

KIC 010071056

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})
010071056-01	OBS	No	1.132052	132.144527	177.0	3.000	10.3	-1.0	2.08	7707	2.80	21392.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010071056-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

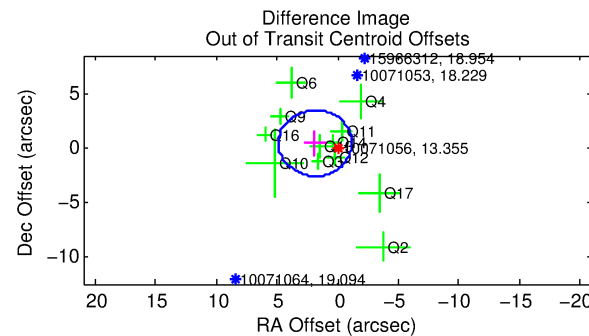
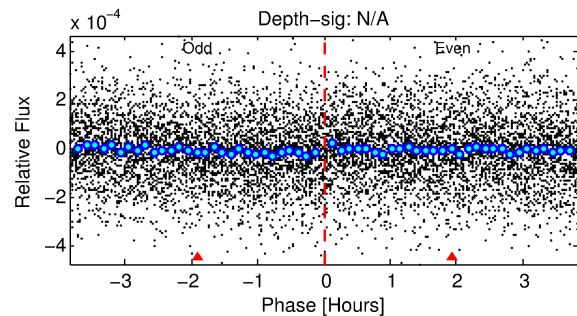
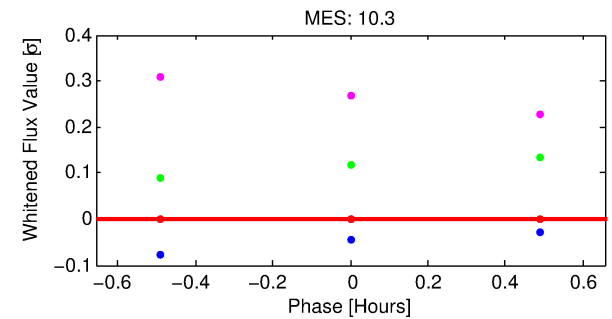
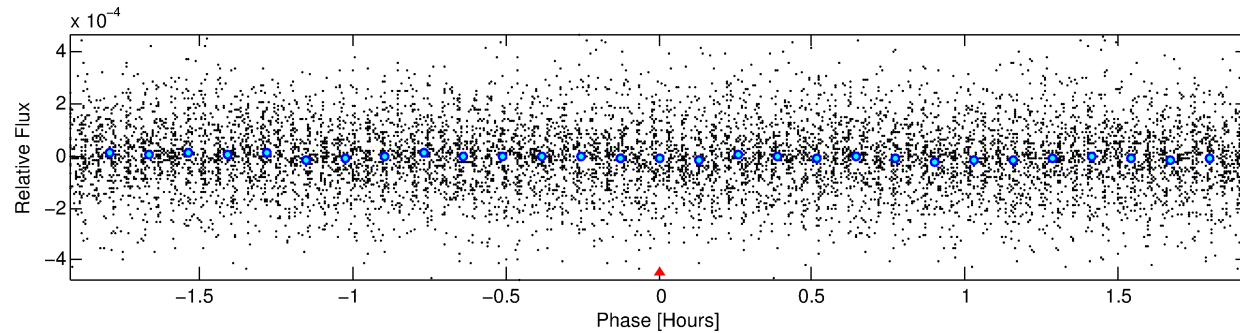
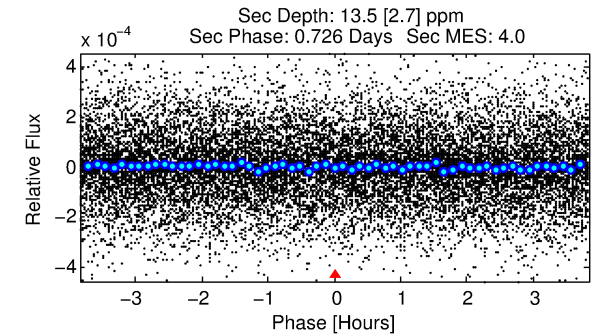
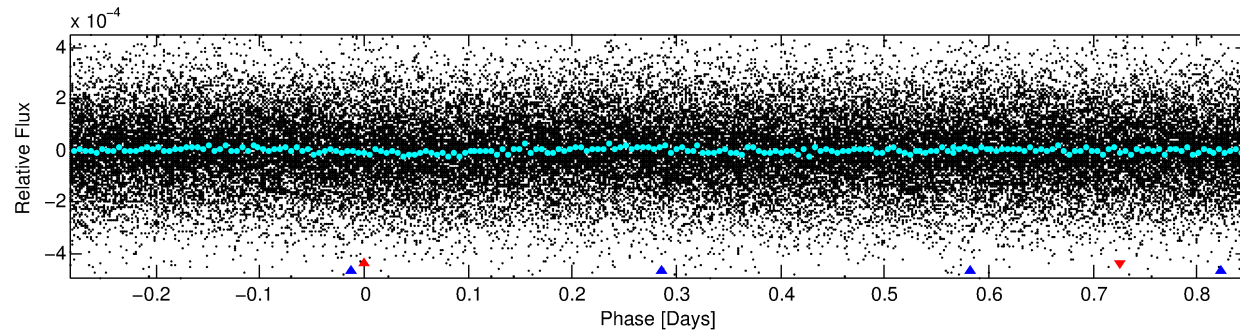
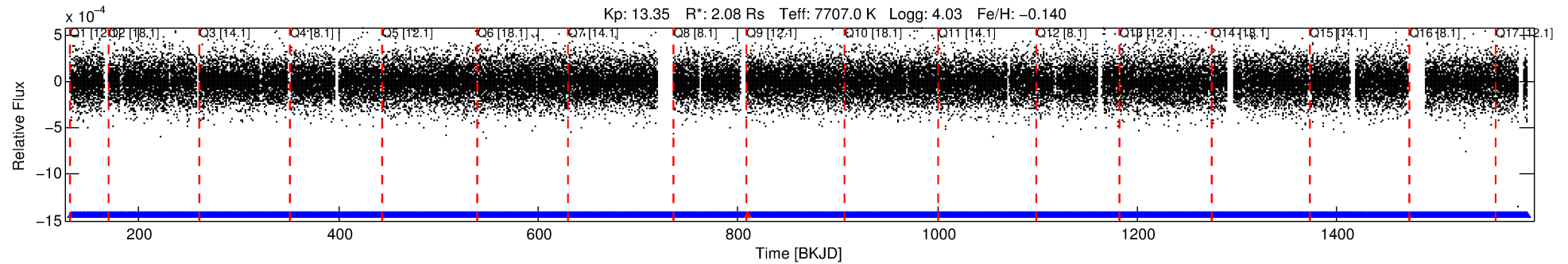
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010071056-01

No Significant Match Found

DV One-Page Summary

KIC: 10071056 Candidate: 1 of 2 Period: 1.132 d



TPS TCE Results:

Period = 1.13205 d
Epoch = 132.1445 BKJD

DV fit results are unavailable

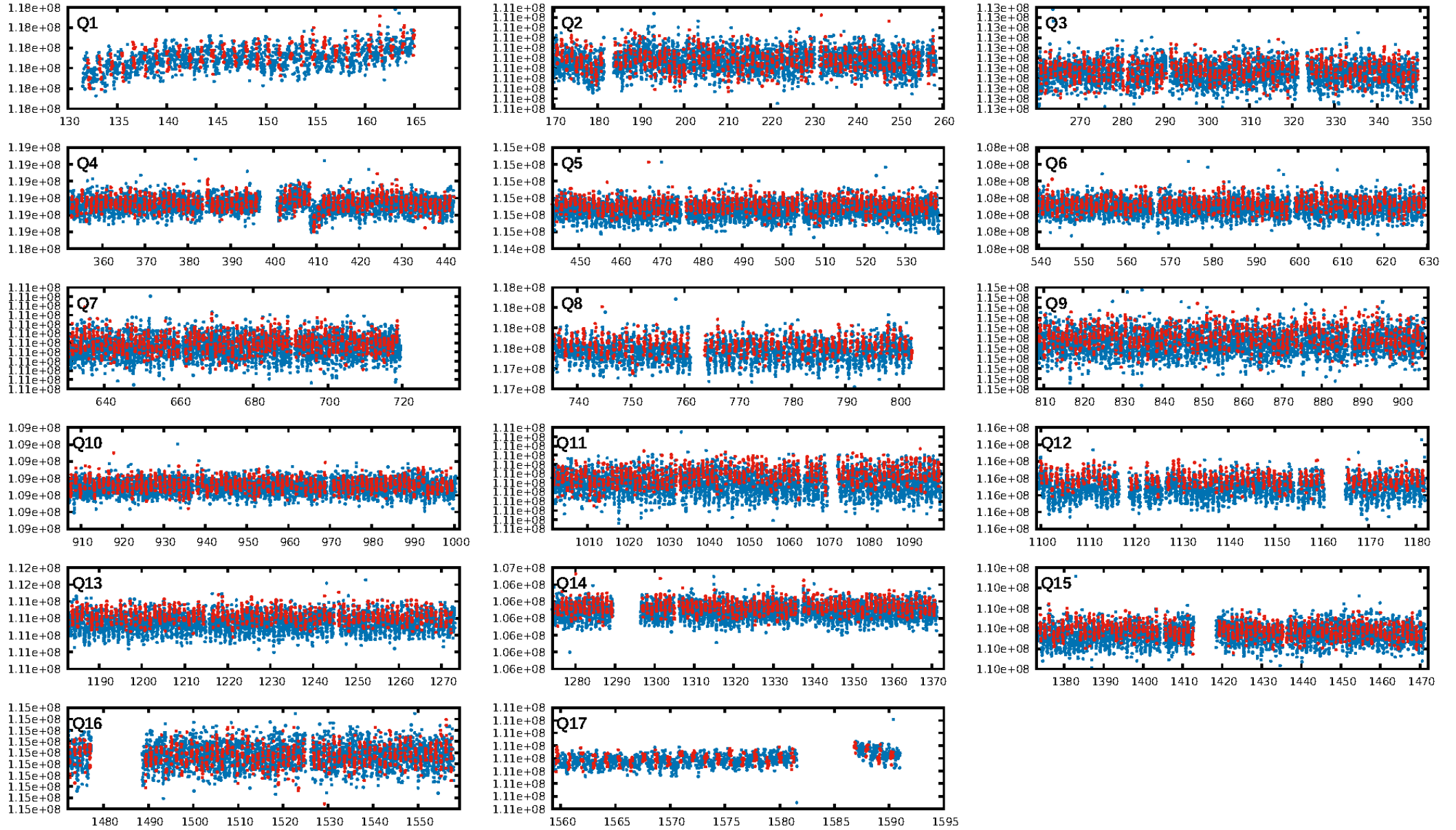
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [953.52σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.29e-20
RollingBand-fgt: 1.00 [1124/1125]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.910 arcsec [1.89σ]
KicOffset-rm: 1.805 arcsec [1.82σ]
OotOffset-st: 4/2/3/3 [12]
KicOffset-st: 4/2/3/3 [12]
DiffImageQuality-fgm: 0.08 [1/12]
DiffImageOverlap-fno: 1.00 [17/17]

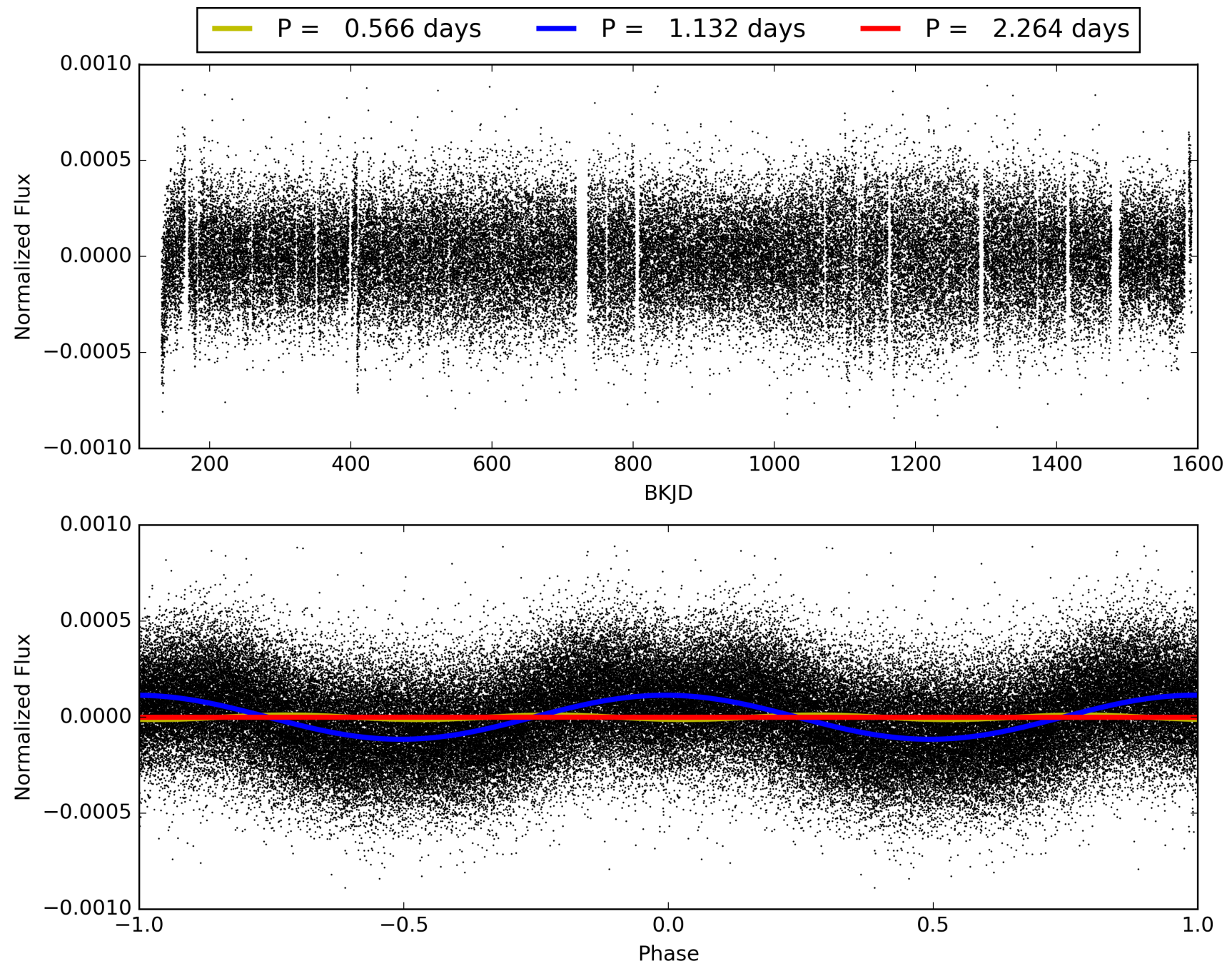
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:00:32 Z

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

TCE 010071056-01, PDC Light Curves

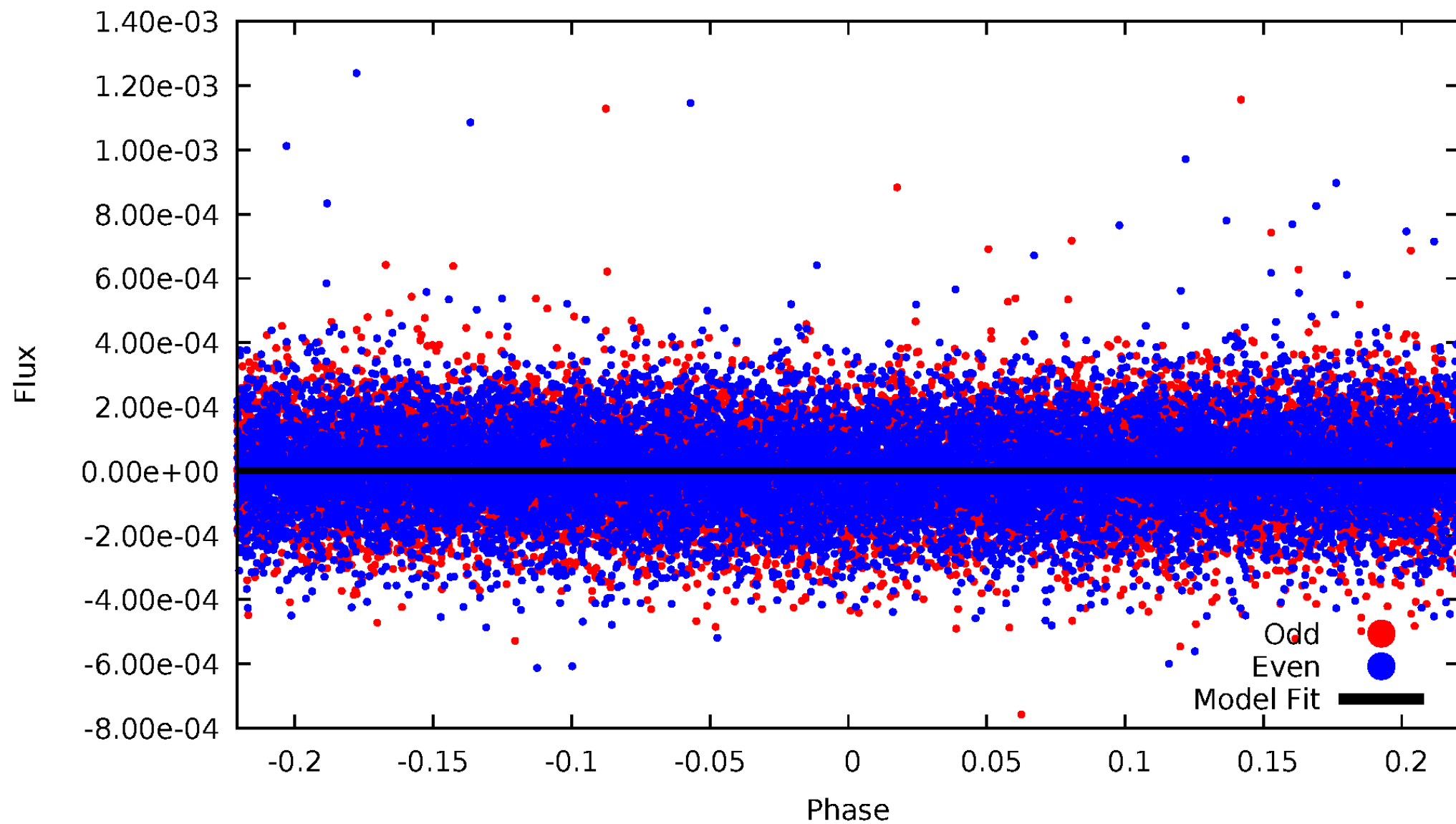


TCE 010071056-01



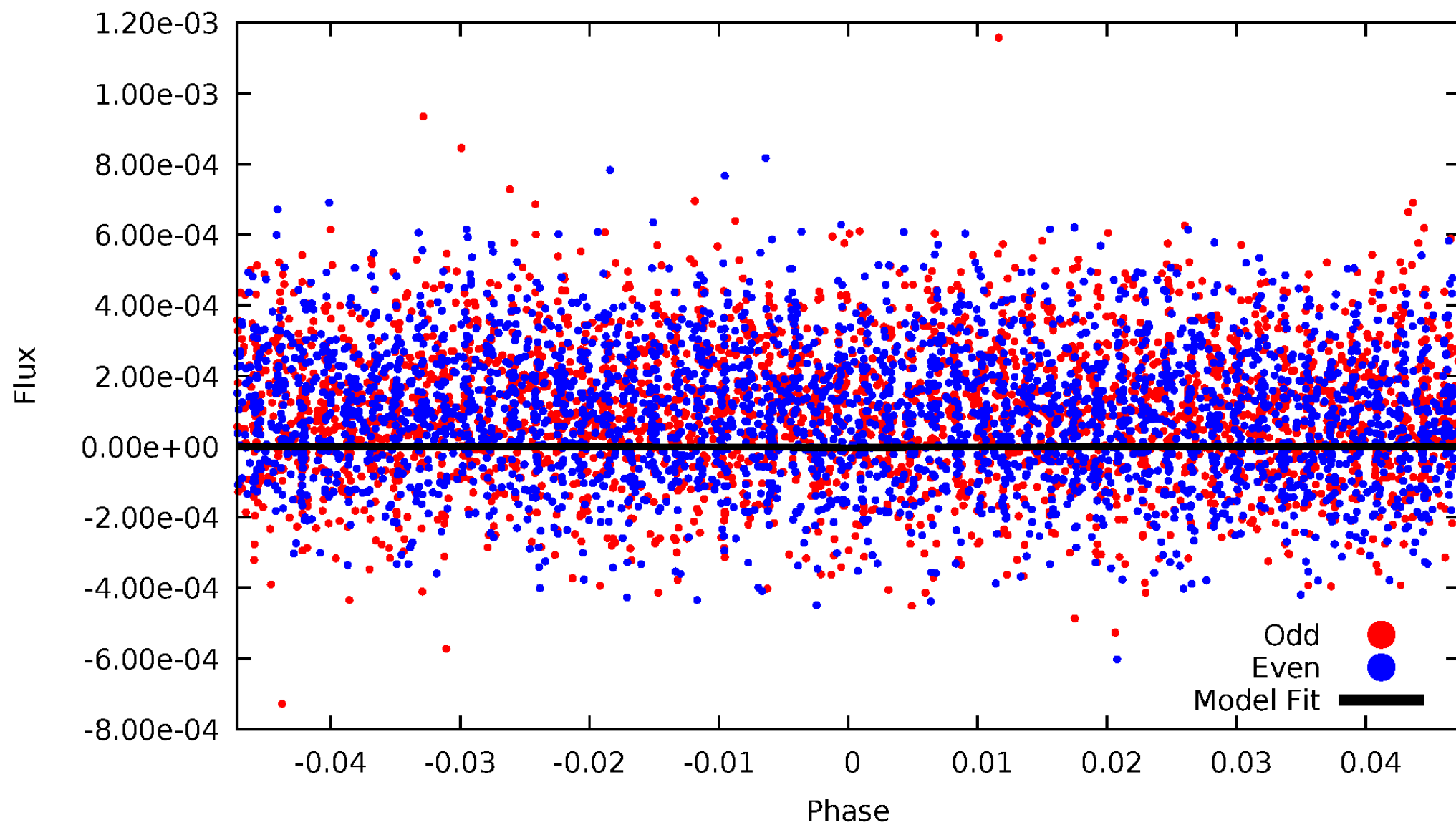
DV Odd/Even

TCE 010071056-01

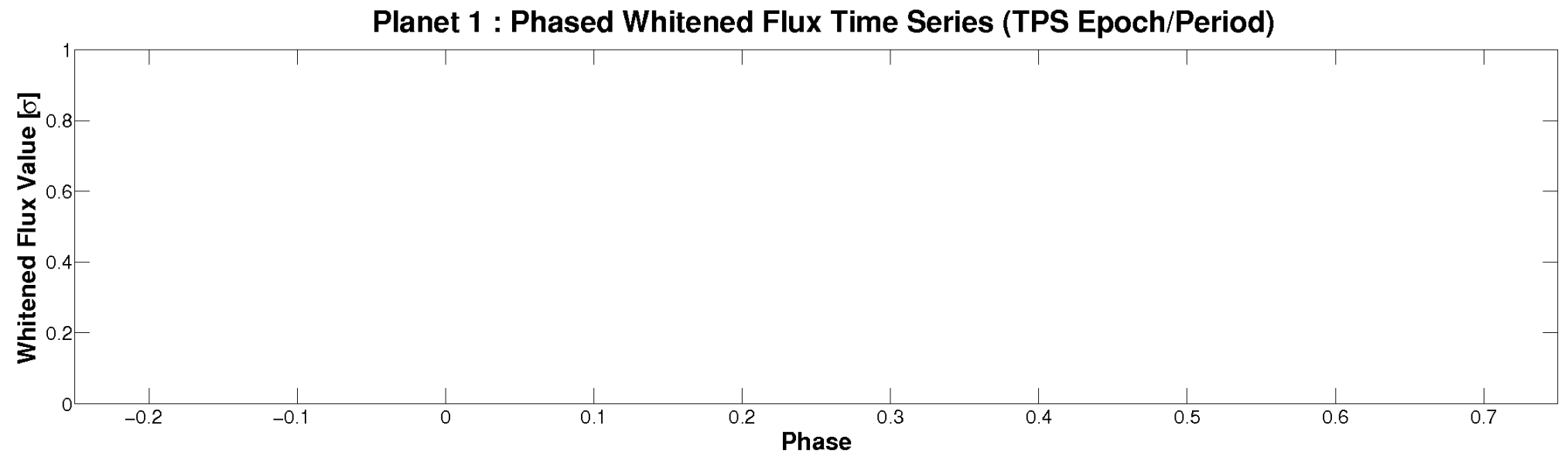
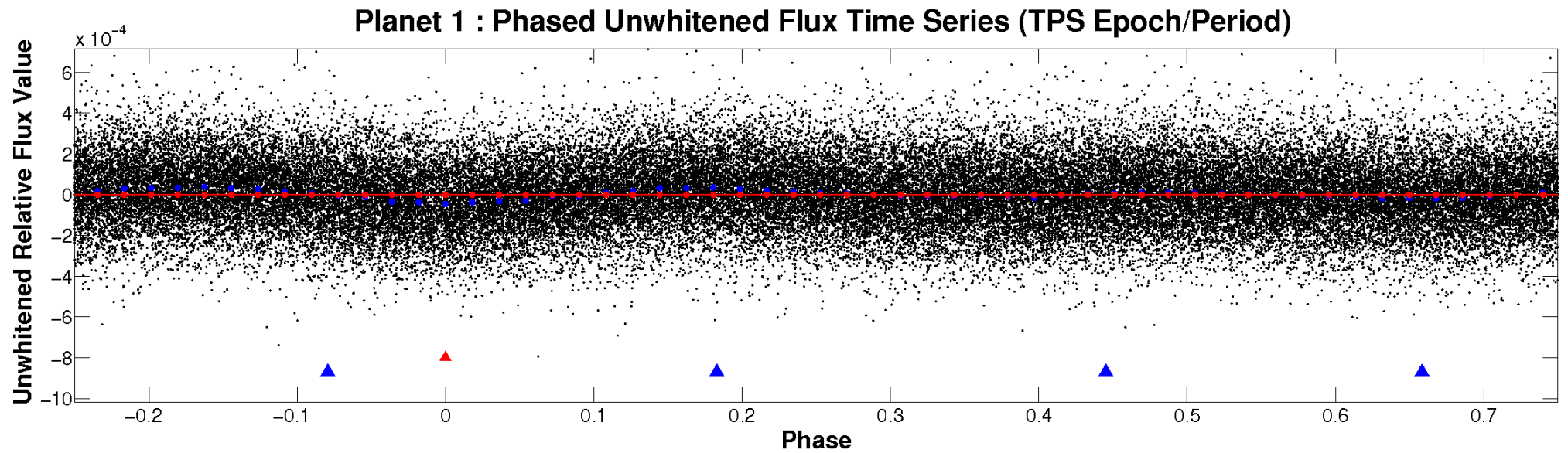


ALT Odd/Even

TCE 010071056-01

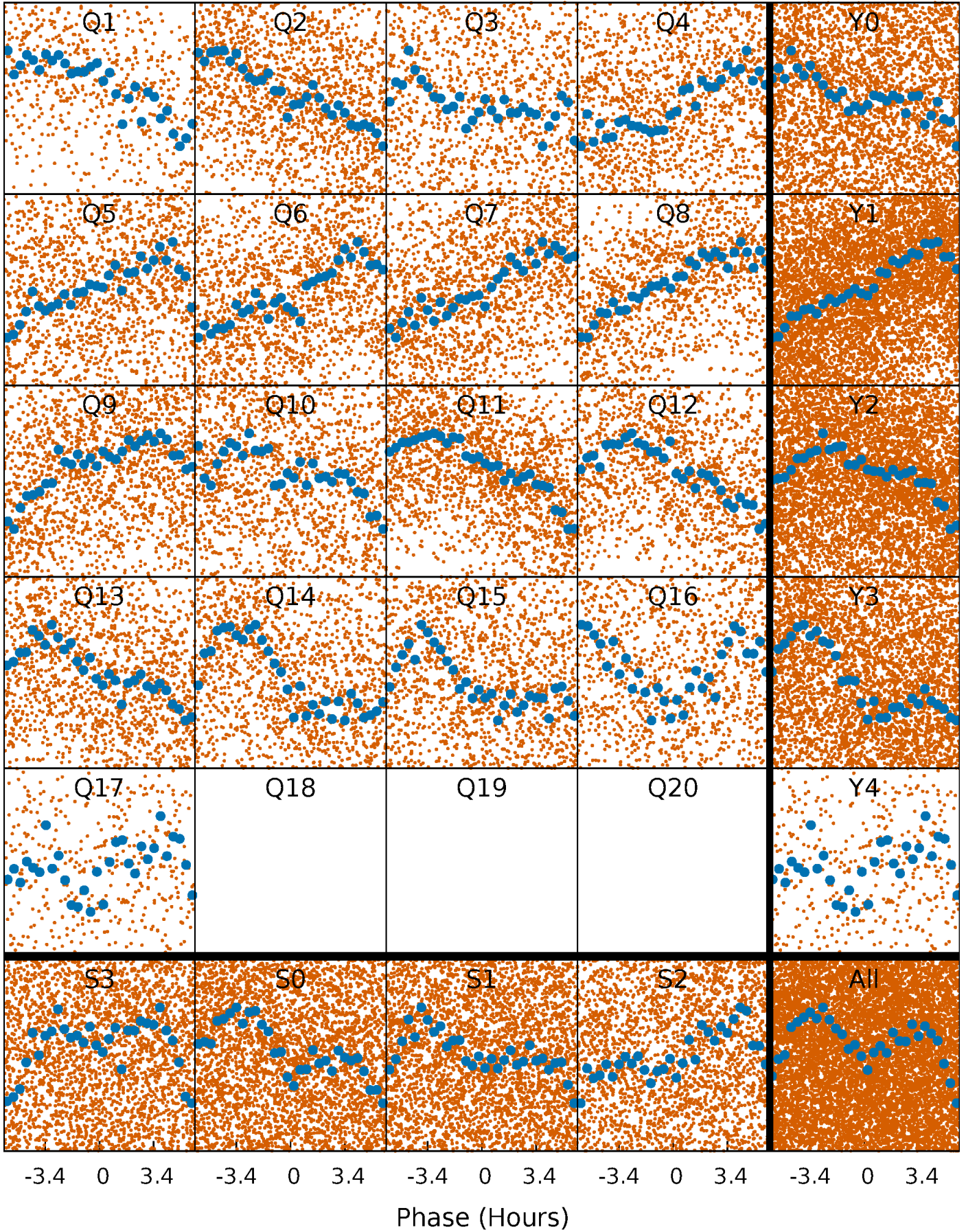


Non-Whitened Vs. Whitened Light Curve



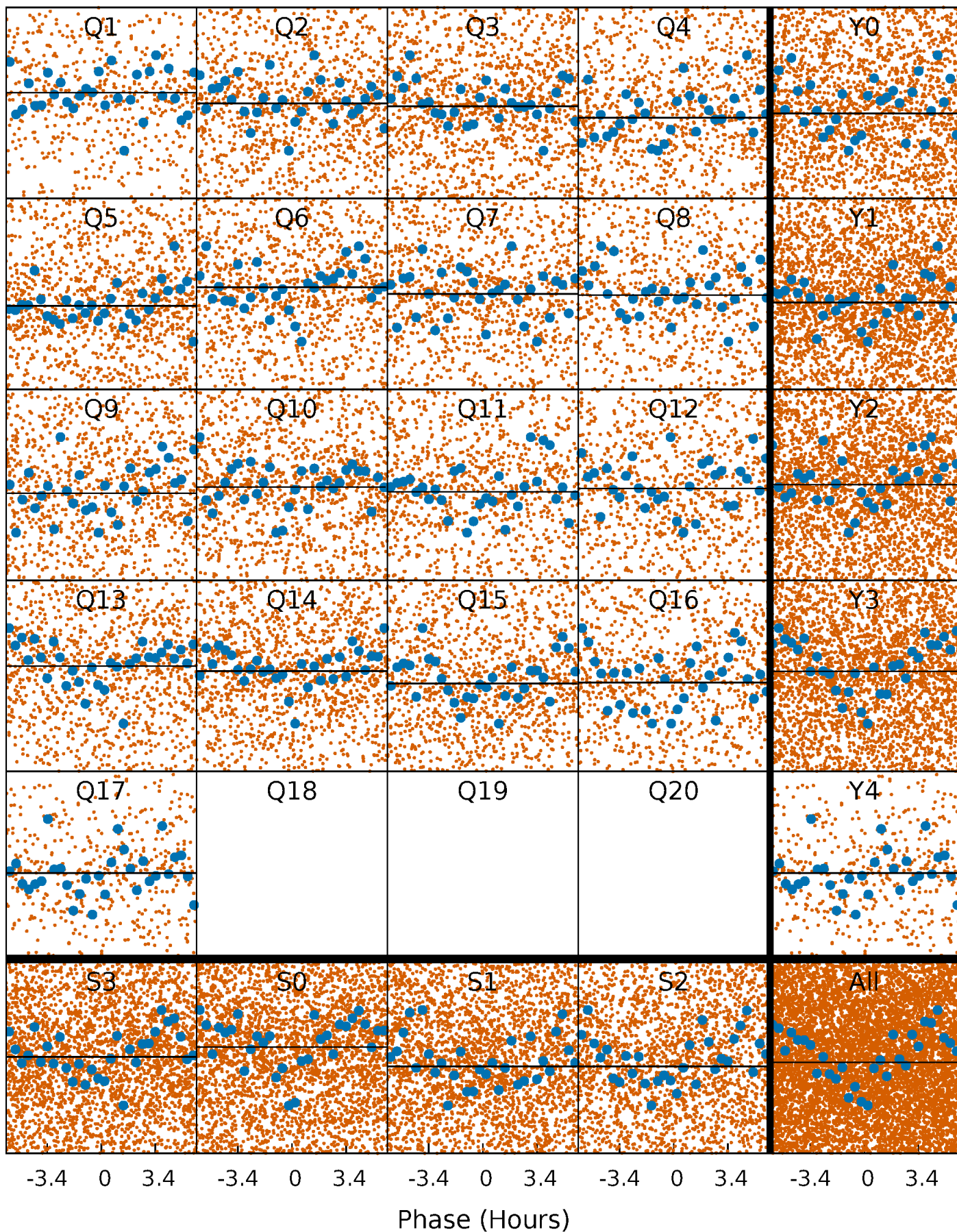
PDC Quarter-Phased Transit Curves

TCE 010071056-01 P= 1.132052 Days $T_0=132.144527$ (BKJD)



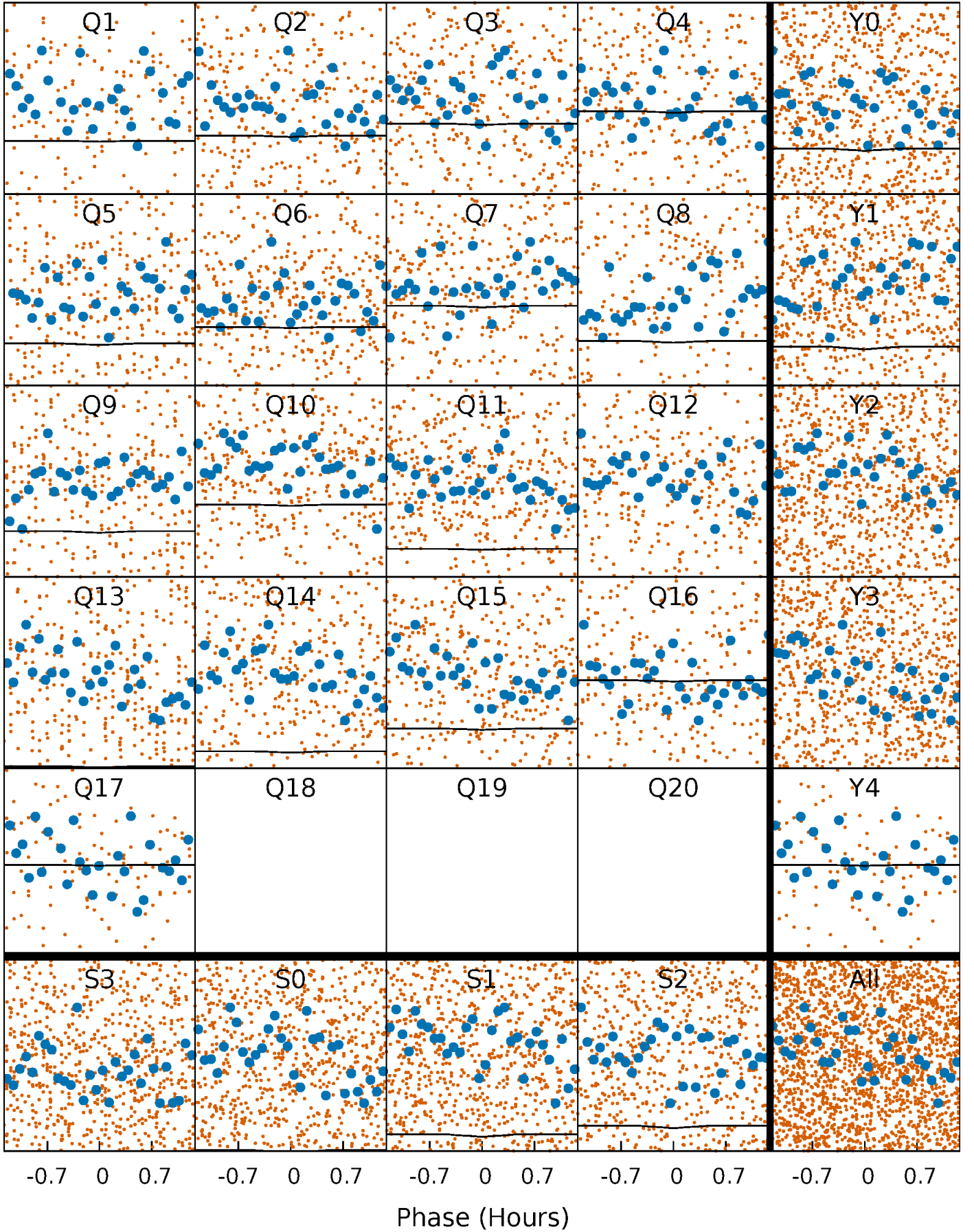
DV Quarter-Phased Transit Curves

TCE 010071056-01 P= 1.132052 Days $T_0=132.144527$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

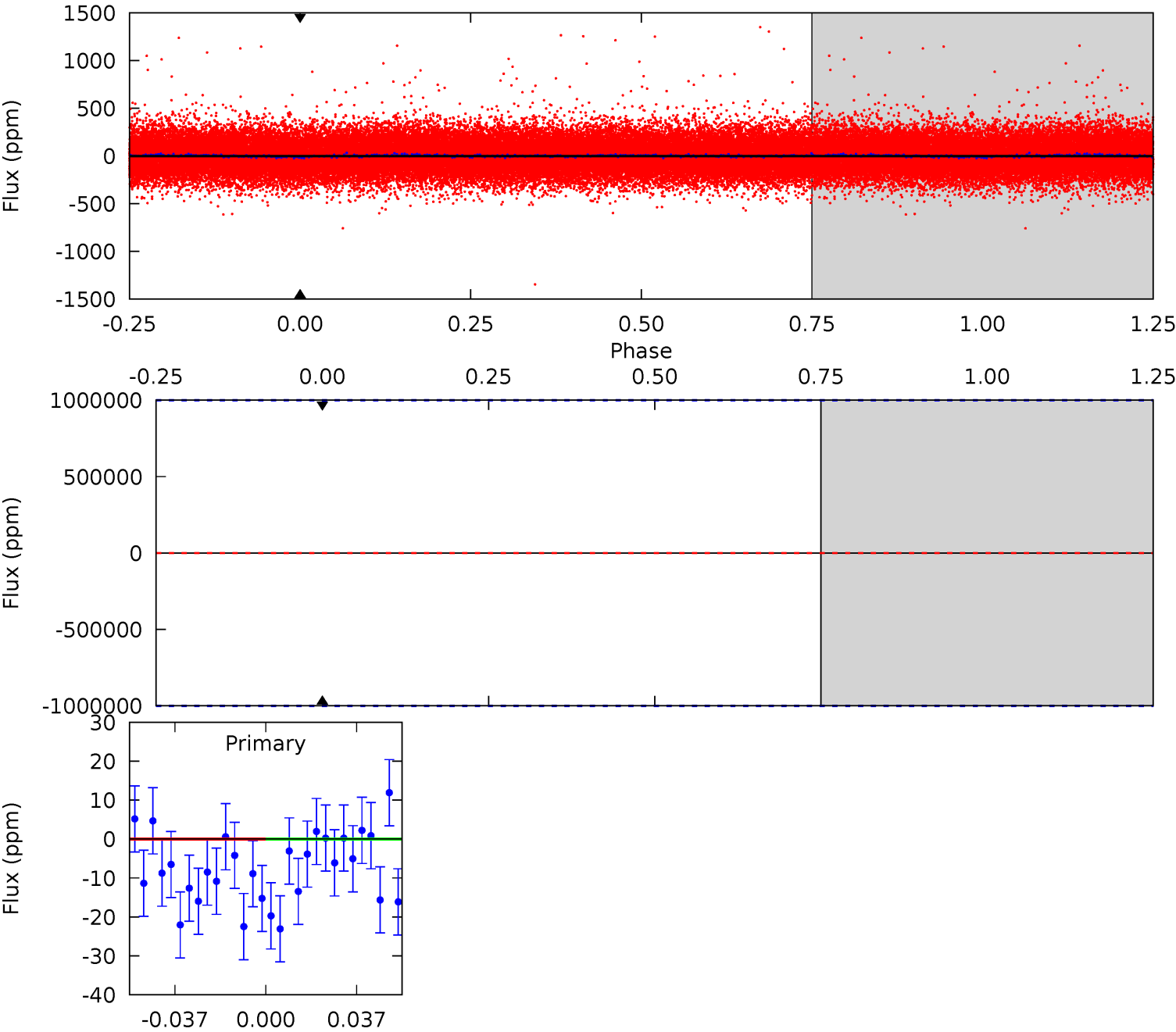
TCE 010071056-01 P= 1.132052 Days $T_0=132.066720$ (BKJD)



DV Model-Shift Uniqueness Test

010071056-01, P = 1.132052 Days, E = 131.012475 Days

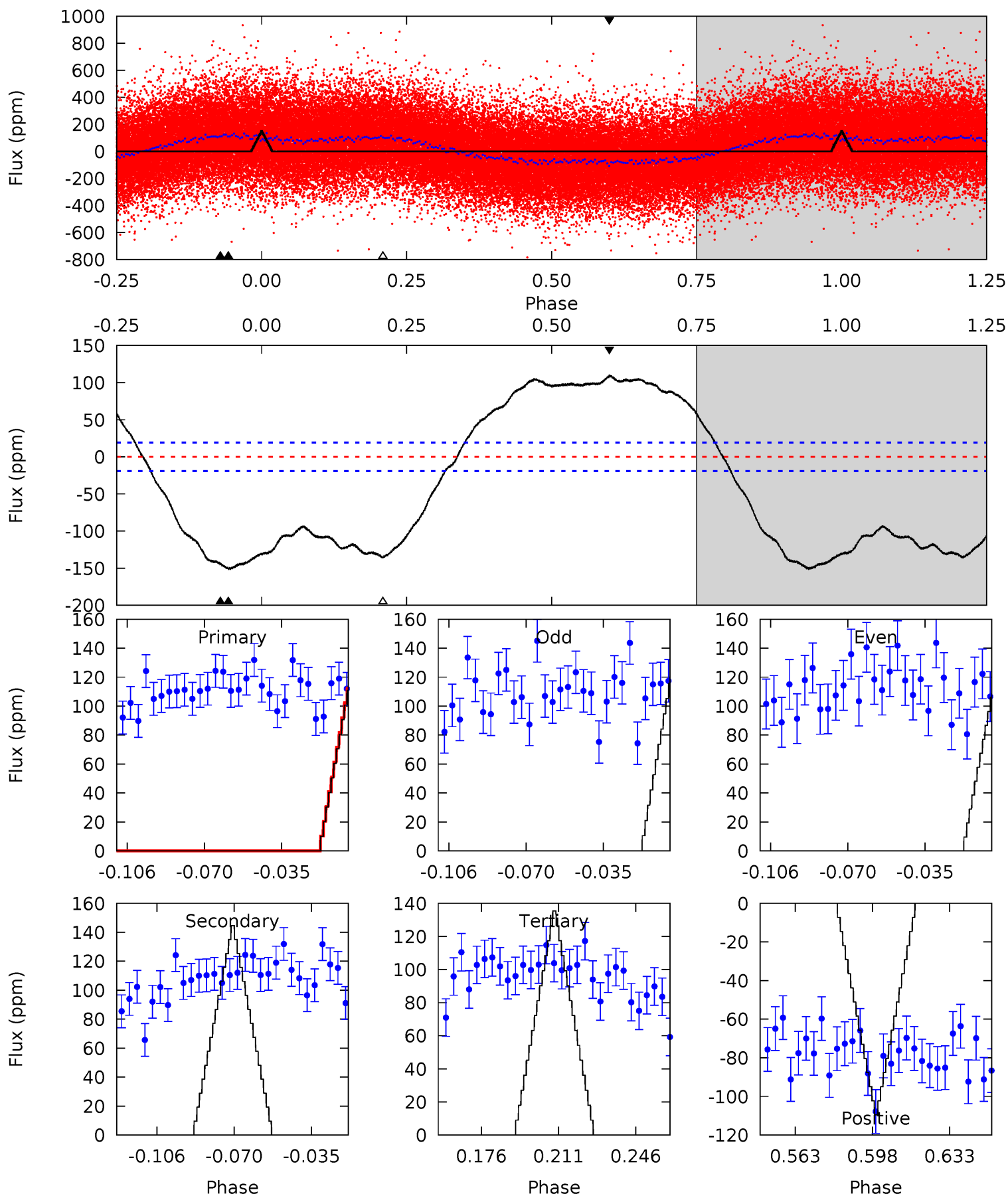
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010071056-01, P = 1.132052 Days, E = 130.934668 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.6	35.9	33.7	27.2	4.78	2.11	23.1	3.90	10.3	2.29	8.72	1.64	1.10	0.42	0.60



Stellar Parameters For KIC 010071056

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7707^{+237}_{-316}	$4.028^{+0.187}_{-0.153}$	$-0.140^{+0.200}_{-0.300}$	$2.082^{+0.525}_{-0.525}$	$1.685^{+0.198}_{-0.273}$	$0.263^{+0.278}_{-0.117}$
	+3%/-4%	+5%/-4%	+143%/-214%	+25%/-25%	+12%/-16%	+106%/-45%
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 010071056-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$16.14^{+16.89}_{-10.87}$	4276^{+297}_{-301}	-6283^{+46009}_{-37036}	$-3.390^{+221.529}_{-220.453}$
Alt.	-145 ± 4	$15.57^{+17.70}_{-11.11}$	4277^{+306}_{-312}	-3111^{+8744}_{-641}	$0.206^{+2.344}_{-0.161}$

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

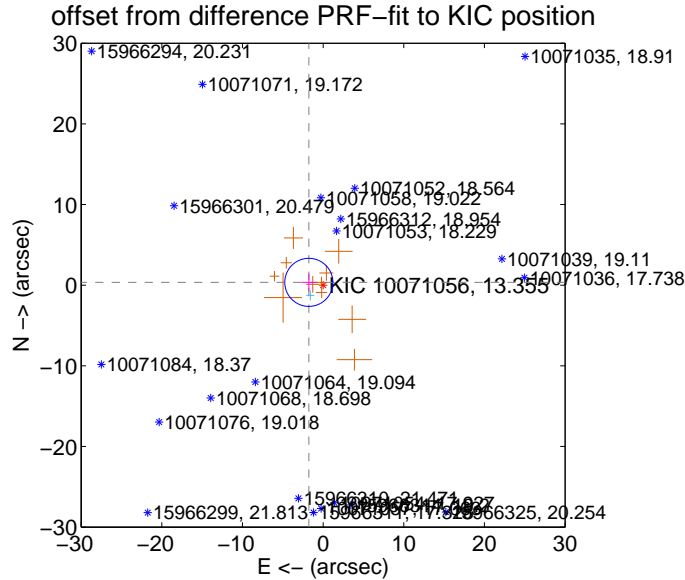
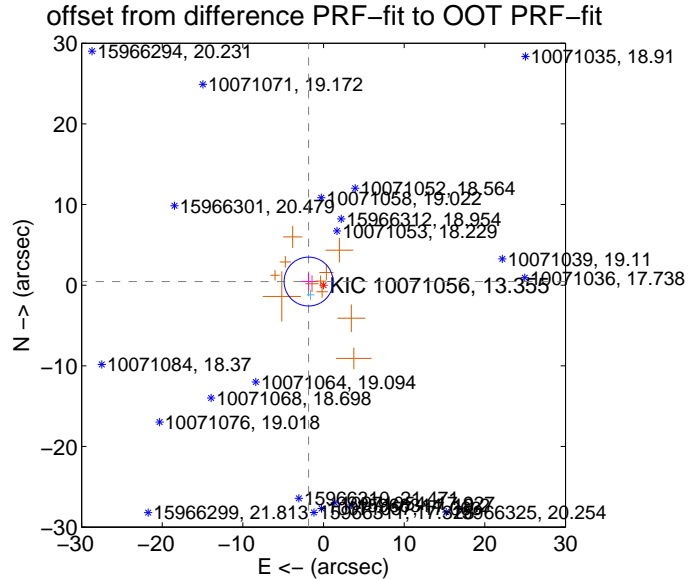
DV Centroid Data

Supplemental centroid analysis for 010071056-01. Kepler magnitude: 13.36. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

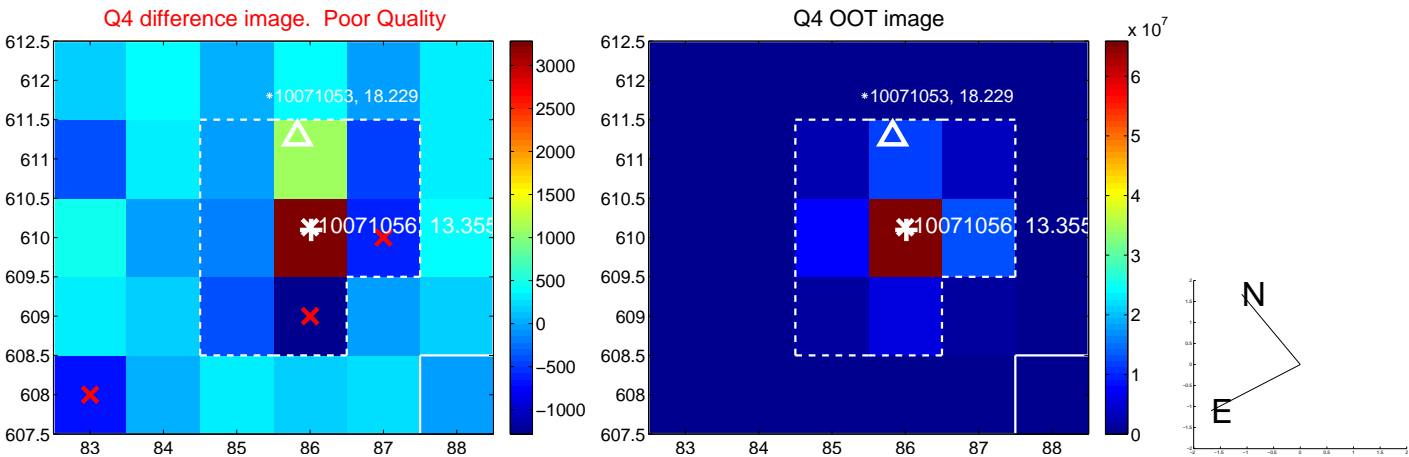
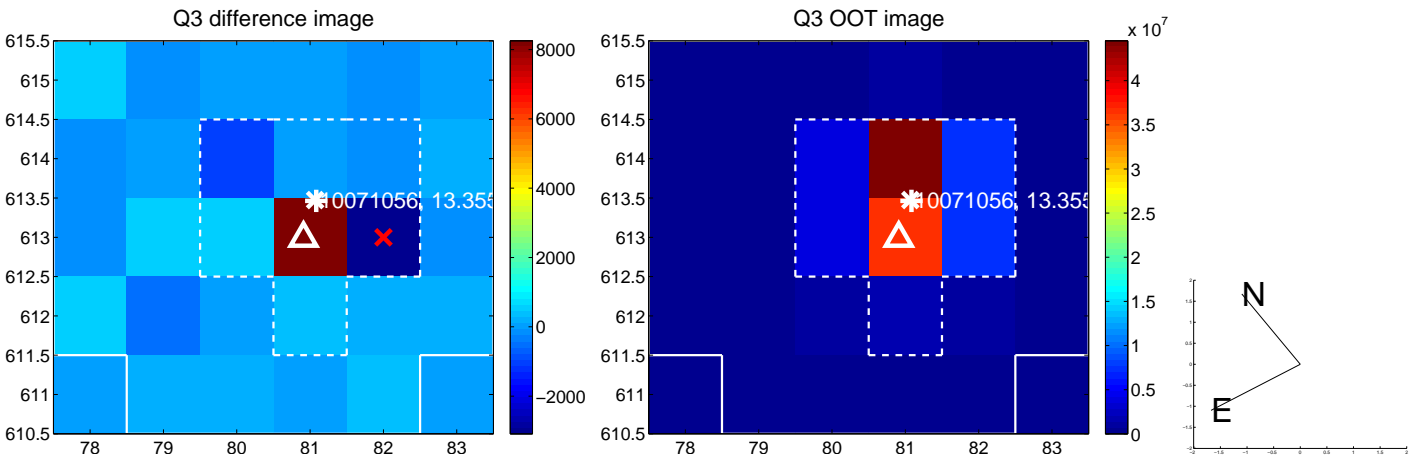
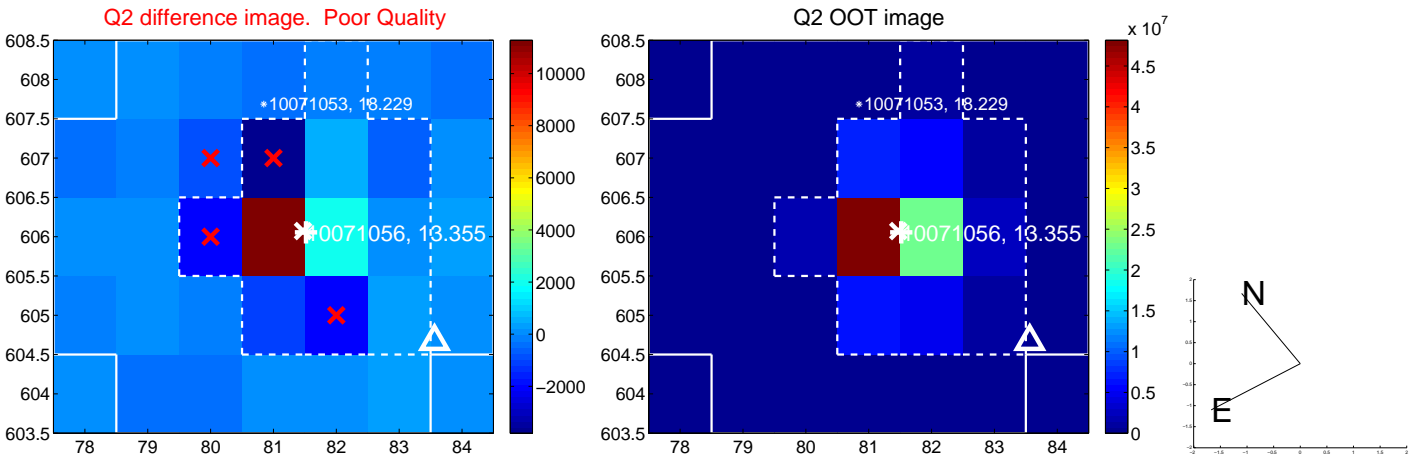
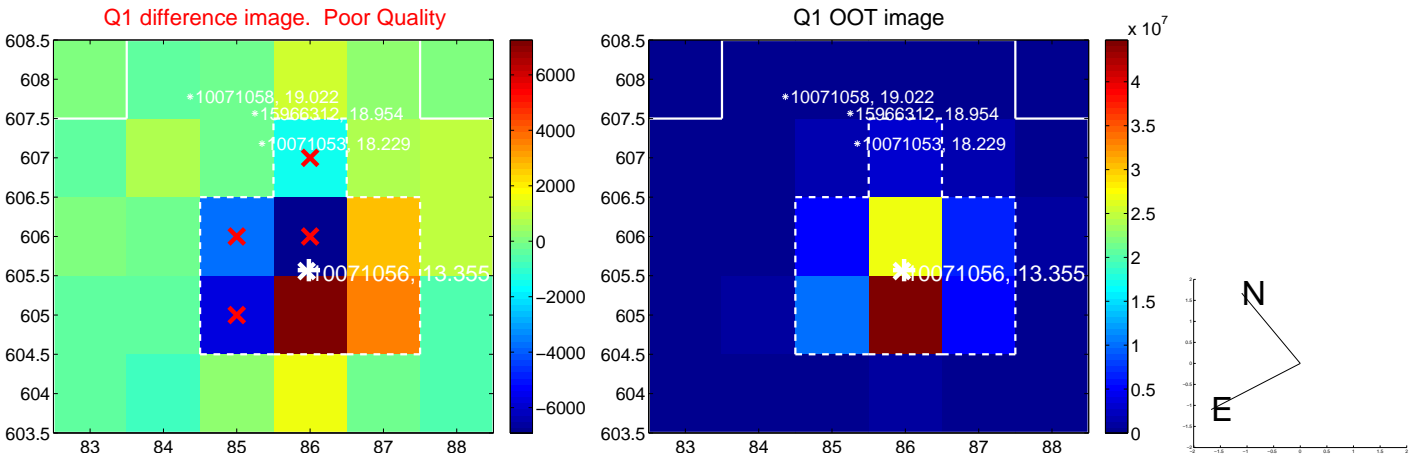
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.910 ± 1.010	1.89	1.857 ± 0.921	0.447 ± 1.072
PRF-fit source offset from KIC position	1.805 ± 0.993	1.82	1.771 ± 0.900	0.348 ± 1.092
photometric centroid source offset	—	—	—	—



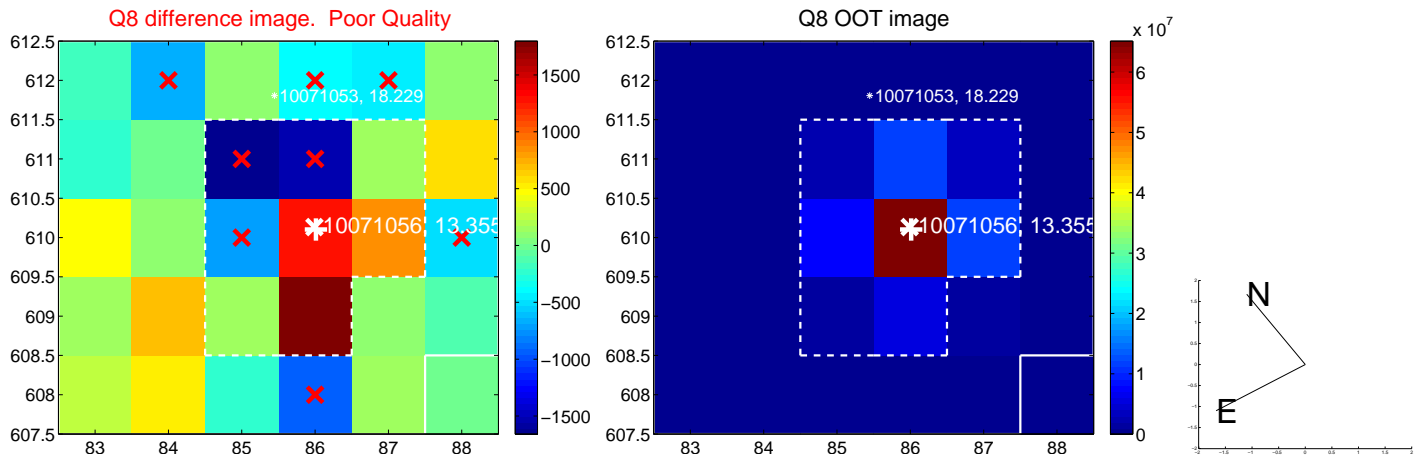
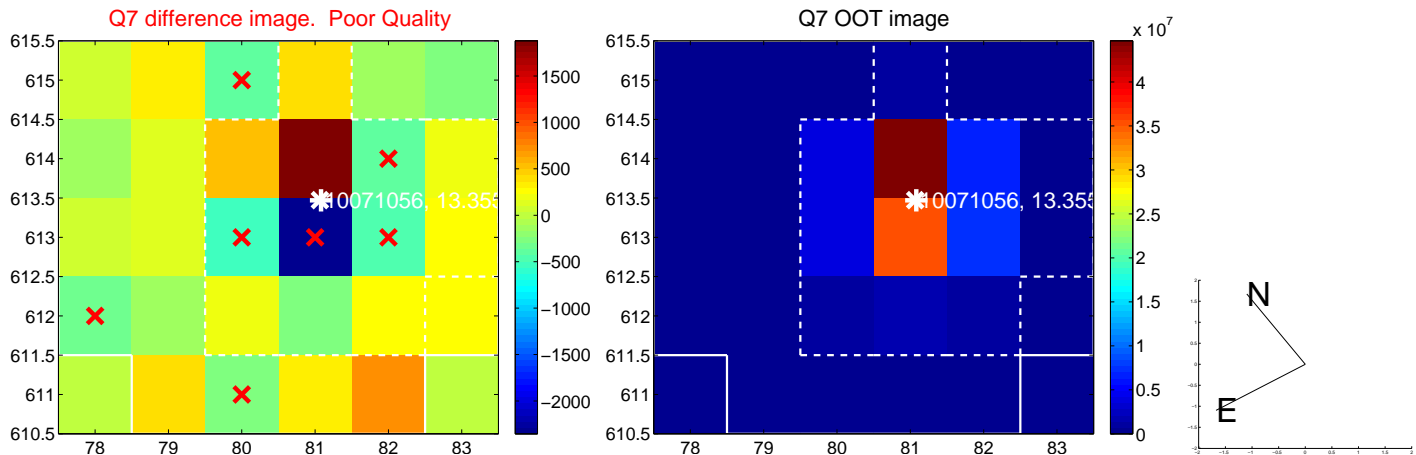
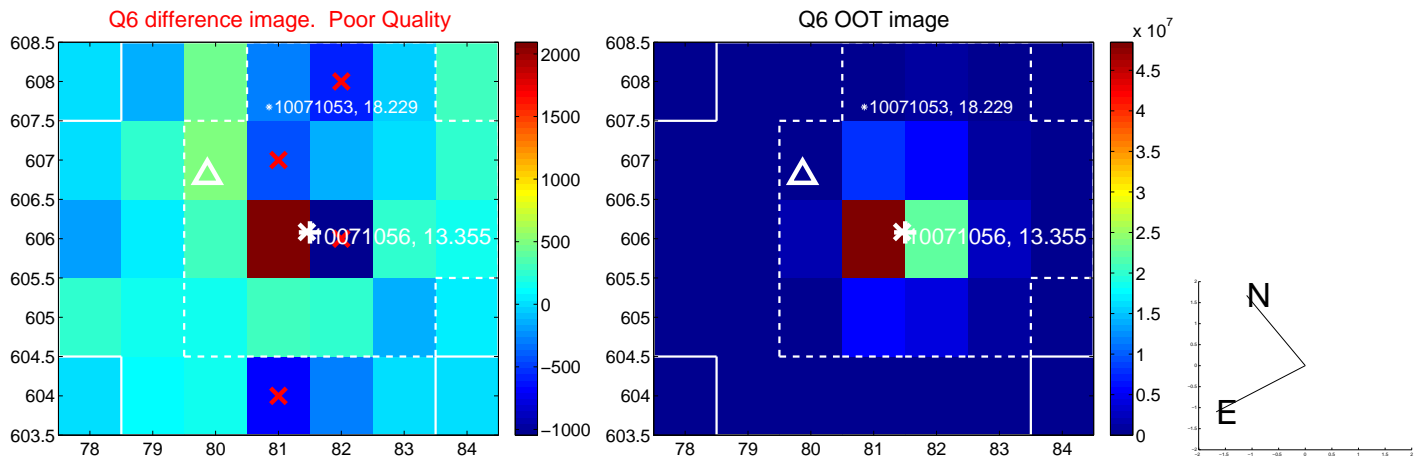
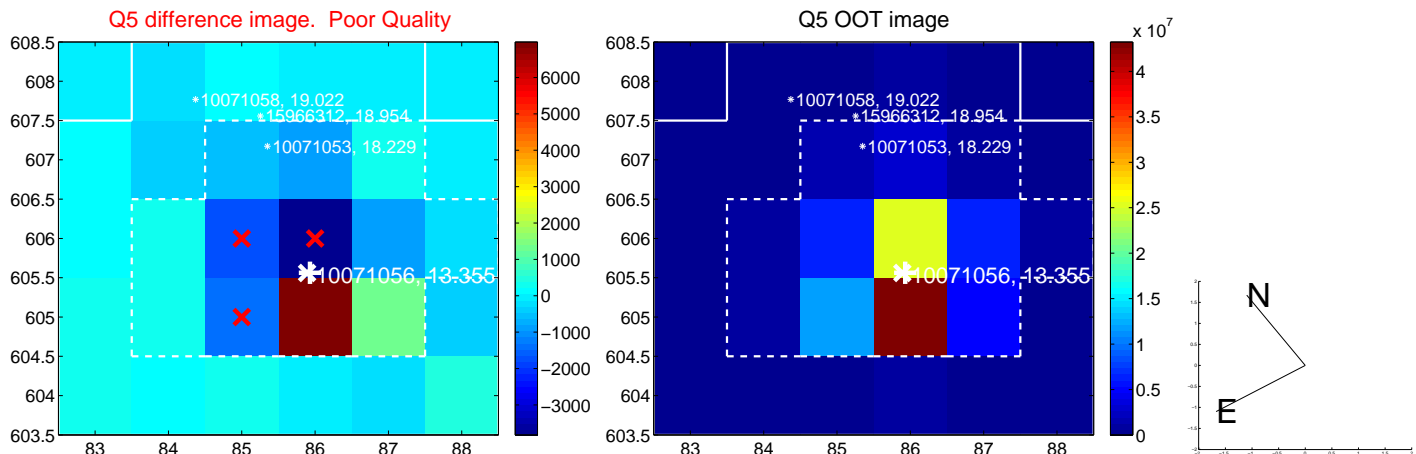
There are no photometric centroids

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.

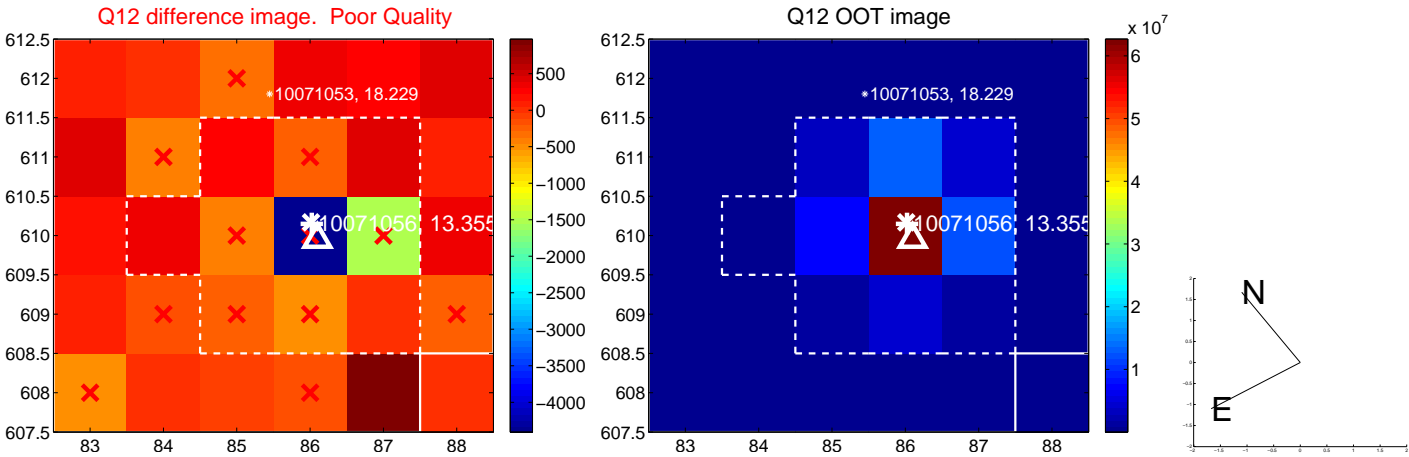
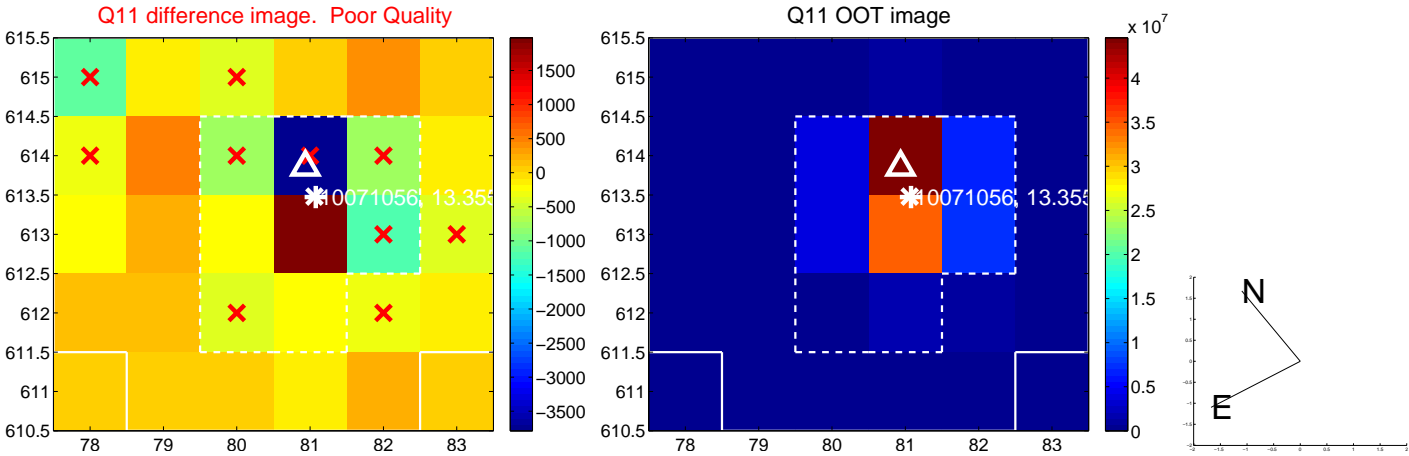
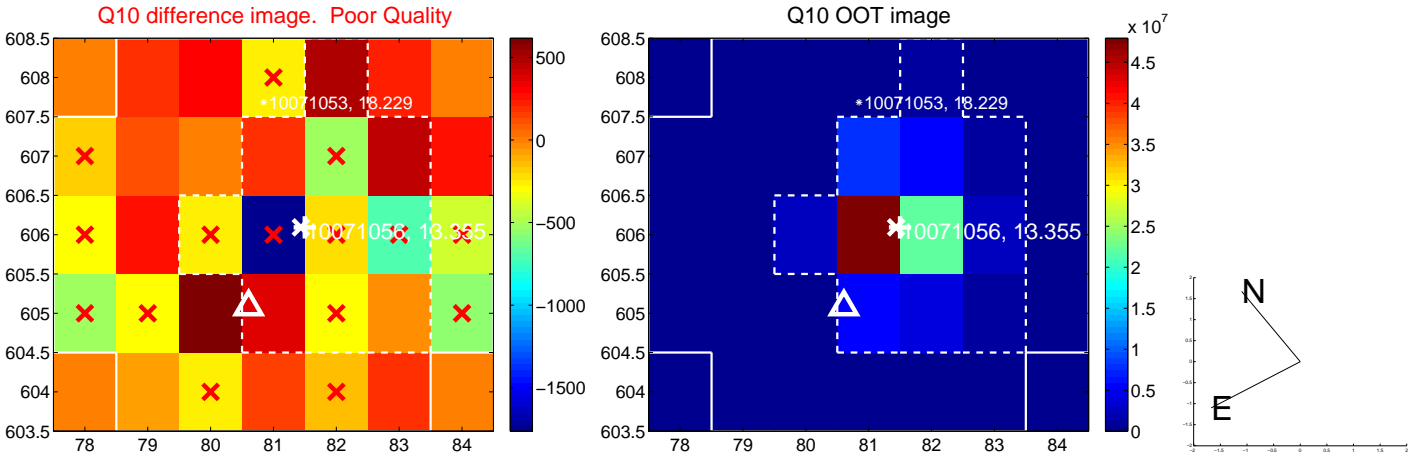
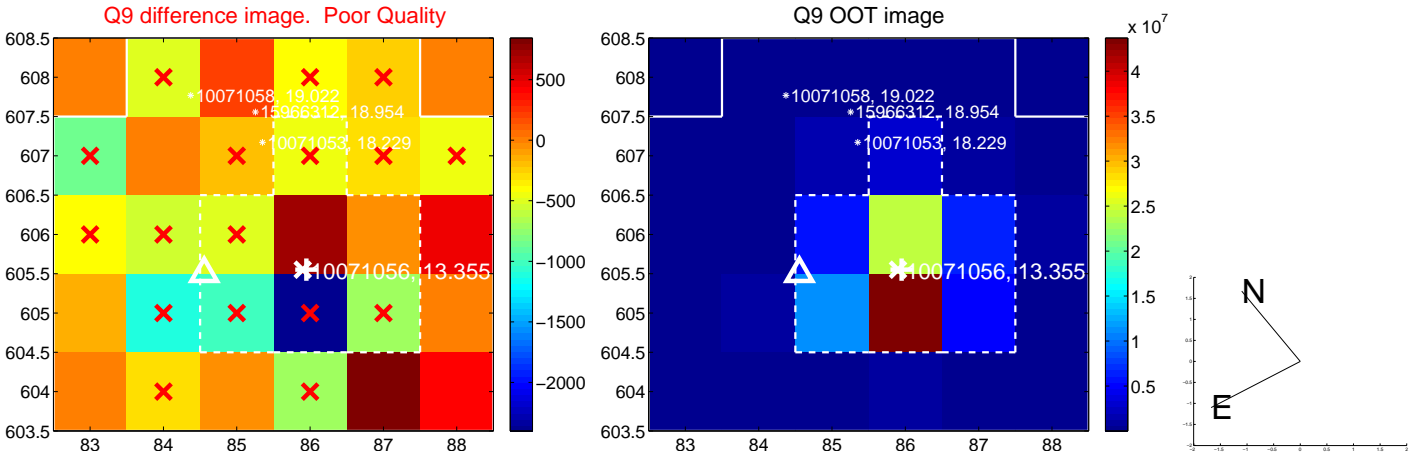
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



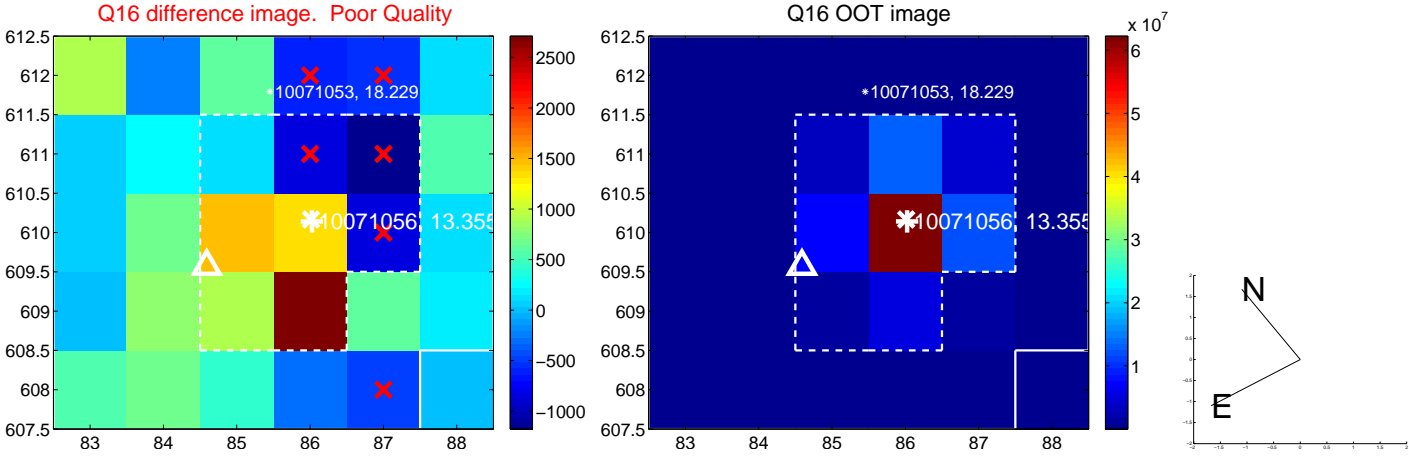
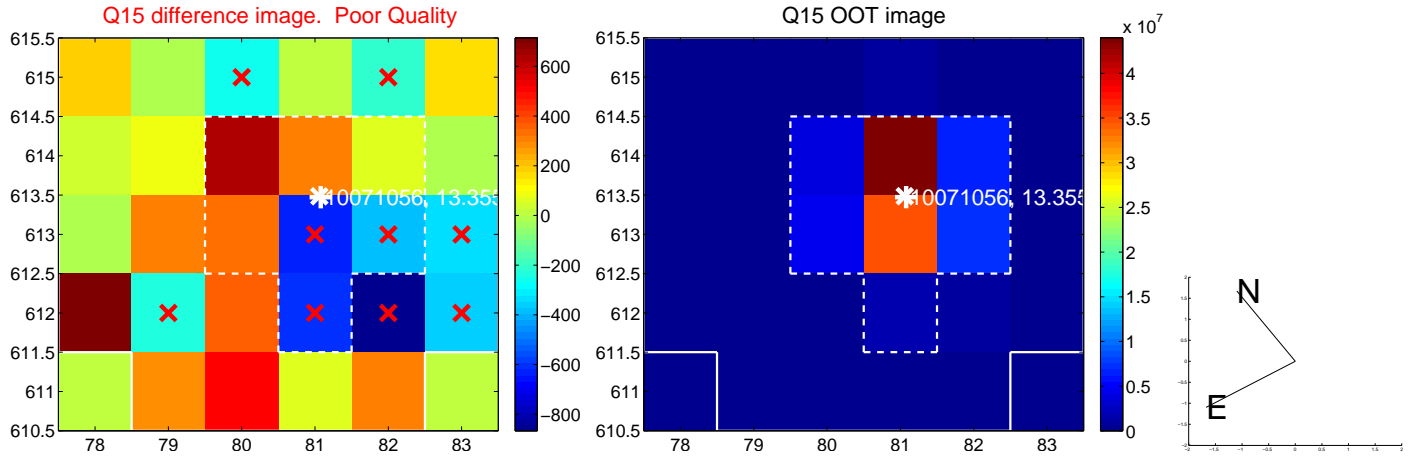
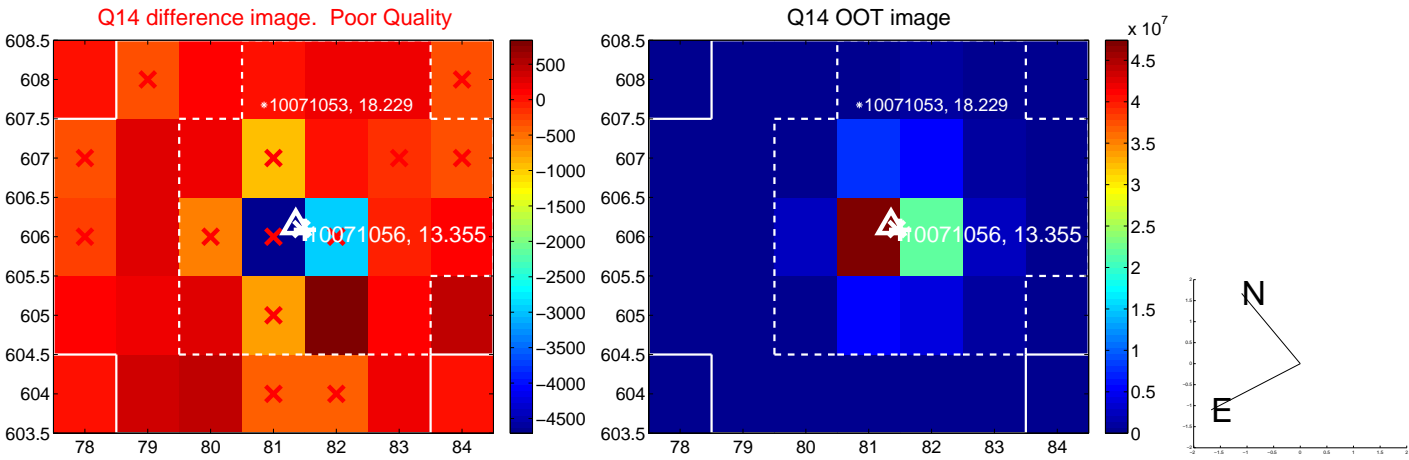
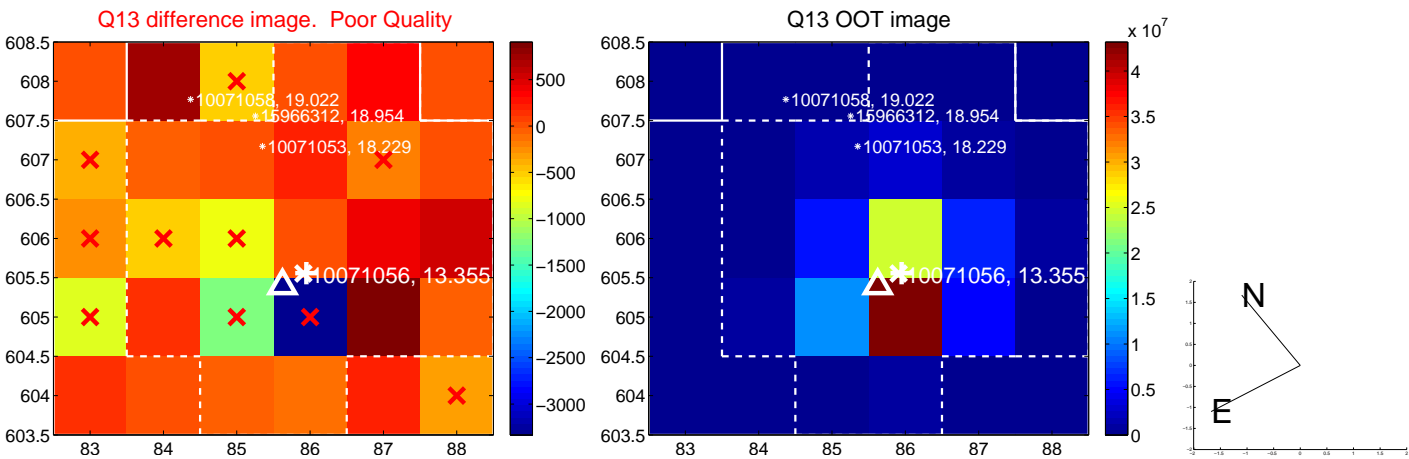
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



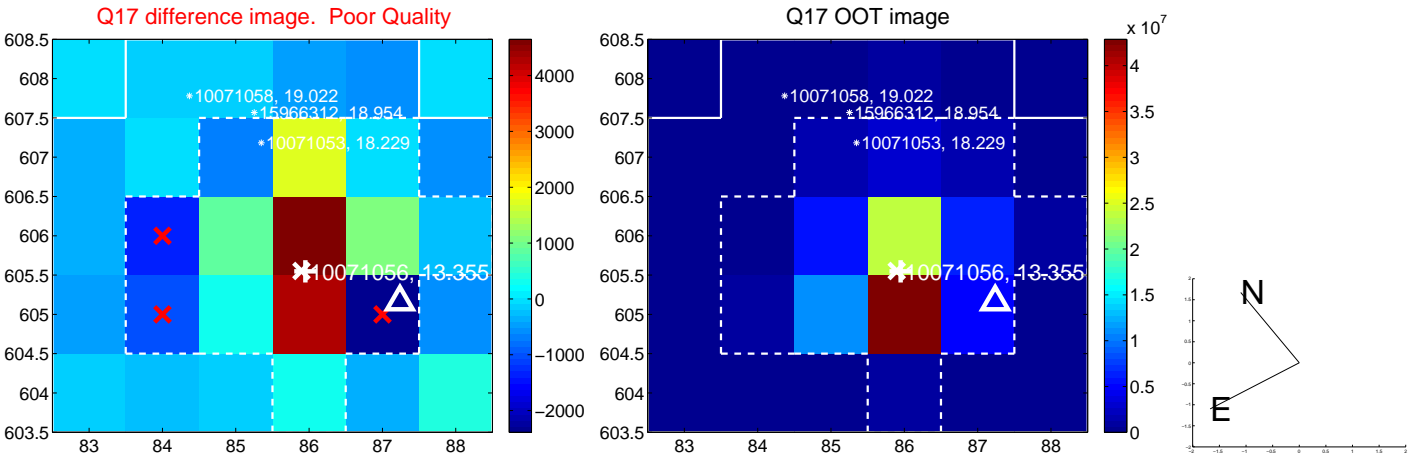
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

