

KIC 007904375

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})
007904375-01	OBS	No	0.534413	131.985994	1288.9	1.500	13.9	-1.0	0.57	4300	2.00	886.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007904375-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_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.

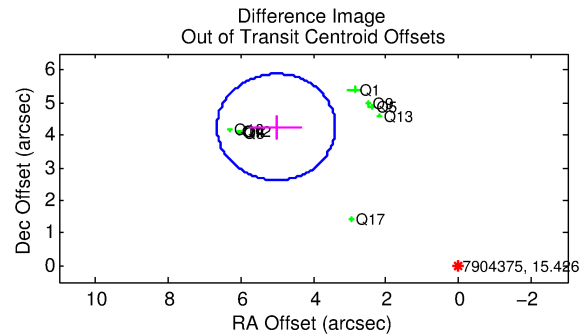
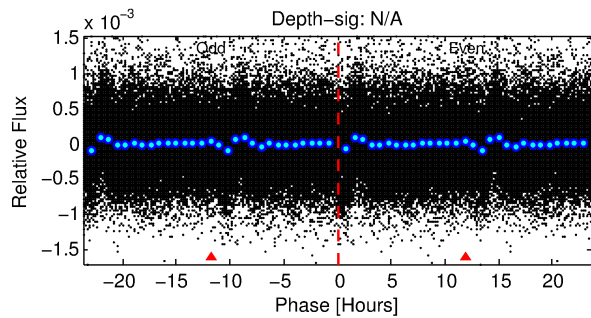
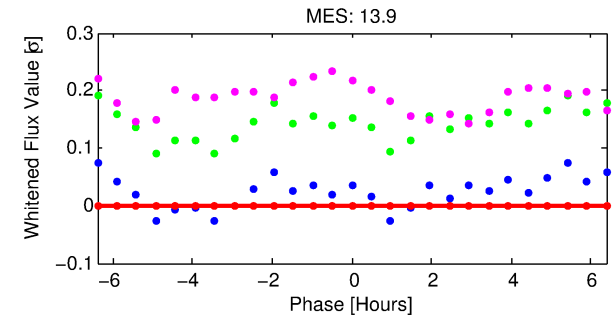
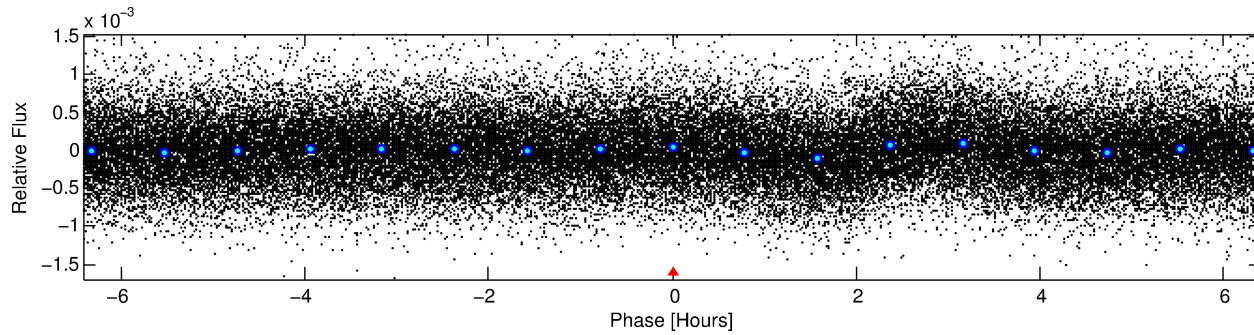
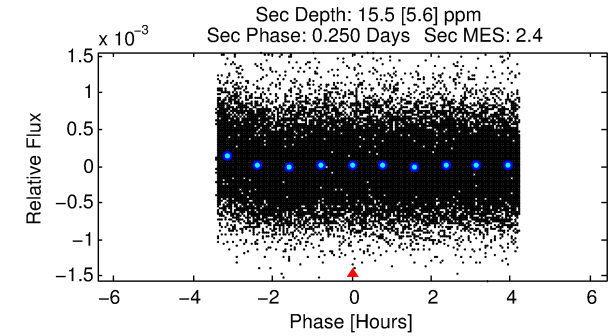
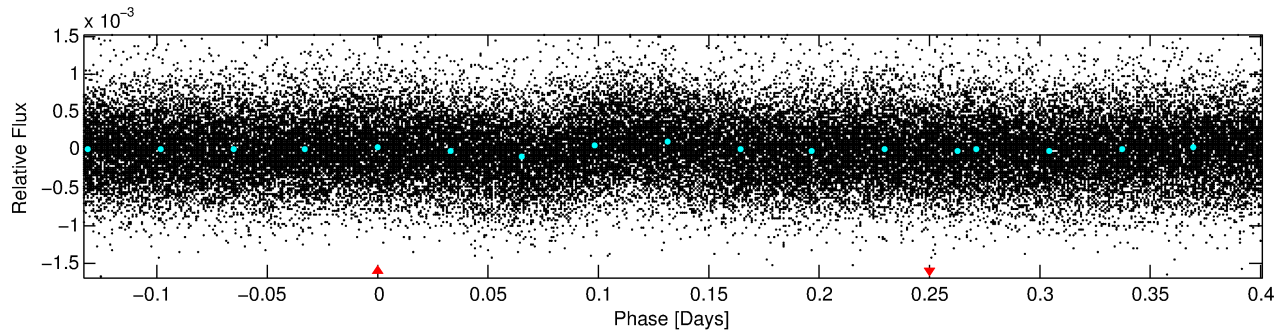
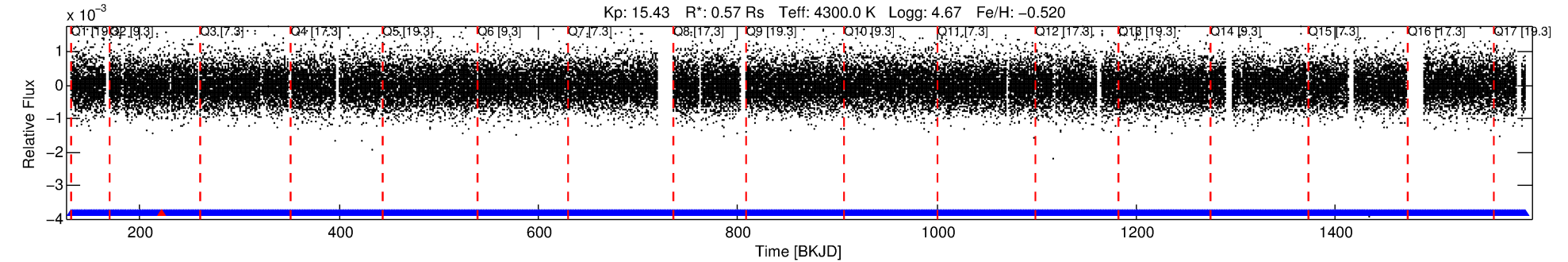
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007904375-01

No Significant Match Found

DV One-Page Summary

KIC: 7904375 Candidate: 1 of 1 Period: 0.534 d



TPS TCE Results:

Period = 0.53441 d
Epoch = 131.9860 BKJD

DV fit results are unavailable

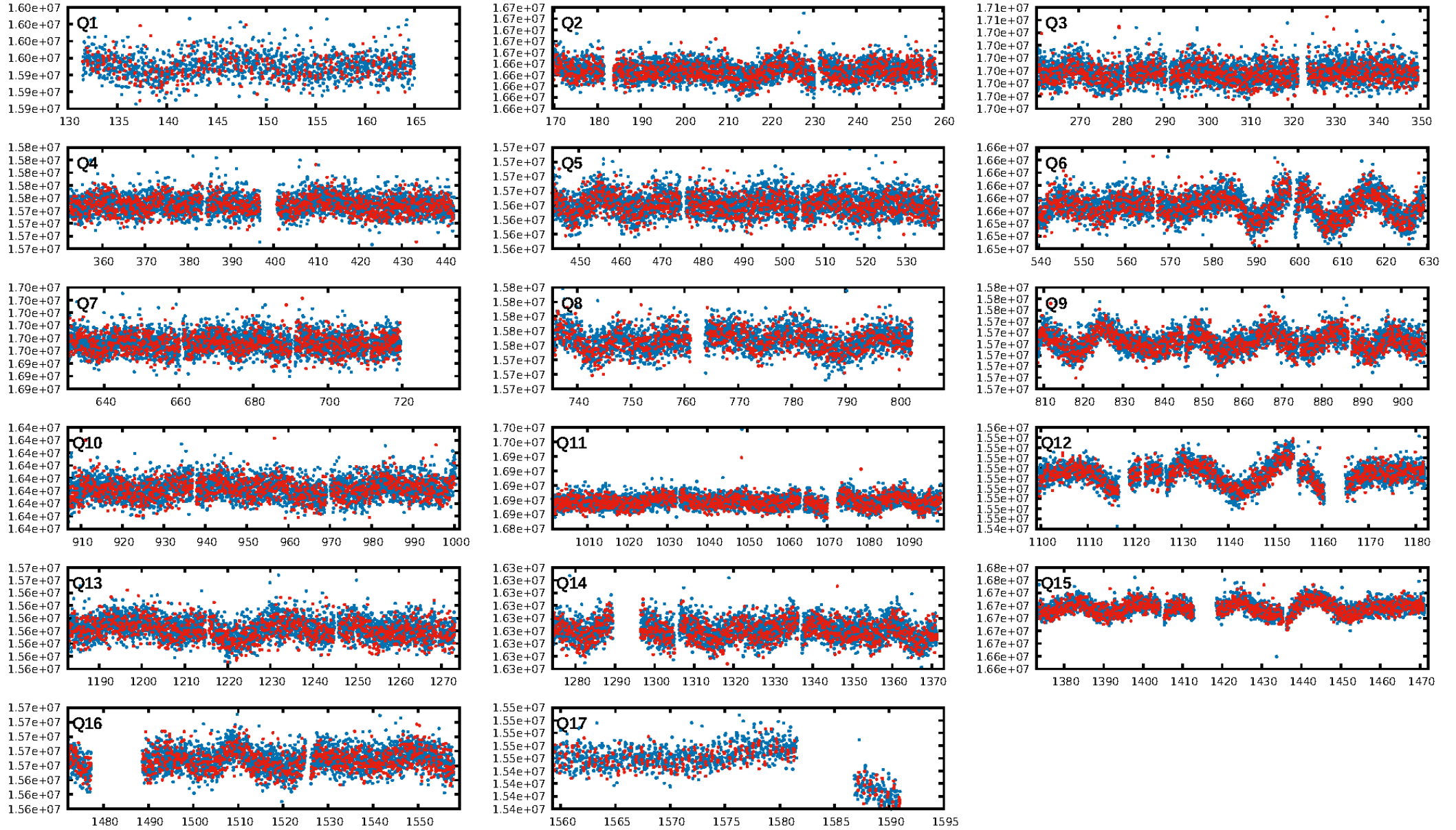
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.22e-41
RollingBand-fgt: 1.00 [2396/2397]
GhostDiagnostic-chr: 0.2877
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 6.577 arcsec [12.11σ]
KicOffset-rm: 6.211 arcsec [12.14σ]
OotOffset-st: 0/0/4/5 [9]
KicOffset-st: 0/0/4/5 [9]
DiffImageQuality-fgm: 0.89 [8/9]
DiffImageOverlap-fno: 1.00 [17/17]

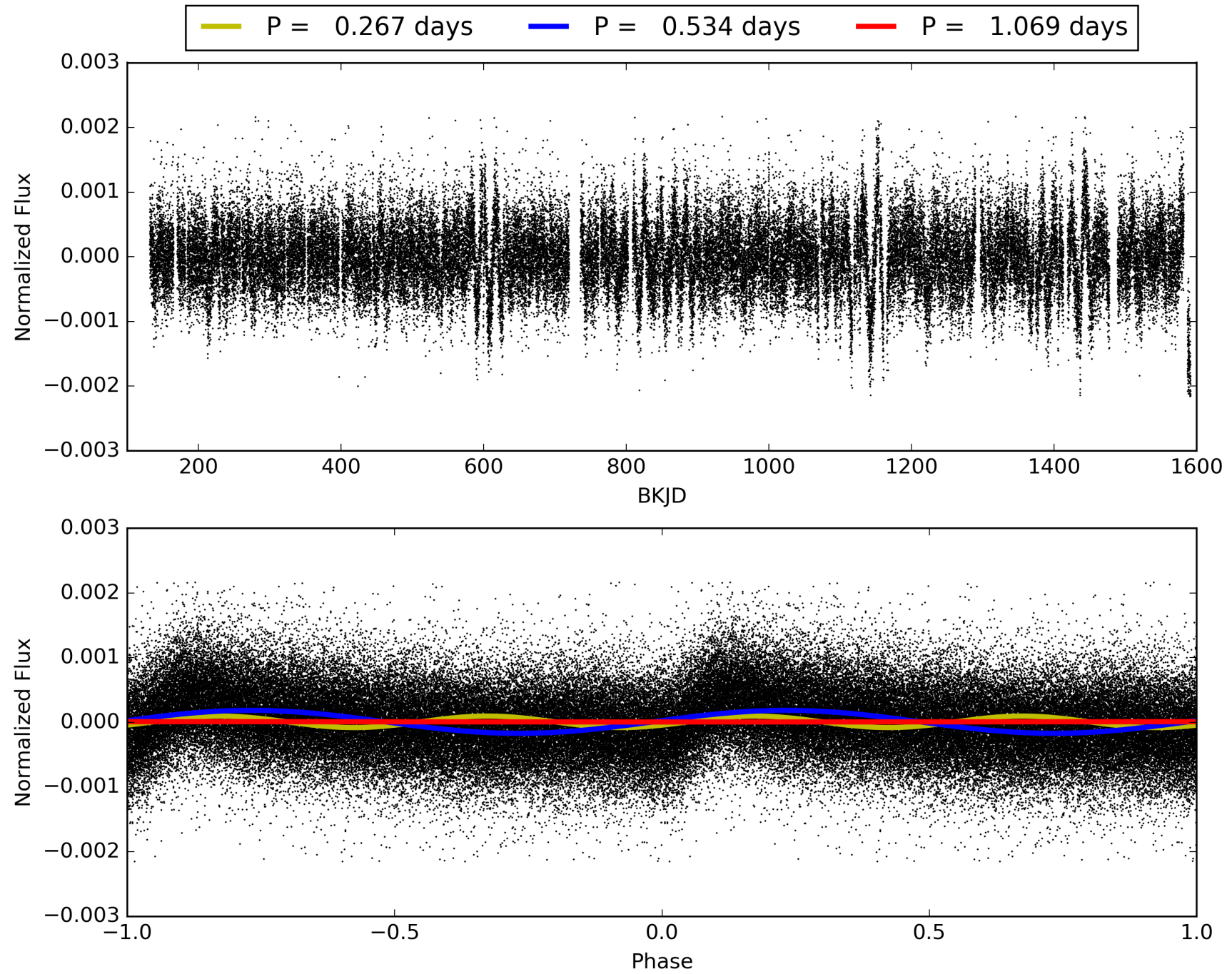
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:04:14 Z

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

TCE 007904375-01, PDC Light Curves

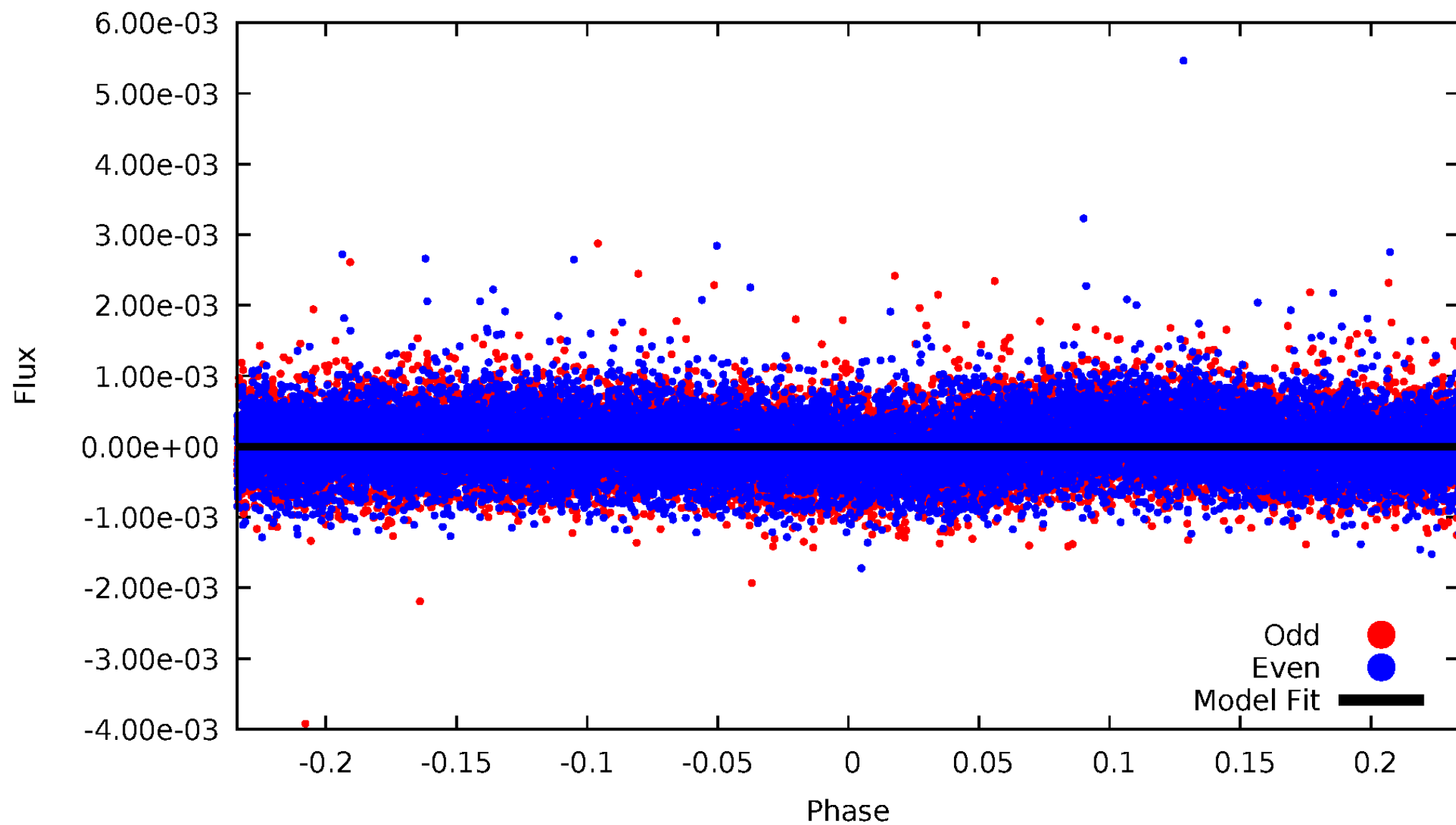


TCE 007904375-01



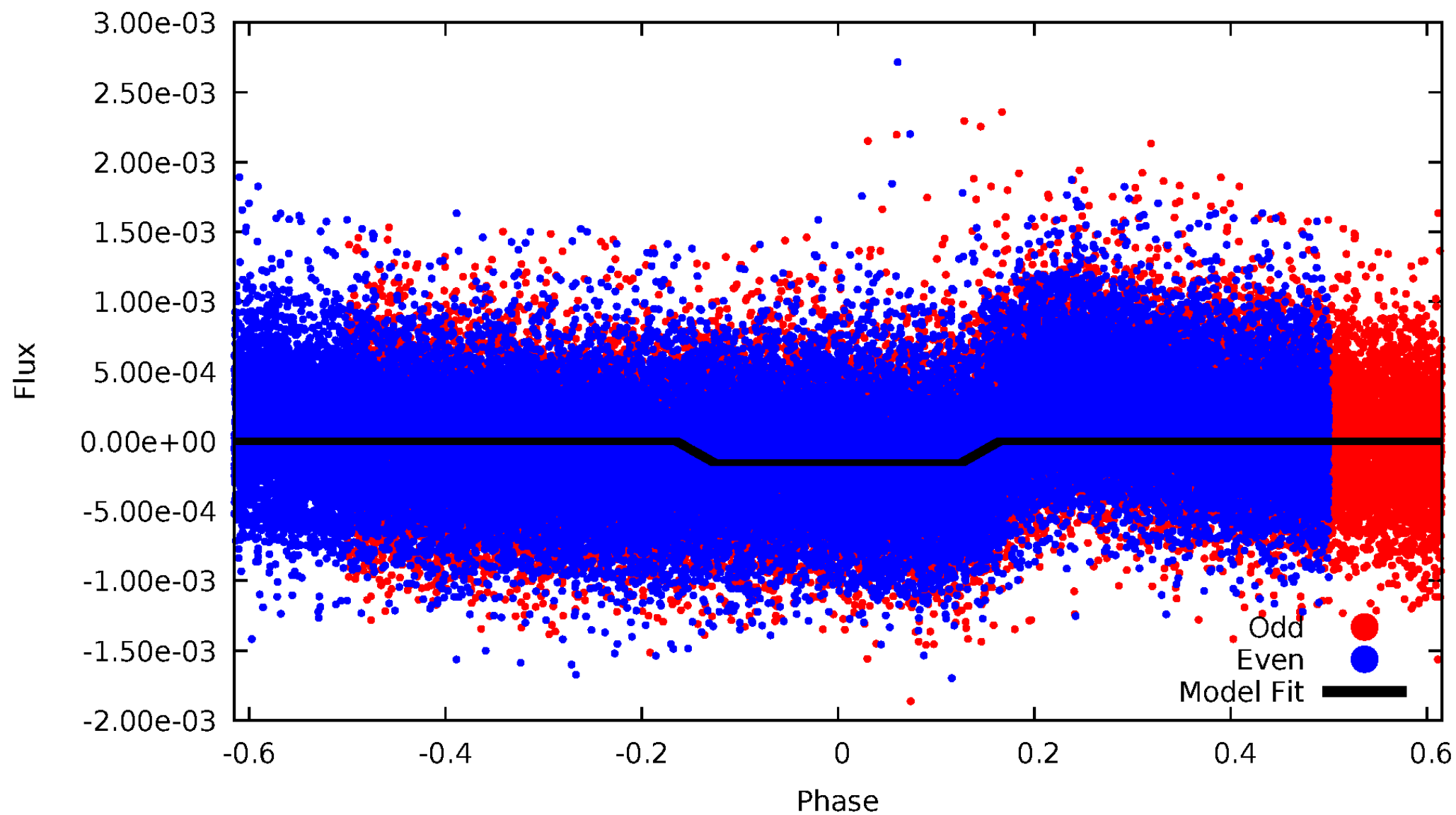
DV Odd/Even

TCE 007904375-01

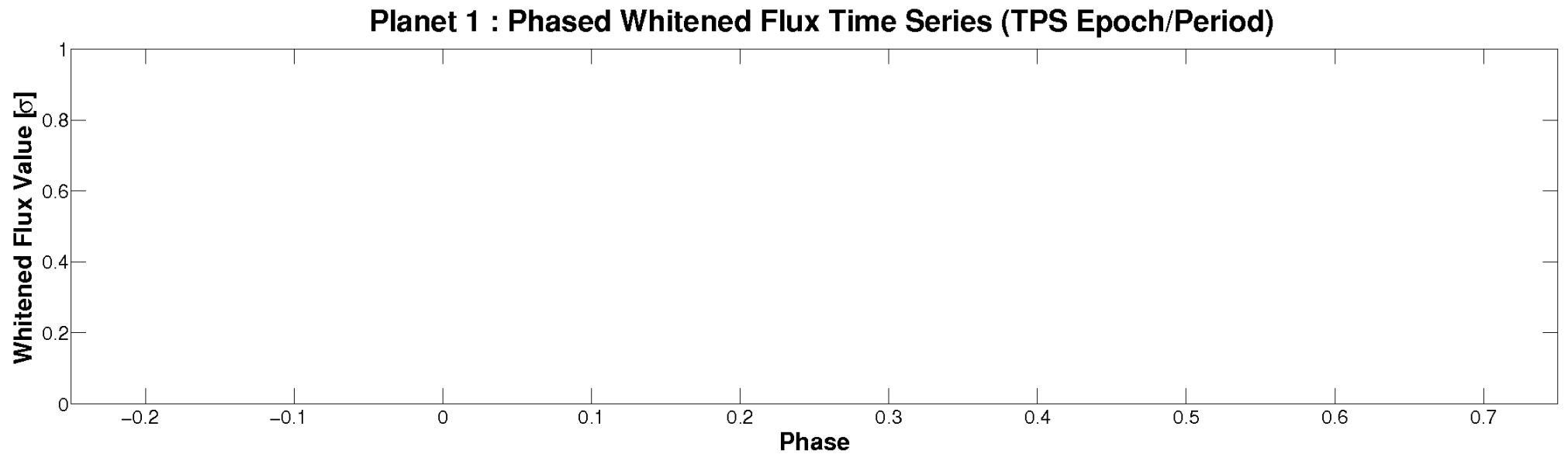
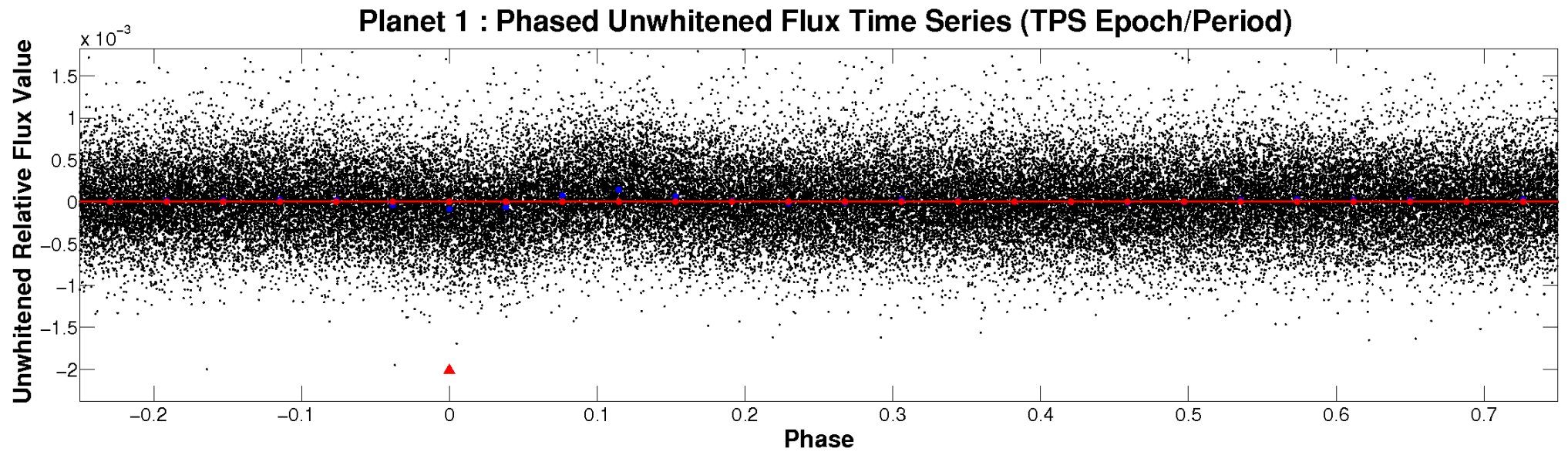


ALT Odd/Even

TCE 007904375-01

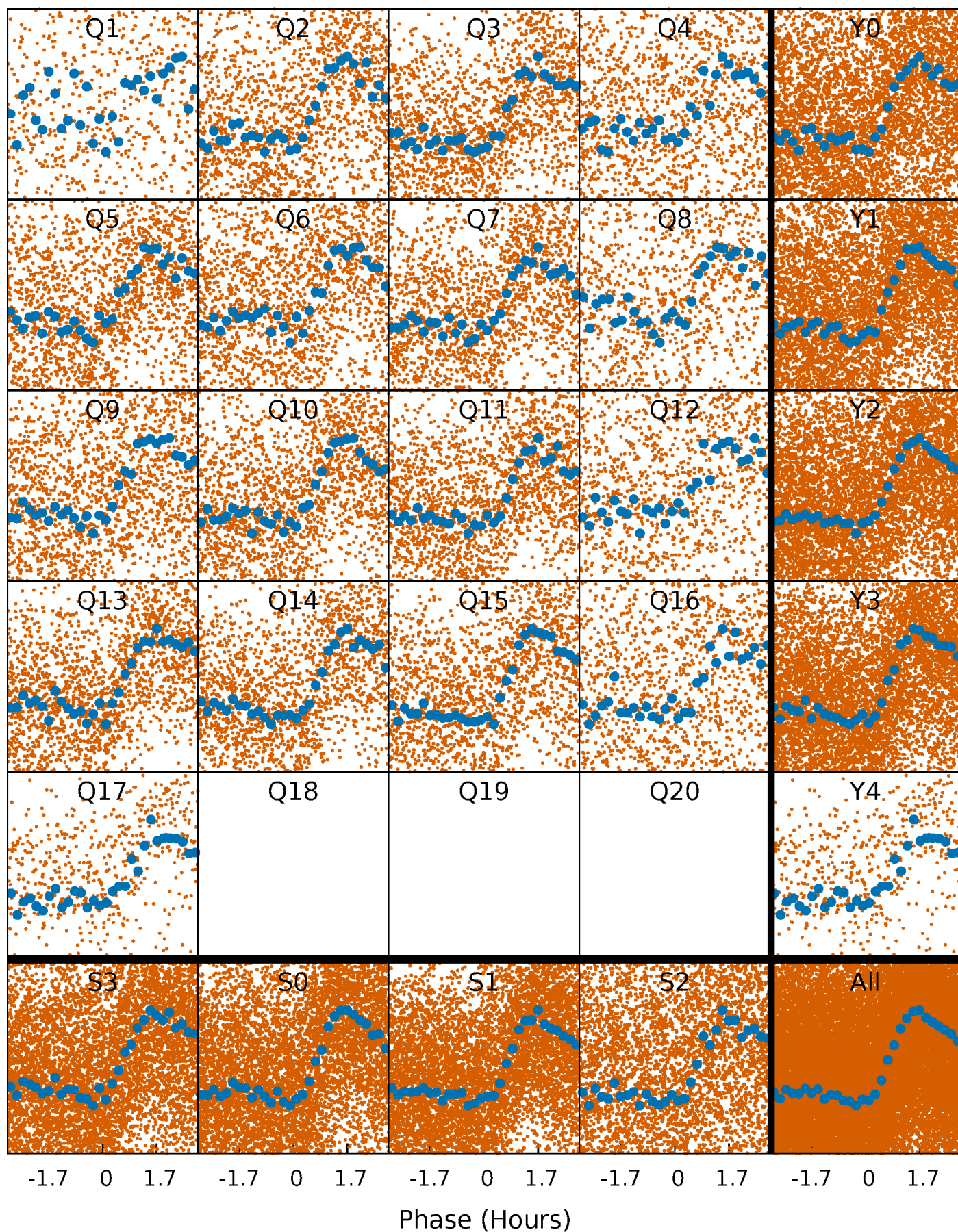


Non-Whitened Vs. Whitened Light Curve



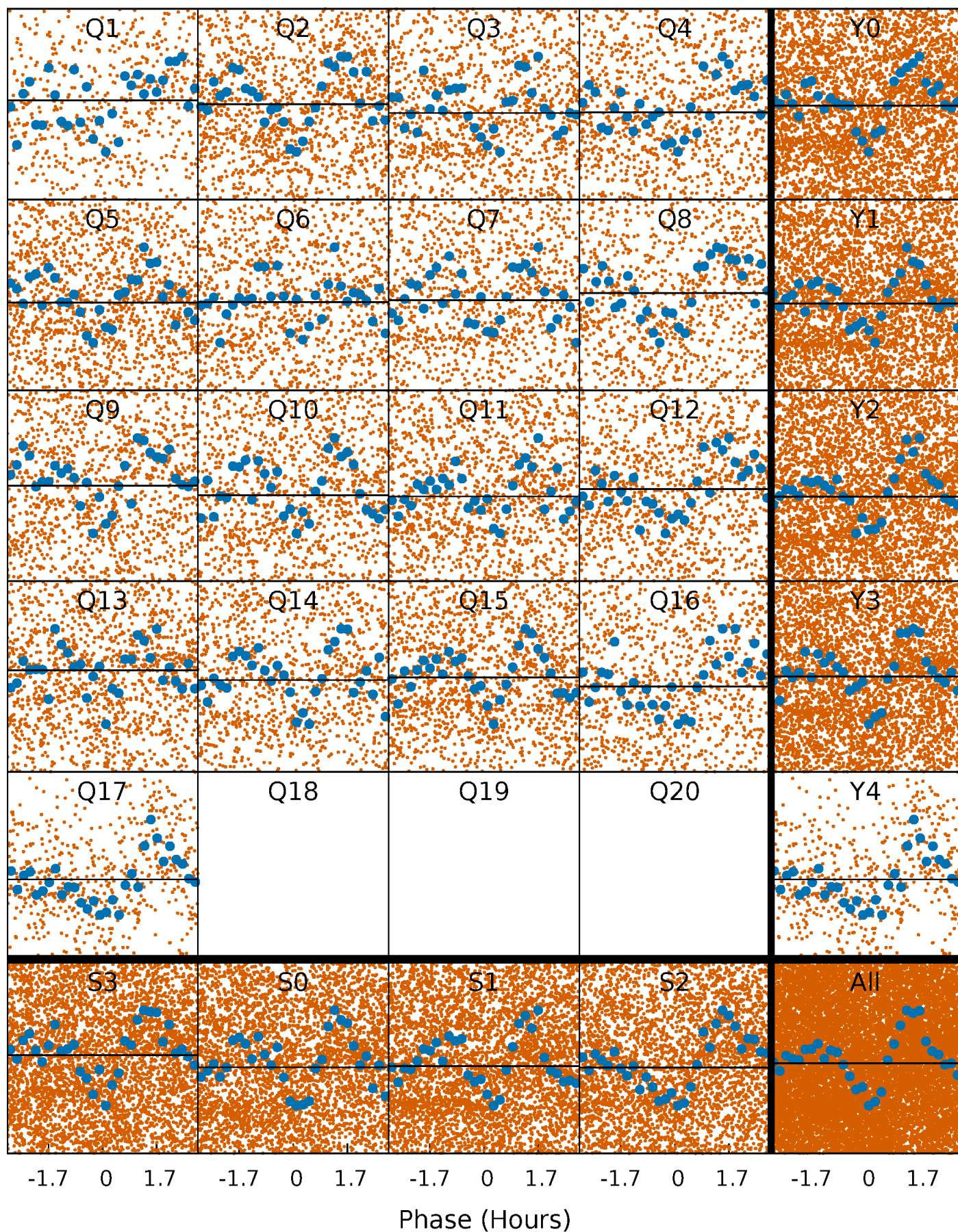
PDC Quarter-Phased Transit Curves

TCE 007904375-01 P= 0.534413 Days $T_0=131.985994$ (BKJD)



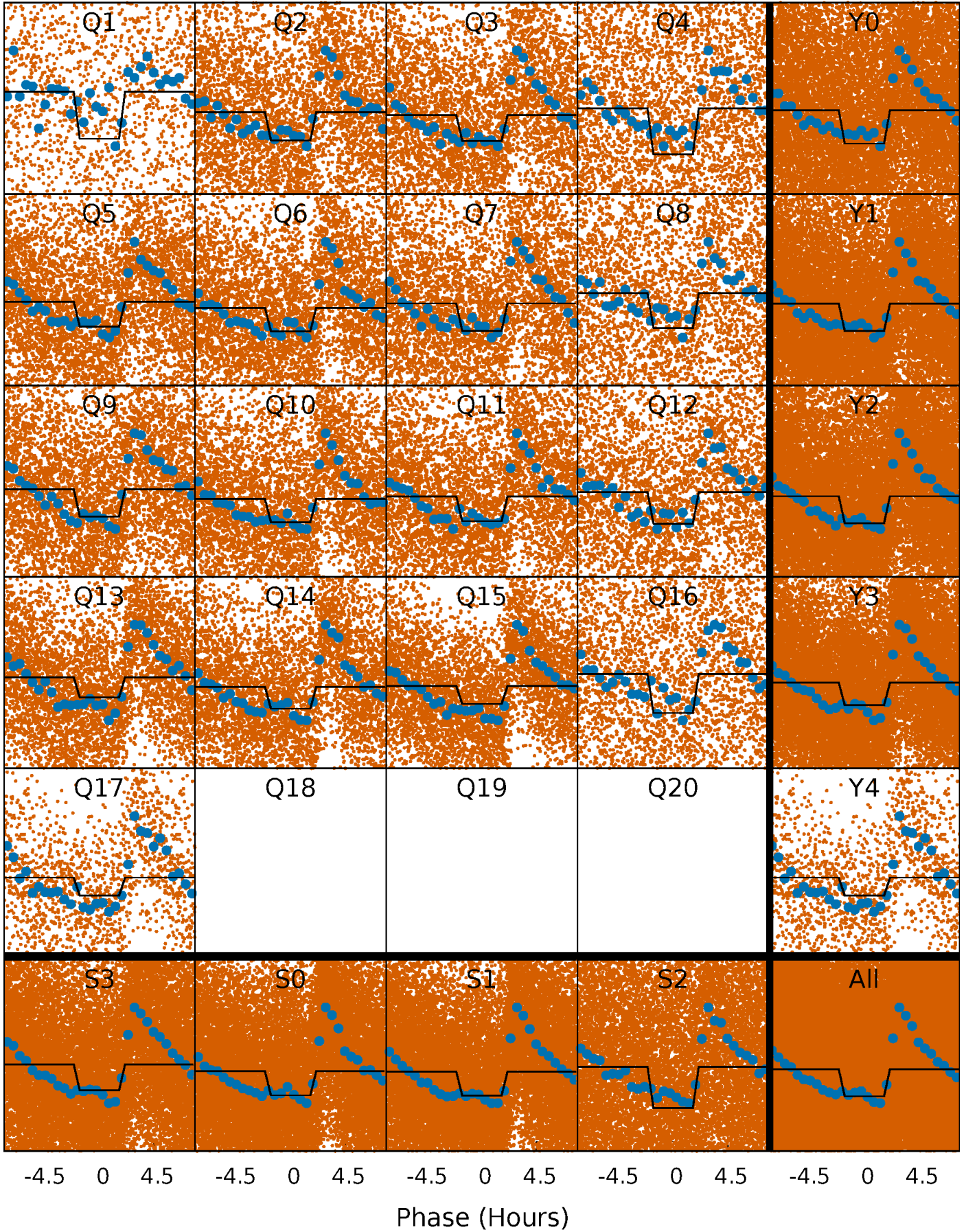
DV Quarter-Phased Transit Curves

TCE 007904375-01 P= 0.534413 Days $T_0=131.985994$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

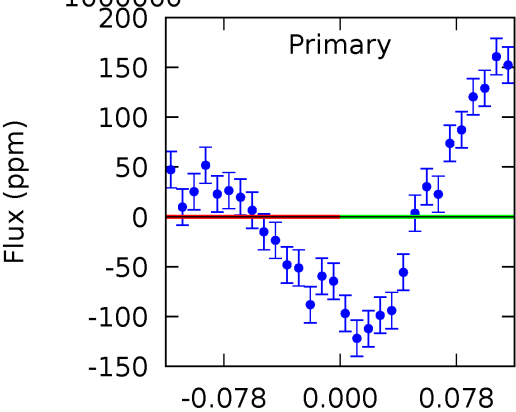
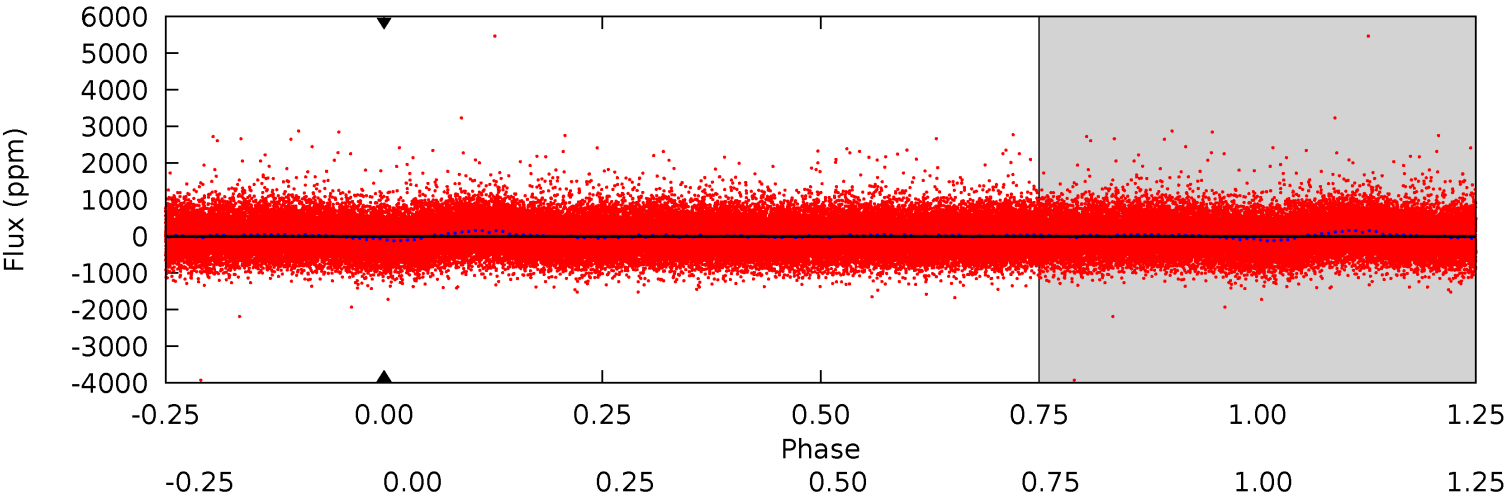
TCE 007904375-01 P= 0.534413 Days $T_0=131.926703$ (BKJD)



DV Model-Shift Uniqueness Test

007904375-01, P = 0.534413 Days, E = 131.451581 Days

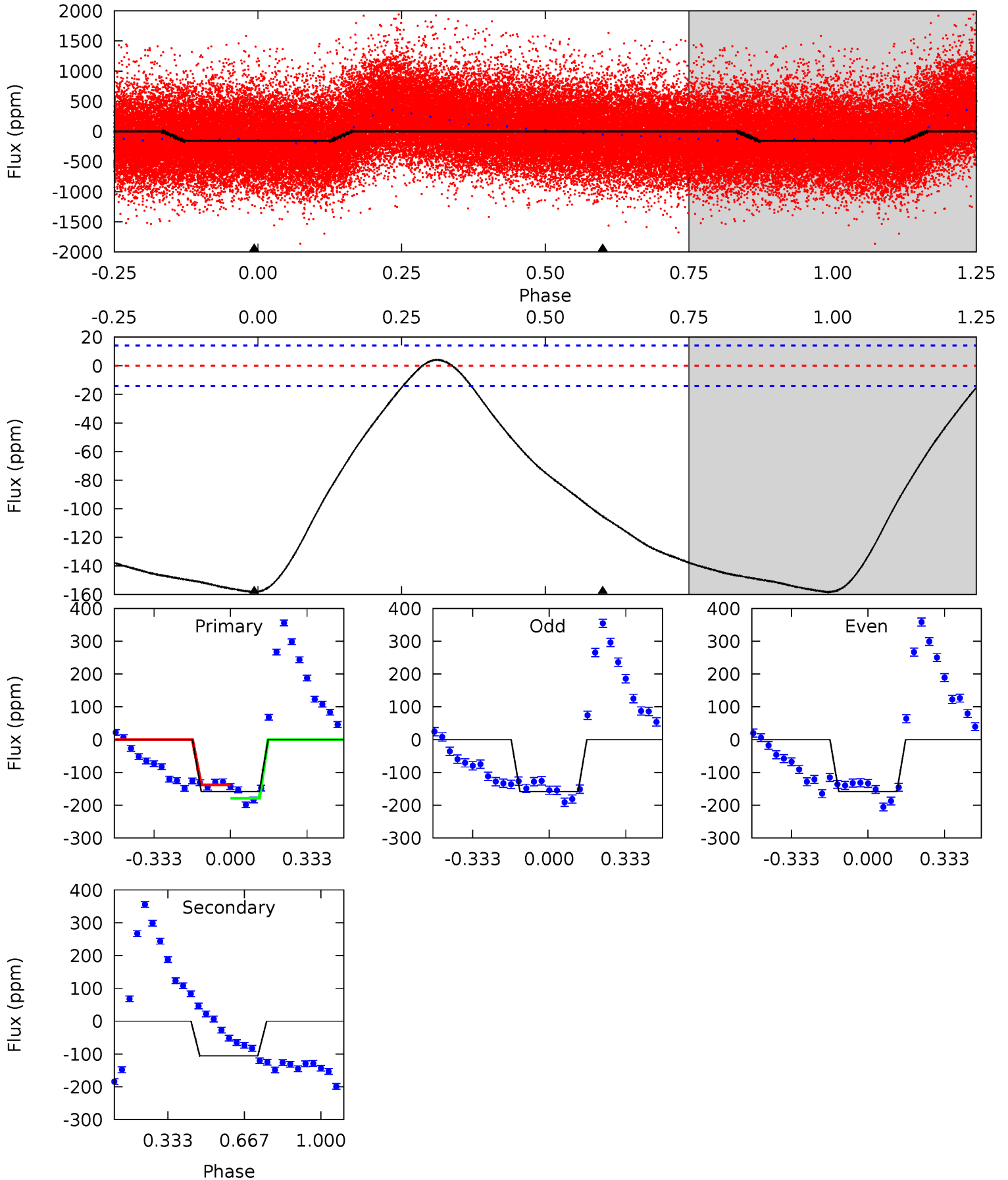
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007904375-01, P = 0.534413 Days, E = 131.392290 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
48.1	32.0	0	0	4.31	0.97	1.88	48.1	48.1	32.0	32.0	0.02	1.01	0.03	6.25



Stellar Parameters For KIC 007904375

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4300^{+127}_{-140}	$4.672^{+0.059}_{-0.027}$	$-0.520^{+0.300}_{-0.300}$	$0.572^{+0.049}_{-0.059}$	$0.561^{+0.061}_{-0.046}$	$4.222^{+1.139}_{-0.577}$
	+3%/-3%	+1%/-1%	+58%/-58%	+9%/-10%	+11%/-8%	+27%/-14%
Source	PHO1	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 007904375-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$5.02^{+5.14}_{-3.68}$	1926^{+65}_{-74}	3871^{+7538}_{-13091}	$8.647^{+602.041}_{-369.106}$
Alt.	-105 ± 3	$4.35^{+4.49}_{-2.89}$	1929^{+67}_{-72}	1980^{+1231}_{-4271}	$0.353^{+2.759}_{-0.270}$

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

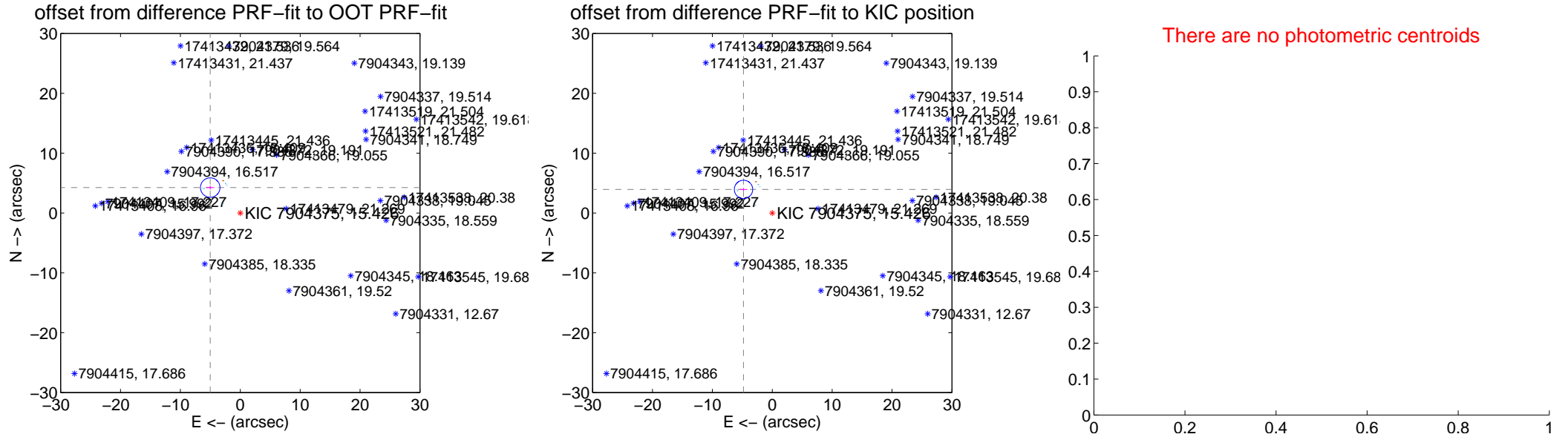
DV Centroid Data

Supplemental centroid analysis for 007904375-01. Kepler magnitude: 15.43. Transit SNR -1.00

There are 8 quarters with good PRF difference image offsets

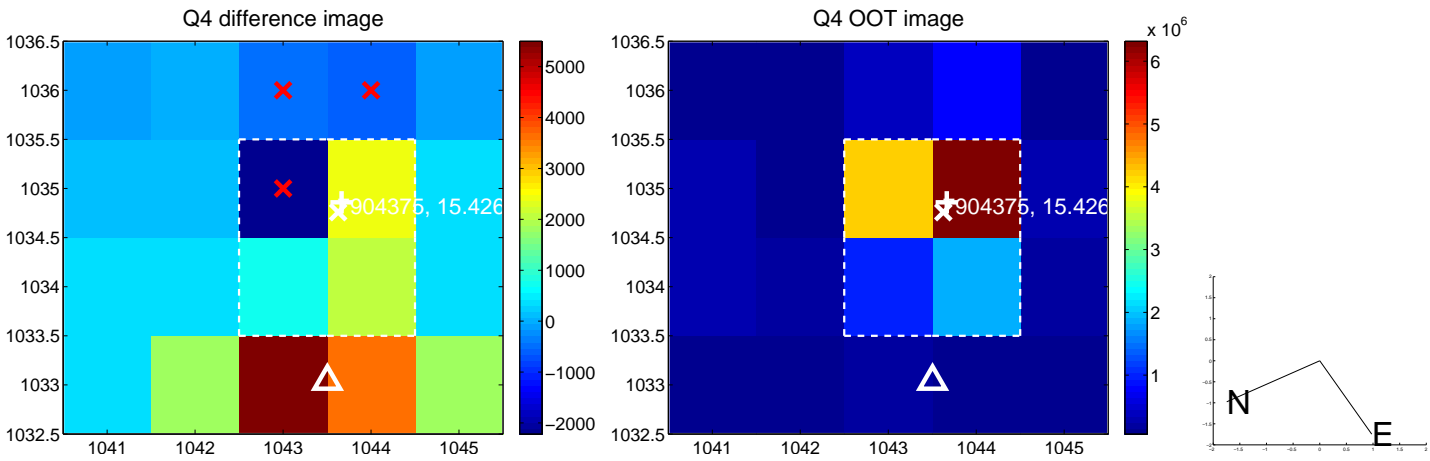
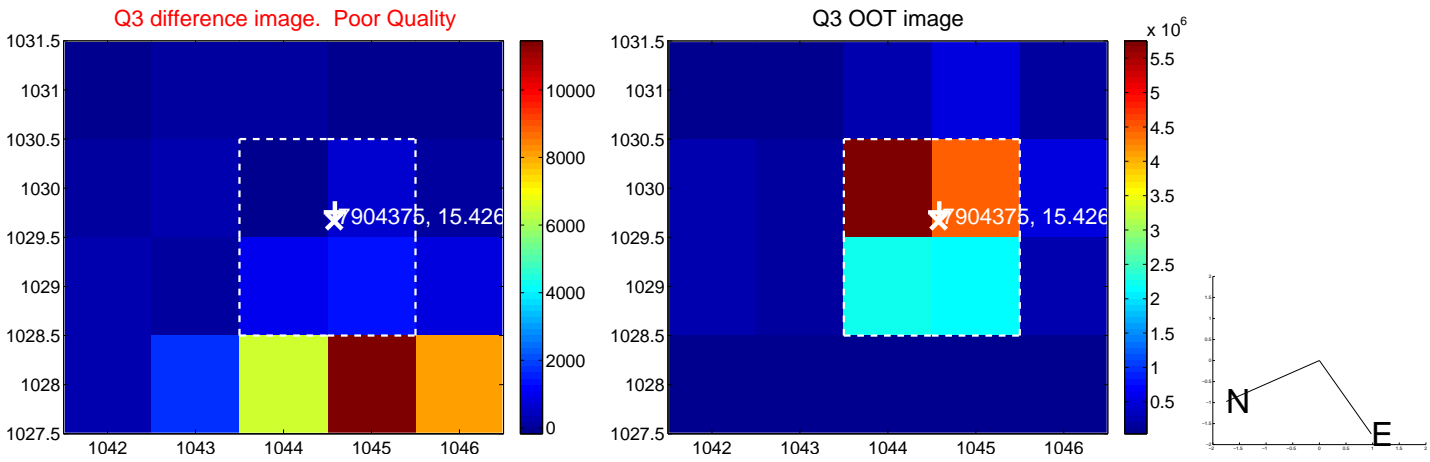
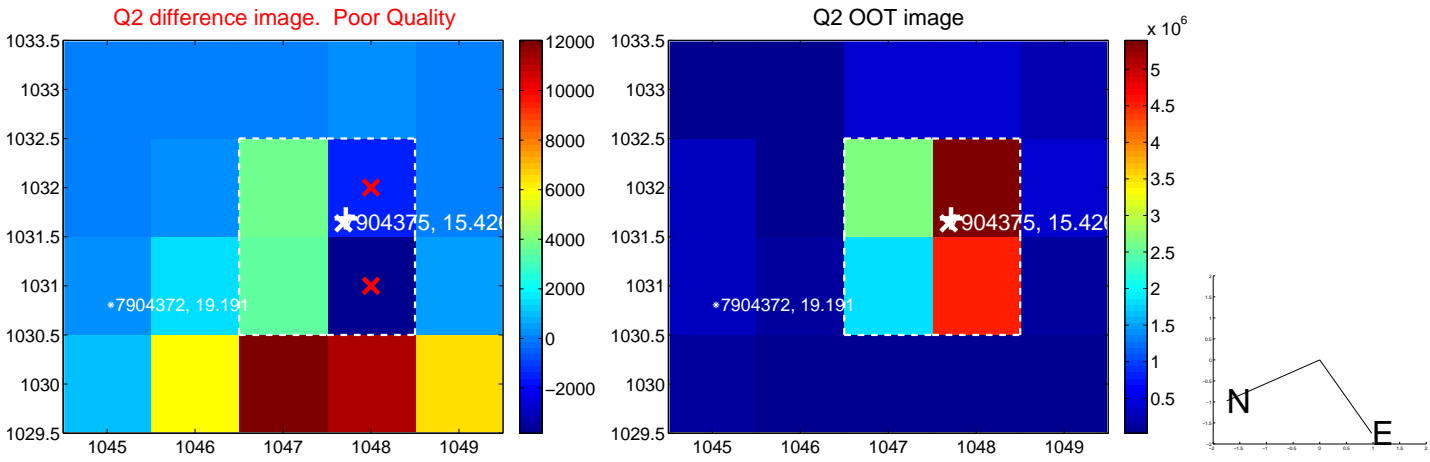
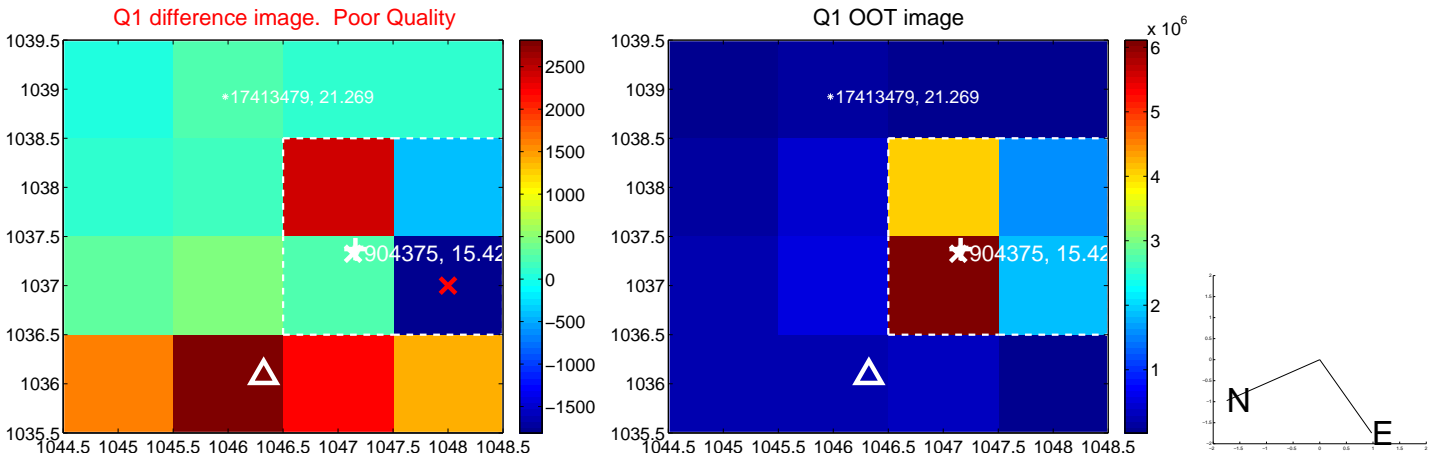
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.577 ± 0.543	12.11	5.019 ± 0.688	4.249 ± 0.341
PRF-fit source offset from KIC position	6.211 ± 0.511	12.14	4.799 ± 0.635	3.942 ± 0.227
photometric centroid source offset	—	—	—	—

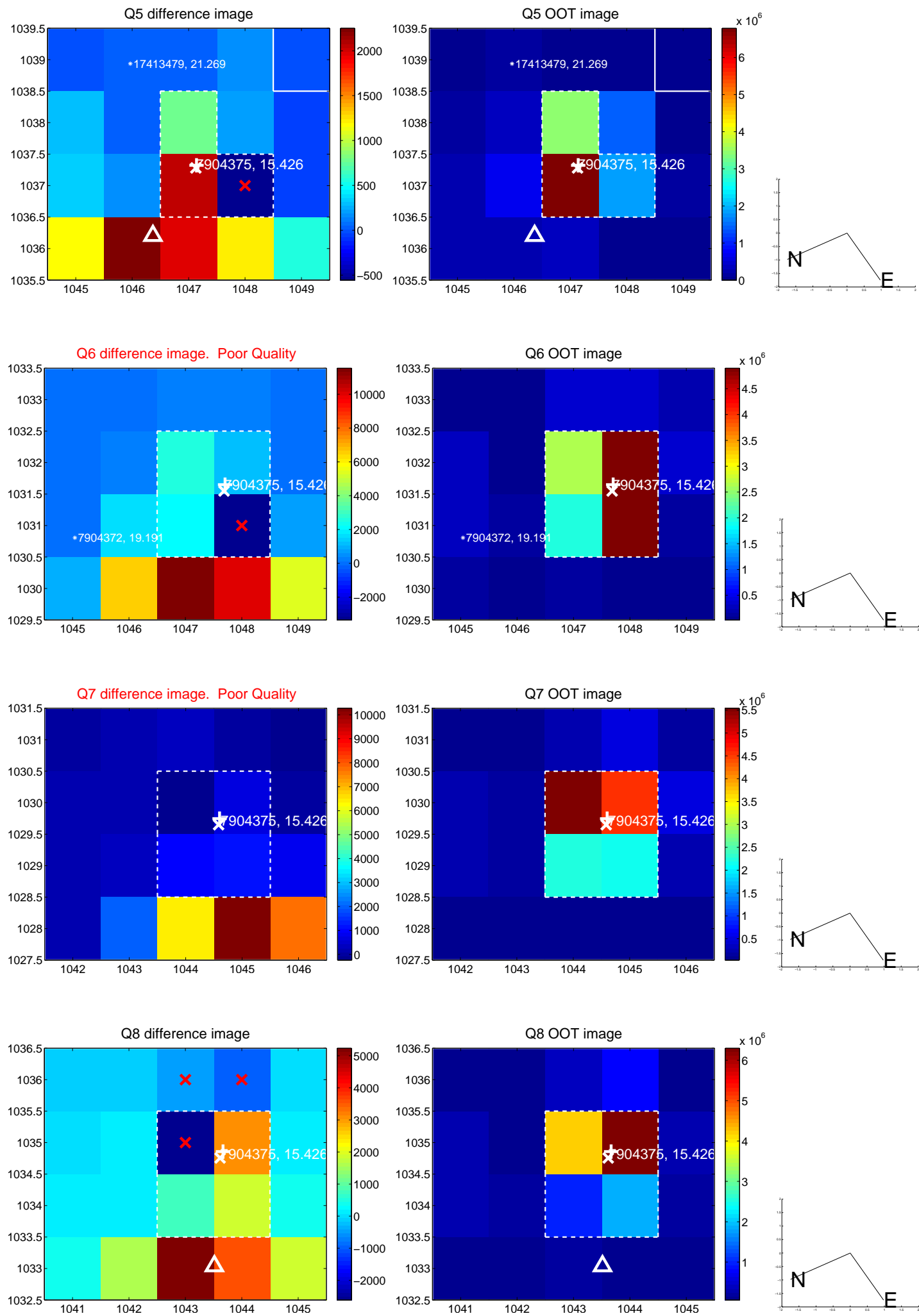


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

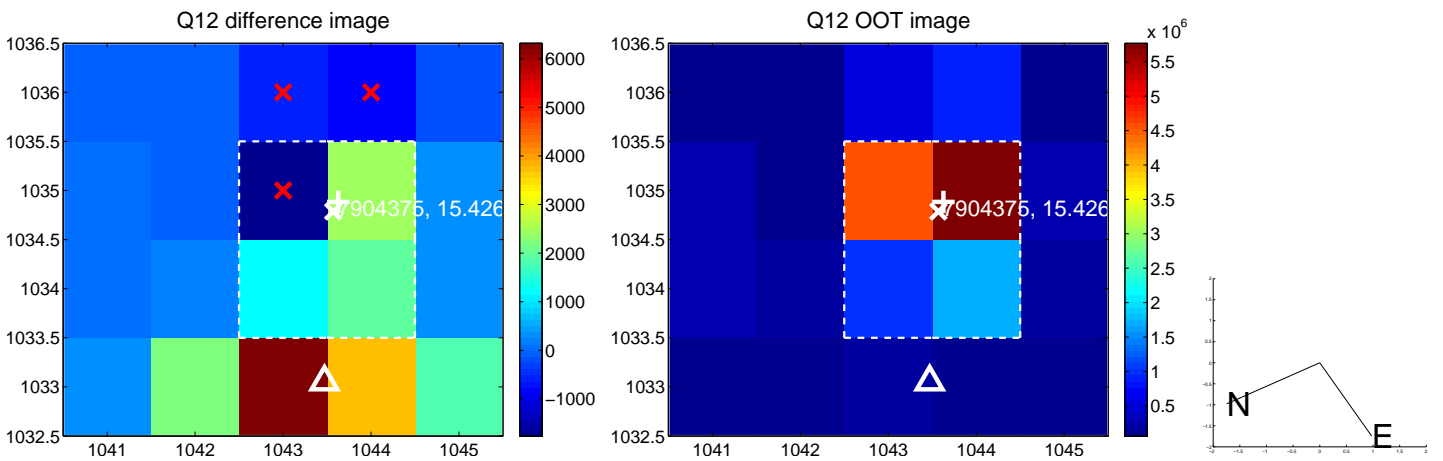
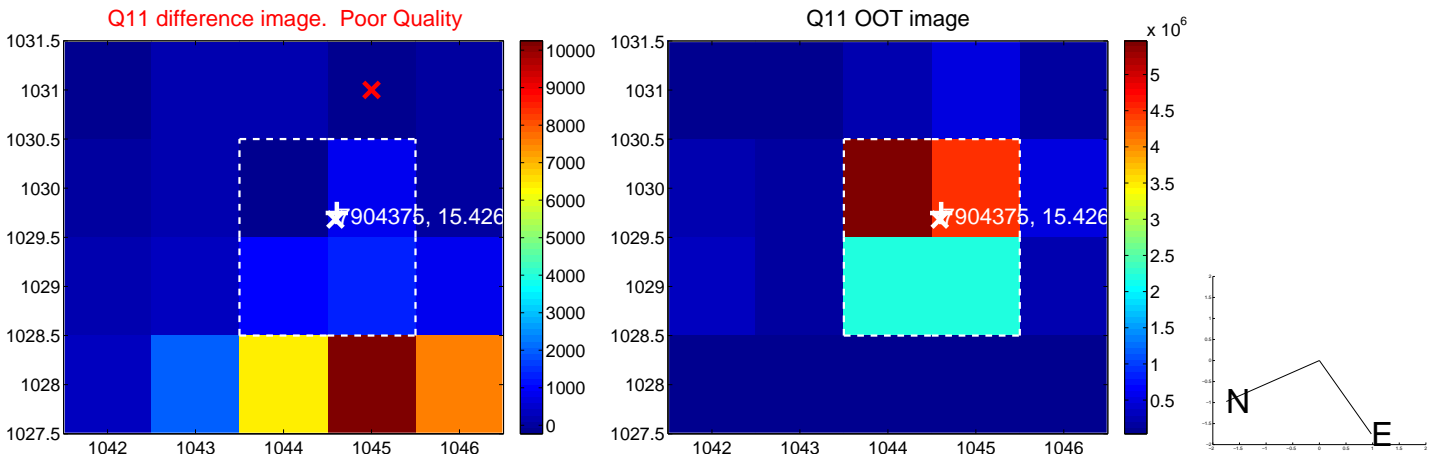
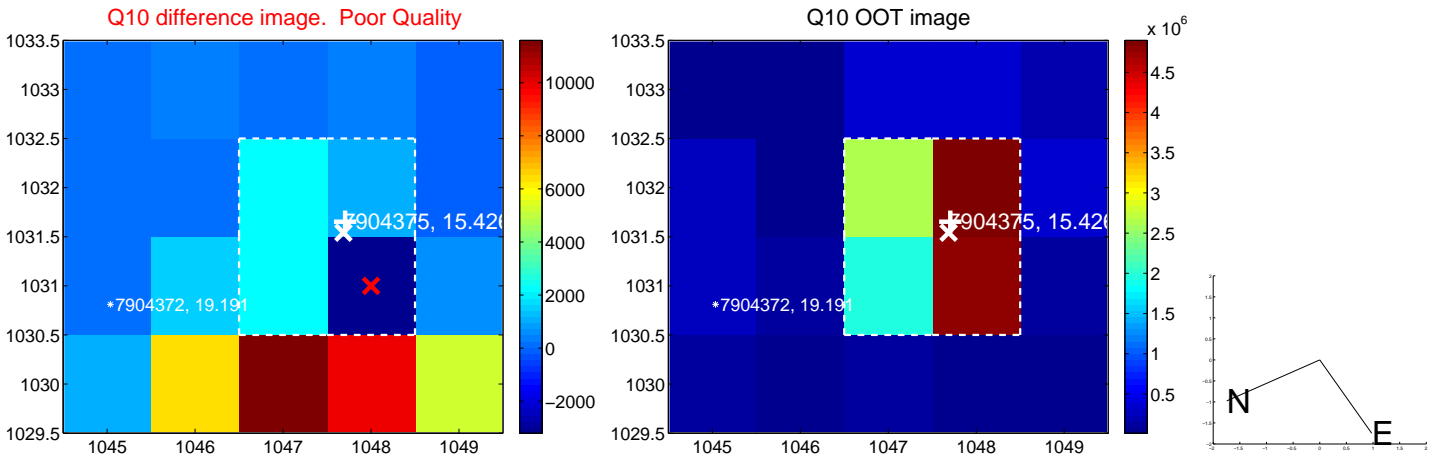
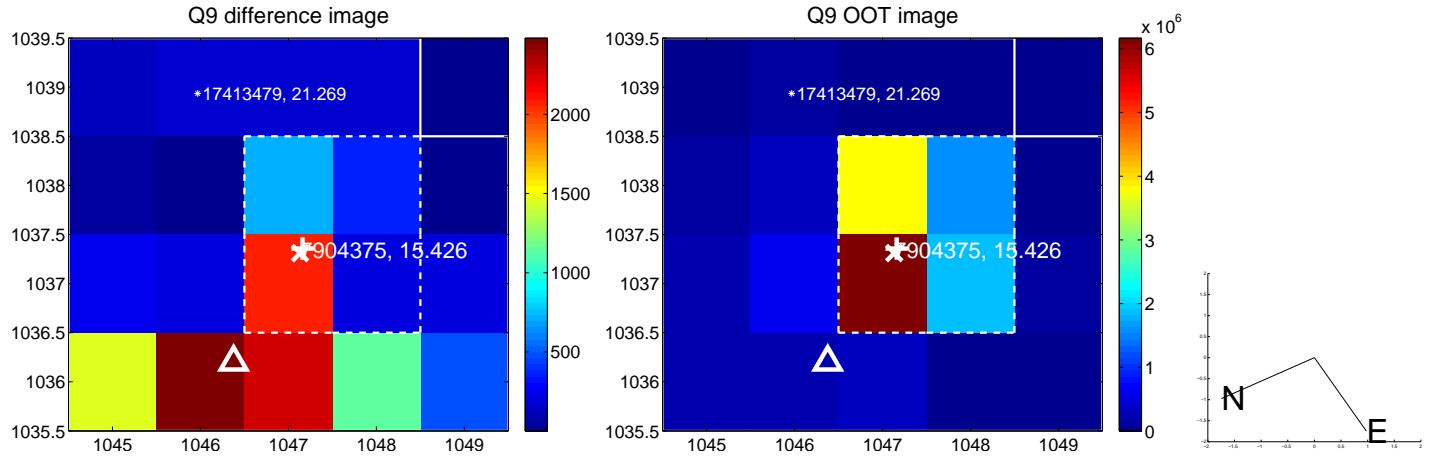
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



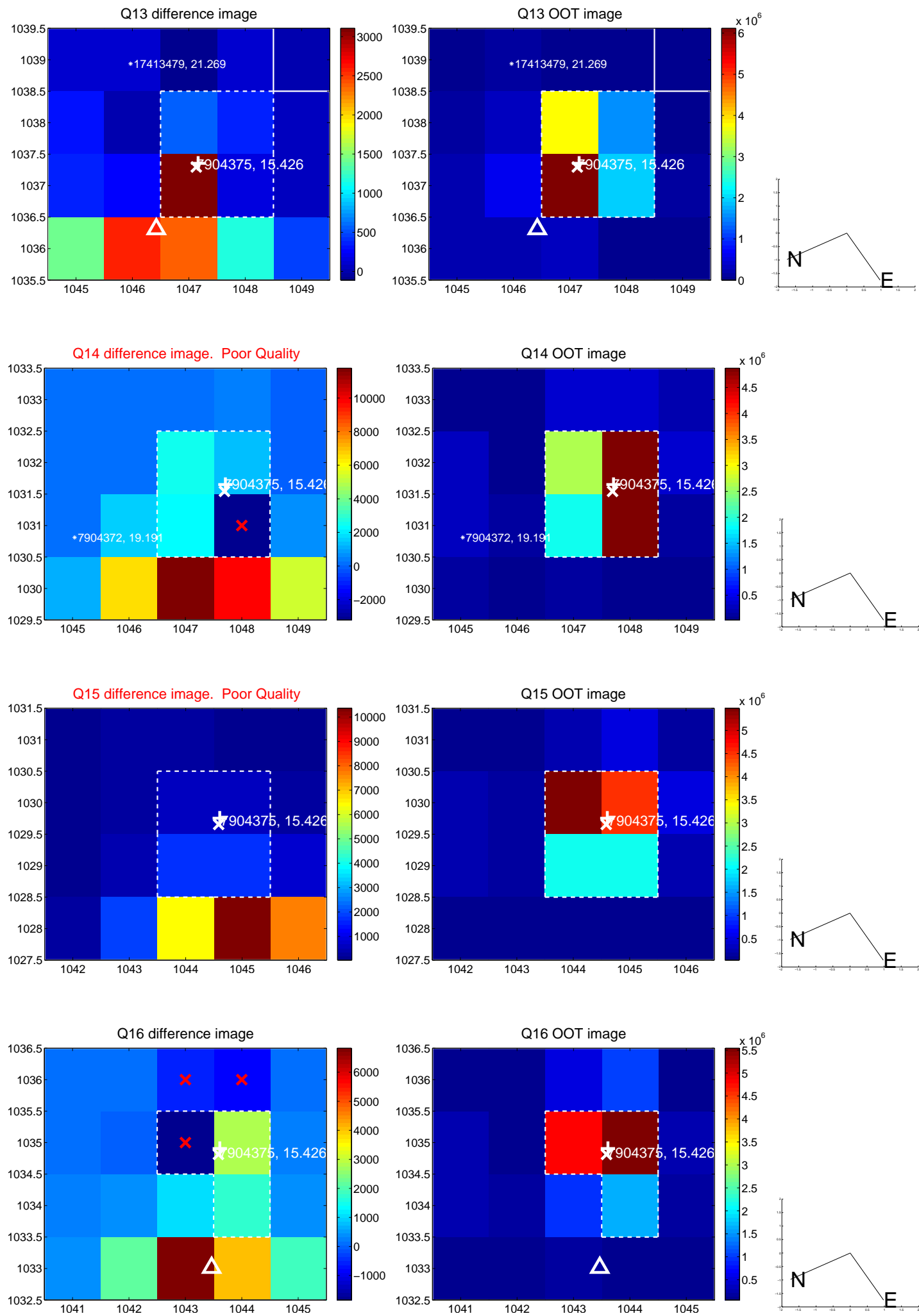
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



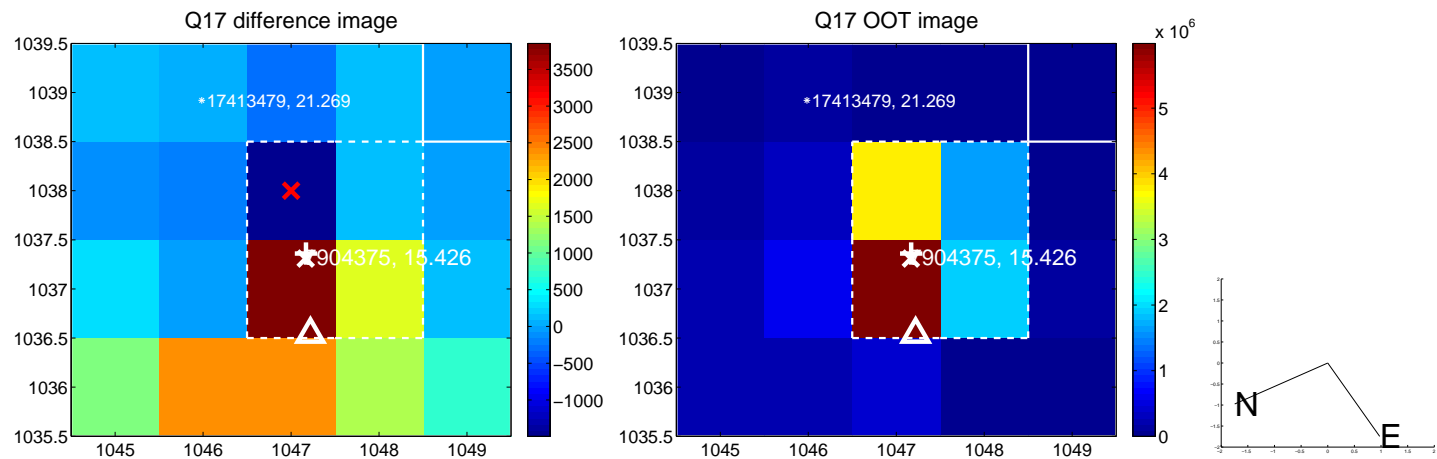
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

