

KIC 005514283

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})
005514283-01	OBS	No	0.565360	131.703074	7.6	4.592	9.0	6.3	2.50	6817	0.72	51987.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005514283-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_FEW_DIFFS—HALO_GHOST

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

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

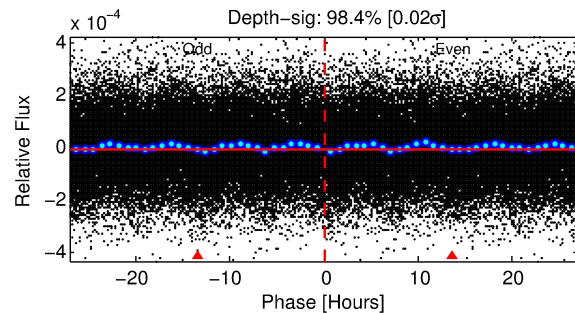
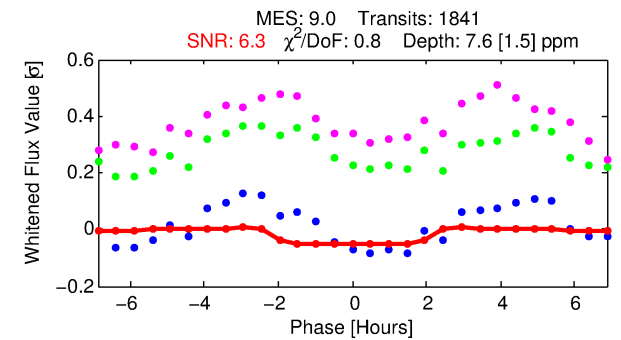
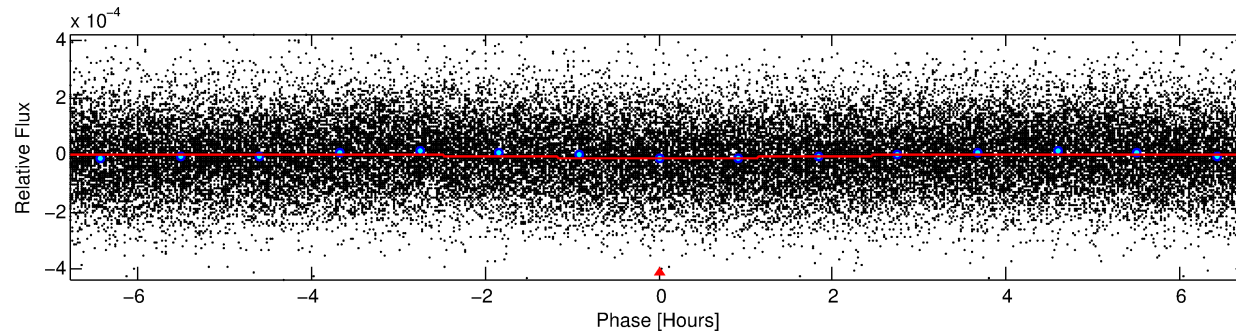
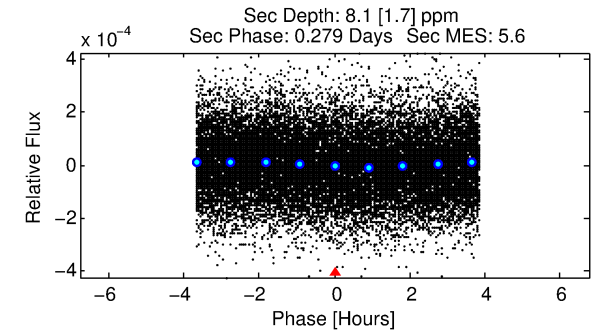
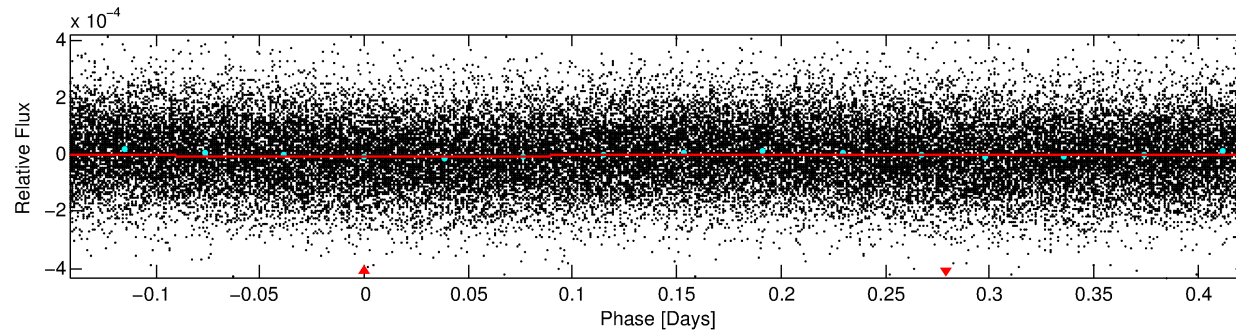
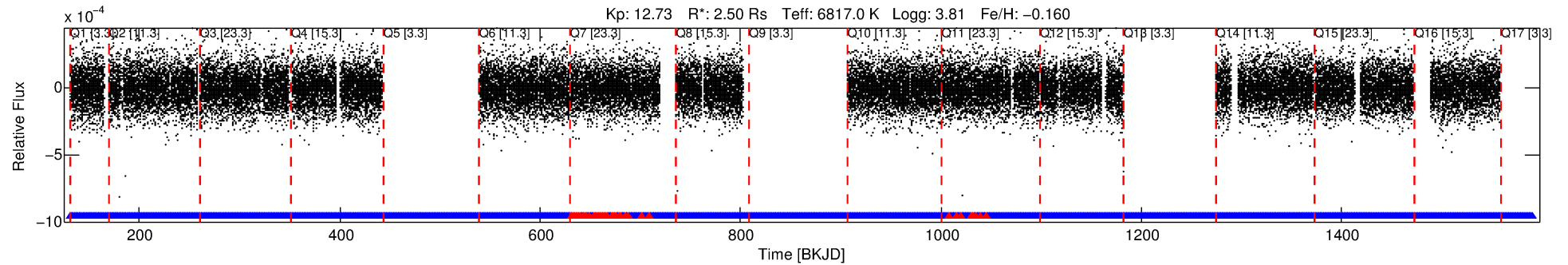
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005514283-01

No Significant Match Found

DV One-Page Summary

KIC: 5514283 Candidate: 1 of 1 Period: 0.565 d



DV Fit Results:

Period = 0.56536 [0.00002] d
Epoch = 131.7031 [0.0069] BKJD
Rp/R* = 0.0026 [0.0026]
a/R* = 1.10 [1.13]
b = 0.56 [7.09]
Seff = 51987.08 [25967.83]
Teq = 3850 [481] K
Rp = 0.72 [0.75] Re
a = 0.0152 [0.0046] AU
Ag = 2.00 [4.12] [0.24σ]
Teffp = 7081 [3545] K [0.90σ]

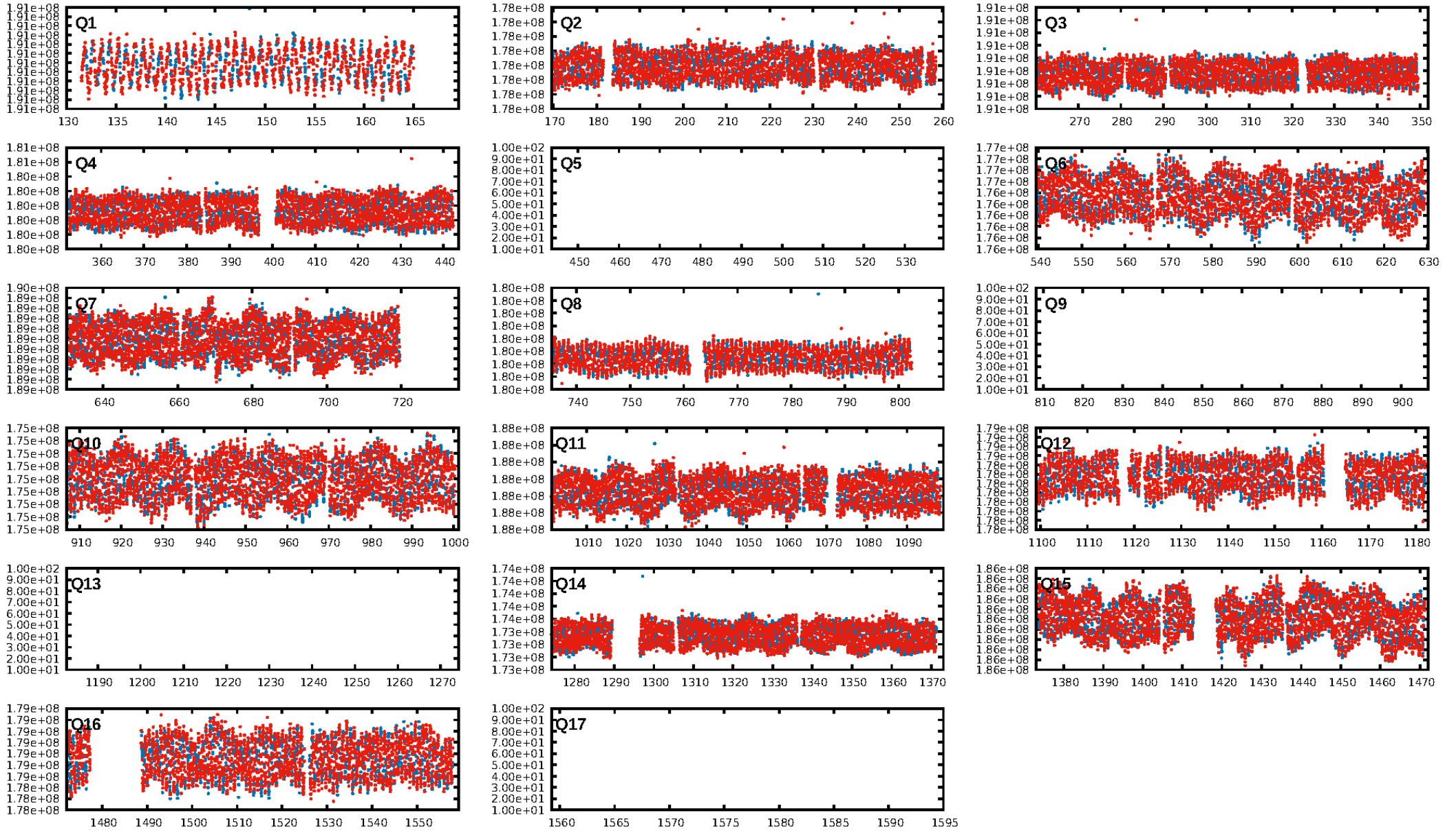
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [1726/1781]
GhostDiagnostic-chr: -0.245
Centroid-sig: 33.3%
Centroid-so: 1.304 arcsec [0.69σ]
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 [13/13]

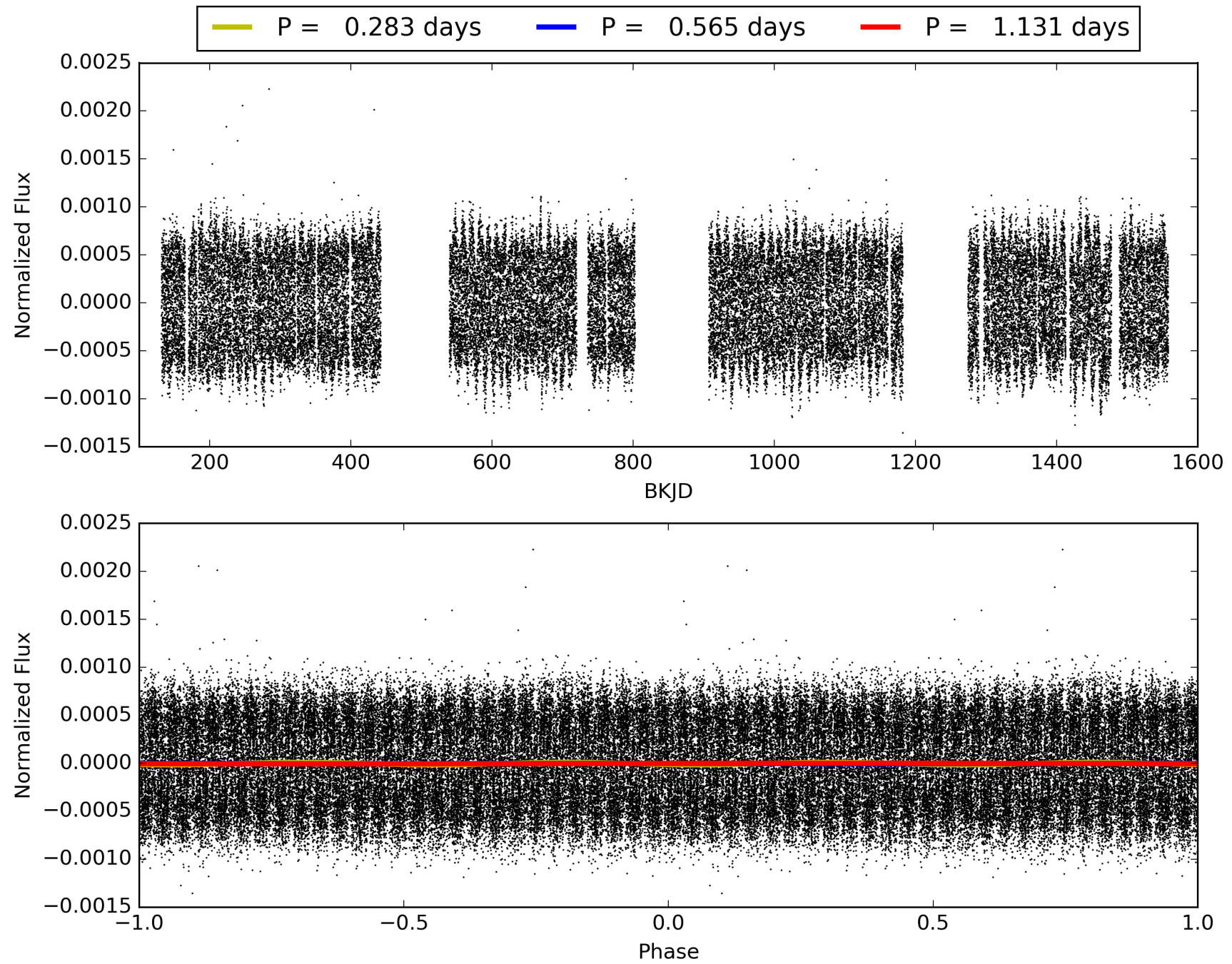
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:20:27 Z

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

TCE 005514283-01, PDC Light Curves

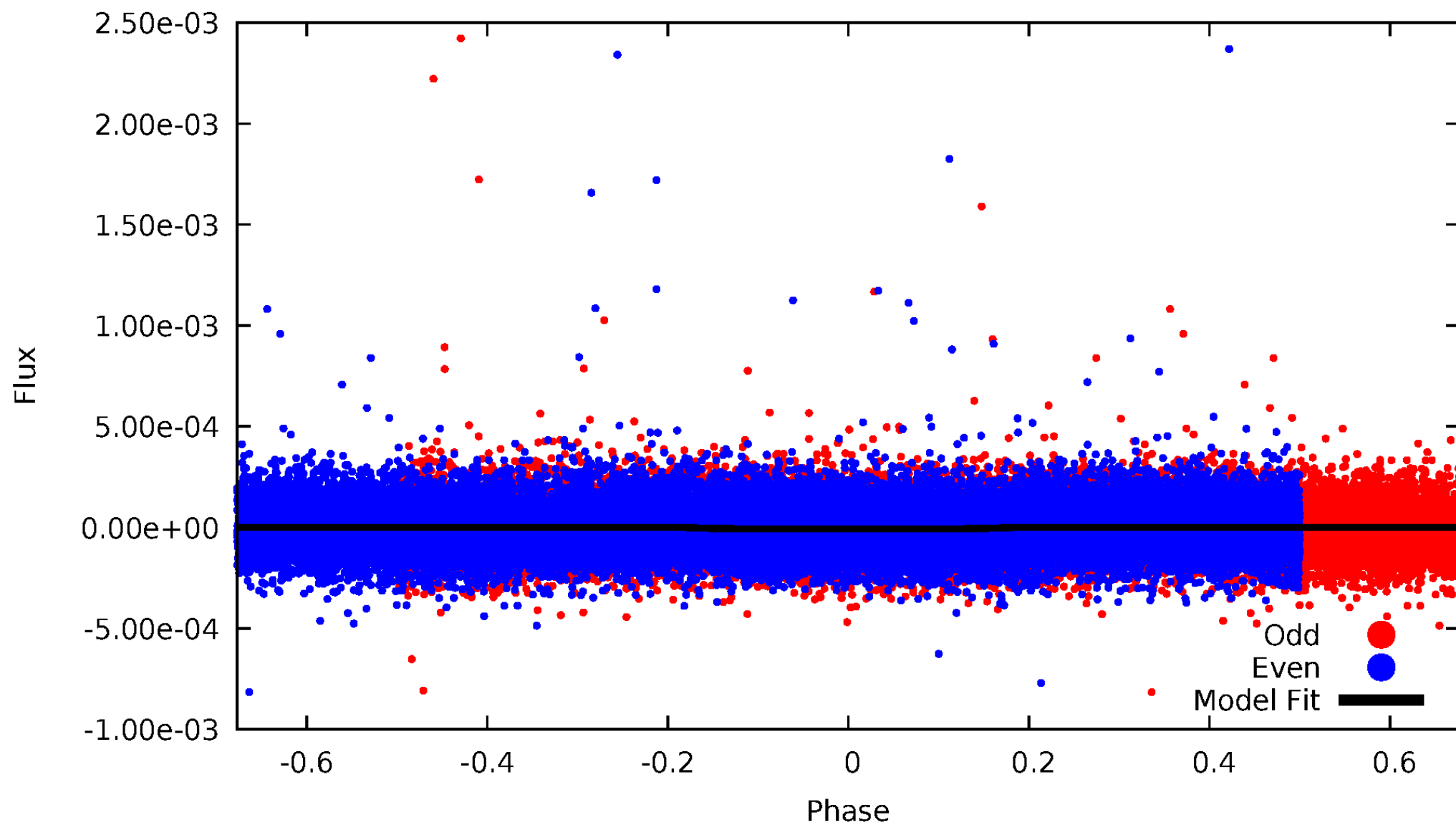


TCE 005514283-01



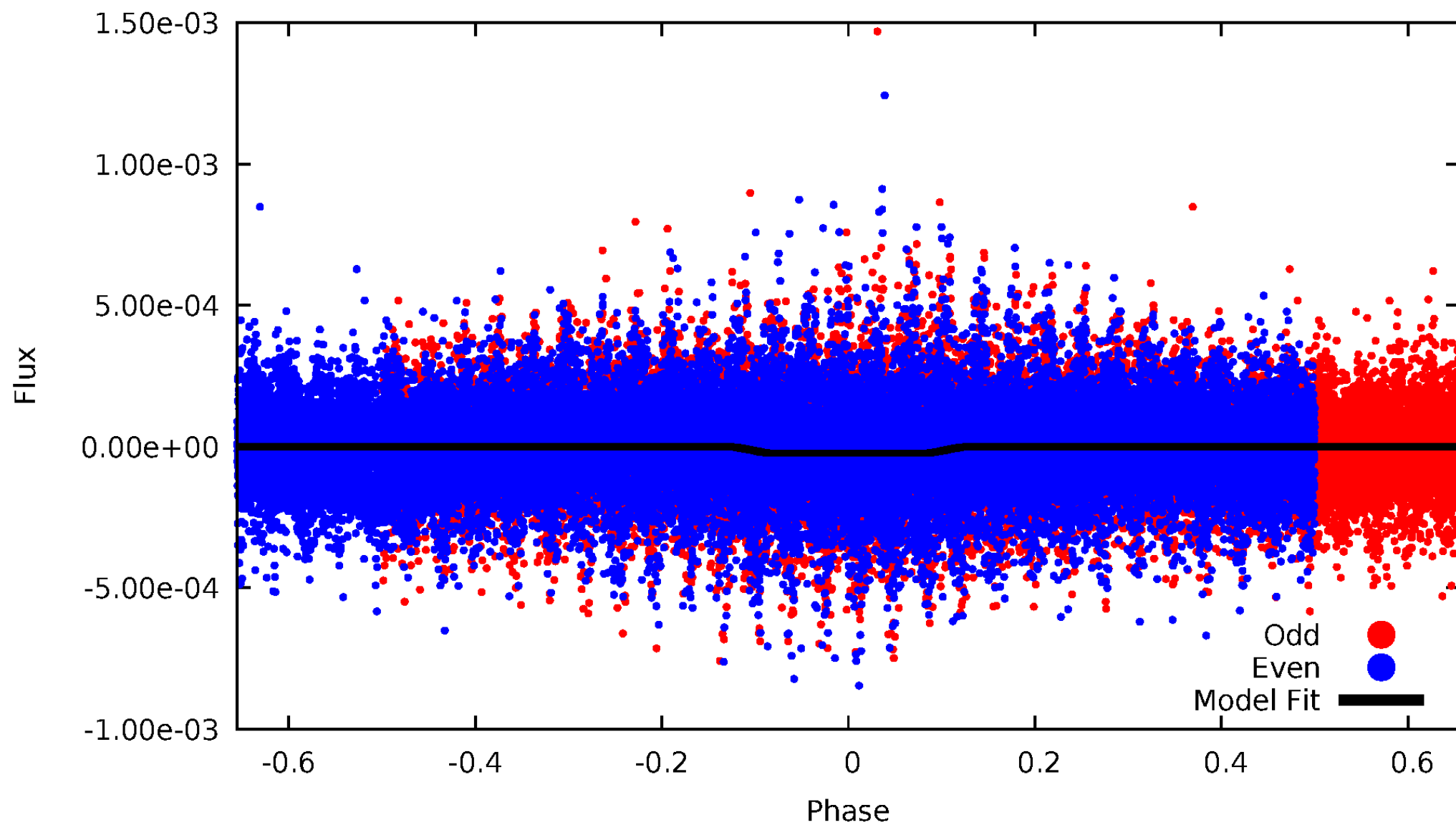
DV Odd/Even

TCE 005514283-01

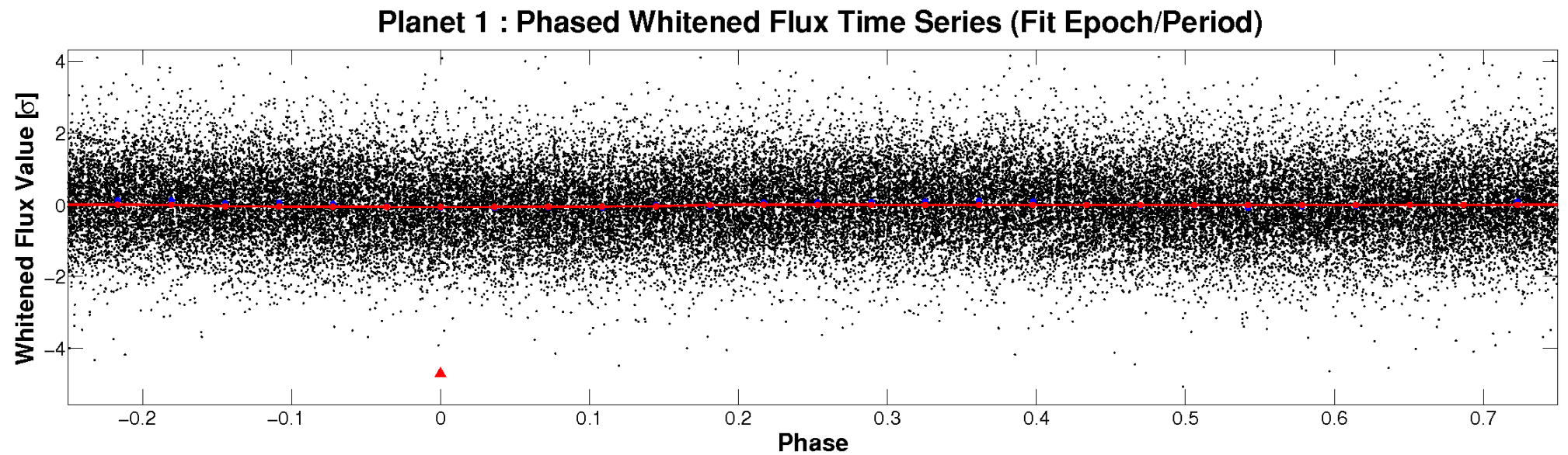
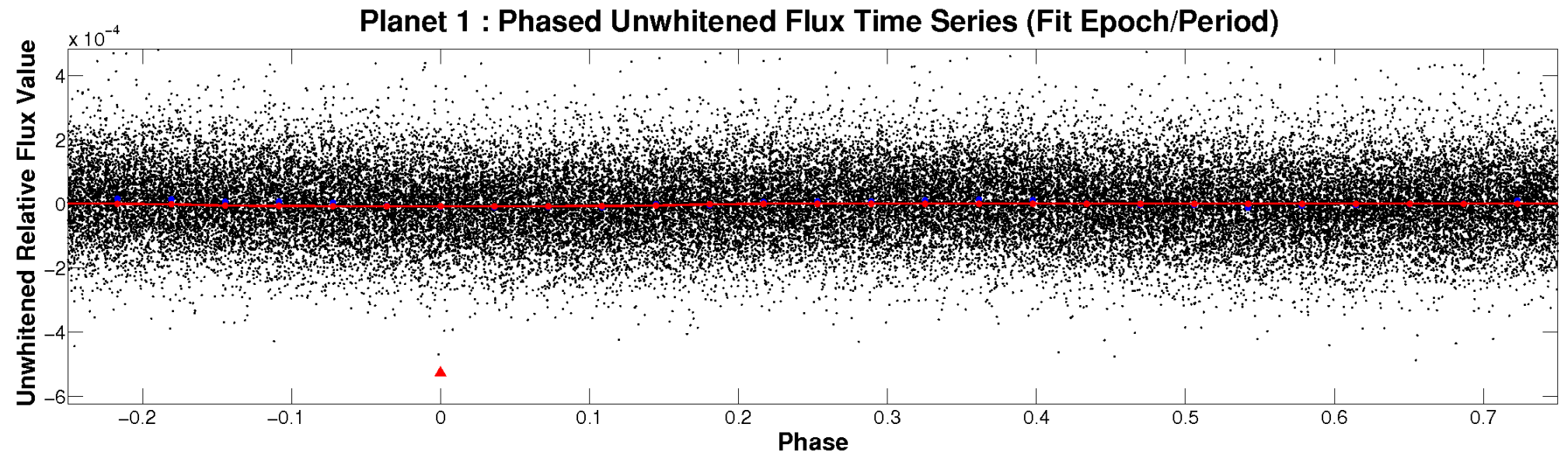


ALT Odd/Even

TCE 005514283-01

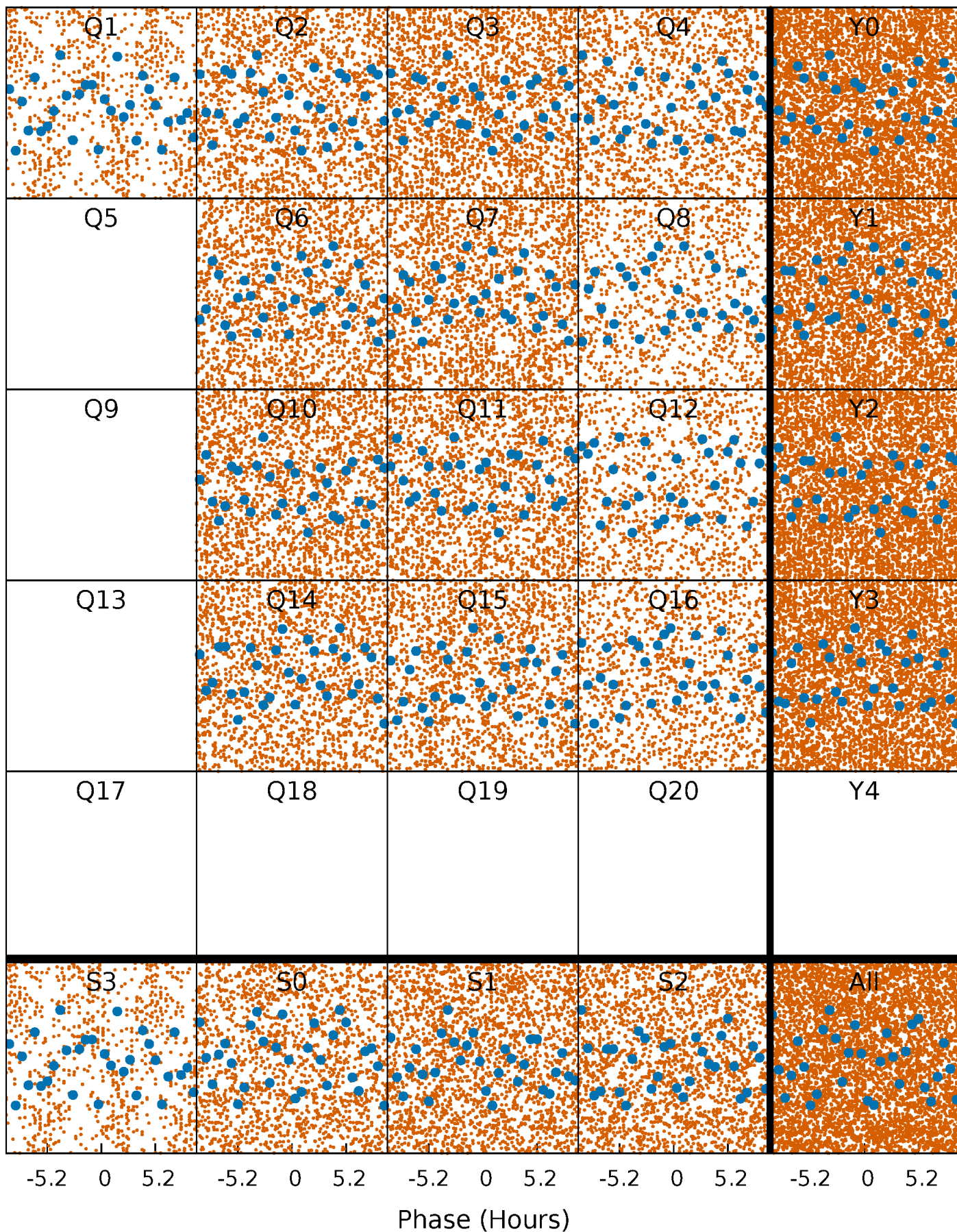


Non-Whitened Vs. Whitened Light Curve



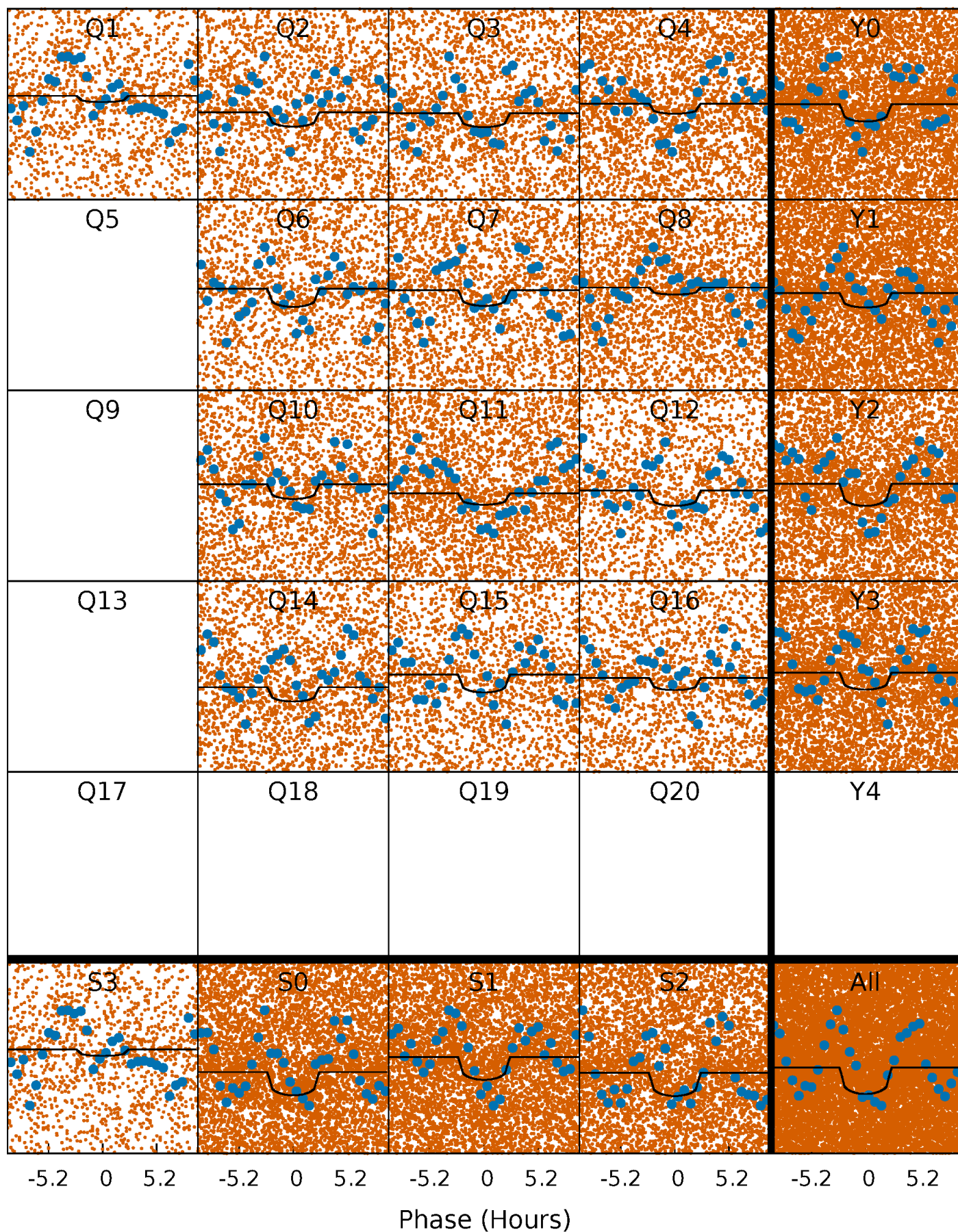
PDC Quarter-Phased Transit Curves

TCE 005514283-01 P= 0.565360 Days $T_0=131.703074$ (BKJD)



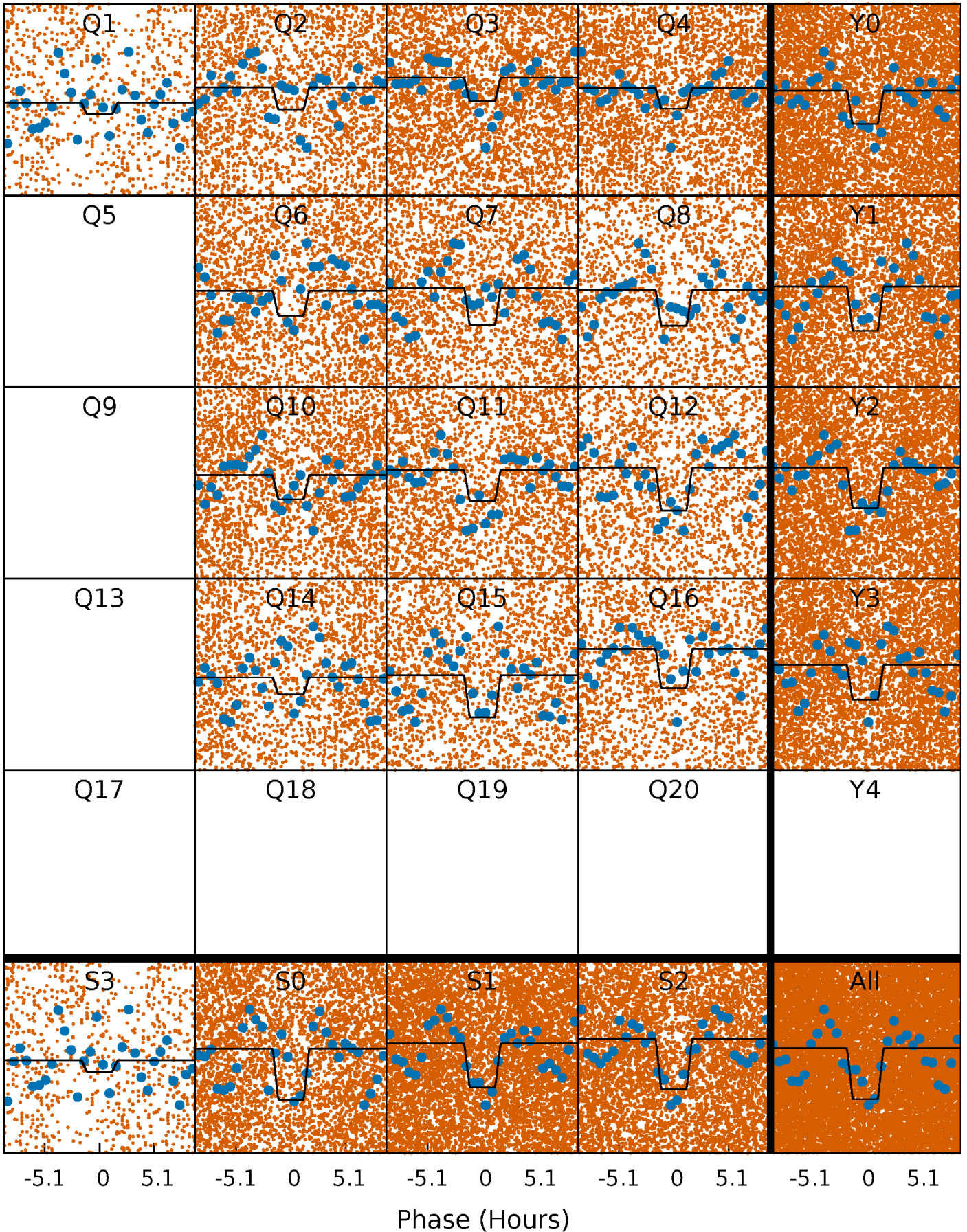
DV Quarter-Phased Transit Curves

TCE 005514283-01 P= 0.565360 Days $T_0=131.703074$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

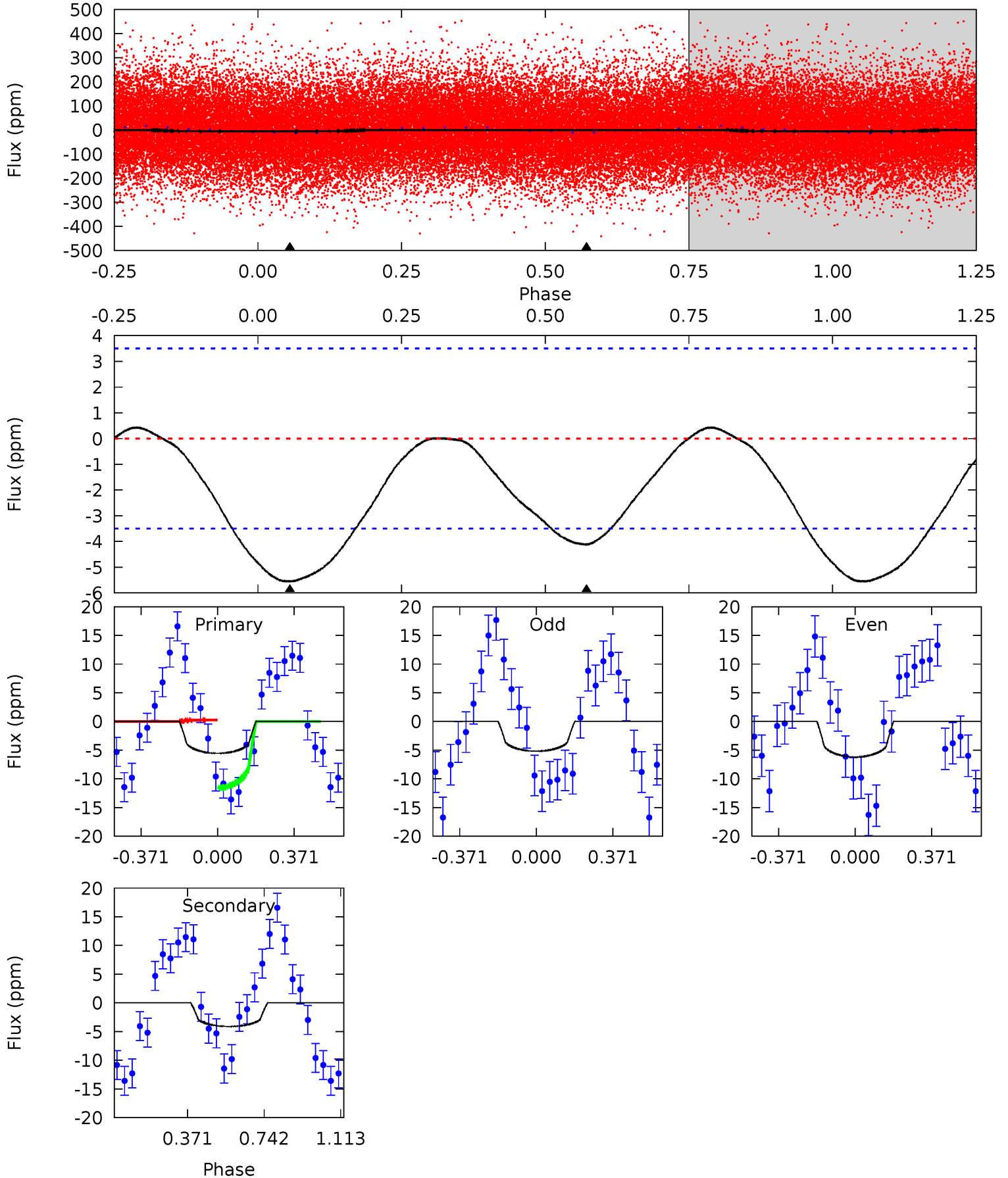
TCE 005514283-01 P= 0.565392 Days $T_0=131.695585$ (BKJD)



DV Model-Shift Uniqueness Test

005514283-01, P = 0.565360 Days, E = 131.137714 Days

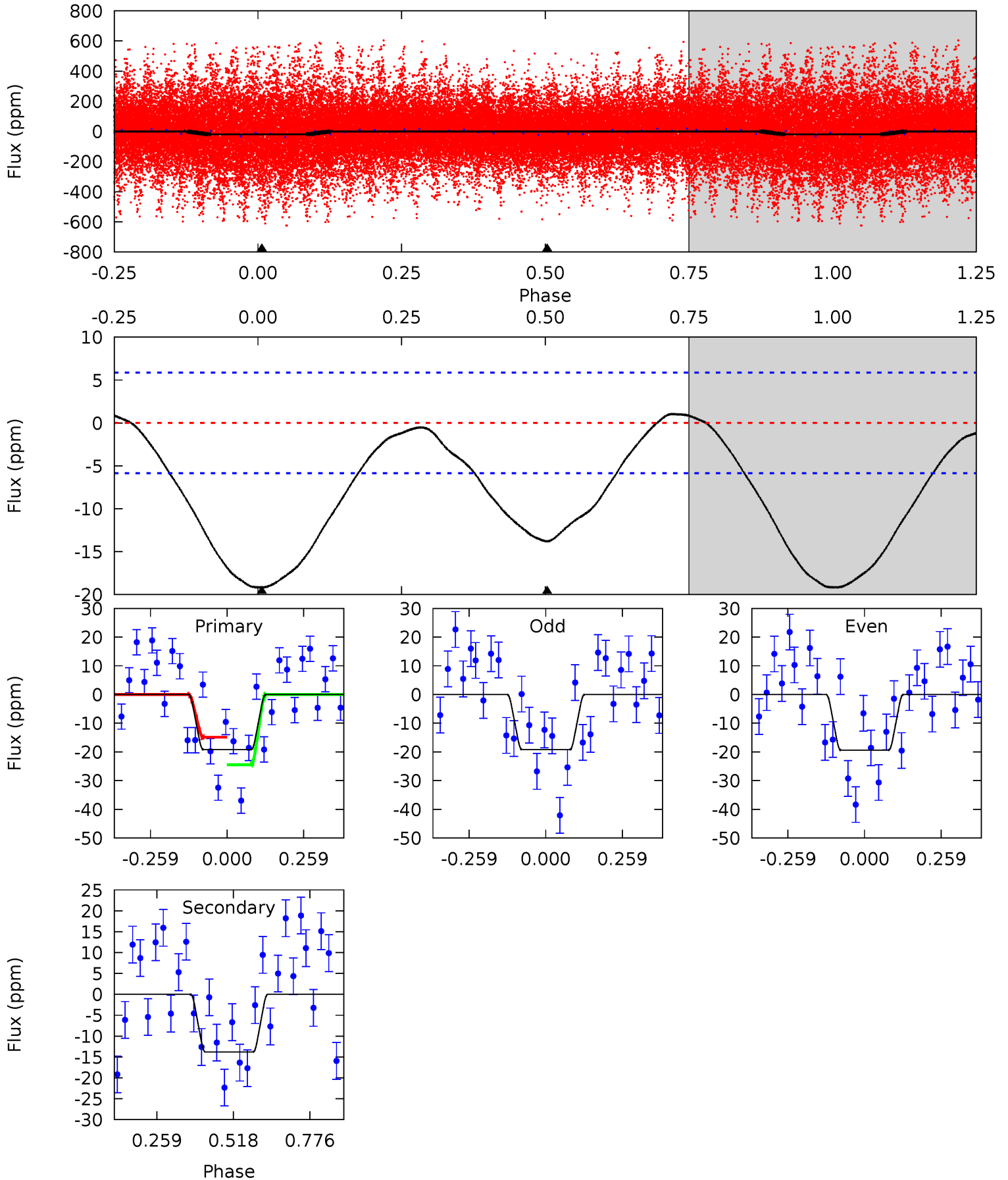
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.79	5.04	0	0	4.28	0.89	0.19	6.79	6.79	5.04	5.04	0.62	1.06	0.07	6.93



Alt Model-Shift Uniqueness Test

005514283-01, P = 0.565392 Days, E = 131.130193 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	10.3	0	0	4.36	1.13	0.67	14.3	14.3	10.3	10.3	0.07	0.94	0.05	3.28



Stellar Parameters For KIC 005514283

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6817^{+184}_{-204}	$3.812^{+0.285}_{-0.095}$	$-0.160^{+0.300}_{-0.250}$	$2.498^{+0.523}_{-0.784}$	$1.478^{+0.243}_{-0.243}$	$0.134^{+0.254}_{-0.046}$
	+3%/-3%	+7%/-2%	+188%/-156%	+21%/-31%	+16%/-16%	+190%/-34%
Source	PHO1	FLK73	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 005514283-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-4 ± 1	$0.81^{+0.71}_{-0.48}$	5298^{+306}_{-453}	4872^{+4208}_{-8311}	$0.793^{+4.315}_{-0.562}$
Alt.	-14 ± 1	$1.26^{+0.73}_{-0.68}$	5276^{+350}_{-421}	5470^{+3219}_{-1519}	$1.104^{+4.023}_{-0.653}$

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 $A_{obs} \gg 1.0$

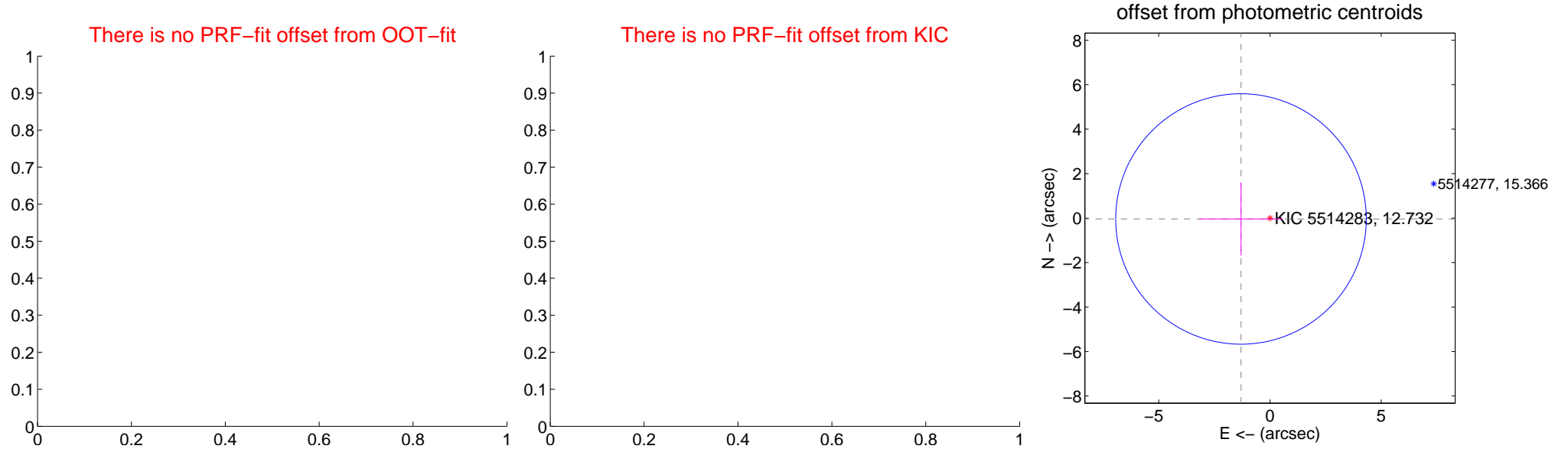
DV Centroid Data

Supplemental centroid analysis for 005514283-01. Kepler magnitude: 12.73. Transit SNR 6.31

There are 0 quarters with good PRF difference image offsets

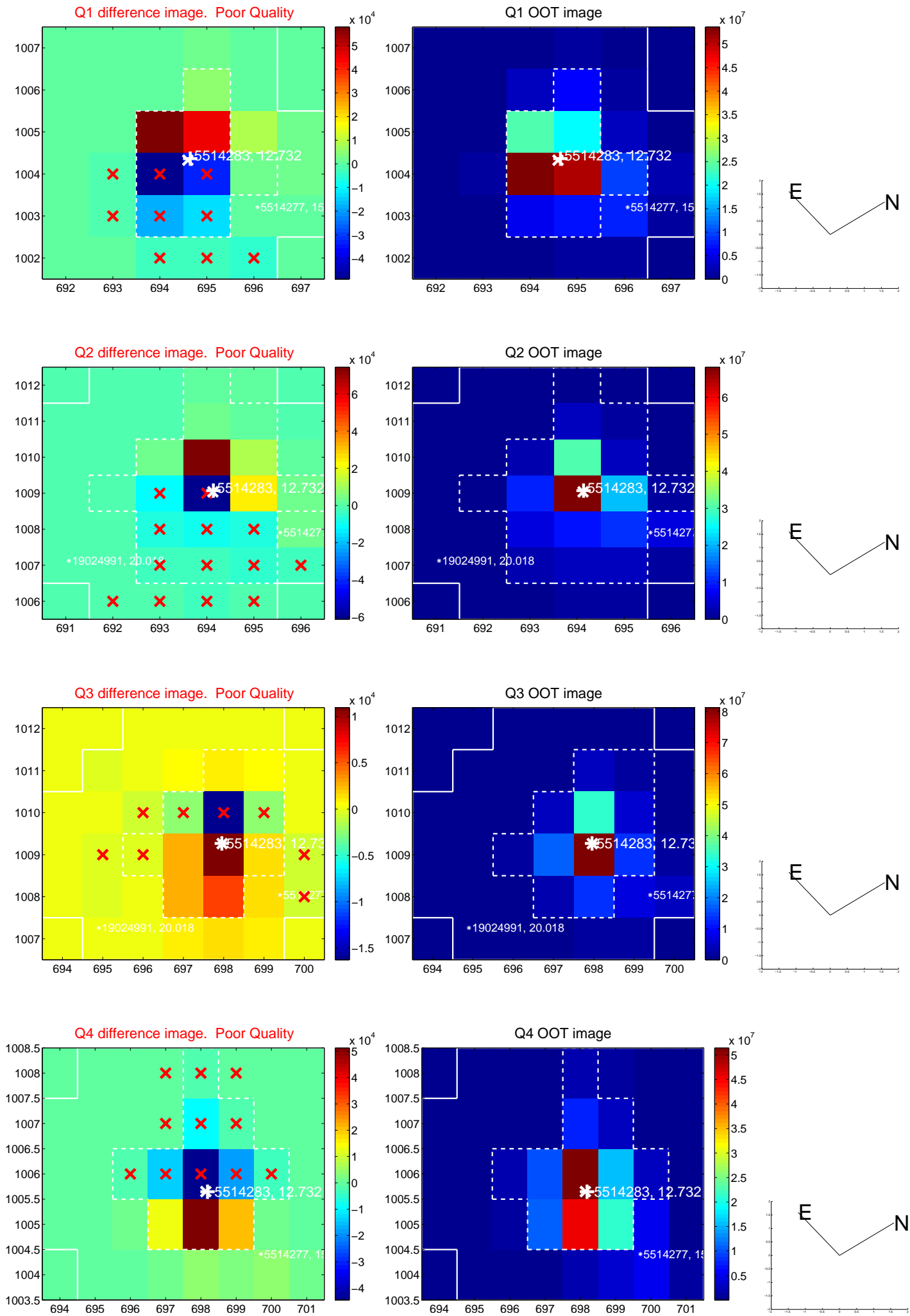
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	1.30 ± 1.88	0.69	1.30 ± 1.88	-0.04 ± 1.64

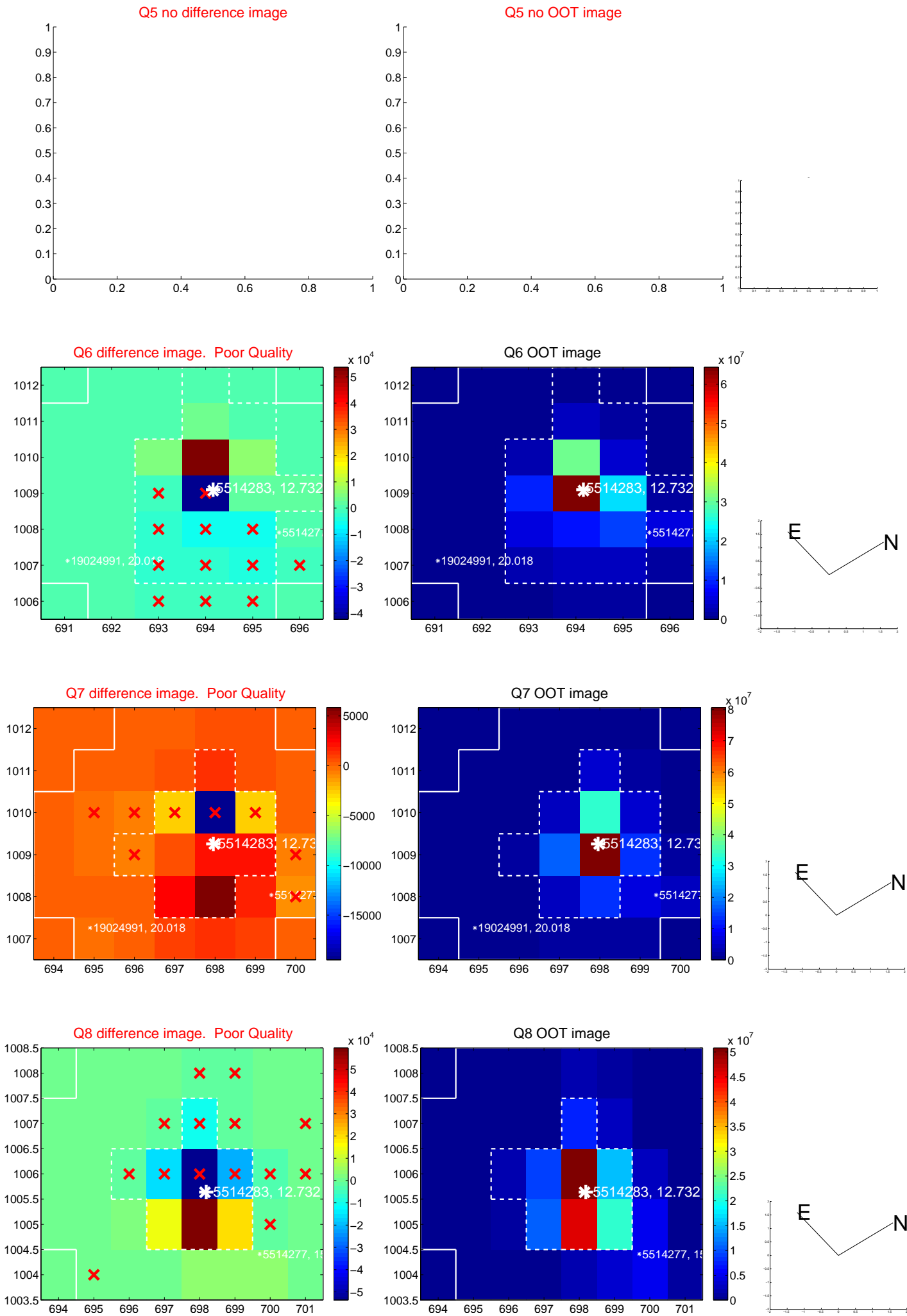


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

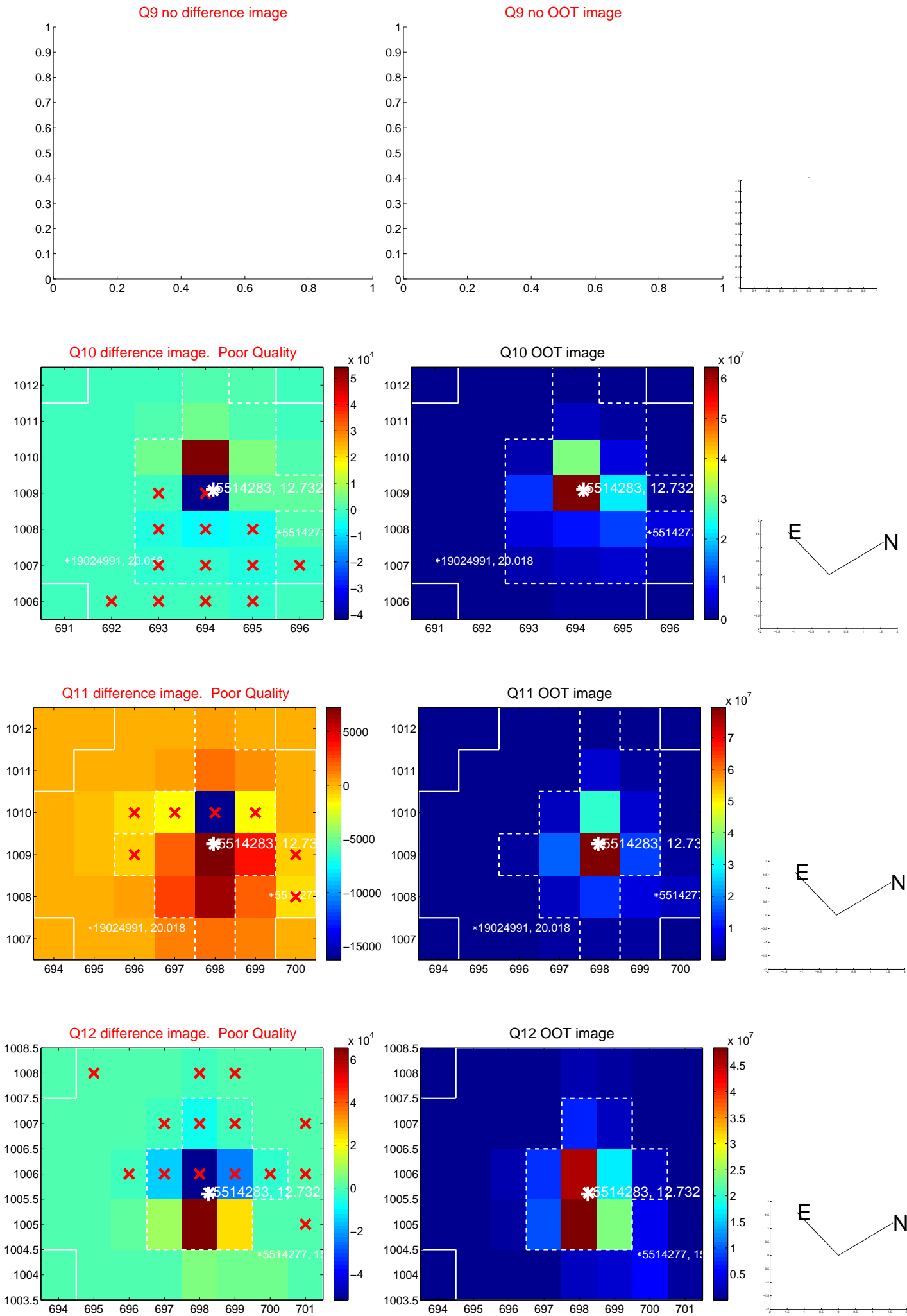
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



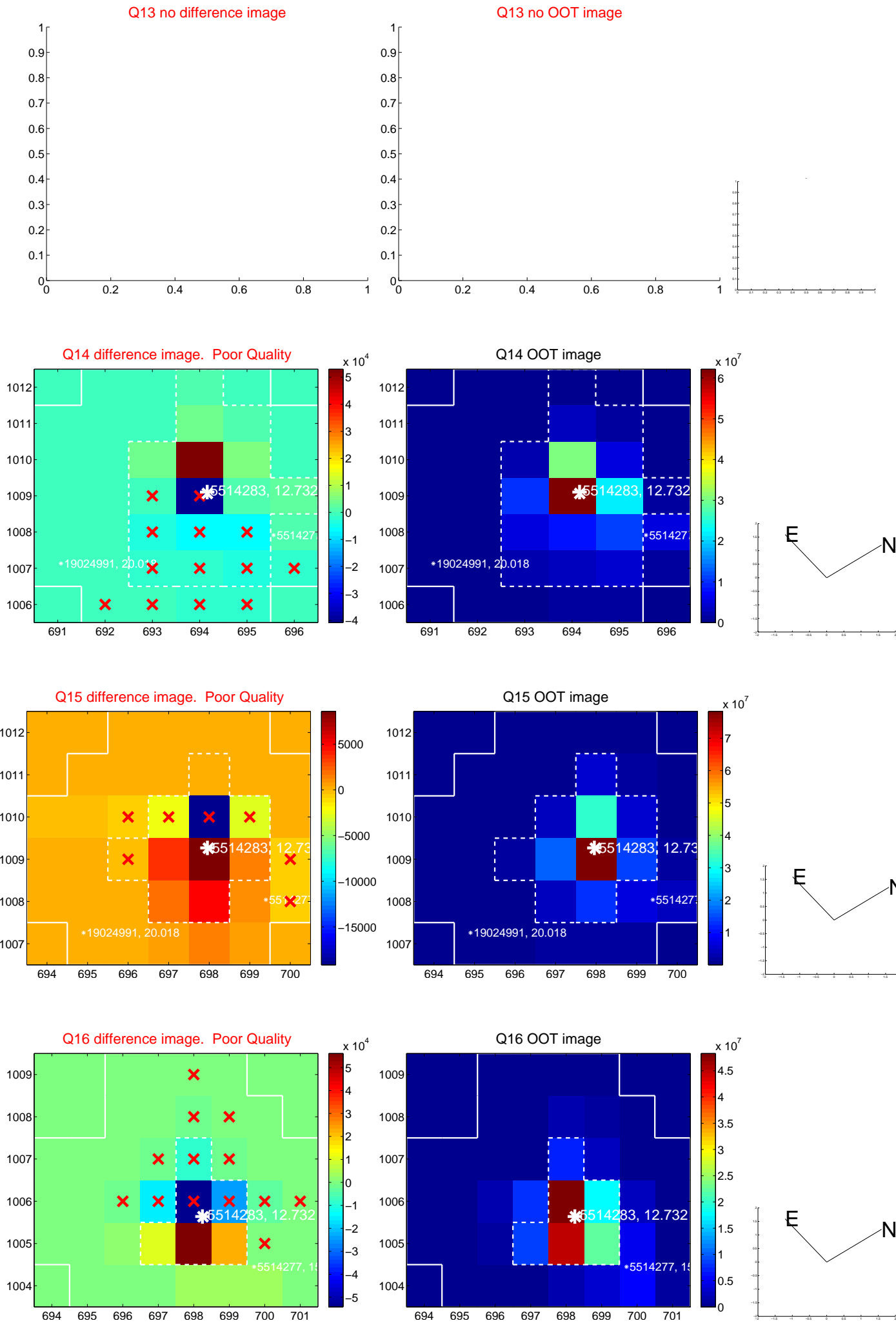
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



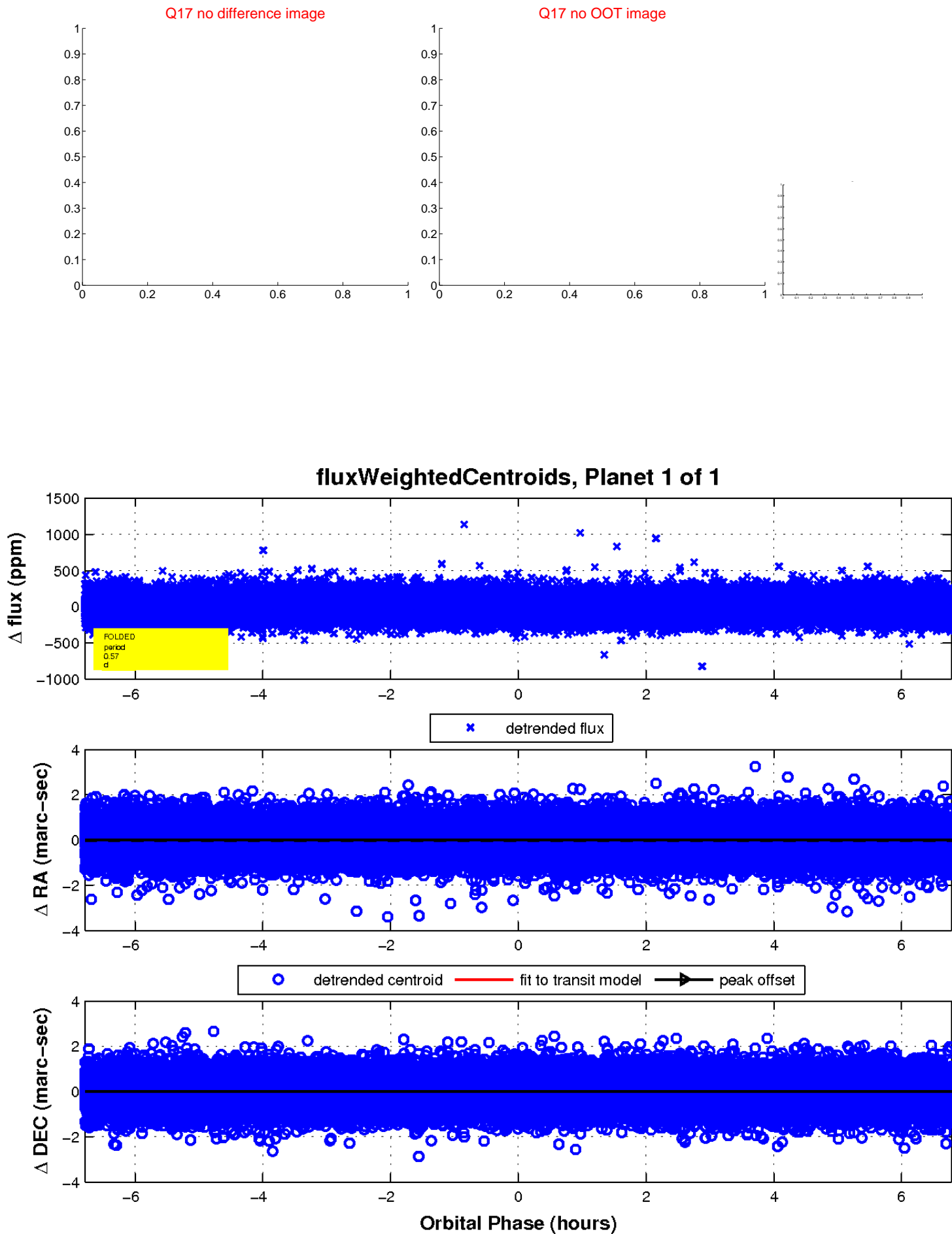
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

