

KIC 003555191

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})
003555191-01	OBS	No	0.761140	131.767369	132.2	5.965	14.6	9.8	1.82	7483	2.14	25662.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003555191-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

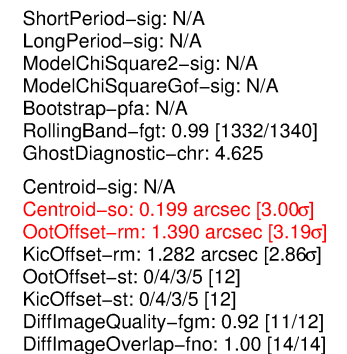
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

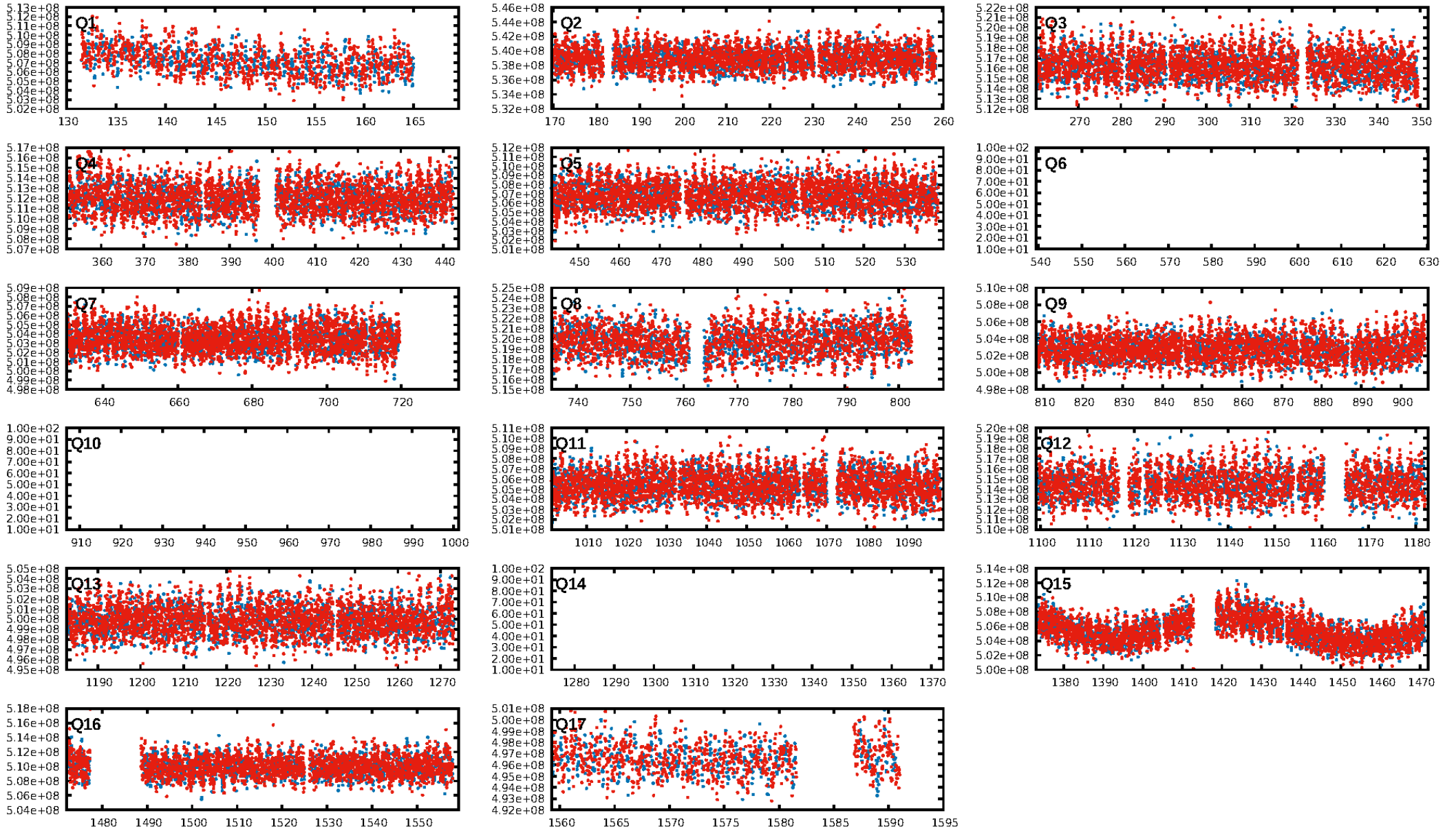
Ephemeris Match Information For 003555191-01

No Significant Match Found

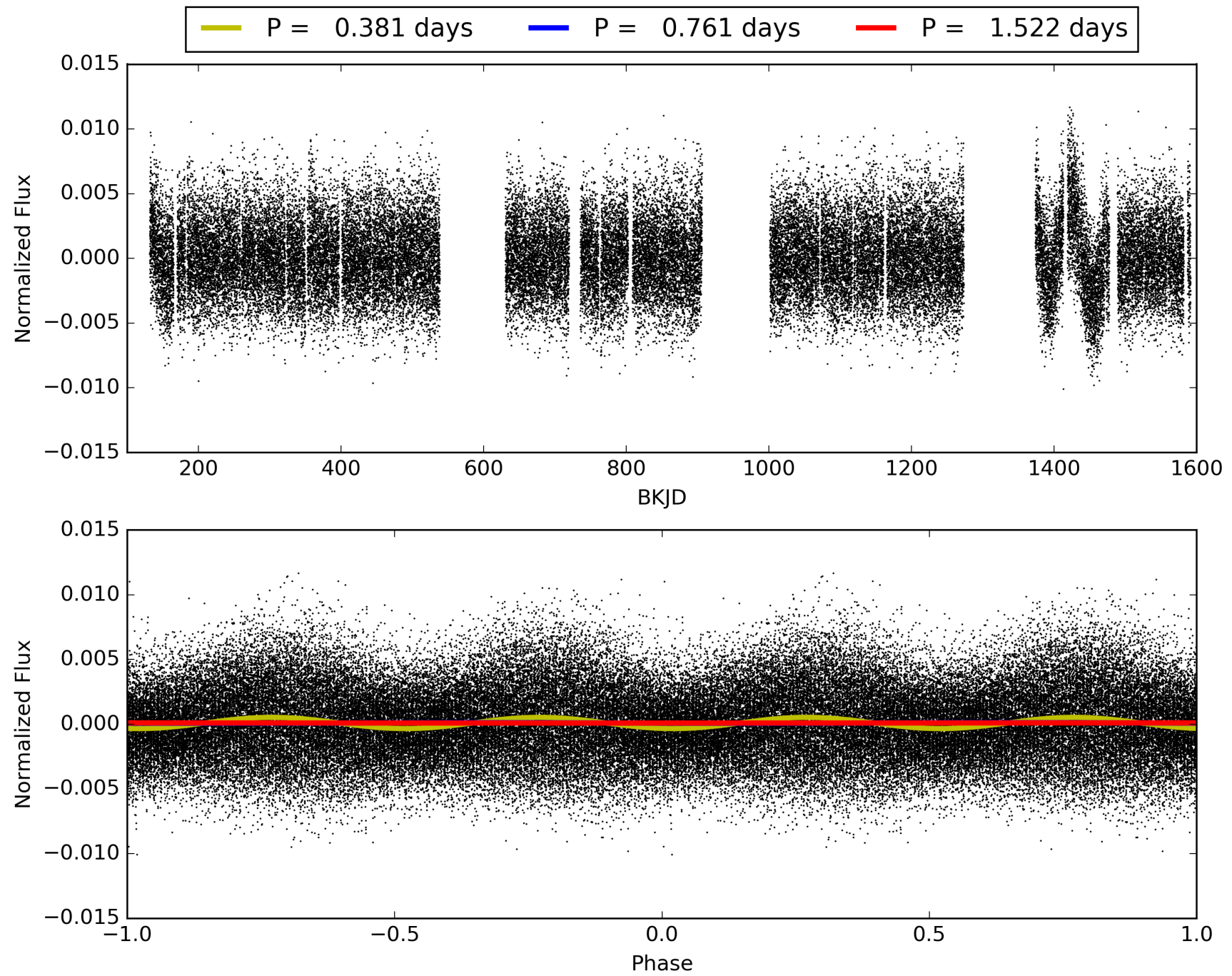
KIC: 3555191 Candidate: 1 of 1 Period: 0.761 d



TCE 003555191-01, PDC Light Curves

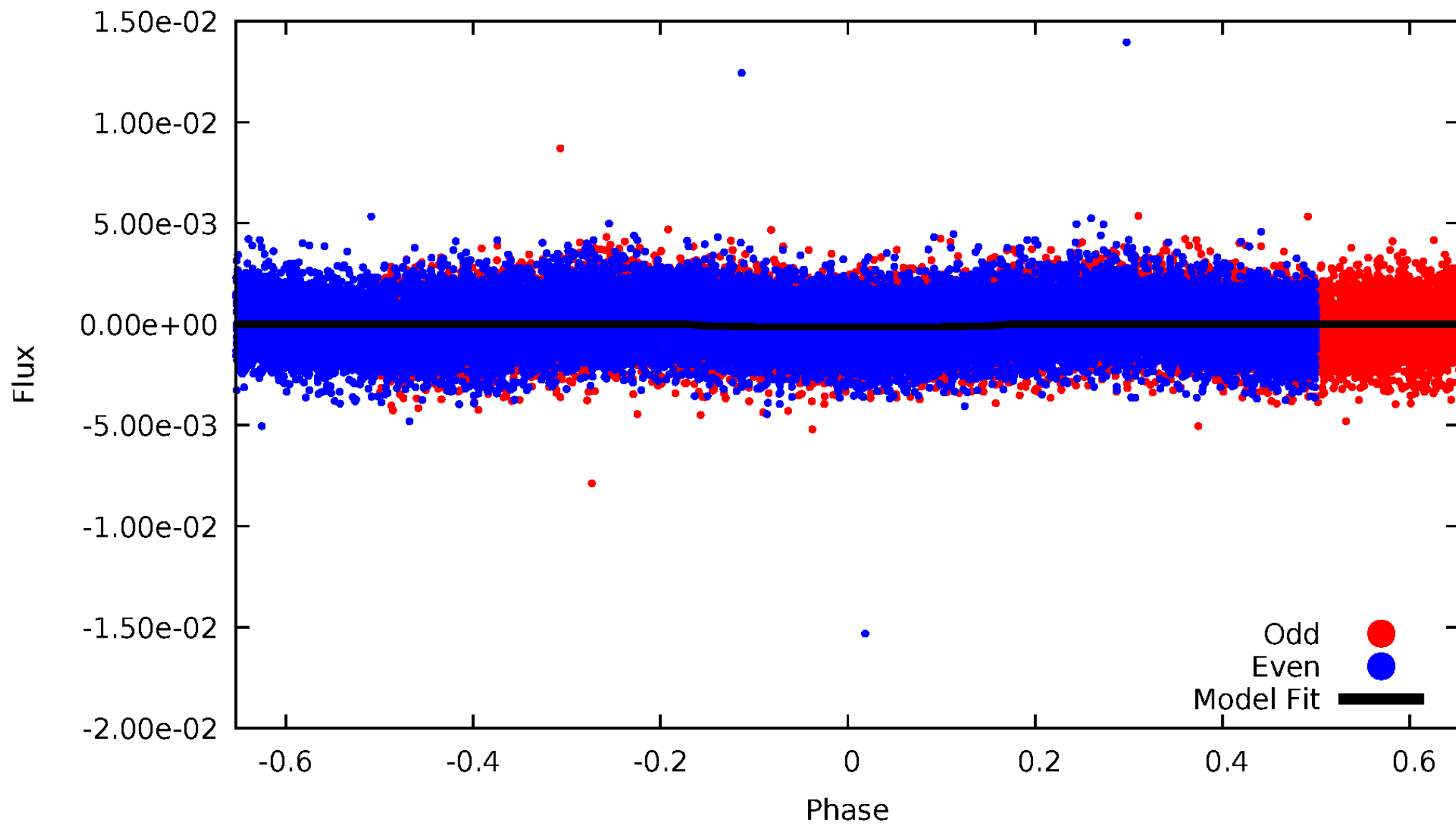


TCE 003555191-01



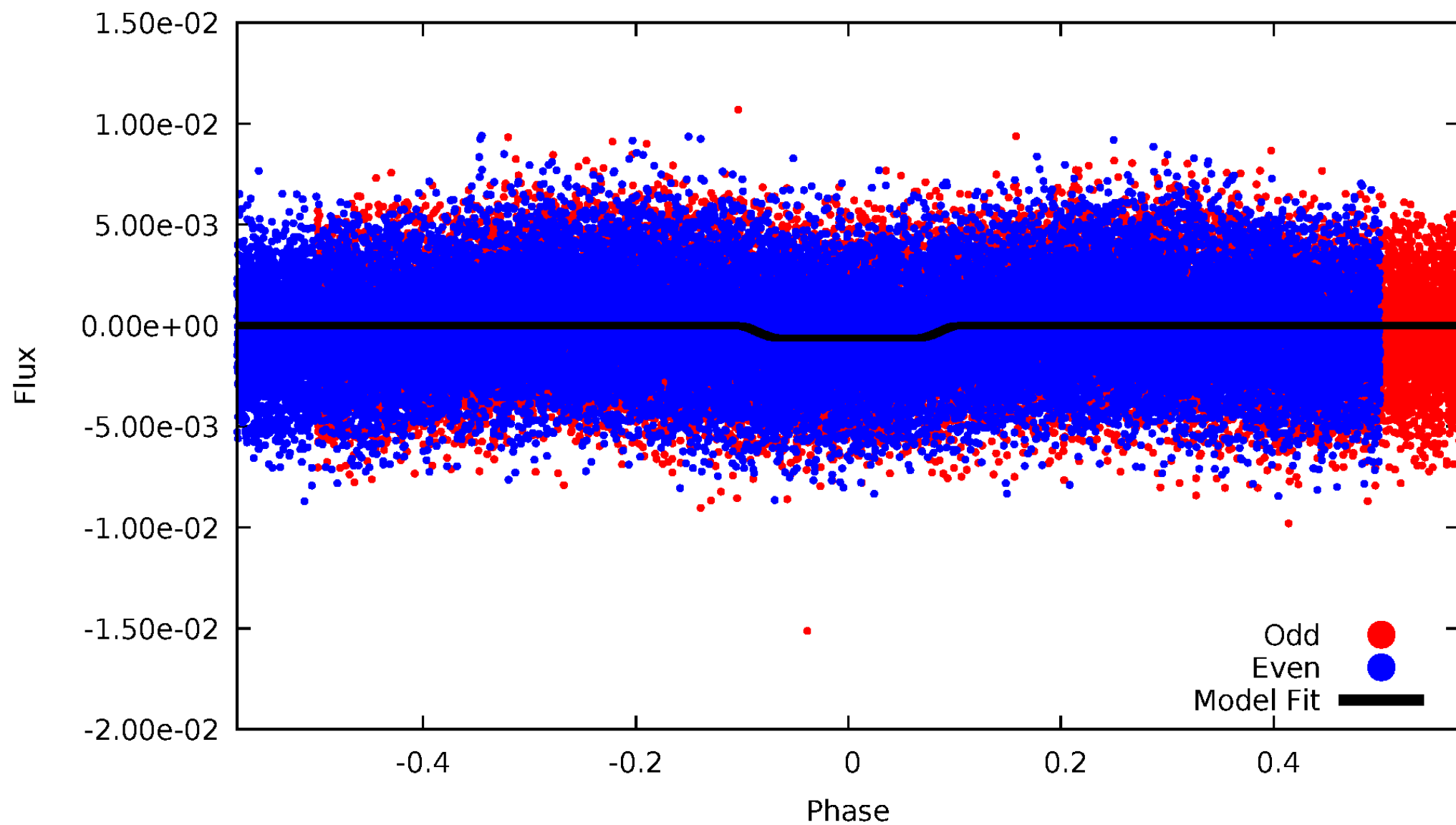
DV Odd/Even

TCE 003555191-01

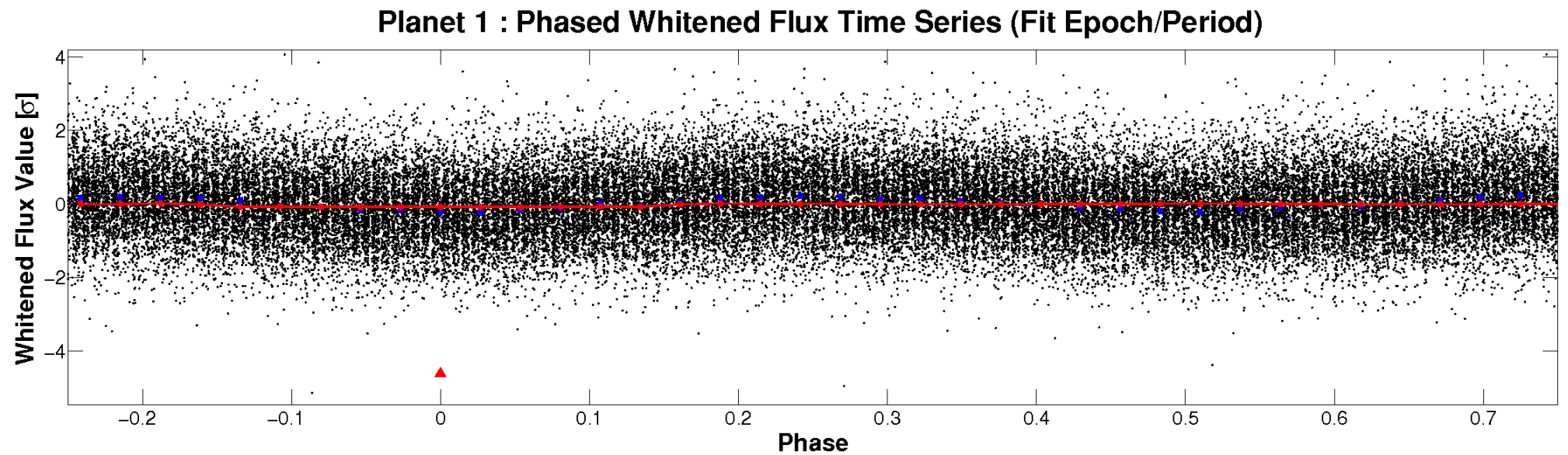
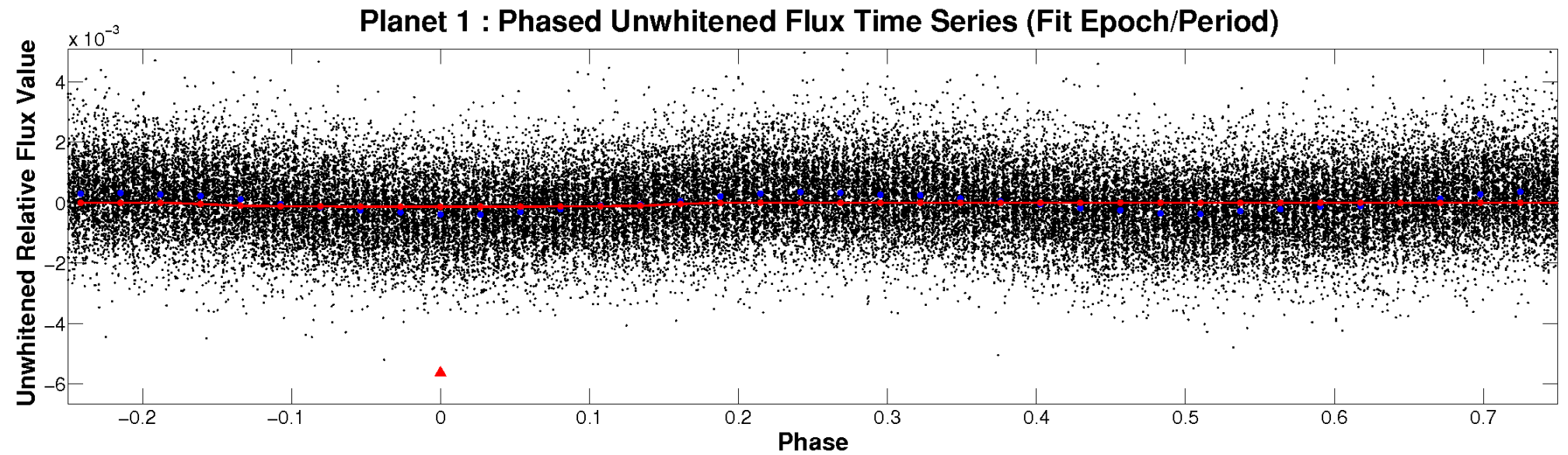


ALT Odd/Even

TCE 003555191-01

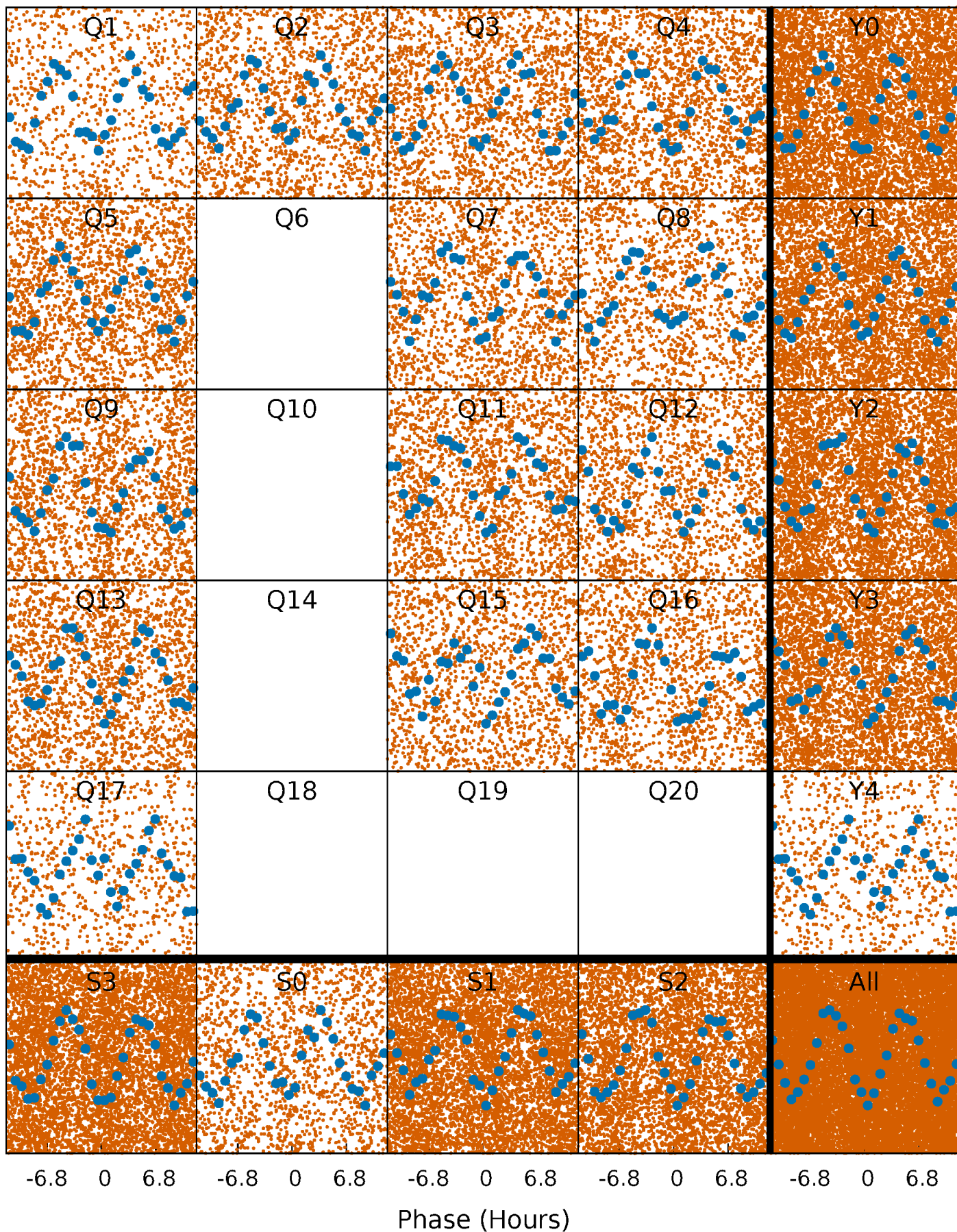


Non-Whitened Vs. Whitened Light Curve



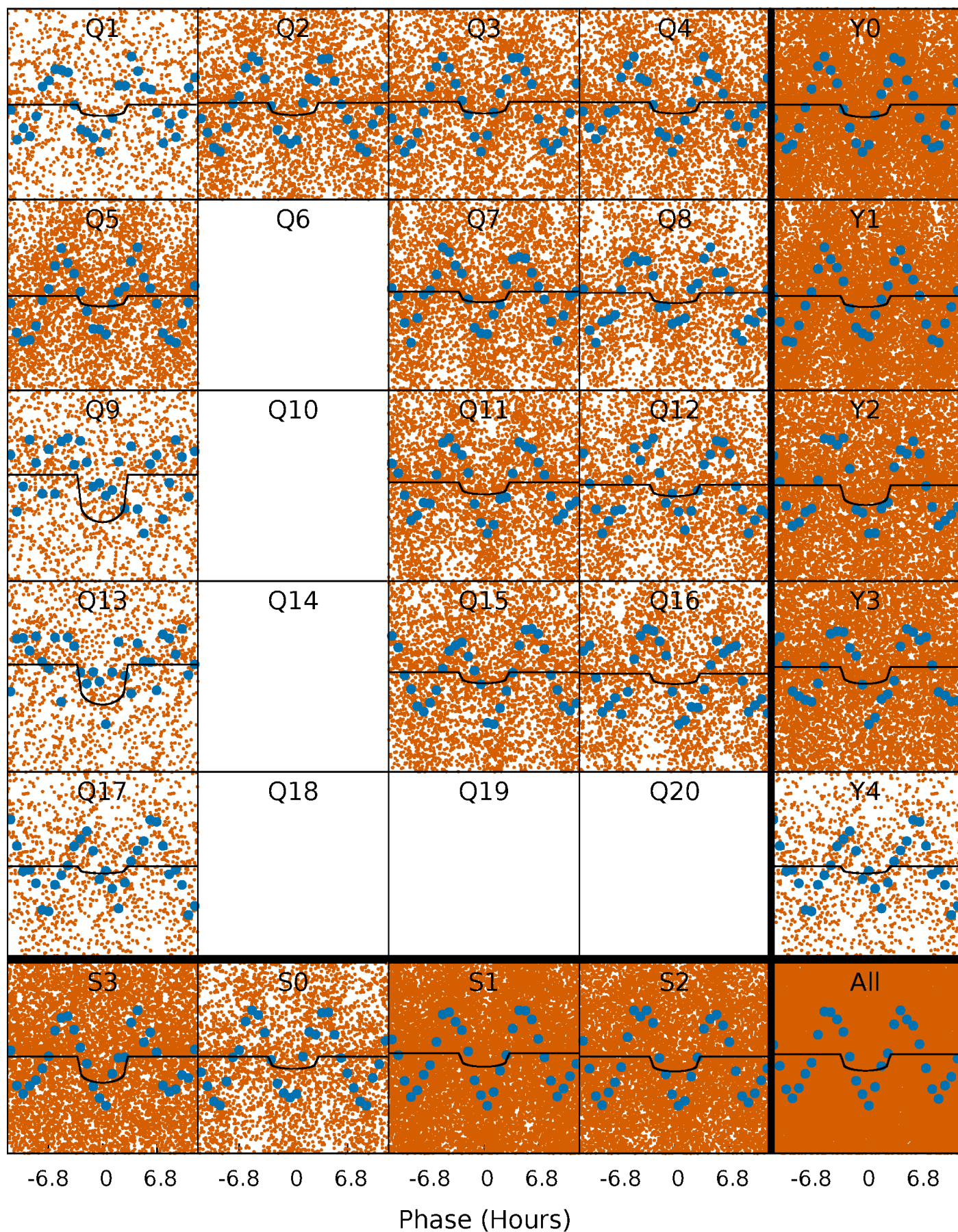
PDC Quarter-Phased Transit Curves

TCE 003555191-01 P= 0.761140 Days $T_0=131.767369$ (BKJD)



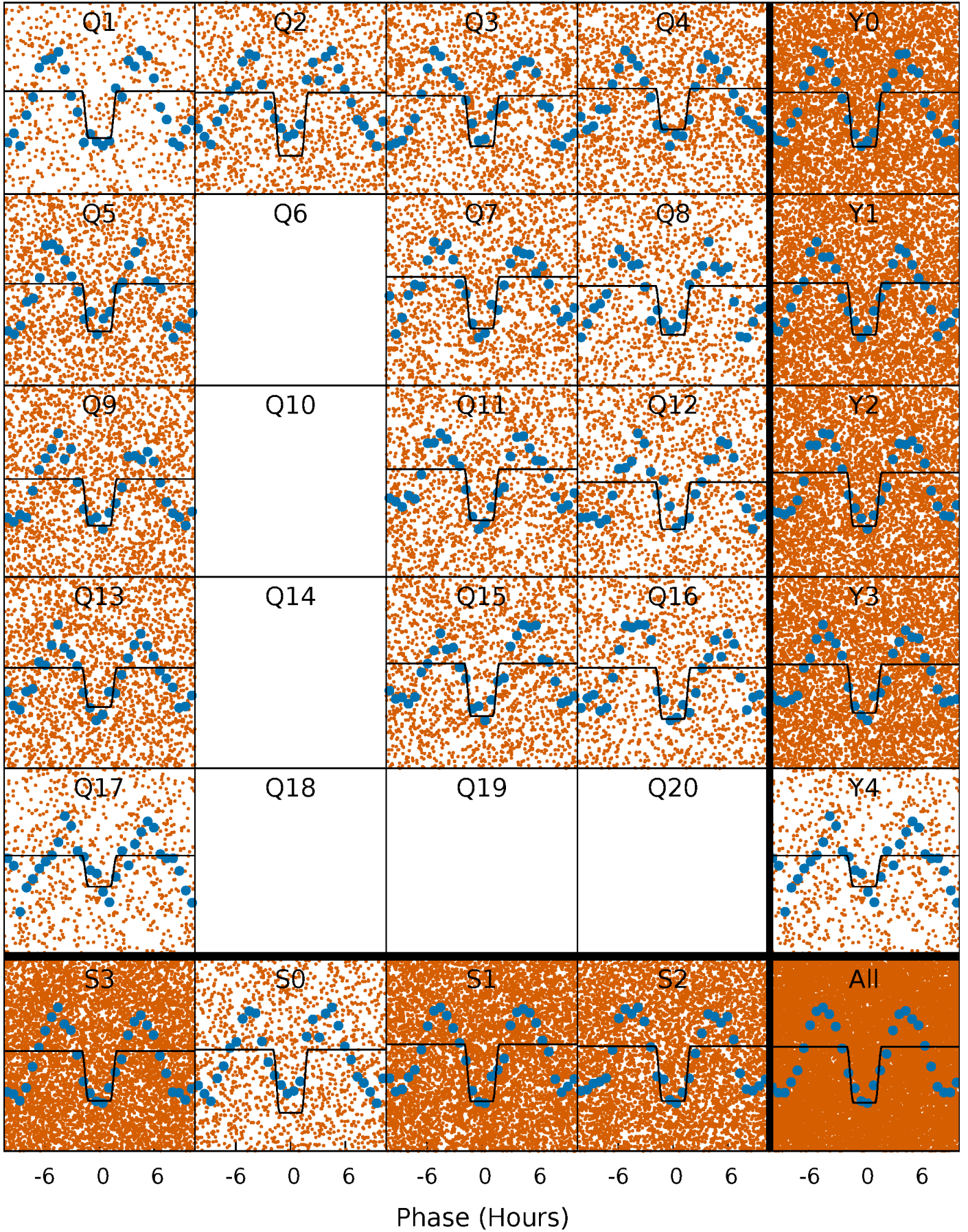
DV Quarter-Phased Transit Curves

TCE 003555191-01 P= 0.761140 Days $T_0=131.767369$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

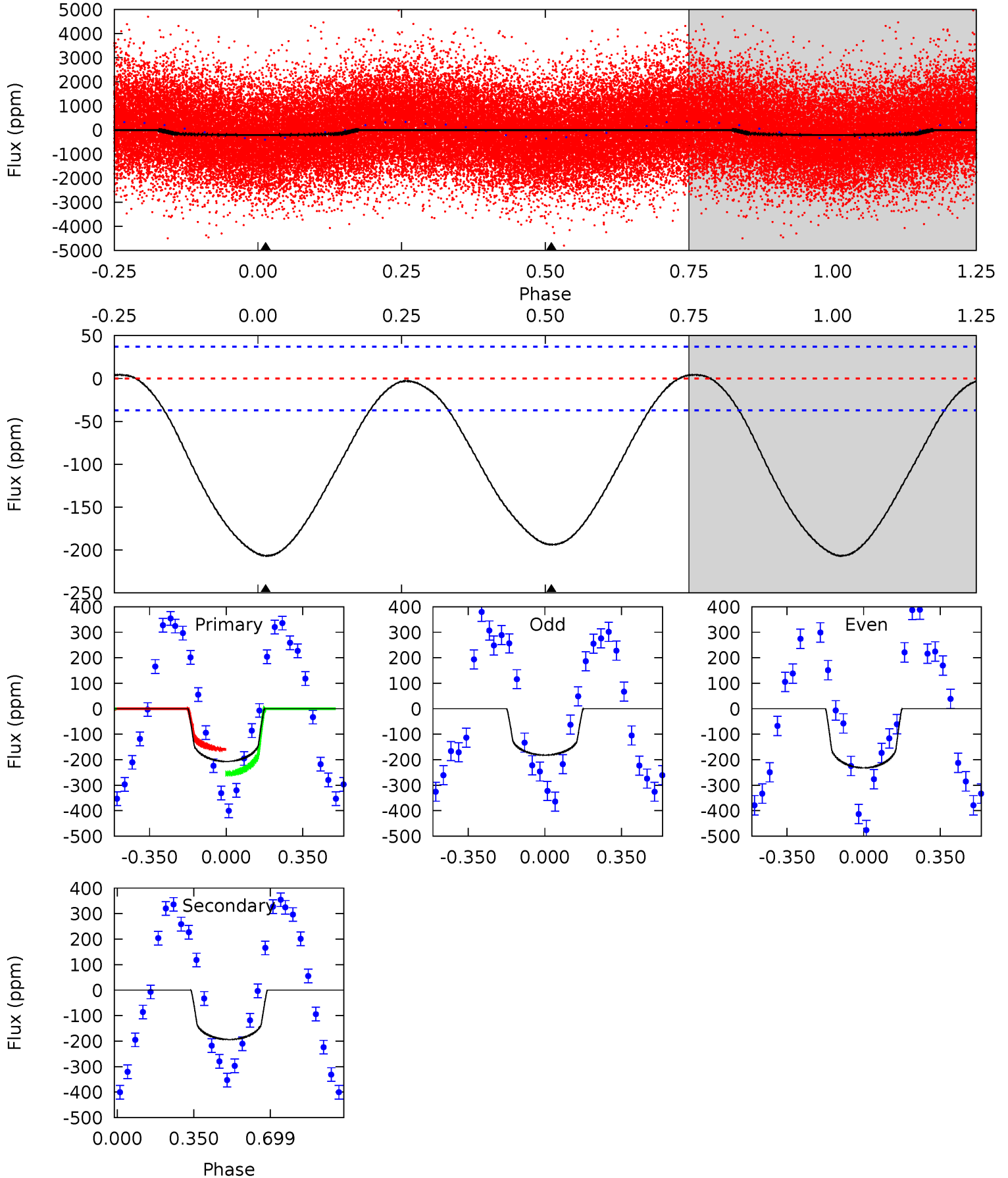
TCE 003555191-01 P= 0.761177 Days $T_0=131.748809$ (BKJD)



DV Model-Shift Uniqueness Test

003555191-01, P = 0.761140 Days, E = 131.006229 Days

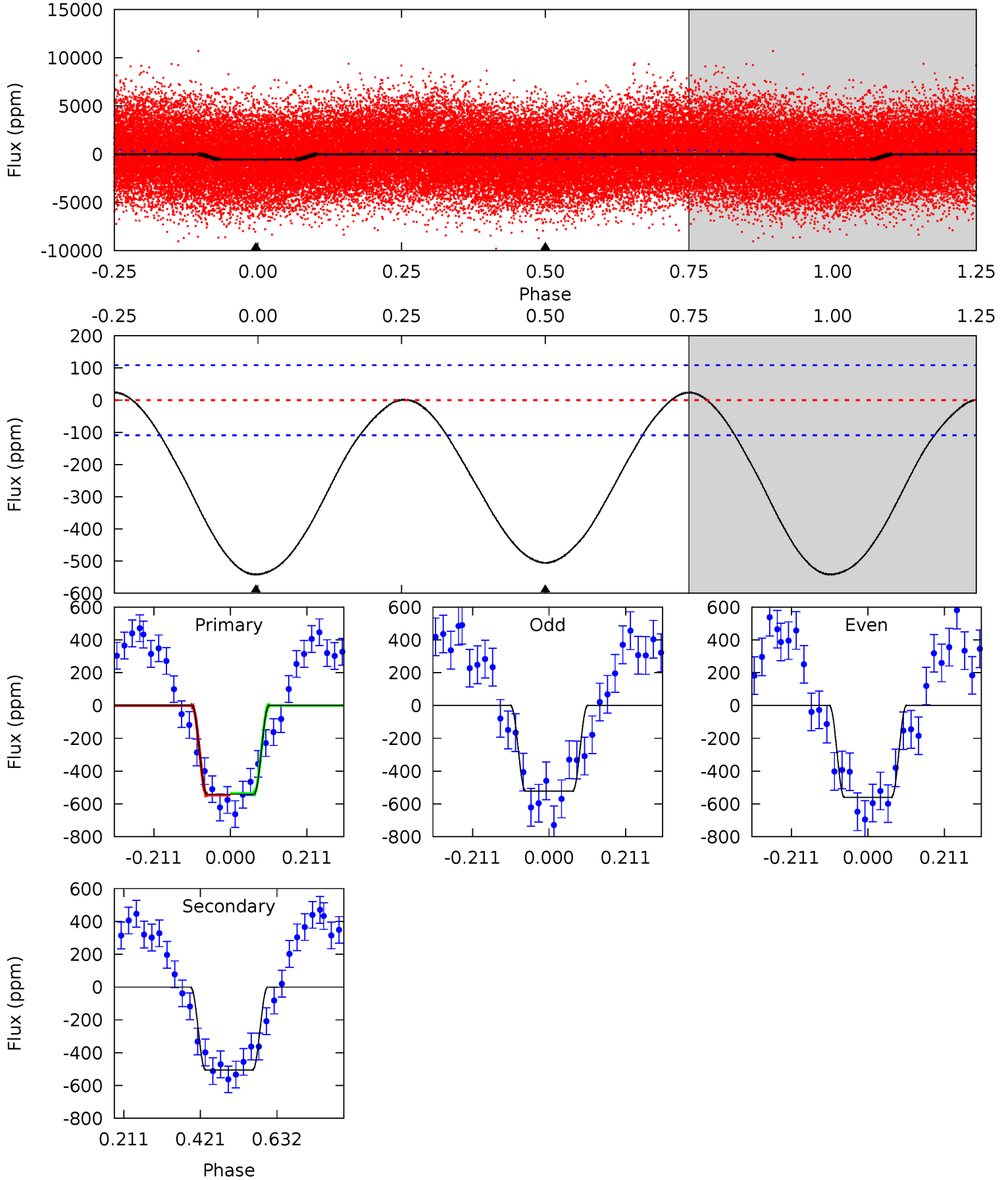
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.0	22.4	0	0	4.29	0.94	0.47	24.0	24.0	22.4	22.4	2.94	1.12	0.02	5.79



Alt Model-Shift Uniqueness Test

003555191-01, P = 0.761177 Days, E = 130.987632 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.9	20.5	0	0	4.41	1.25	0.68	21.9	21.9	20.5	20.5	0.78	1.06	0.04	0.21



Stellar Parameters For KIC 003555191

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7483^{+209}_{-314}	$4.119^{+0.140}_{-0.171}$	$-0.060^{+0.200}_{-0.350}$	$1.820^{+0.540}_{-0.360}$	$1.589^{+0.198}_{-0.242}$	$0.371^{+0.259}_{-0.175}$
	+3%/-4%	+3%/-4%	+333%/-583%	+30%/-20%	+12%/-15%	+70%/-47%
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 003555191-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-194 ± 9	$2.34^{+1.65}_{-1.25}$	4494^{+334}_{-296}	7945^{+6670}_{-2014}	$6.951^{+25.478}_{-4.538}$
Alt.	-506 ± 25	$4.91^{+1.76}_{-1.75}$	4513^{+317}_{-299}	6929^{+2183}_{-1157}	$4.095^{+6.094}_{-1.925}$

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

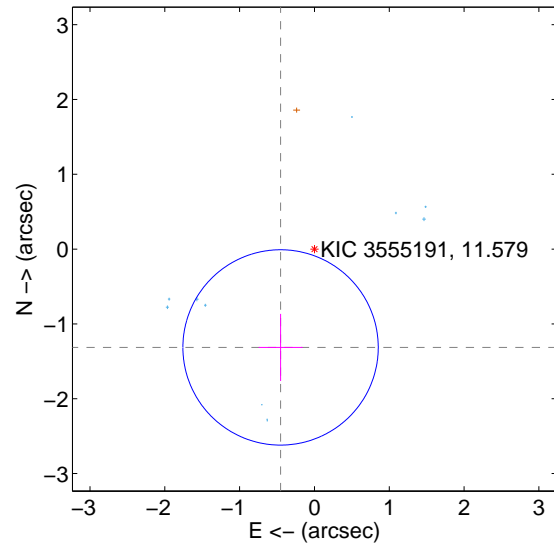
Supplemental centroid analysis for 003555191-01. **Kepler magnitude: 11.58.** Transit SNR 9.80

There are 11 quarters with good PRF difference image offsets

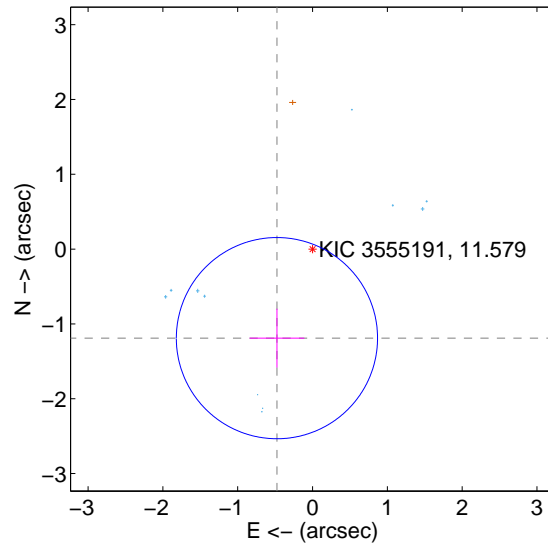
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.390 ± 0.435	3.19	0.453 ± 0.294	-1.315 ± 0.449
PRF-fit source offset from KIC position	1.282 ± 0.448	2.86	0.476 ± 0.366	-1.190 ± 0.394
photometric centroid source offset	0.20 ± 0.07	3.00	0.11 ± 0.06	0.17 ± 0.07

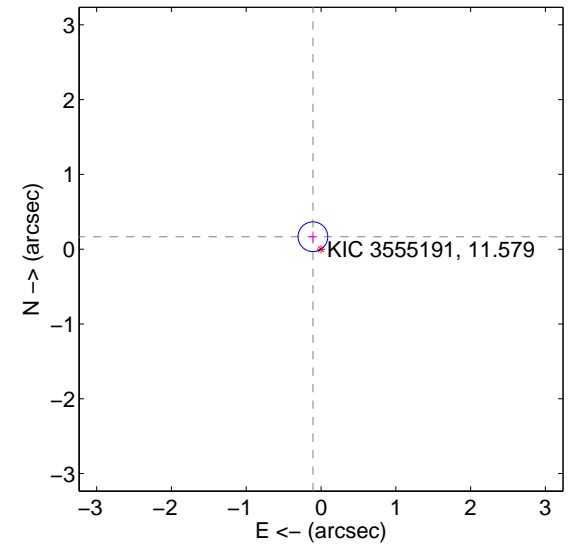
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

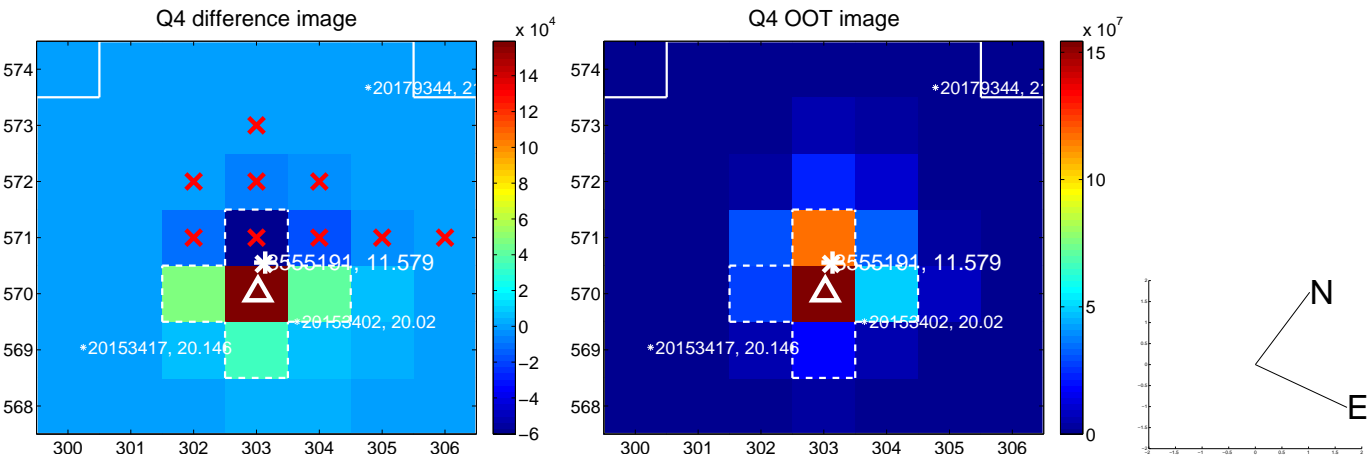
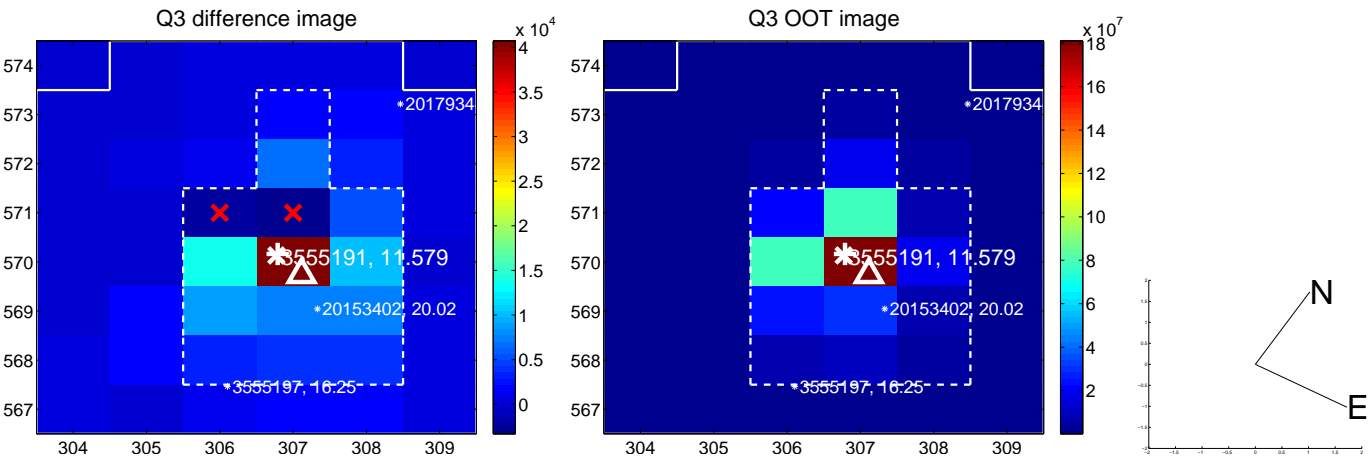
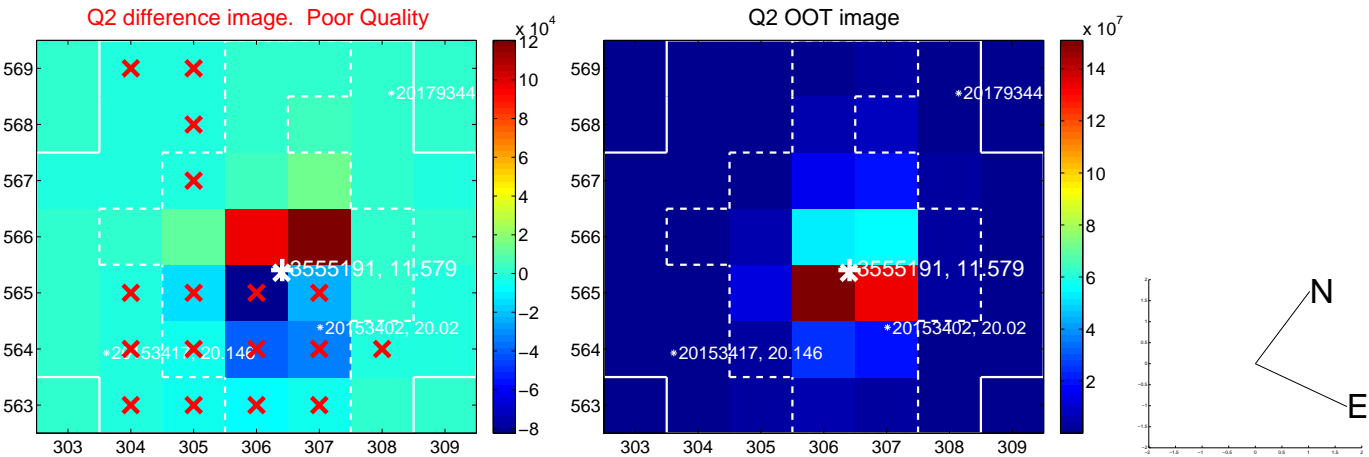
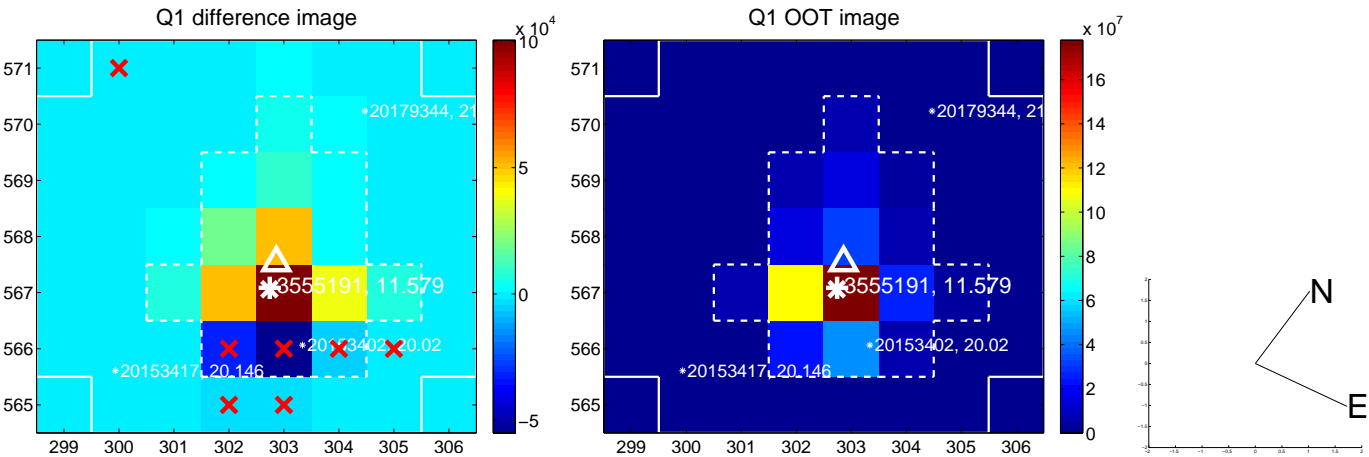


offset from photometric centroids

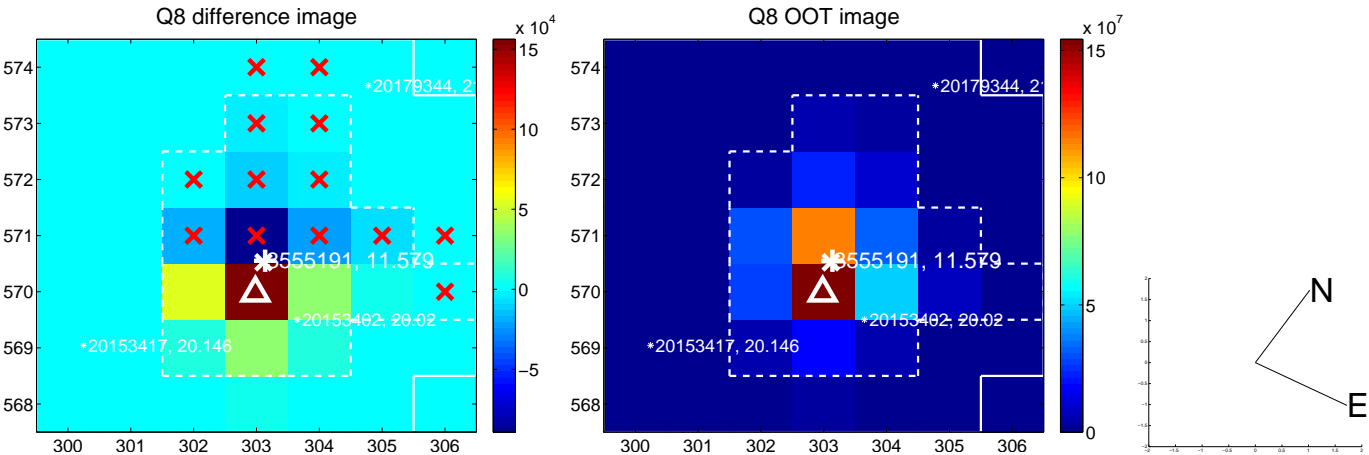
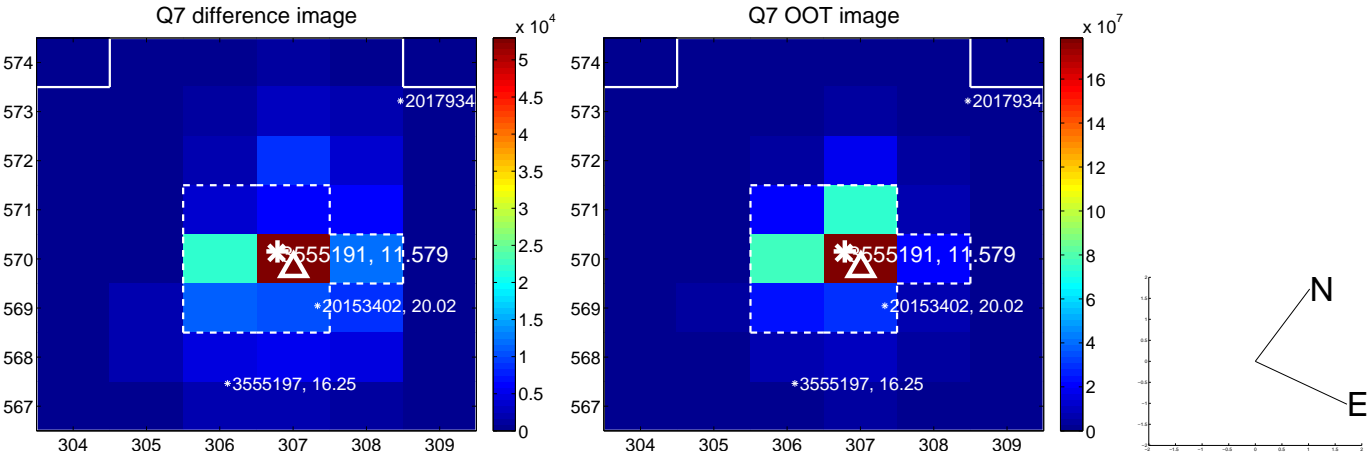
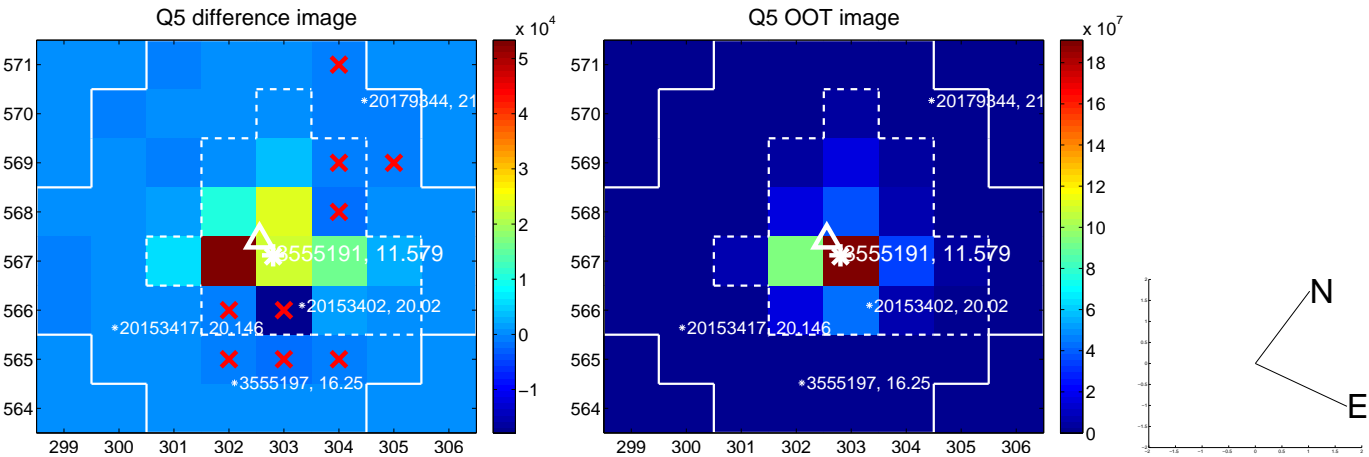


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

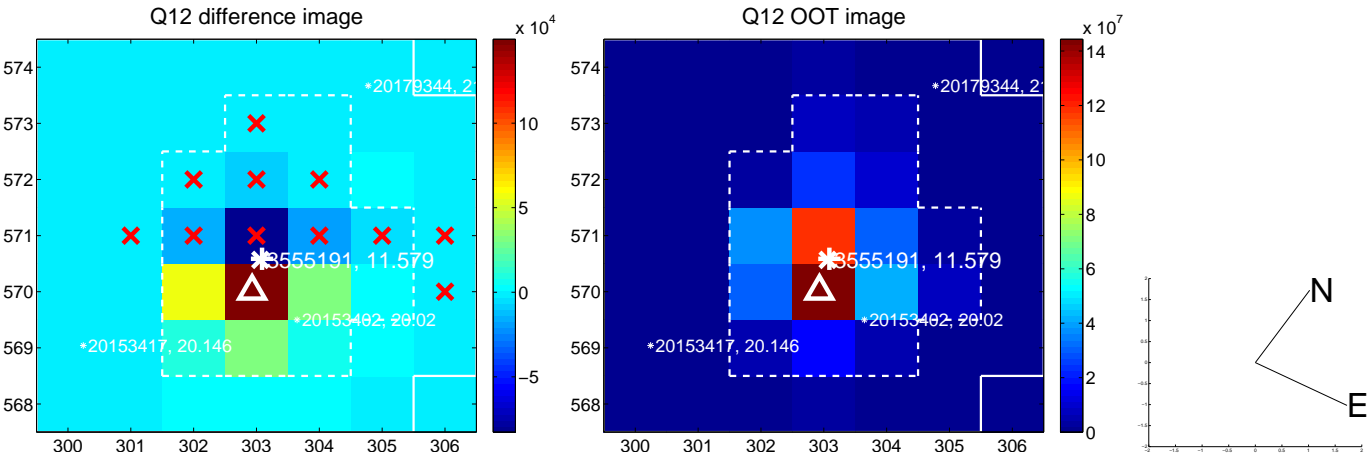
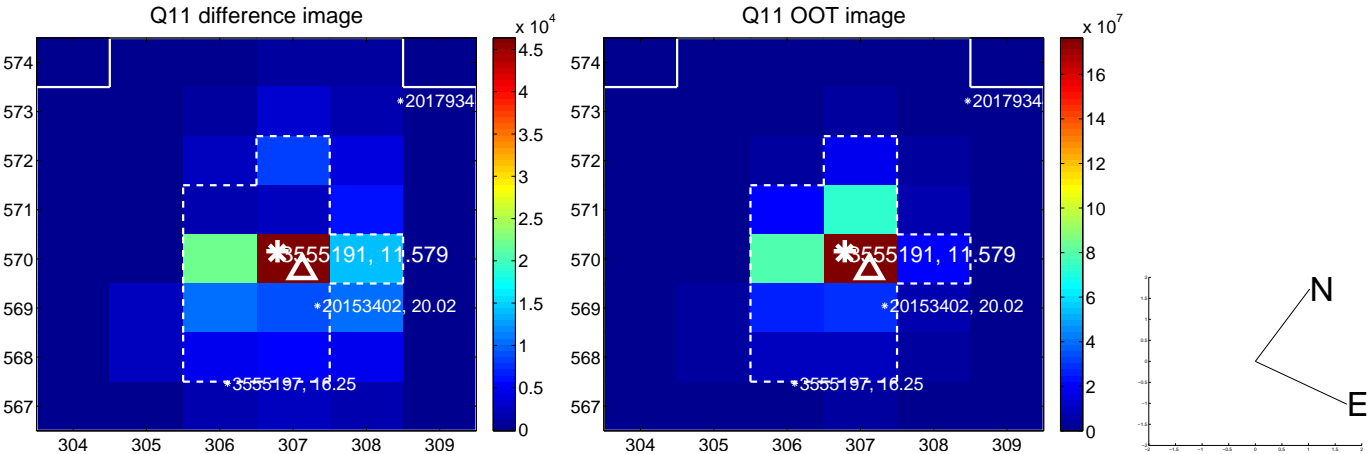
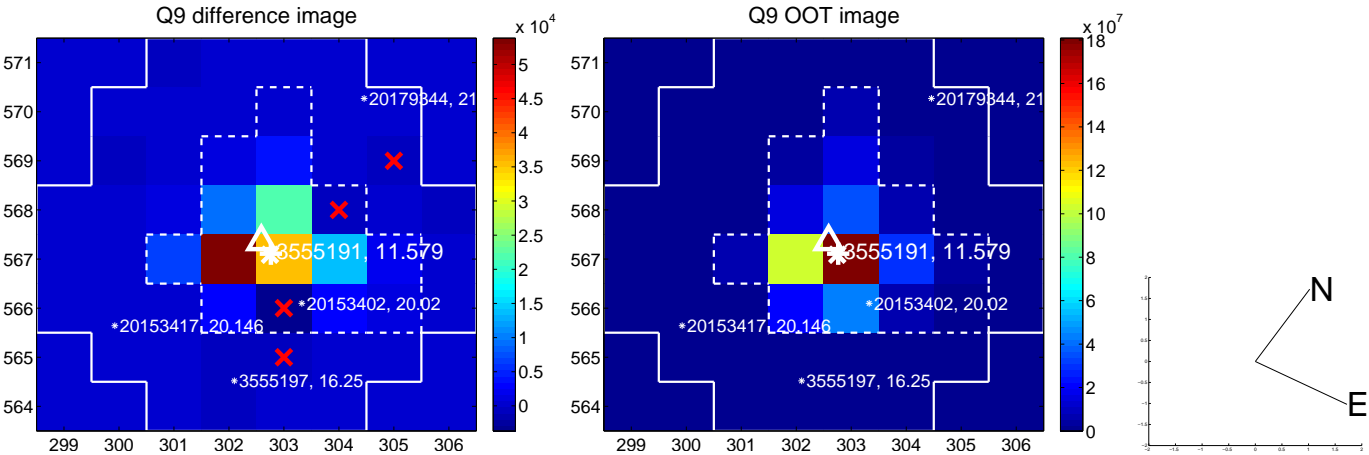
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



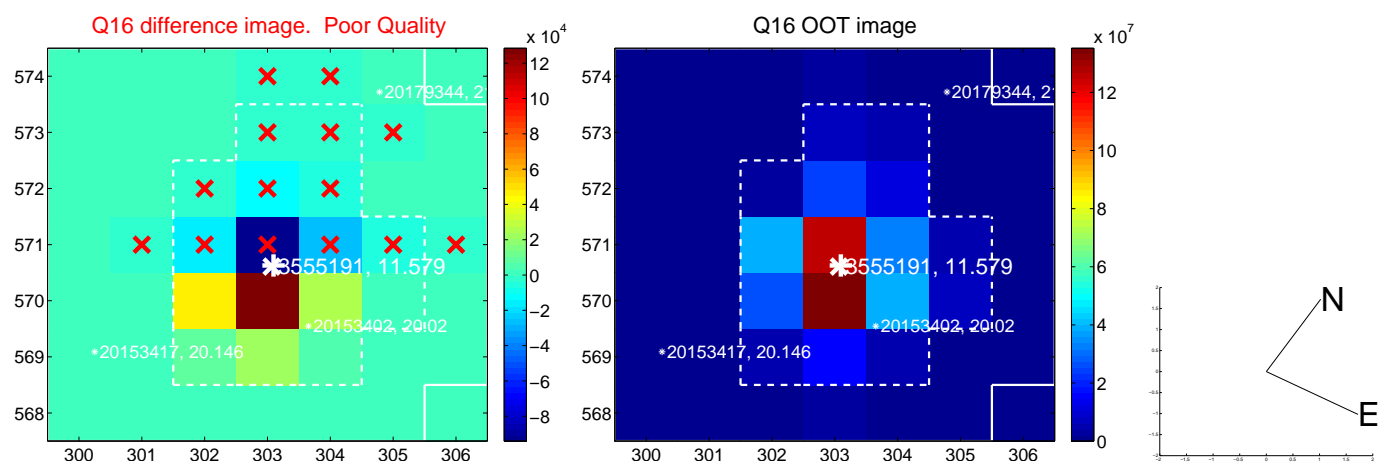
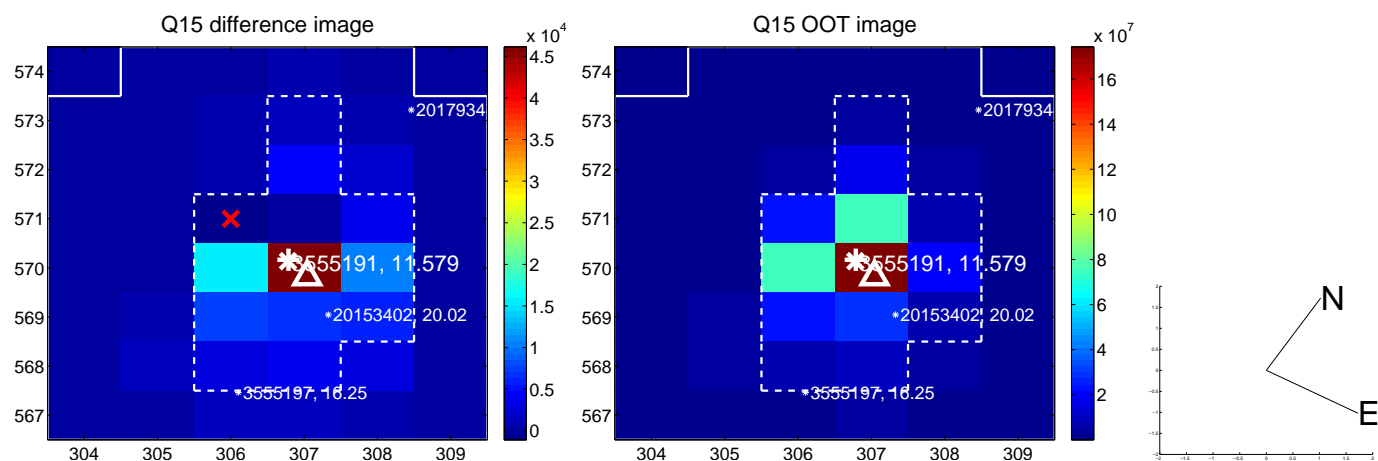
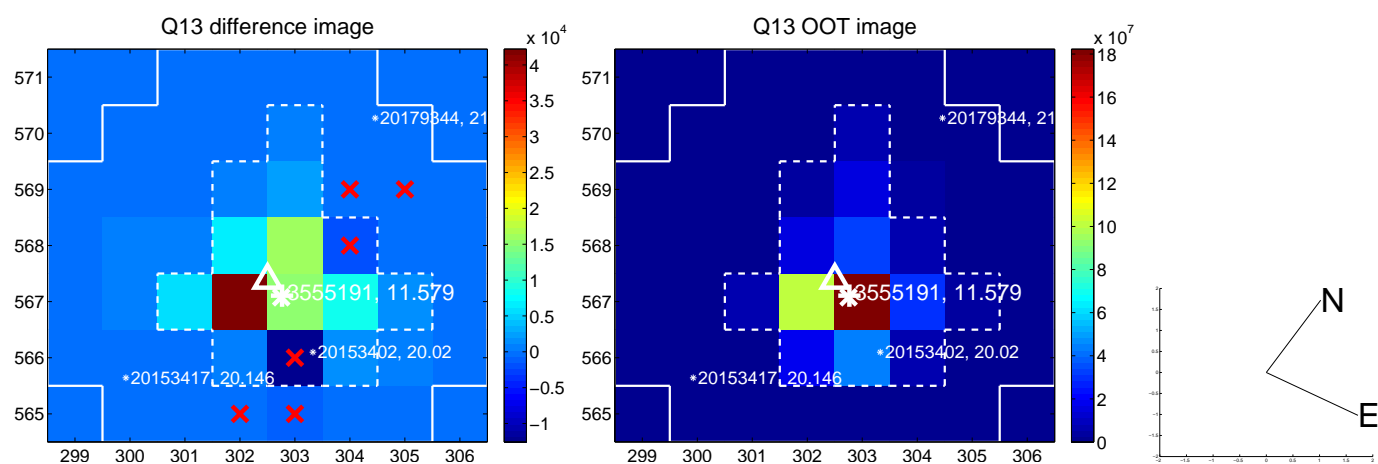
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



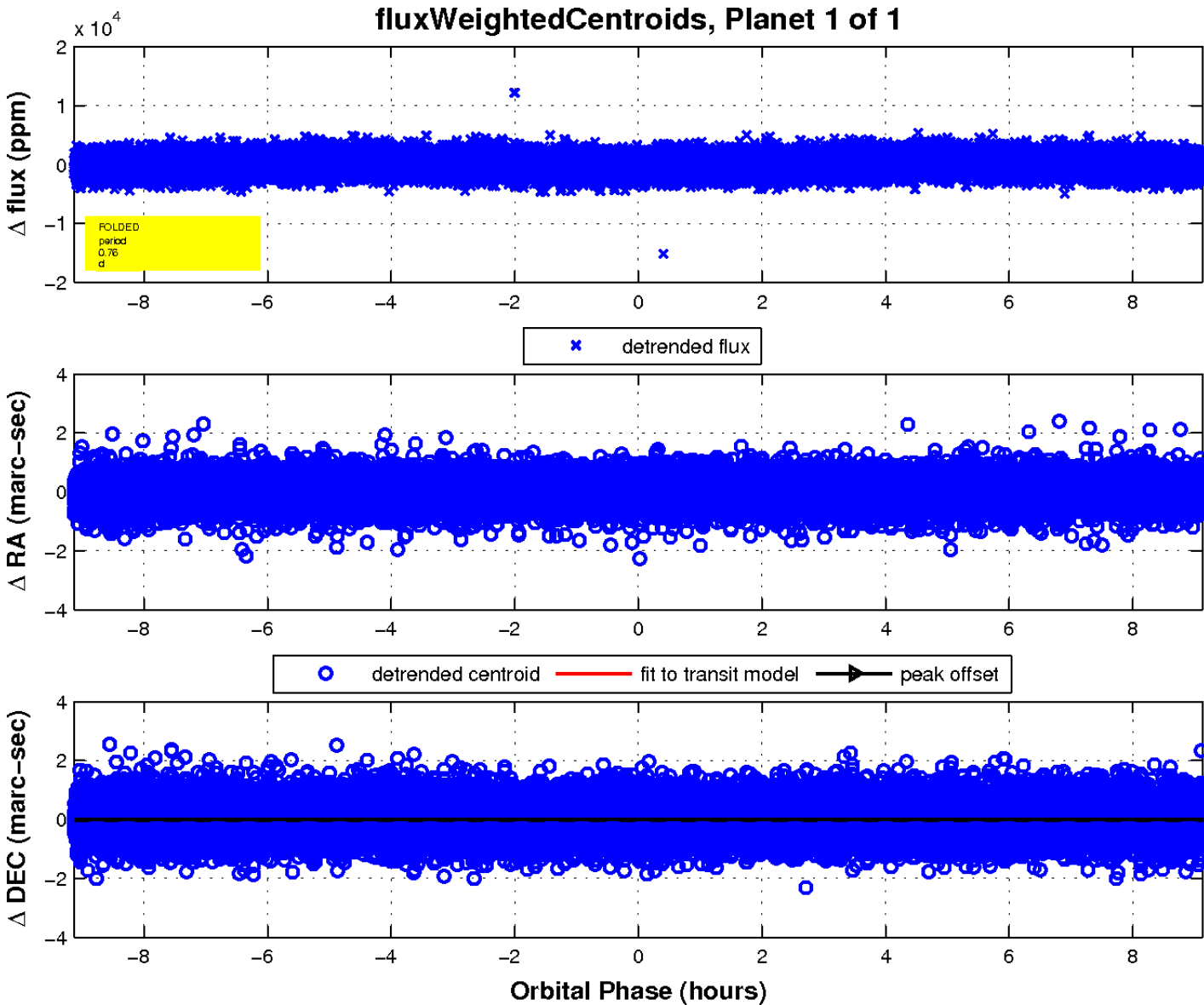
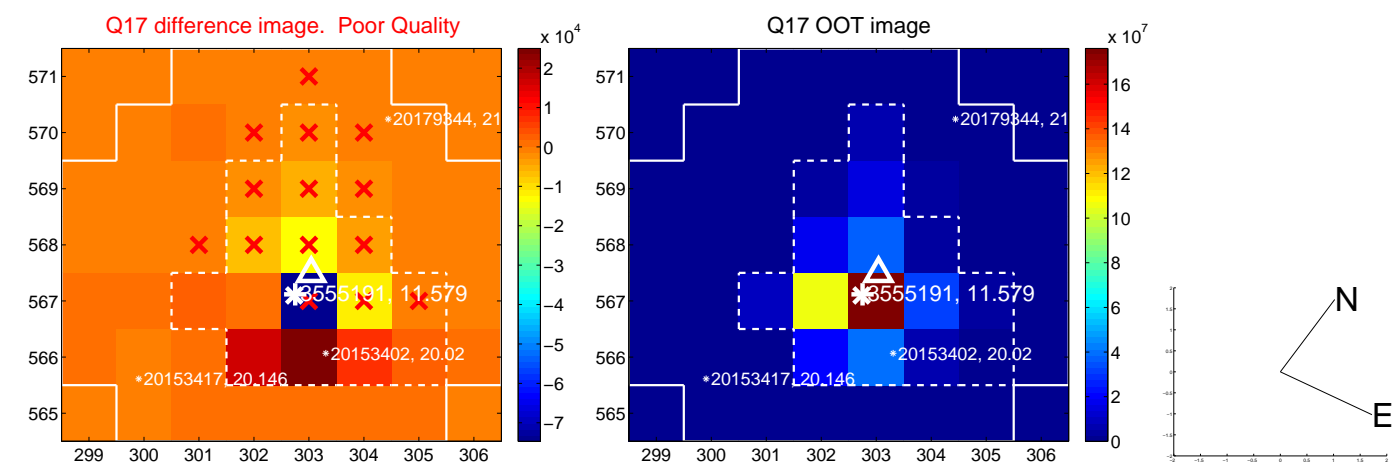
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UKIRT Image

