

KIC 005566579

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})
005566579-01	OBS	No	0.651390	131.721611	1.7	5.301	8.0	3.1	1.92	9253	0.26	67803.89

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005566579-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

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

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

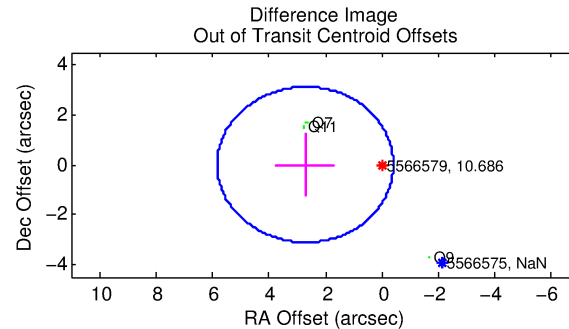
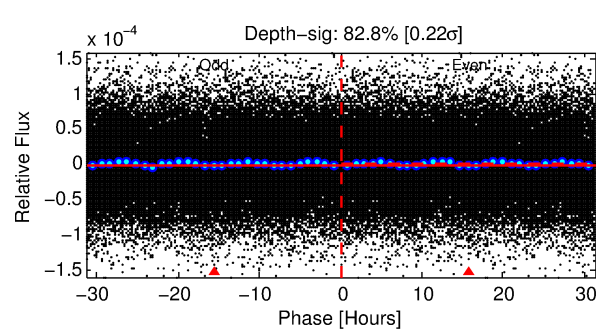
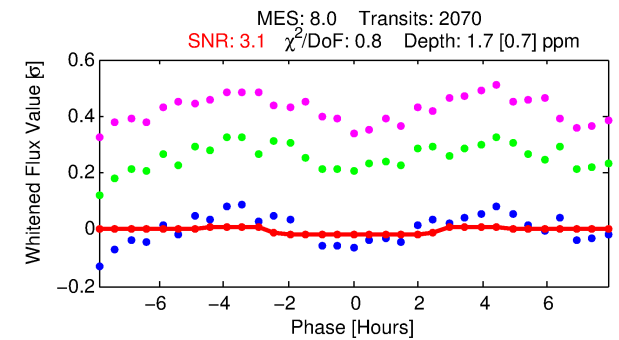
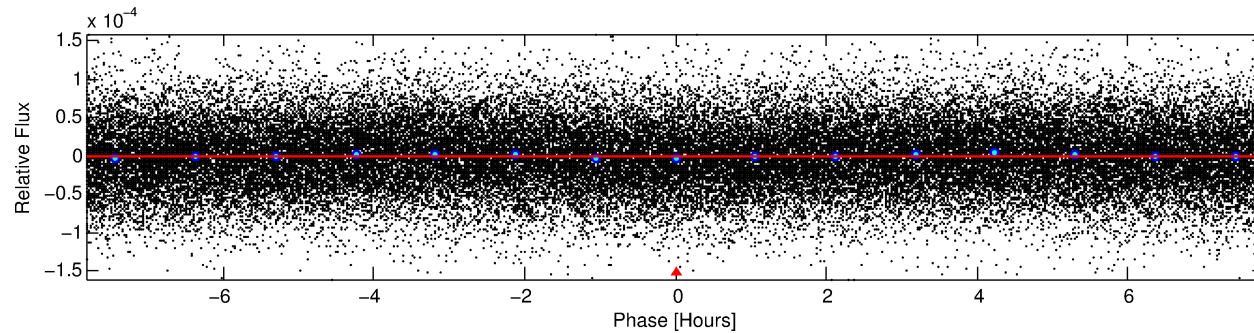
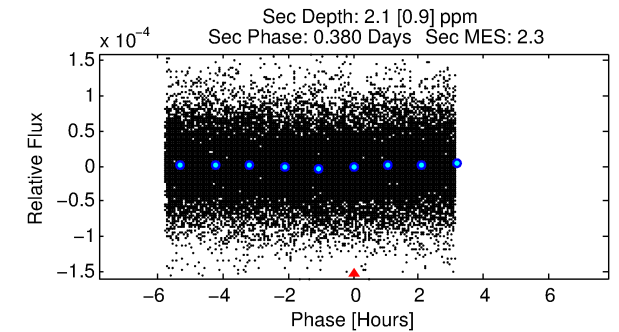
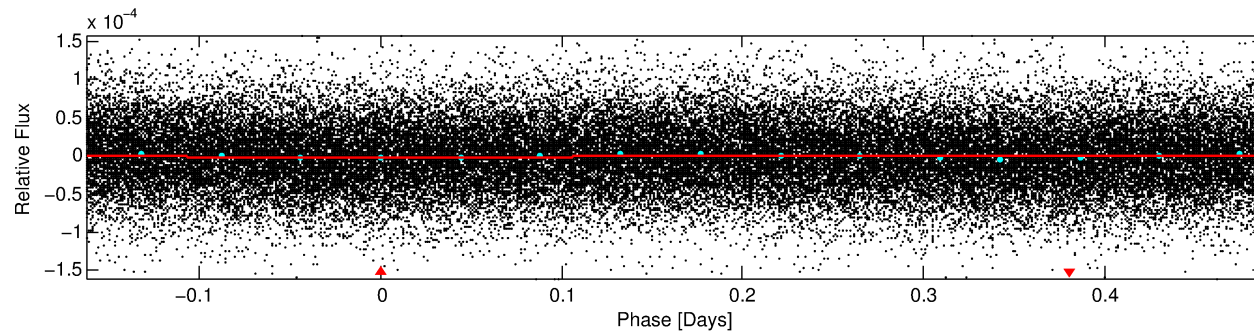
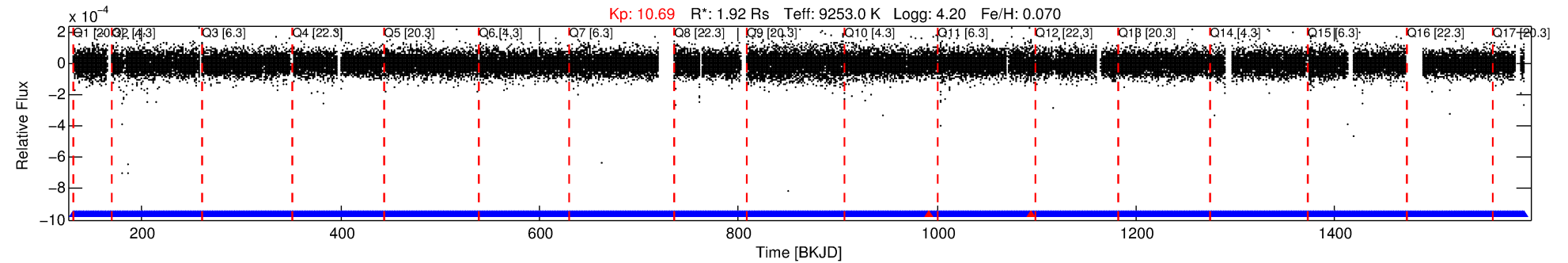
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005566579-01

No Significant Match Found

DV One-Page Summary

KIC: 5566579 Candidate: 1 of 1 Period: 0.651 d



DV Fit Results:

Period = 0.65139 [0.00003] d
Epoch = 131.7216 [0.0107] BKJD
Rp/R* = 0.0012 [0.0007]
a/R* = 1.10 [0.74]
b = 0.58 [4.51]
Seff = 67803.89 [27183.57]
Teff = 4115 [412] K
Rp = 0.26 [0.18] Re
a = 0.0189 [0.0049] AU
Ag = 5.97 [7.84] [0.63σ]
Teffp = 9944 [3179] K [1.82σ]

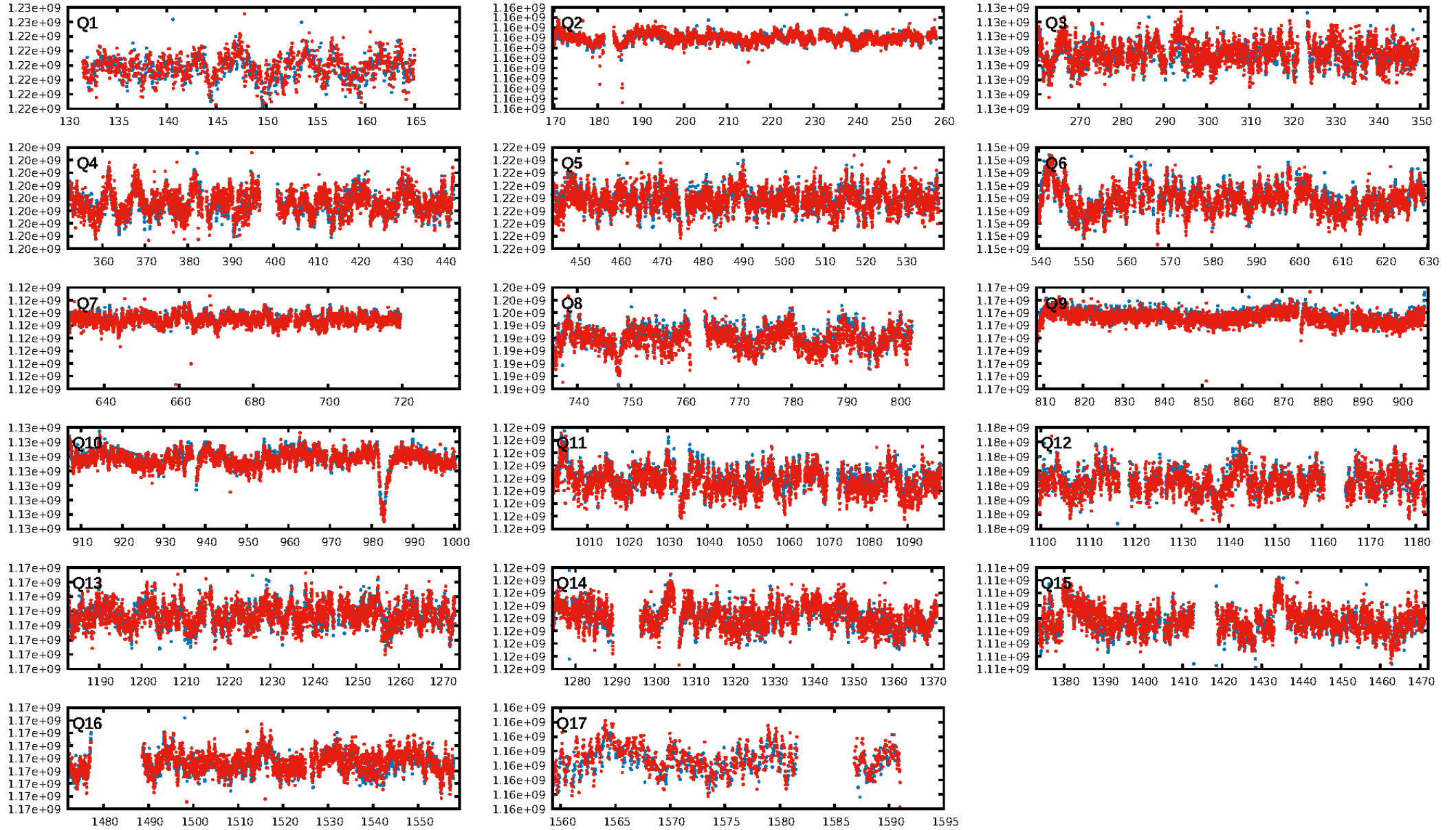
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1975/1977]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.713 arcsec [2.61σ]
KicOffset-rm: 1.917 arcsec [1.19σ]
OotOffset-st: 0/2/0/1 [3]
KicOffset-st: 0/2/0/1 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [17/17]

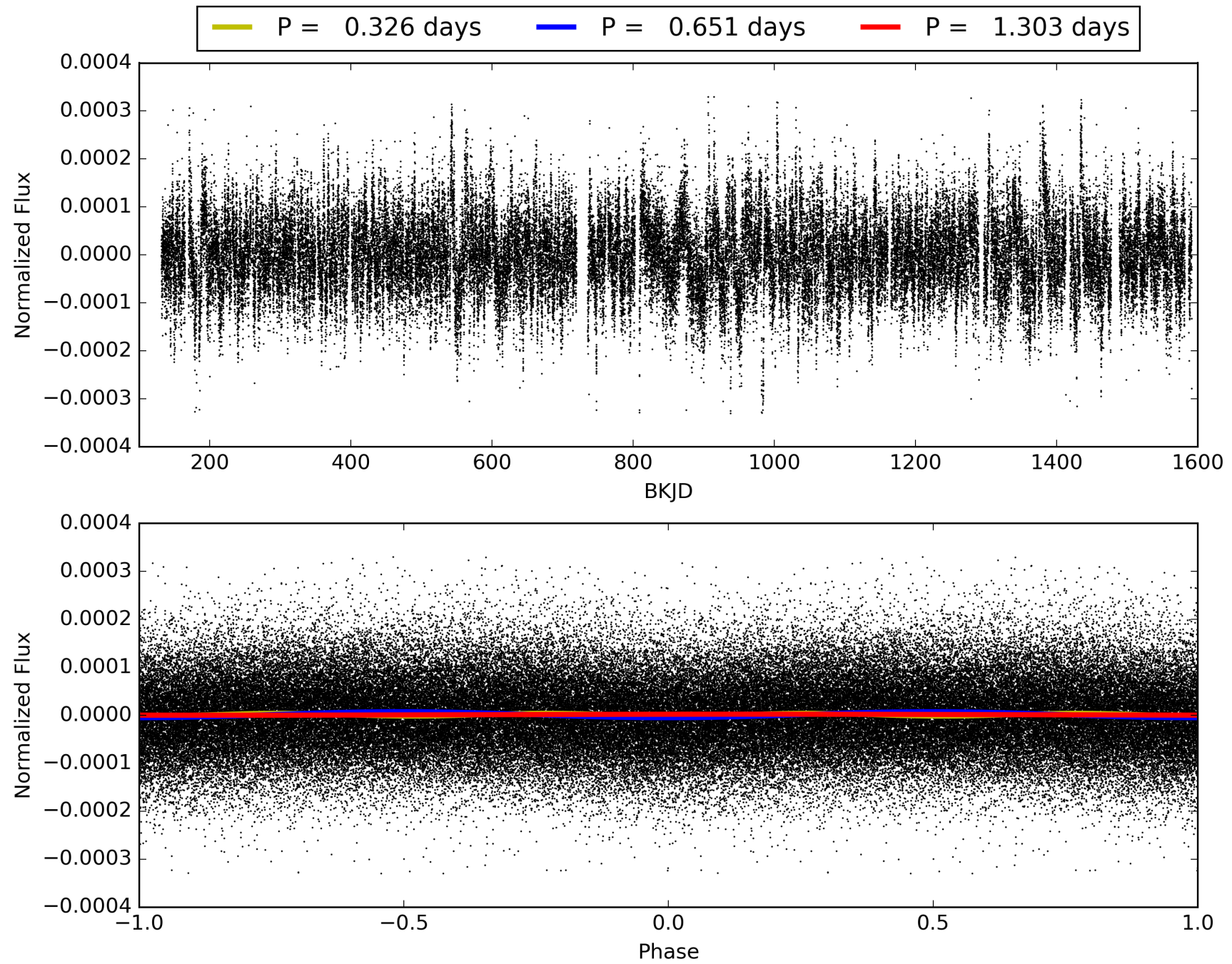
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:08:58 Z

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

TCE 005566579-01, PDC Light Curves

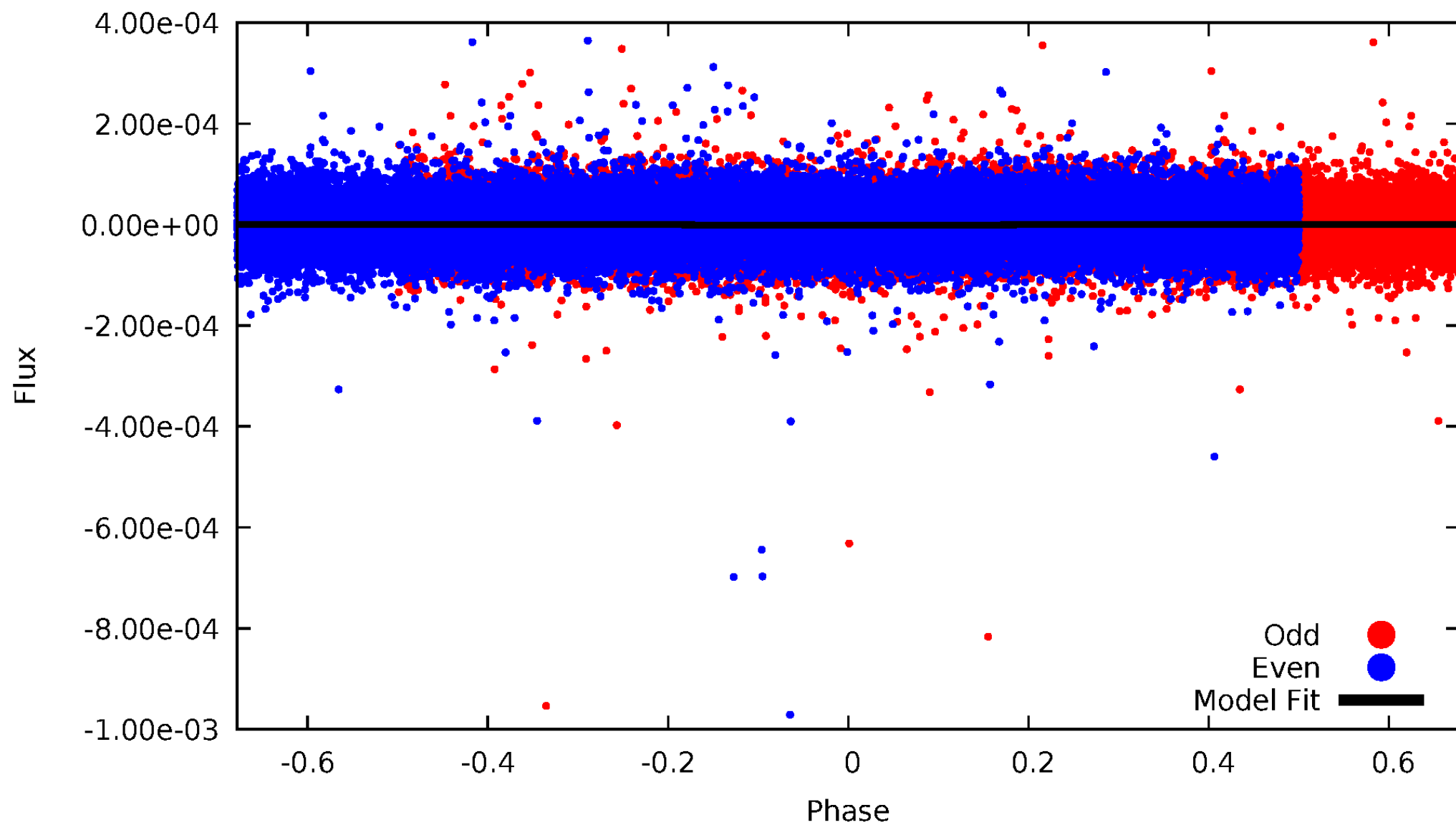


TCE 005566579-01



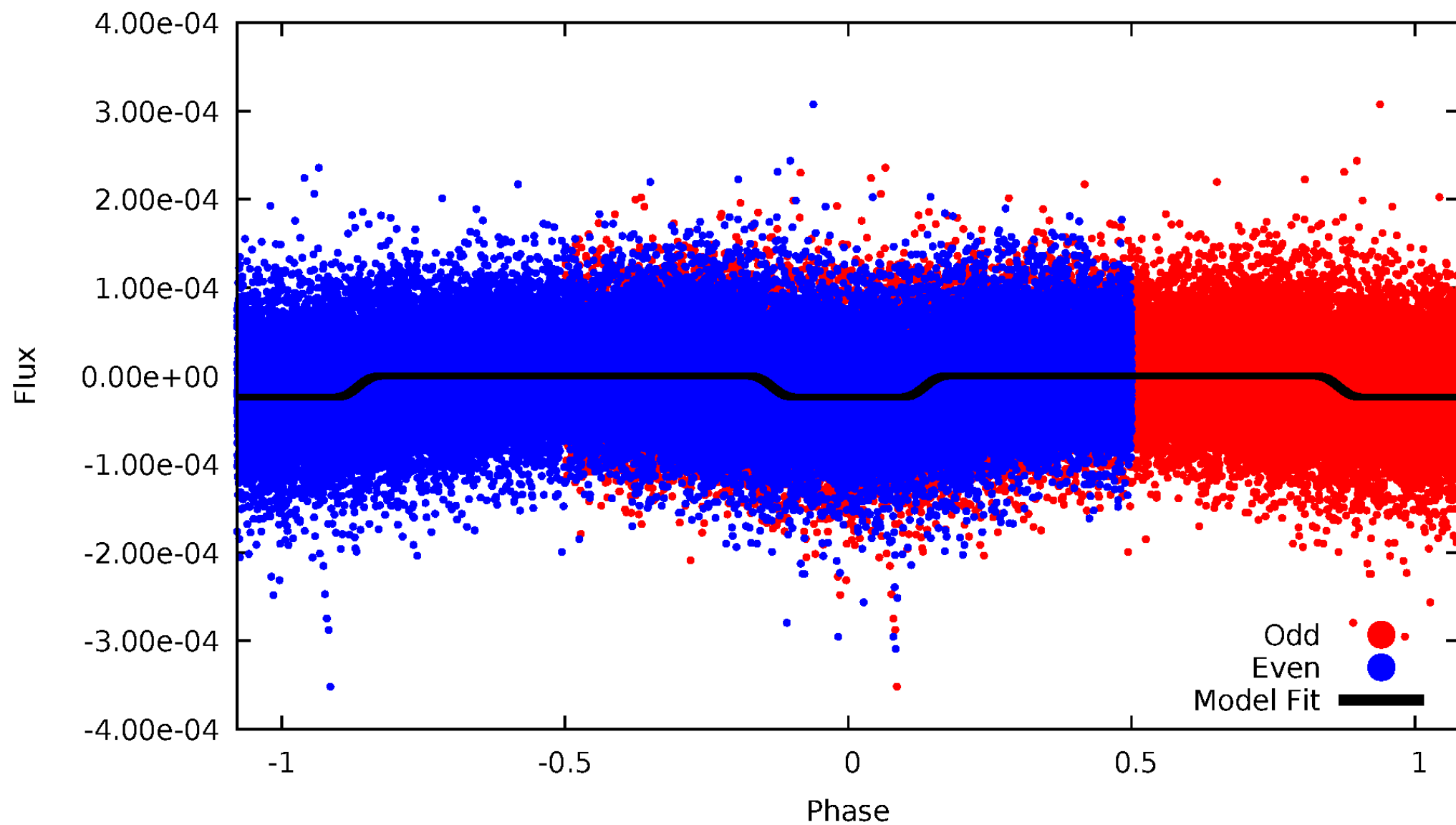
DV Odd/Even

TCE 005566579-01



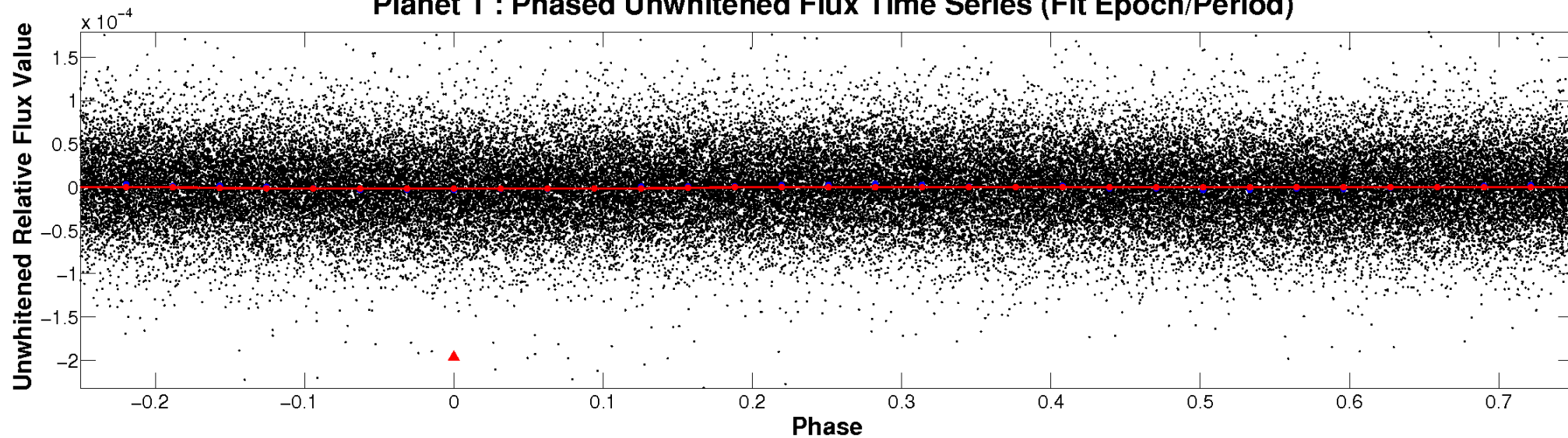
ALT Odd/Even

TCE 005566579-01

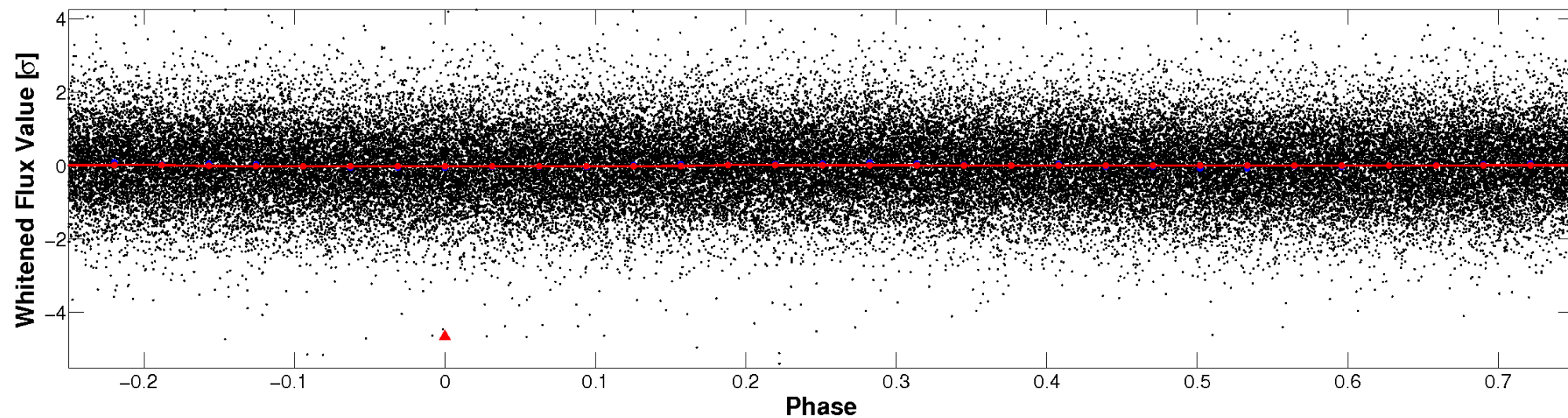


Non-Whitened Vs. Whitened Light Curve

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

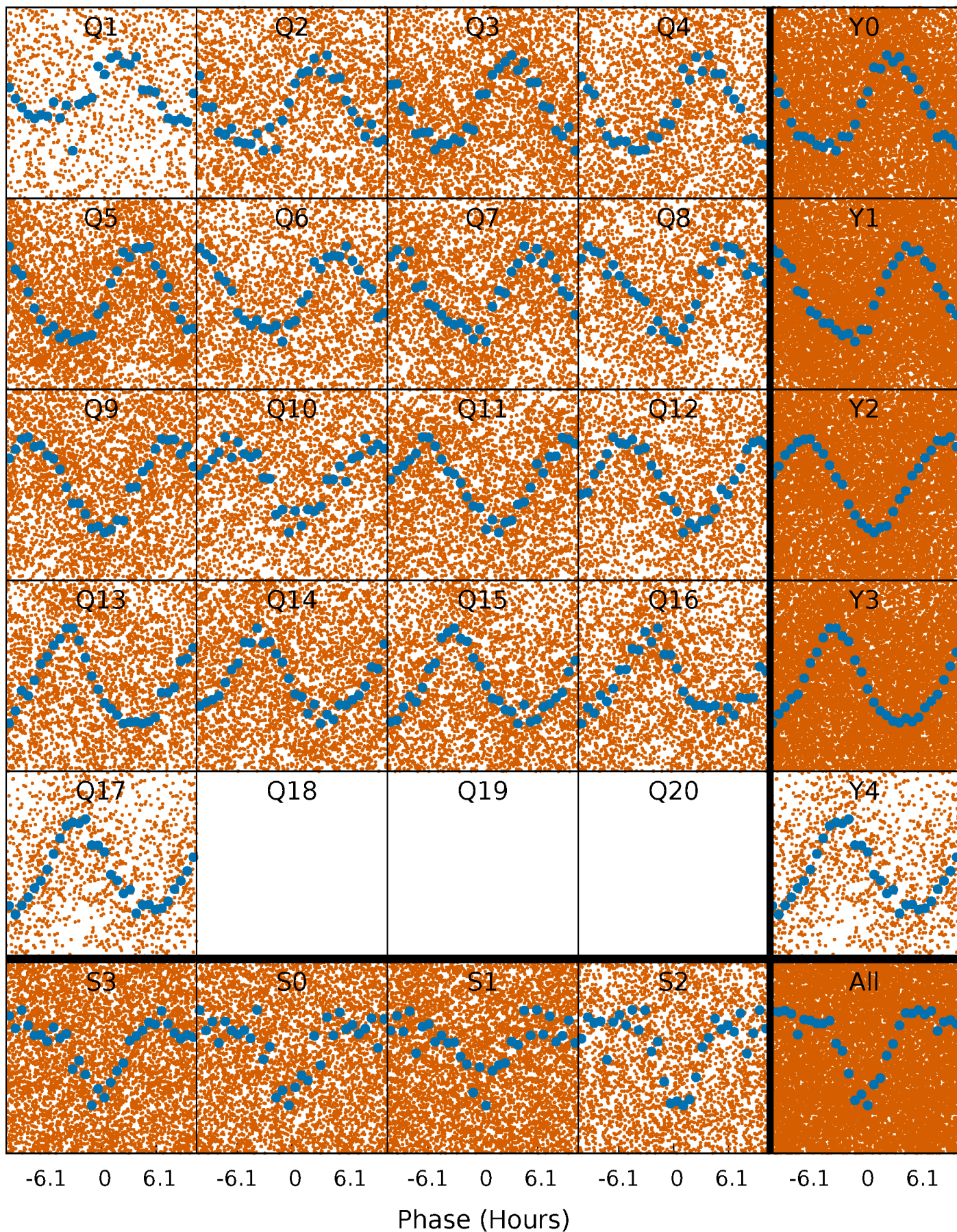


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



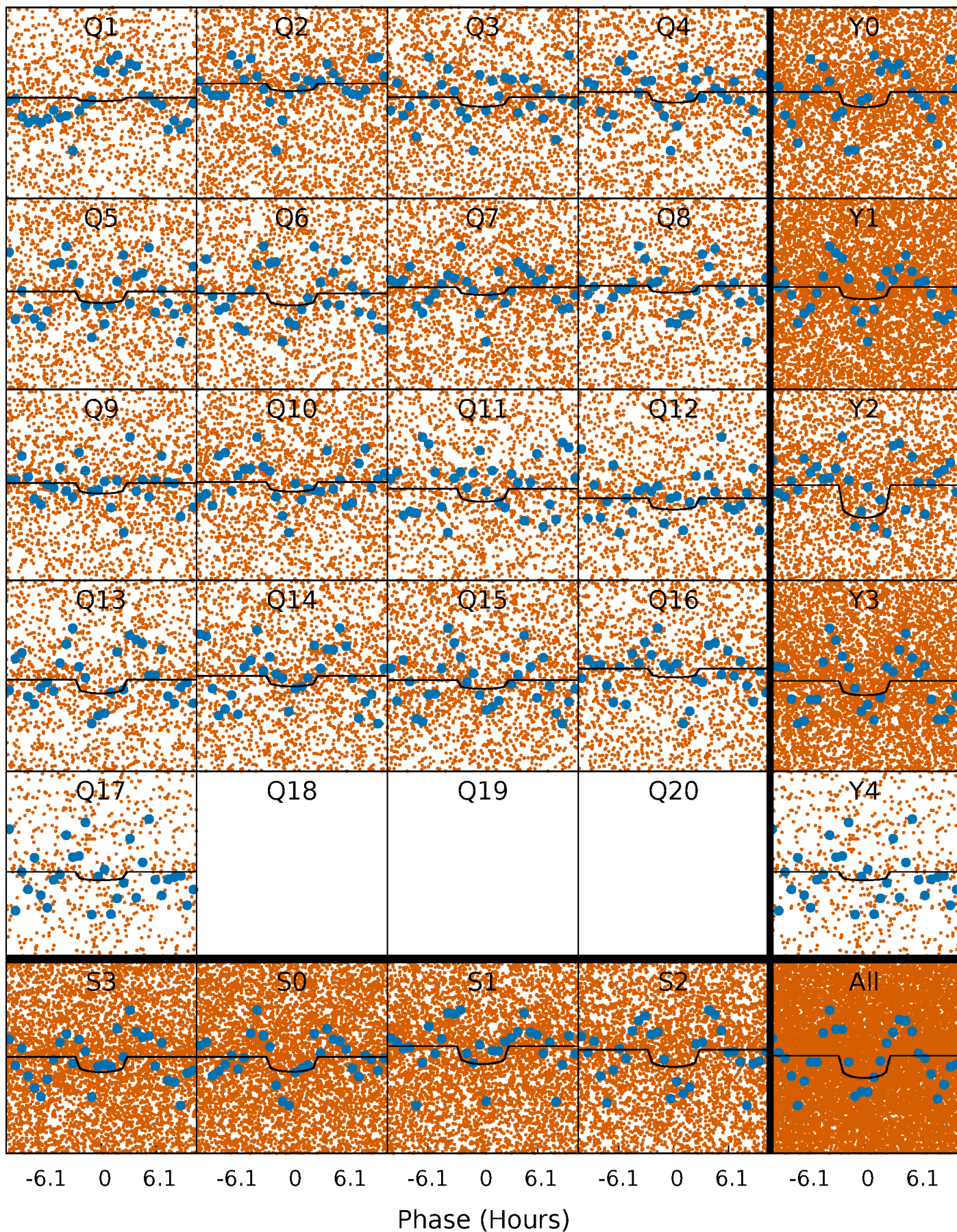
PDC Quarter-Phased Transit Curves

TCE 005566579-01 P= 0.651390 Days $T_0=131.721611$ (BKJD)



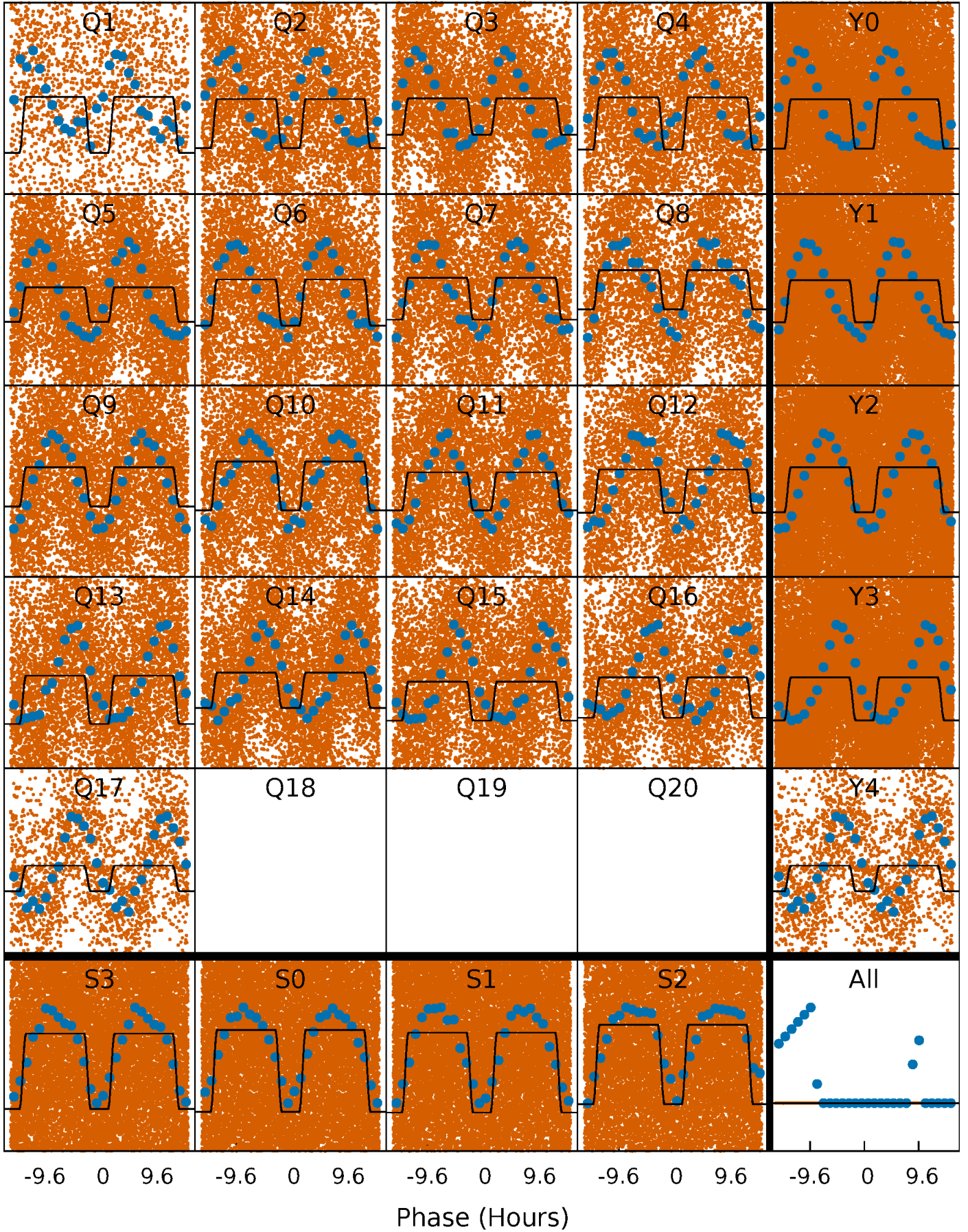
DV Quarter-Phased Transit Curves

TCE 005566579-01 P= 0.651390 Days $T_0=131.721611$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

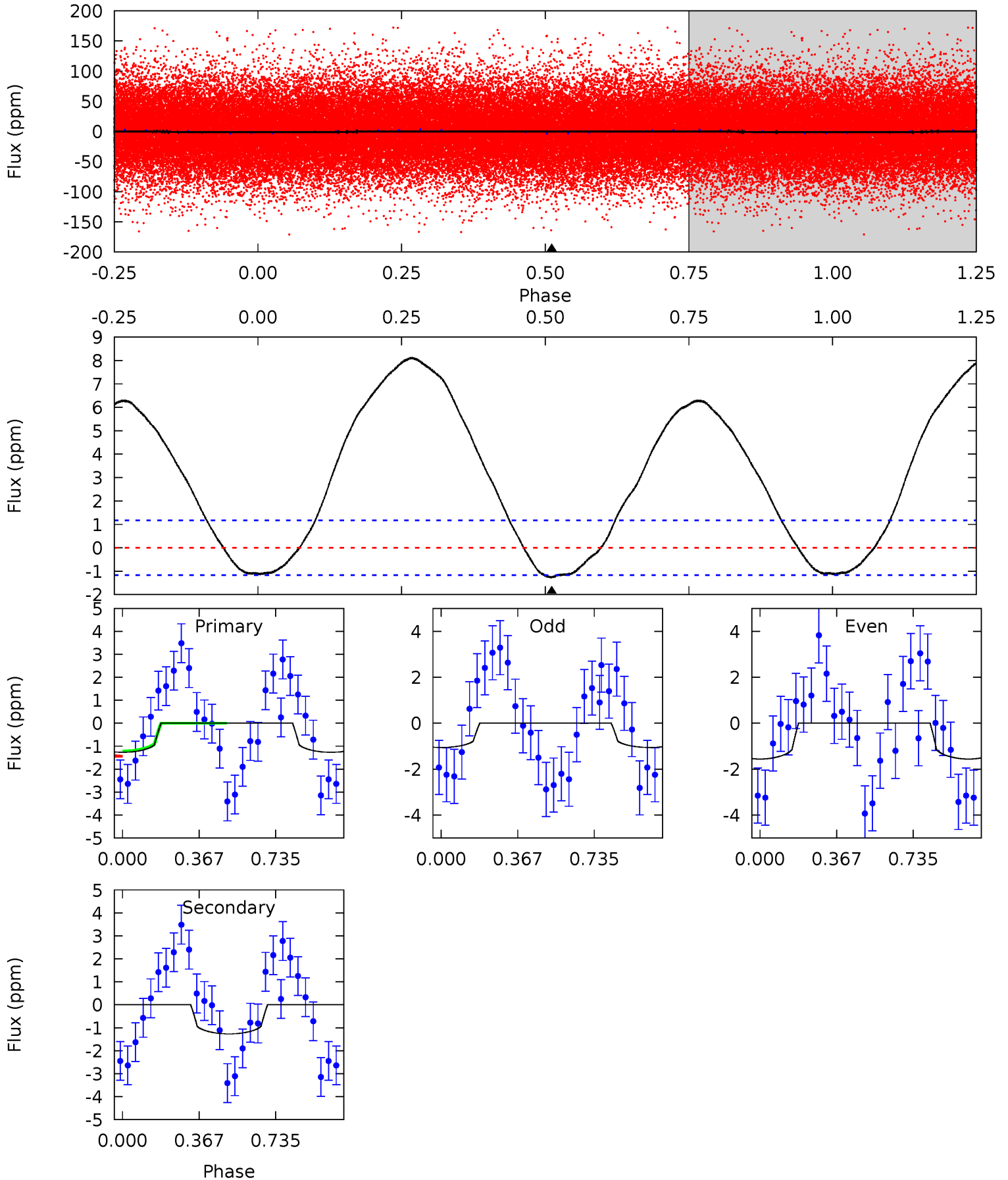
TCE 005566579-01 P= 0.651441 Days $T_0=131.660665$ (BKJD)



DV Model-Shift Uniqueness Test

005566579-01, P = 0.651390 Days, E = 131.070221 Days

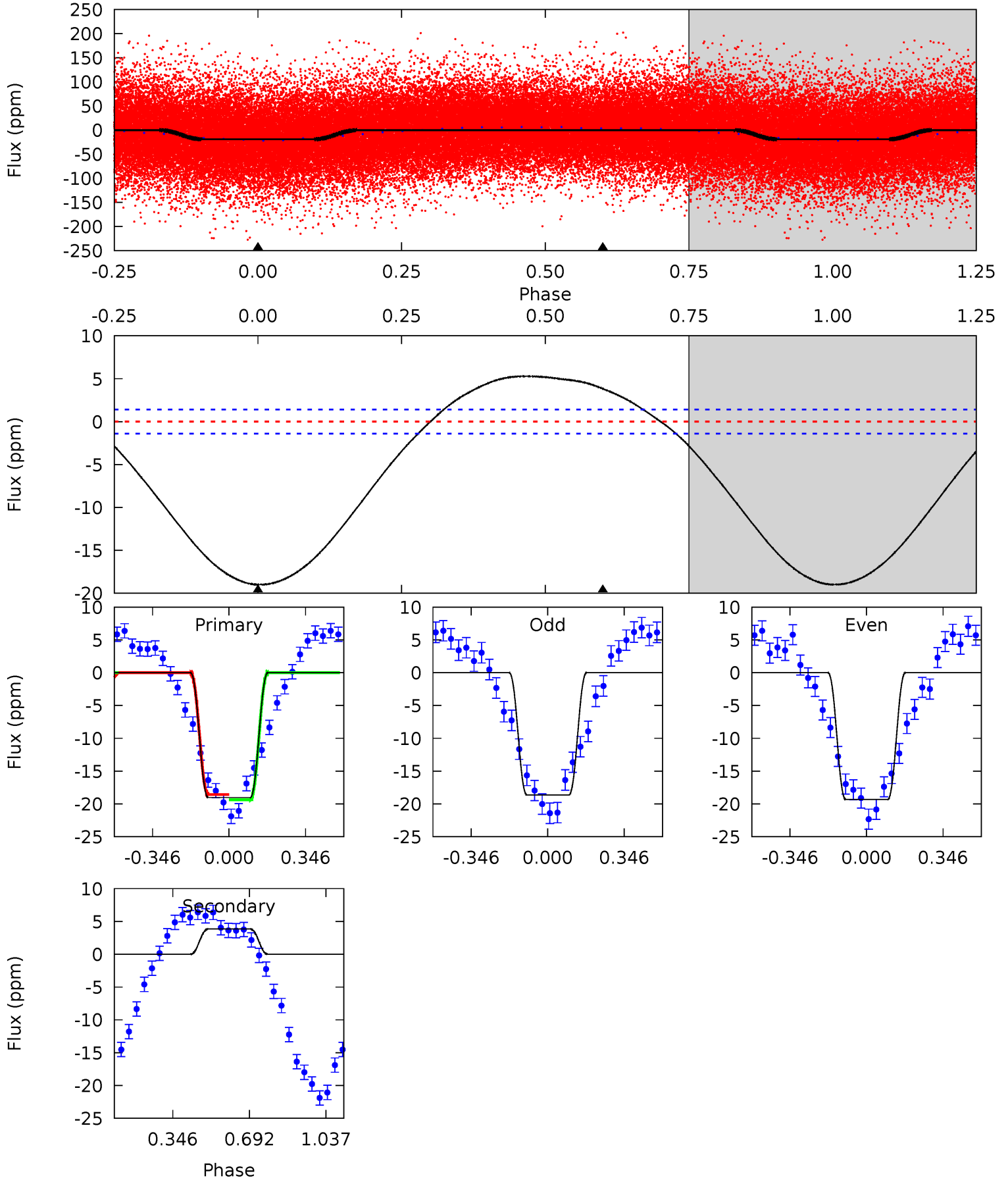
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.65	4.65	0	0	4.28	0.90	5.22	4.65	4.65	4.65	4.65	0.93	1.21	0.86	0.41



Alt Model-Shift Uniqueness Test

005566579-01, P = 0.651441 Days, E = 131.009224 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
57.9	-11.7	0	0	4.30	0.94	5.60	57.9	57.9	-11.7	-11.7	1.04	0.99	0.22	1.17



Stellar Parameters For KIC 005566579

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	9253^{+254}_{-435}	$4.198^{+0.120}_{-0.180}$	$0.070^{+0.150}_{-0.700}$	$1.921^{+0.638}_{-0.425}$	$2.124^{+0.373}_{-0.513}$	$0.422^{+0.272}_{-0.211}$
	+3%/-5%	+3%/-4%	+214%/-1000%	+33%/-22%	+18%/-24%	+64%/-50%
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 005566579-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1 ± 0	$0.27^{+0.15}_{-0.15}$	5773^{+441}_{-391}	8049^{+6145}_{-2058}	$3.159^{+10.282}_{-1.885}$
Alt.	4 ± 0	$1.02^{+0.27}_{-0.20}$	5768^{+440}_{-392}	-6042^{+383}_{-442}	$-0.704^{+0.250}_{-0.348}$

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

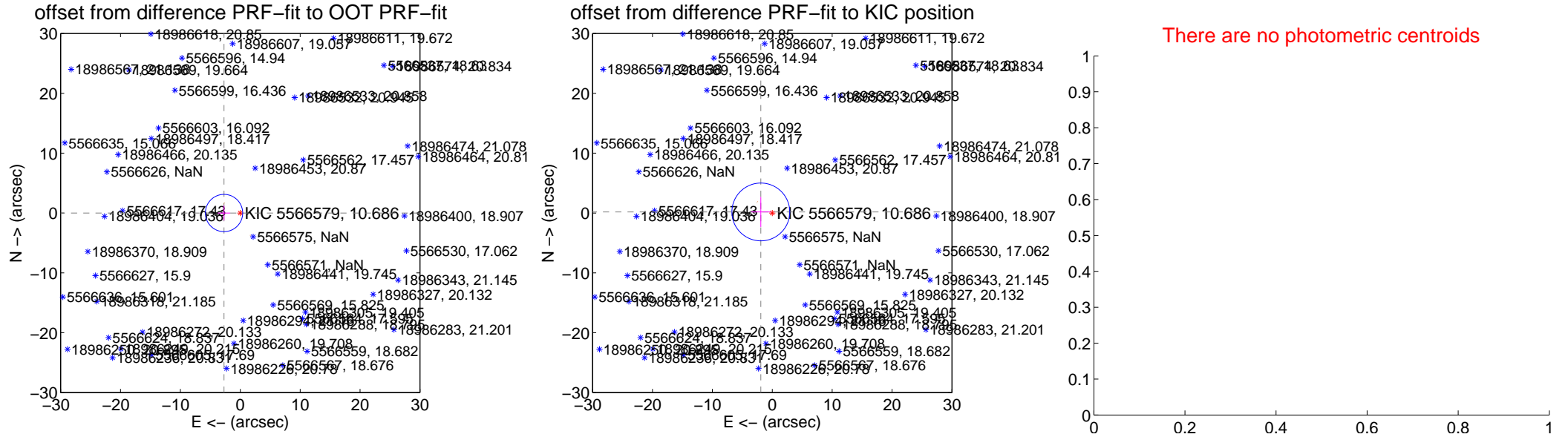
DV Centroid Data

Supplemental centroid analysis for 005566579-01. **Kepler magnitude: 10.69.** Transit SNR 3.11

There are 0 quarters with good PRF difference image offsets

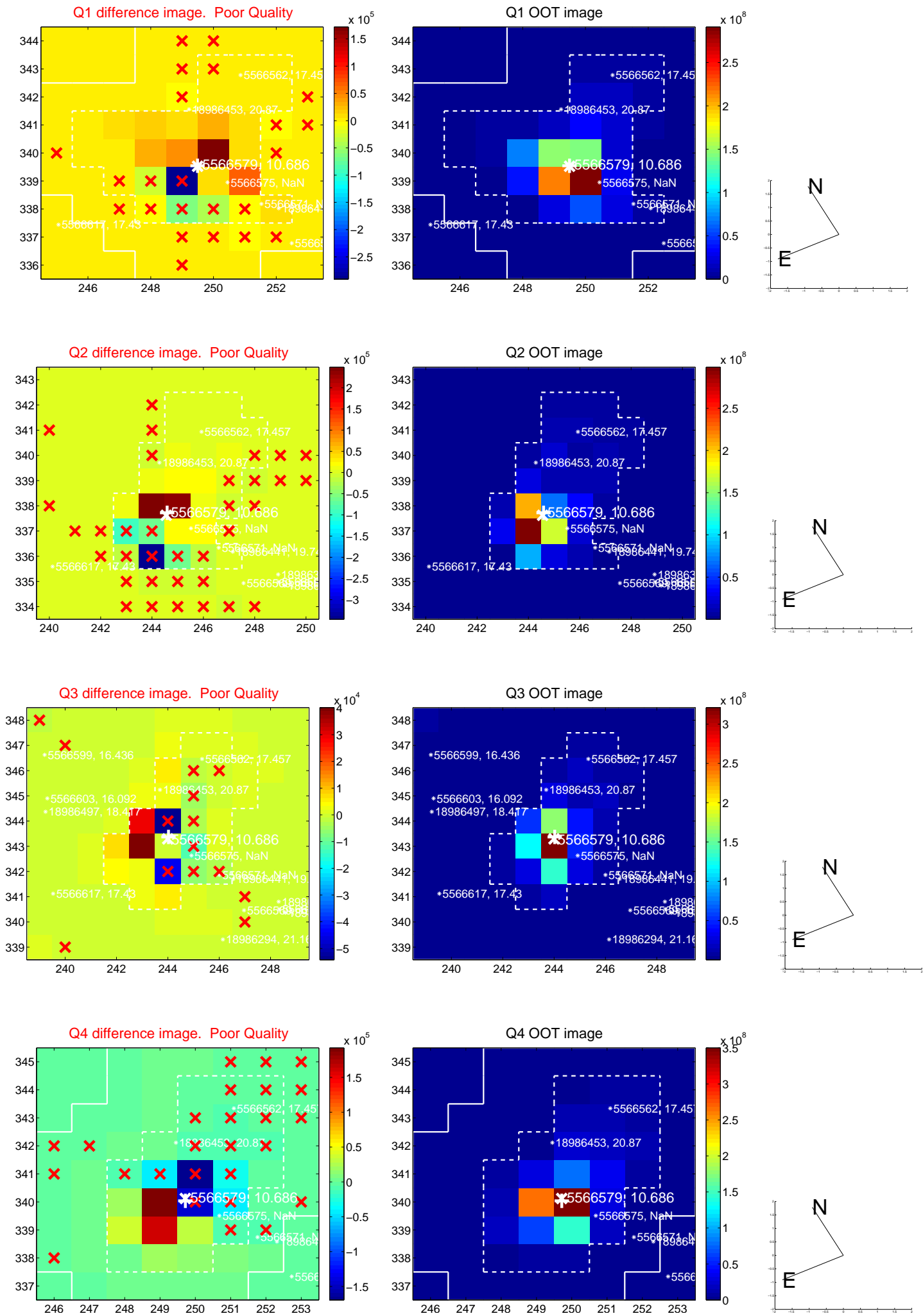
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.713 ± 1.038	2.61	2.713 ± 1.038	-0.001 ± 1.247
PRF-fit source offset from KIC position	1.917 ± 1.610	1.19	1.909 ± 1.600	0.177 ± 2.517
photometric centroid source offset	—	—	—	—

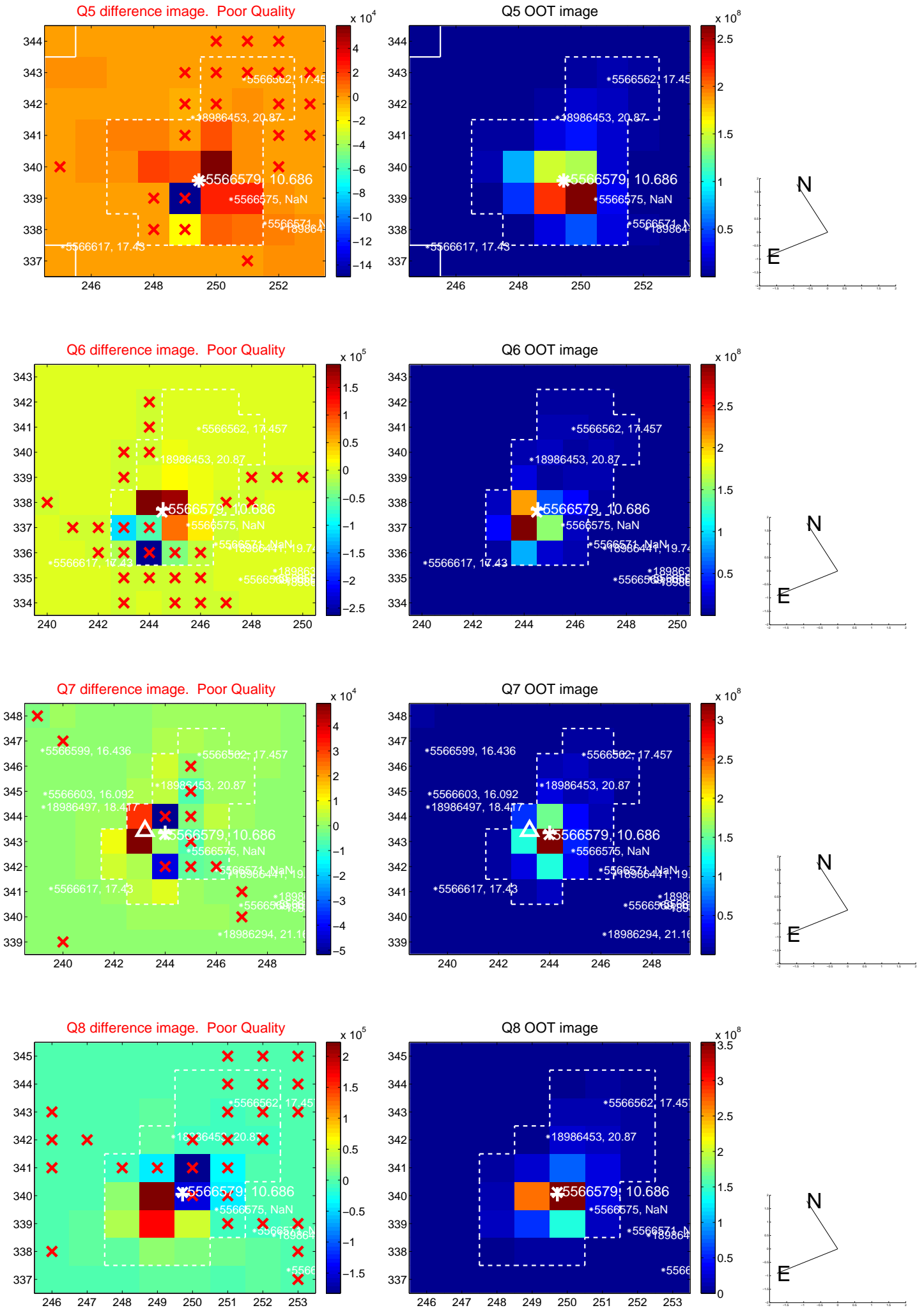


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

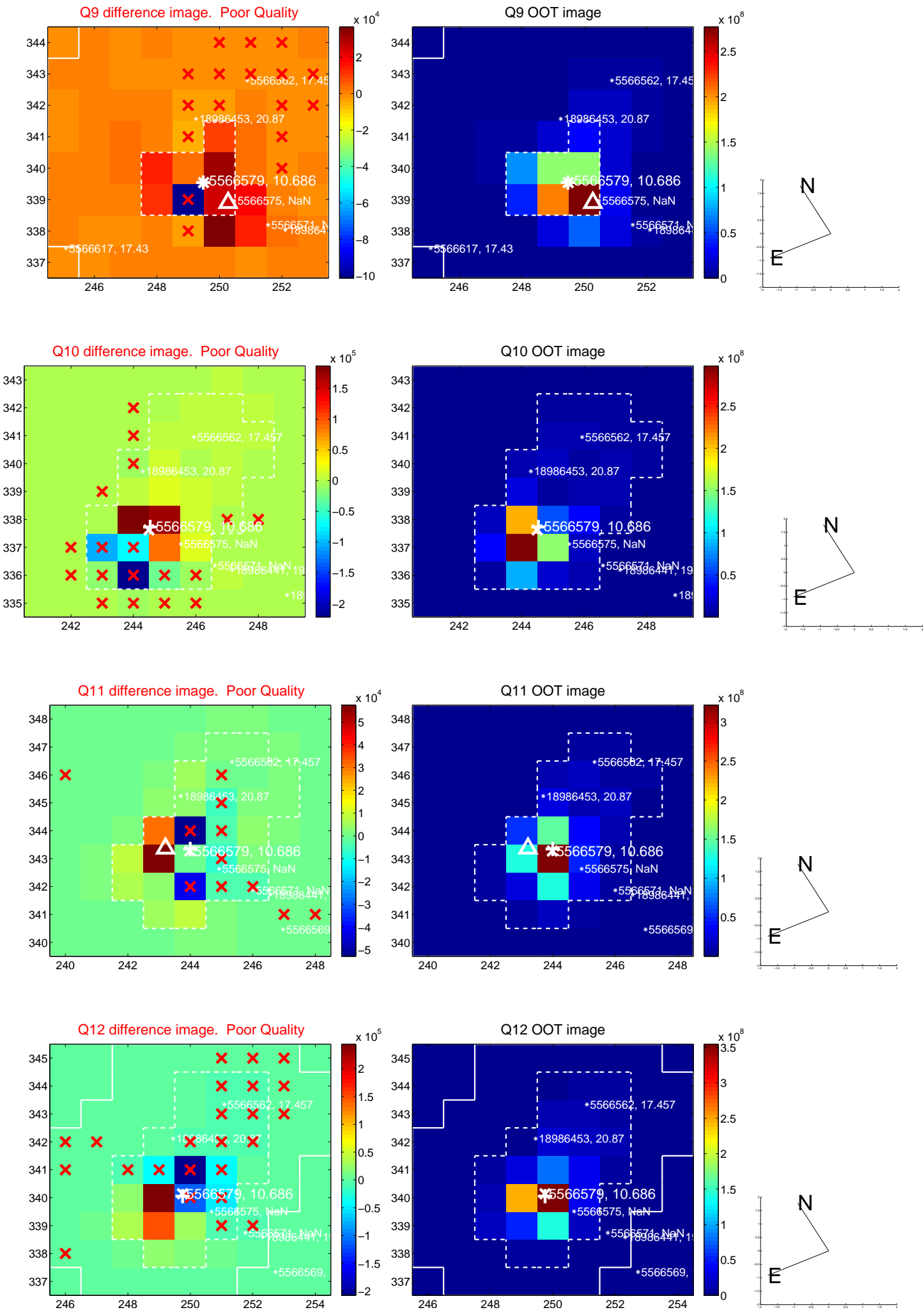
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



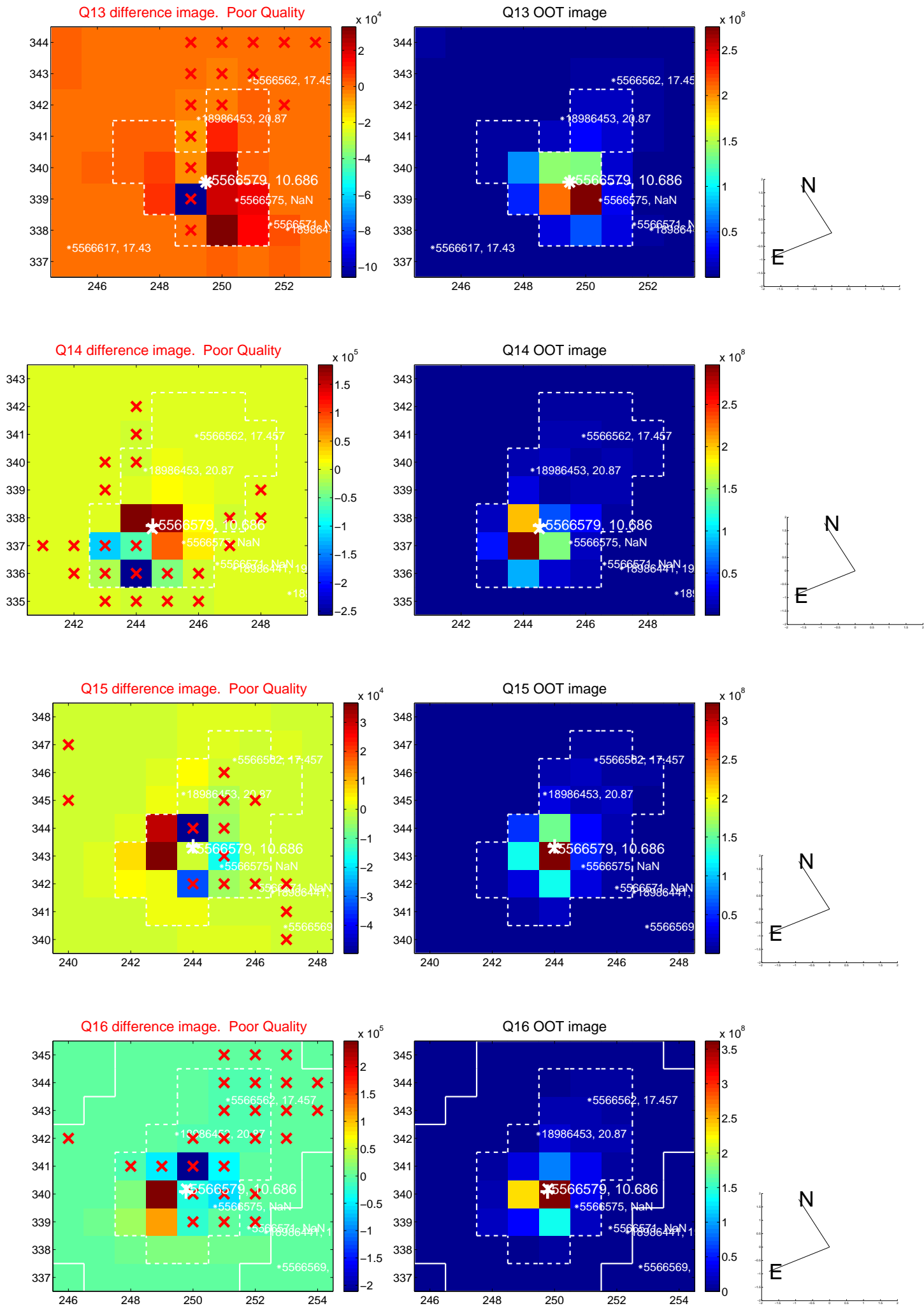
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



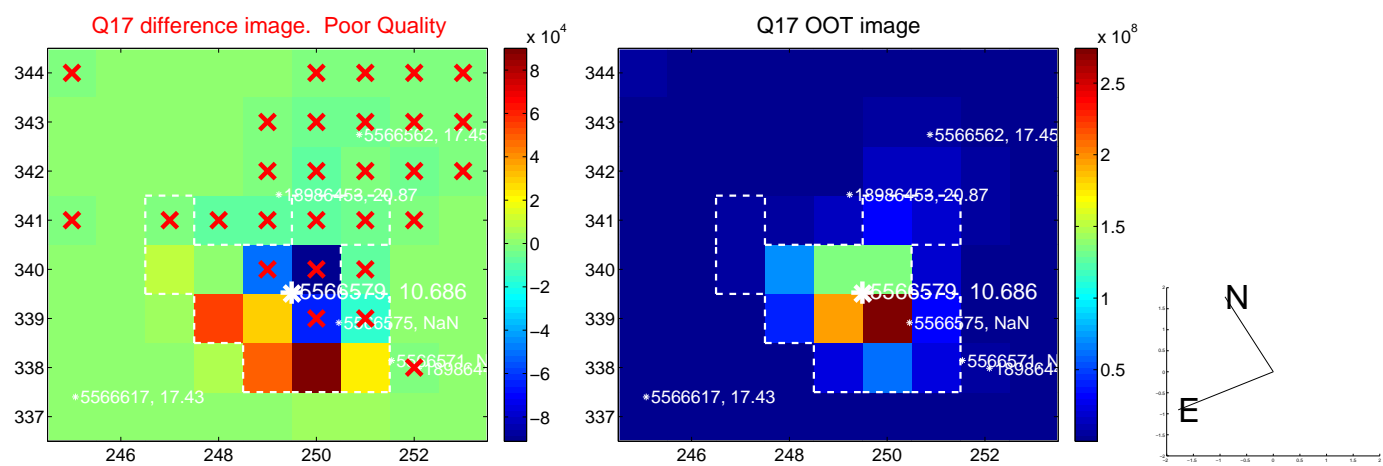
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

