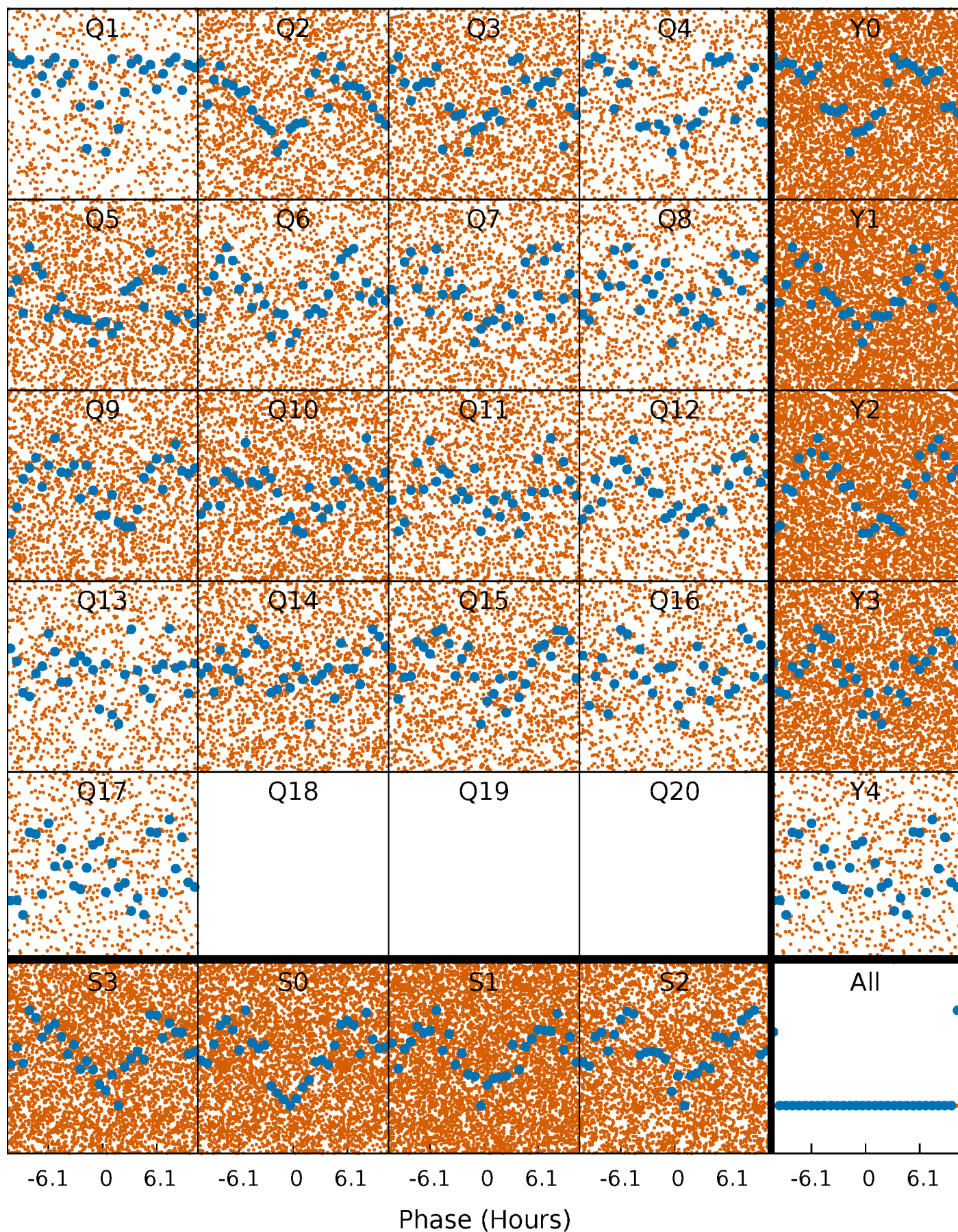


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



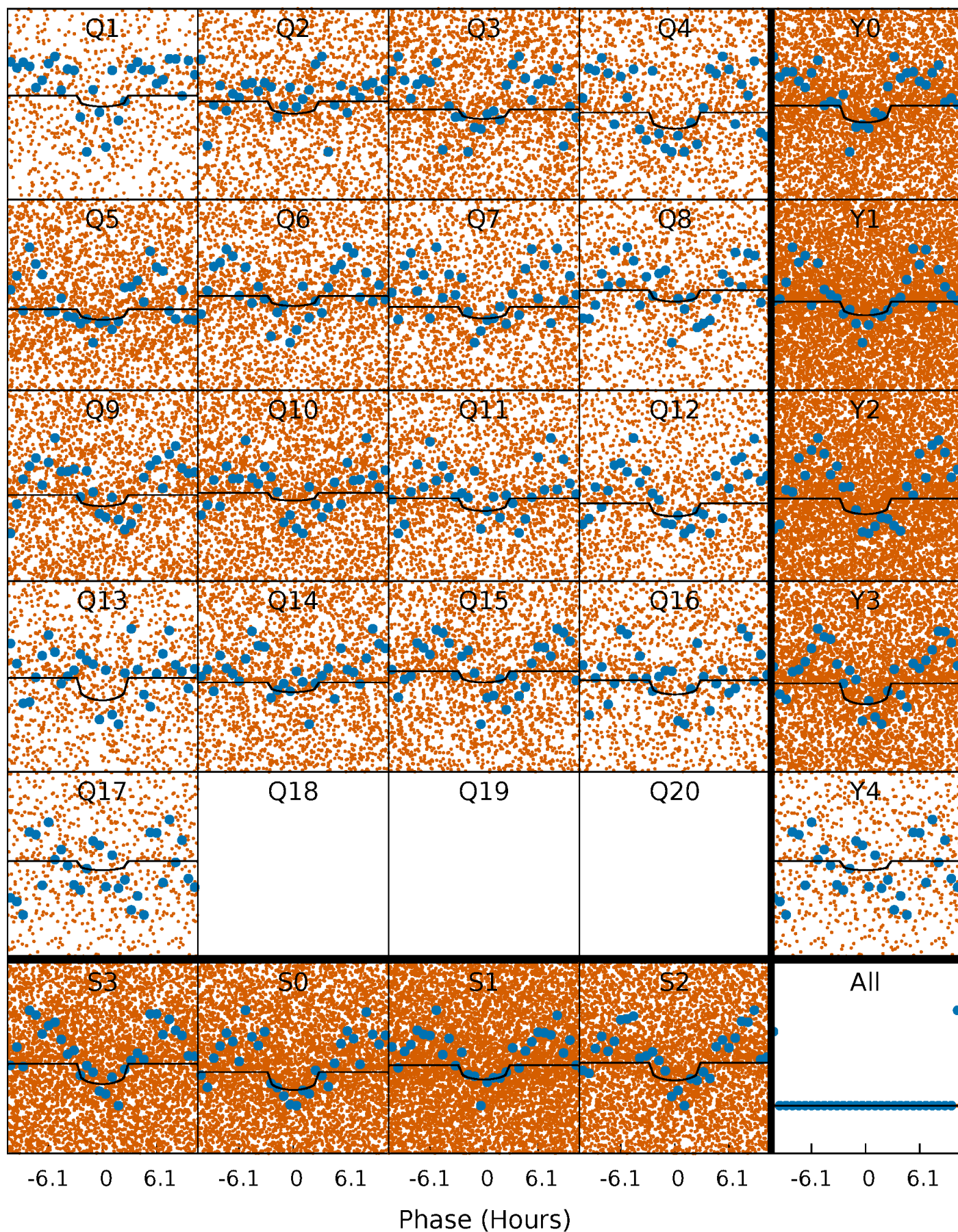
PDC Quarter-Phased Transit Curves

TCE 005648823-01 P= 0.565510 Days $T_0=132.103286$ (BKJD)



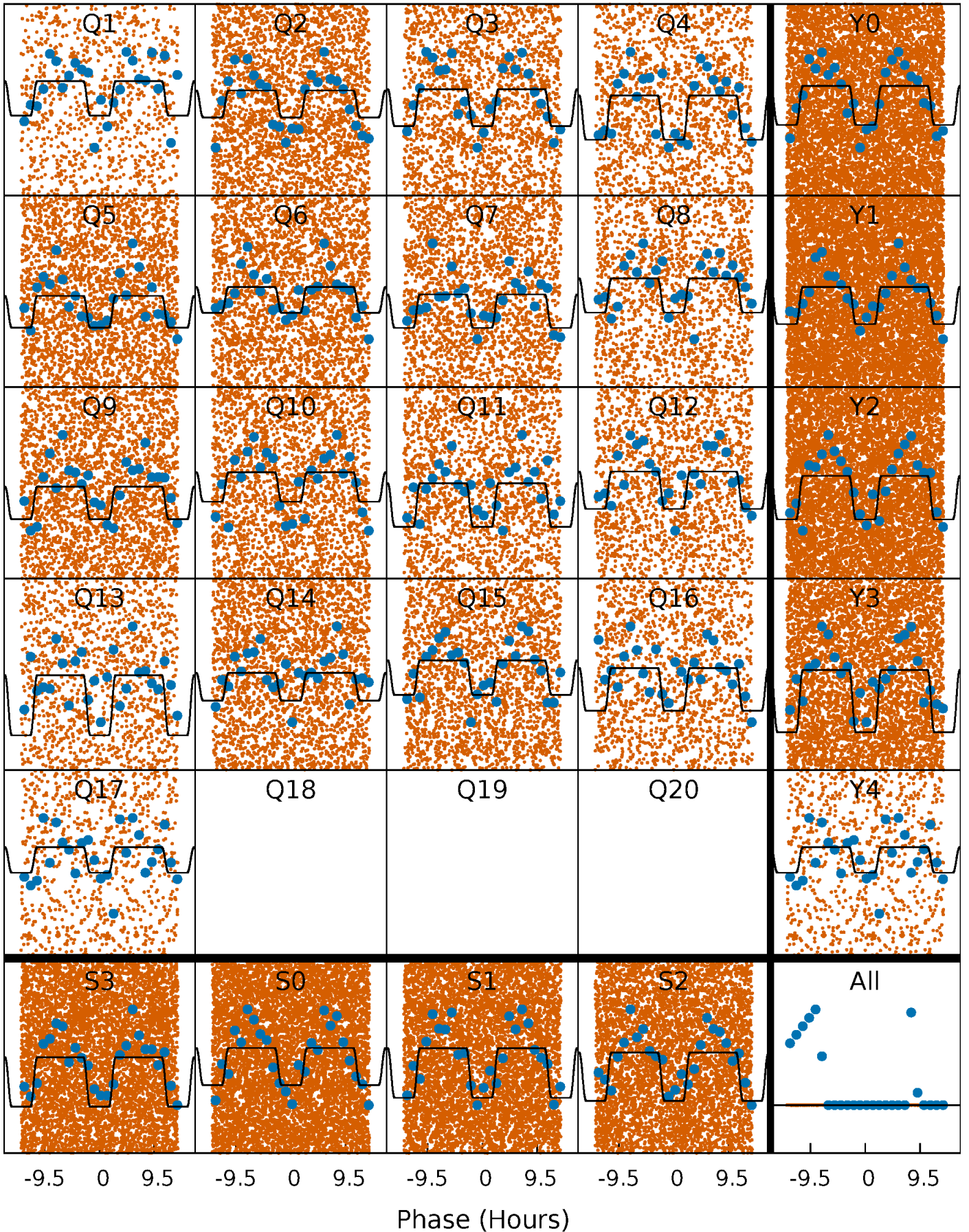
DV Quarter-Phased Transit Curves

TCE 005648823-01 P= 0.565510 Days $T_0=132.103286$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

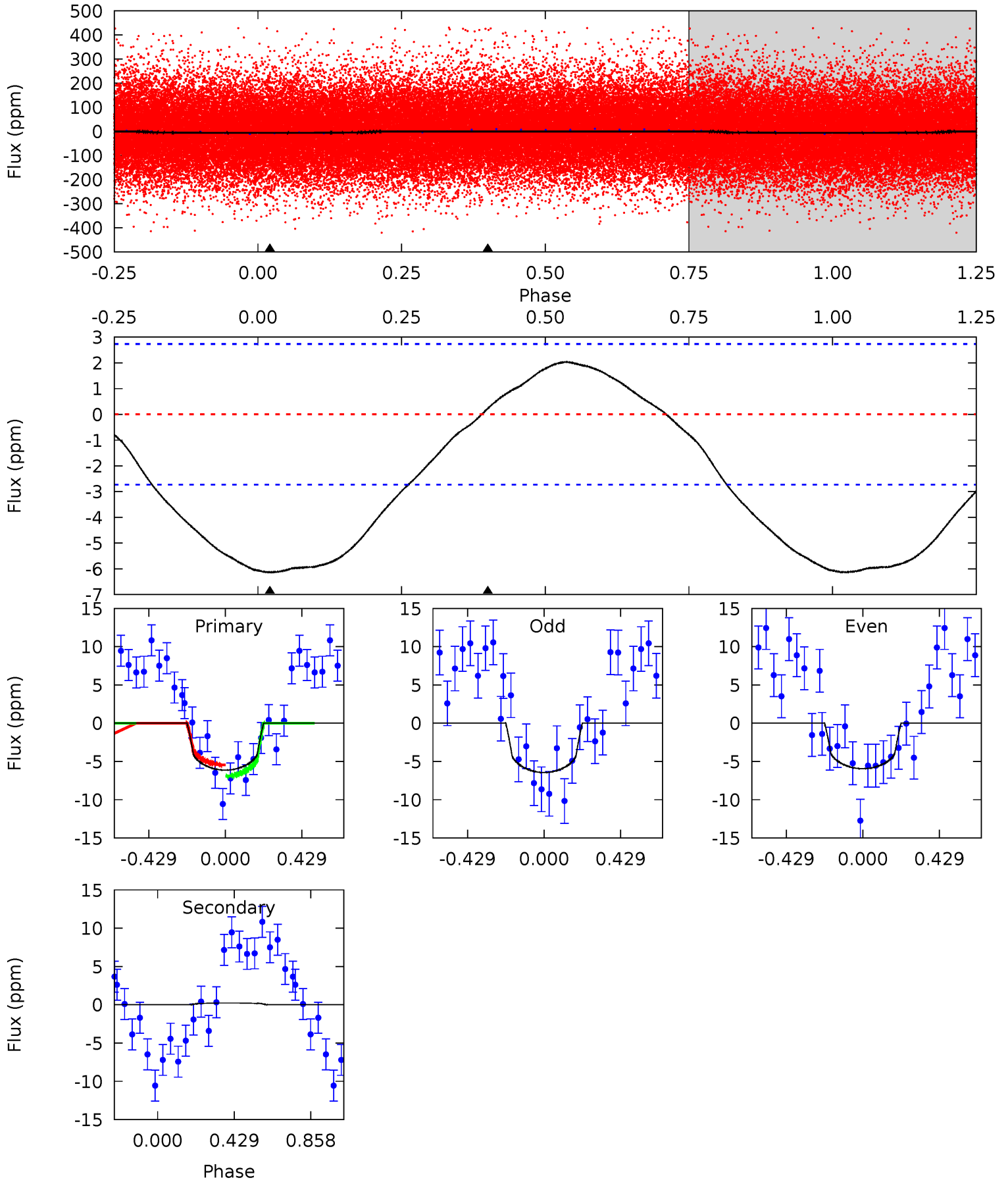
TCE 005648823-01 P= 0.565560 Days $T_0=132.060662$ (BKJD)



DV Model-Shift Uniqueness Test

005648823-01, P = 0.565510 Days, E = 130.972266 Days

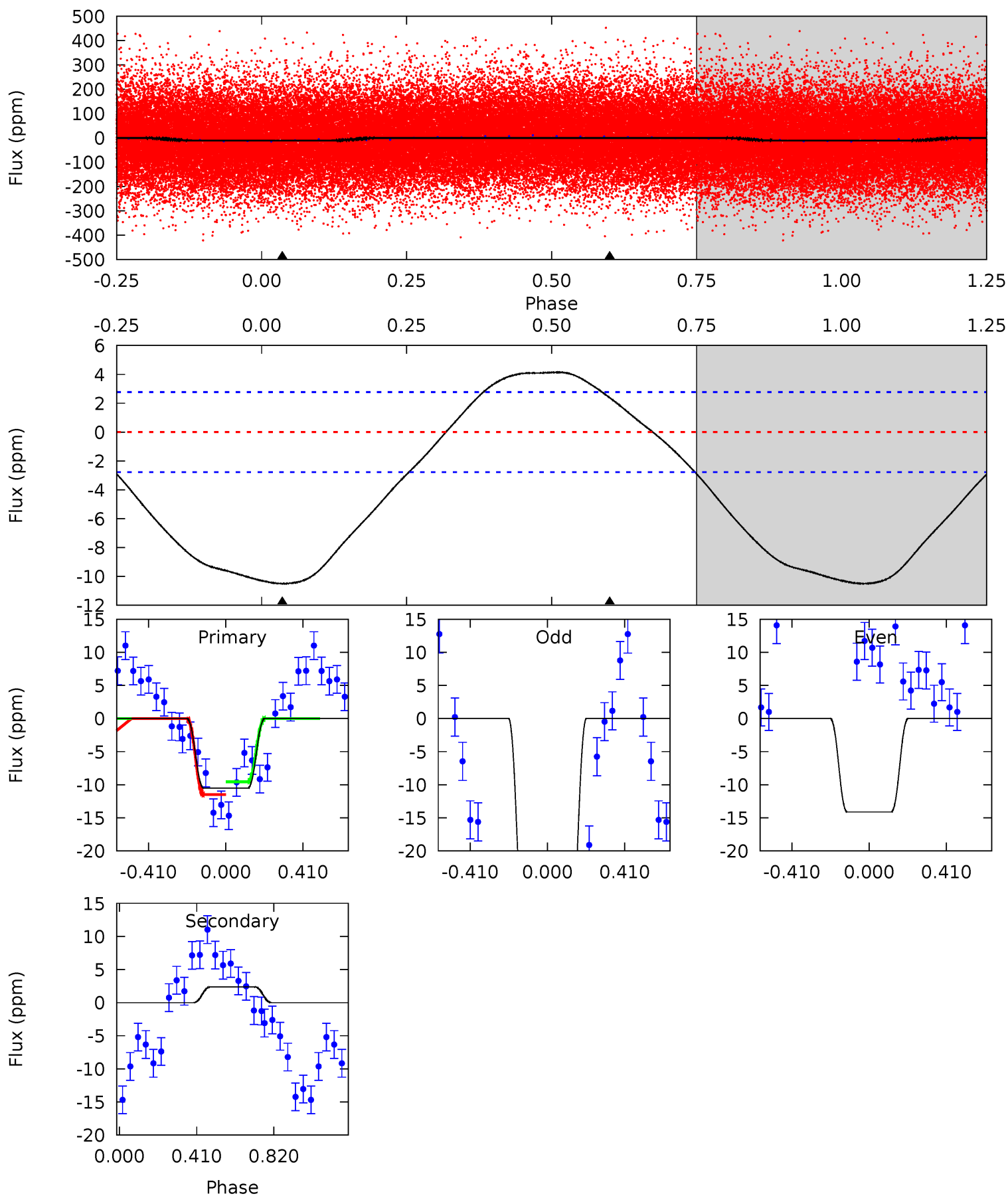
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.54	-0.36	0	0	4.25	0.79	0.81	9.54	9.54	-0.36	-0.36	0.39	0.95	0.25	1.14



Alt Model-Shift Uniqueness Test

005648823-01, P = 0.565560 Days, E = 131.495102 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.1	-3.66	0	0	4.26	0.82	2.01	16.1	16.1	-3.66	-3.66	16.0	0.98	0.28	1.43



Stellar Parameters For KIC 005648823

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7368^{+232}_{-310}	$3.993^{+0.260}_{-0.160}$	$-0.300^{+0.250}_{-0.350}$	$2.064^{+0.557}_{-0.619}$	$1.527^{+0.207}_{-0.285}$	$0.245^{+0.412}_{-0.100}$
	+3%/-4%	+7%/-4%	+83%/-117%	+27%/-30%	+14%/-19%	+168%/-41%
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 005648823-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1	$0.72^{+0.68}_{-0.49}$	5189^{+420}_{-435}	-4551^{+655}_{-846}	$-0.036^{+0.156}_{-0.525}$
Alt.	2 ± 1	$0.93^{+0.71}_{-0.60}$	5195^{+420}_{-457}	-5209^{+542}_{-2129}	$-0.348^{+0.239}_{-2.368}$

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 005648823-01. Kepler magnitude: 12.76. Transit SNR 5.32

There are 0 quarters with good PRF difference image offsets

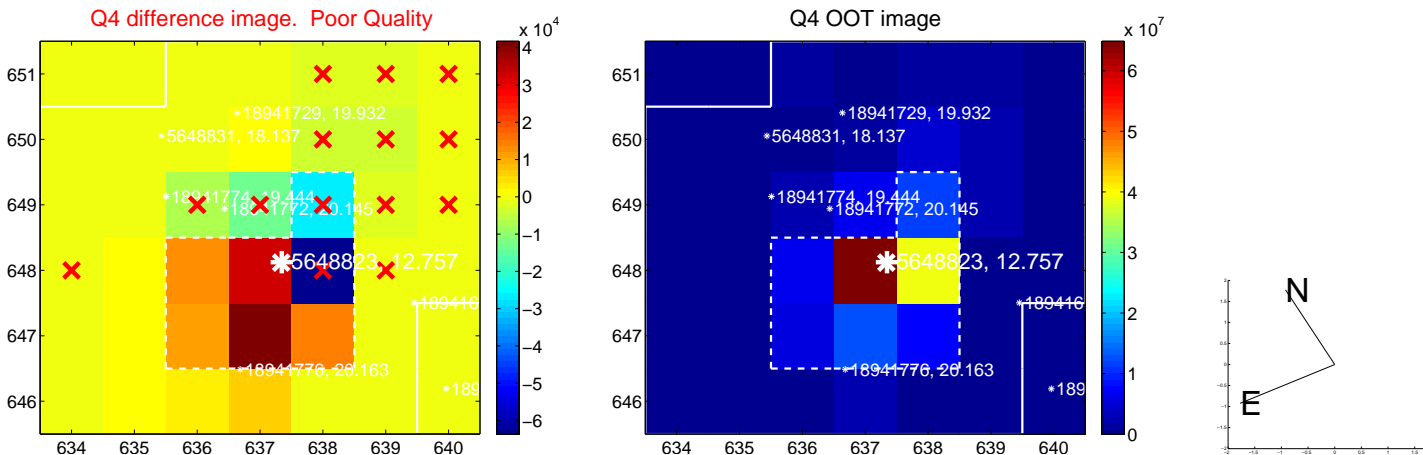
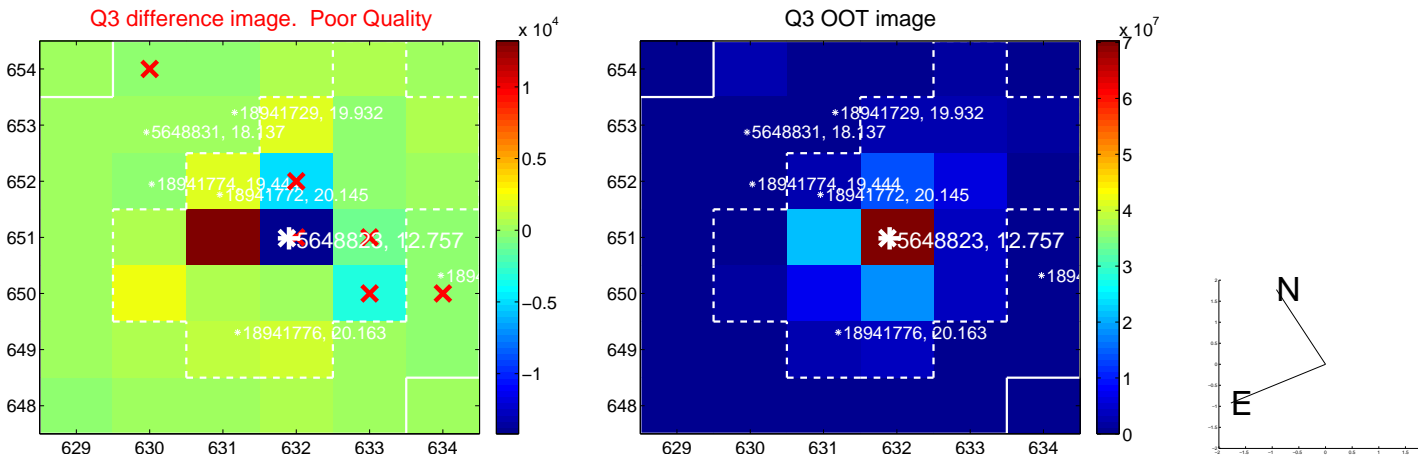
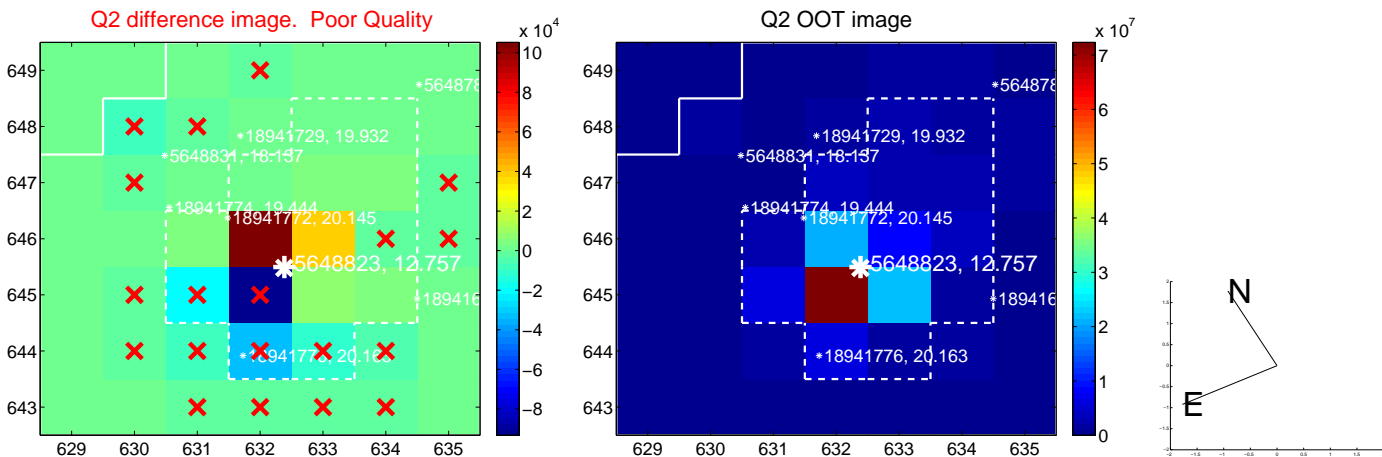
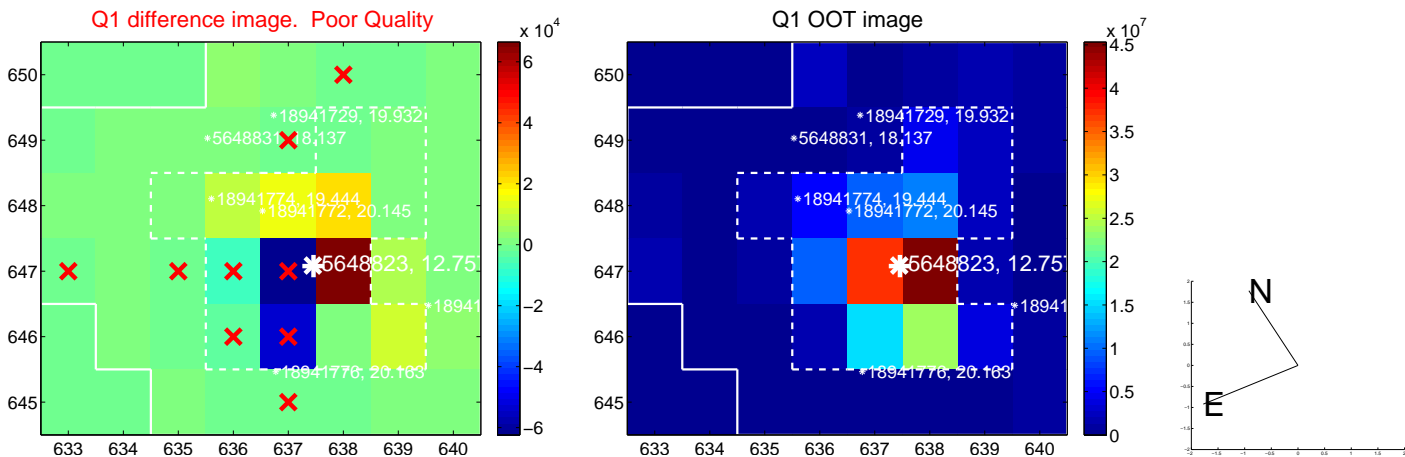
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—

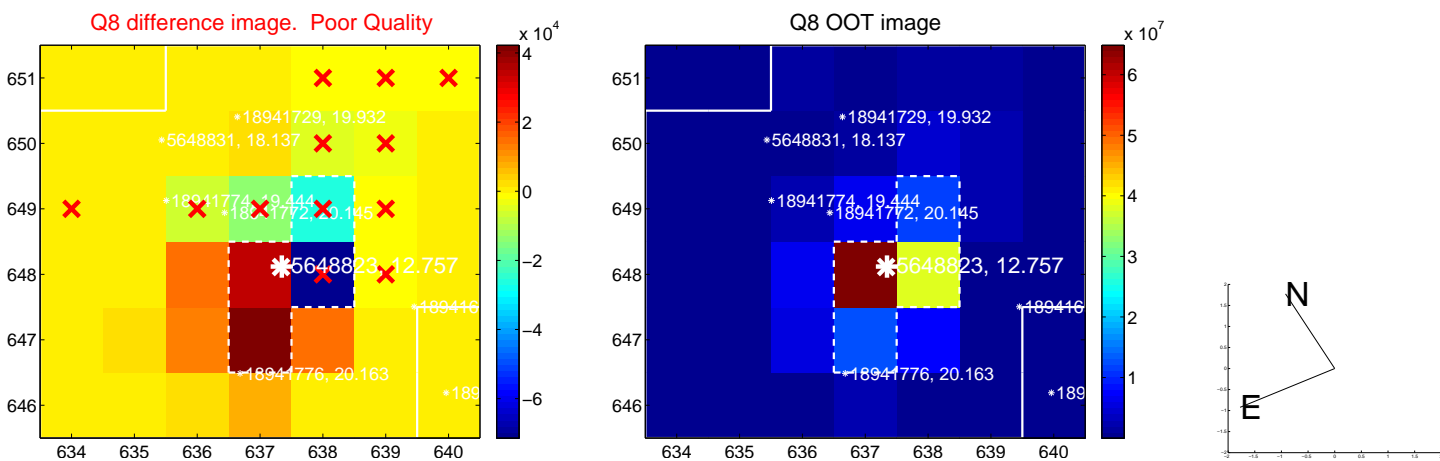
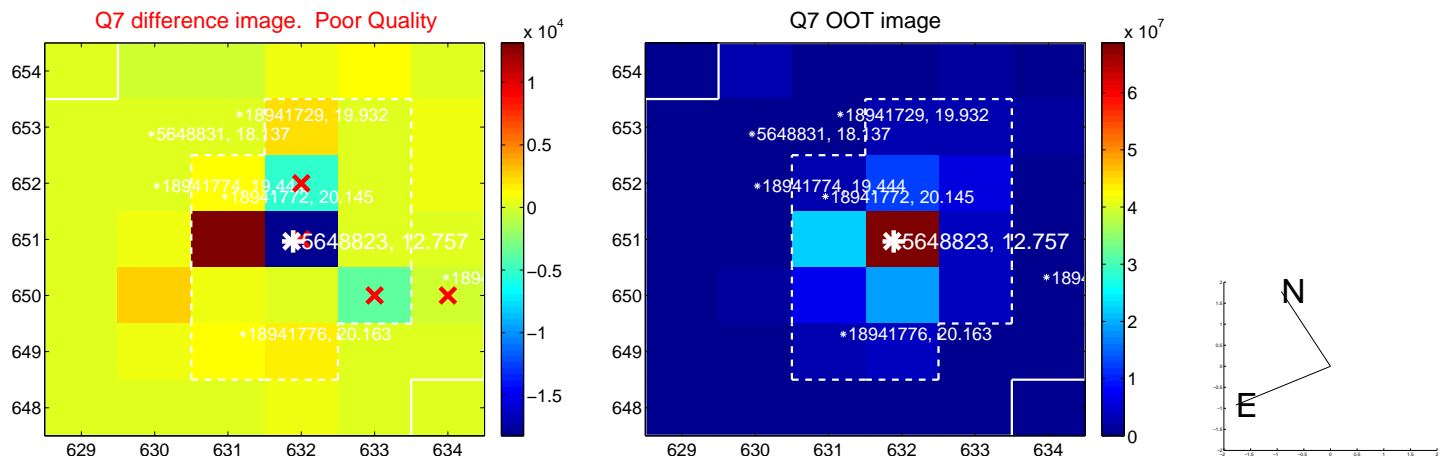
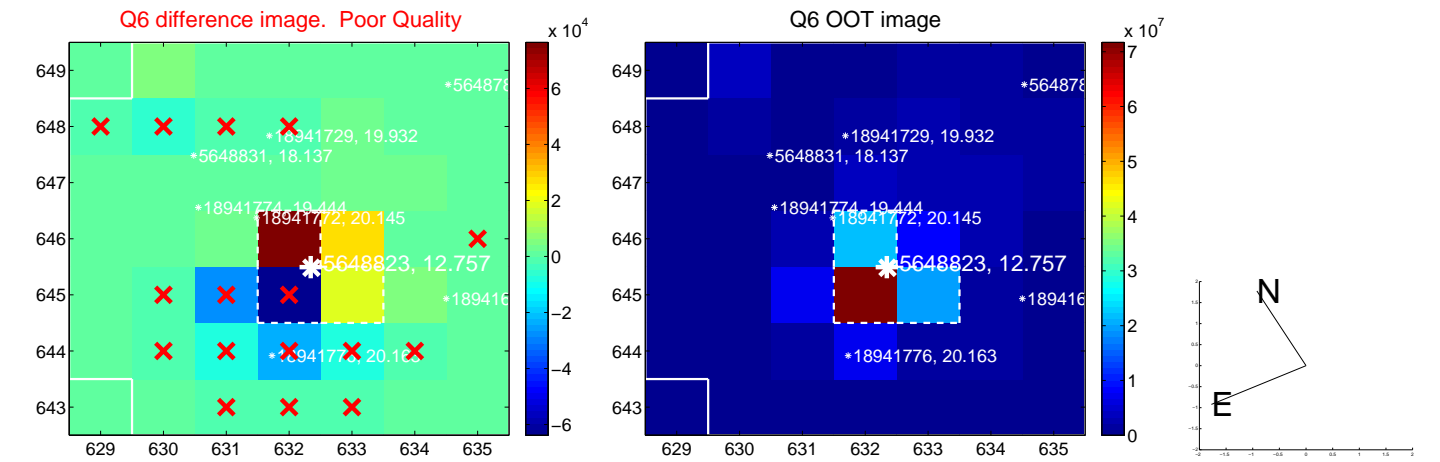
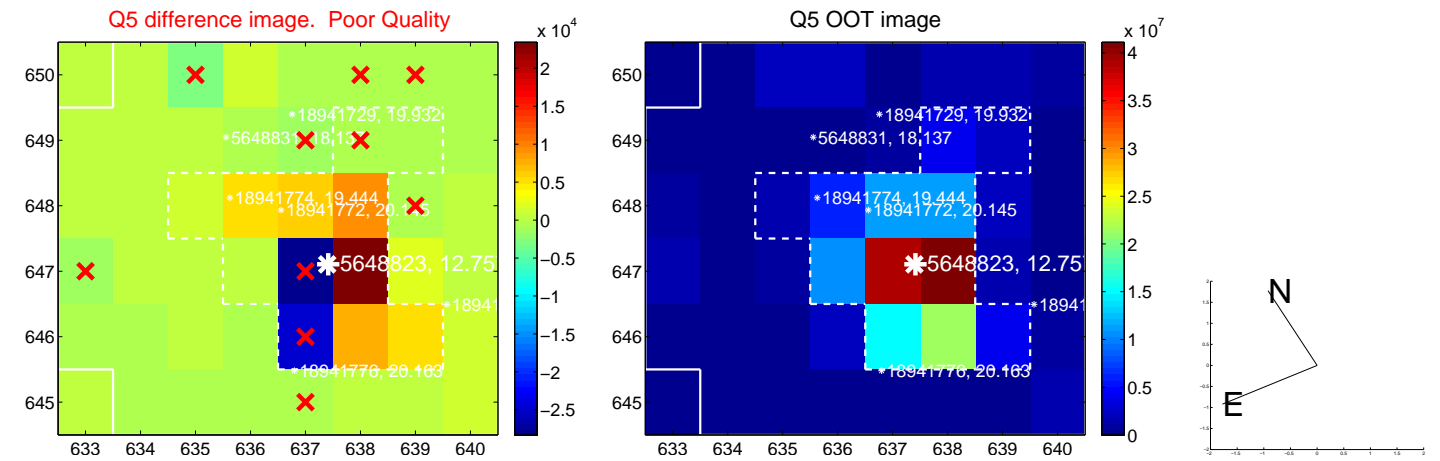


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

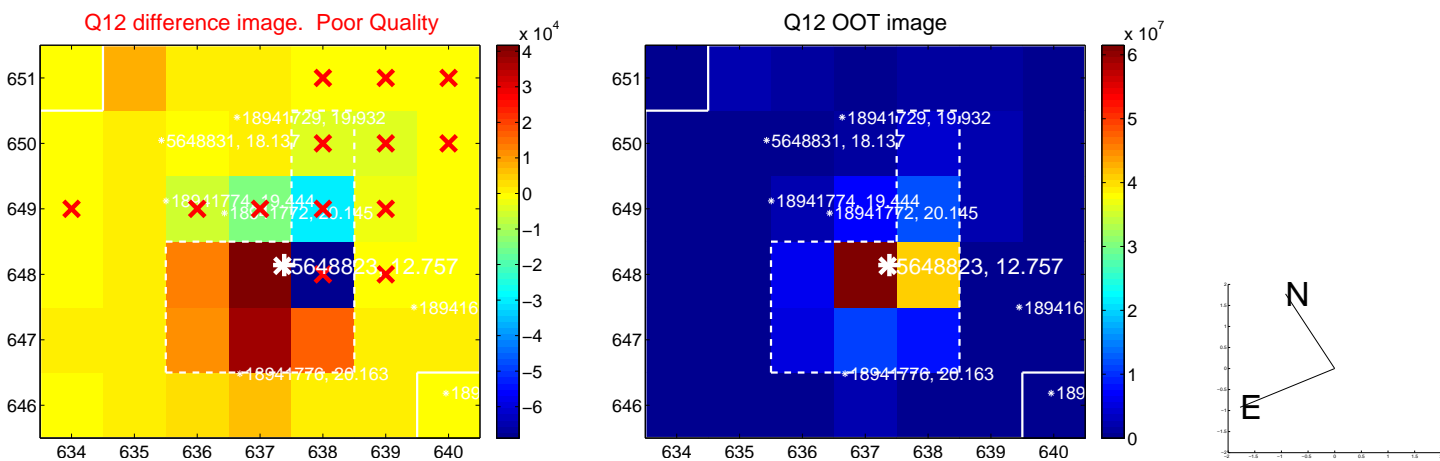
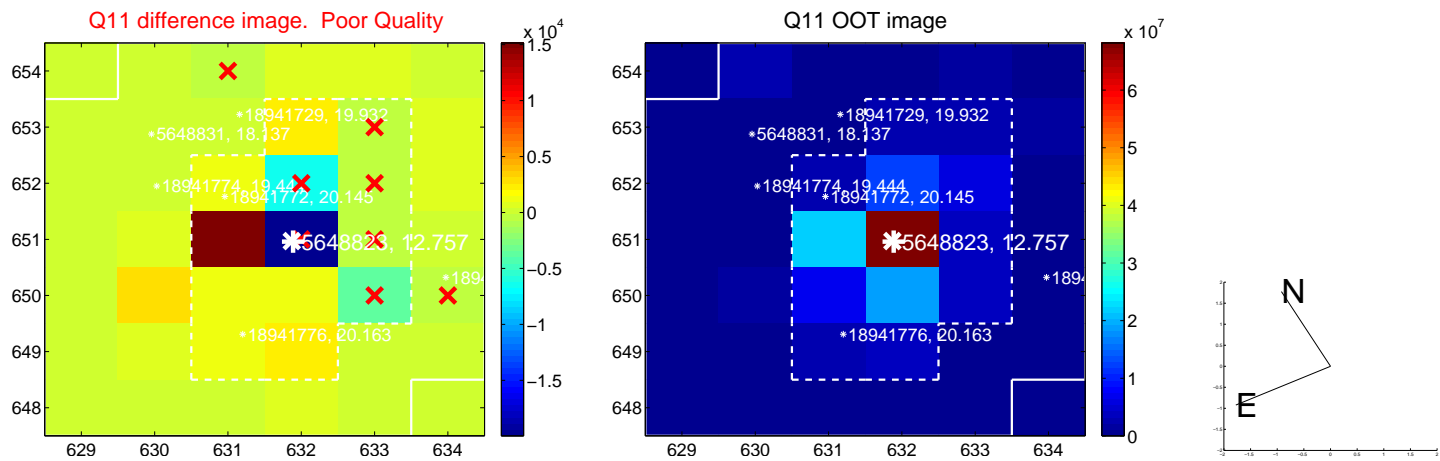
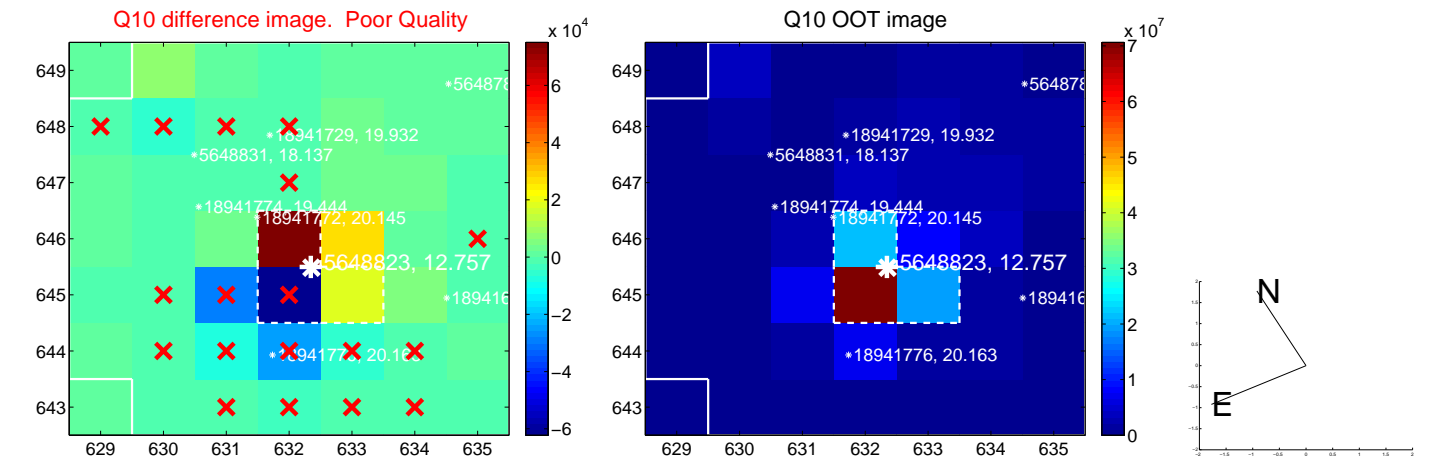
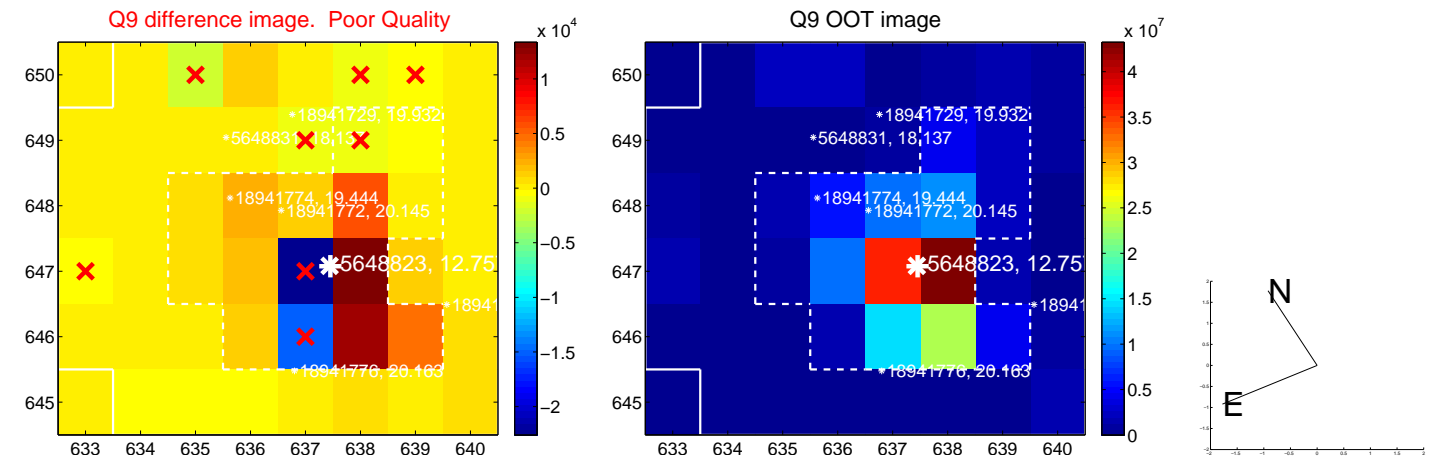
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



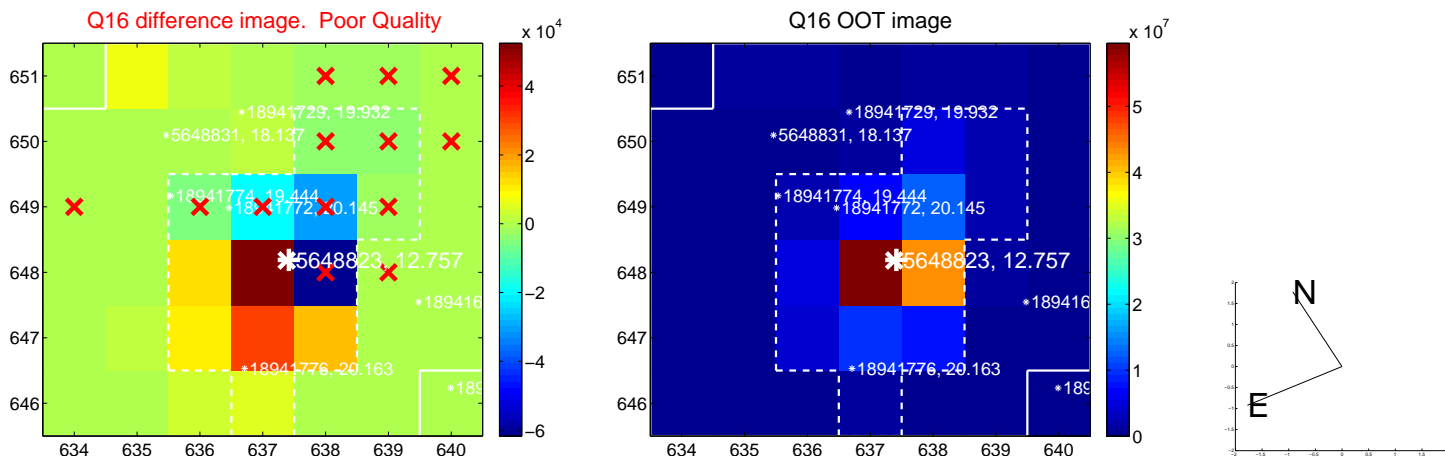
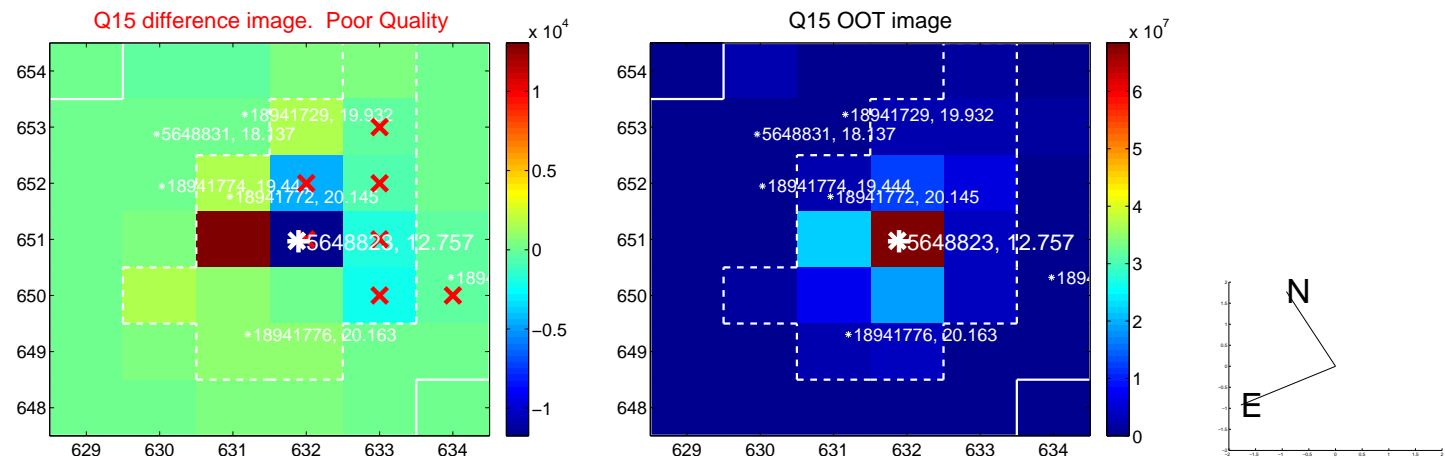
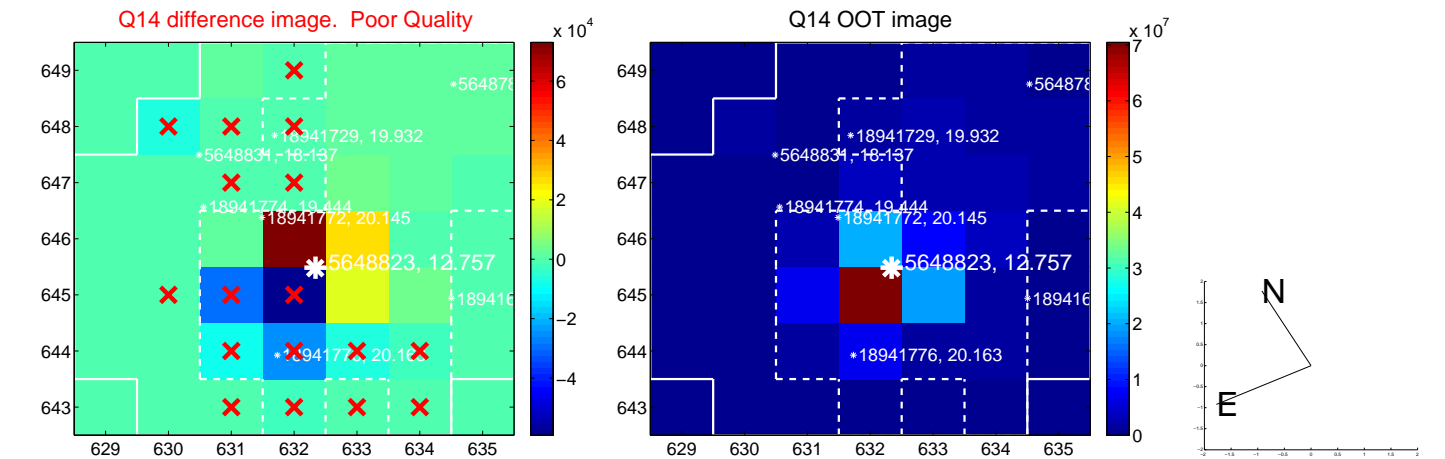
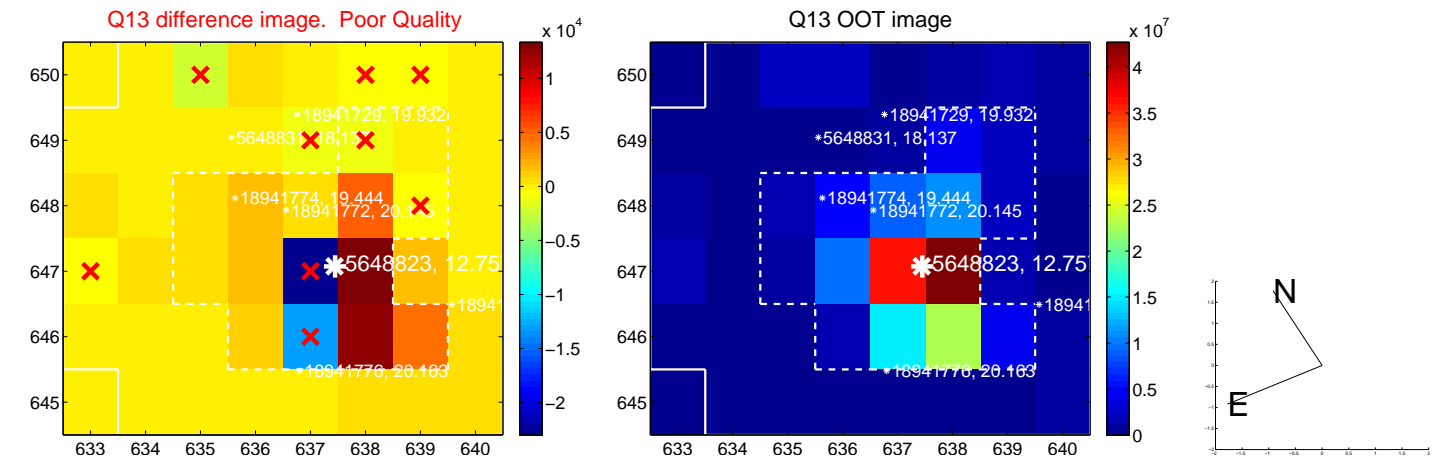
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



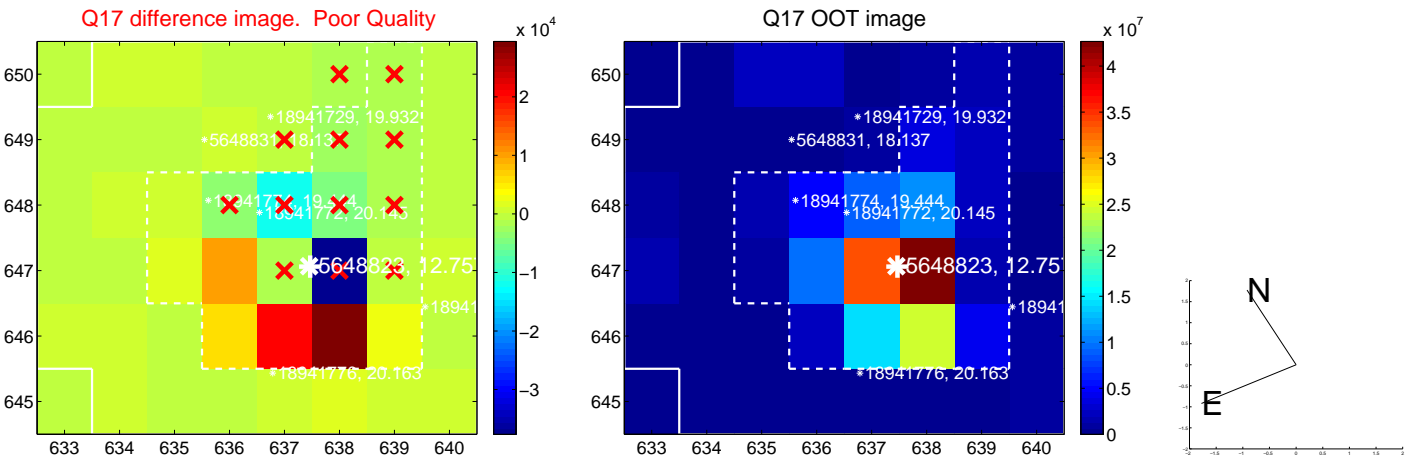
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



folded centroid time series figure for this object.

UKIRT Image

Declination

