

KIC 011395587

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})
011395587-01	OBS	0350.01	12.990693	138.266770	387.2	3.242	29.2	33.1	1.03	5787	3.04	92.38

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011395587-01	OBS	PC	0.98	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.

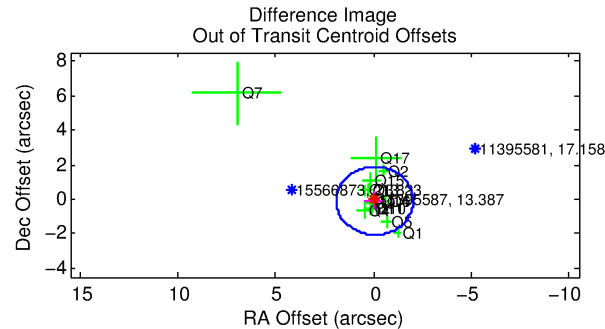
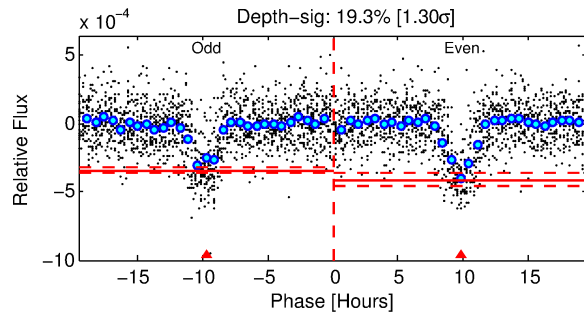
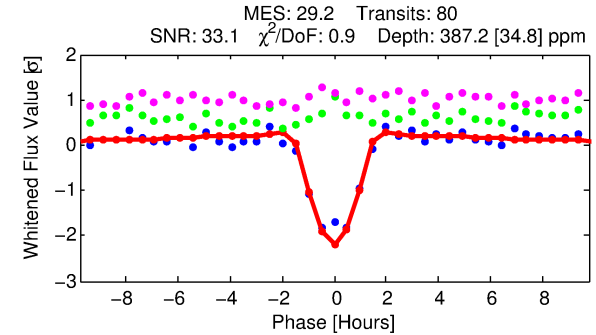
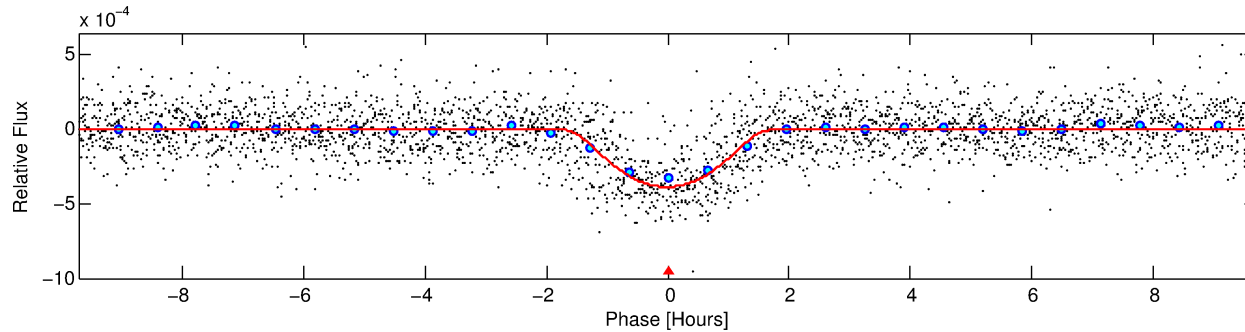
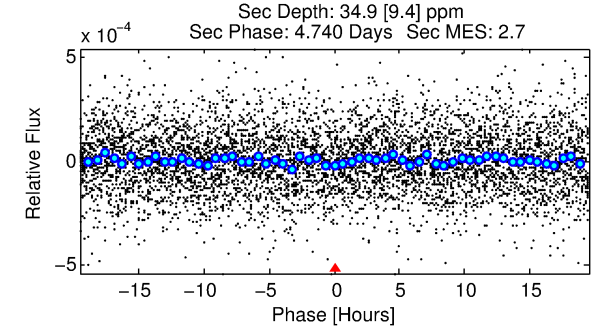
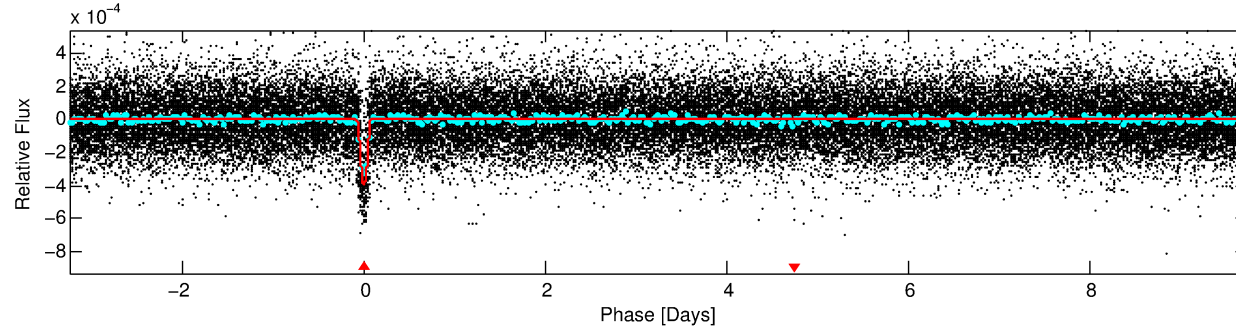
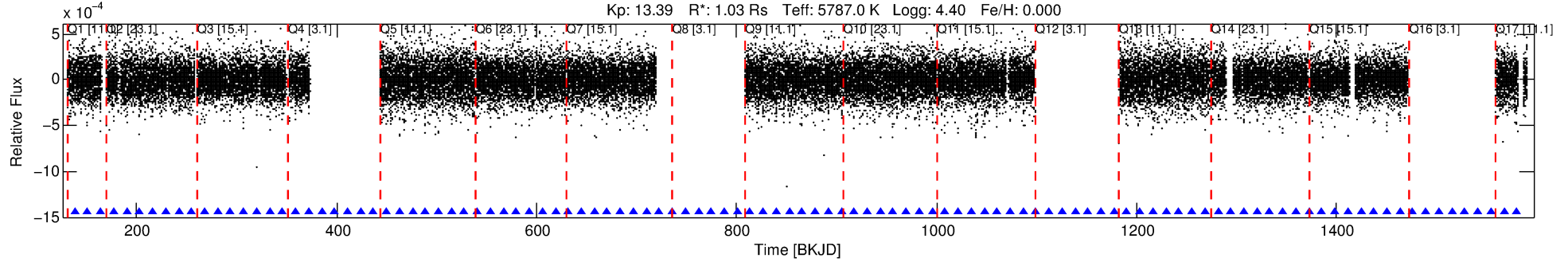
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011395587-01

No Significant Match Found

DV One-Page Summary

KIC: 11395587 Candidate: 1 of 1 Period: 12.991 d
KOI: K00350.01 Corr: 0.857



DV Fit Results:

Period = 12.99069 [0.00003] d
Epoch = 138.2668 [0.0020] BKJD
Rp/R* = 0.0271 [0.0069]
a/R* = 9.12 [1.20]
b = 0.98 [0.02]
Seff = 92.38 [19.50]
Teq = 791 [42] K
Rp = 3.04 [0.90] Re
a = 0.1071 [0.0139] AU
Ag = 23.91 [14.61] [1.57σ]
Teffp = 2703 [395] K [4.82σ]

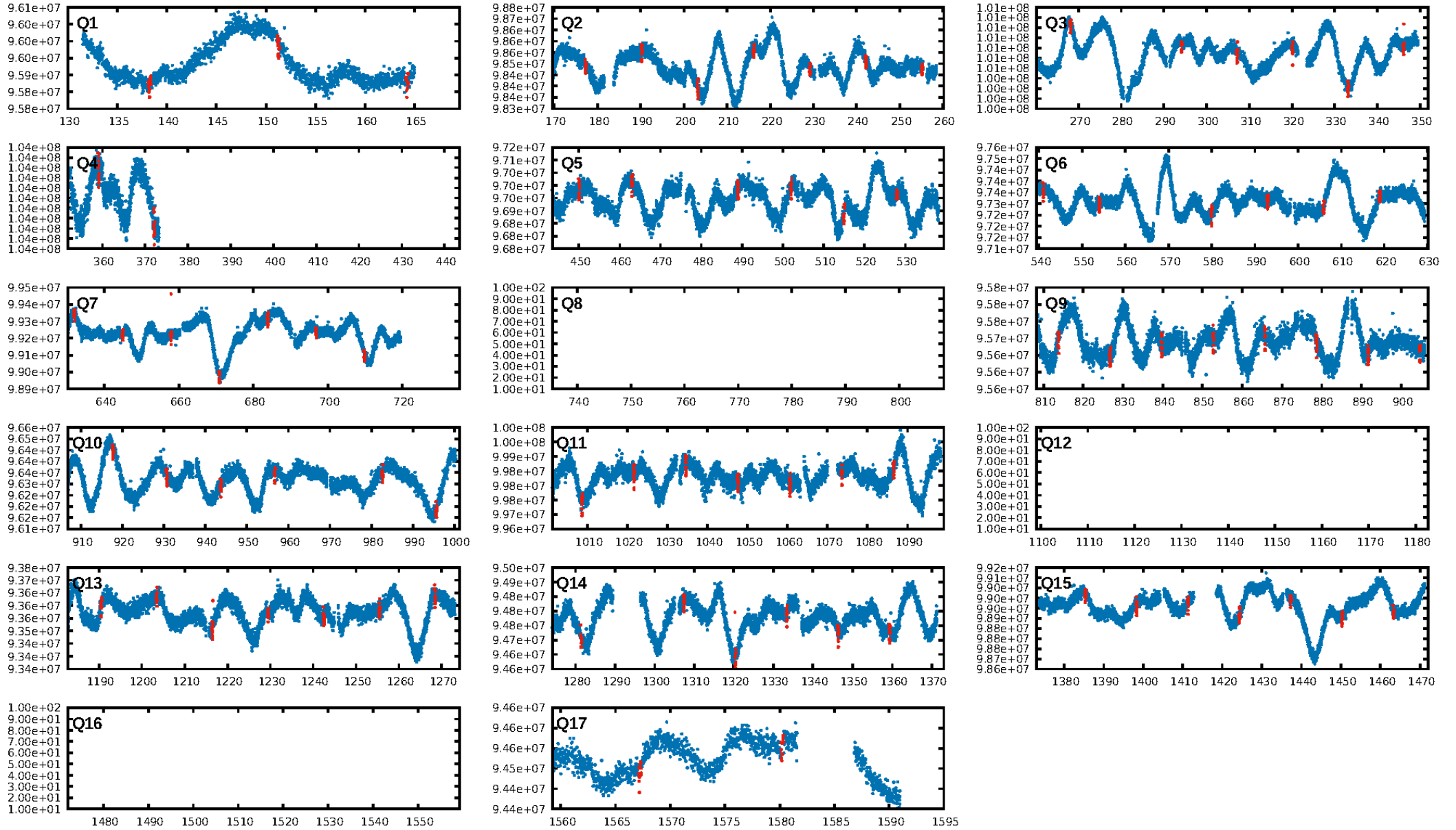
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 89.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.29e-173
RollingBand-fgt: 1.00 [73/73]
GhostDiagnostic-chr: 4.605
Centroid-sig: 70.5%
Centroid-so: 0.135 arcsec [0.44σ]
OotOffset-rm: 0.106 arcsec [0.16σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-rm: 0.091 arcsec [0.13σ]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.93 [13/14]
DiffImageOverlap-fno: 1.00 [14/14]

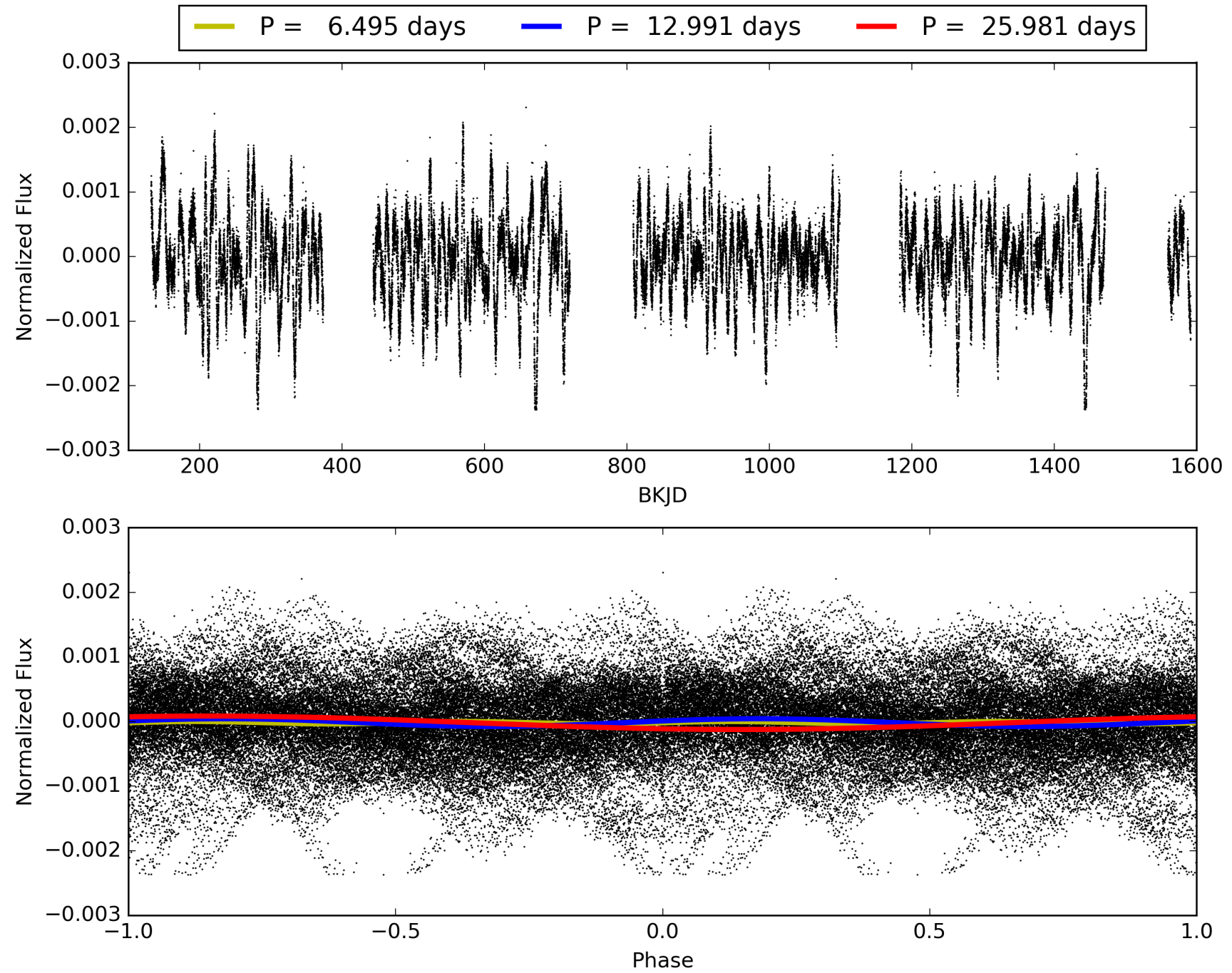
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:01:18 Z

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

TCE 011395587-01, PDC Light Curves

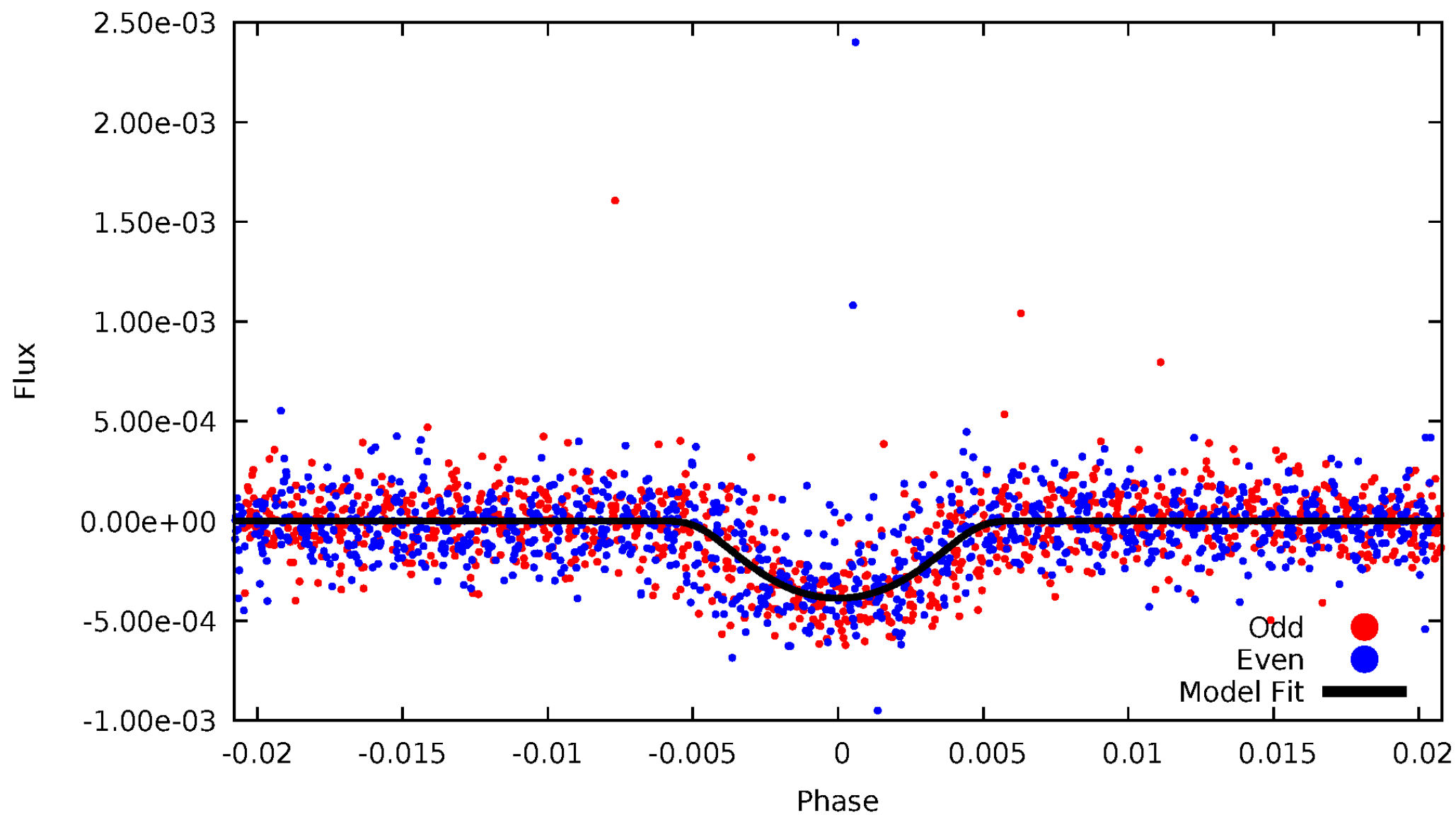


TCE 011395587-01



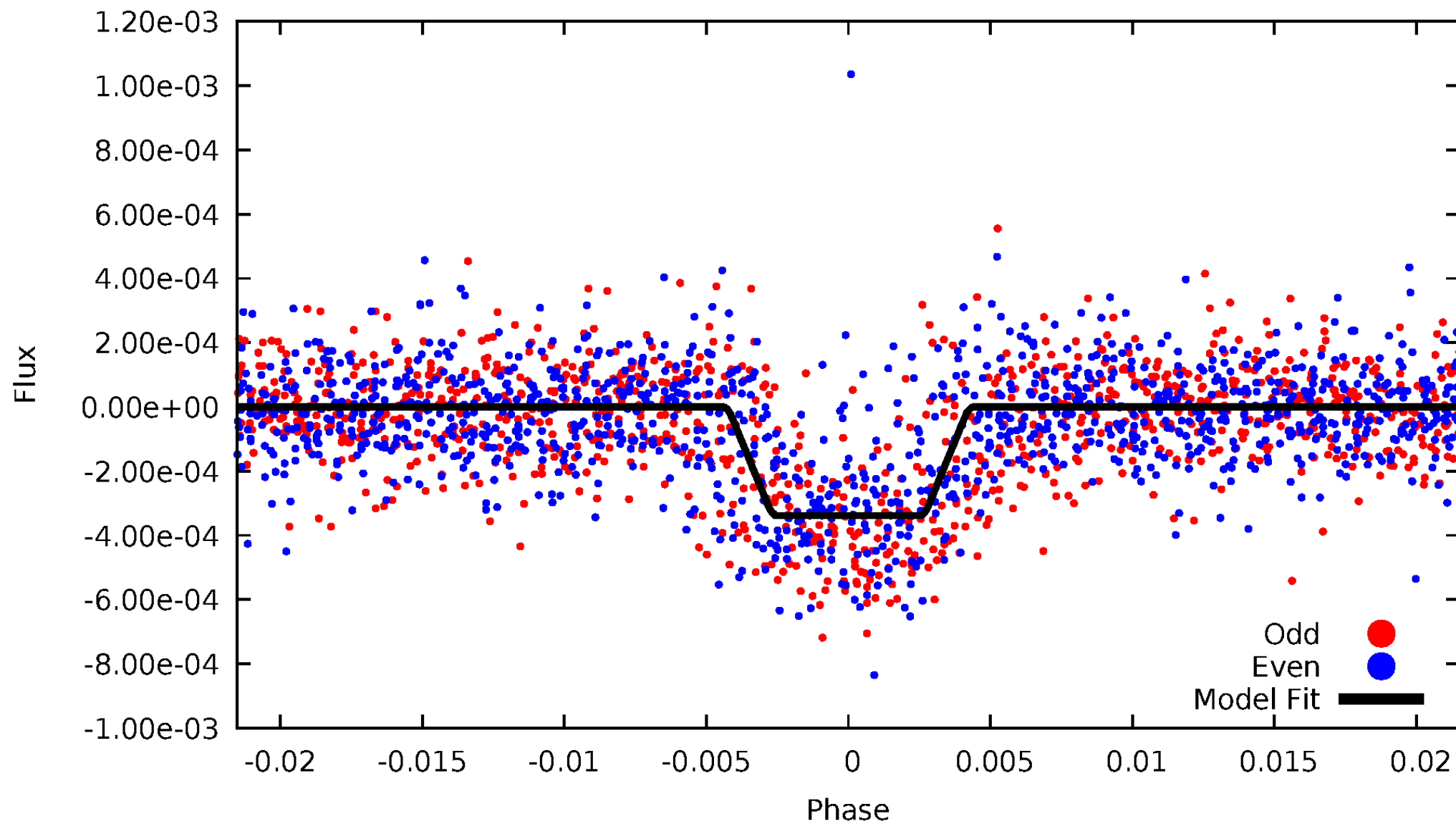
DV Odd/Even

TCE 011395587-01

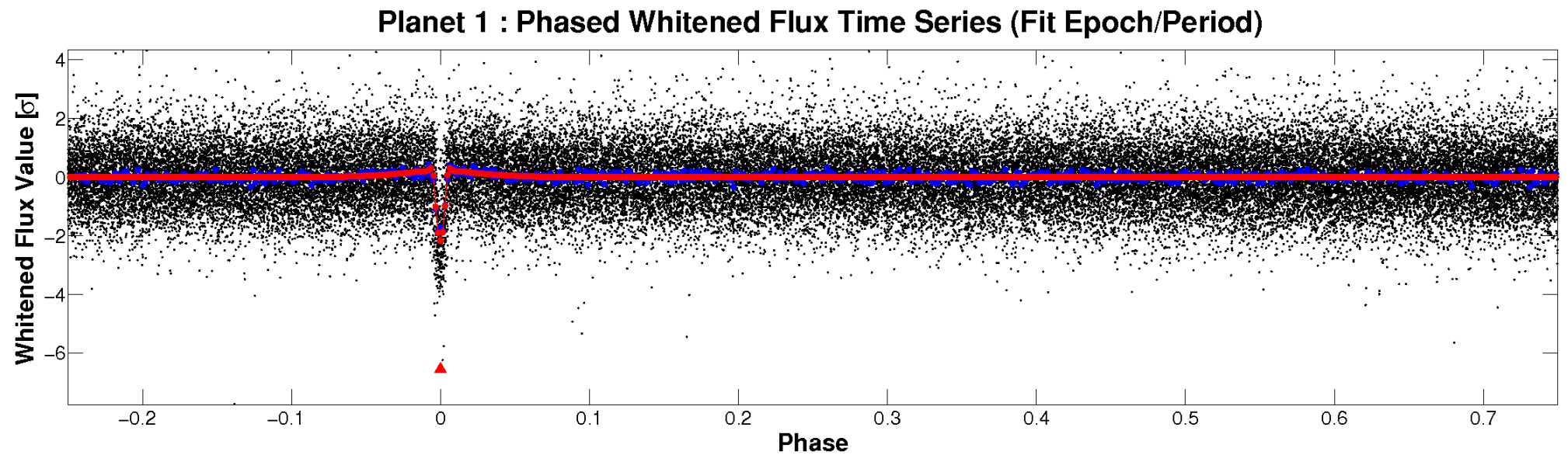
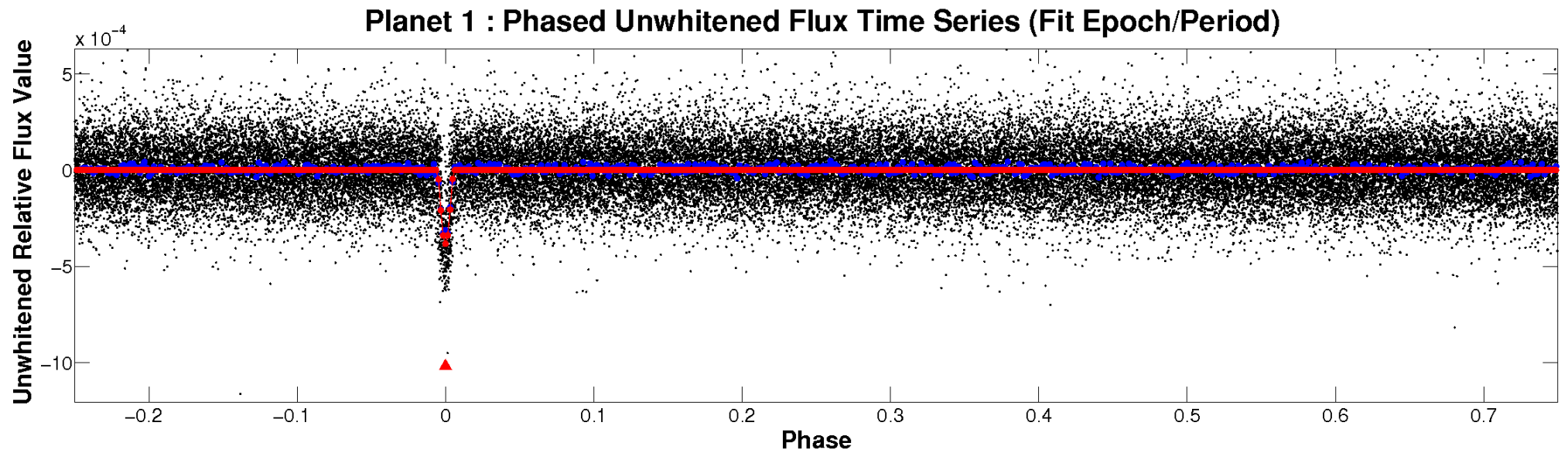


ALT Odd/Even

TCE 011395587-01

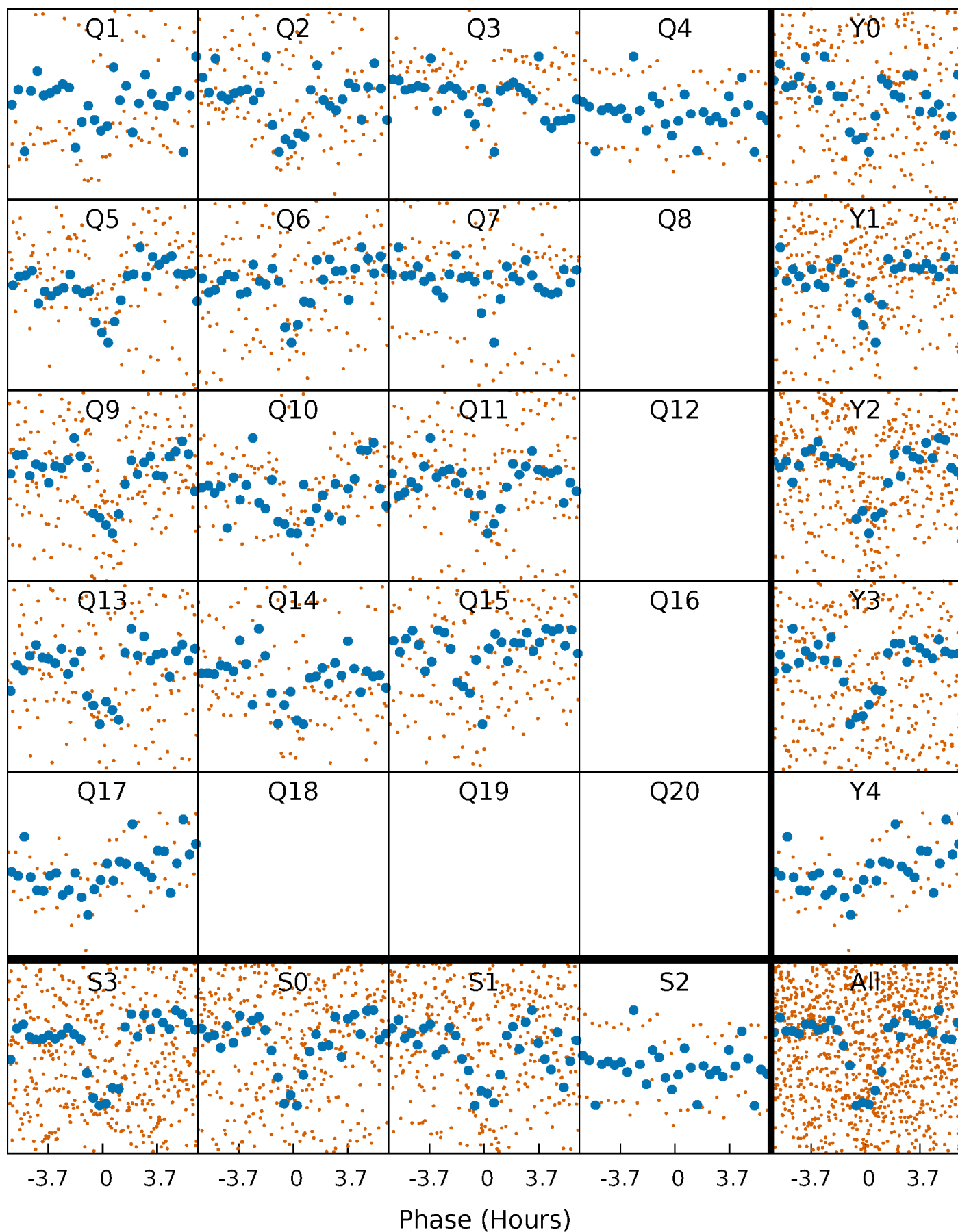


Non-Whitened Vs. Whitened Light Curve



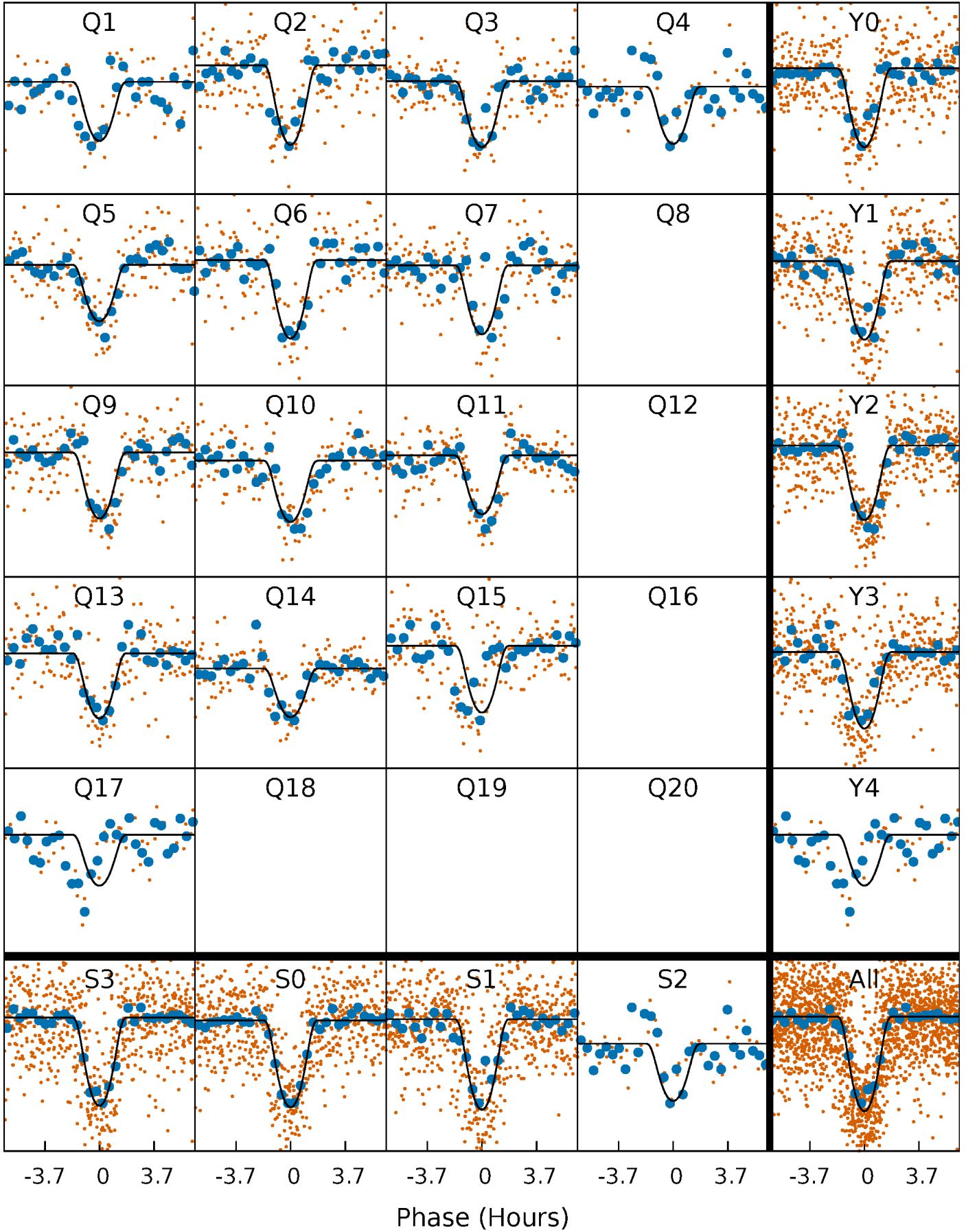
PDC Quarter-Phased Transit Curves

TCE 011395587-01 P= 12.990693 Days $T_0=138.266770$ (BKJD)



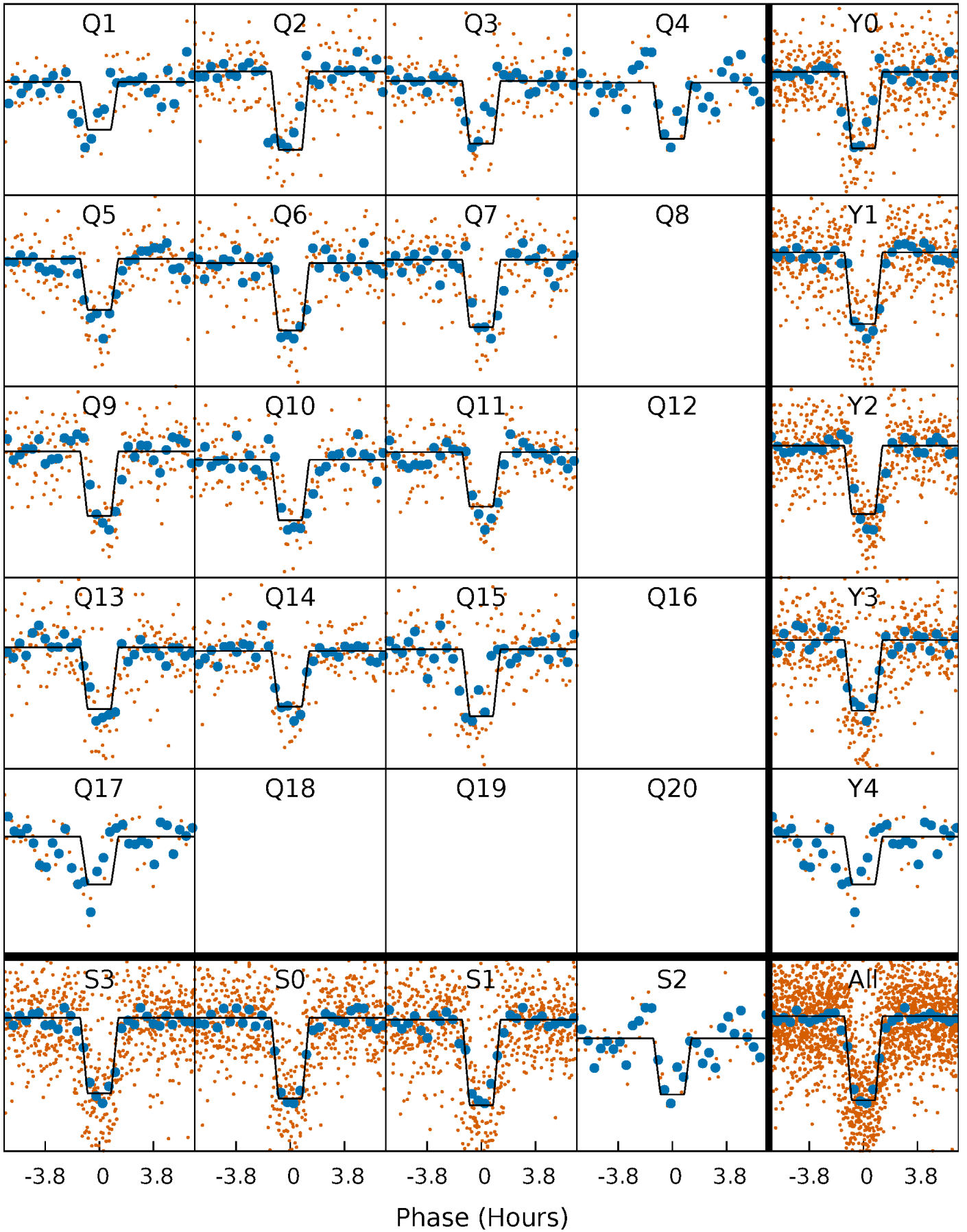
DV Quarter-Phased Transit Curves

TCE 011395587-01 P= 12.990693 Days $T_0=138.266770$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

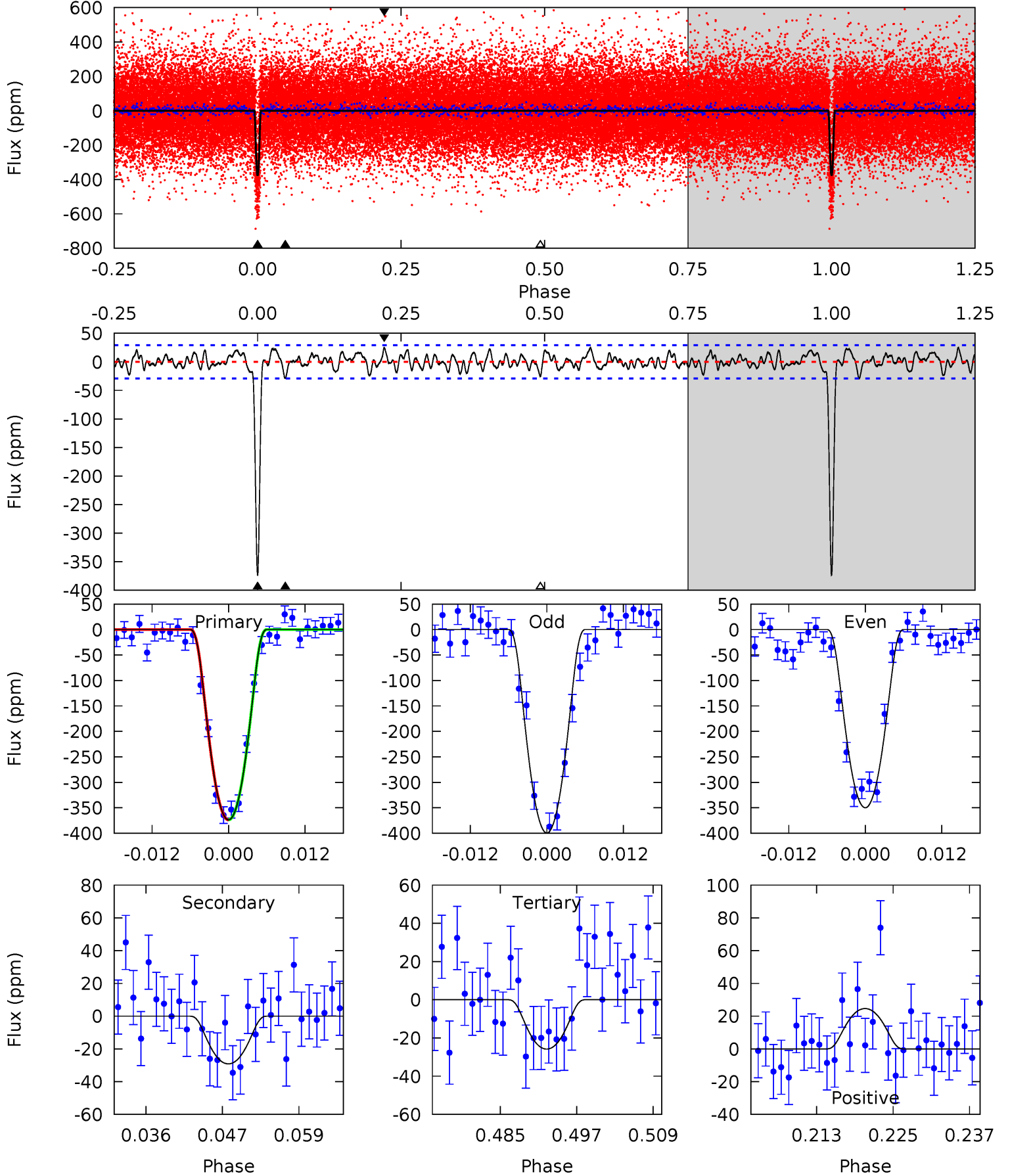
TCE 011395587-01 P= 12.990466 Days $T_0=138.275877$ (BKJD)



DV Model-Shift Uniqueness Test

011395587-01, $P = 12.990693$ Days, $E = 125.276077$ Days

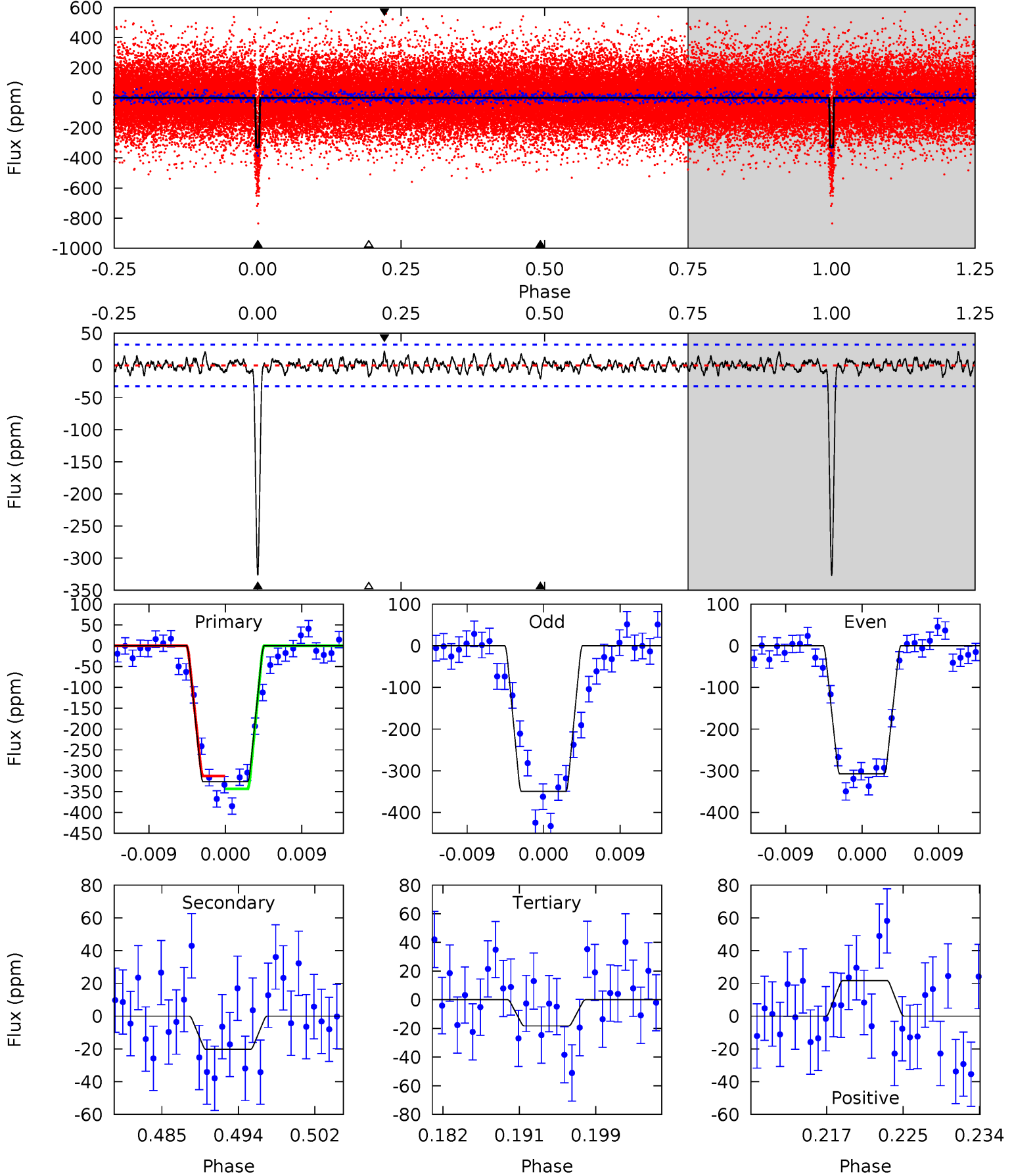
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
64.0	5.00	4.43	4.22	4.99	2.52	1.67	59.6	59.8	0.57	0.77	4.24	0.94	0.06	0.03



Alt Model-Shift Uniqueness Test

011395587-01, $P = 12.990466$ Days, $E = 125.285411$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
50.9	3.17	2.85	3.37	5.05	2.63	1.03	48.0	47.5	0.32	-0.21	3.25	1.01	0.06	2.41



Stellar Parameters For KIC 011395587

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5787^{+104}_{-116}	$4.402^{+0.090}_{-0.110}$	$0.000^{+0.150}_{-0.150}$	$1.027^{+0.151}_{-0.100}$	$0.971^{+0.068}_{-0.062}$	$1.264^{+0.409}_{-0.406}$
	+2%/-2%	+2%/-2%	+inf%/-inf%	+15%/-10%	+7%/-6%	+32%/-32%
Source	SPE57	SPE57	SPE57	DSEP		

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

Secondary Eclipse Parameters for KIC 011395587-01 / KOI 0350.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-29 ± 6	$3.03^{+0.80}_{-0.74}$	1107^{+49}_{-42}	3183^{+302}_{-227}	20^{+16}_{-9}
Alt.	-20 ± 6	$2.09^{+0.85}_{-0.80}$	1104^{+49}_{-43}	3354^{+605}_{-357}	29^{+51}_{-15}

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 $A_{obs} \gg 1.0$

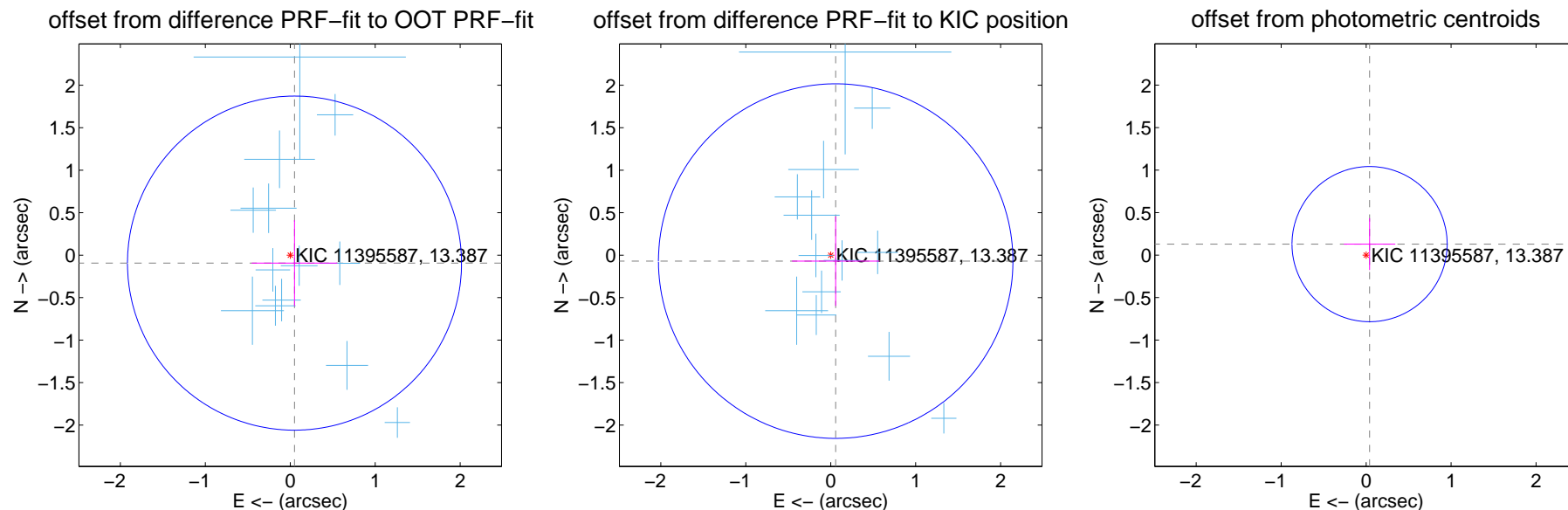
DV Centroid Data

Supplemental centroid analysis for 011395587-01. Kepler magnitude: 13.39. Transit SNR 33.07

There are 13 quarters with good PRF difference image offsets

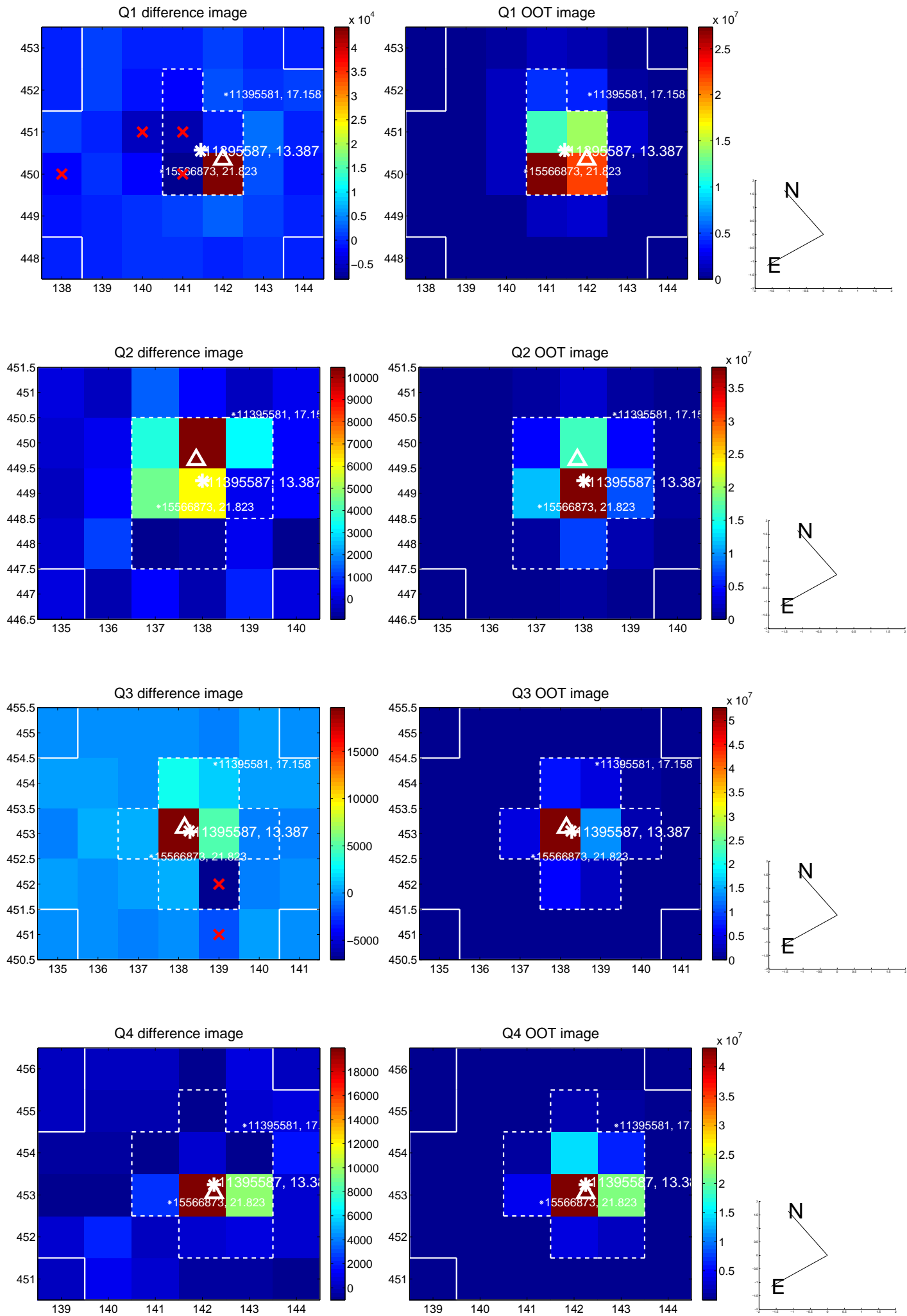
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.106 ± 0.655	0.16	-0.050 ± 0.504	-0.094 ± 0.505
PRF-fit source offset from KIC position	0.091 ± 0.696	0.13	-0.059 ± 0.514	-0.070 ± 0.526
photometric centroid source offset	0.14 ± 0.30	0.44	-0.04 ± 0.30	0.13 ± 0.30

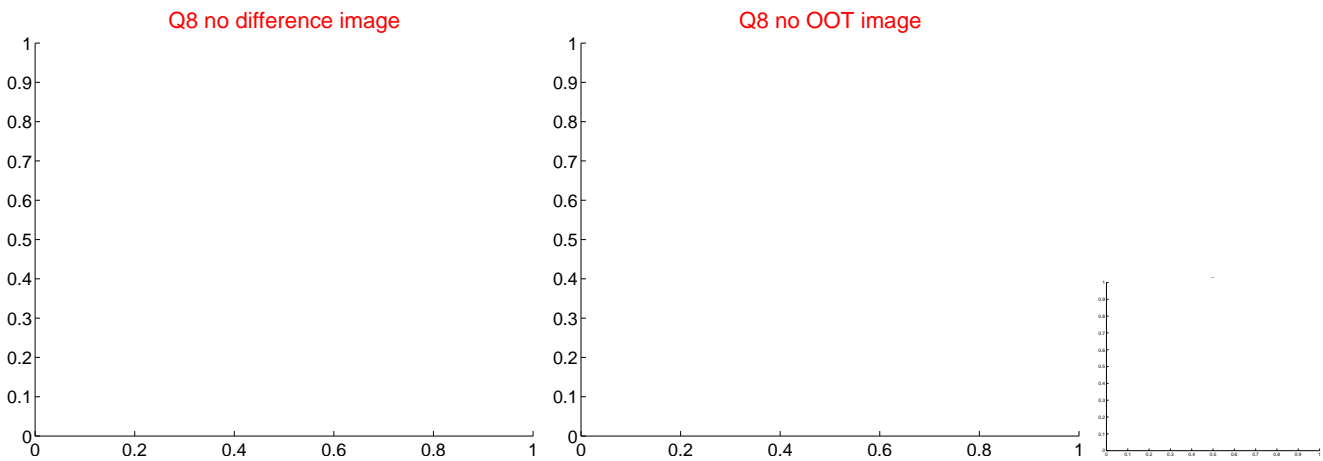
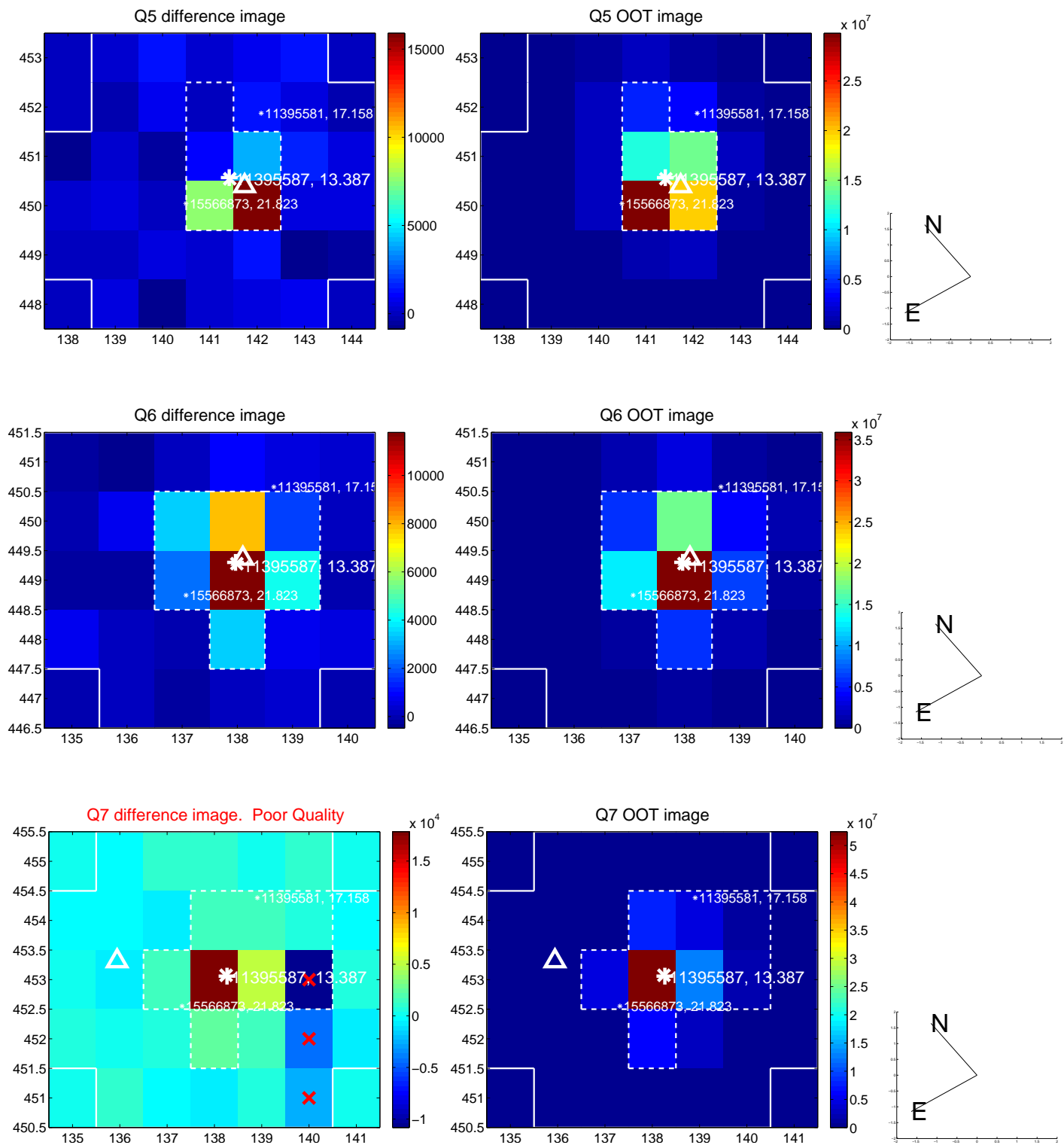


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

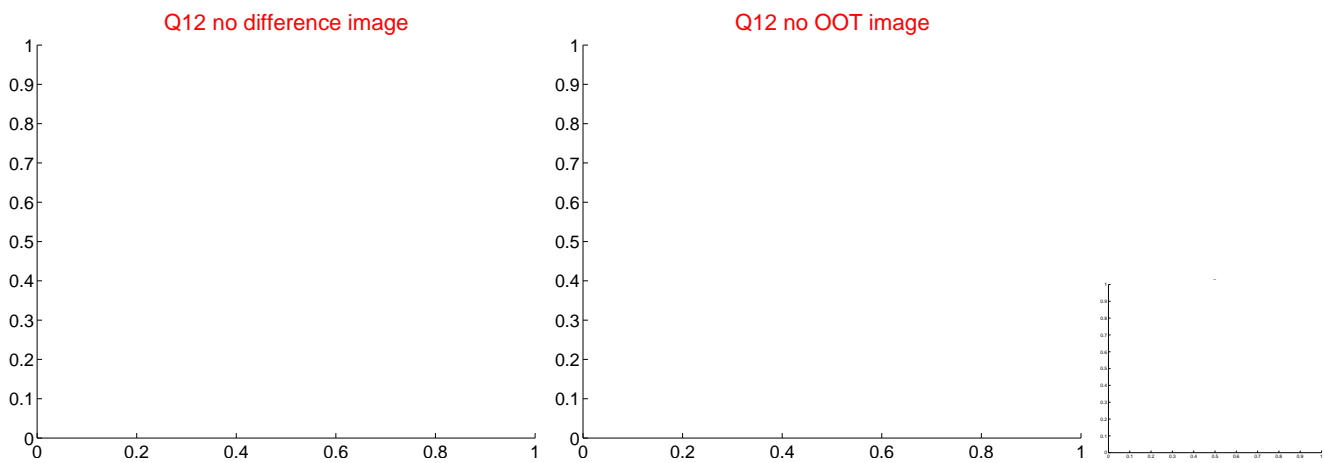
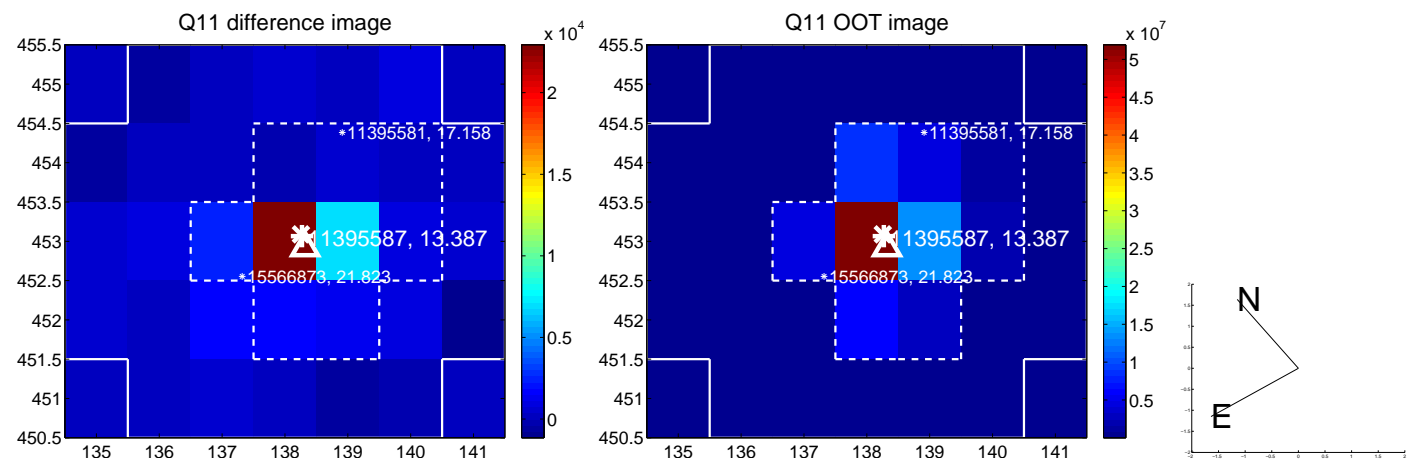
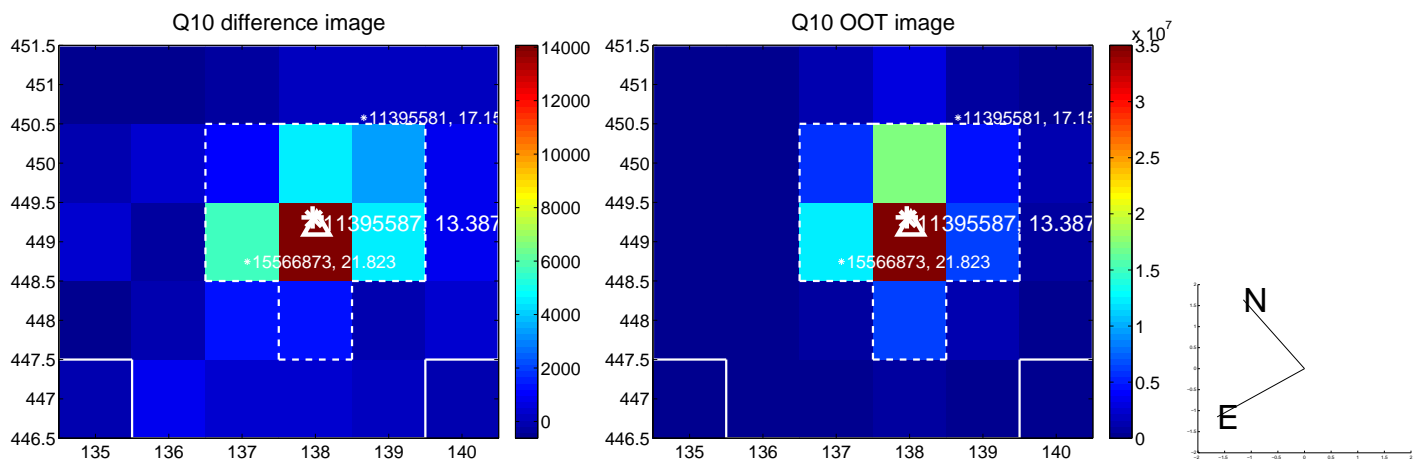
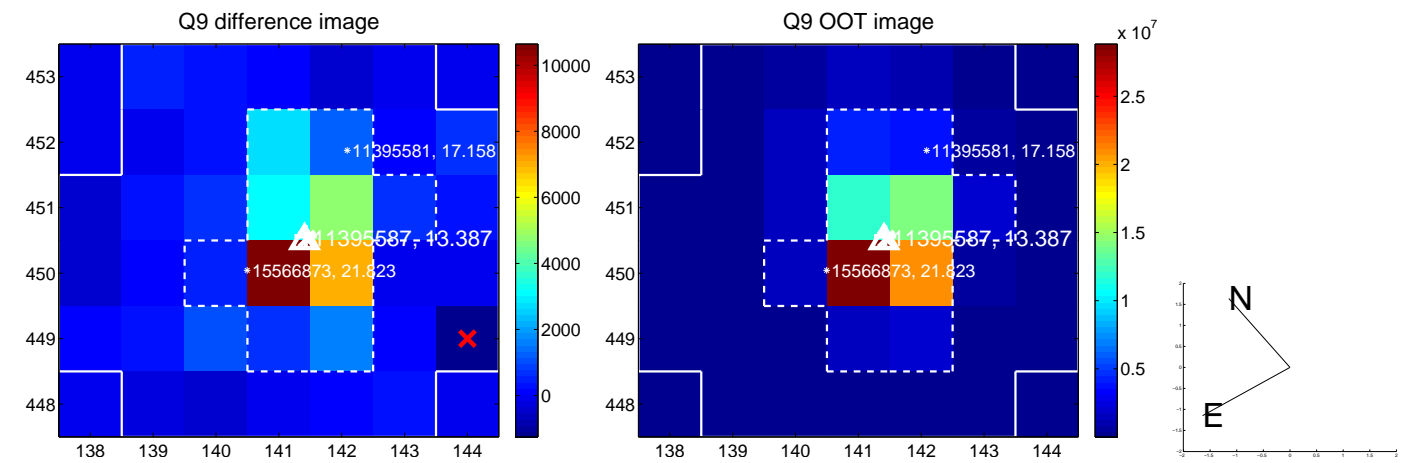
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



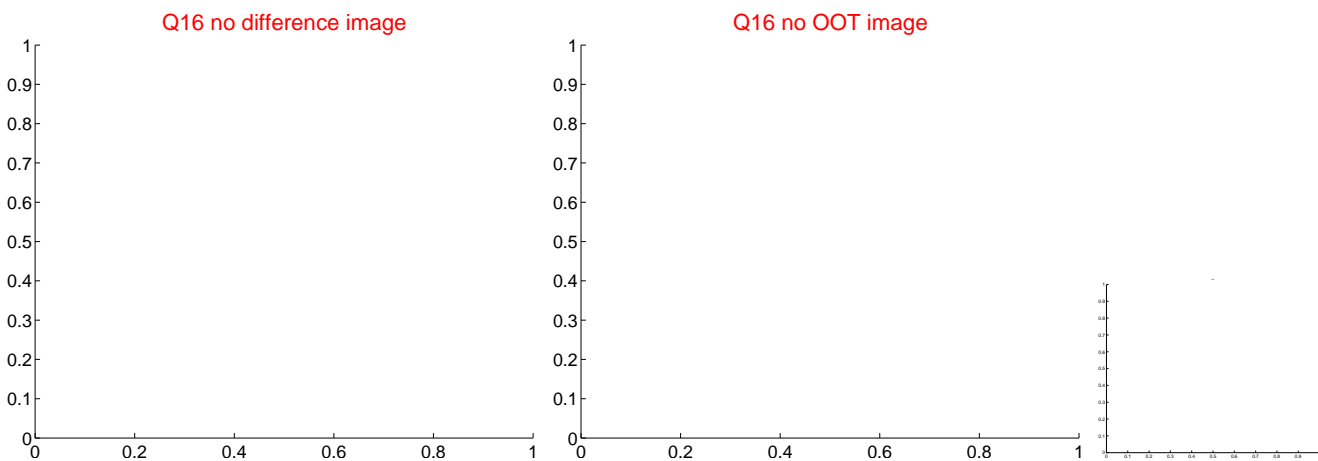
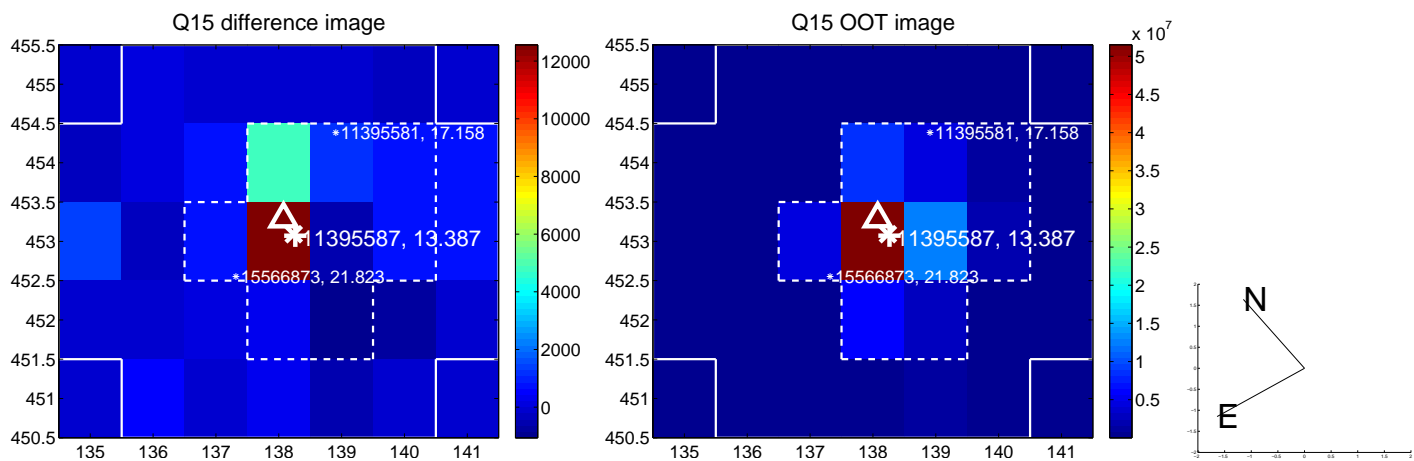
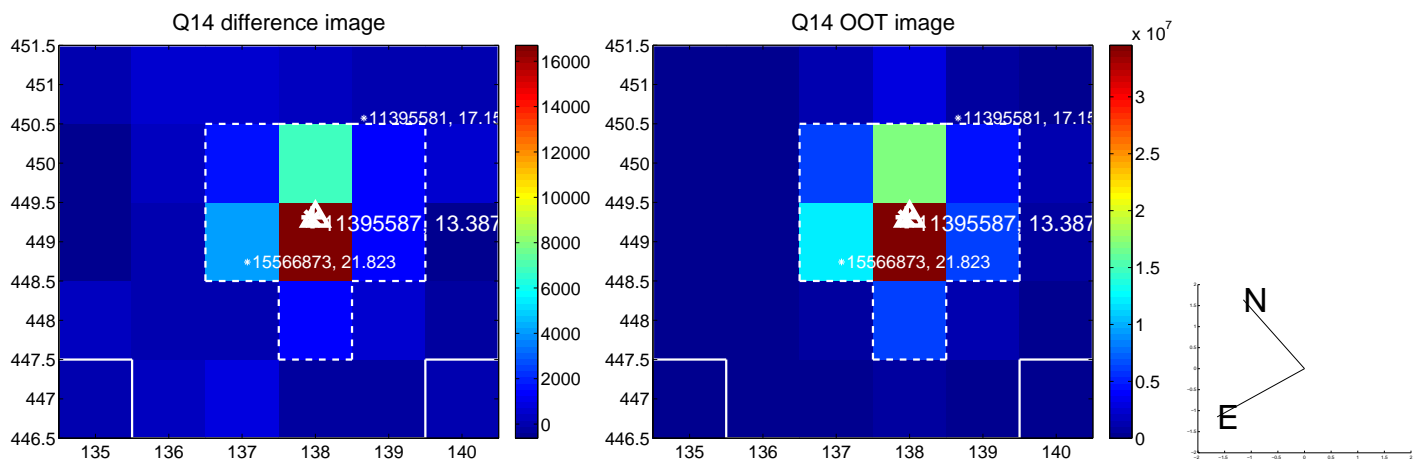
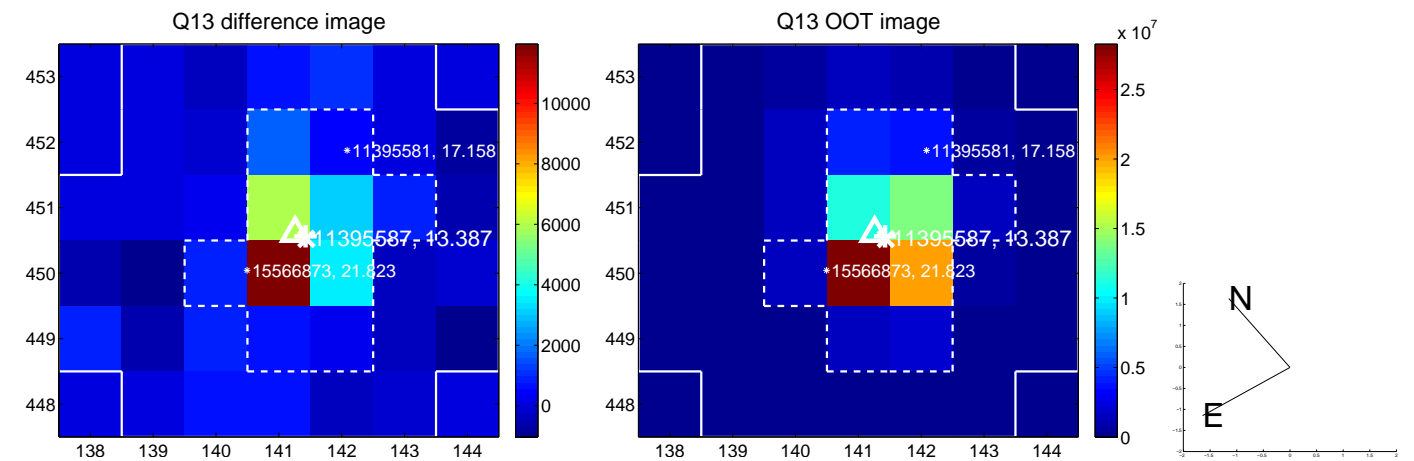
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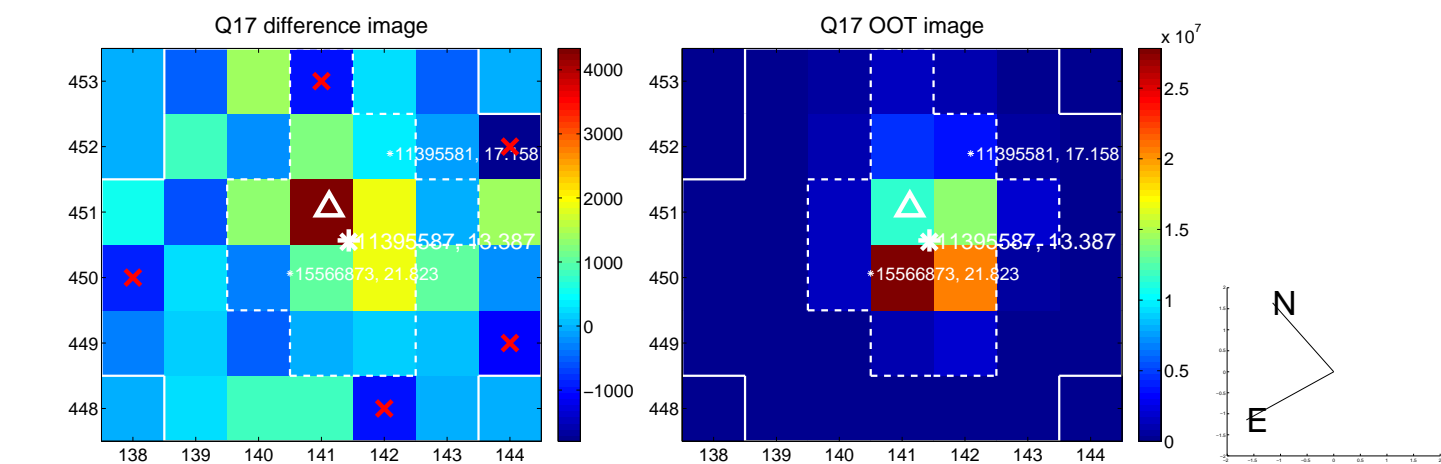
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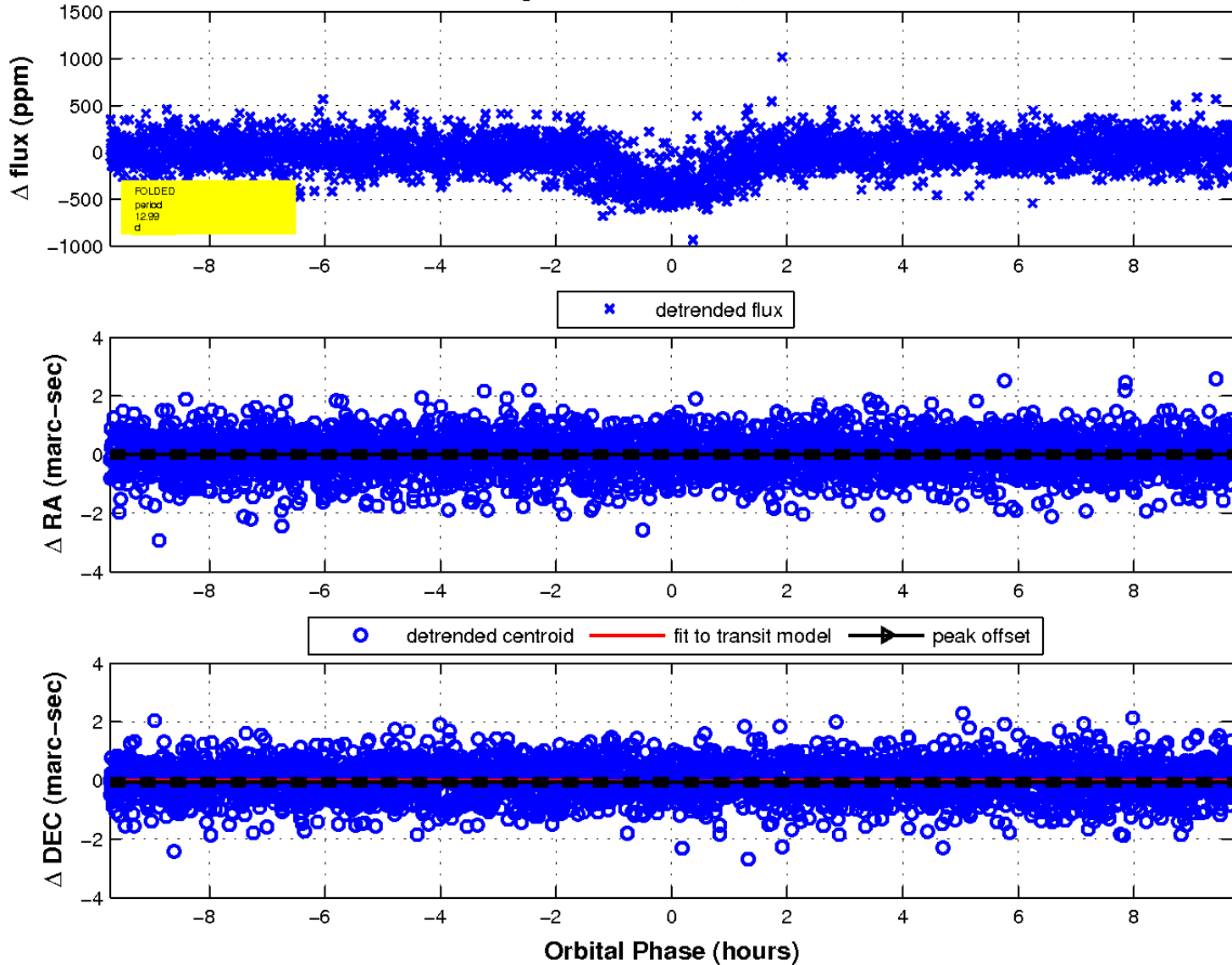
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

