

KIC 011250587

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})
011250587-01	OBS	0107.01	7.256966	134.023627	462.3	5.023	127.9	130.8	1.55	5858	3.71	432.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011250587-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

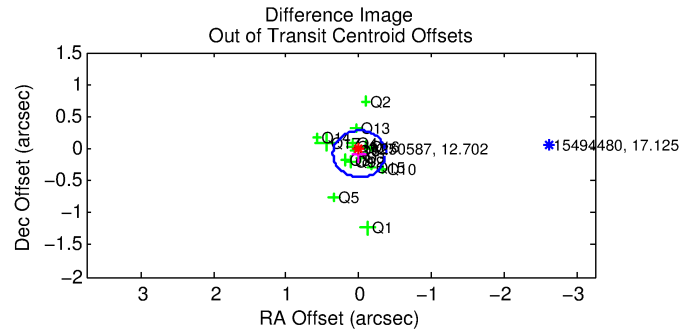
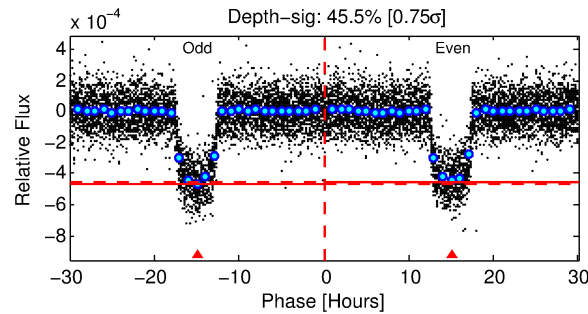
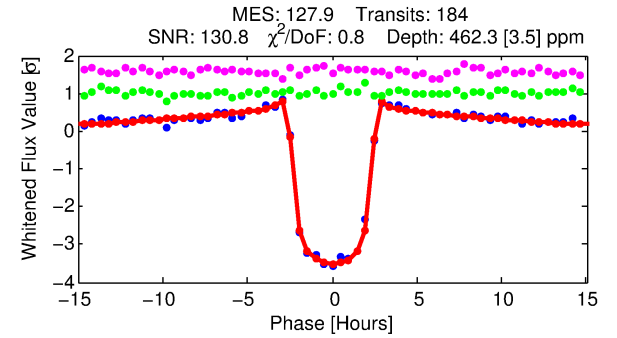
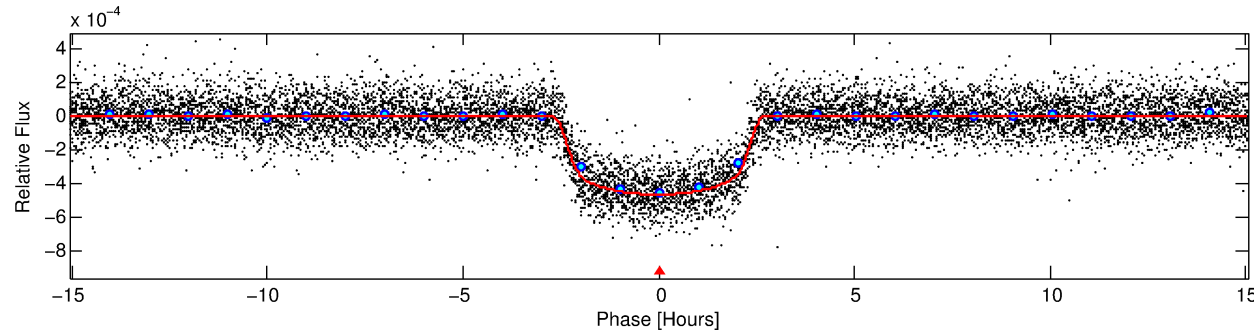
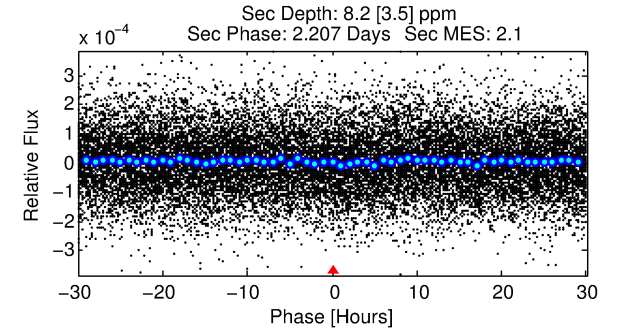
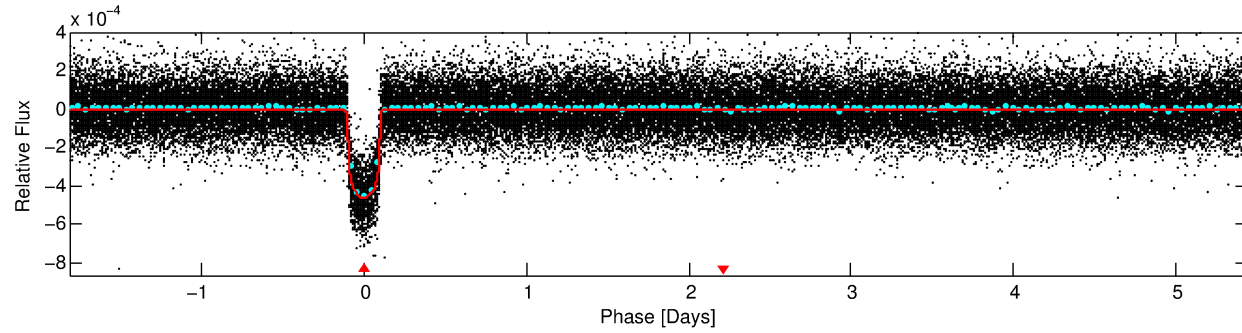
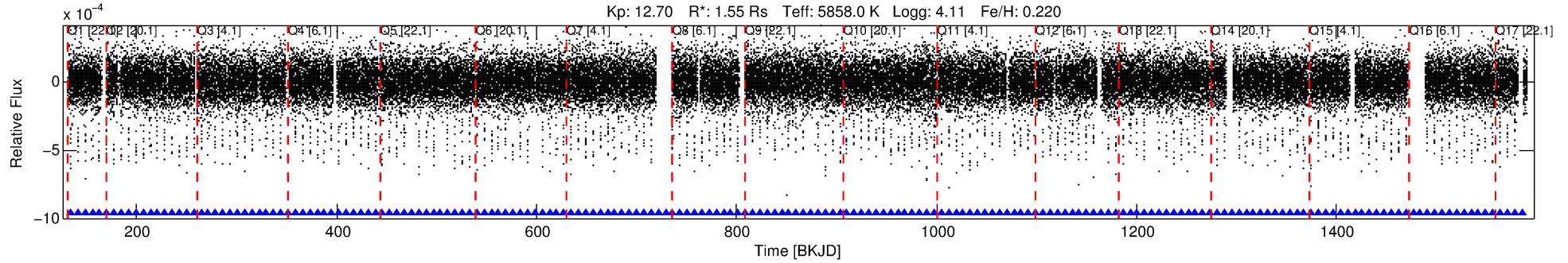
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011250587-01

No Significant Match Found

DV One-Page Summary

KIC: 11250587 Candidate: 1 of 1 Period: 7.257 d
KOI: K00107.01 Corr: 0.984



DV Fit Results:

Period = 7.25697 [0.00001] d
Epoch = 134.0236 [0.0006] BKJD
Rp/R* = 0.0220 [0.0008]
a/R* = 6.98 [1.13]
b = 0.81 [0.07]
Seff = 432.77 [32.96]
Teff = 1163 [22] K
Rp = 3.71 [0.26] Re
a = 0.0765 [0.0033] AU
Ag = 1.91 [0.84] [1.08σ]
Teffp = 2115 [233] K [4.07σ]

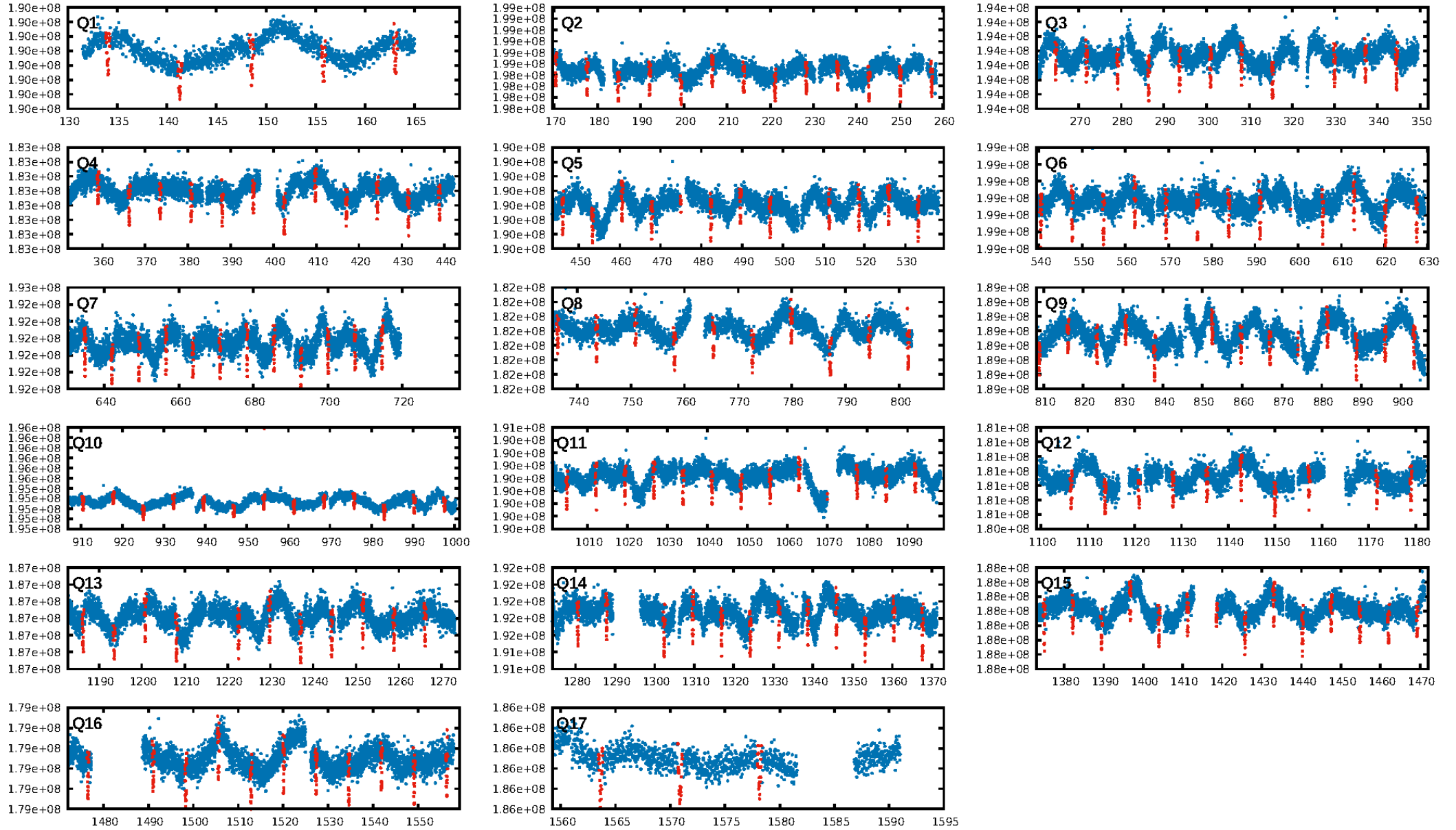
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 95.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [176/176]
GhostDiagnostic-chr: 5.487
Centroid-sig: 40.9%
Centroid-so: 0.035 arcsec [0.49σ]
OotOffset-rm: 0.083 arcsec [0.68σ]
KicOffset-rm: 0.143 arcsec [1.20σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

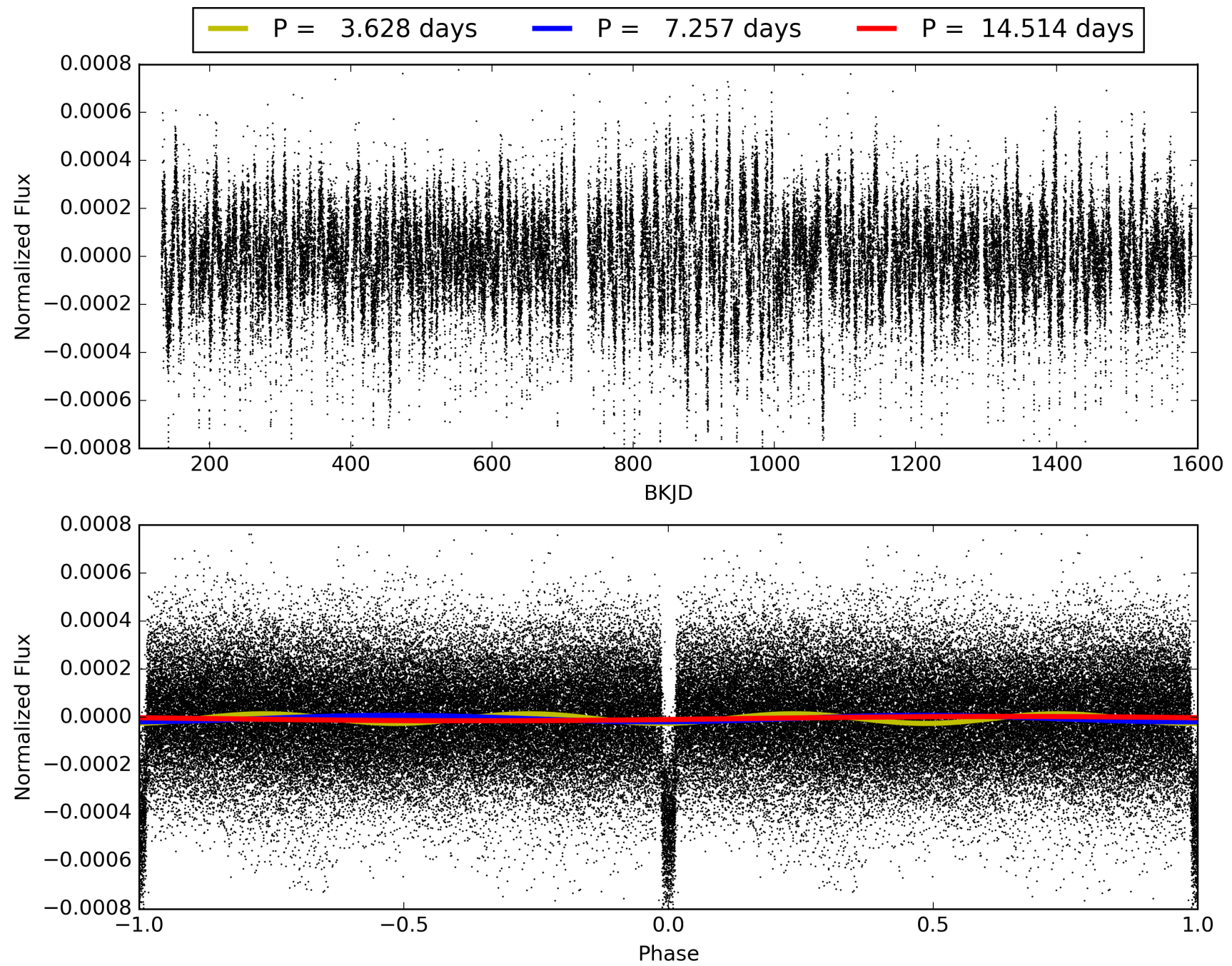
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:11:21 Z

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

TCE 011250587-01, PDC Light Curves

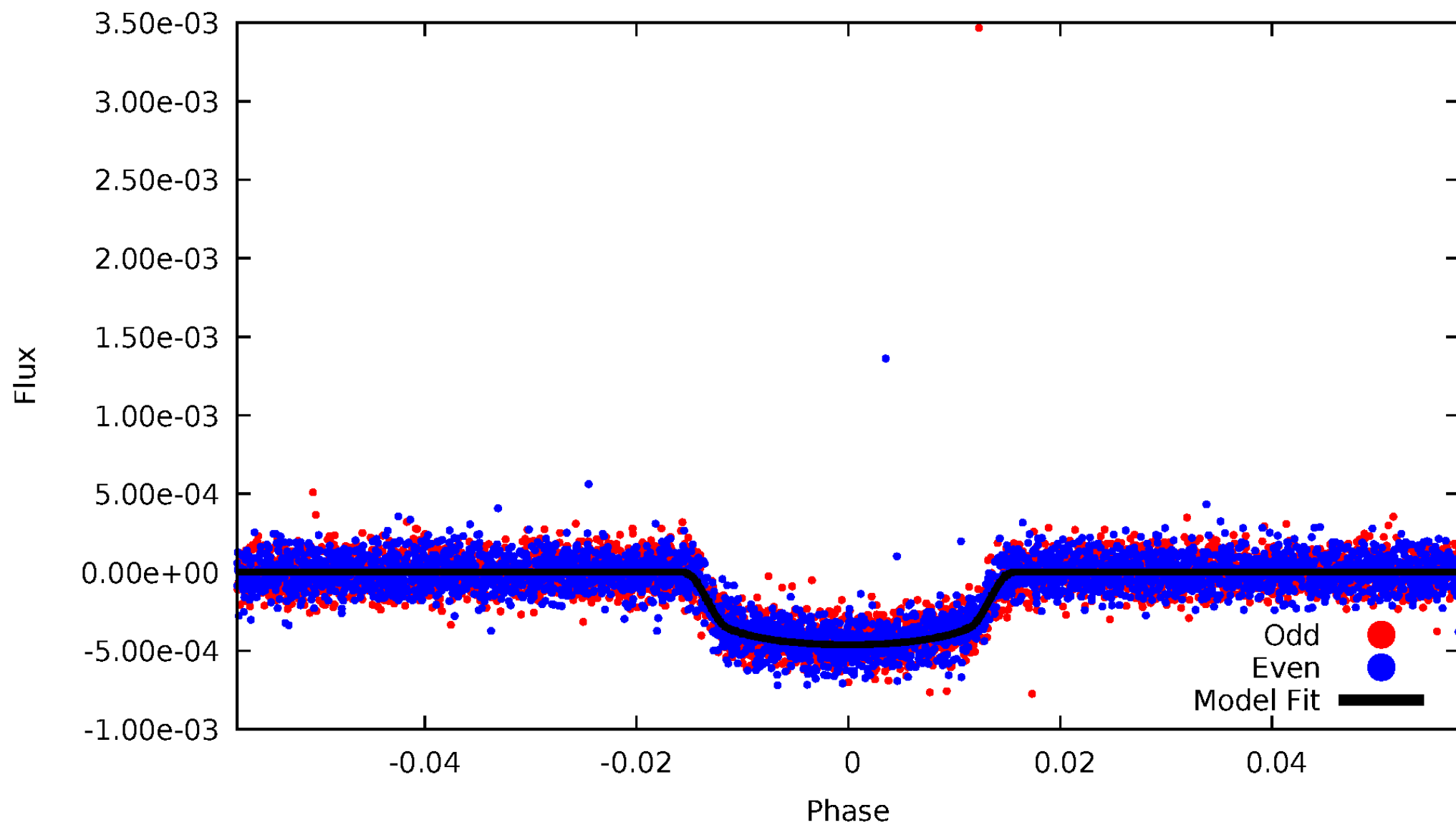


TCE 011250587-01



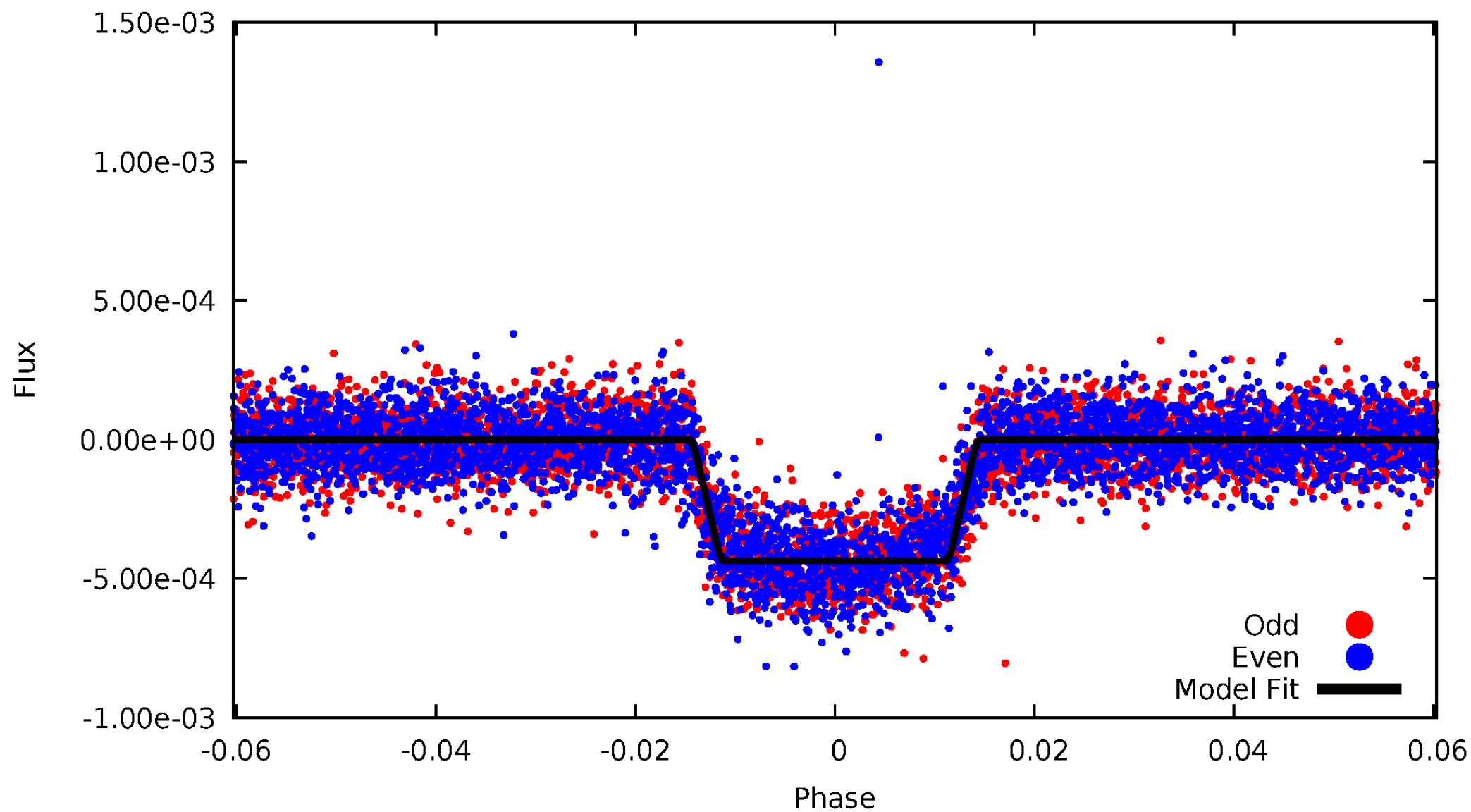
DV Odd/Even

TCE 011250587-01

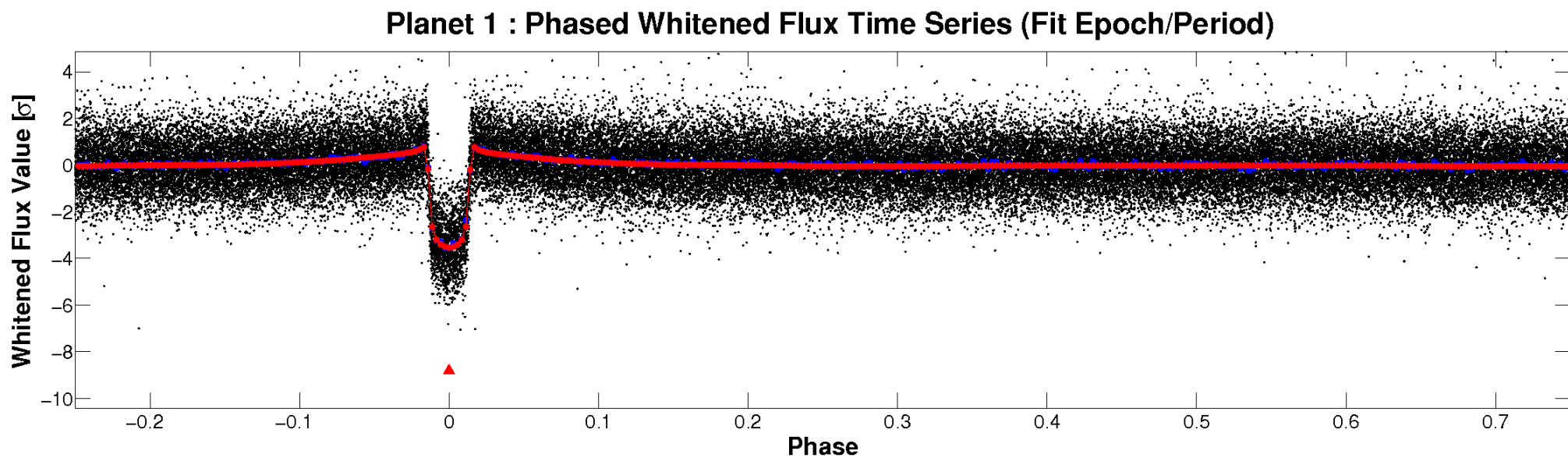
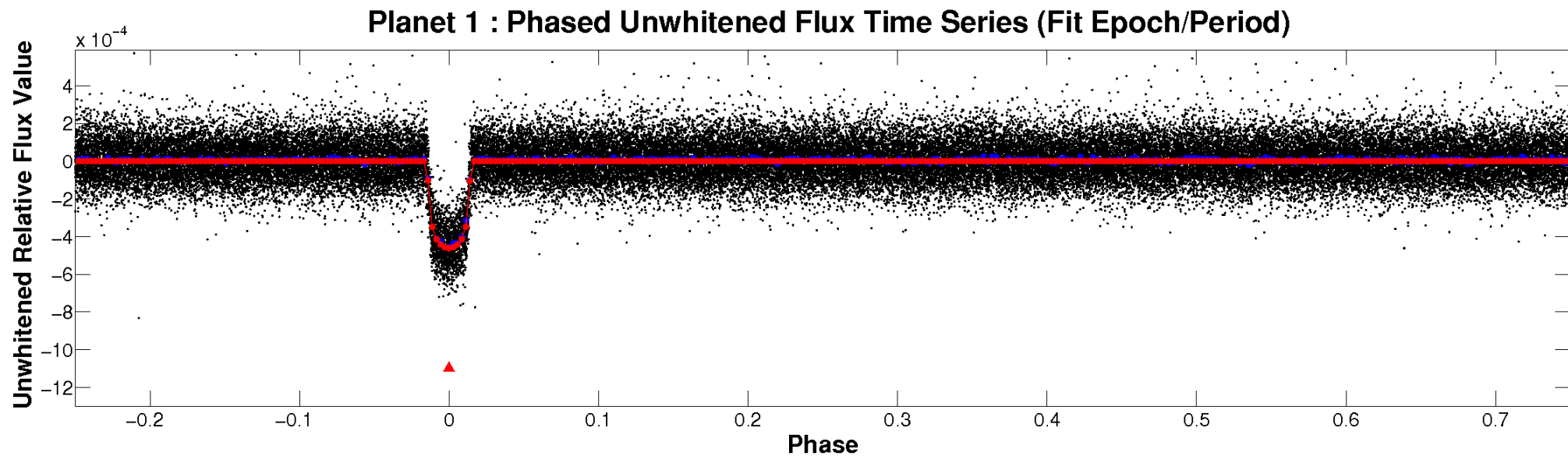


ALT Odd/Even

TCE 011250587-01

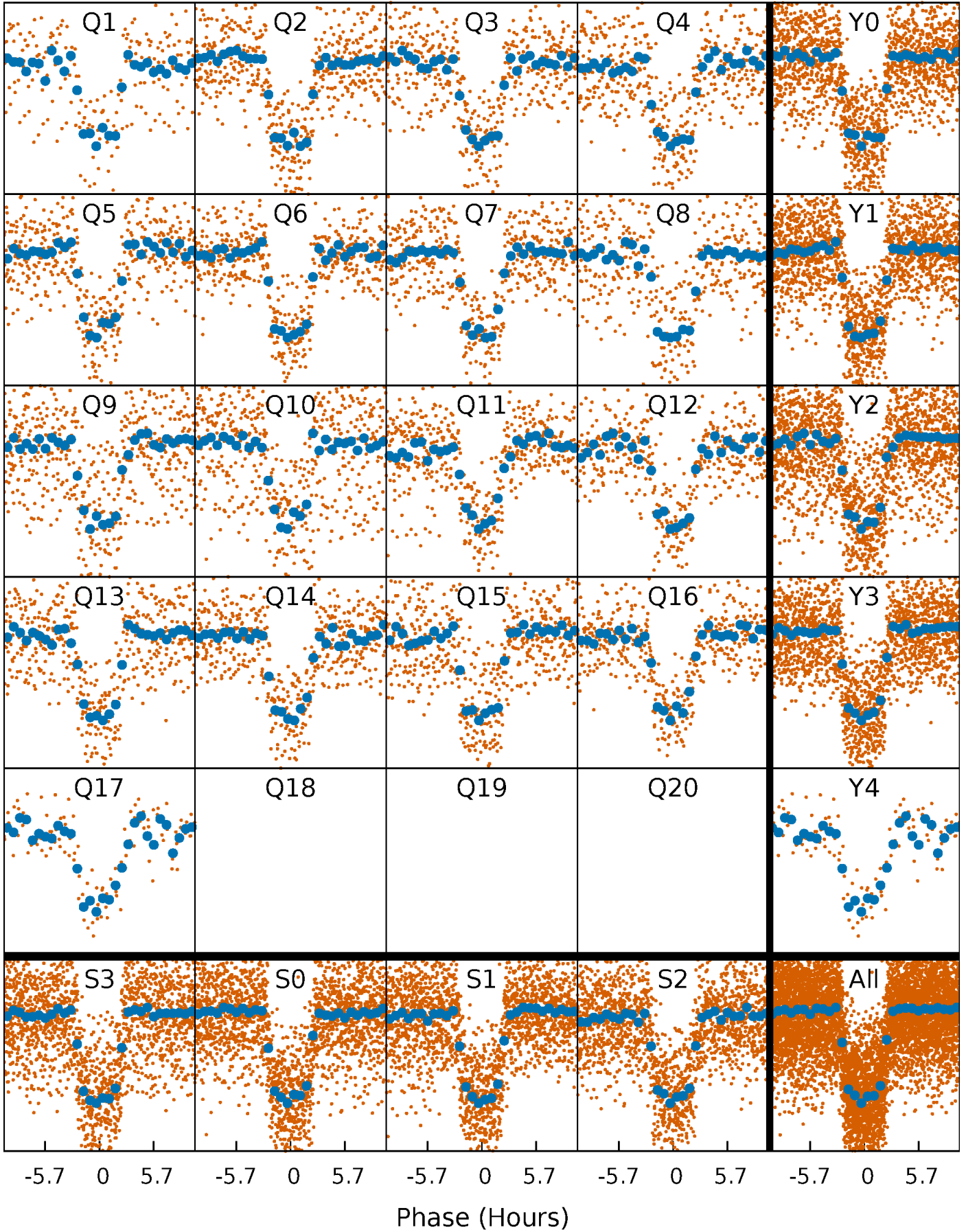


Non-Whitened Vs. Whitened Light Curve



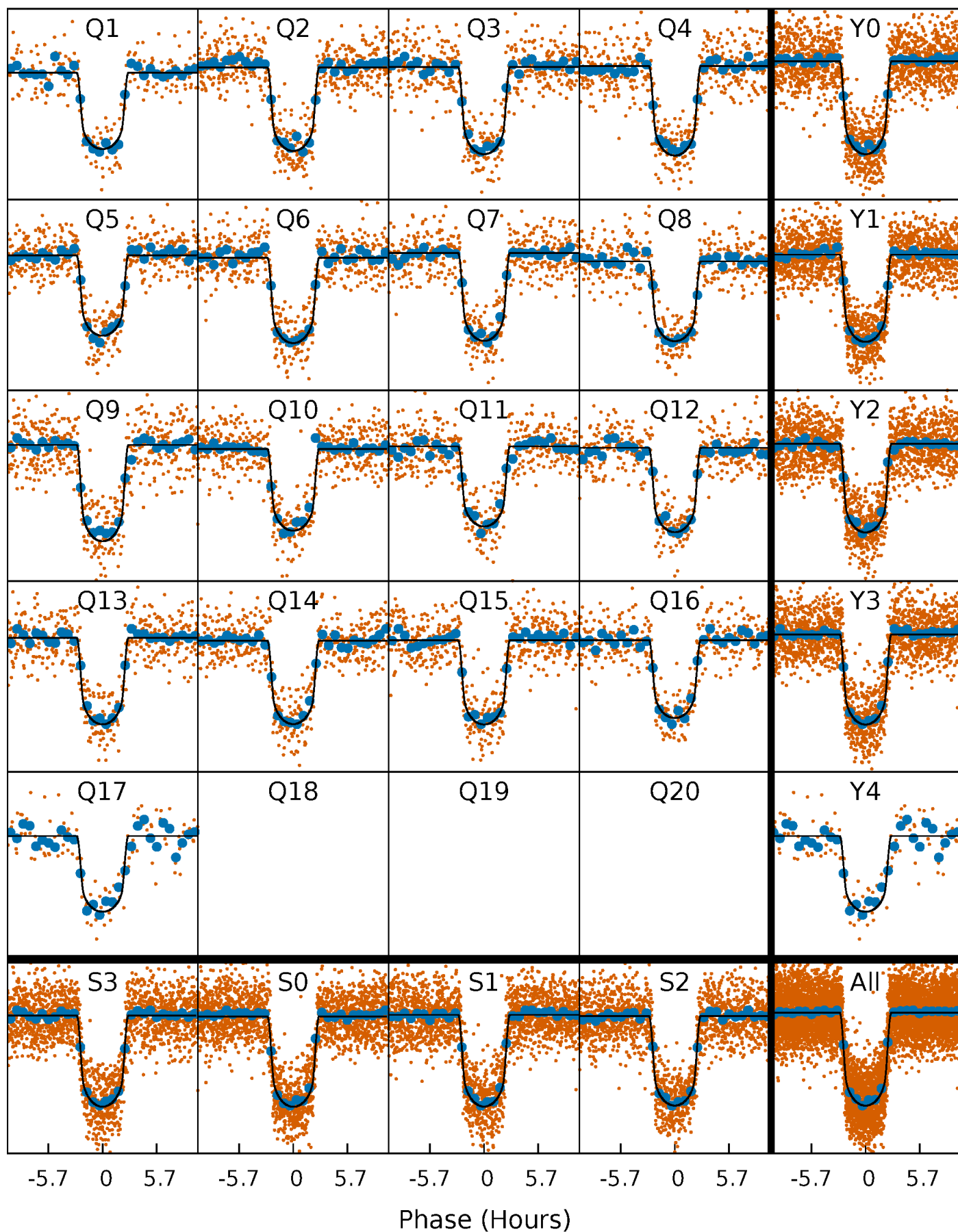
PDC Quarter-Phased Transit Curves

TCE 011250587-01 P= 7.256966 Days $T_0=134.023627$ (BKJD)



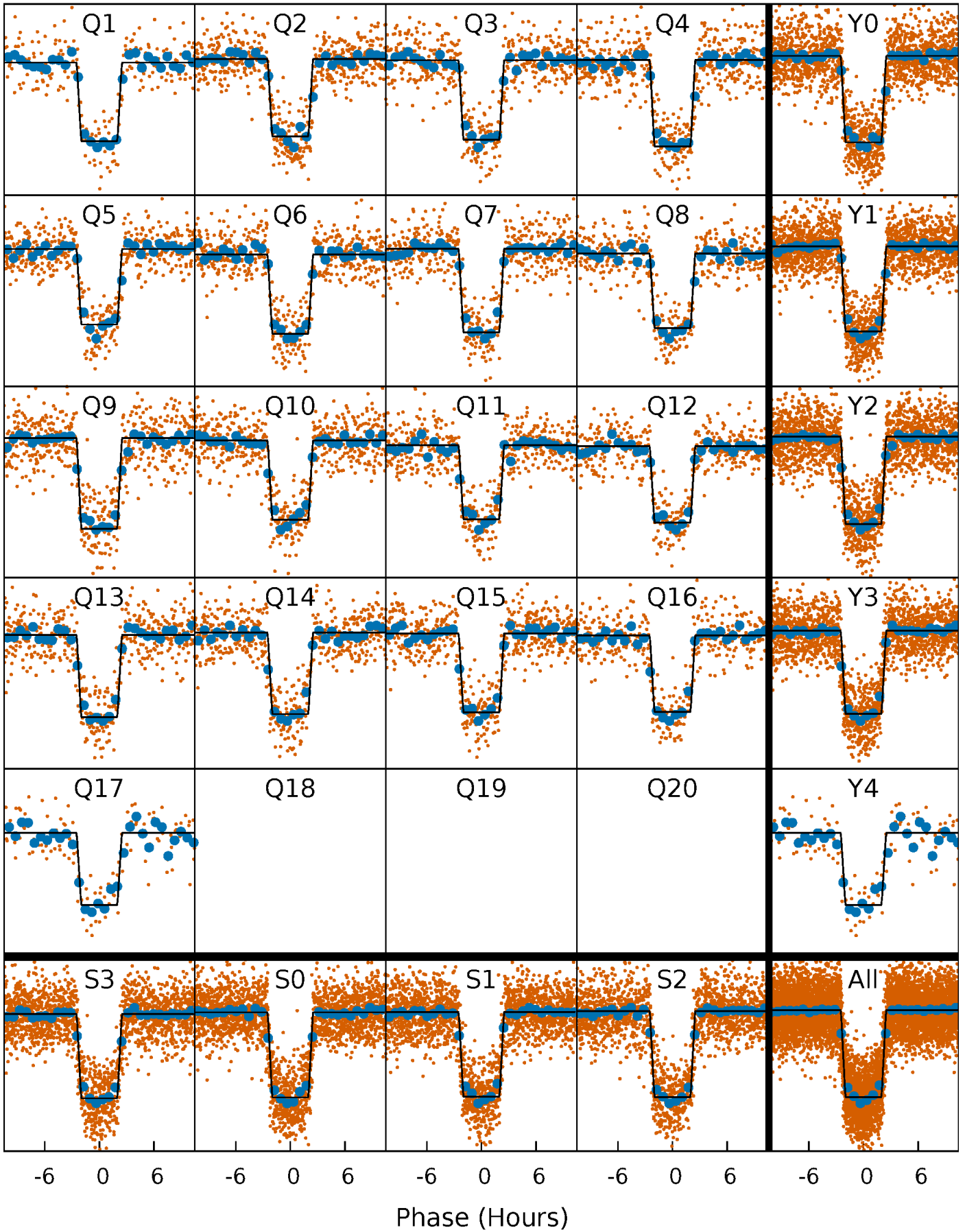
DV Quarter-Phased Transit Curves

TCE 011250587-01 P= 7.256966 Days $T_0=134.023627$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

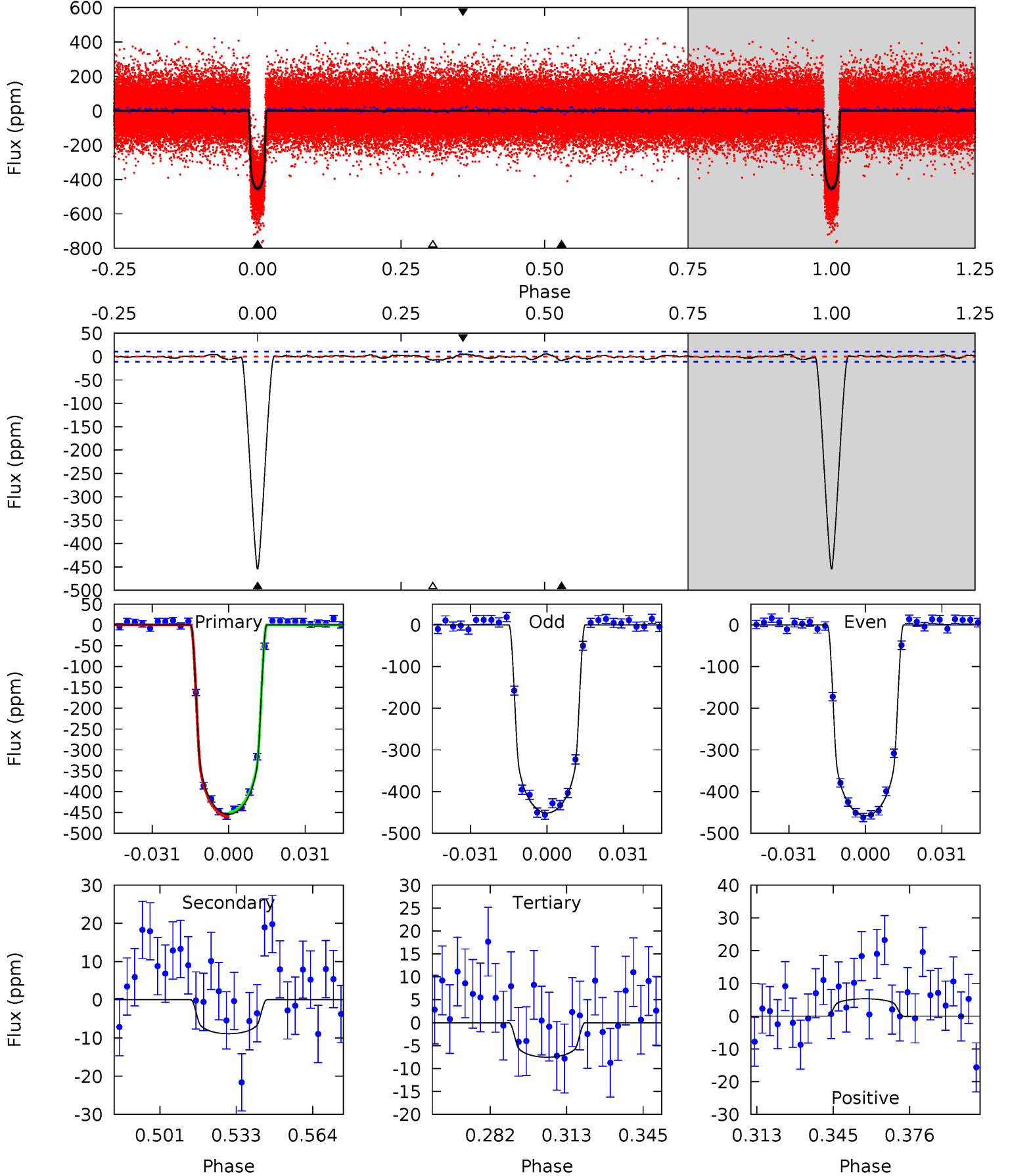
TCE 011250587-01 P= 7.257037 Days $T_0=134.016926$ (BKJD)



DV Model-Shift Uniqueness Test

011250587-01, P = 7.256966 Days, E = 126.766661 Days

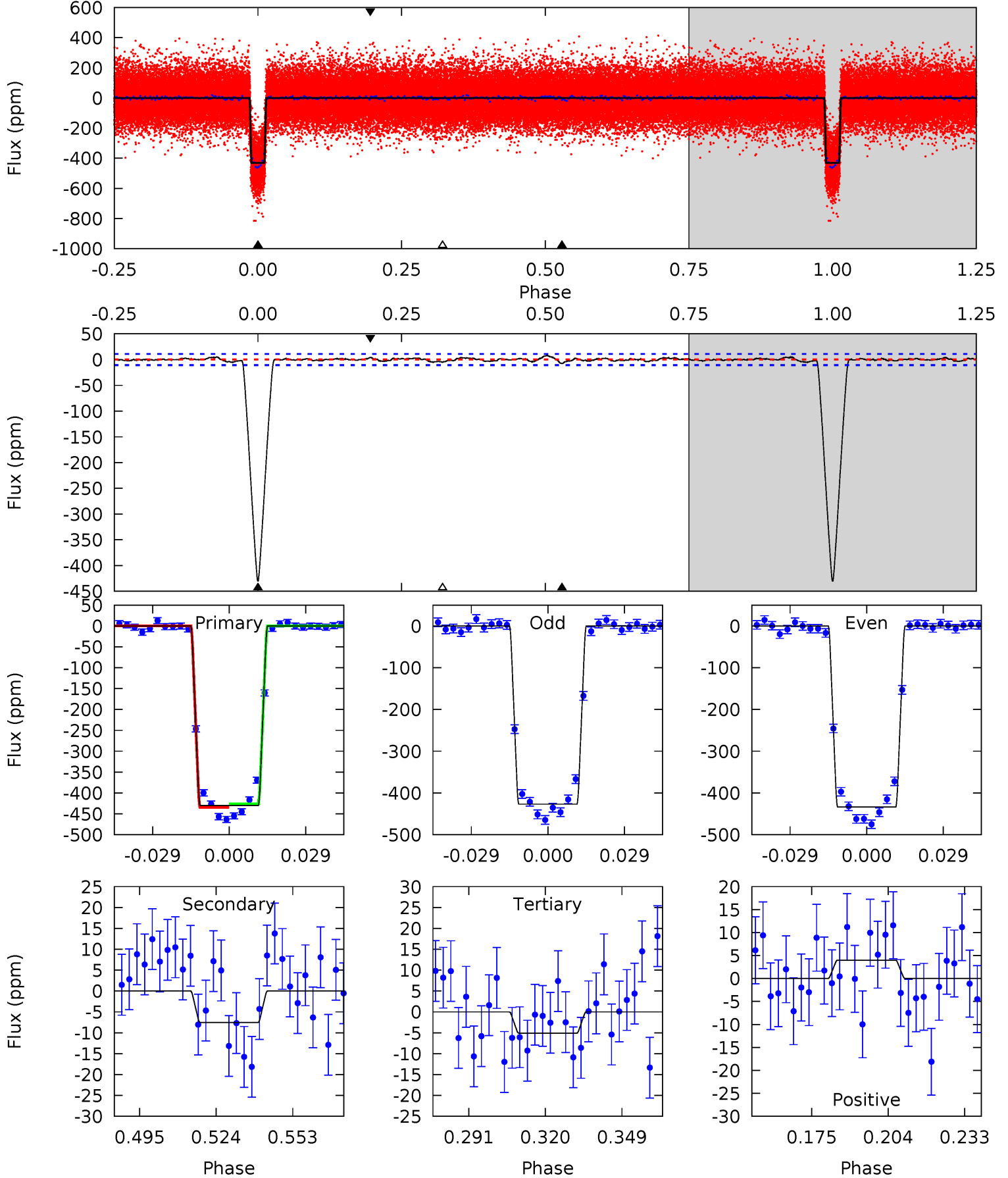
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
202.8	3.97	3.36	2.36	4.80	2.15	1.17	199.4	200.4	0.61	1.61	1.48	1.00	0.01	2.21



Alt Model-Shift Uniqueness Test

011250587-01, P = 7.257037 Days, E = 126.759889 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
189.8	3.32	2.24	1.76	4.82	2.18	0.93	187.6	188.0	1.08	1.56	1.48	1.01	0.02	1.98



Stellar Parameters For KIC 011250587

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5858^{+70}_{-79}	$4.112^{+0.024}_{-0.020}$	$0.220^{+0.150}_{-0.150}$	$1.549^{+0.091}_{-0.074}$	$1.133^{+0.121}_{-0.071}$	$0.430^{+0.041}_{-0.034}$
	+1%/-1%	+1%/-0%	+68%/-68%	+6%/-5%	+11%/-6%	+10%/-8%
Source	SPE72	AST8	SPE72	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011250587-01 / KOI 0107.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-9 ± 2	$3.71^{+0.20}_{-0.19}$	1624^{+25}_{-27}	2816^{+110}_{-123}	$2.107^{+0.544}_{-0.529}$
Alt.	-8 ± 2	$3.53^{+0.18}_{-0.18}$	1623^{+26}_{-26}	2794^{+122}_{-162}	$1.990^{+0.618}_{-0.612}$

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

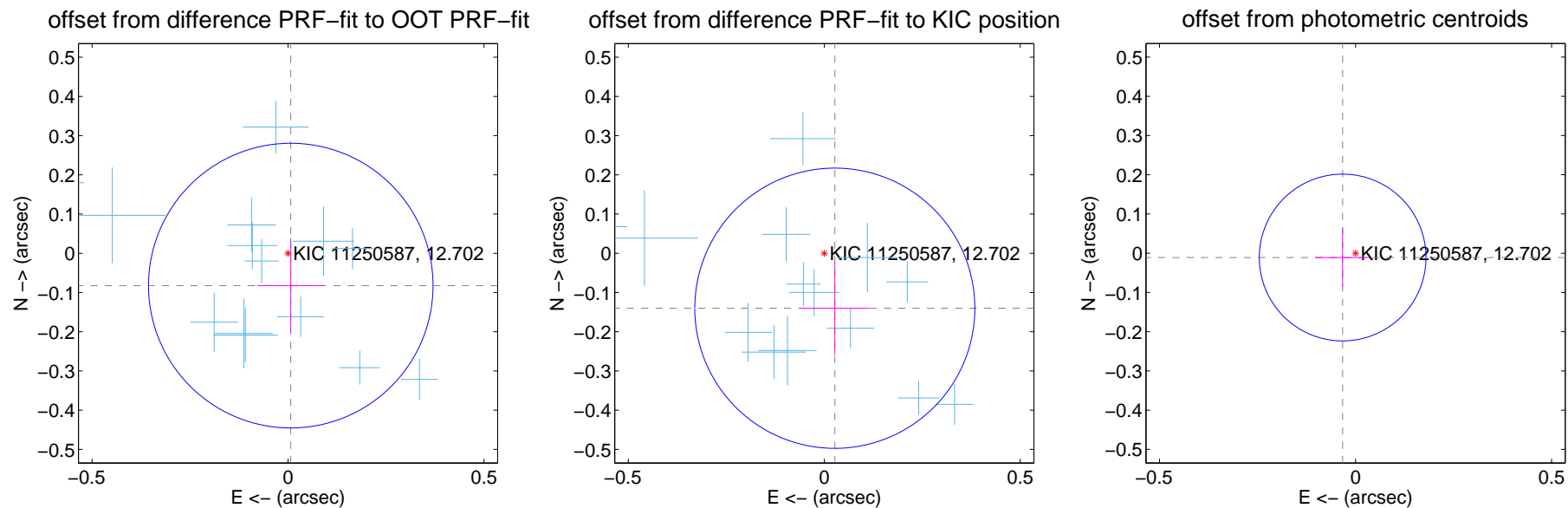
DV Centroid Data

Supplemental centroid analysis for 011250587-01. Kepler magnitude: 12.70. Transit SNR 130.82

There are 17 quarters with good PRF difference image offsets

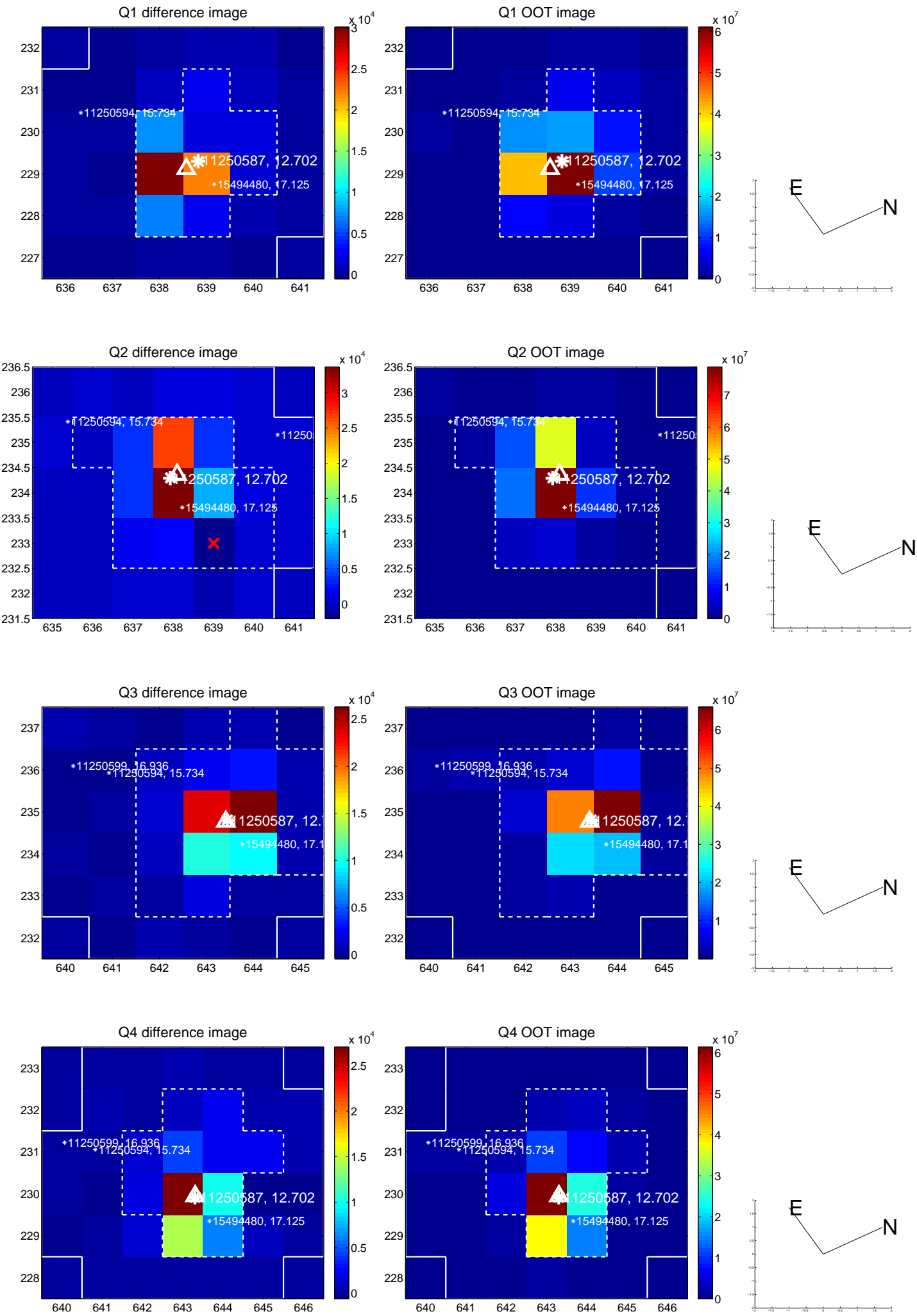
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.083 ± 0.121	0.68	-0.007 ± 0.085	-0.082 ± 0.121
PRF-fit source offset from KIC position	0.143 ± 0.119	1.20	-0.027 ± 0.088	-0.140 ± 0.119
photometric centroid source offset	0.03 ± 0.07	0.49	0.03 ± 0.07	-0.01 ± 0.07

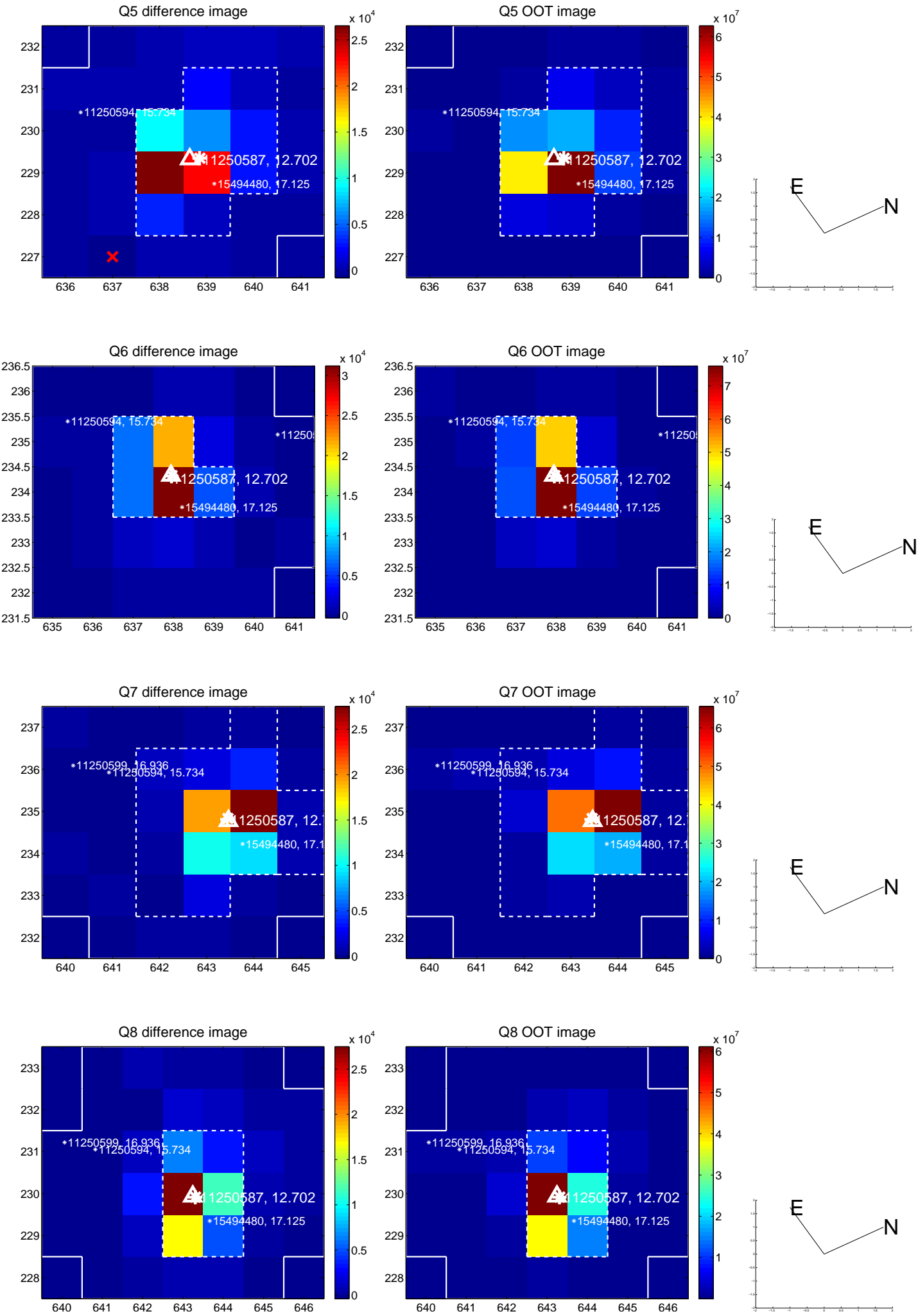


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

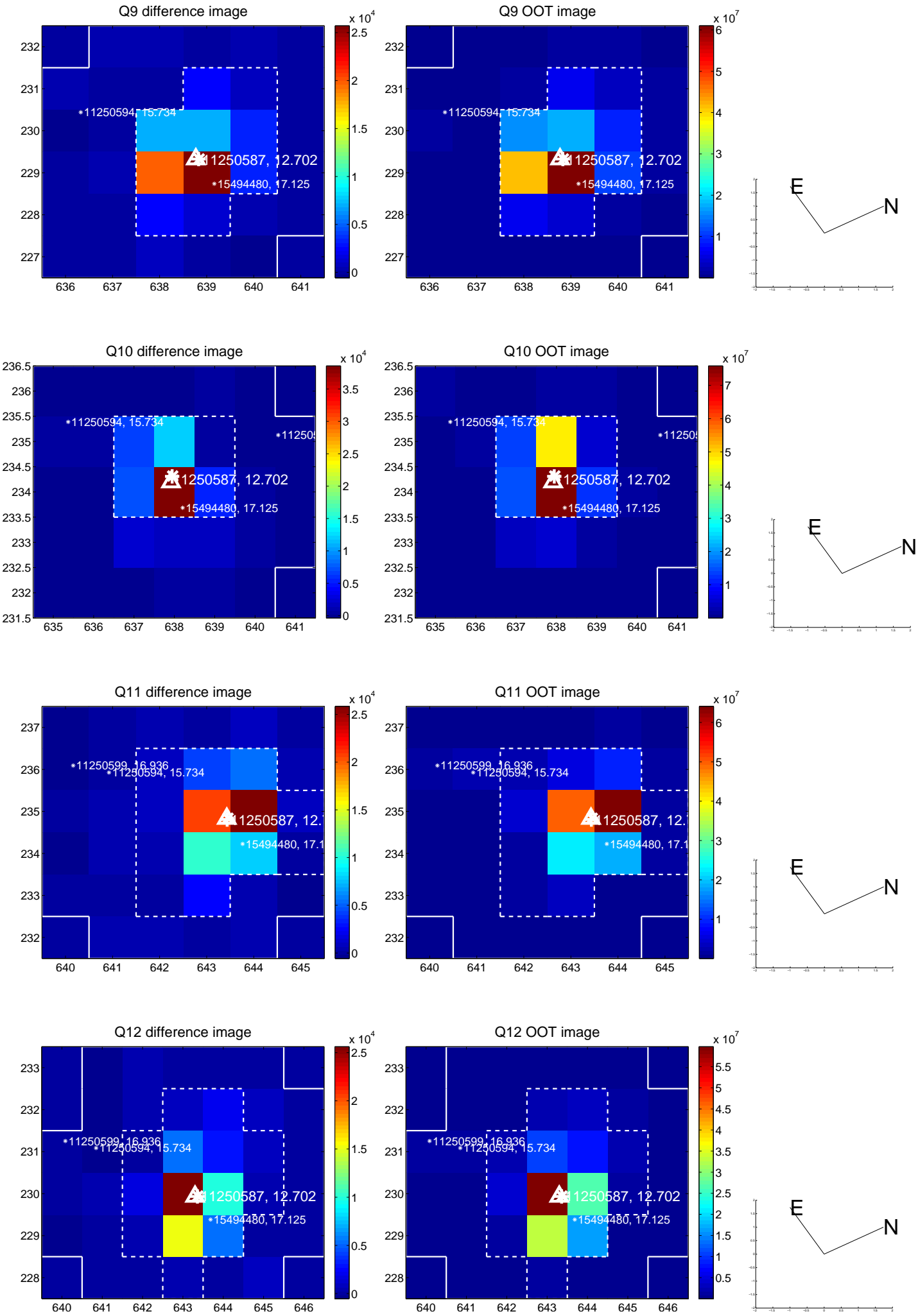
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



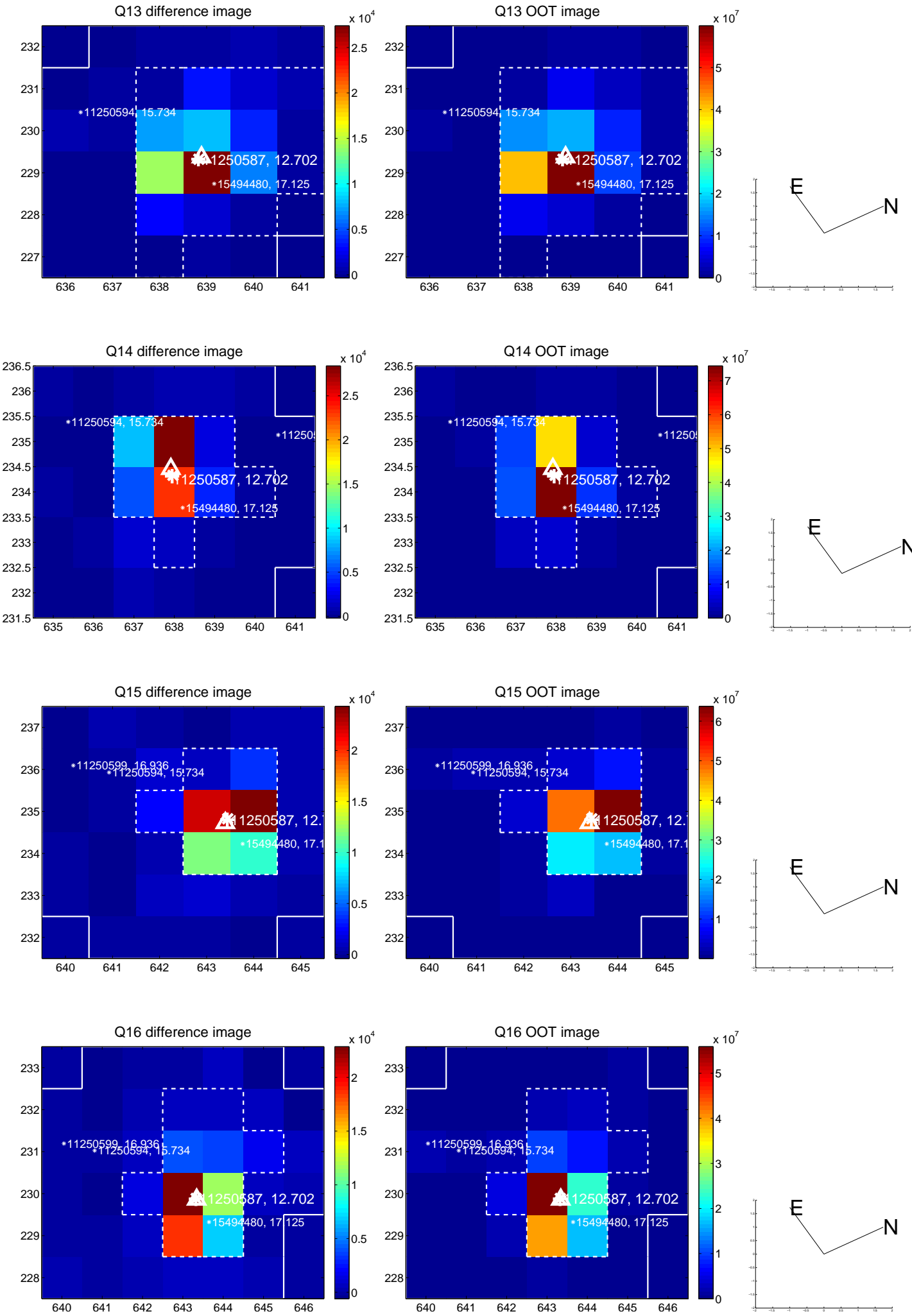
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

