

KIC 006548898

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})
006548898-01	OBS	No	0.964485	132.401555	44.1	4.854	10.8	8.2	0.61	3830	0.39	271.70
006548898-02	OBS	No	184.453924	312.014894	656.9	9.455	15.3	7.0	0.61	3830	1.66	0.25
006548898-03	OBS	No	144.113449	156.046462	813.1	4.218	11.3	8.8	0.61	3830	1.88	0.34
006548898-04	OBS	No	130.442857	236.613313	473.5	6.407	8.0	6.0	0.61	3830	1.51	0.39
006548898-05	OBS	No	223.313792	194.600350	706.1	3.013	7.6	7.4	0.61	3830	1.89	0.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006548898-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
006548898-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006548898-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006548898-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
006548898-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

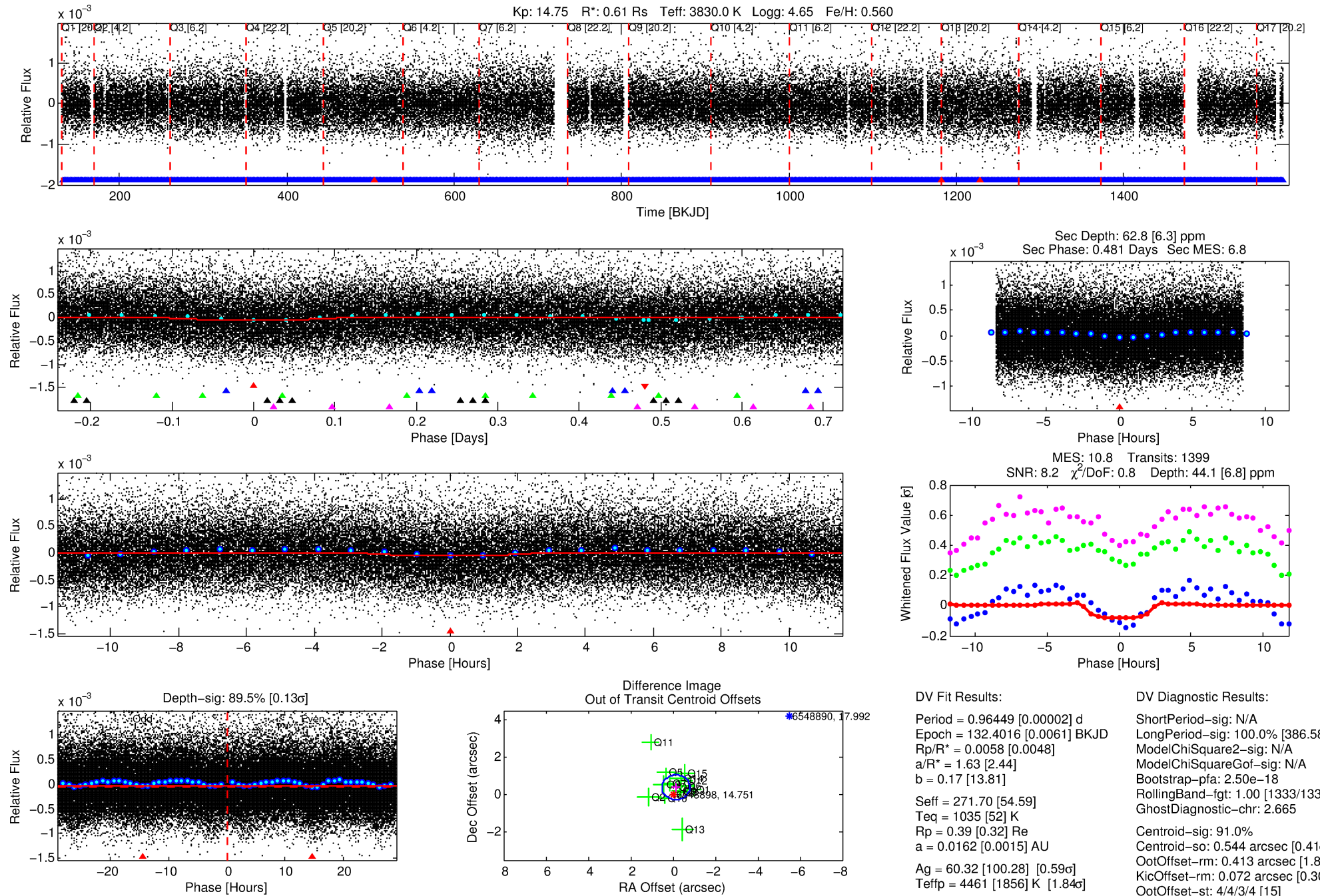
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006548898-01

No Significant Match Found

DV One-Page Summary

KIC: 6548898 Candidate: 1 of 5 Period: 0.964 d



DV Fit Results:

Period = 0.96449 [0.00002] d
Epoch = 132.4016 [0.0061] BKJD
Rp/R* = 0.0058 [0.0048]
a/R* = 1.63 [2.44]
b = 0.17 [13.81]
Seff = 271.70 [54.59]
Teq = 1035 [52] K
Rp = 0.39 [0.32] Re
a = 0.0162 [0.0015] AU
Ag = 60.32 [100.28] [0.59 σ]
Teffp = 4461 [1856] K [1.84 σ]

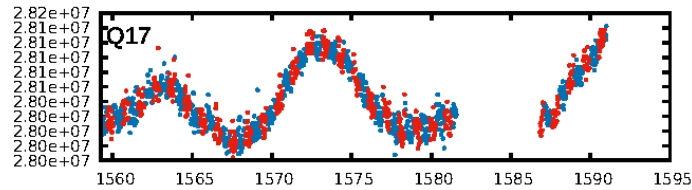
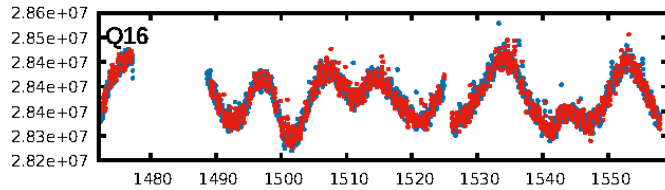
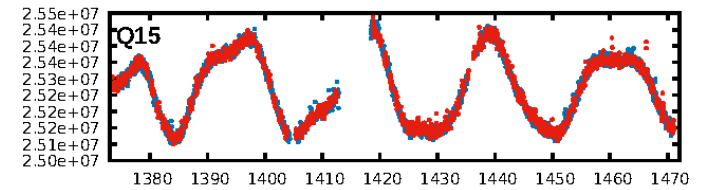
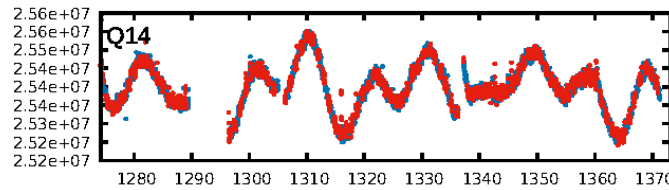
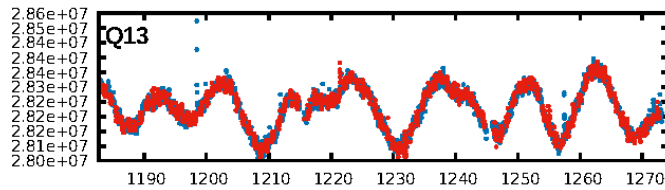
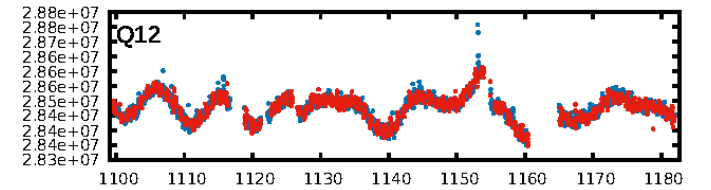
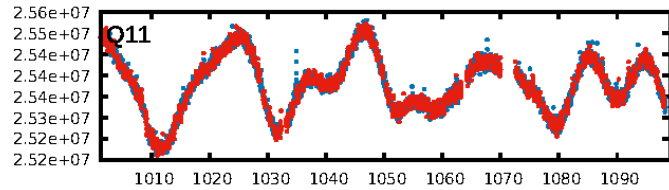
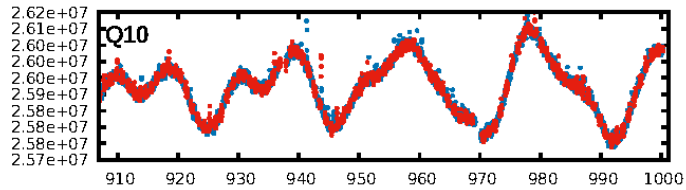
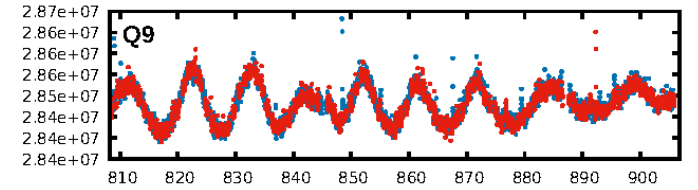
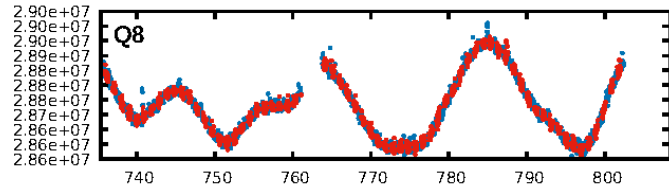
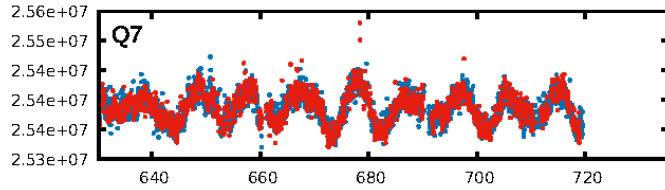
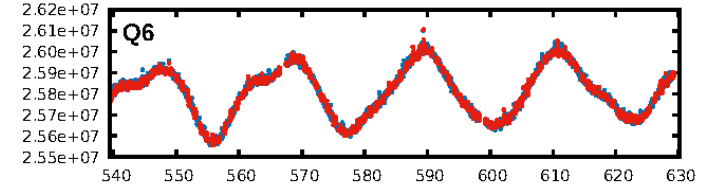
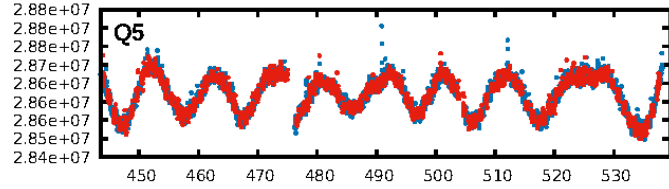
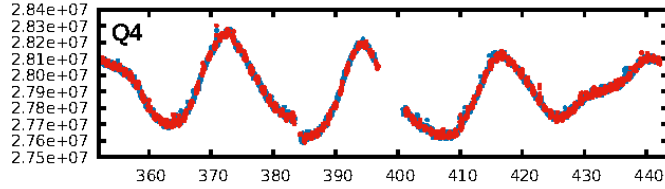
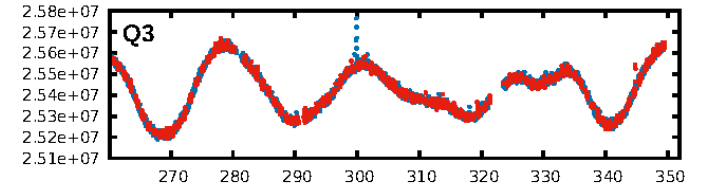
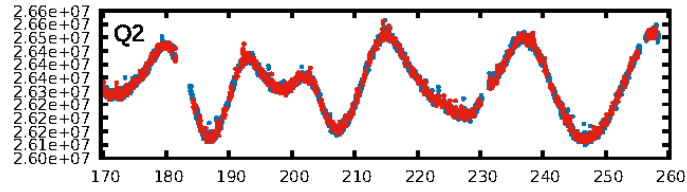
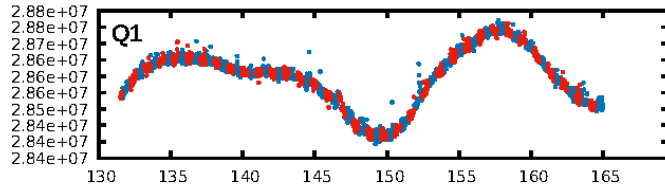
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [386.58 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.50e-18
RollingBand-fgt: 1.00 [1333/1336]
GhostDiagnostic-chr: 2.665
Centroid-sig: 91.0%
Centroid-so: 0.544 arcsec [0.41 σ]
OotOffset-rm: 0.413 arcsec [1.88 σ]
KicOffset-rm: 0.072 arcsec [0.30 σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.93 [14/15]
DiffImageOverlap-fno: 1.00 [17/17]

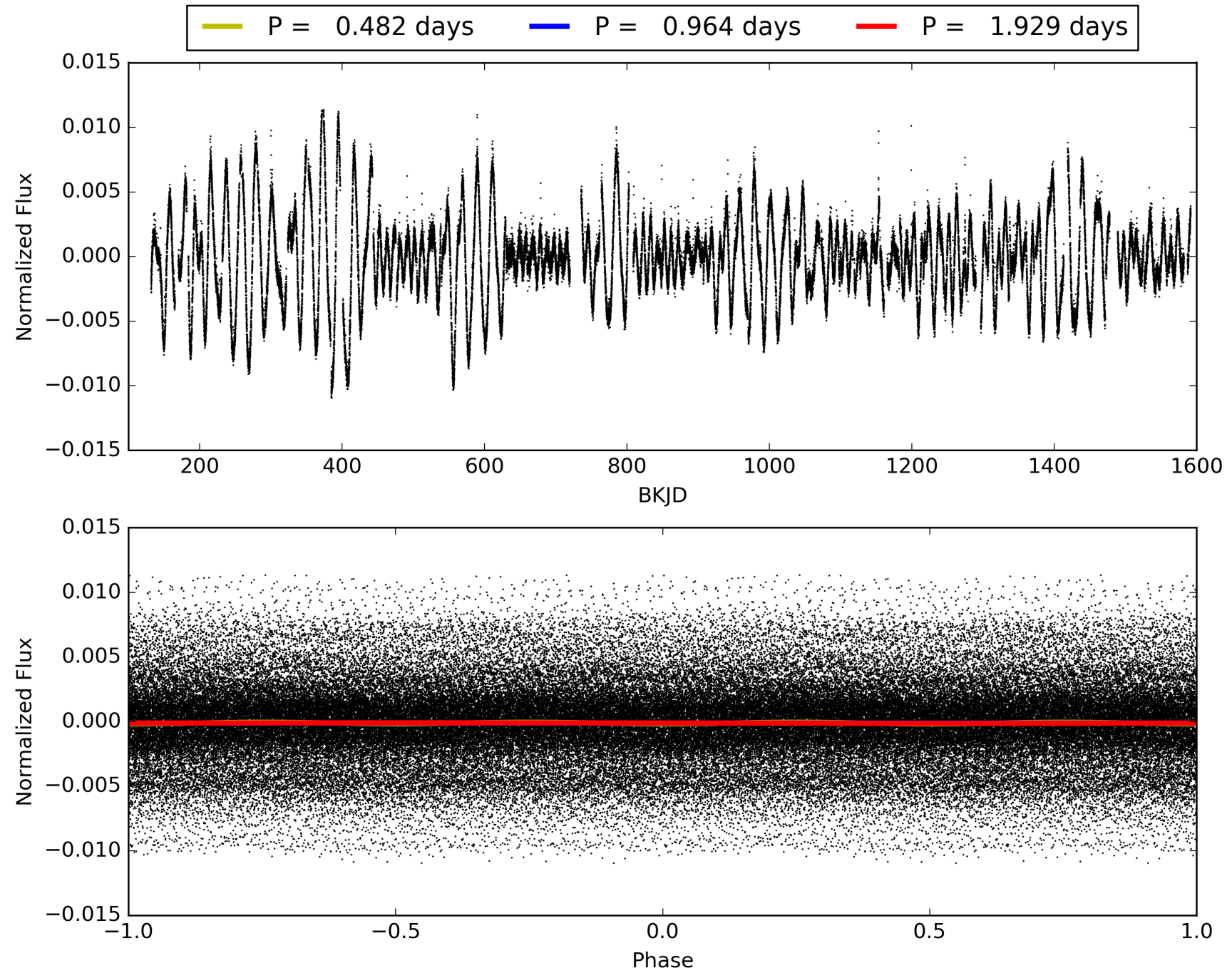
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:49:51 Z

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

TCE 006548898-01, PDC Light Curves

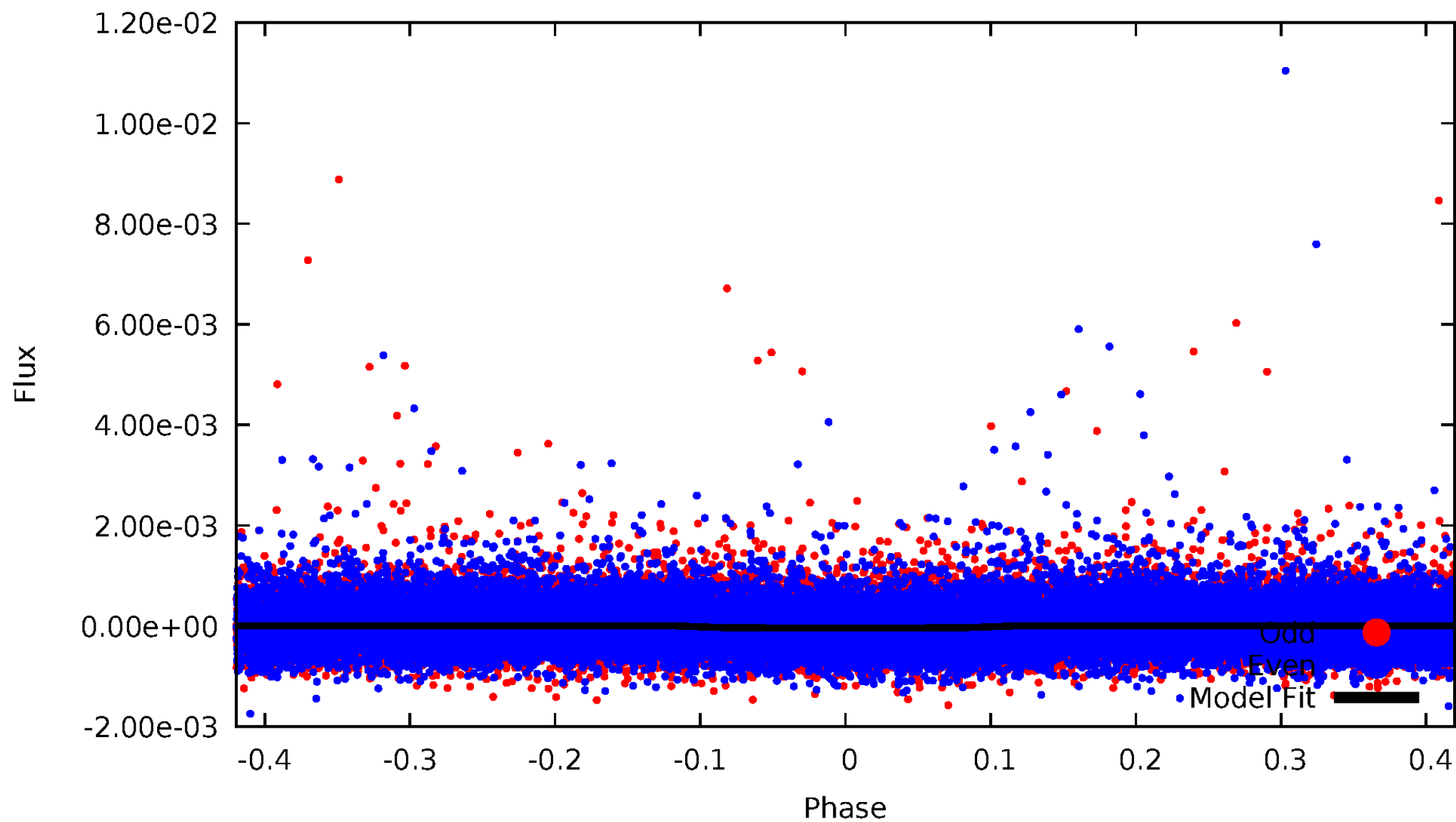


TCE 006548898-01



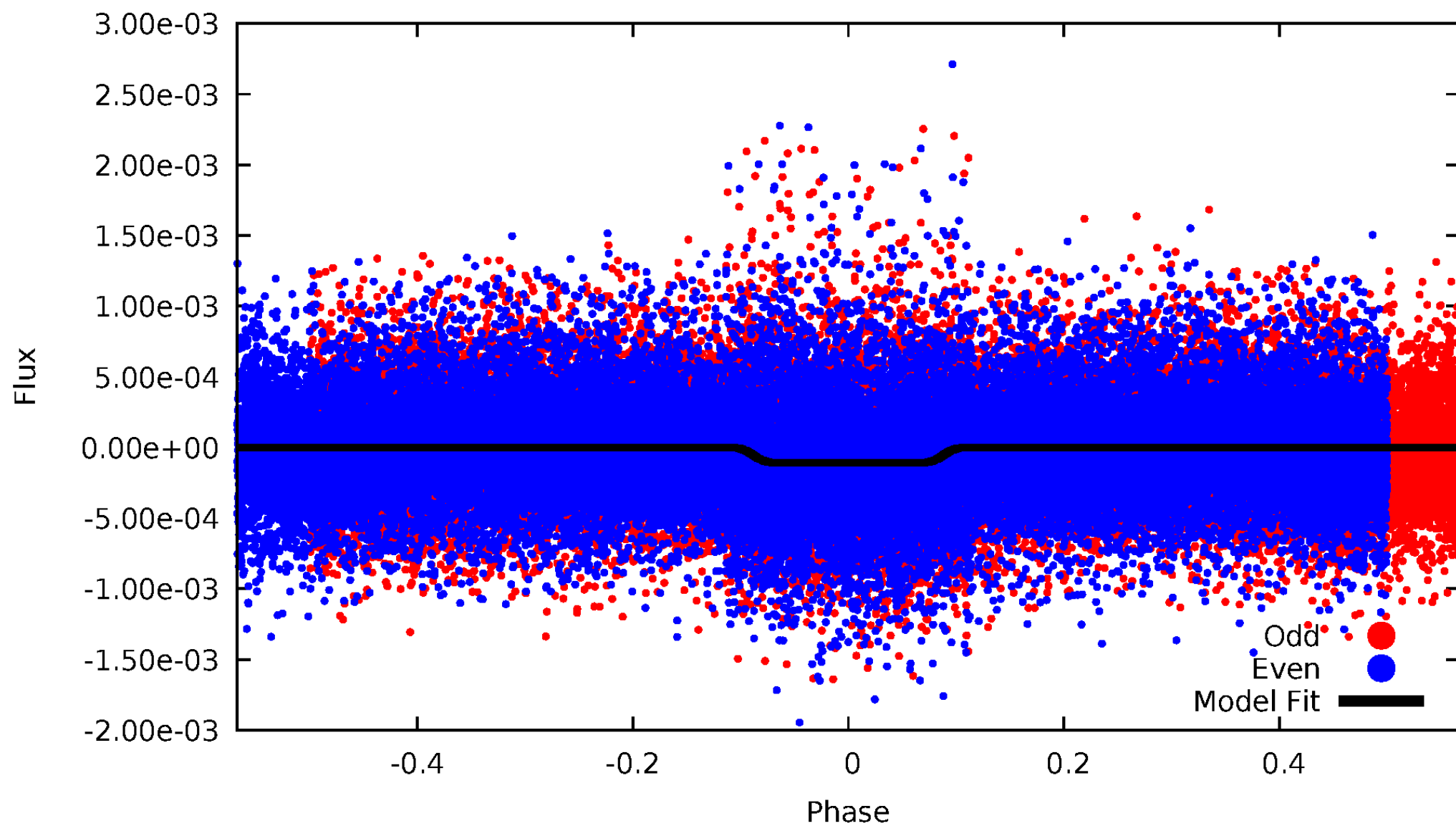
DV Odd/Even

TCE 006548898-01

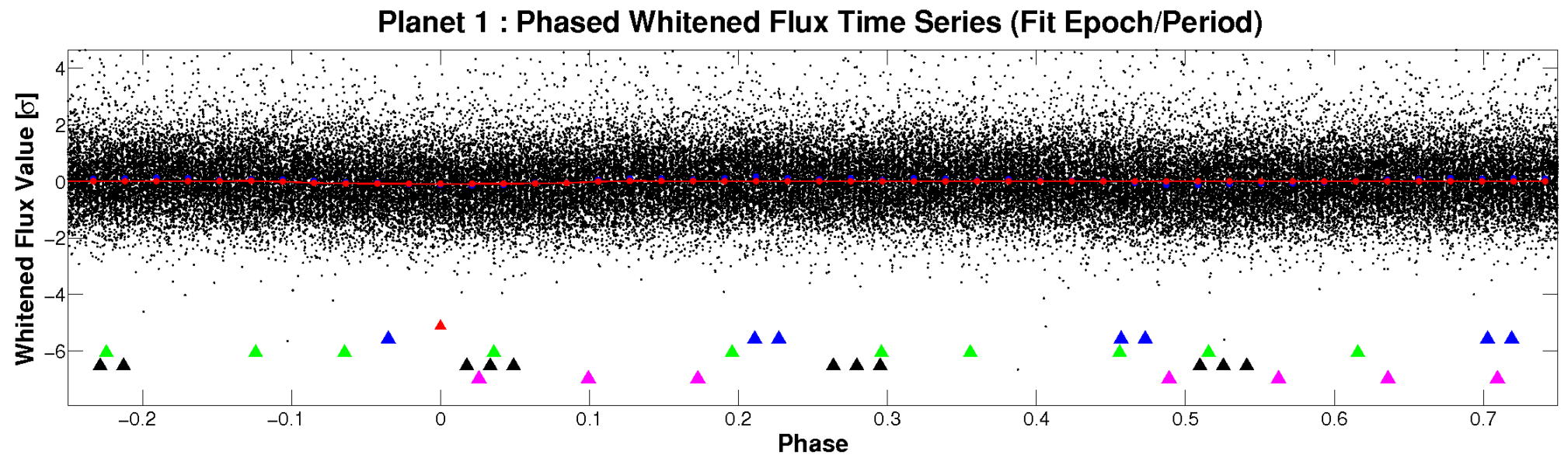
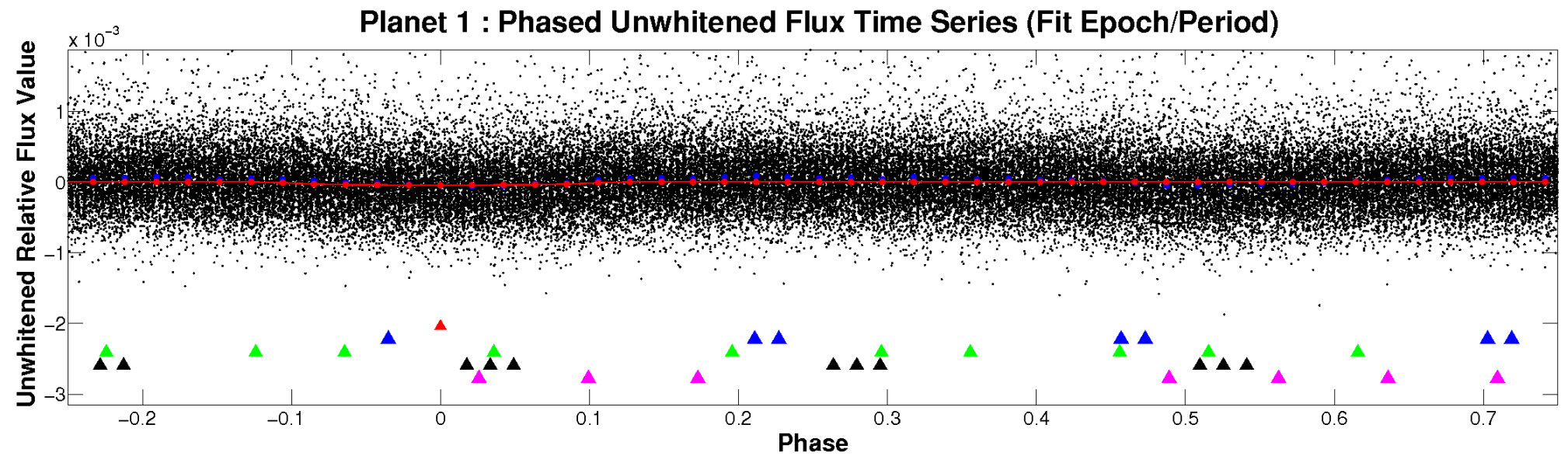


ALT Odd/Even

TCE 006548898-01

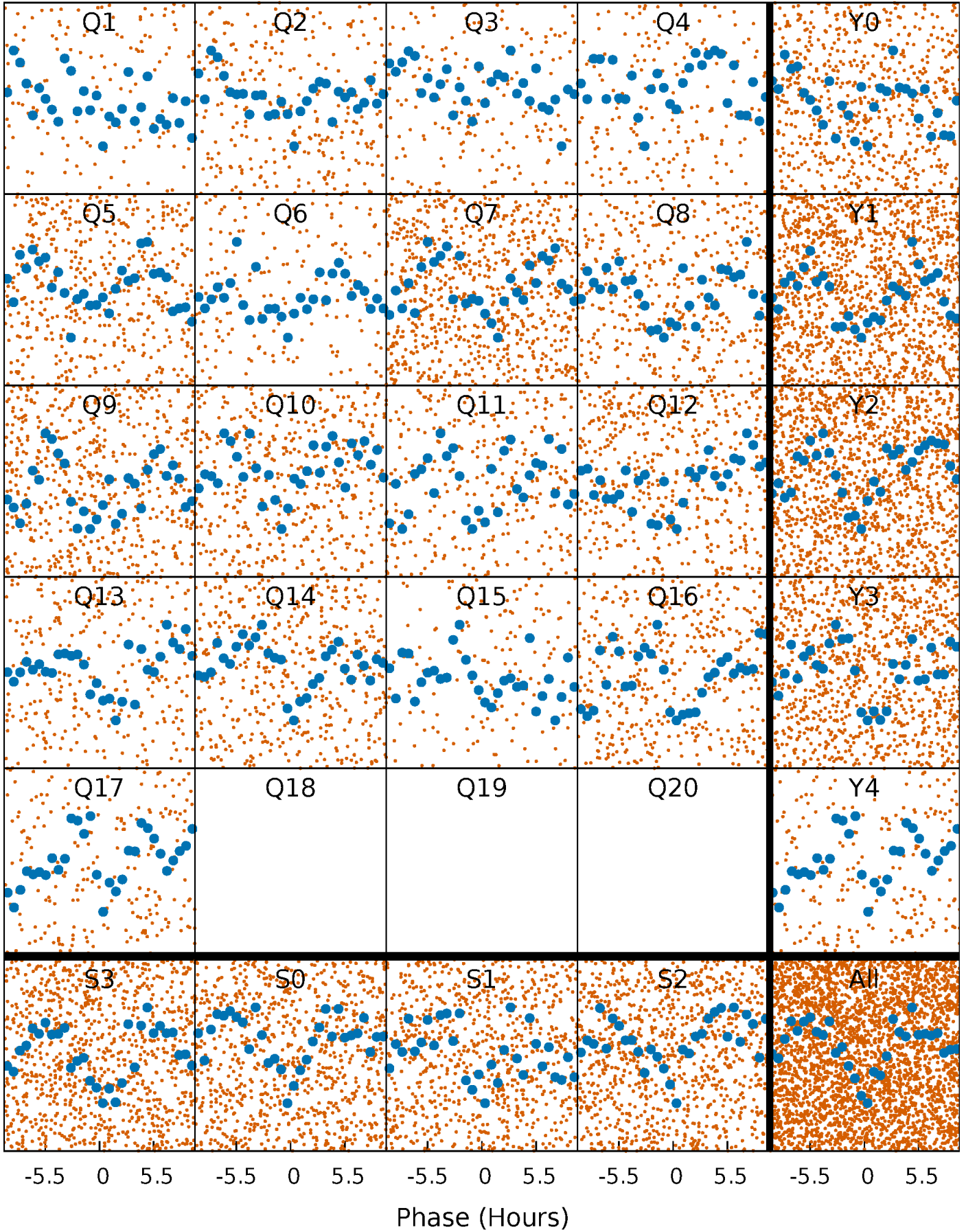


Non-Whitened Vs. Whitened Light Curve



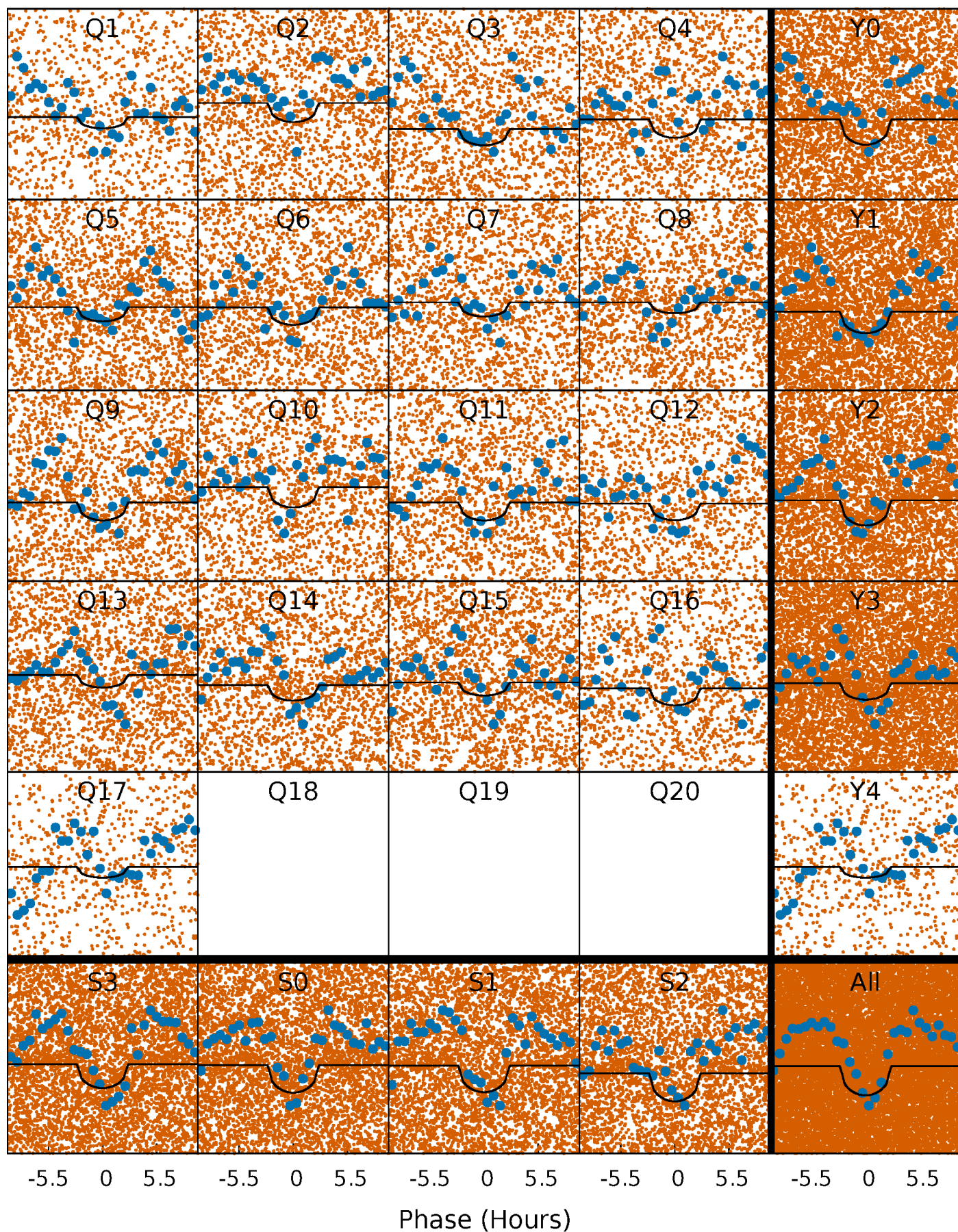
PDC Quarter-Phased Transit Curves

TCE 006548898-01 P= 0.964485 Days $T_0=132.401555$ (BKJD)



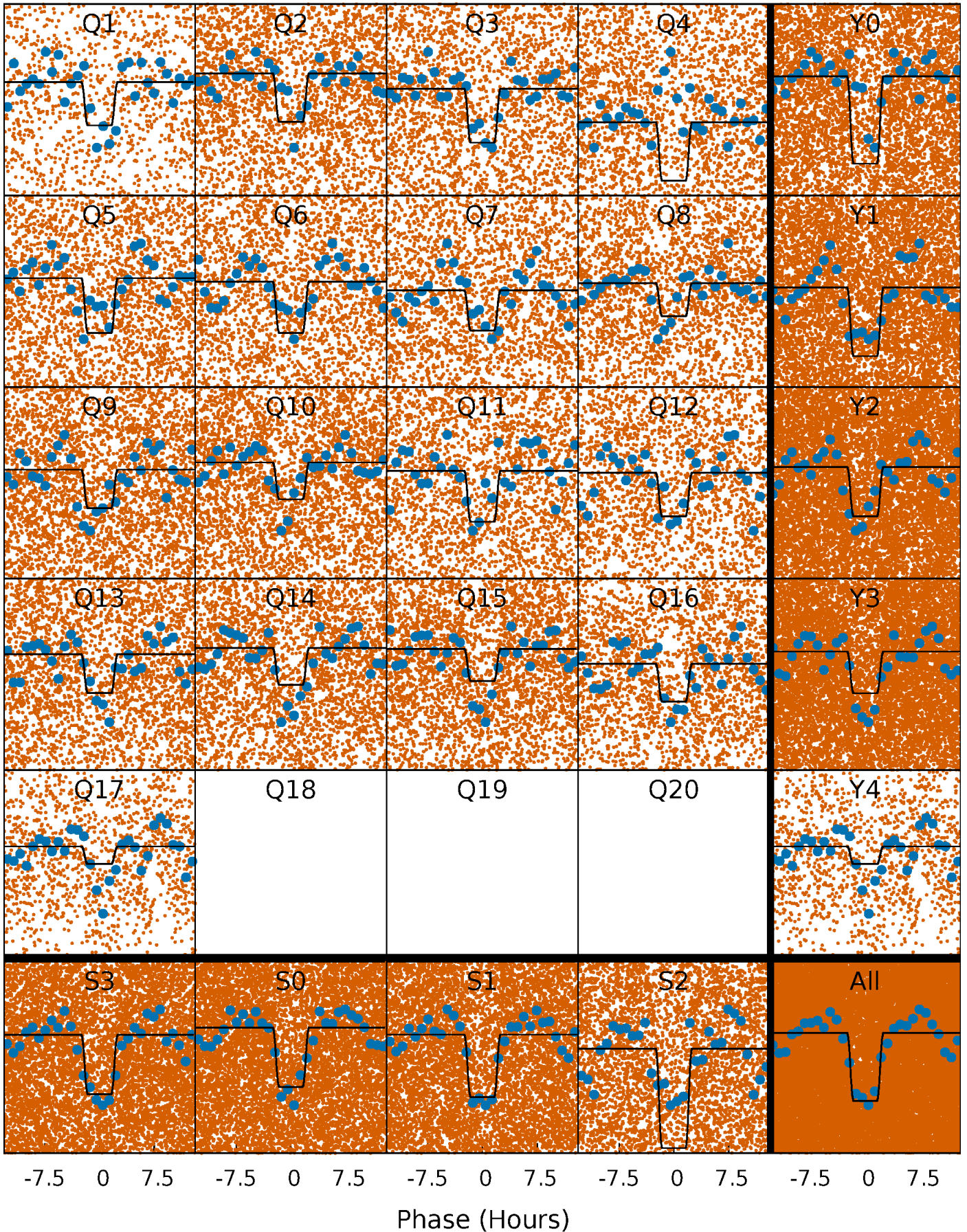
DV Quarter-Phased Transit Curves

TCE 006548898-01 P= 0.964485 Days $T_0=132.401555$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

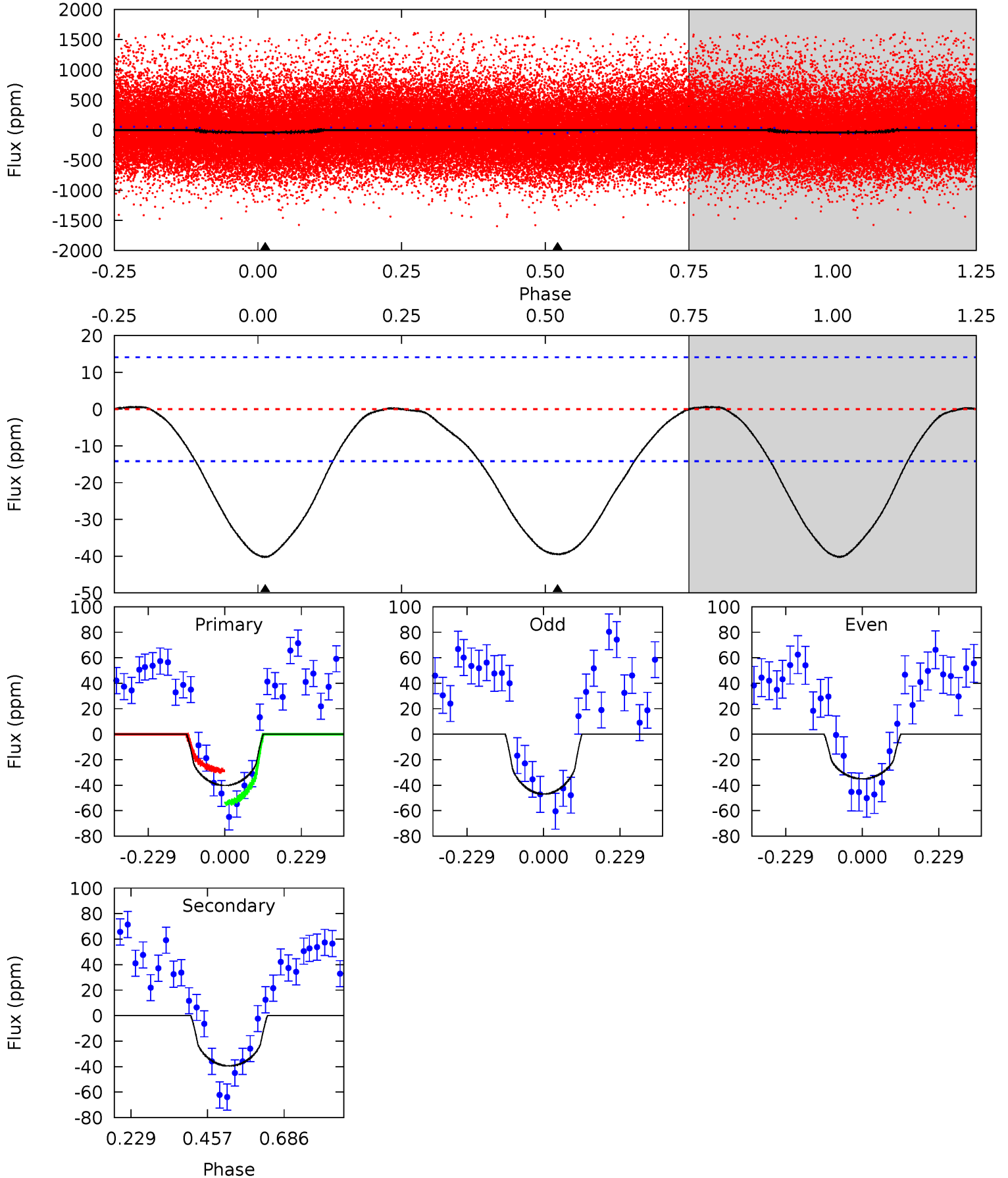
TCE 006548898-01 P= 0.964531 Days $T_0=132.370339$ (BKJD)



DV Model-Shift Uniqueness Test

006548898-01, P = 0.964485 Days, E = 131.437070 Days

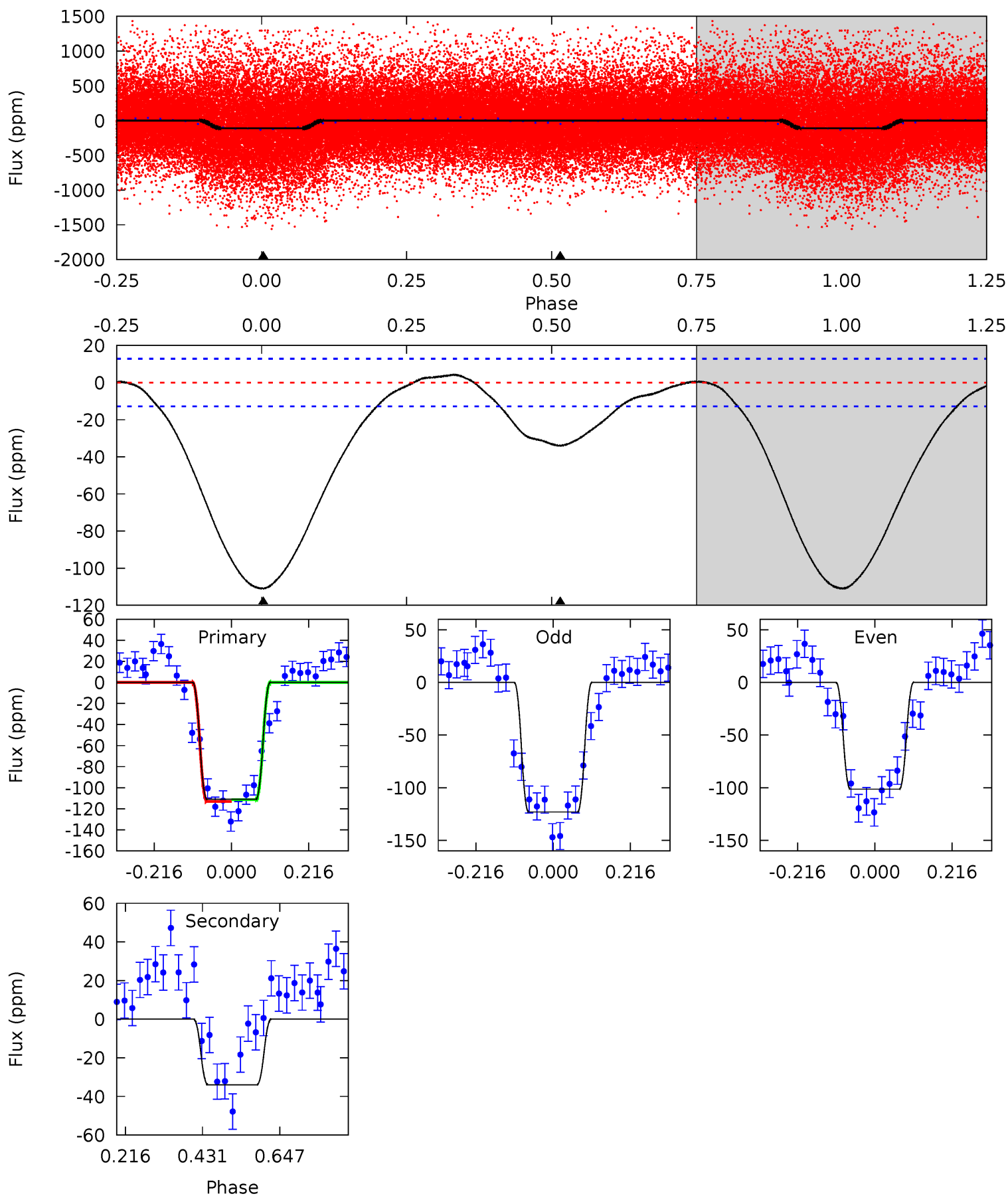
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	12.2	0	0	4.39	1.20	0.15	12.5	12.5	12.2	12.2	1.83	0.56	0.01	3.86



Alt Model-Shift Uniqueness Test

006548898-01, P = 0.964531 Days, E = 131.405808 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.1	11.7	0	0	4.40	1.24	0.84	38.1	38.1	11.7	11.7	3.73	0.95	0.04	0.30



Stellar Parameters For KIC 006548898

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3830^{+120}_{-147}	$4.654^{+0.068}_{-0.016}$	$0.560^{+0.050}_{-0.300}$	$0.607^{+0.028}_{-0.070}$	$0.606^{+0.035}_{-0.060}$	$3.808^{+1.215}_{-0.336}$
	+3%/-4%	+1%/-0%	+9%/-54%	+5%/-12%	+6%/-10%	+32%/-9%
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 006548898-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-39 ± 3	$0.43^{+0.32}_{-0.25}$	1430^{+53}_{-58}	3749^{+1517}_{-630}	31^{+148}_{-21}
Alt.	-34 ± 3	$0.67^{+0.28}_{-0.30}$	1429^{+54}_{-67}	3151^{+681}_{-321}	11^{+25}_{-5}

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 $A_{obs} \gg 1.0$

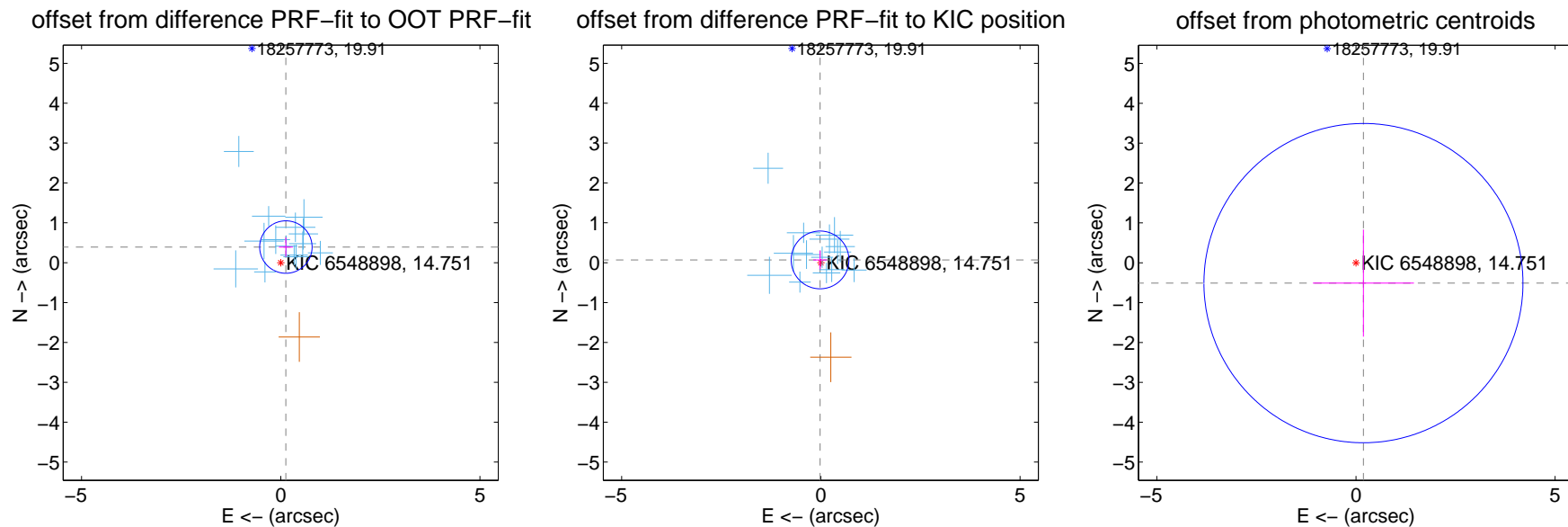
DV Centroid Data

Supplemental centroid analysis for 006548898-01. Kepler magnitude: 14.75. Transit SNR 8.18

There are 14 quarters with good PRF difference image offsets

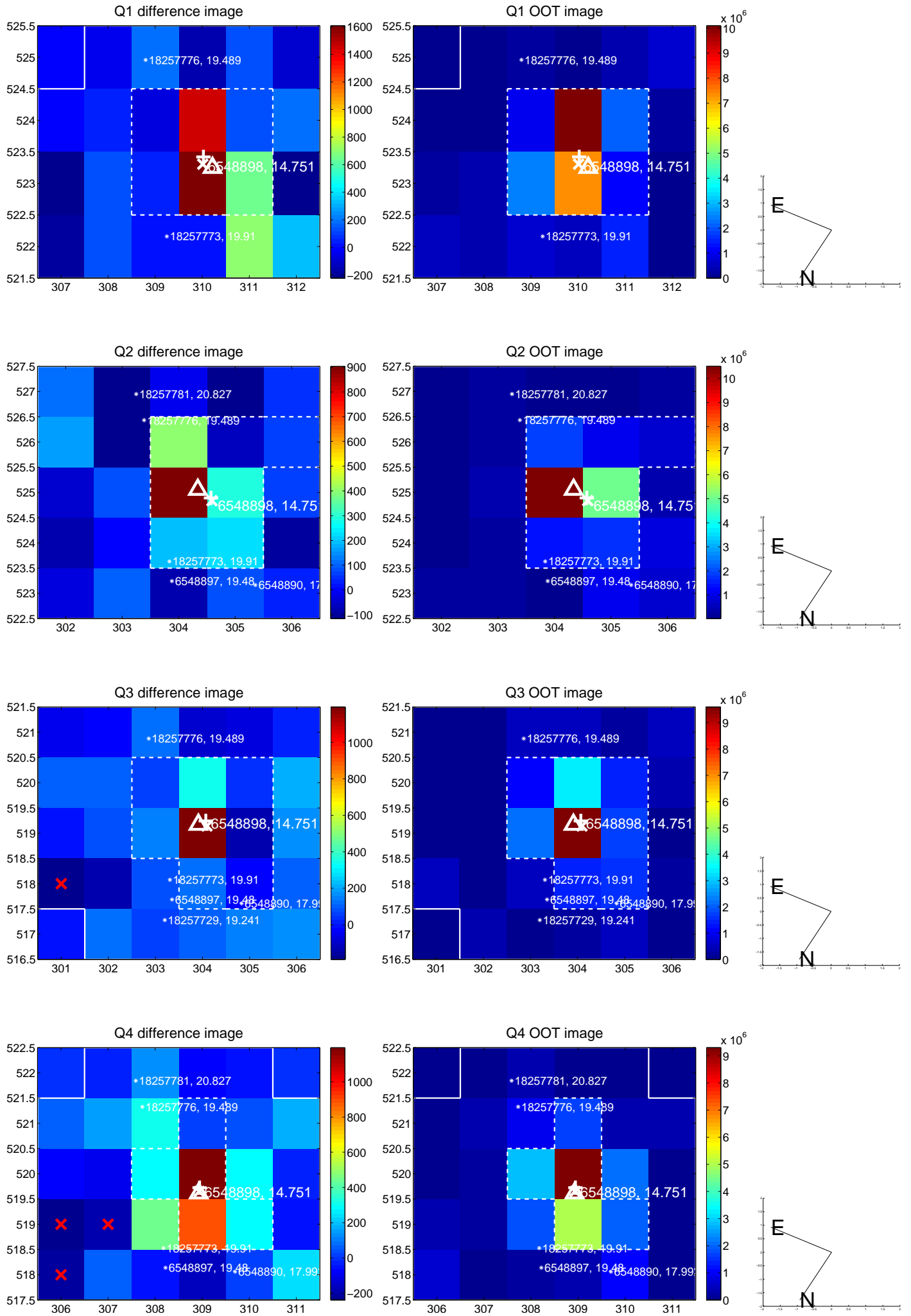
The direct PRF centroid is offset from the target star catalog position by about 0.51 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.413 ± 0.219	1.88	-0.129 ± 0.176	0.392 ± 0.240
PRF-fit source offset from KIC position	0.072 ± 0.241	0.30	0.021 ± 0.170	0.070 ± 0.235
photometric centroid source offset	0.54 ± 1.33	0.41	-0.19 ± 1.27	-0.51 ± 1.34

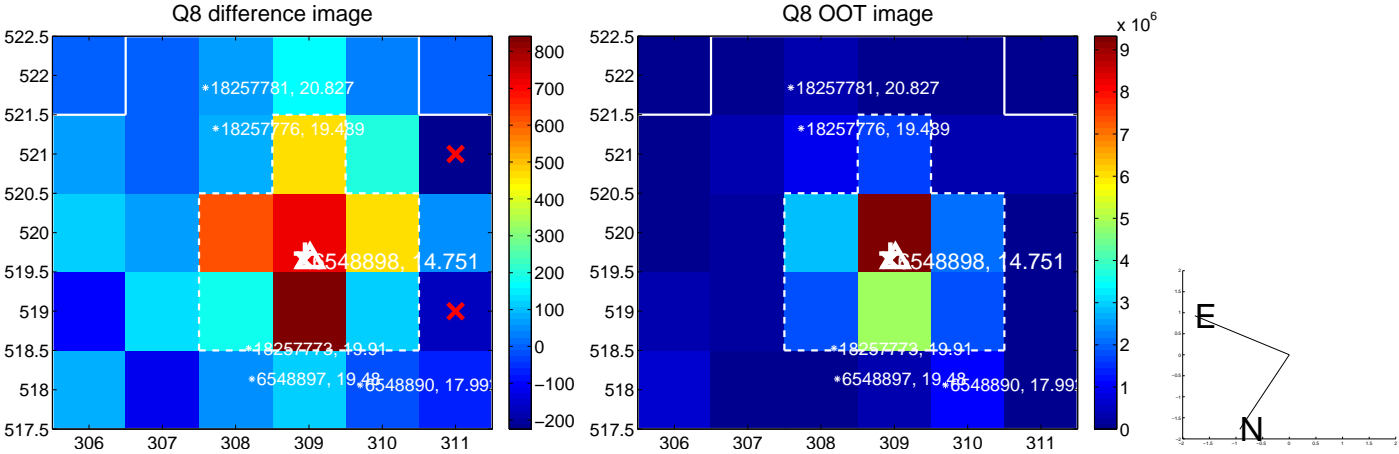
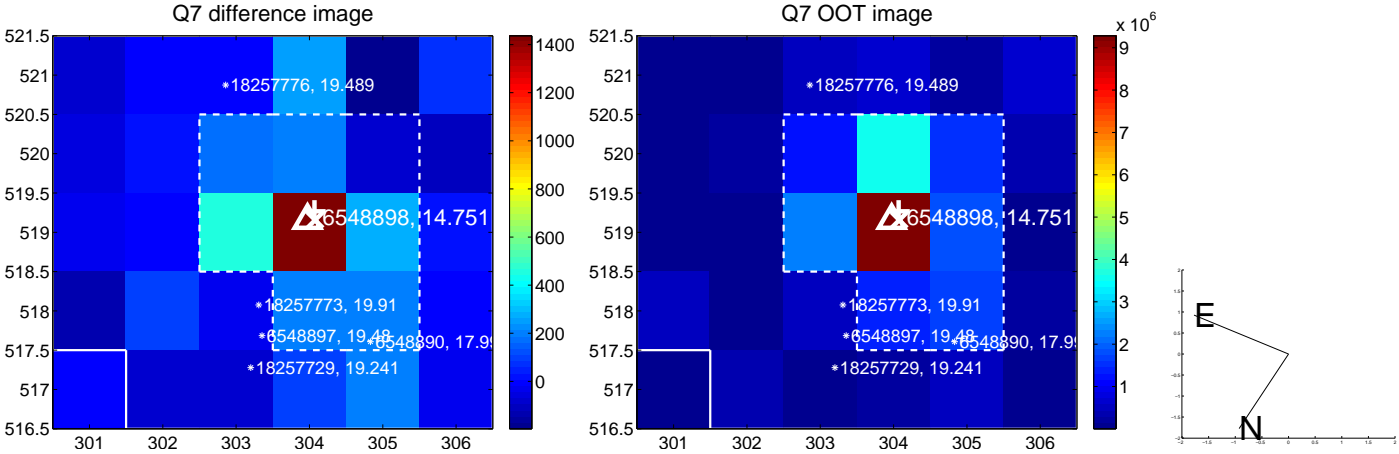
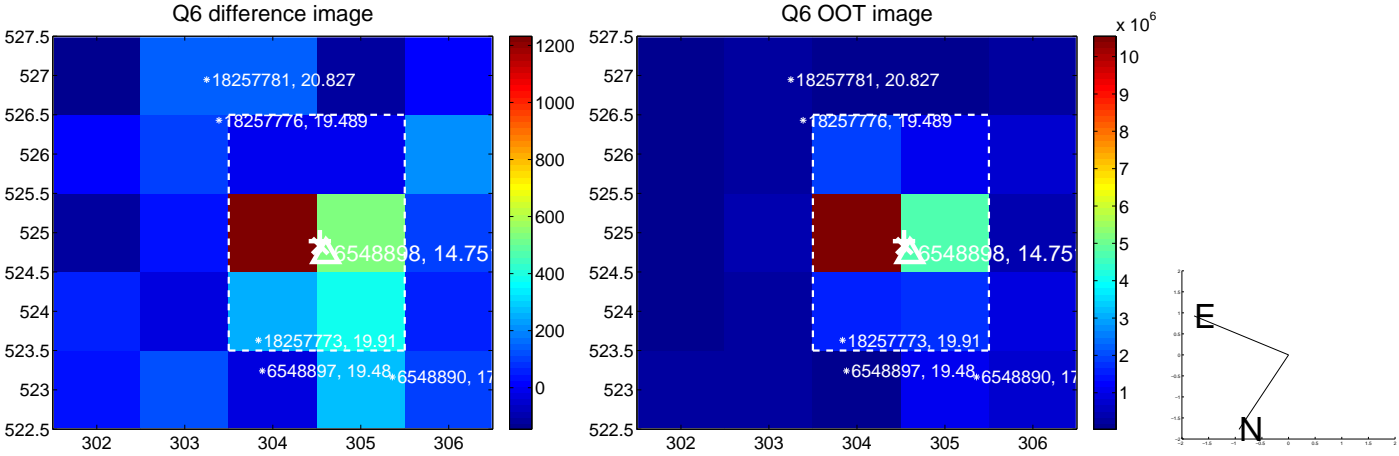
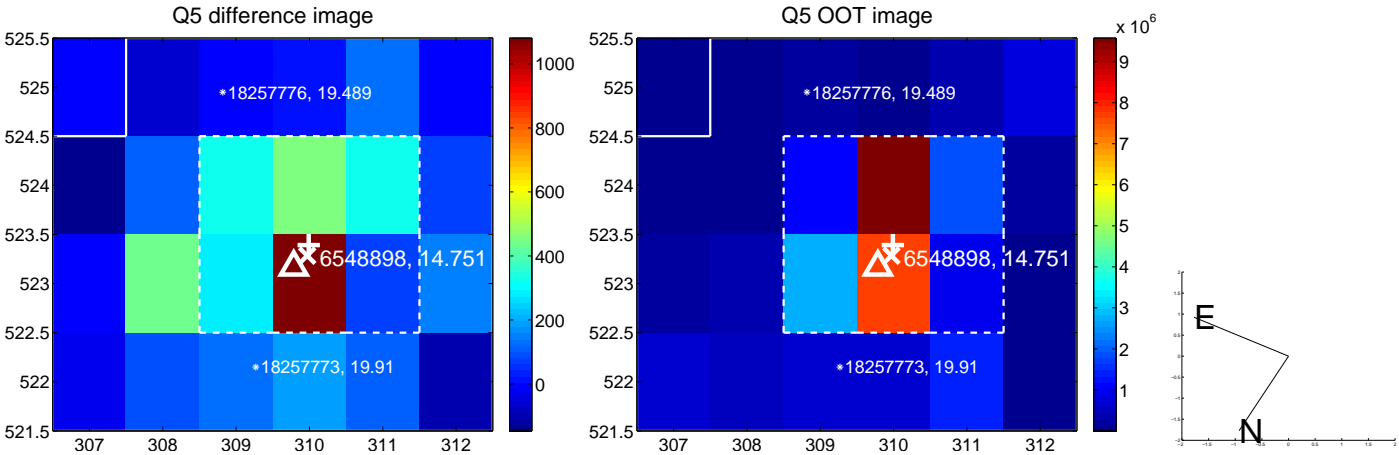


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

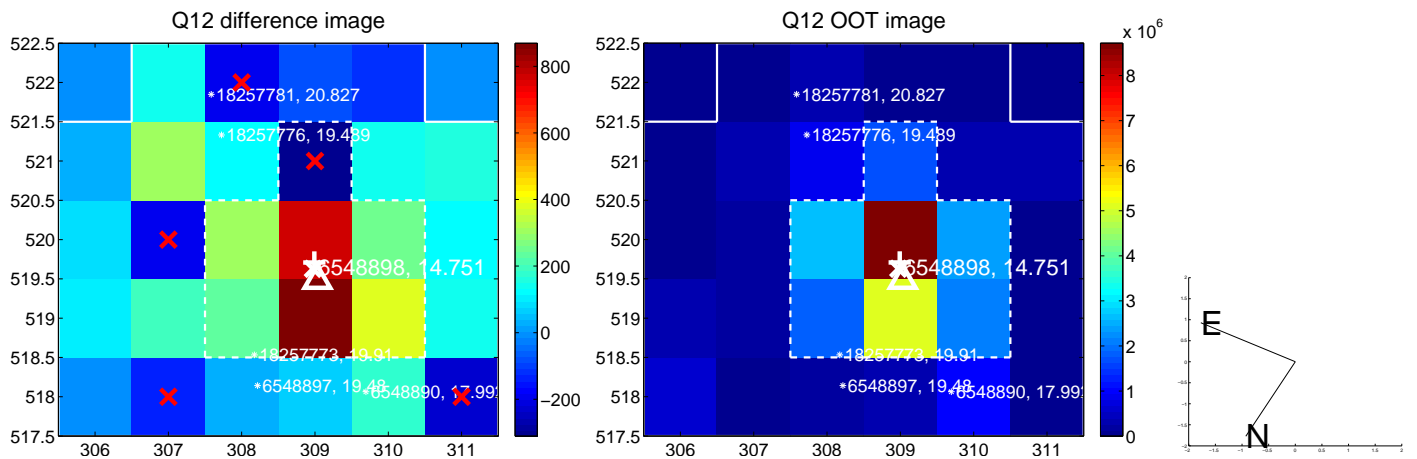
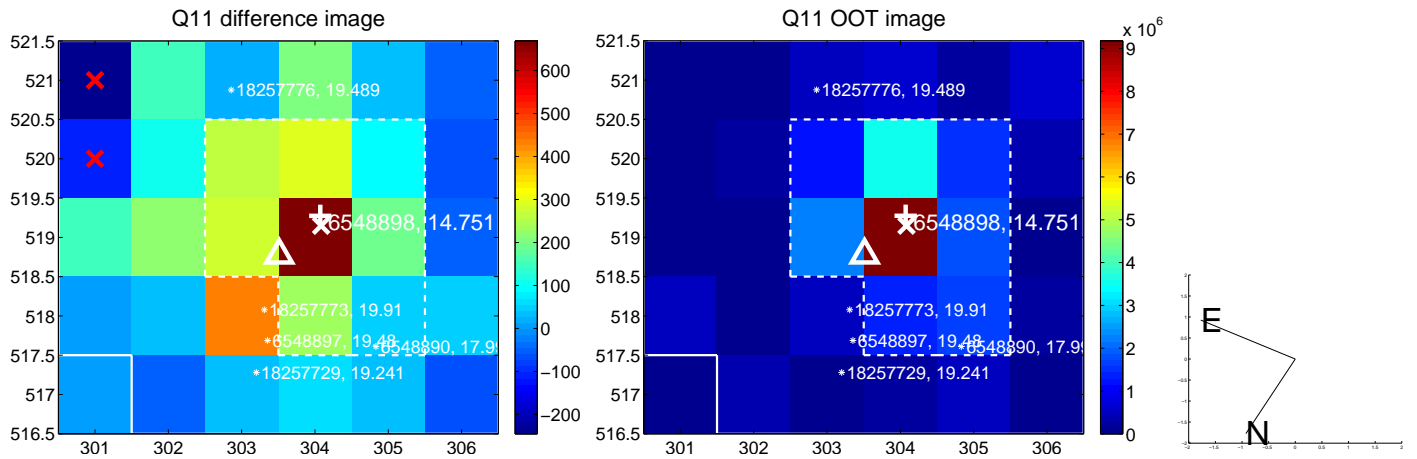
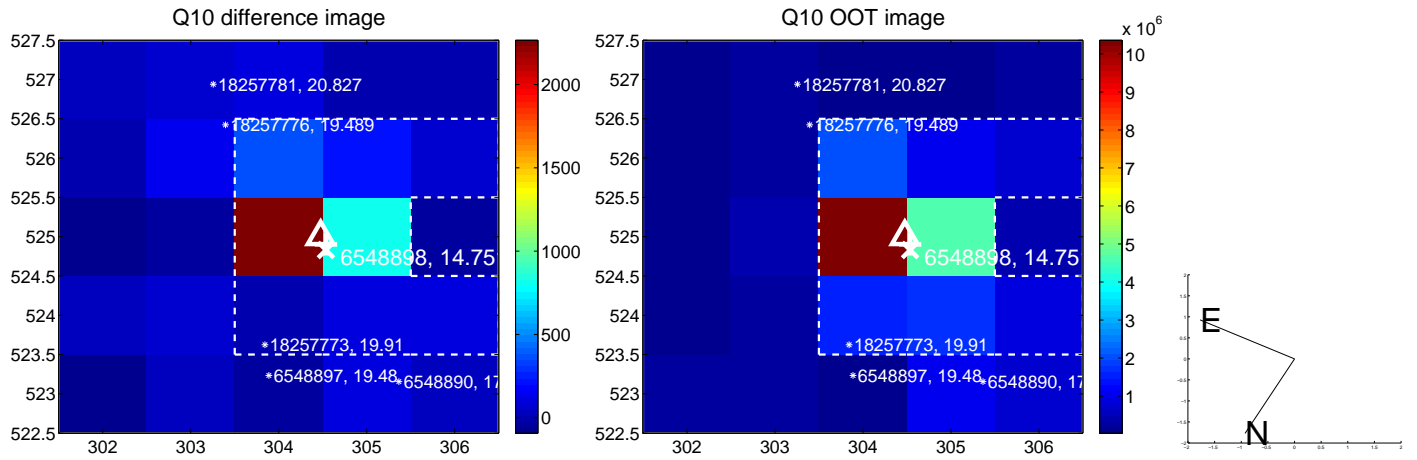
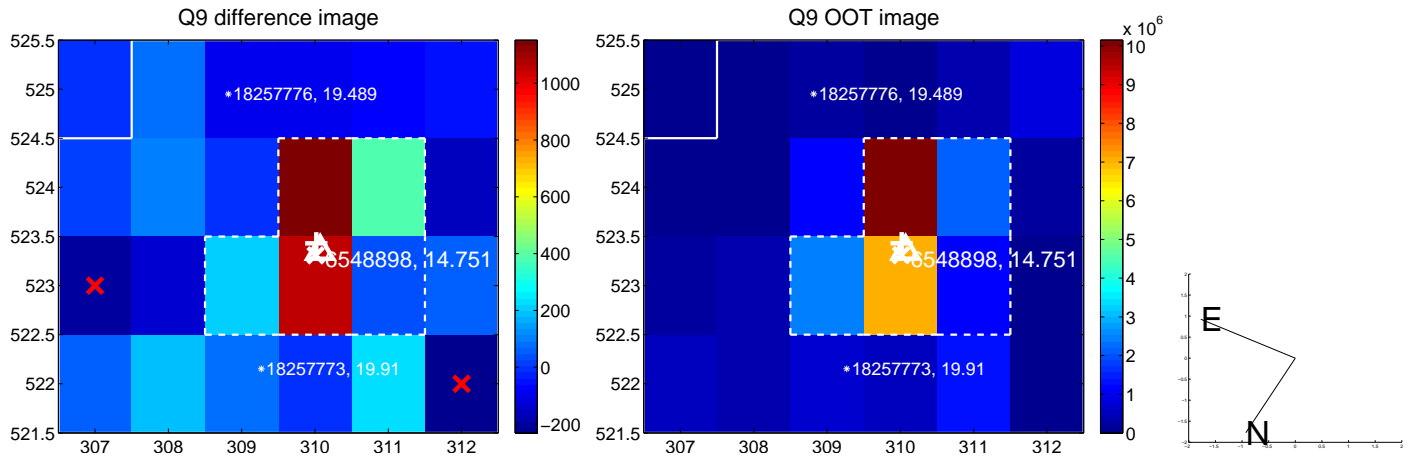
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



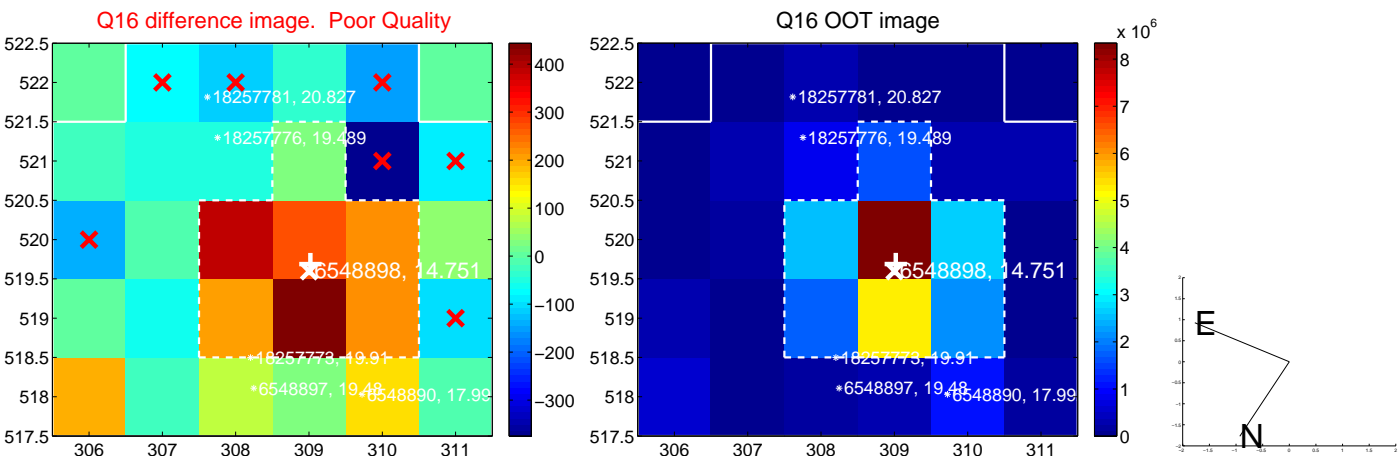
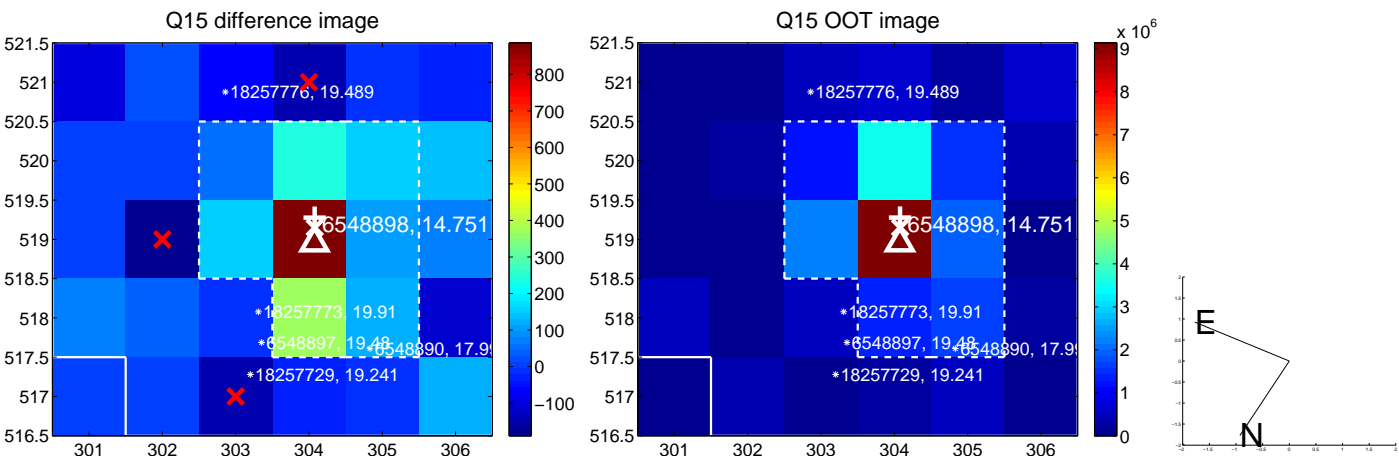
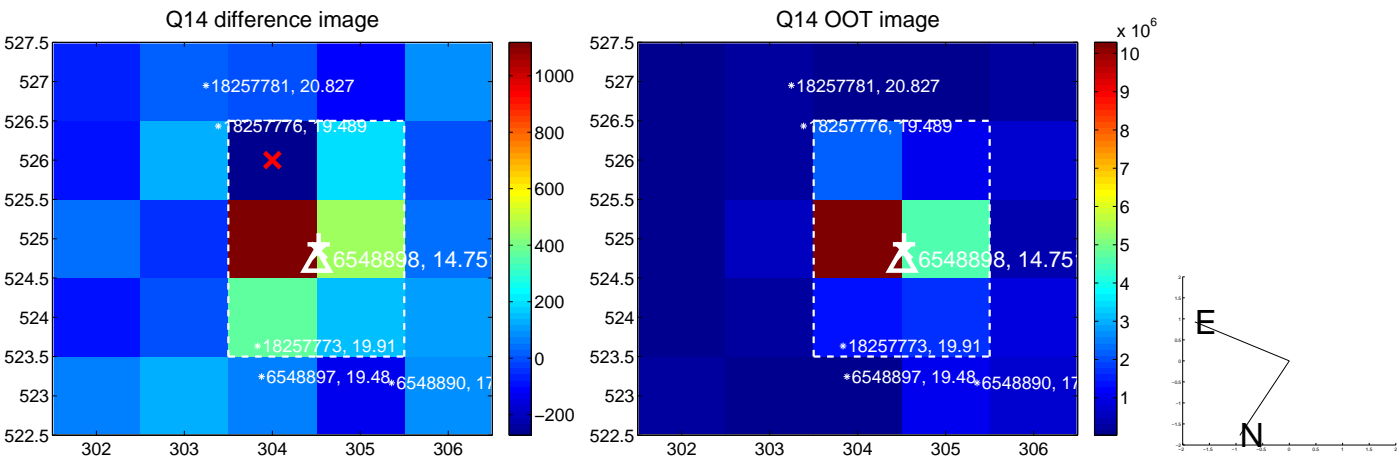
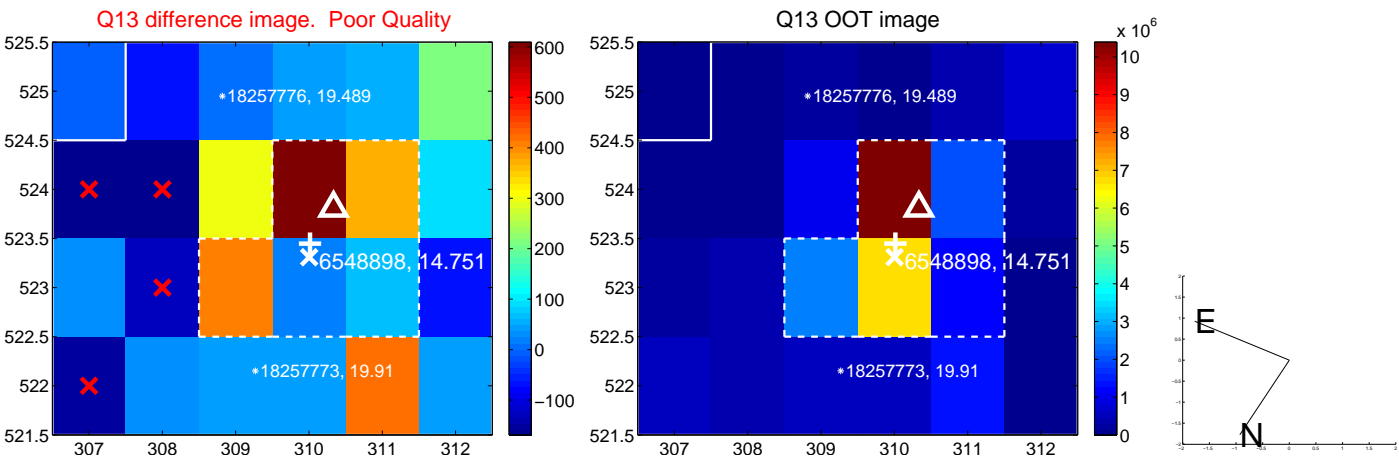
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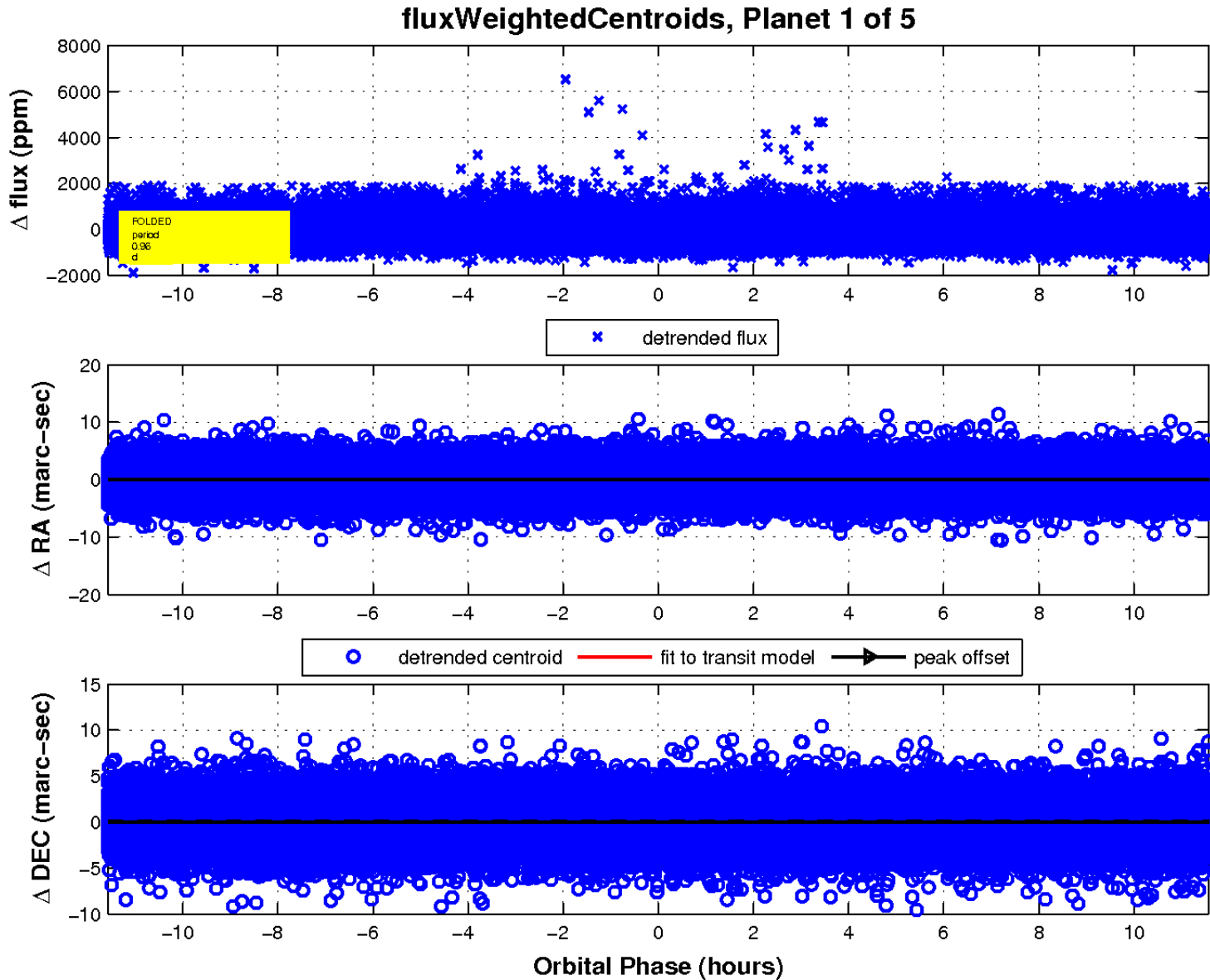
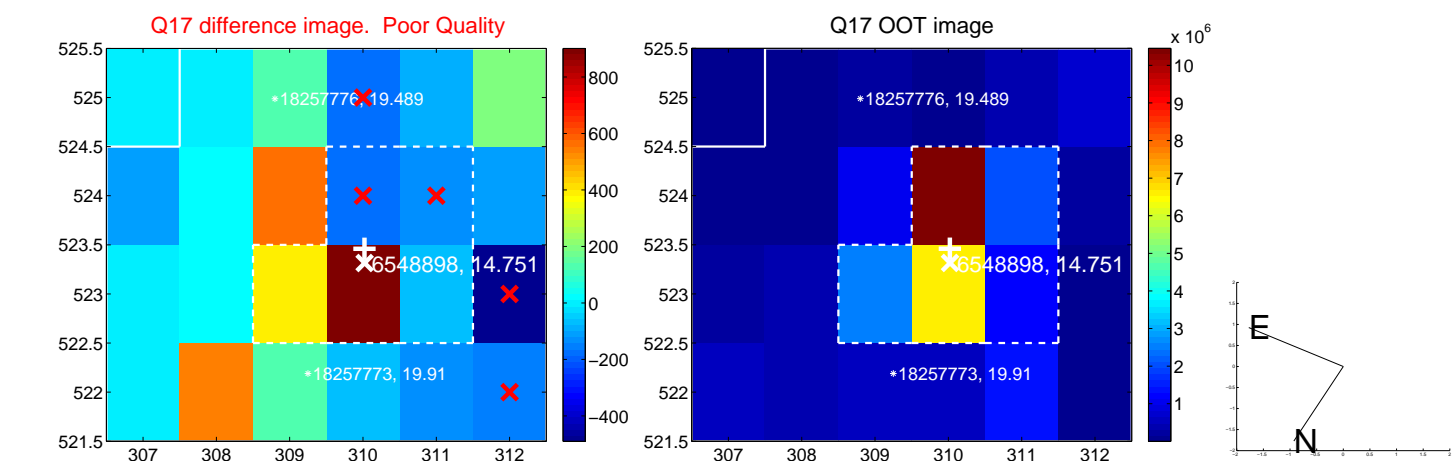
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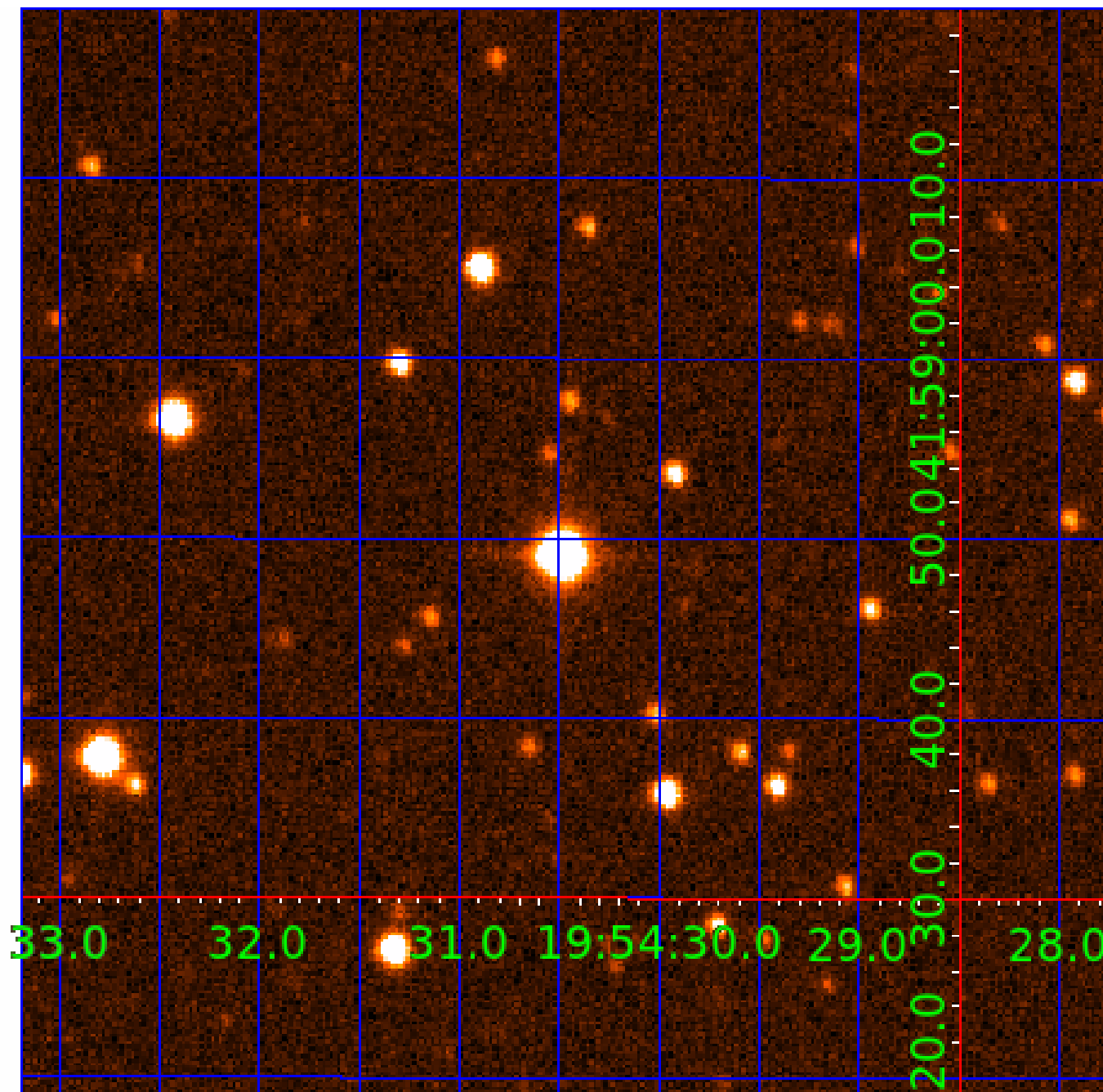


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006548898

Q1-17 DR25 TCE Parameters

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Robovetter Results

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006548898-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006548898-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
006548898-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

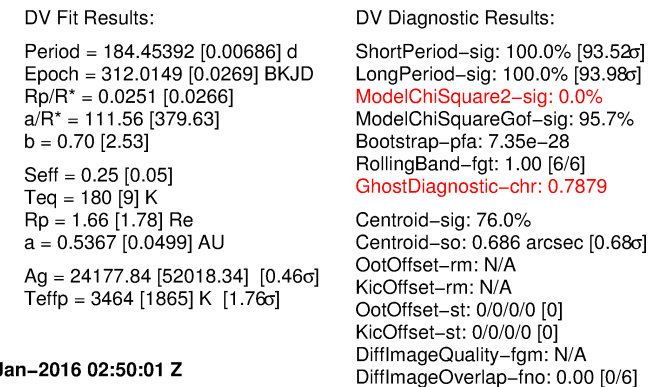
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 006548898-02

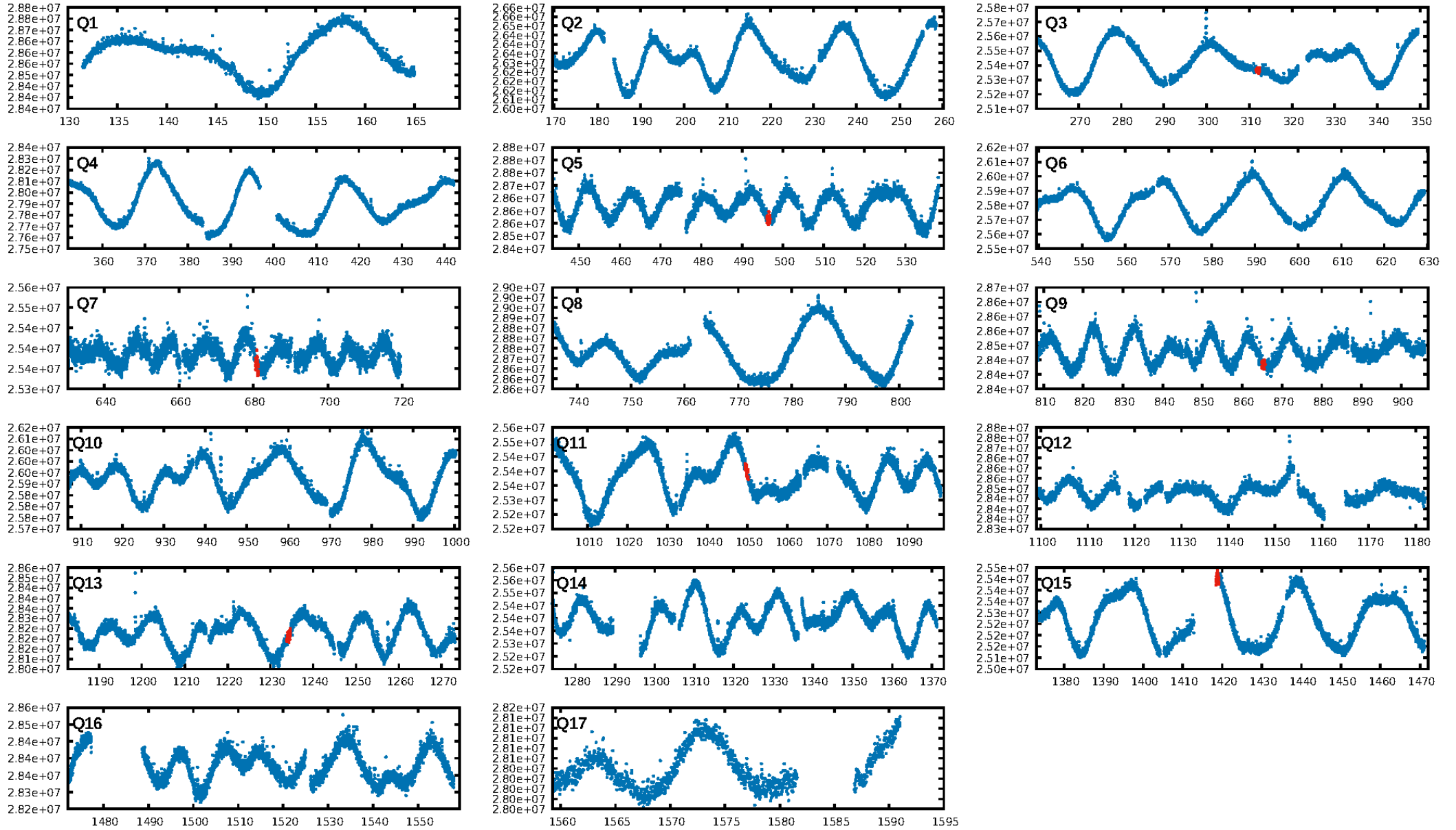
No Significant Match Found

KIC: 6548898 Candidate: 2 of 5 Period: 184.454 d

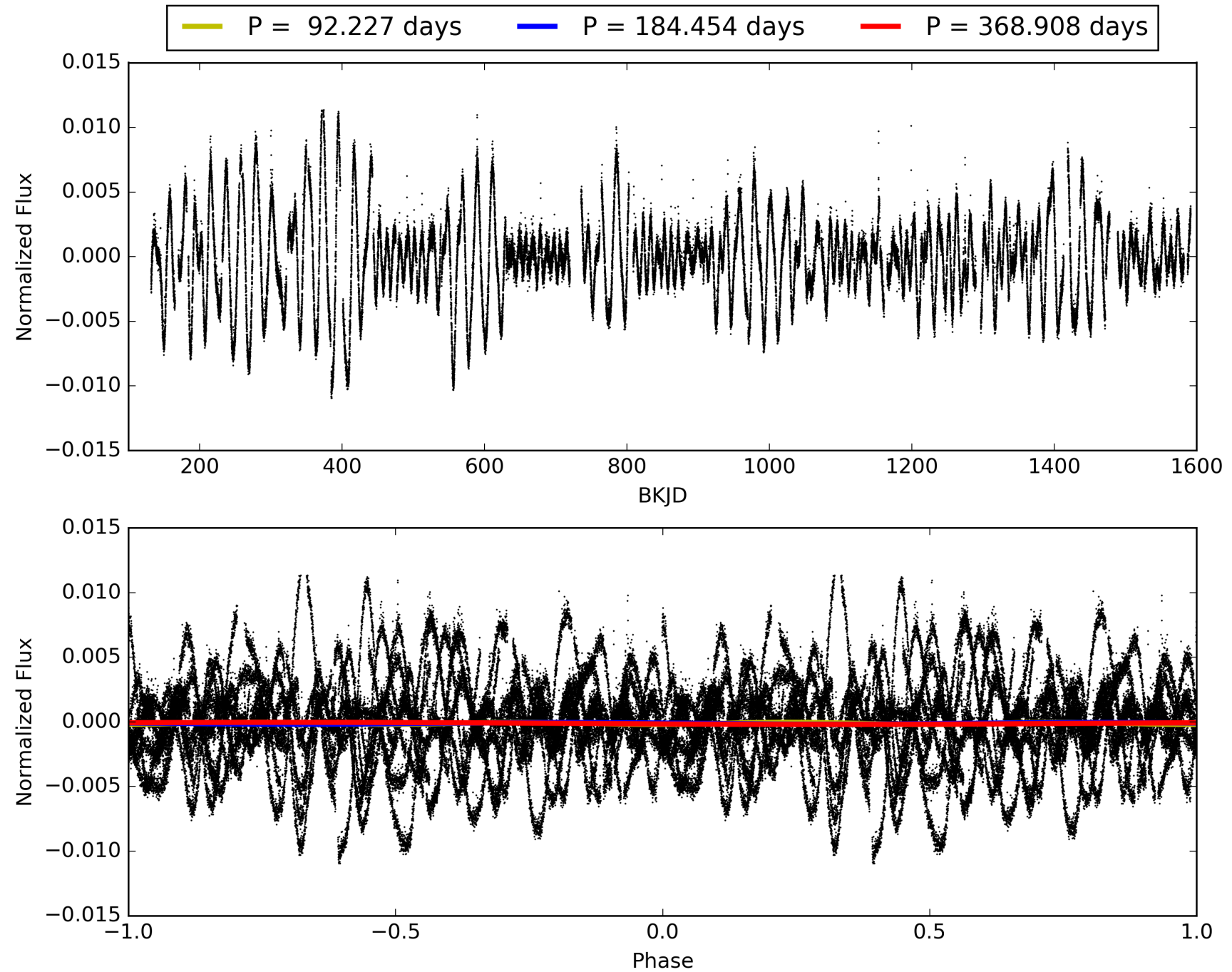
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006548898-02, PDC Light Curves

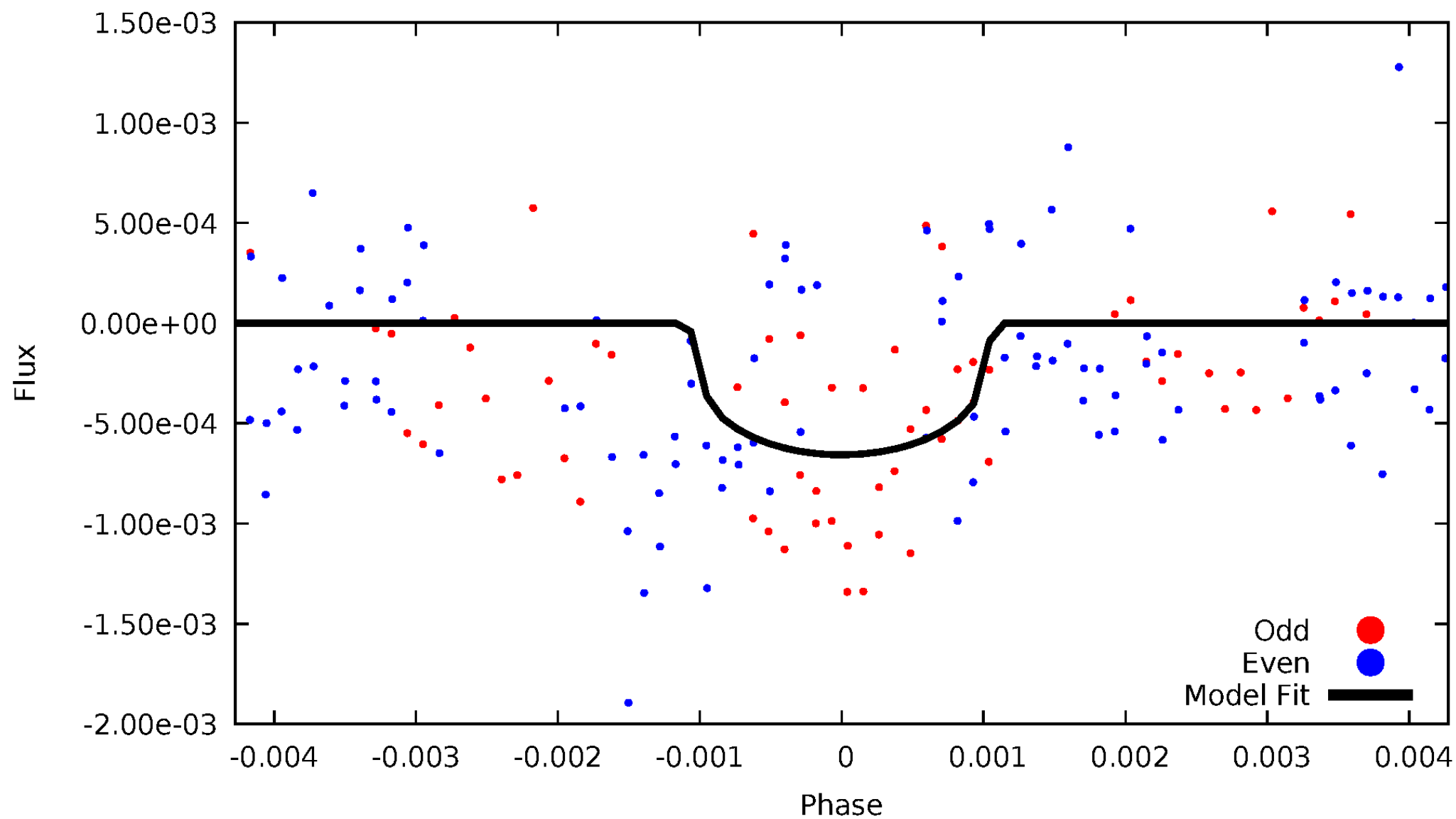


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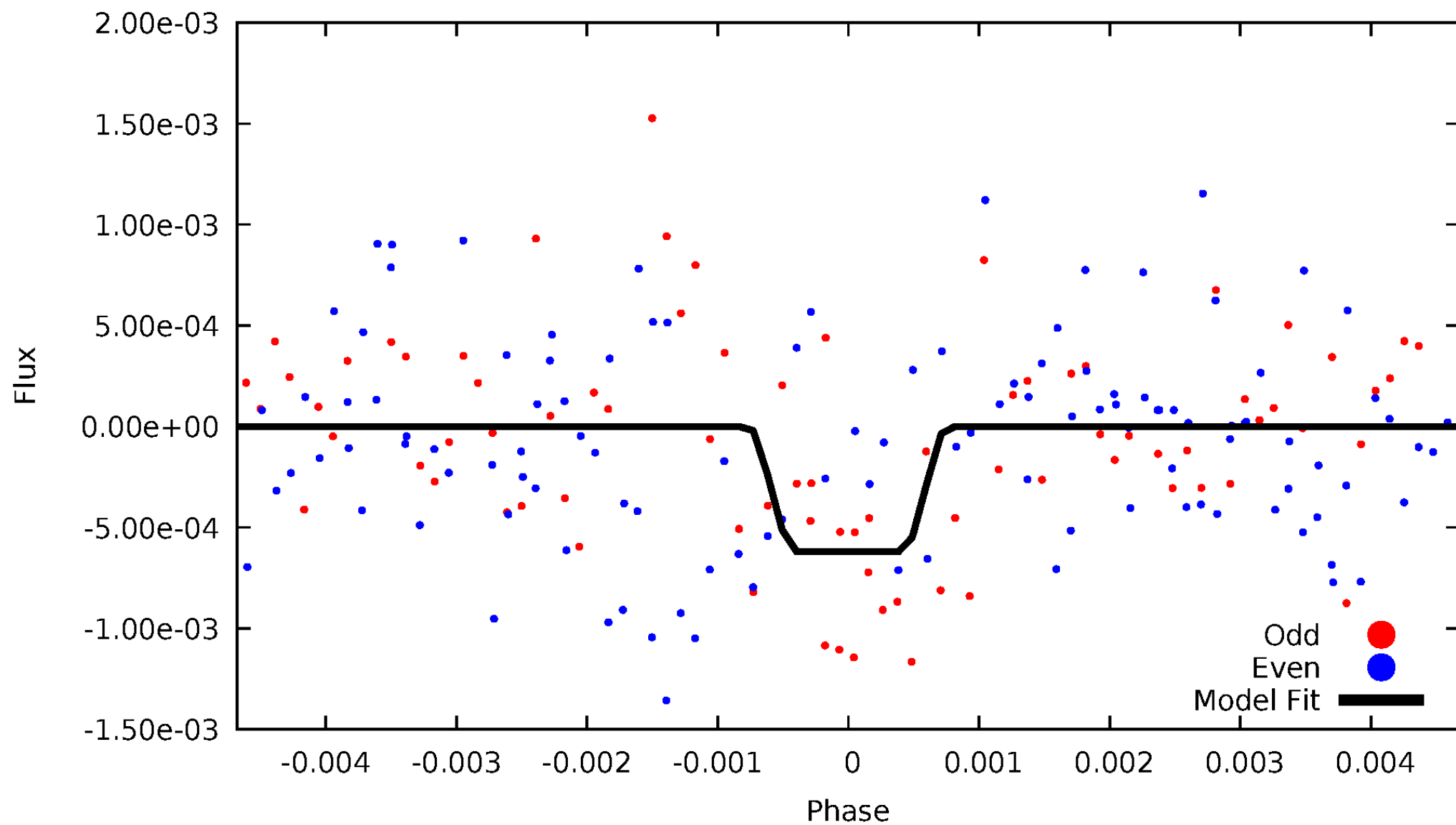
DV Odd/Even

TCE 006548898-02



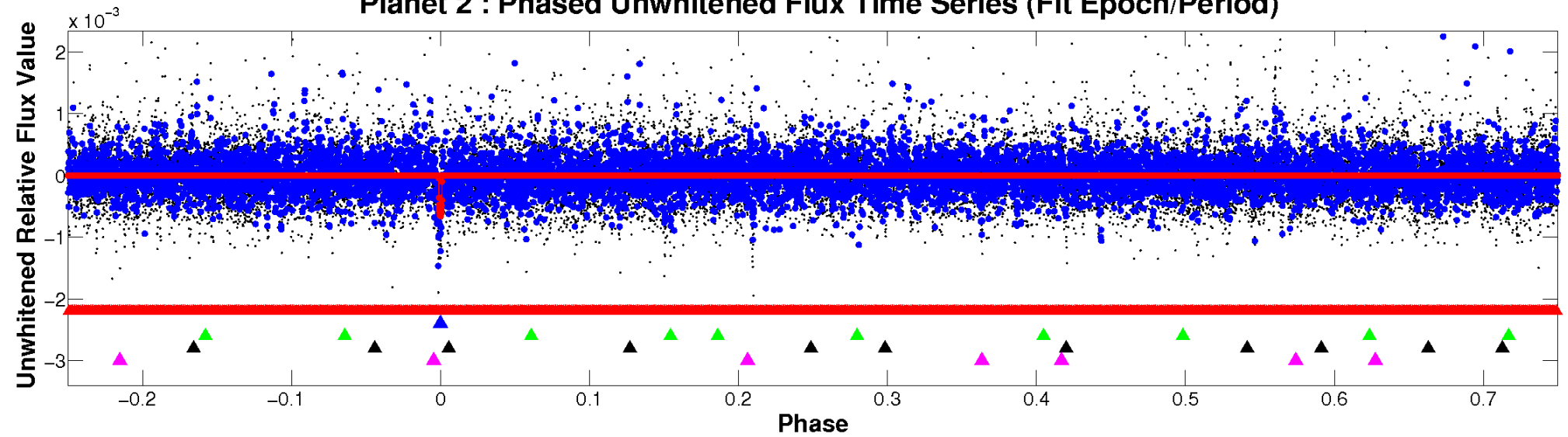
ALT Odd/Even

TCE 006548898-02

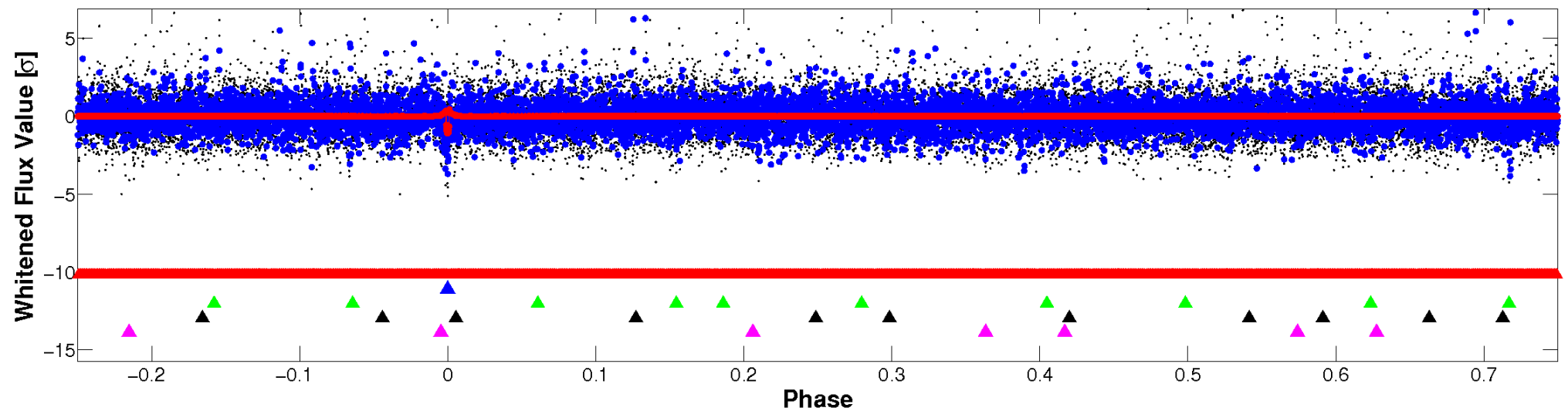


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

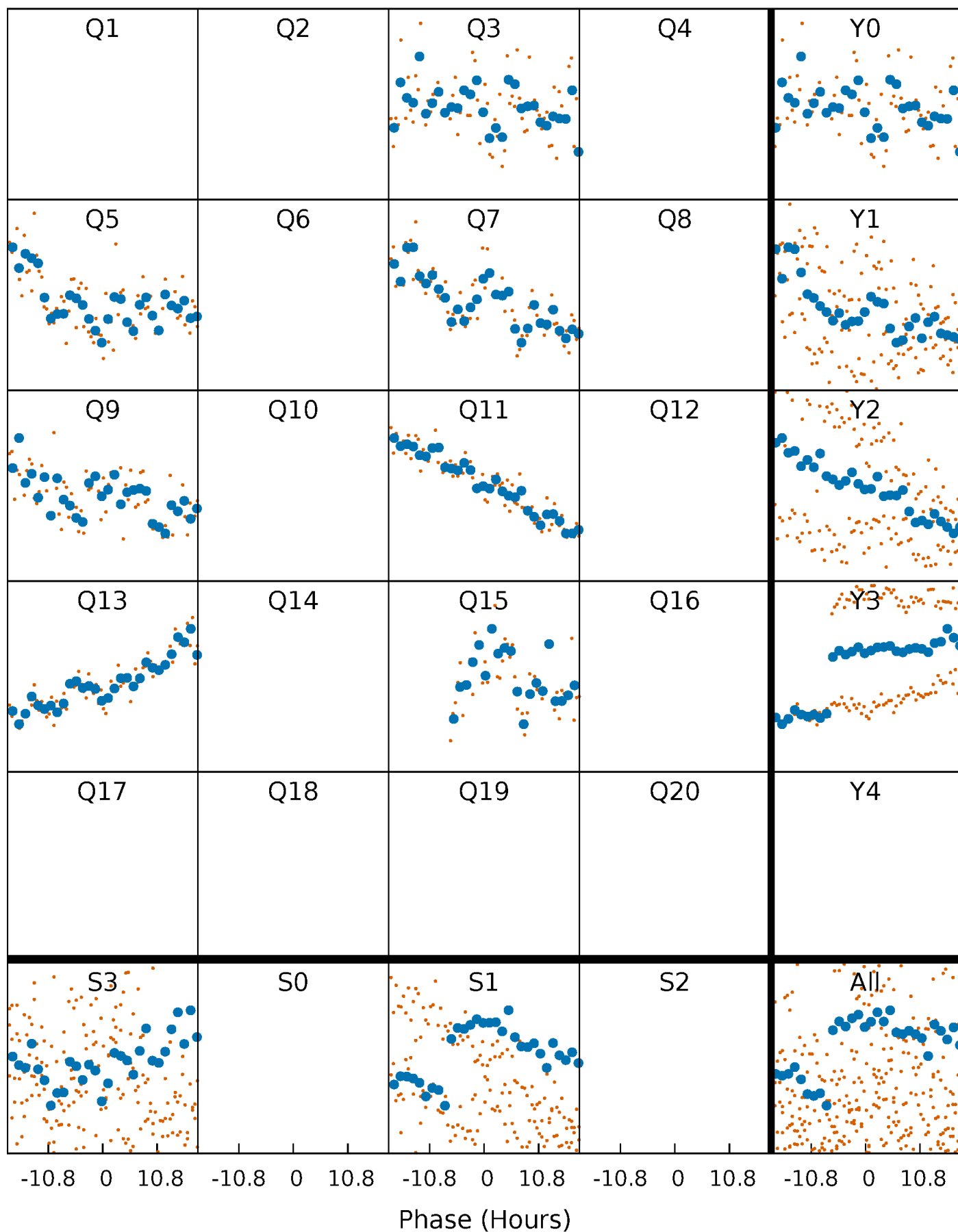


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



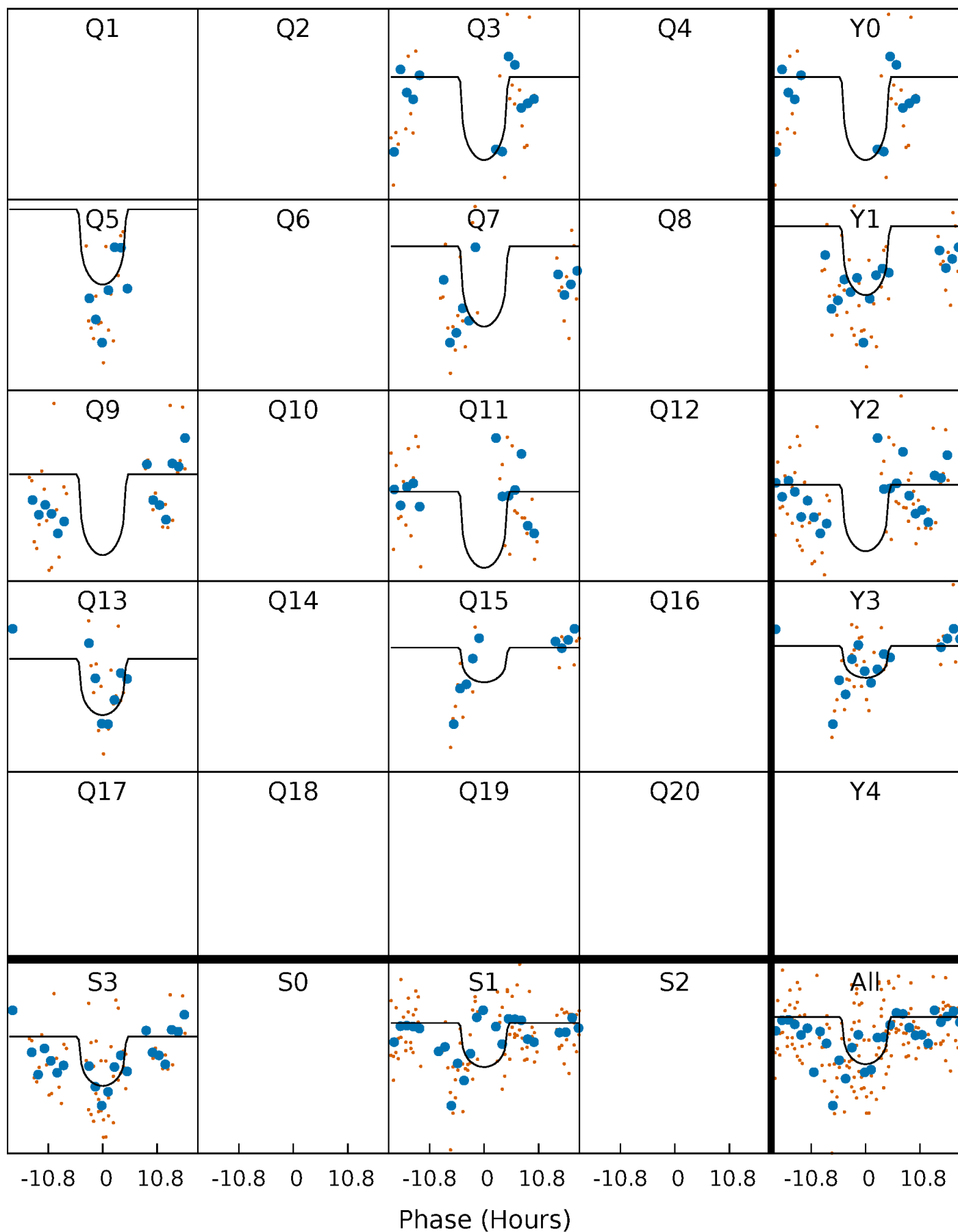
PDC Quarter-Phased Transit Curves

TCE 006548898-02 $P=184.453924$ Days $T_0=312.014895$ (BKJD)



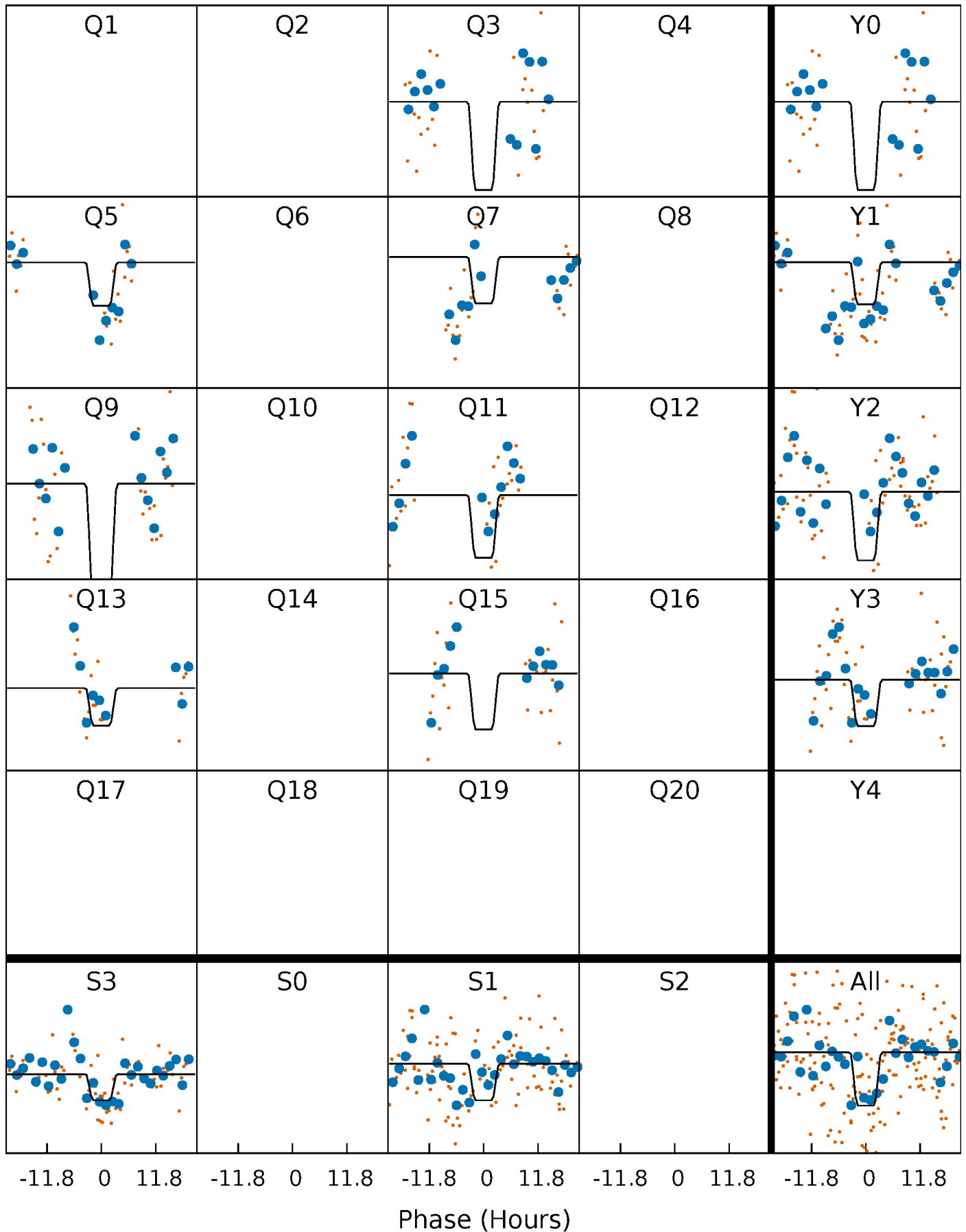
DV Quarter-Phased Transit Curves

TCE 006548898-02 $P=184.453924$ Days $T_0=312.014895$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

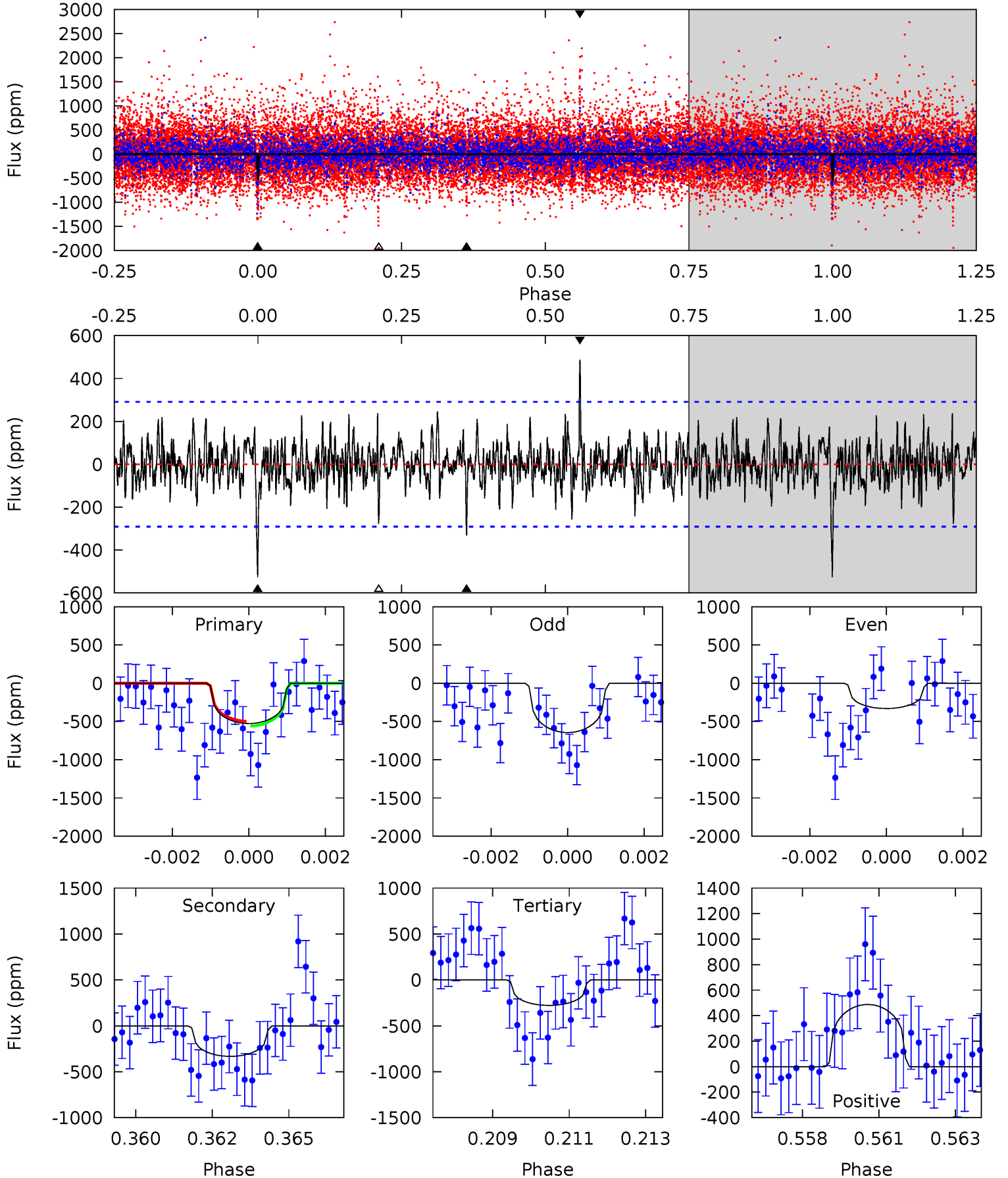
TCE 006548898-02 P=184.515047 Days $T_0=311.871617$ (BKJD)



DV Model-Shift Uniqueness Test

006548898-02, $P = 184.453924$ Days, $E = 127.560971$ Days

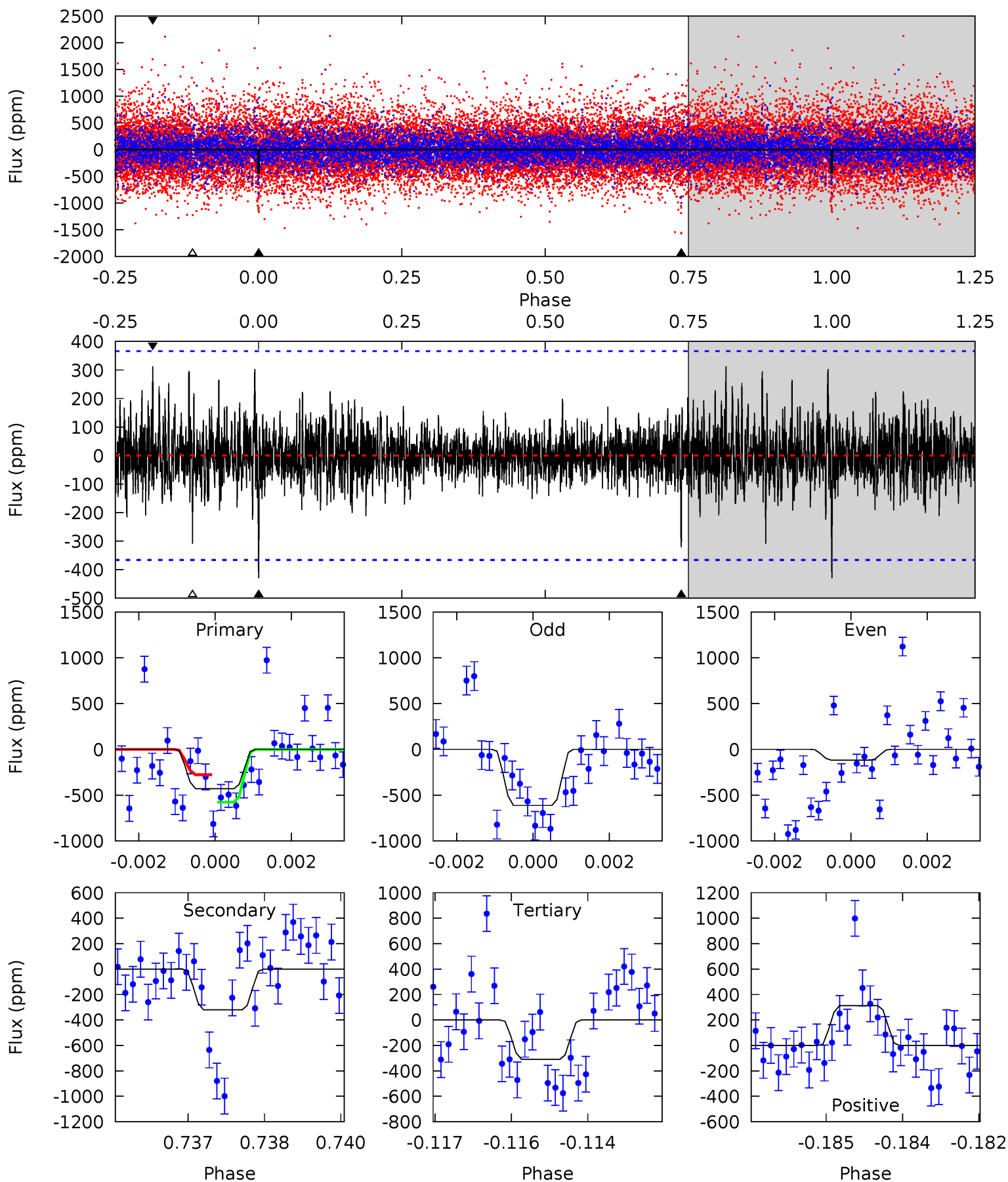
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.64	6.09	5.07	8.91	5.32	3.07	1.43	4.56	0.73	1.01	-2.82	2.80	0.96	0.48	0.58



Alt Model-Shift Uniqueness Test

006548898-02, P = 184.515047 Days, E = 127.356570 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.29	4.71	4.53	4.58	5.37	3.17	0.97	1.76	1.71	0.18	0.12	3.52	1.47	0.42	2.21



Stellar Parameters For KIC 006548898

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3830^{+120}_{-147}	$4.654^{+0.068}_{-0.016}$	$0.560^{+0.050}_{-0.300}$	$0.607^{+0.028}_{-0.070}$	$0.606^{+0.035}_{-0.060}$	$3.808^{+1.215}_{-0.336}$
	+3%/-4%	+1%/-0%	+9%/-54%	+5%/-12%	+6%/-10%	+32%/-9%
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 006548898-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-333 ± 55	$1.99^{+1.59}_{-1.22}$	248^{+8}_{-10}	3236^{+1227}_{-512}	13061^{+79197}_{-9093}
Alt.	-321 ± 68	$2.01^{+1.60}_{-1.20}$	247^{+9}_{-10}	3197^{+1187}_{-490}	12458^{+69479}_{-8648}

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

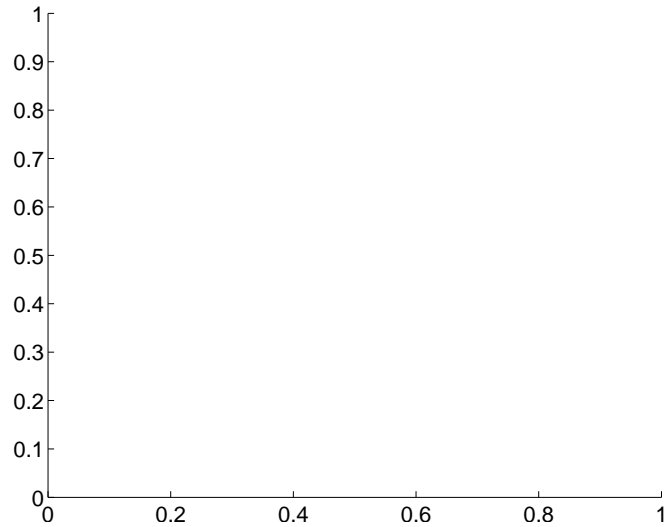
Supplemental centroid analysis for 006548898-02. Kepler magnitude: 14.75. Transit SNR 7.01

There are 0 quarters with good PRF difference image offsets

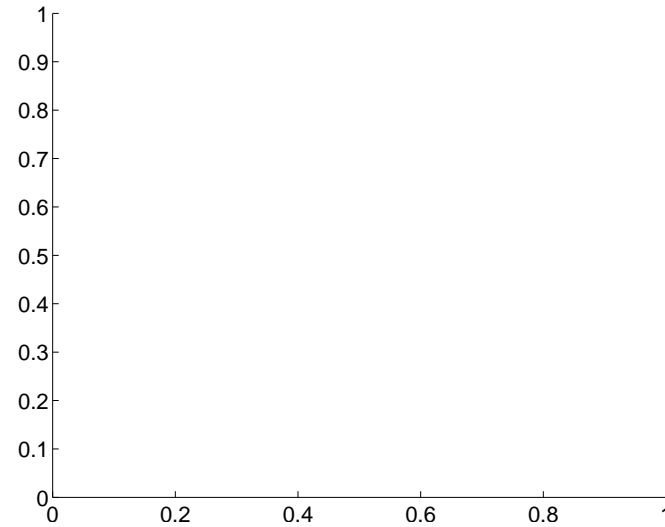
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	0.69 ± 1.01	0.68	-0.18 ± 1.10	-0.66 ± 1.01

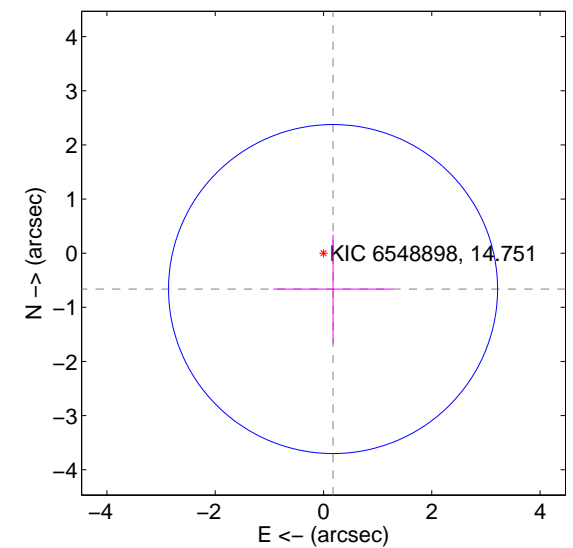
There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

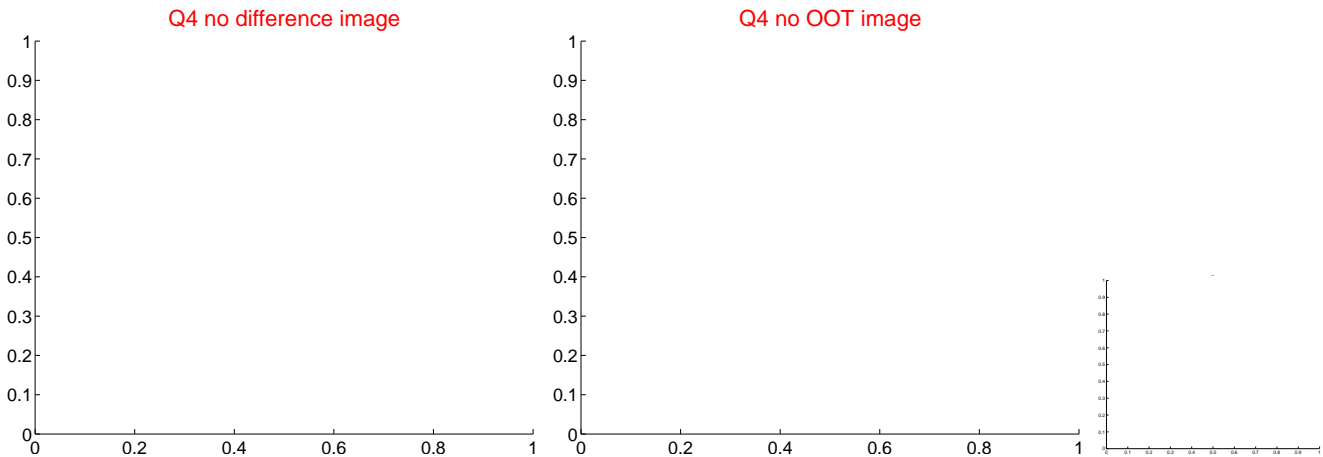
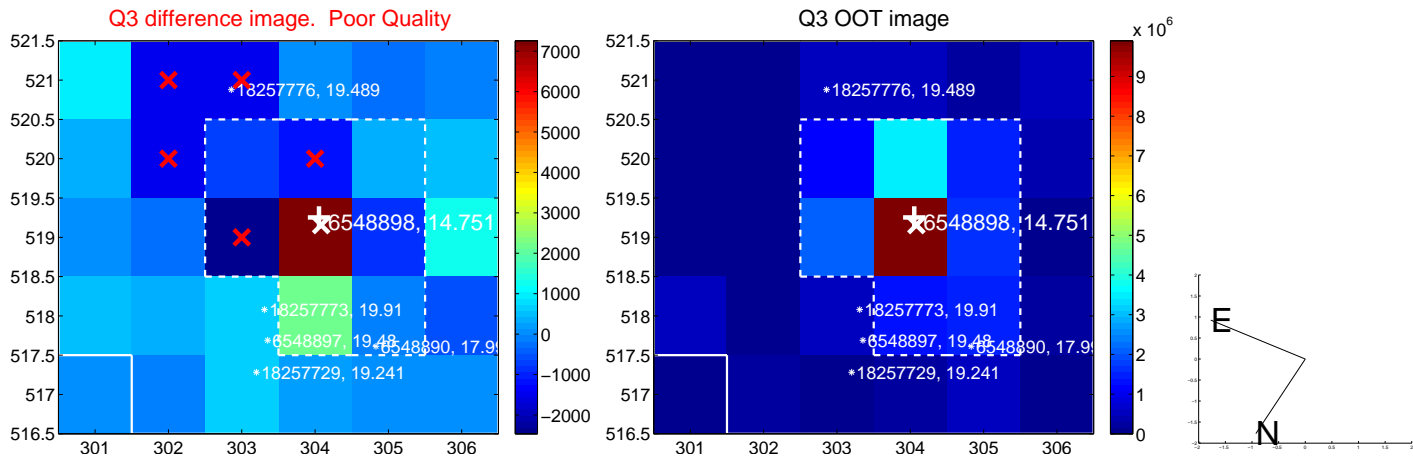
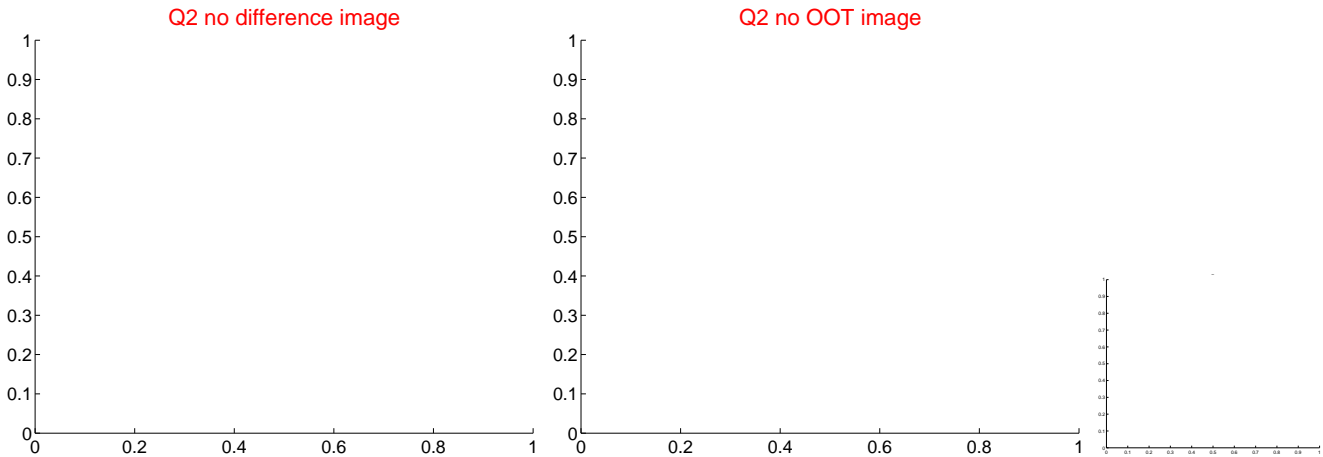
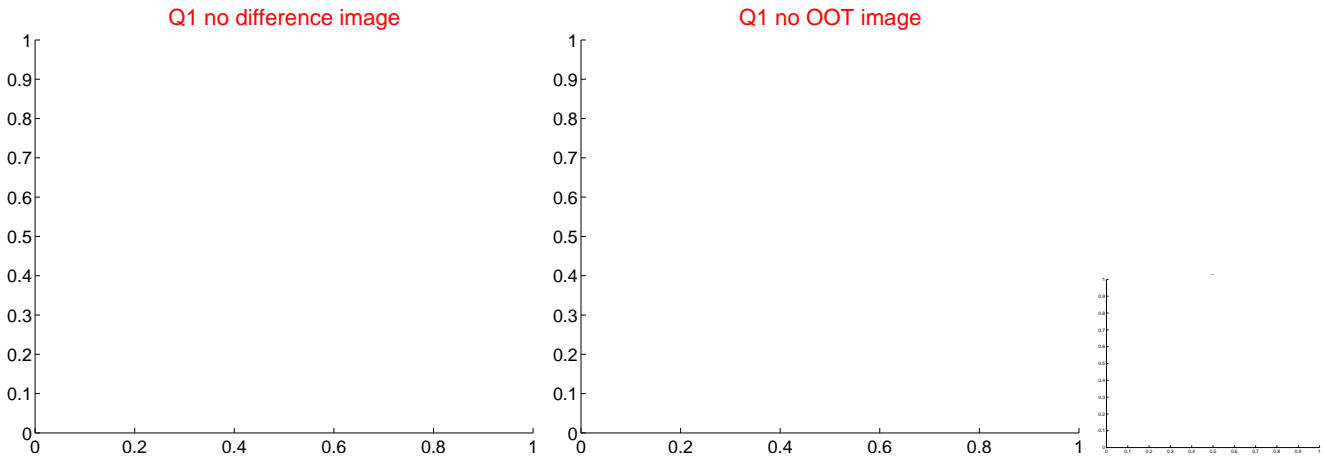


offset from photometric centroids

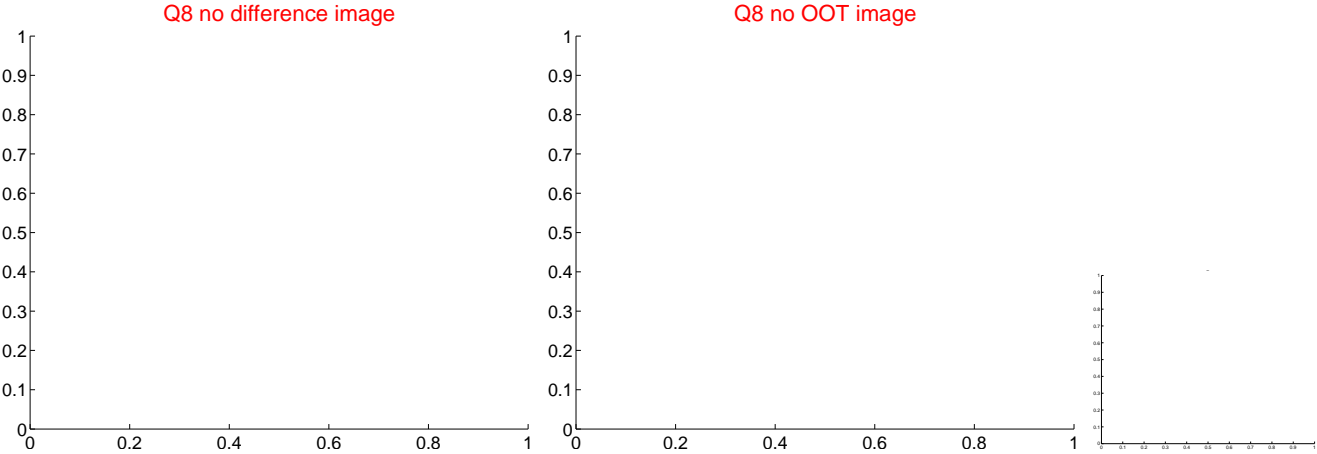
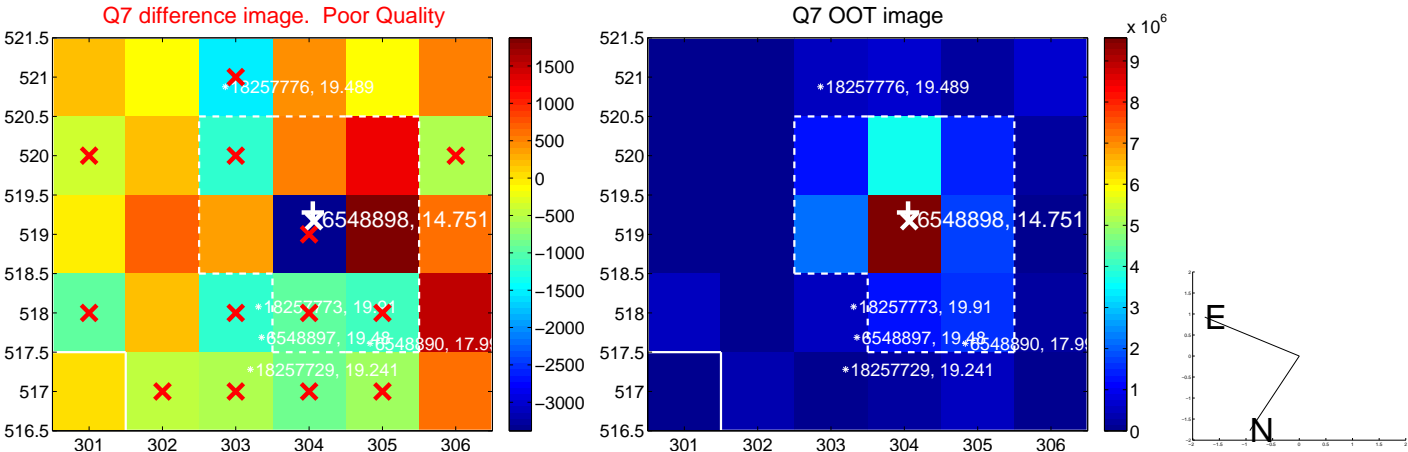
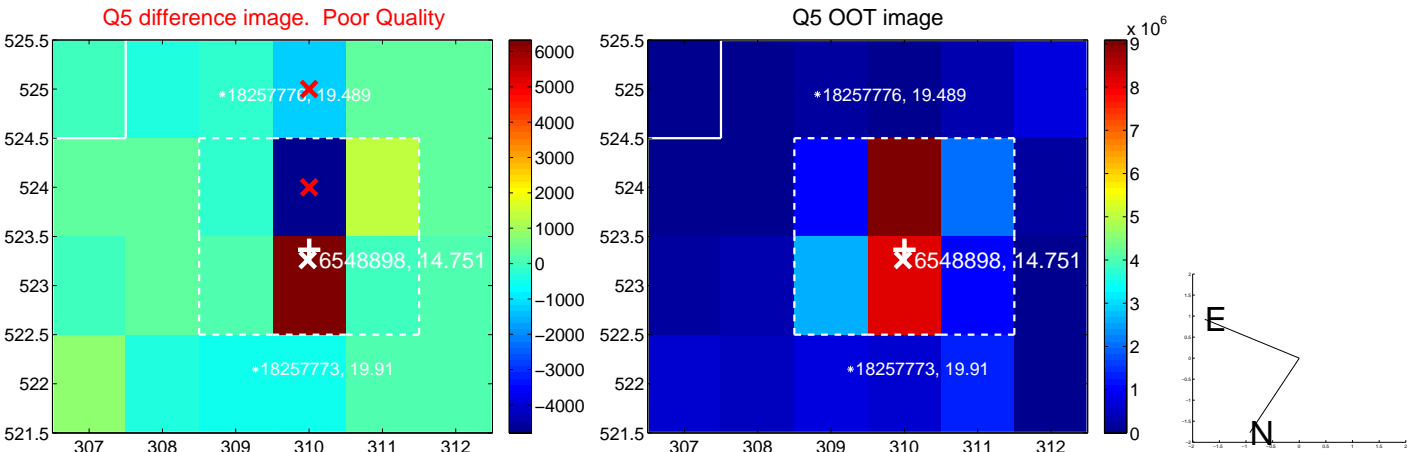


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

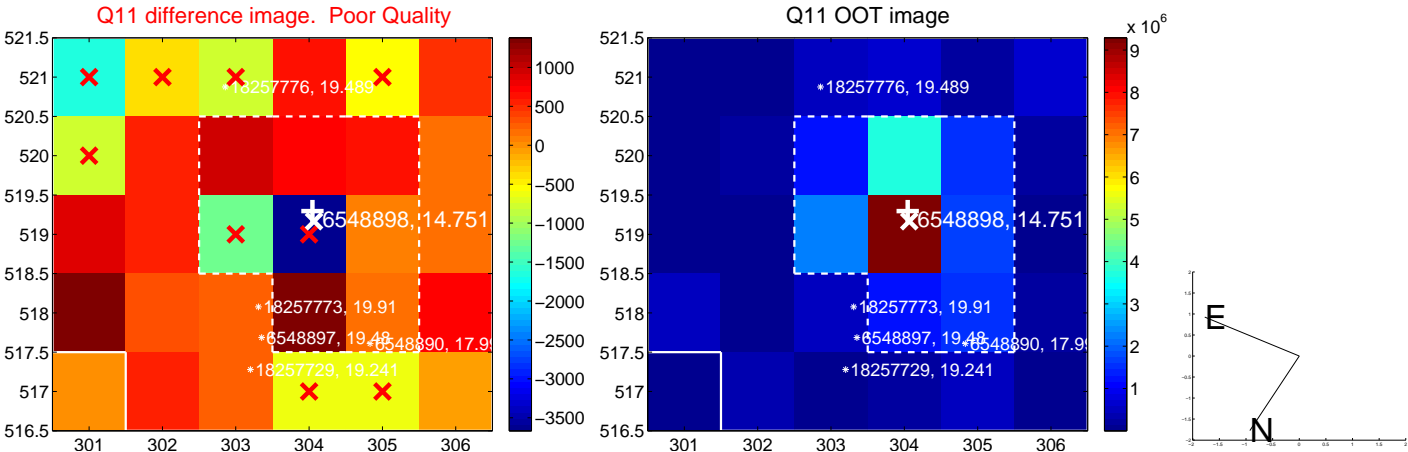
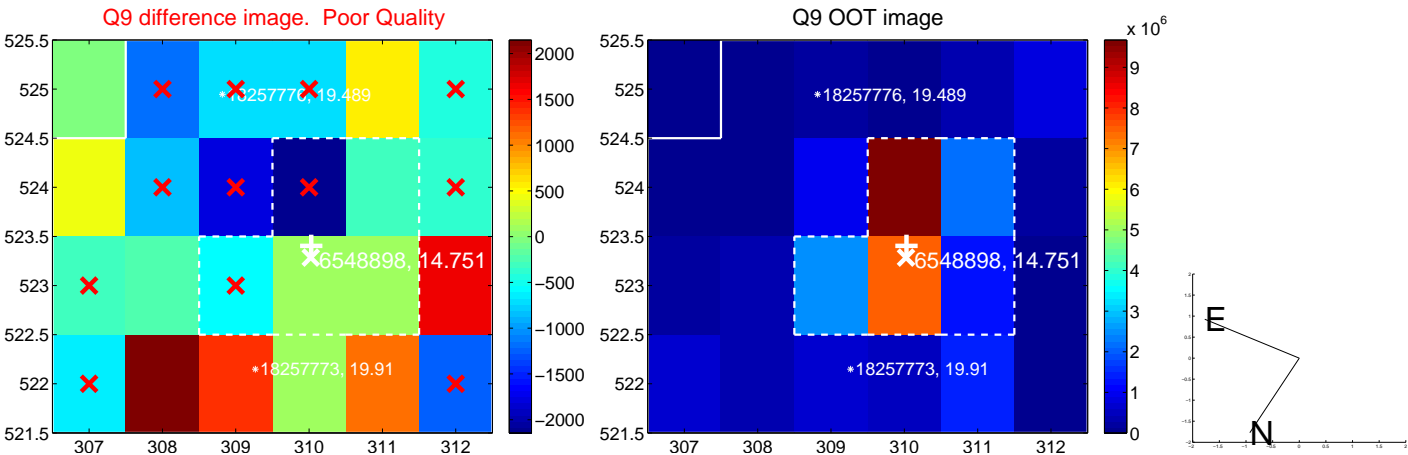
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



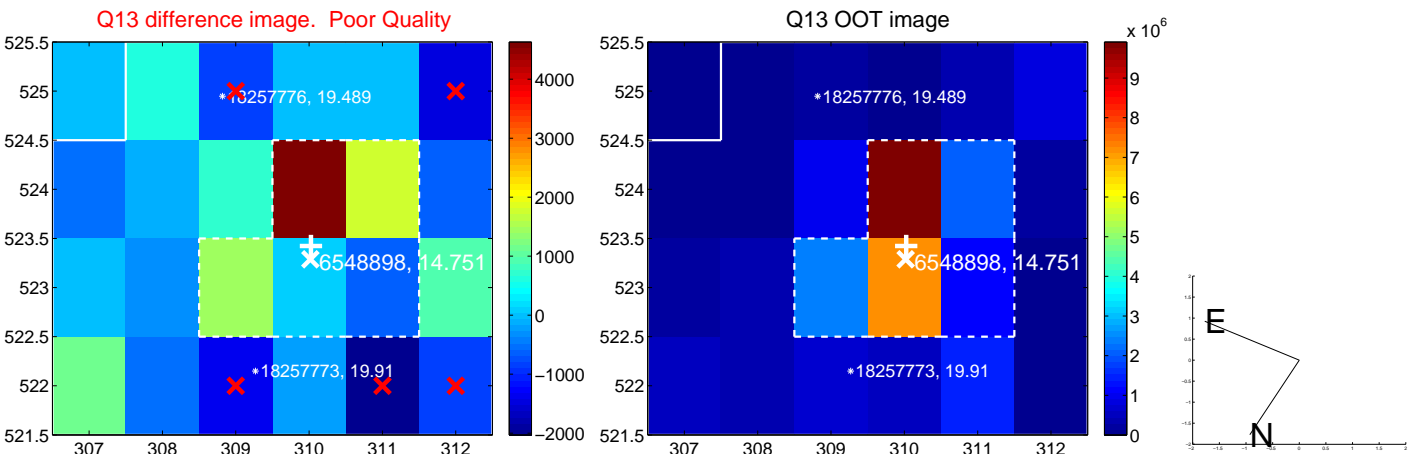
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



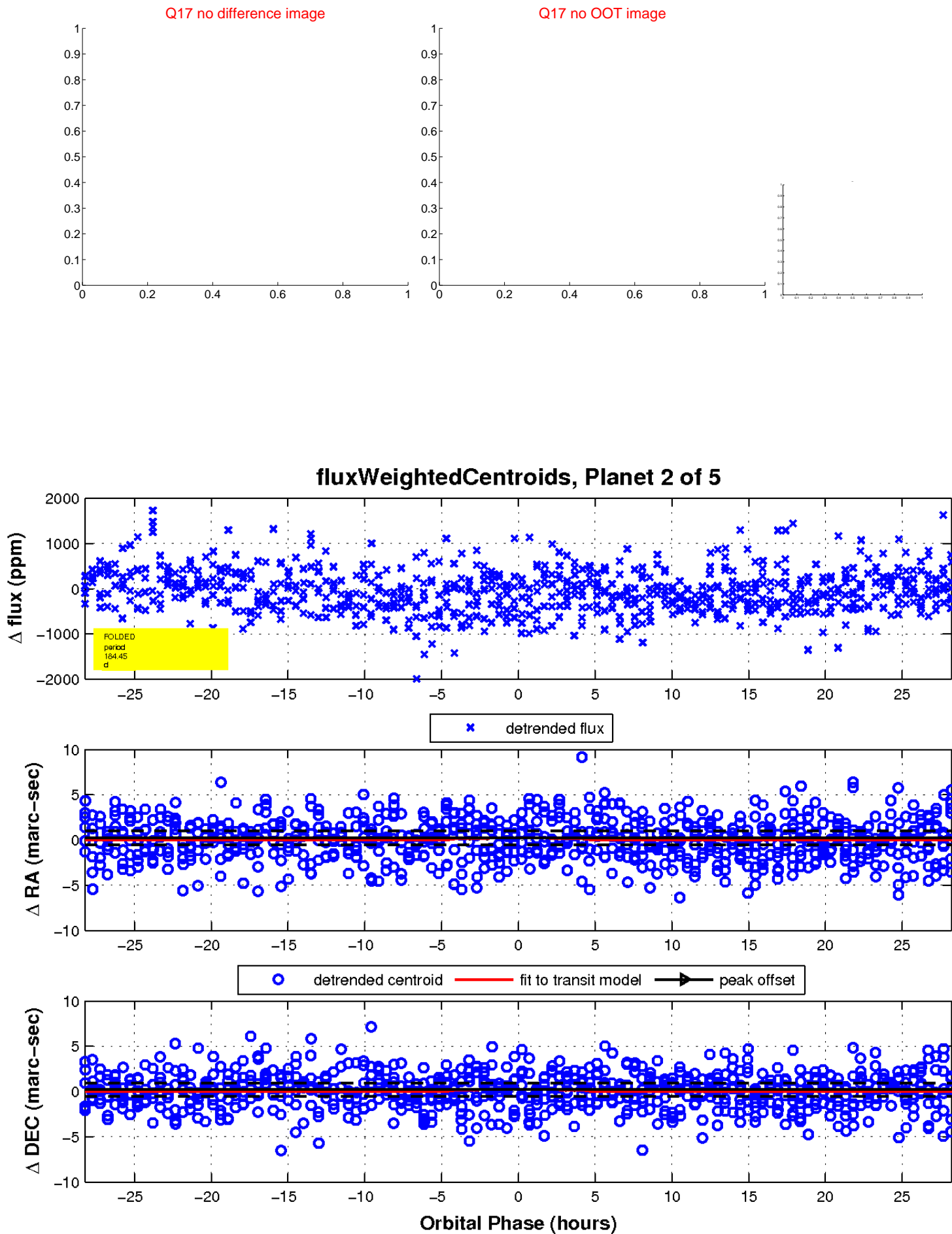
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

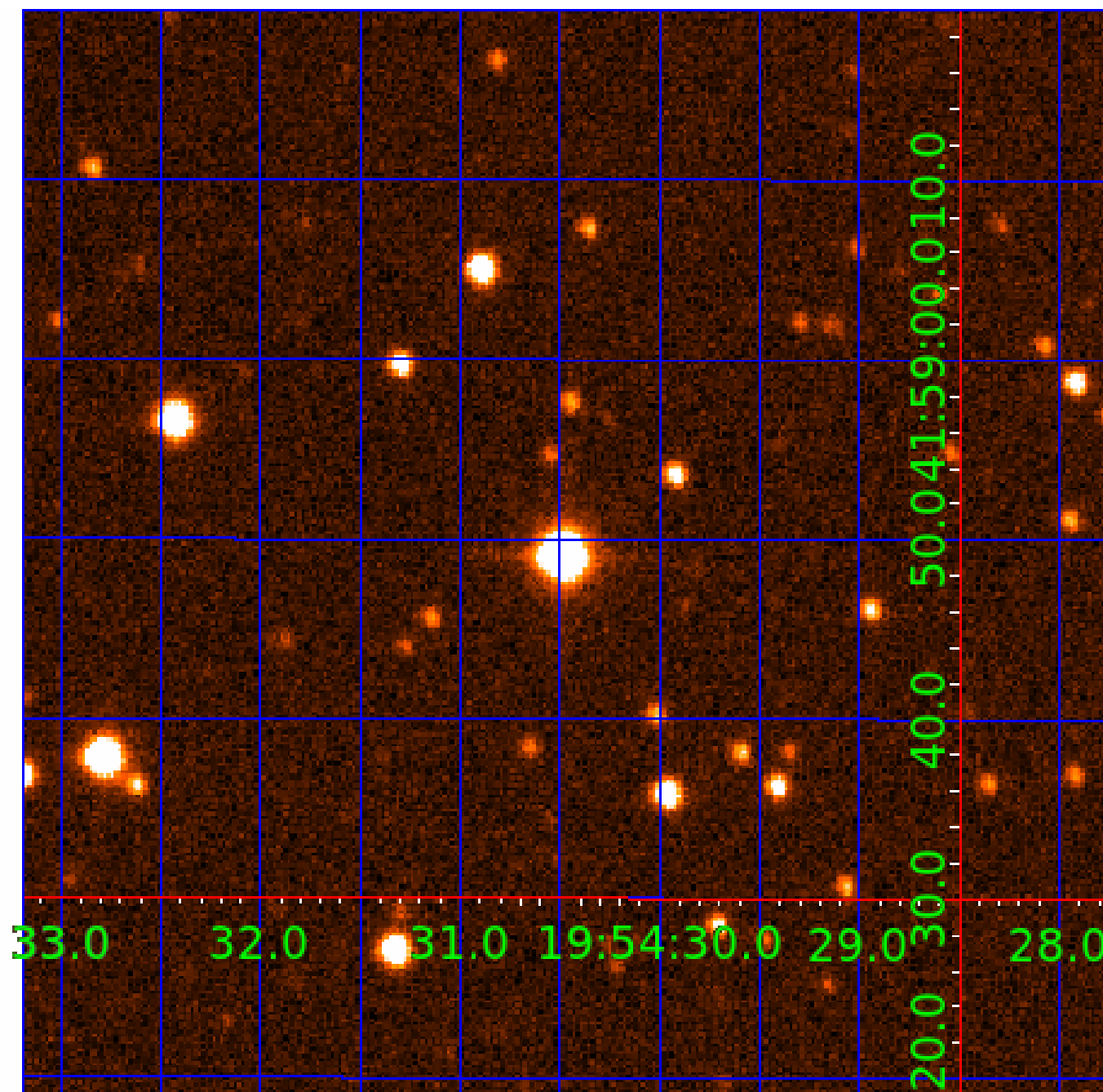


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006548898

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})
006548898-01	OBS	No	0.964485	132.401555	44.1	4.854	10.8	8.2	0.61	3830	0.39	271.70
006548898-02	OBS	No	184.453924	312.014894	656.9	9.455	15.3	7.0	0.61	3830	1.66	0.25
006548898-03	OBS	No	144.113449	156.046462	813.1	4.218	11.3	8.8	0.61	3830	1.88	0.34
006548898-04	OBS	No	130.442857	236.613313	473.5	6.407	8.0	6.0	0.61	3830	1.51	0.39
006548898-05	OBS	No	223.313792	194.600350	706.1	3.013	7.6	7.4	0.61	3830	1.89	0.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006548898-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
006548898-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006548898-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006548898-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
006548898-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

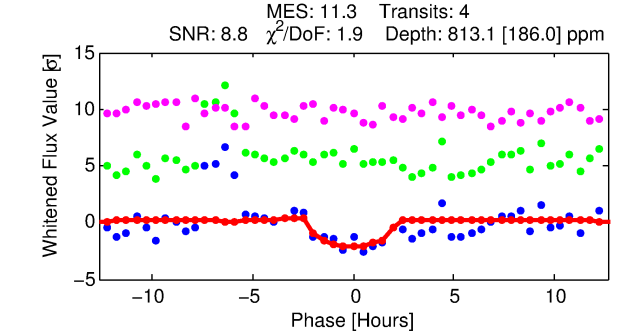
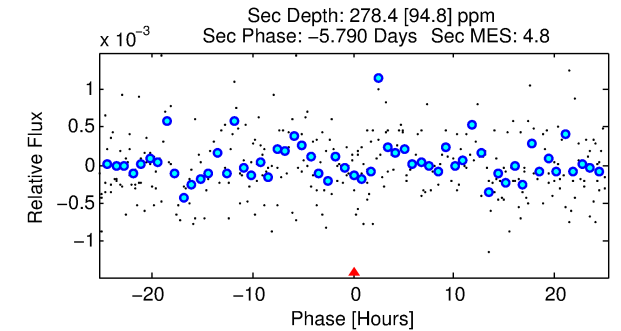
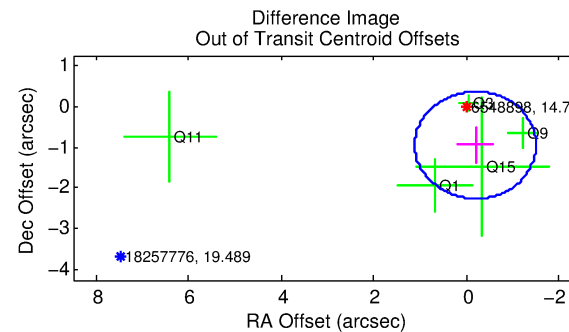
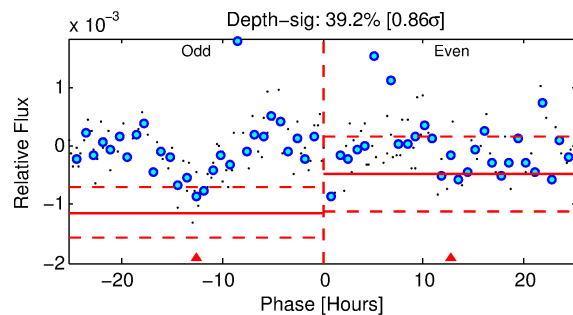
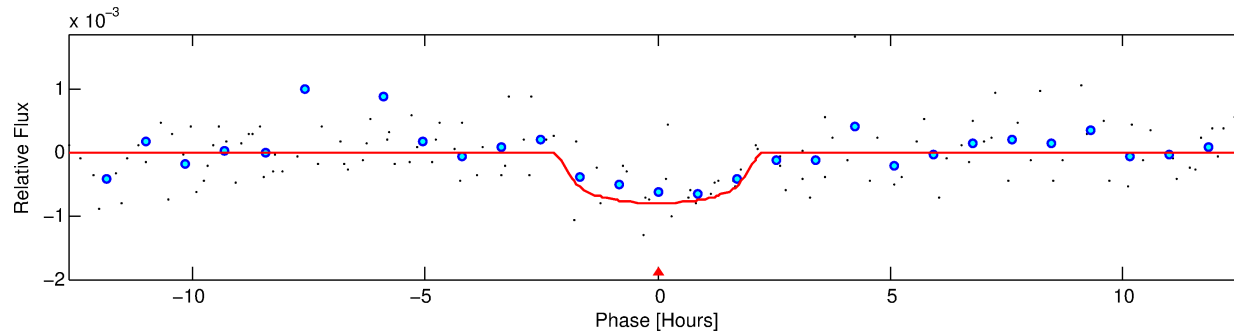
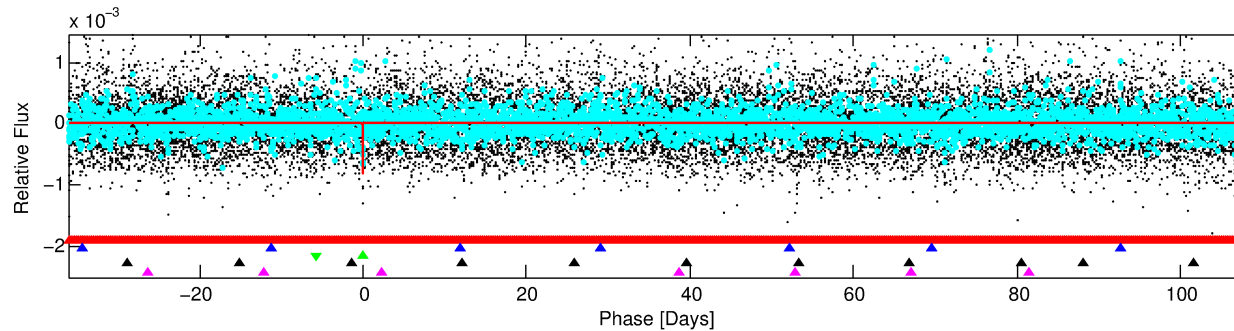
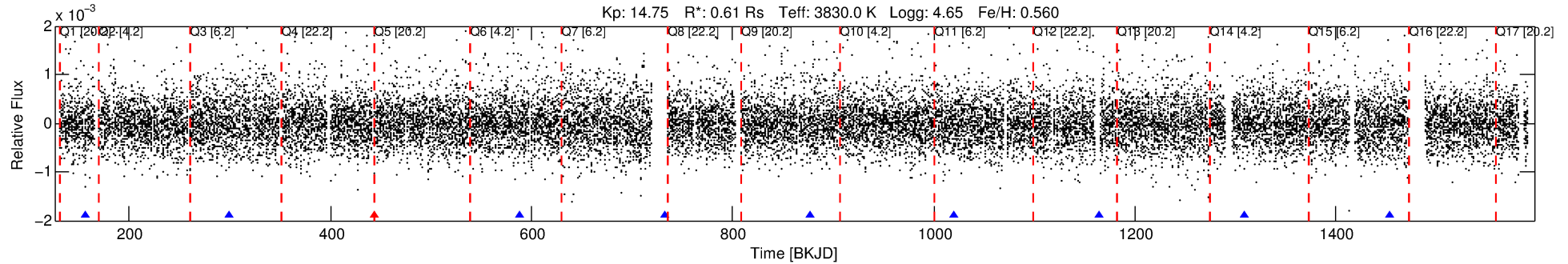
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006548898-03

No Significant Match Found

DV One-Page Summary

KIC: 6548898 Candidate: 3 of 5 Period: 144.113 d



DV Fit Results:

Period = 144.11345 [0.00350] d
Epoch = 156.0465 [0.0154] BKJD
Rp/R* = 0.0284 [0.0551]
a/R* = 187.86 [1171.20]
b = 0.73 [4.01]
Seff = 0.34 [0.07]
Teq = 195 [10] K
Rp = 1.88 [3.66] Re
a = 0.4553 [0.0423] AU
Ag = 8995.71 [35112.01] [0.26 σ]
Teffp = 2938 [2867] K [0.96 σ]

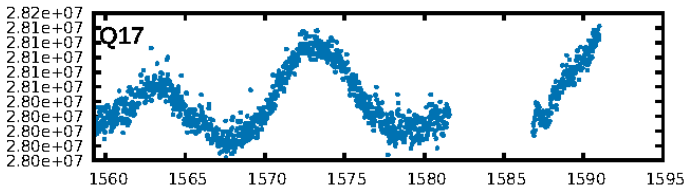
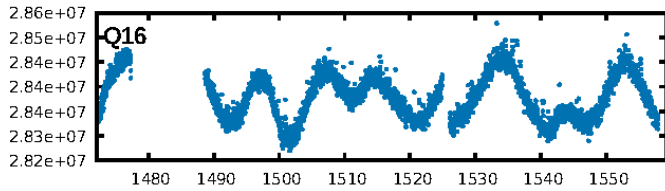
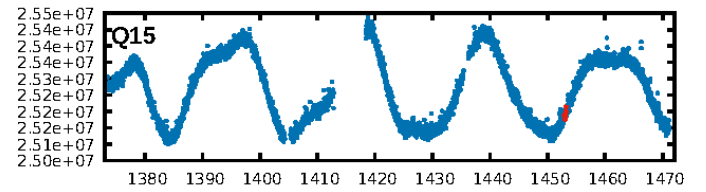
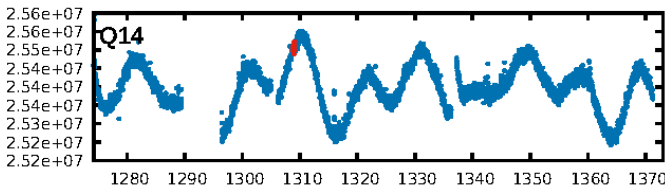
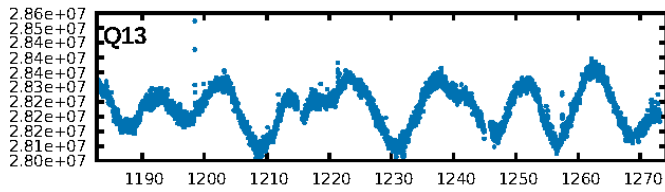
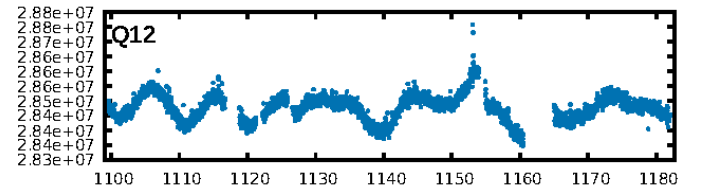
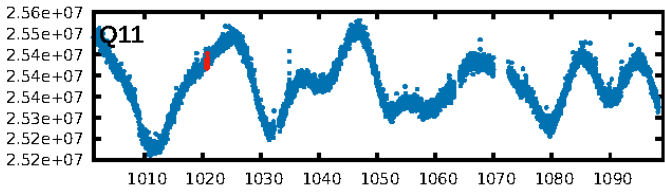
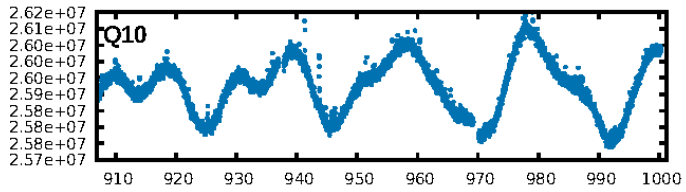
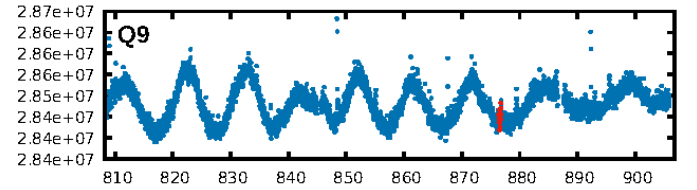
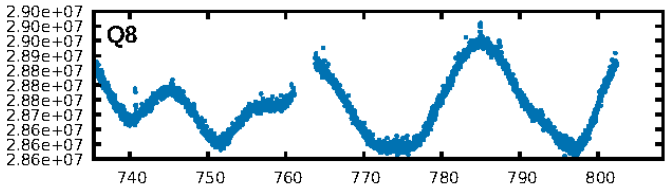
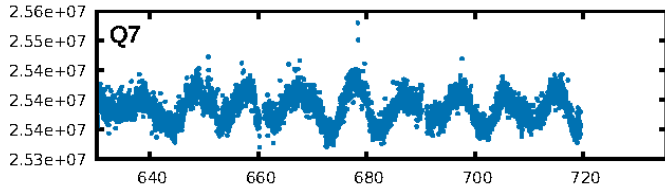
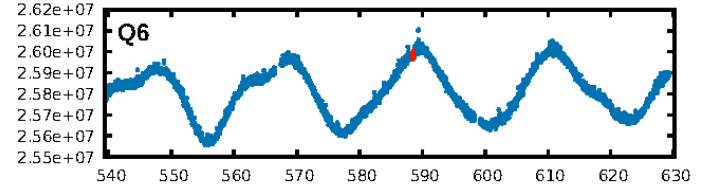
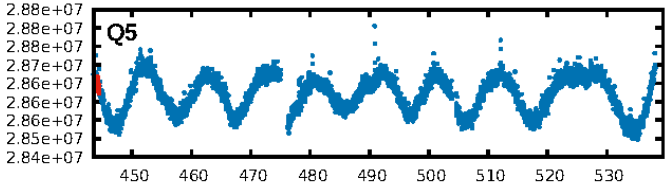
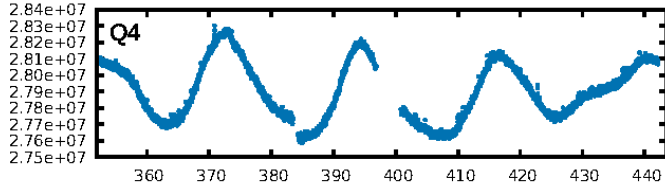
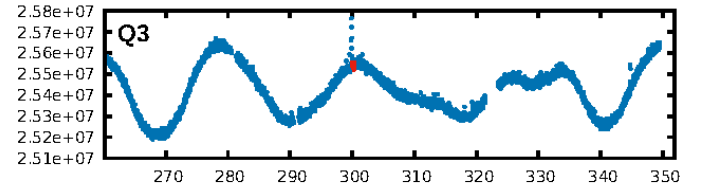
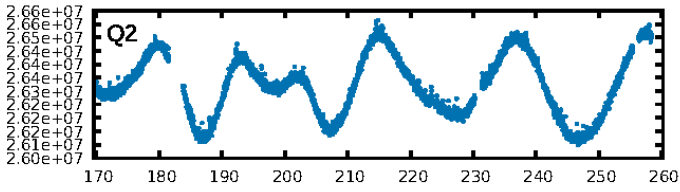
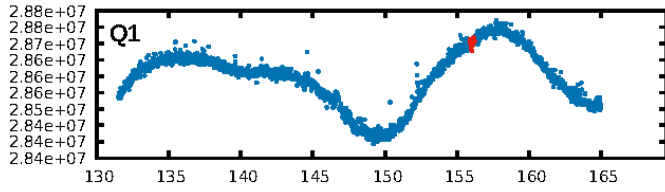
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [42.77 σ]
LongPeriod-sig: 100.0% [93.52 σ]
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 84.7%
Bootstrap-pfa: 1.55e-16
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 0.04758
Centroid-sig: 14.9%
Centroid-so: 0.773 arcsec [0.73 σ]
OotOffset-rm: 0.967 arcsec [2.21 σ]
OotOffset-st: 0/3/0/2 [5]
KicOffset-rm: 1.417 arcsec [3.23 σ]
KicOffset-st: 0/3/0/2 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 0.00 [0/7]

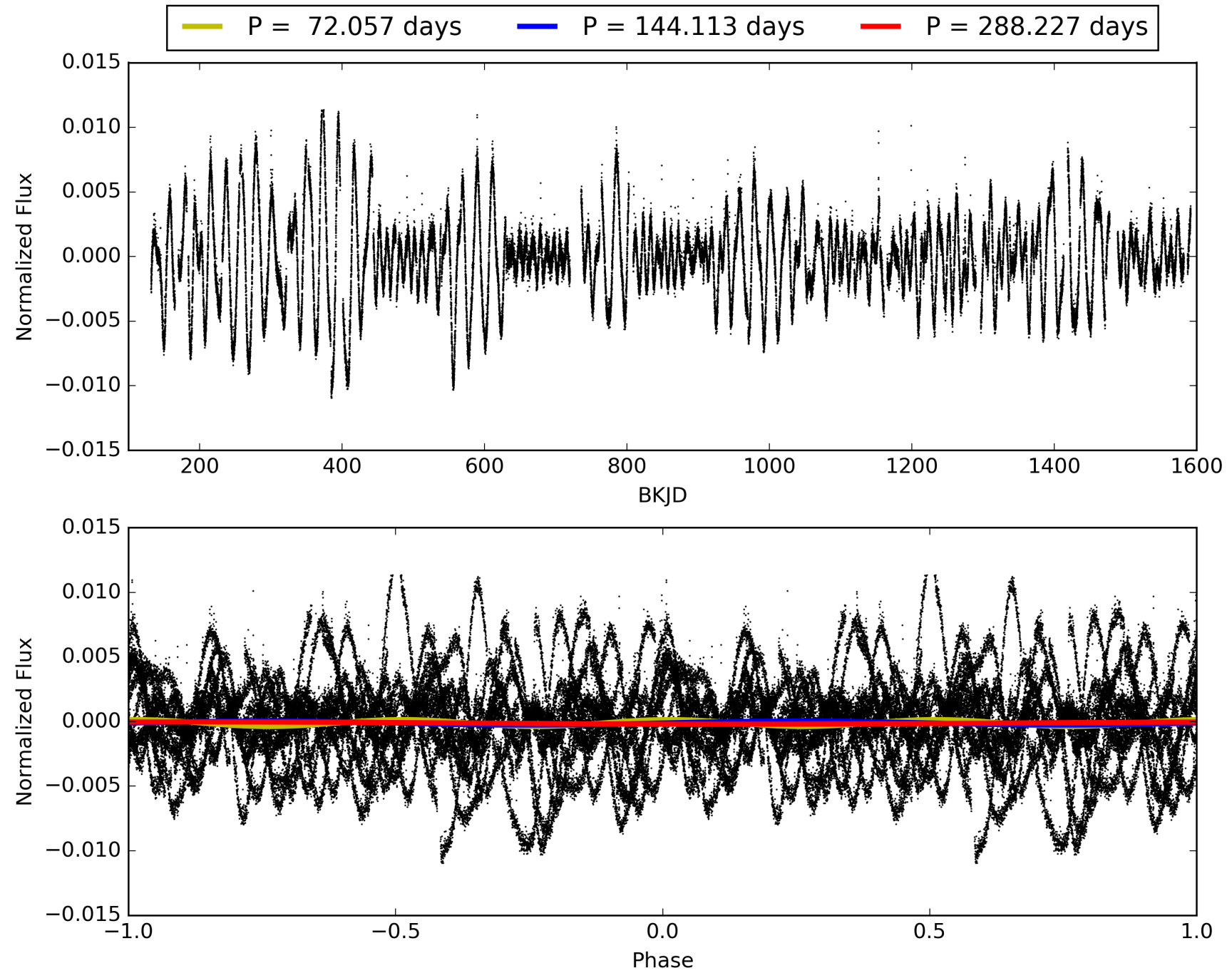
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:50:07 Z

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

TCE 006548898-03, PDC Light Curves

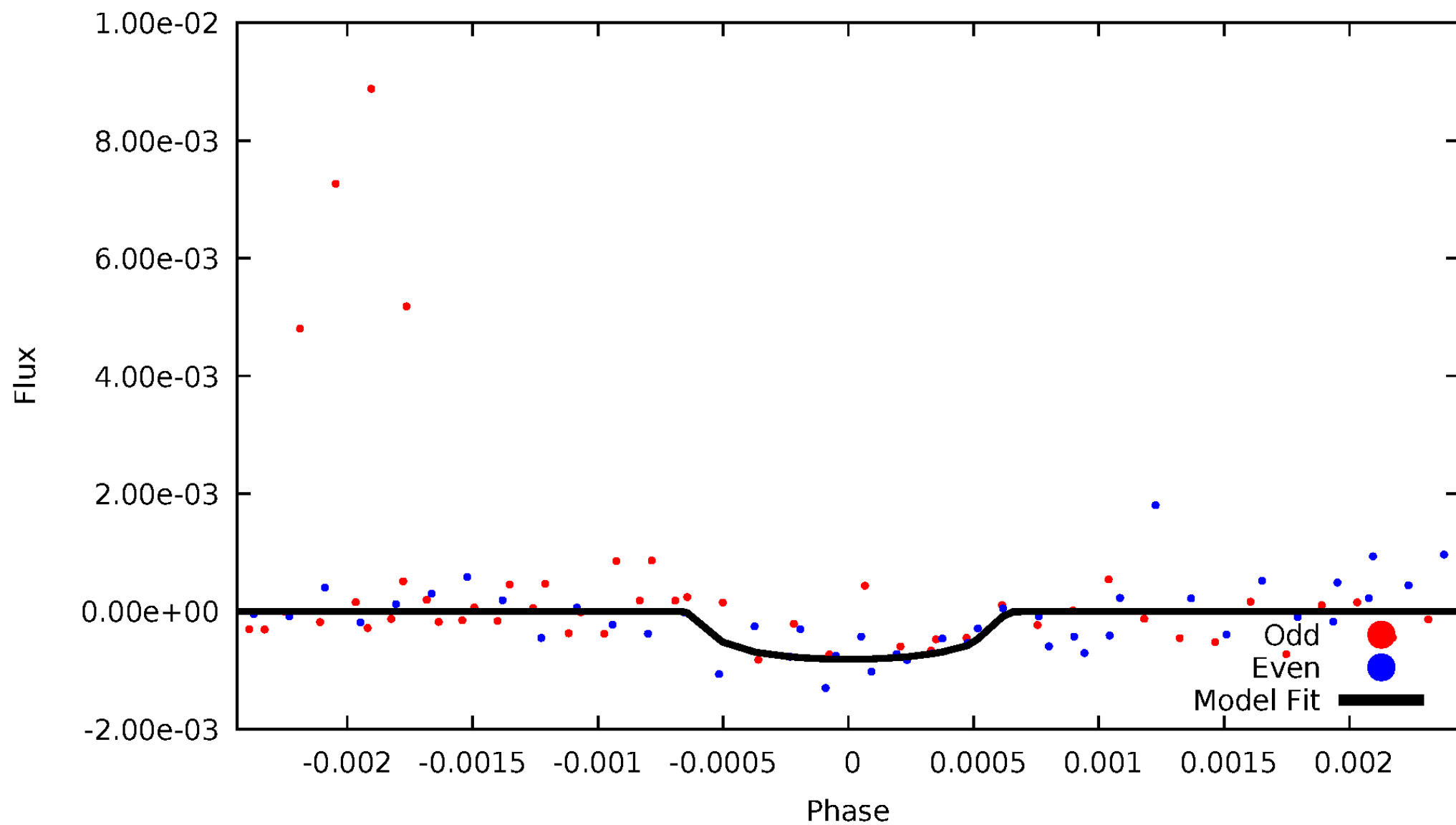


TCE 006548898-03



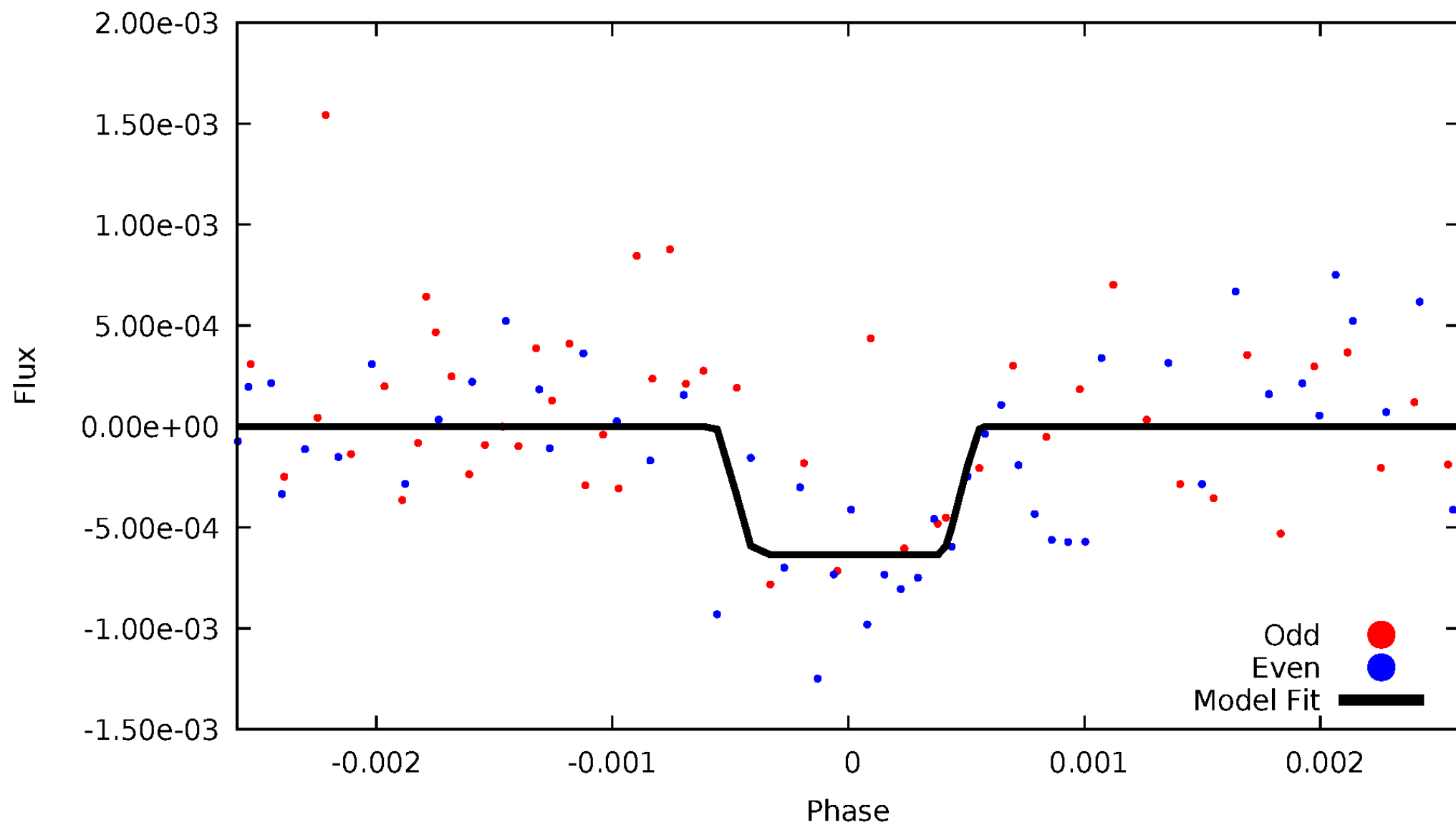
DV Odd/Even

TCE 006548898-03



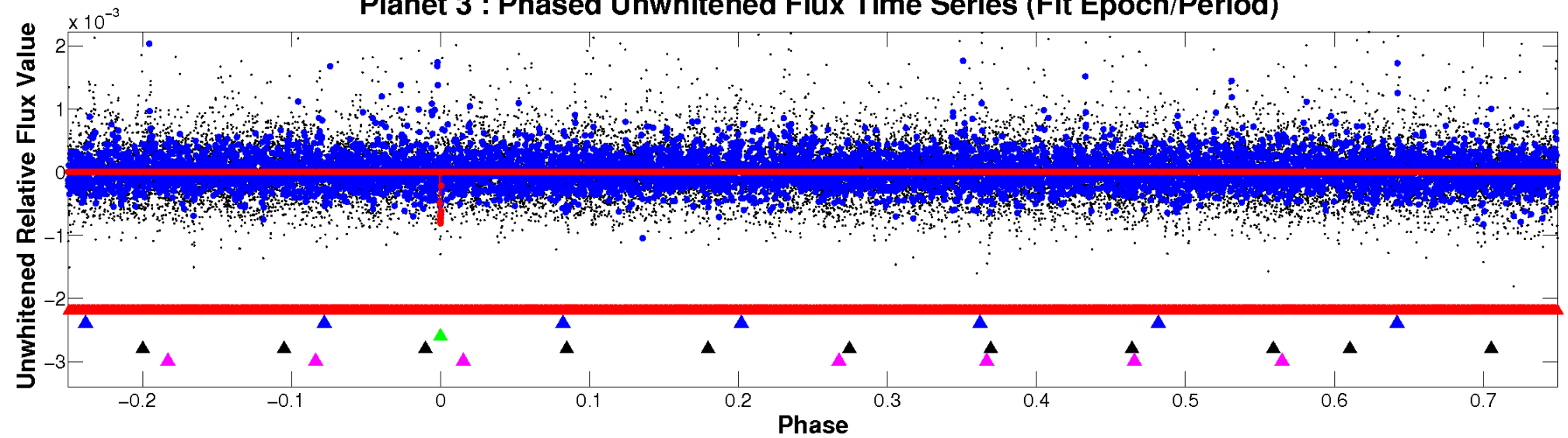
ALT Odd/Even

TCE 006548898-03

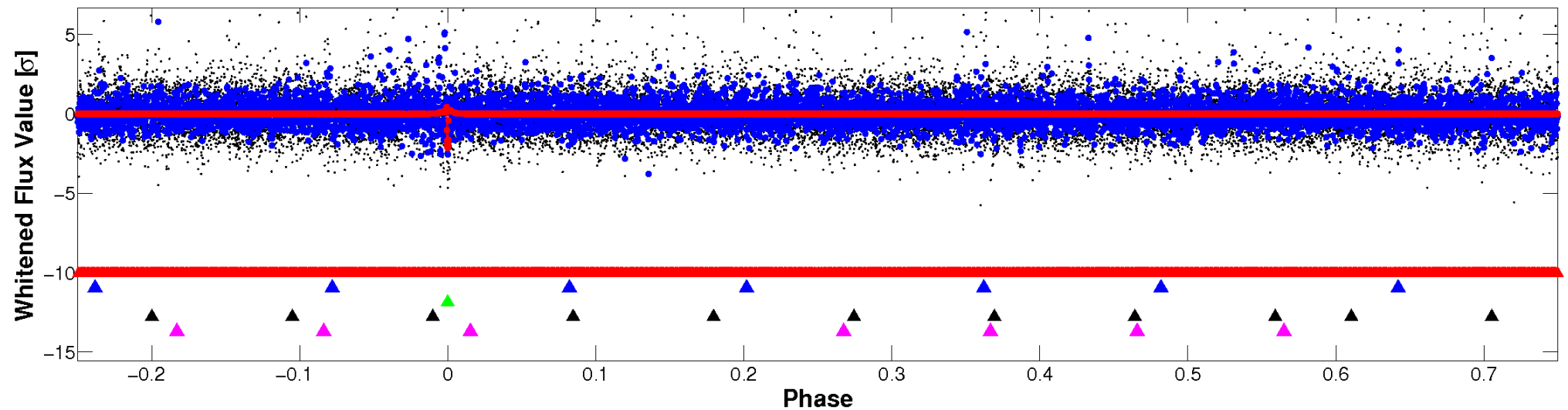


Non-Whitened Vs. Whitened Light Curve

Planet 3 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

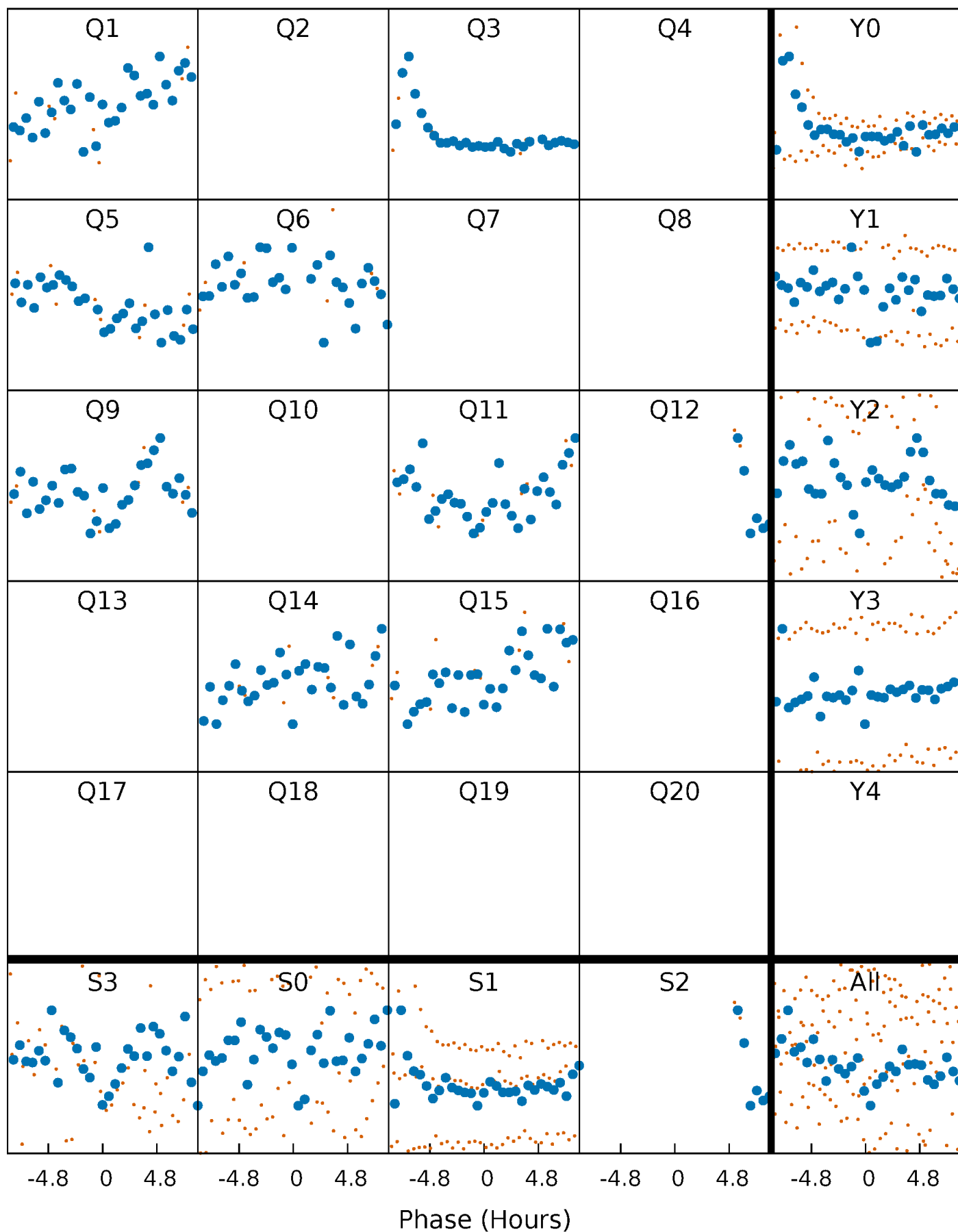


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



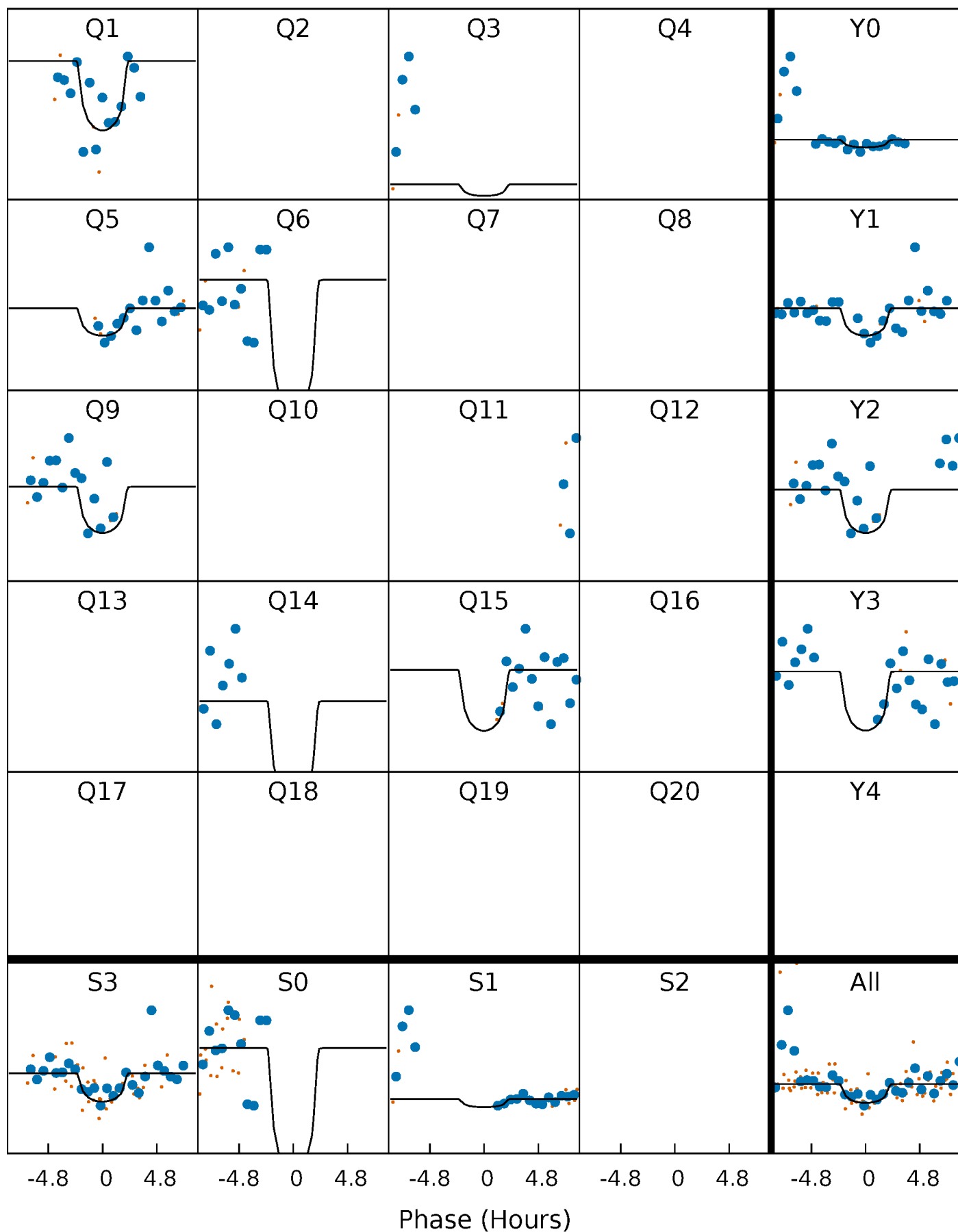
PDC Quarter-Phased Transit Curves

TCE 006548898-03 P=144.113449 Days $T_0=156.046462$ (BKJD)



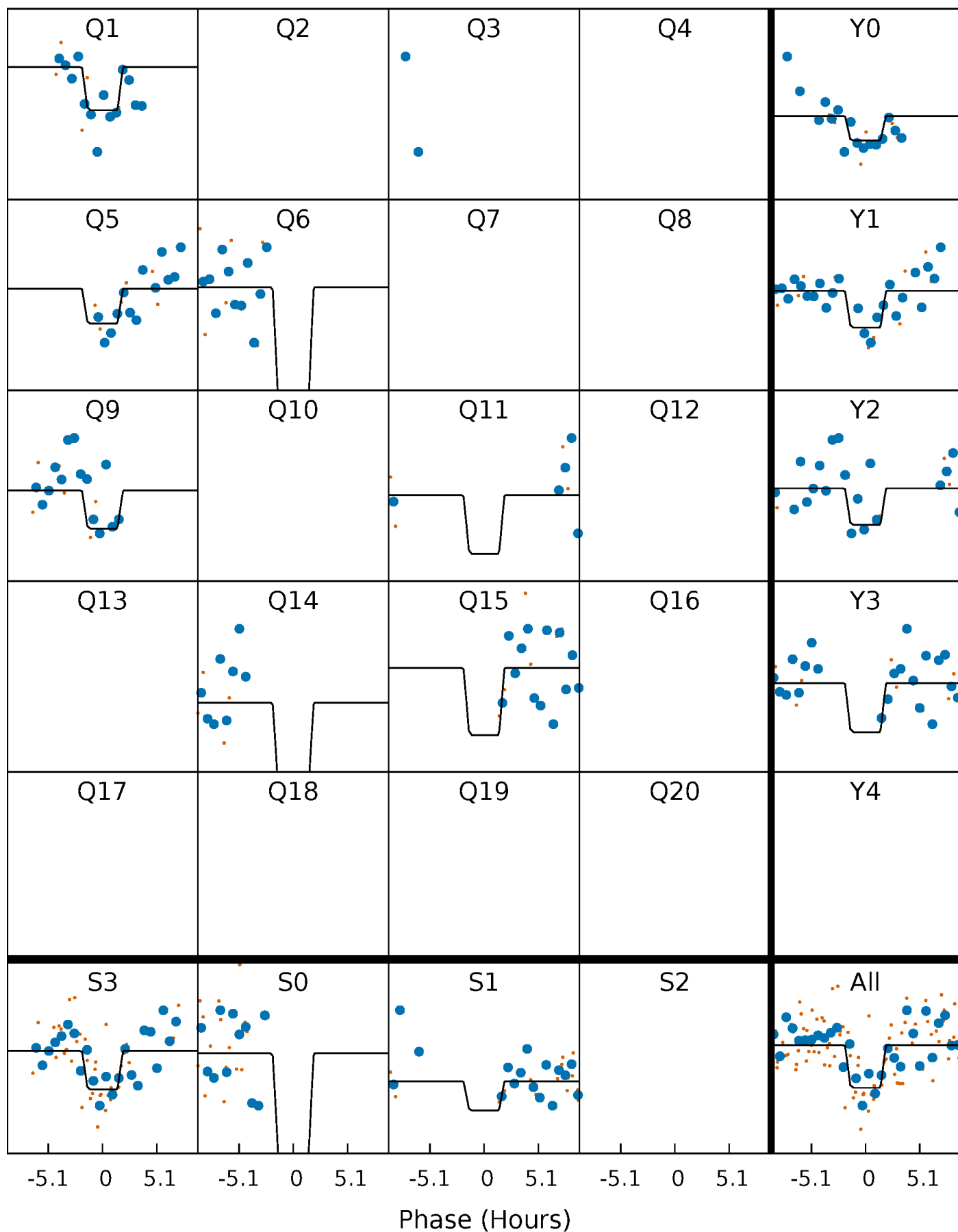
DV Quarter-Phased Transit Curves

TCE 006548898-03 P=144.113449 Days $T_0=156.046462$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

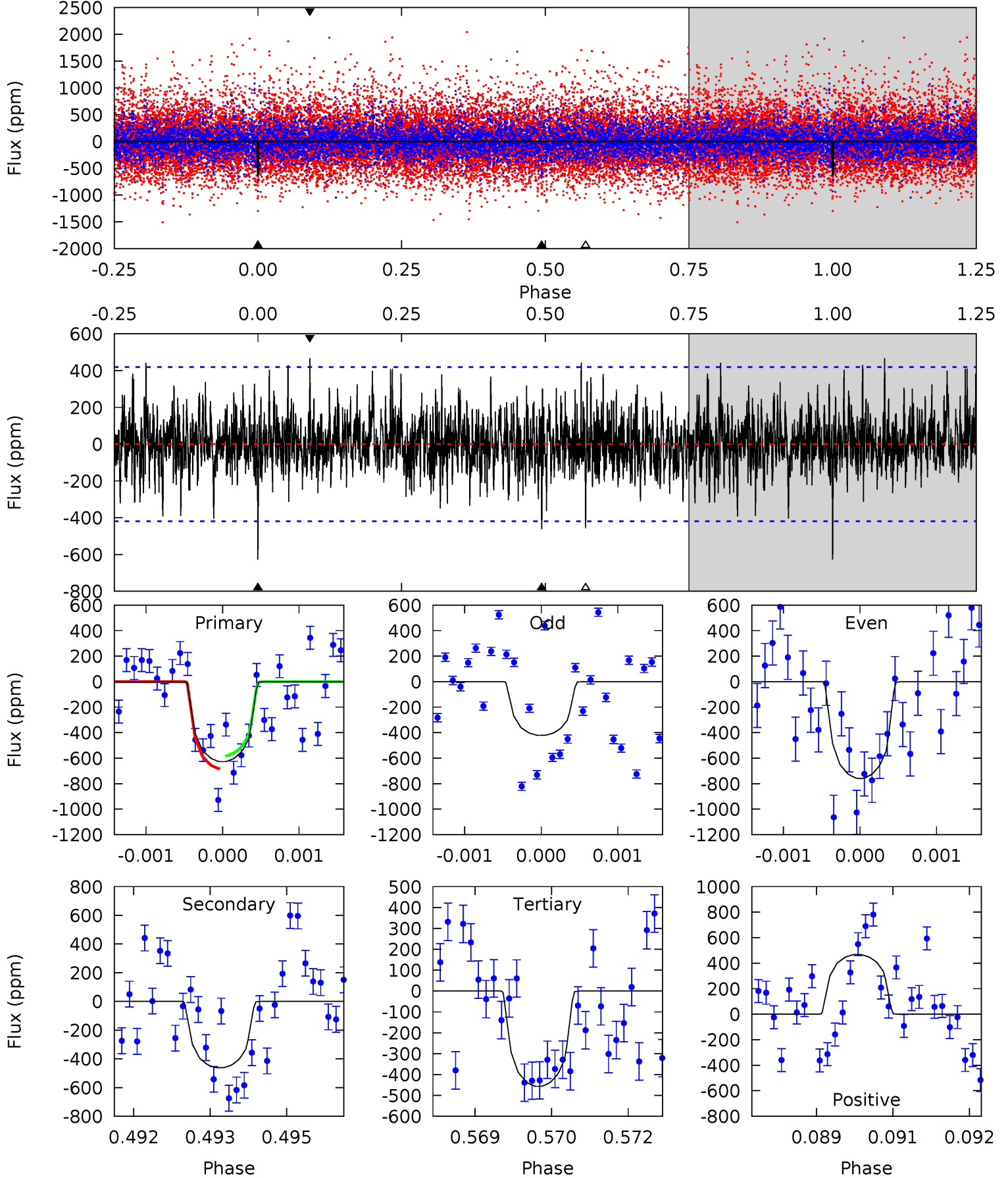
TCE 006548898-03 P=144.111480 Days $T_0=156.052122$ (BKJD)



DV Model-Shift Uniqueness Test

006548898-03, P = 144.113449 Days, E = 11.933013 Days

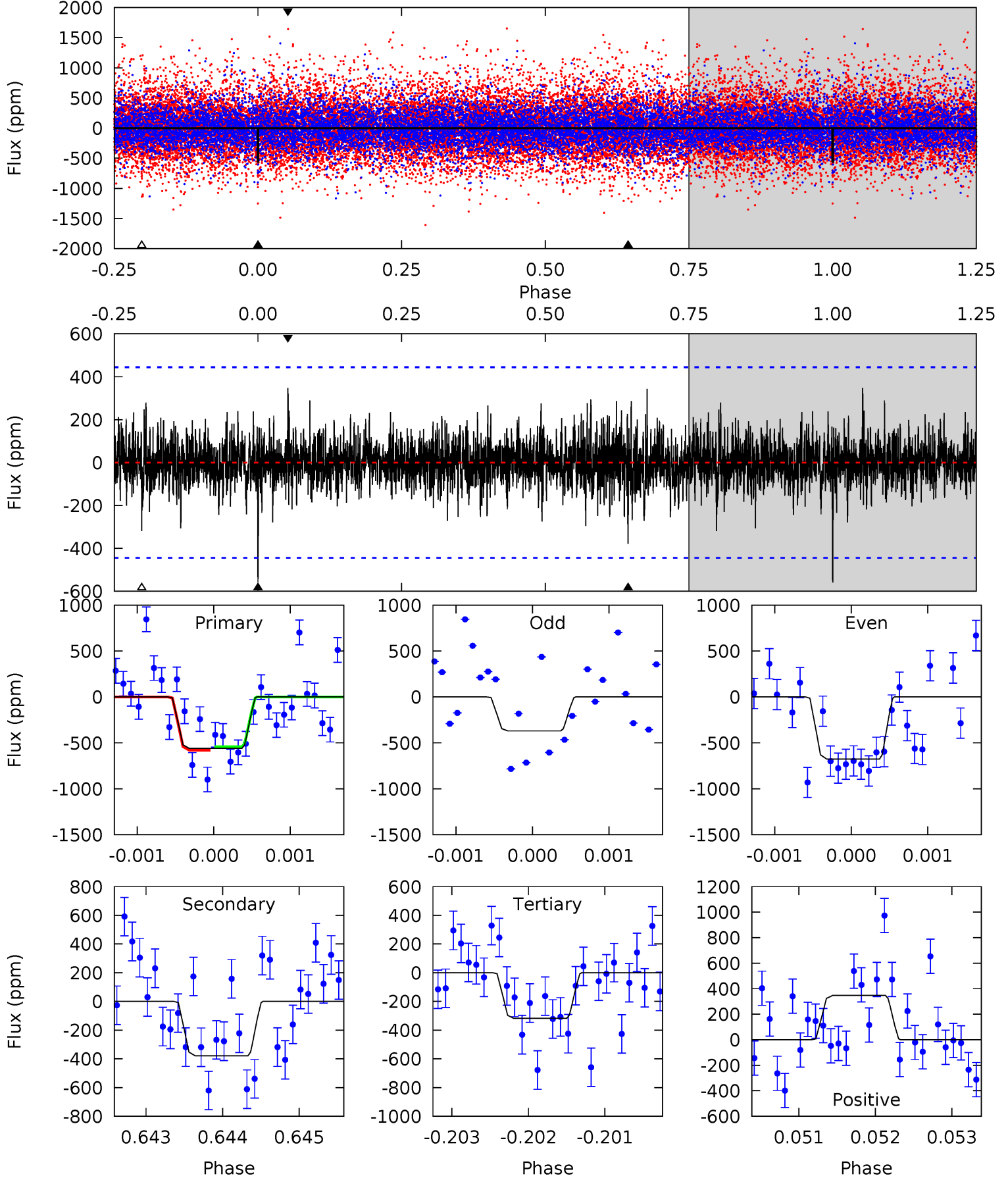
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.06	5.94	5.87	6.02	5.39	3.20	1.52	2.19	2.05	0.07	-0.07	2.07	0.92	0.43	0.63



Alt Model-Shift Uniqueness Test

006548898-03, P = 144.111480 Days, E = 11.940642 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.85	4.64	3.90	4.26	5.45	3.28	1.01	2.95	2.60	0.73	0.38	1.77	0.95	0.38	0.21



Stellar Parameters For KIC 006548898

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3830^{+120}_{-147}	$4.654^{+0.068}_{-0.016}$	$0.560^{+0.050}_{-0.300}$	$0.607^{+0.028}_{-0.070}$	$0.606^{+0.035}_{-0.060}$	$3.808^{+1.215}_{-0.336}$
	+3%/-4%	+1%/-0%	+9%/-54%	+5%/-12%	+6%/-10%	+32%/-9%
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 006548898-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-462 ± 78	$3.31^{+3.08}_{-2.24}$	269^{+10}_{-10}	2926^{+1234}_{-481}	4726^{+38447}_{-3495}
Alt.	-378 ± 82	$3.20^{+2.74}_{-2.15}$	270^{+10}_{-12}	2862^{+1237}_{-437}	4028^{+34591}_{-2883}

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 $A_{obs} \gg 1.0$

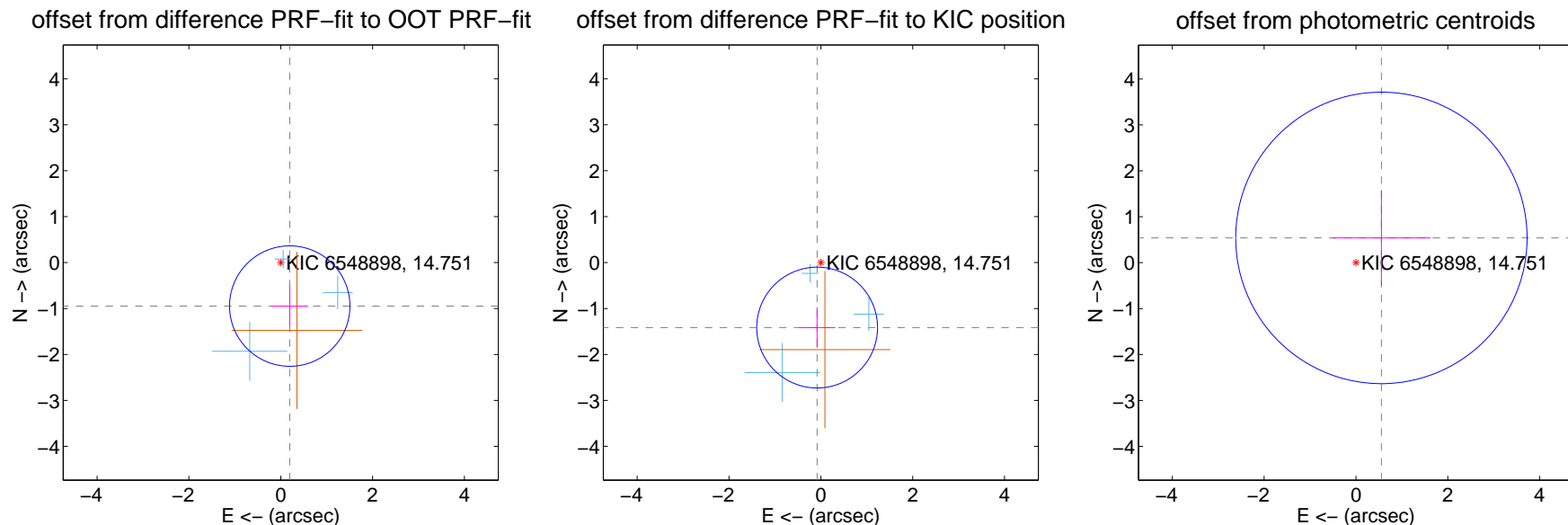
DV Centroid Data

Supplemental centroid analysis for 006548898-03. Kepler magnitude: 14.75. Transit SNR 8.79

There are 3 quarters with good PRF difference image offsets

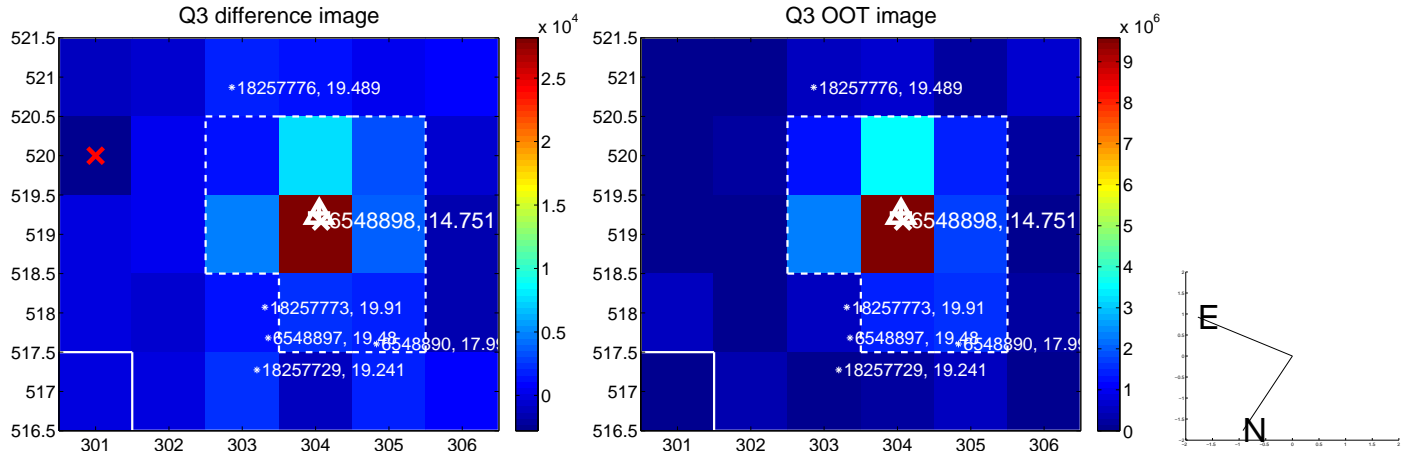
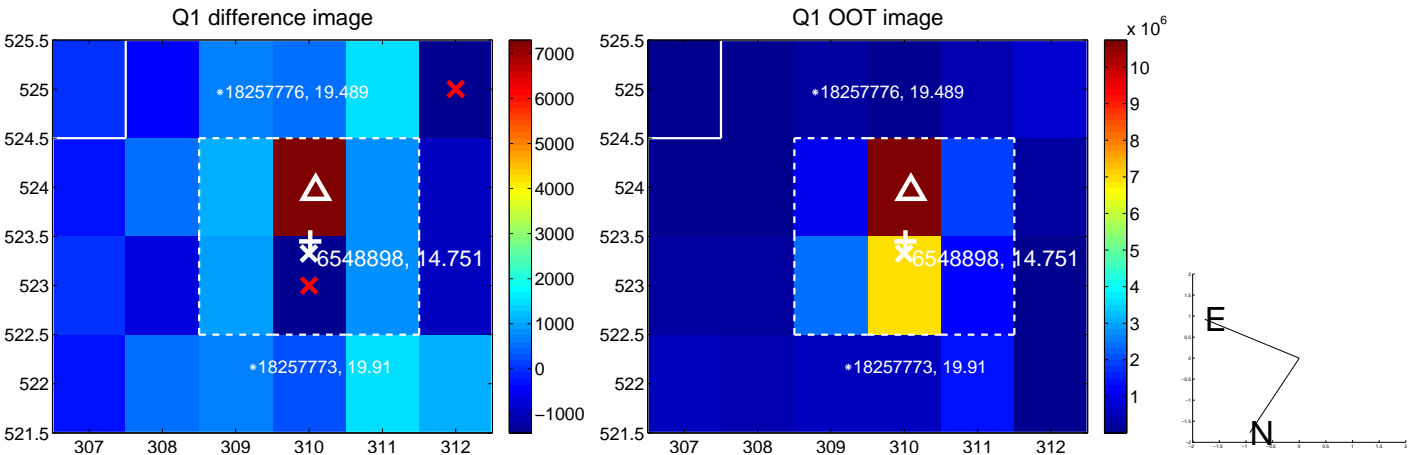
The direct PRF centroid is offset from the target star catalog position by about 0.49 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.967 ± 0.437	2.21	-0.196 ± 0.398	-0.947 ± 0.438
PRF-fit source offset from KIC position	1.417 ± 0.438	3.23	0.081 ± 0.398	-1.415 ± 0.438
photometric centroid source offset	0.77 ± 1.06	0.73	-0.55 ± 1.07	0.54 ± 1.04

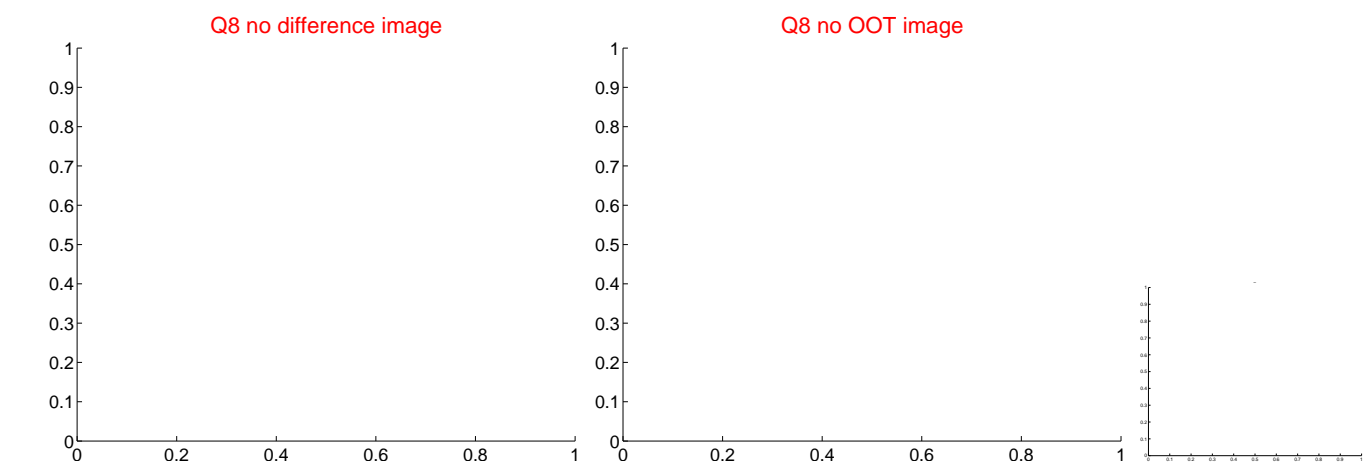
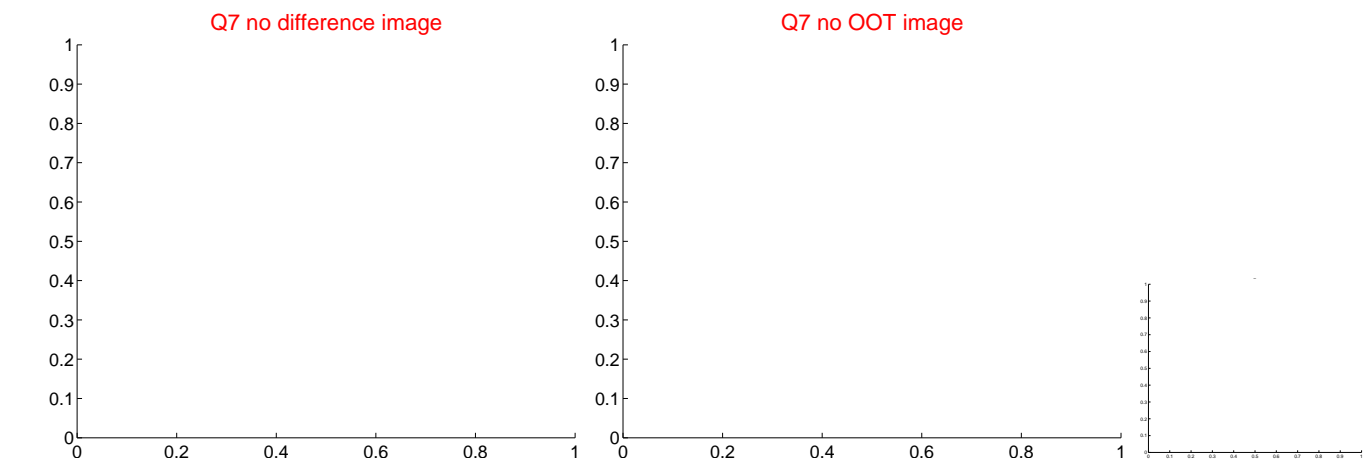
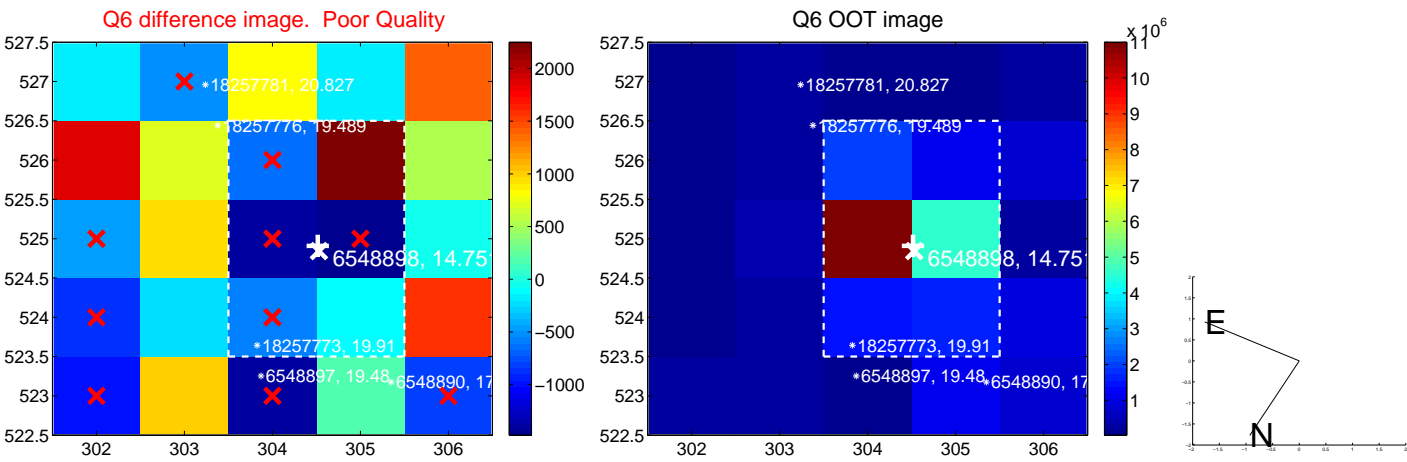
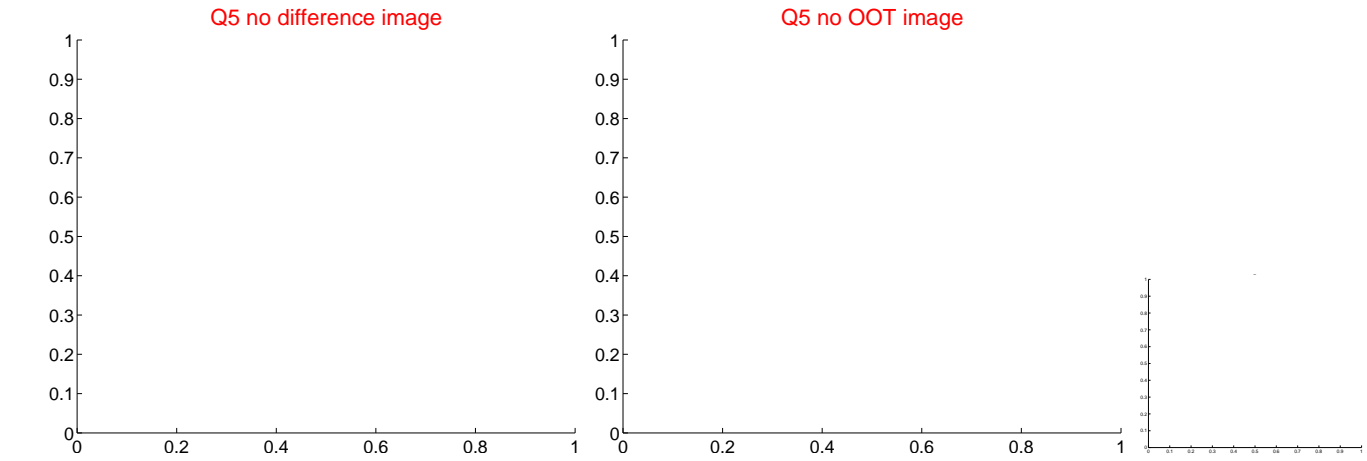


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

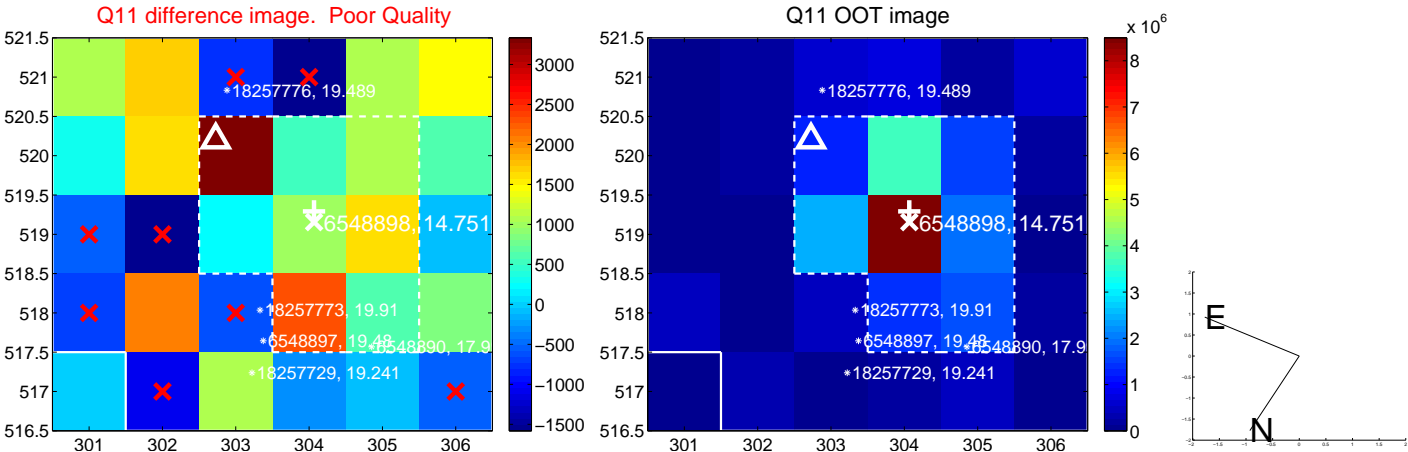
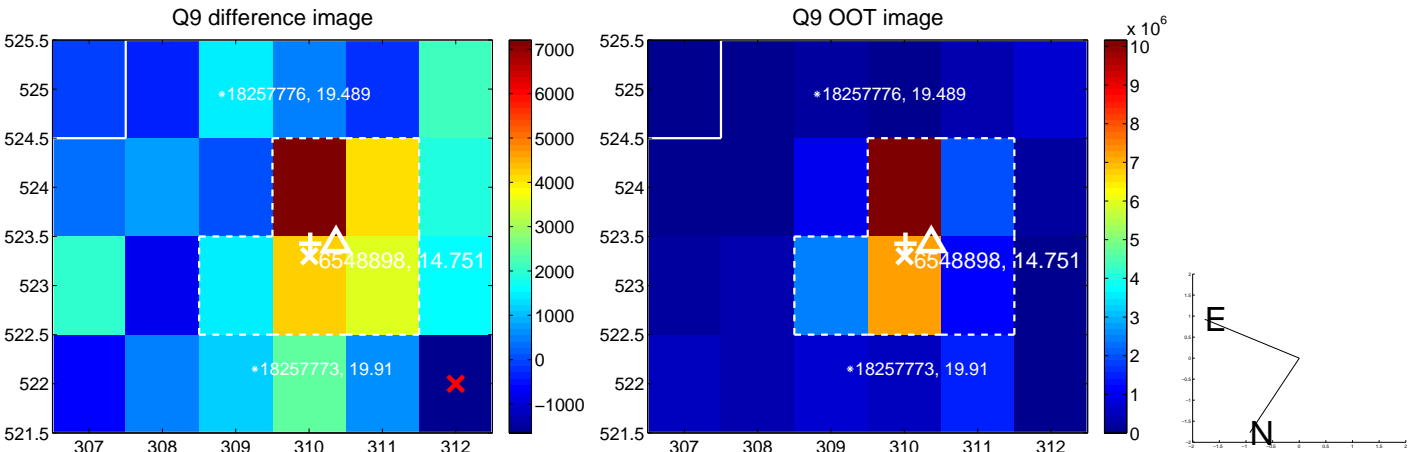
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



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

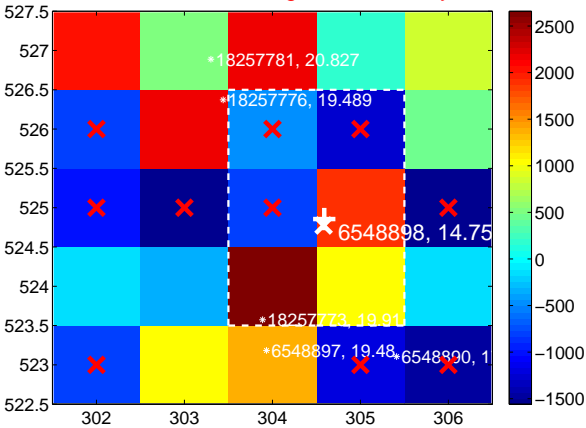
Q13 no difference image



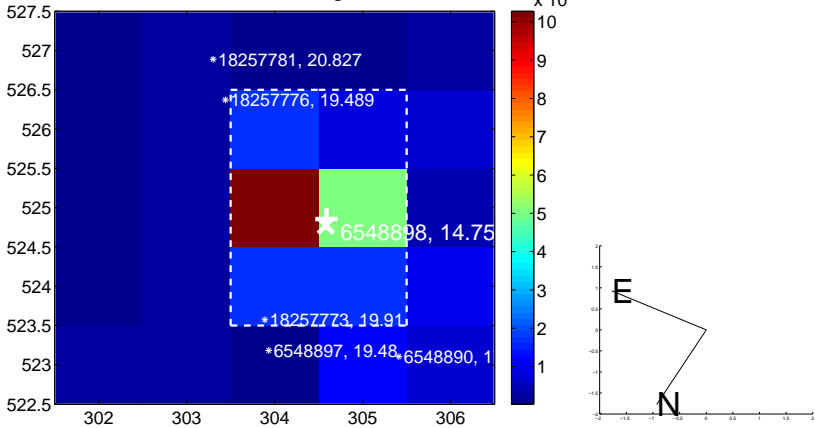
Q13 no OOT image



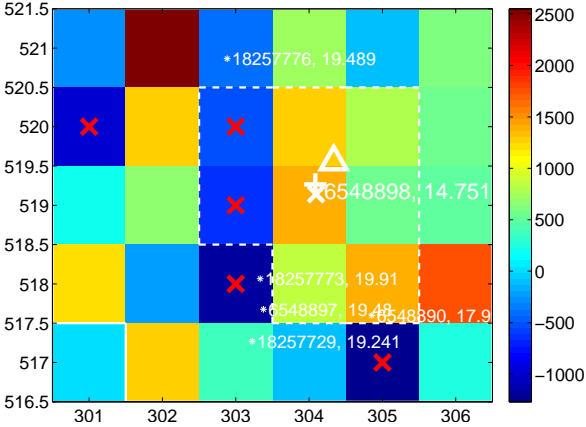
Q14 difference image. Poor Quality



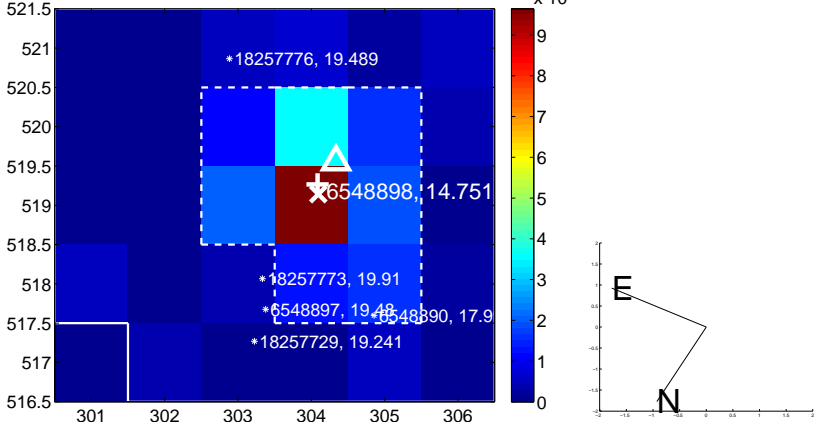
Q14 OOT image



Q15 difference image. Poor Quality



Q15 OOT image



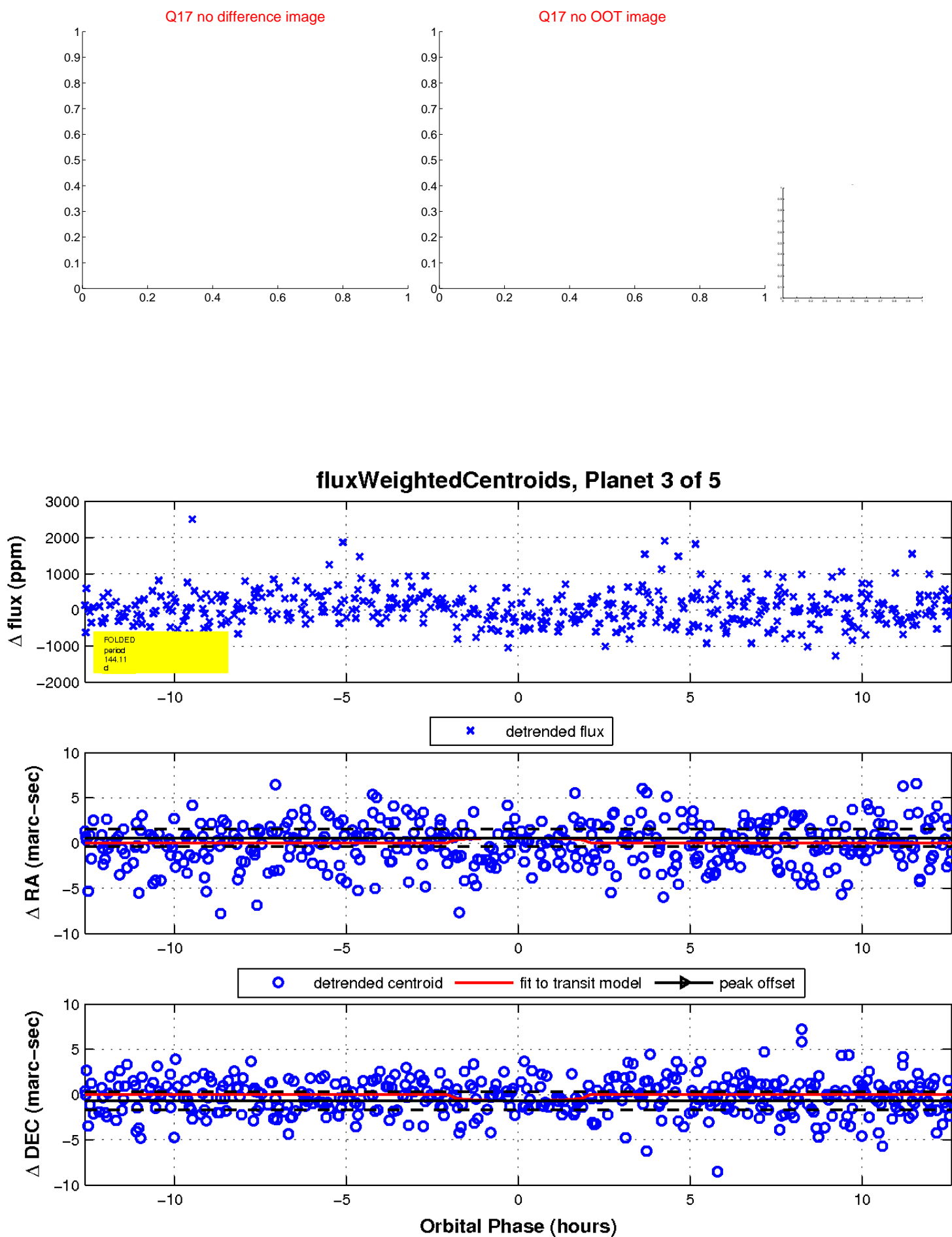
Q16 no difference image



Q16 no OOT image

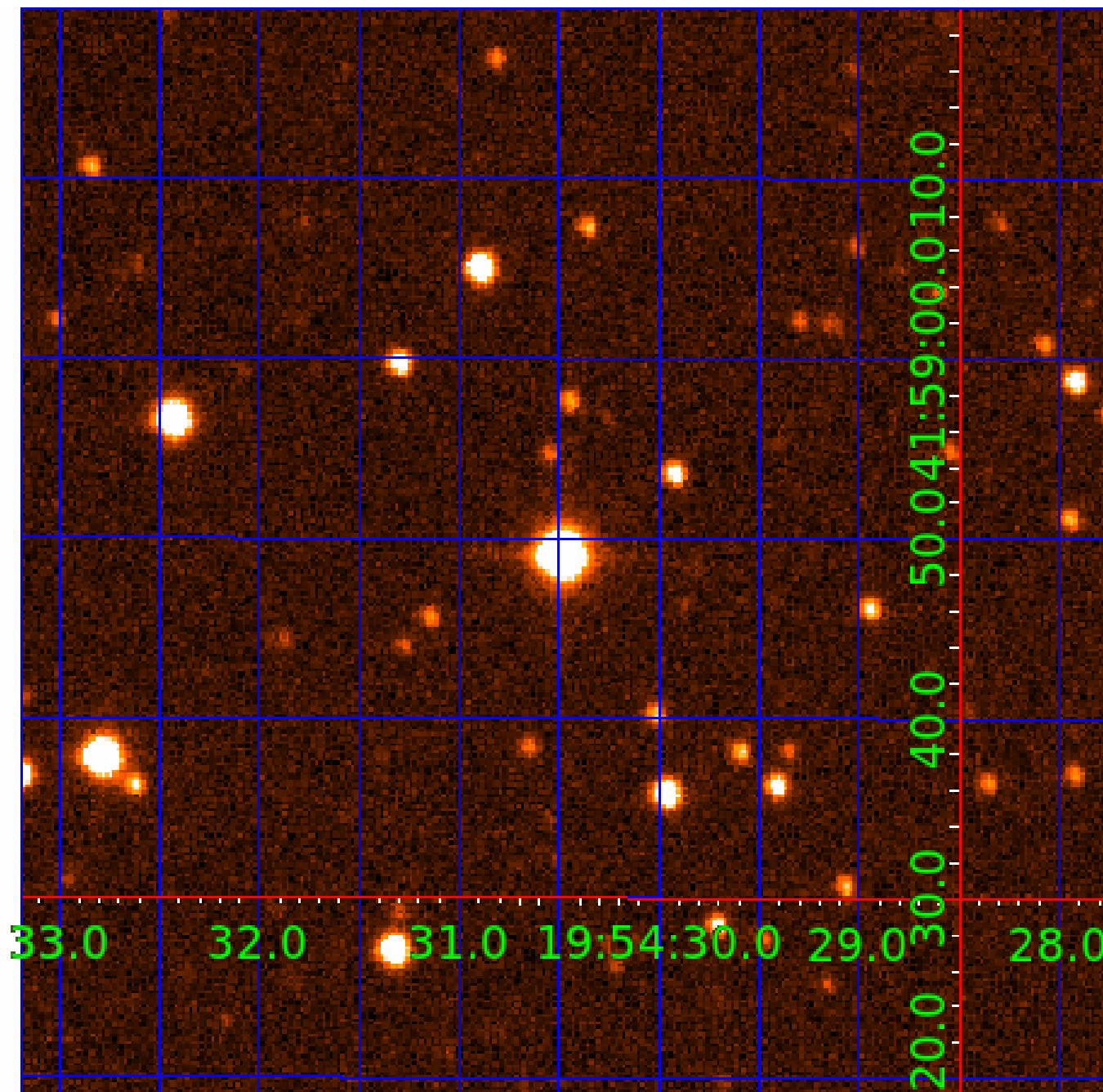


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006548898

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})
006548898-01	OBS	No	0.964485	132.401555	44.1	4.854	10.8	8.2	0.61	3830	0.39	271.70
006548898-02	OBS	No	184.453924	312.014894	656.9	9.455	15.3	7.0	0.61	3830	1.66	0.25
006548898-03	OBS	No	144.113449	156.046462	813.1	4.218	11.3	8.8	0.61	3830	1.88	0.34
006548898-04	OBS	No	130.442857	236.613313	473.5	6.407	8.0	6.0	0.61	3830	1.51	0.39
006548898-05	OBS	No	223.313792	194.600350	706.1	3.013	7.6	7.4	0.61	3830	1.89	0.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006548898-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
006548898-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006548898-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006548898-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
006548898-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

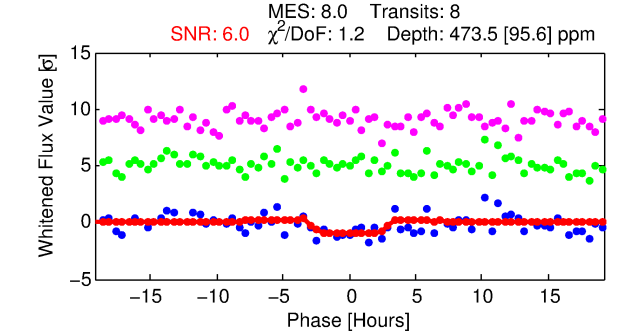
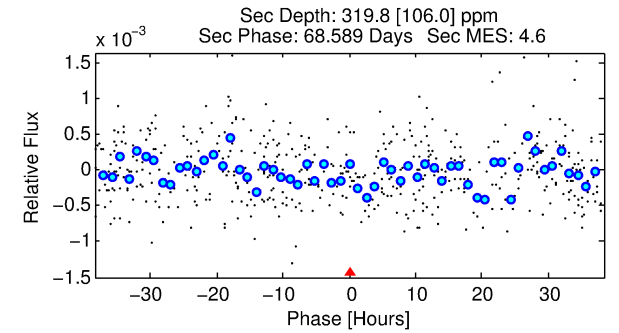
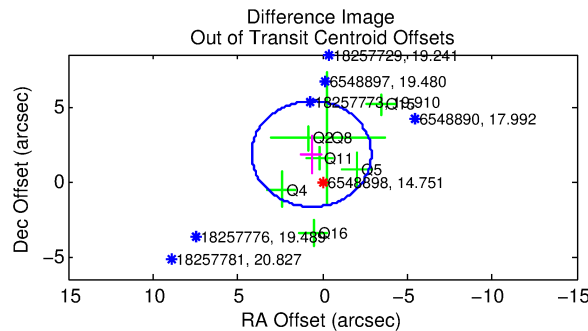
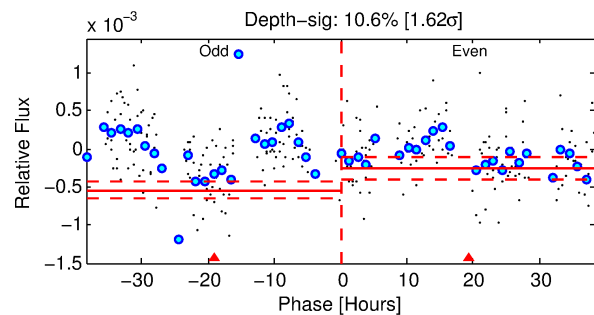
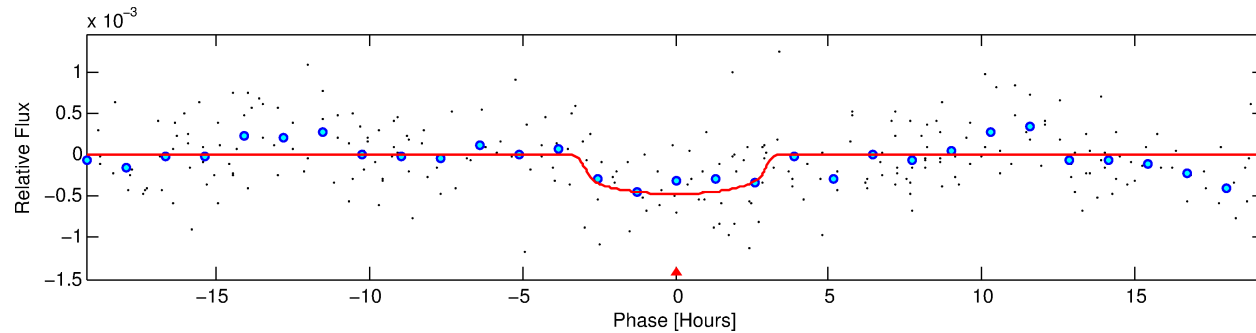
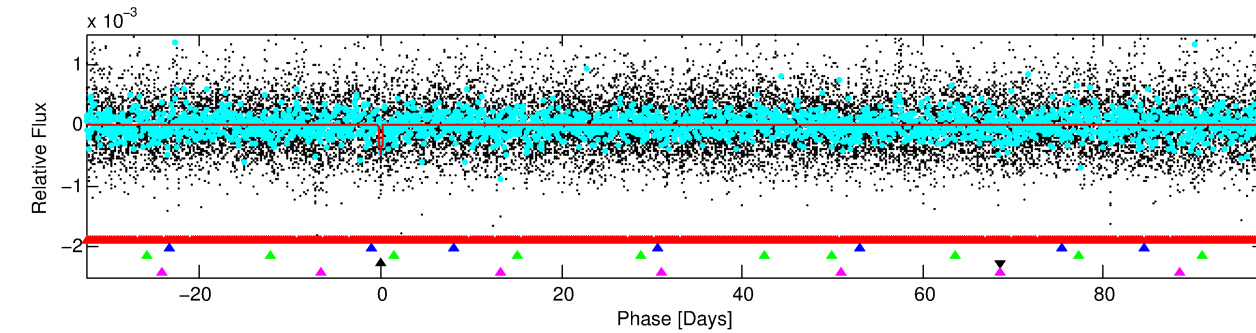
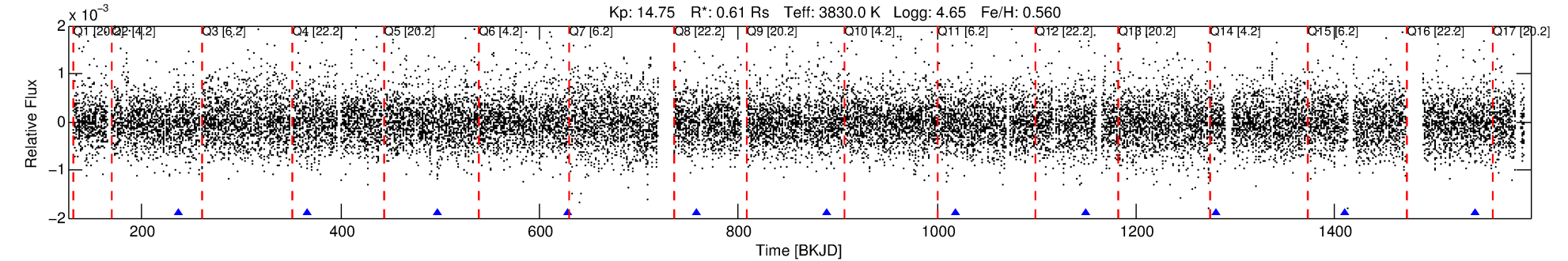
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006548898-04

No Significant Match Found

DV One-Page Summary

KIC: 6548898 Candidate: 4 of 5 Period: 130.443 d



DV Fit Results:

Period = 130.44286 [0.00275] d
Epoch = 236.6133 [0.0186] BKJD
Rp/R* = 0.0228 [0.0172]
a/R* = 95.05 [248.23]
b = 0.82 [1.06]
Seff = 0.39 [0.08]
Teq = 202 [10] K
Rp = 1.51 [1.15] Re
a = 0.4260 [0.0396] AU
Ag = 14045.24 [21766.14] [0.65 σ]
Teff = 3395 [1317] K [2.42 σ]

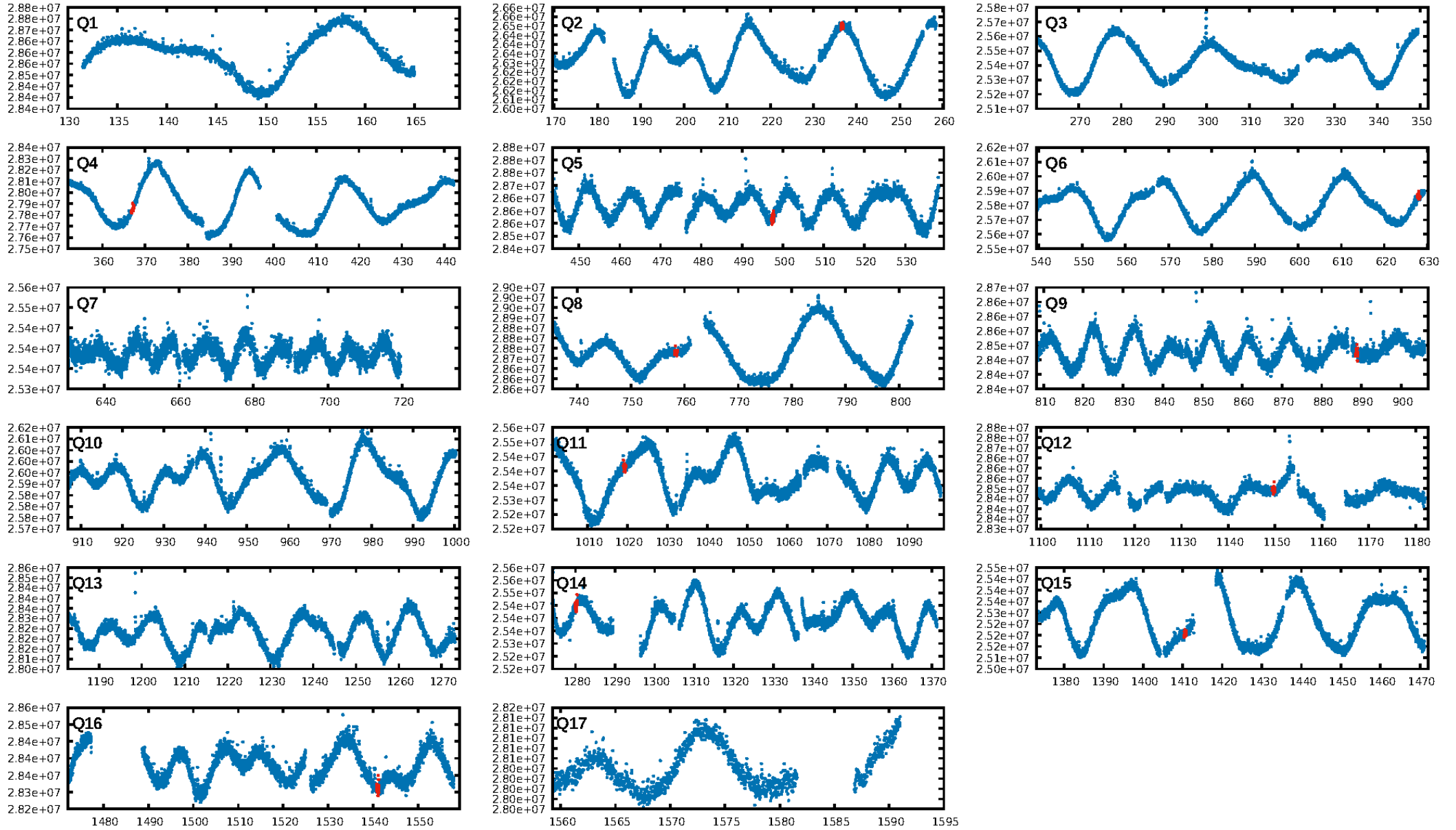
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [386.58 σ]
LongPeriod-sig: 100.0% [42.77 σ]
ModelChiSquare2-sig: 37.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.85e-09
RollingBand-fgt: 1.00 [8/8]
GhostDiagnostic-chr: 2.121
Centroid-sig: 0.0%
Centroid-so: 2.498 arcsec [1.99 σ]
OotOffset-rm: 1.961 arcsec [1.67 σ]
KicOffset-rm: 1.526 arcsec [1.25 σ]
OotOffset-st: 1/2/3/1 [7]
KicOffset-st: 1/2/3/1 [7]
DiffImageQuality-fgm: 0.29 [2/7]
DiffImageOverlap-fno: 0.00 [0/11]

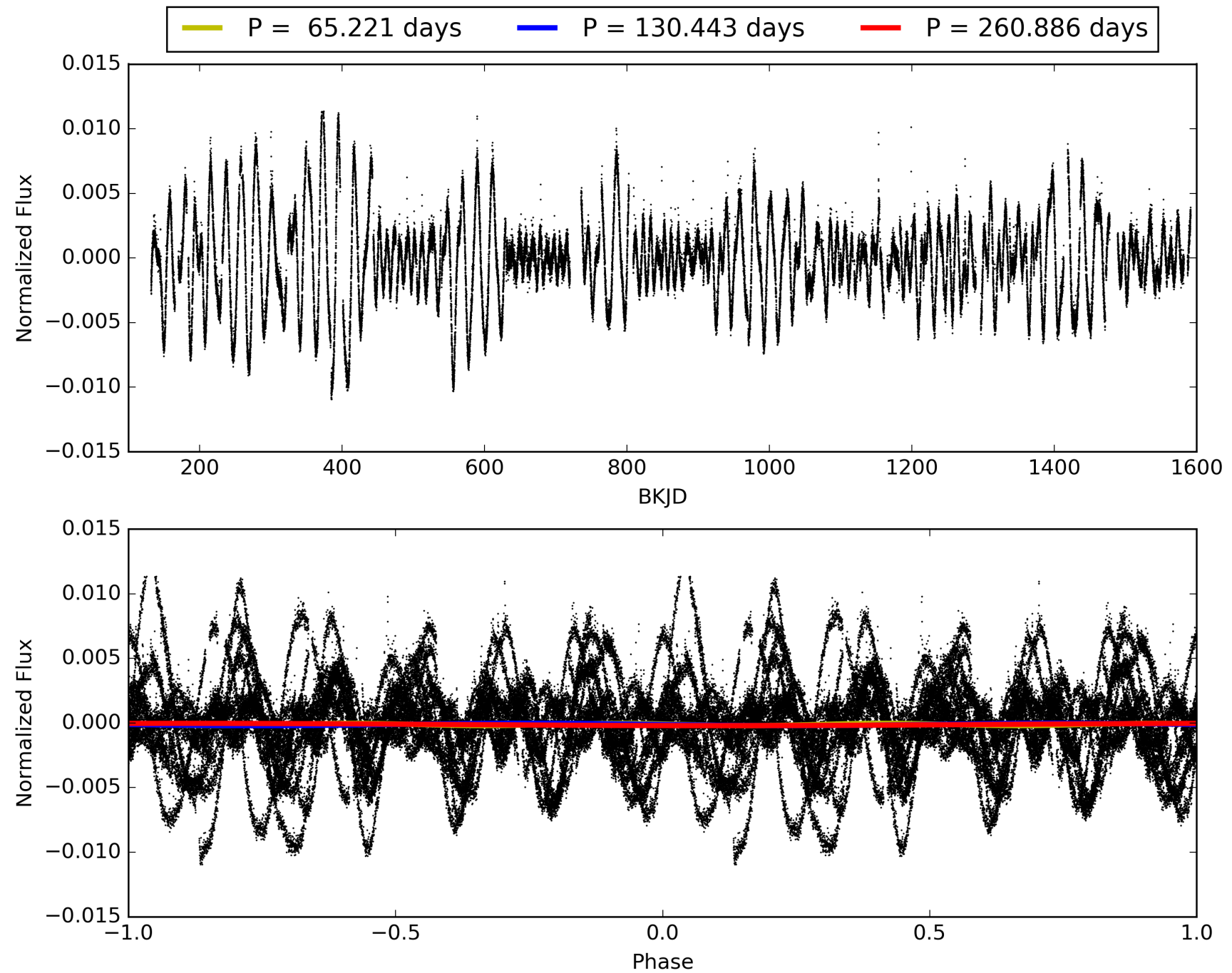
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:50:12 Z

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

TCE 006548898-04, PDC Light Curves

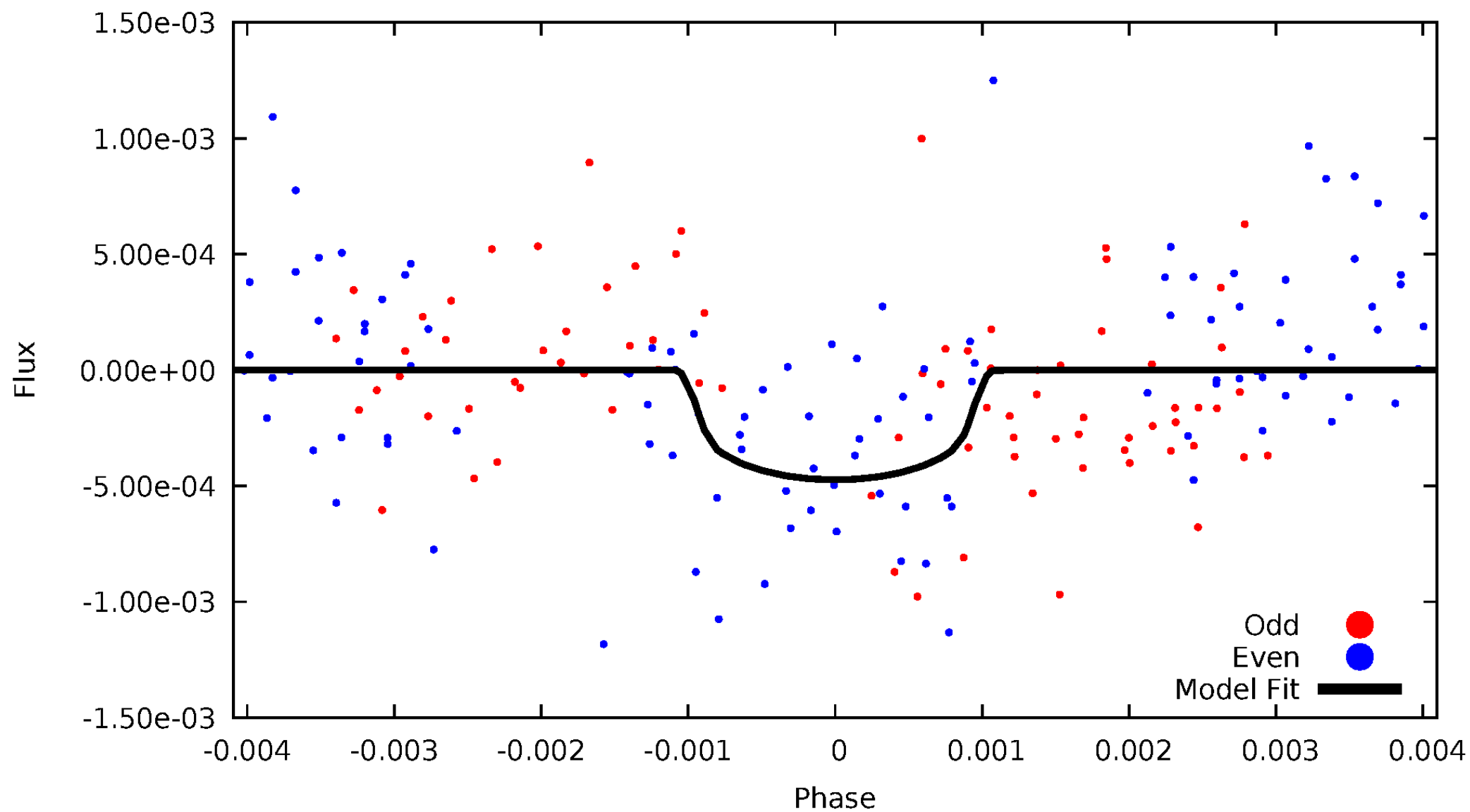


TCE 006548898-04



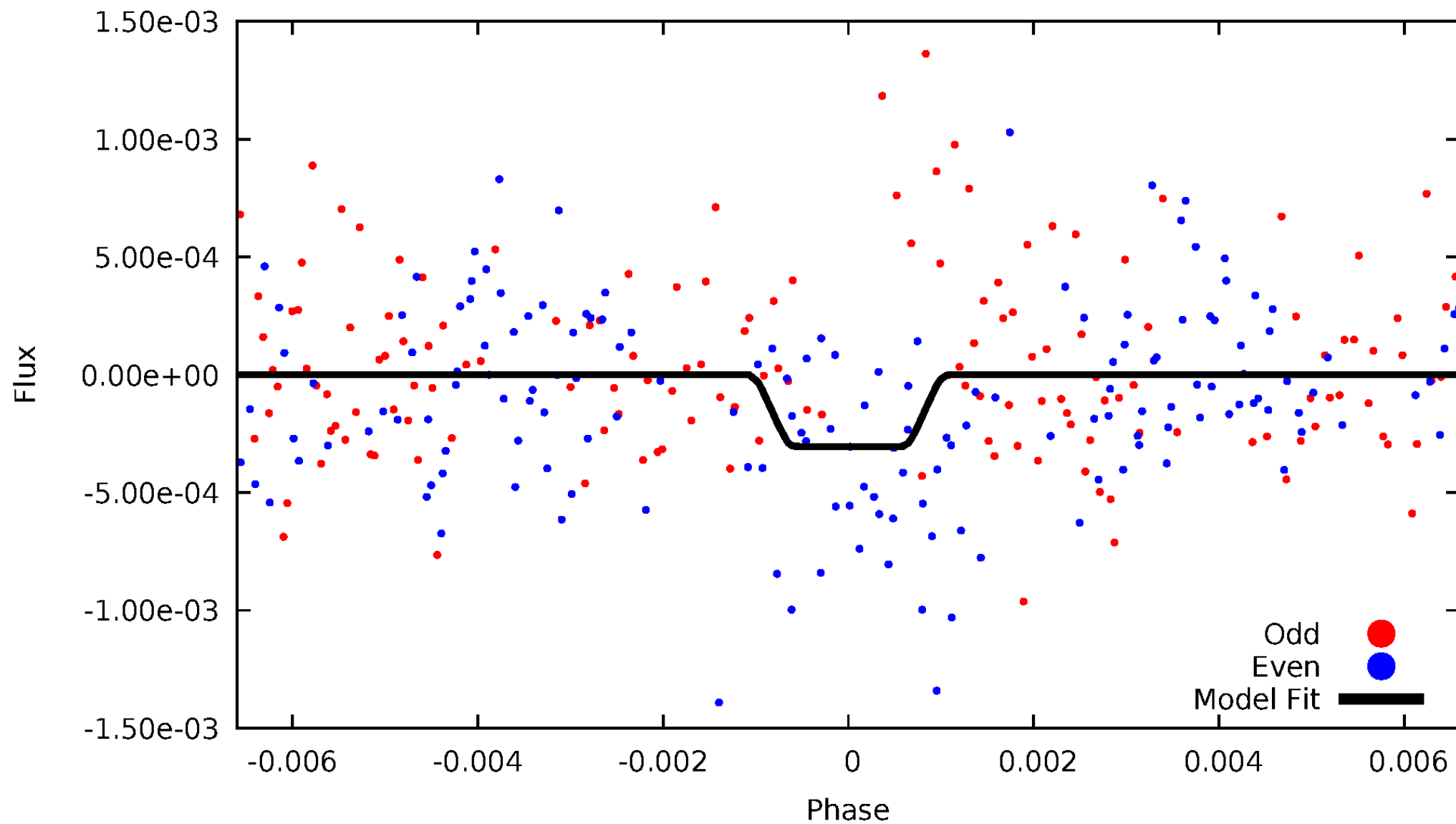
DV Odd/Even

TCE 006548898-04



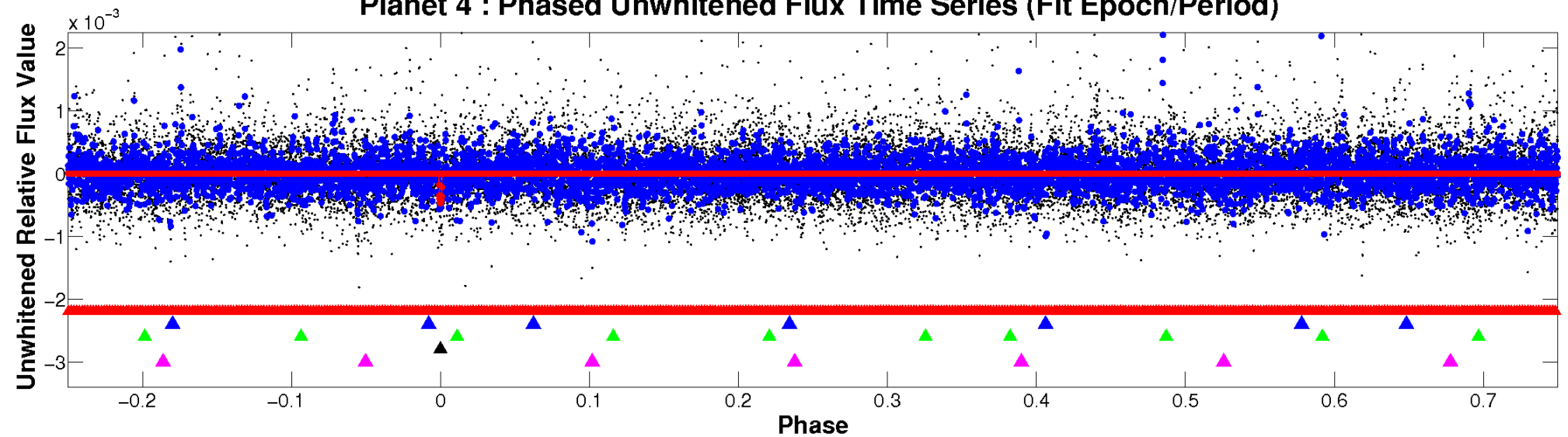
ALT Odd/Even

TCE 006548898-04

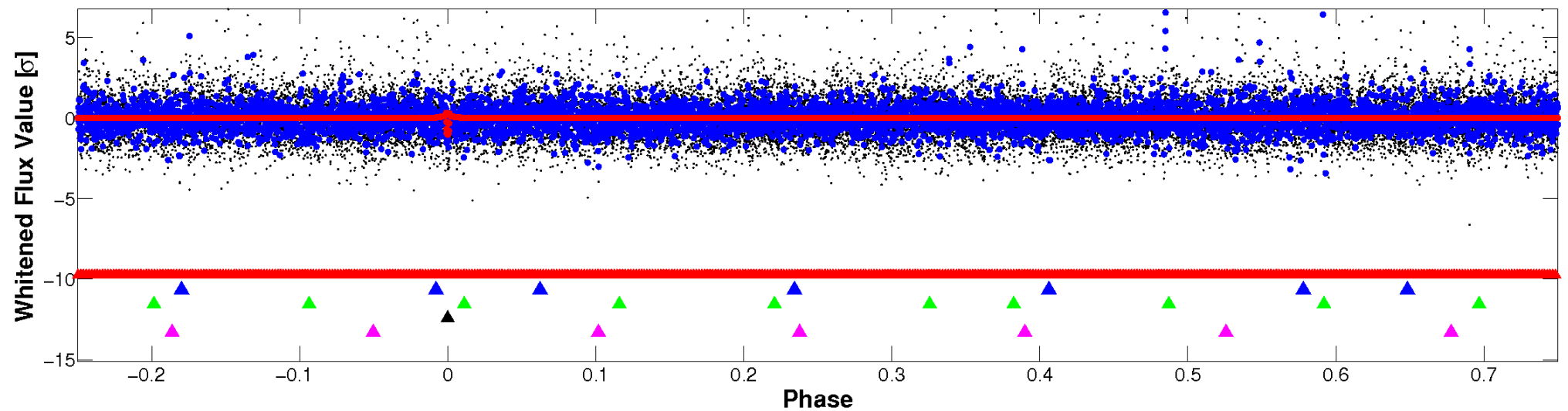


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

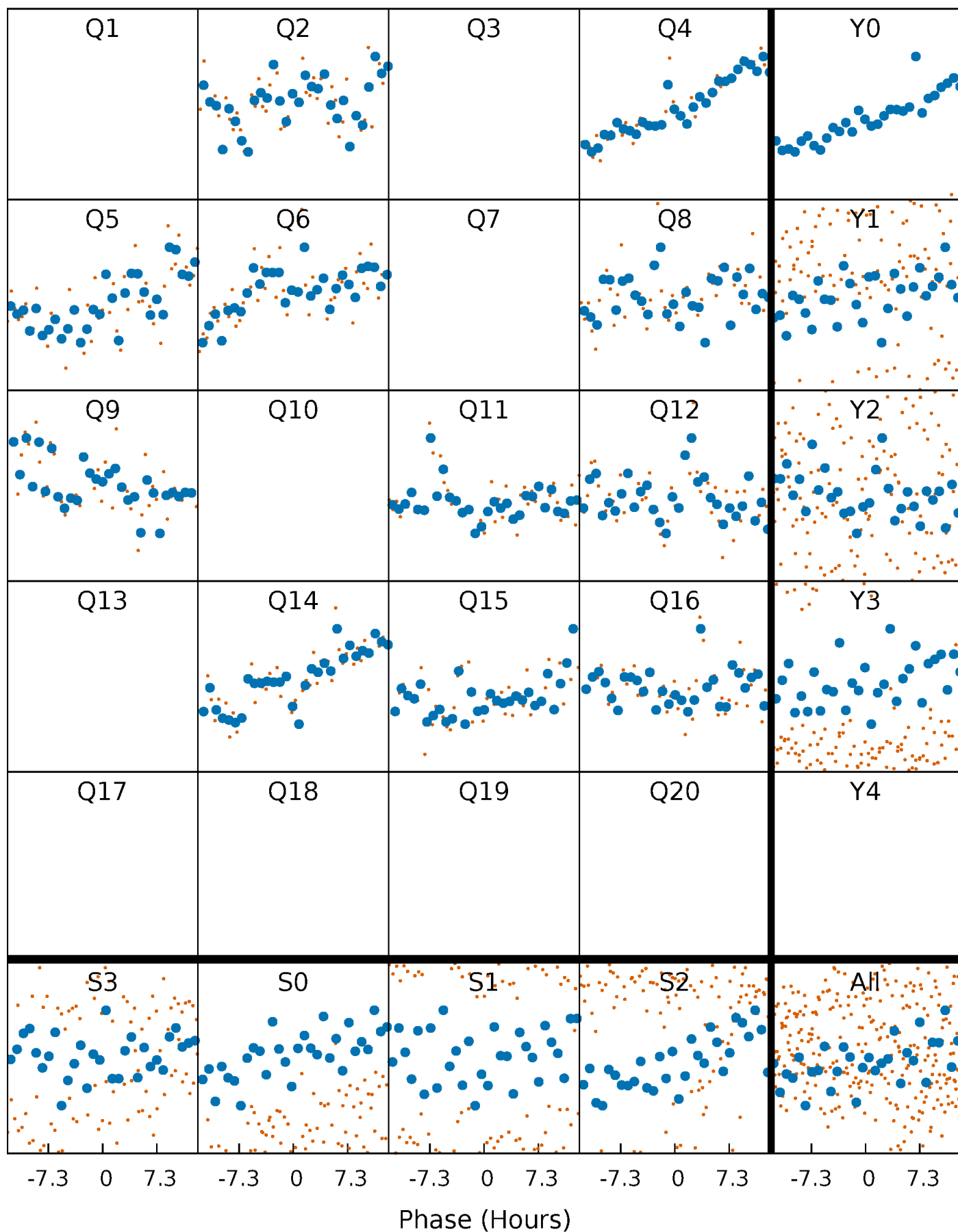


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



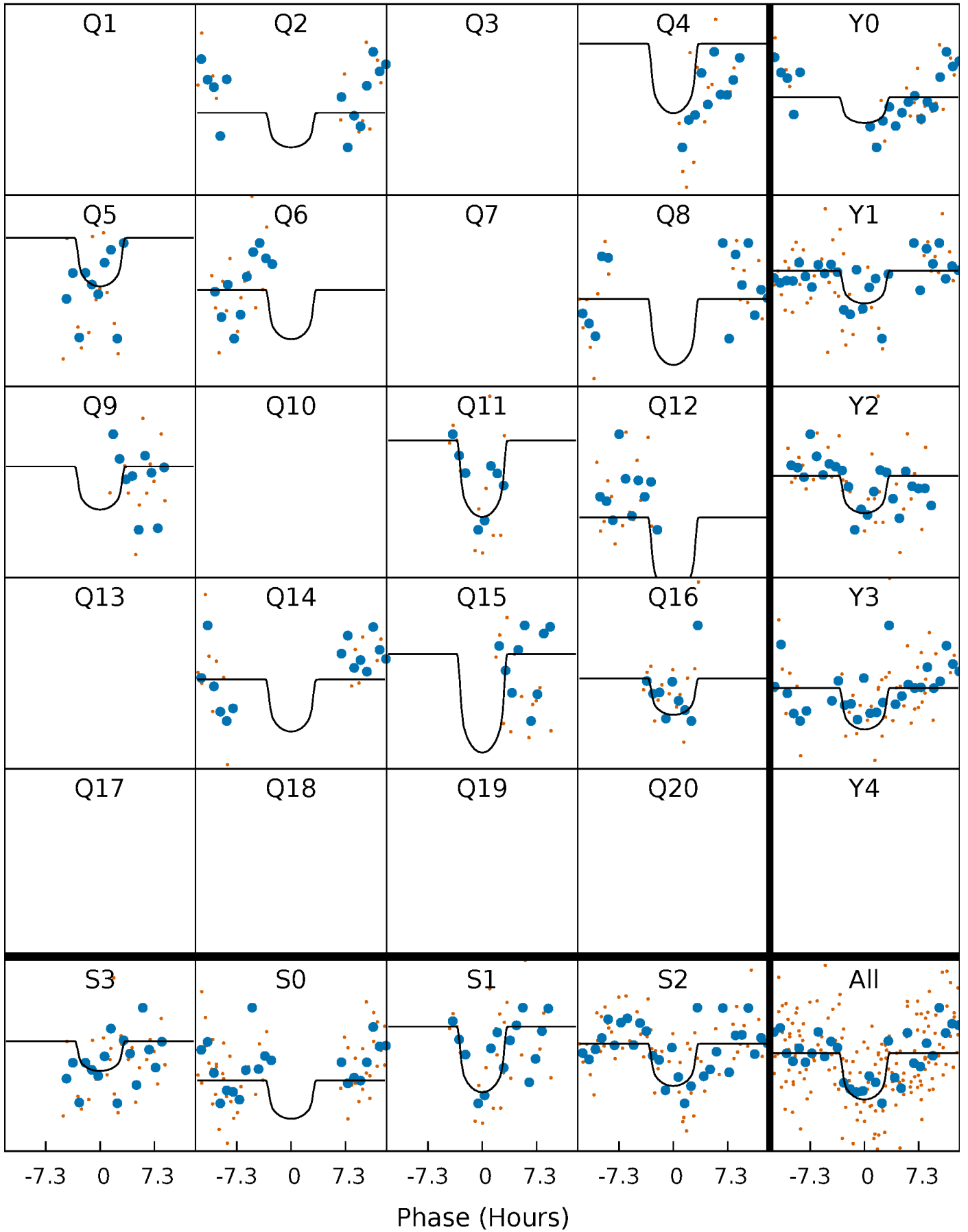
PDC Quarter-Phased Transit Curves

TCE 006548898-04 P=130.442857 Days $T_0=236.613313$ (BKJD)



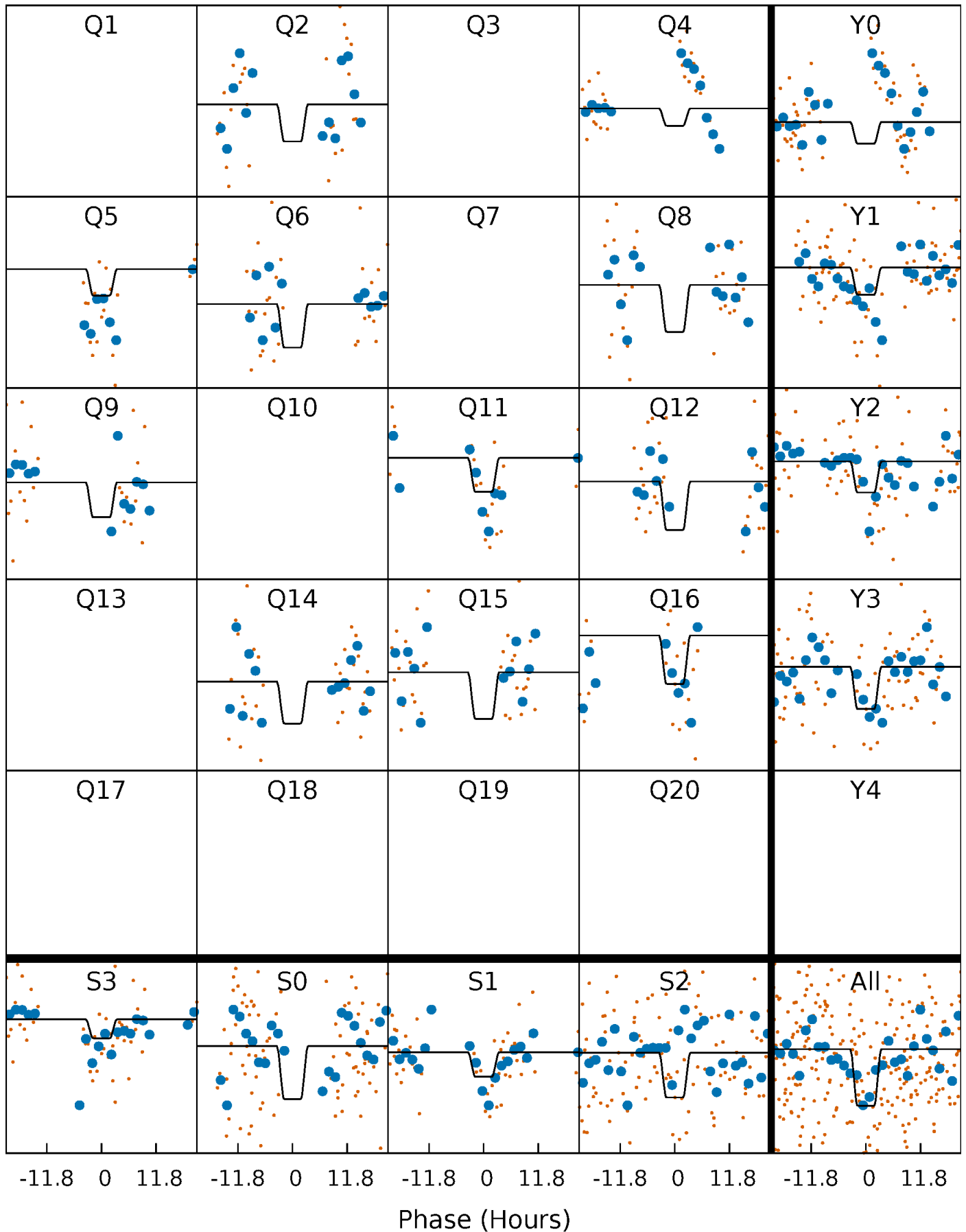
DV Quarter-Phased Transit Curves

TCE 006548898-04 P=130.442857 Days $T_0=236.613313$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

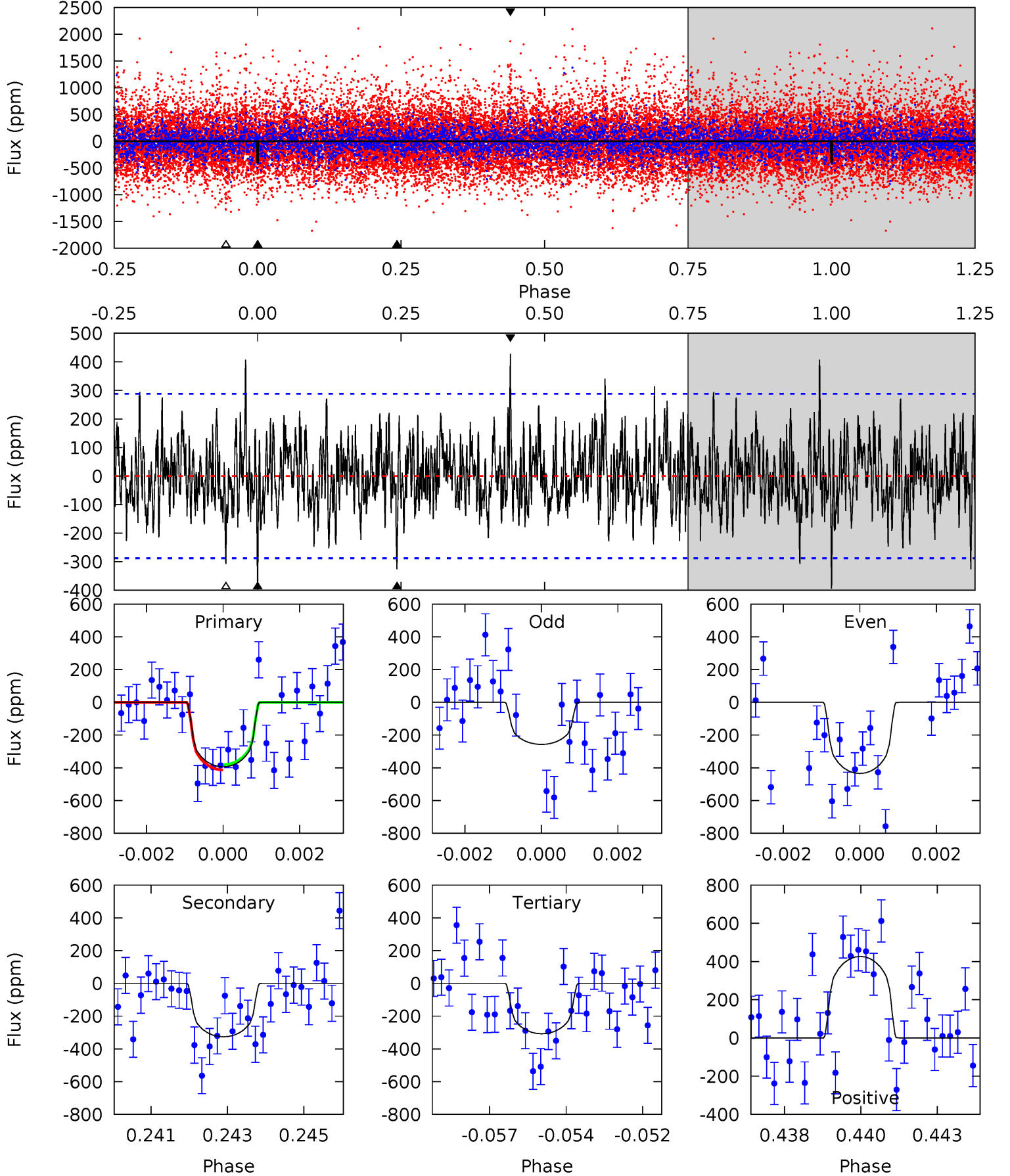
TCE 006548898-04 P=130.434901 Days $T_0=236.605845$ (BKJD)



DV Model-Shift Uniqueness Test

006548898-04, P = 130.442857 Days, E = 106.170456 Days

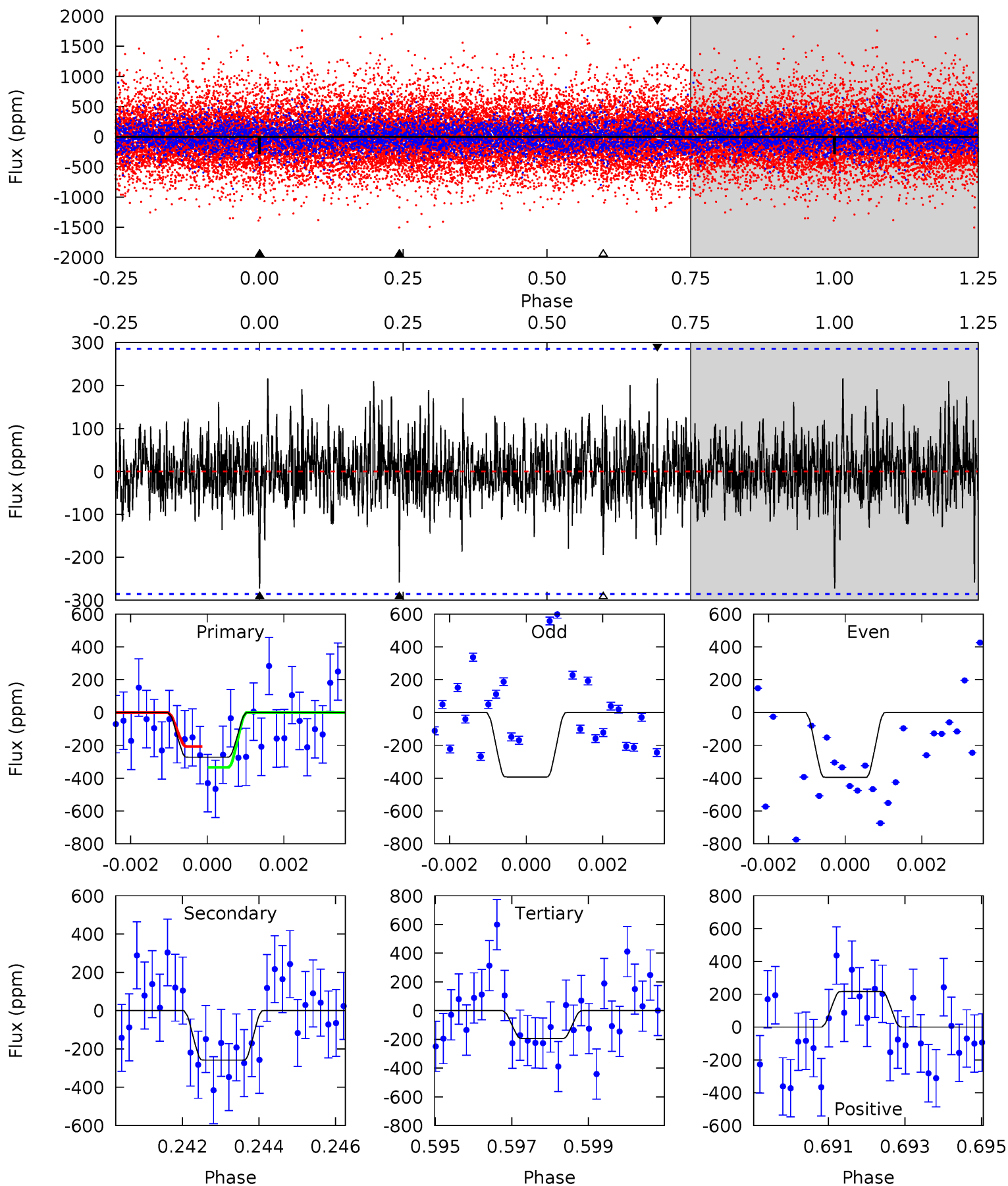
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.27	6.01	5.67	7.86	5.30	3.05	1.82	1.60	-0.60	0.34	-1.85	1.52	0.82	0.52	0.29



Alt Model-Shift Uniqueness Test

006548898-04, P = 130.434901 Days, E = 106.170944 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.07	4.81	3.62	4.03	5.32	3.08	1.04	1.45	1.05	1.19	0.78	0.02	0.20	0.44	1.18



Stellar Parameters For KIC 006548898

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3830^{+120}_{-147}	$4.654^{+0.068}_{-0.016}$	$0.560^{+0.050}_{-0.300}$	$0.607^{+0.028}_{-0.070}$	$0.606^{+0.035}_{-0.060}$	$3.808^{+1.215}_{-0.336}$
	+3%/-4%	+1%/-0%	+9%/-54%	+5%/-12%	+6%/-10%	+32%/-9%
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 006548898-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-326 ± 54	$1.58^{+1.15}_{-0.89}$	278^{+10}_{-11}	3453^{+1125}_{-525}	13340^{+53082}_{-9129}
Alt.	-258 ± 54	$1.35^{+1.02}_{-0.83}$	279^{+10}_{-13}	3492^{+1435}_{-533}	14209^{+82727}_{-9788}

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

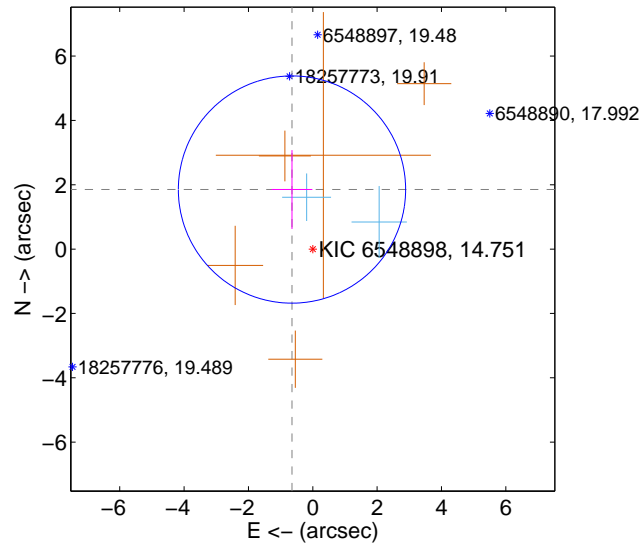
Supplemental centroid analysis for 006548898-04. Kepler magnitude: 14.75. Transit SNR 5.96

There are 2 quarters with good PRF difference image offsets

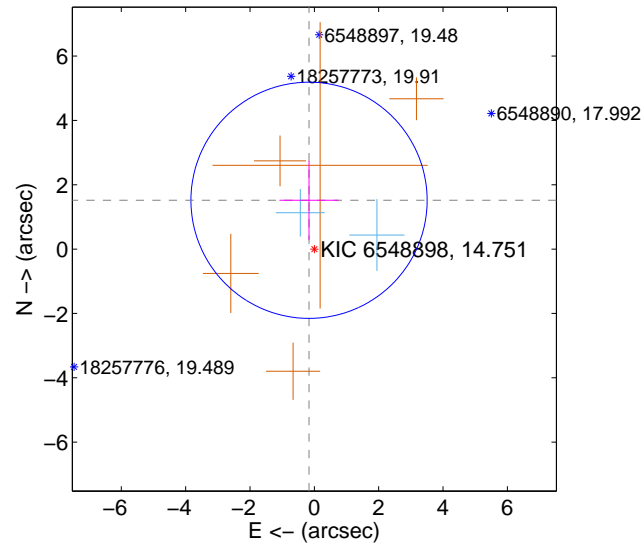
The direct PRF centroid is offset from the target star catalog position by about 0.39 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.961 ± 1.177	1.67	0.646 ± 0.633	1.851 ± 1.227
PRF-fit source offset from KIC position	1.526 ± 1.224	1.25	0.165 ± 0.919	1.517 ± 1.227
photometric centroid source offset	2.50 ± 1.26	1.99	-0.53 ± 1.21	2.44 ± 1.26

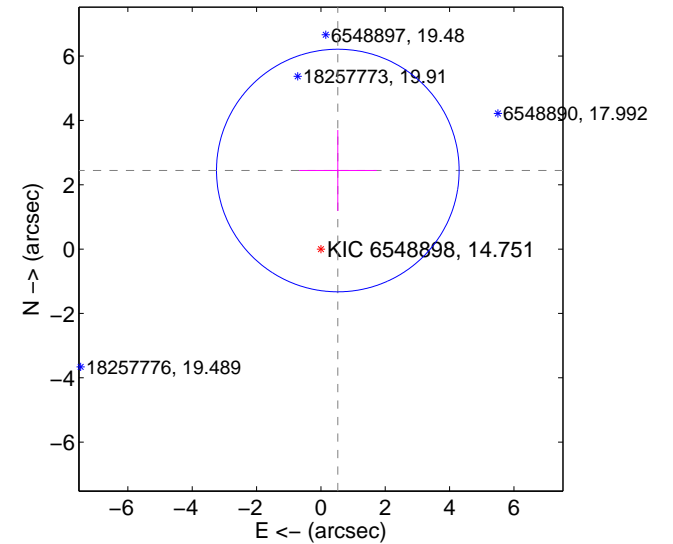
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

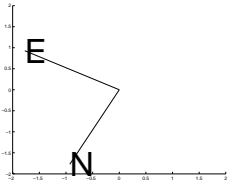
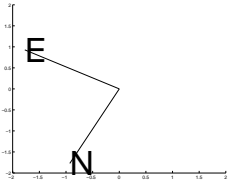
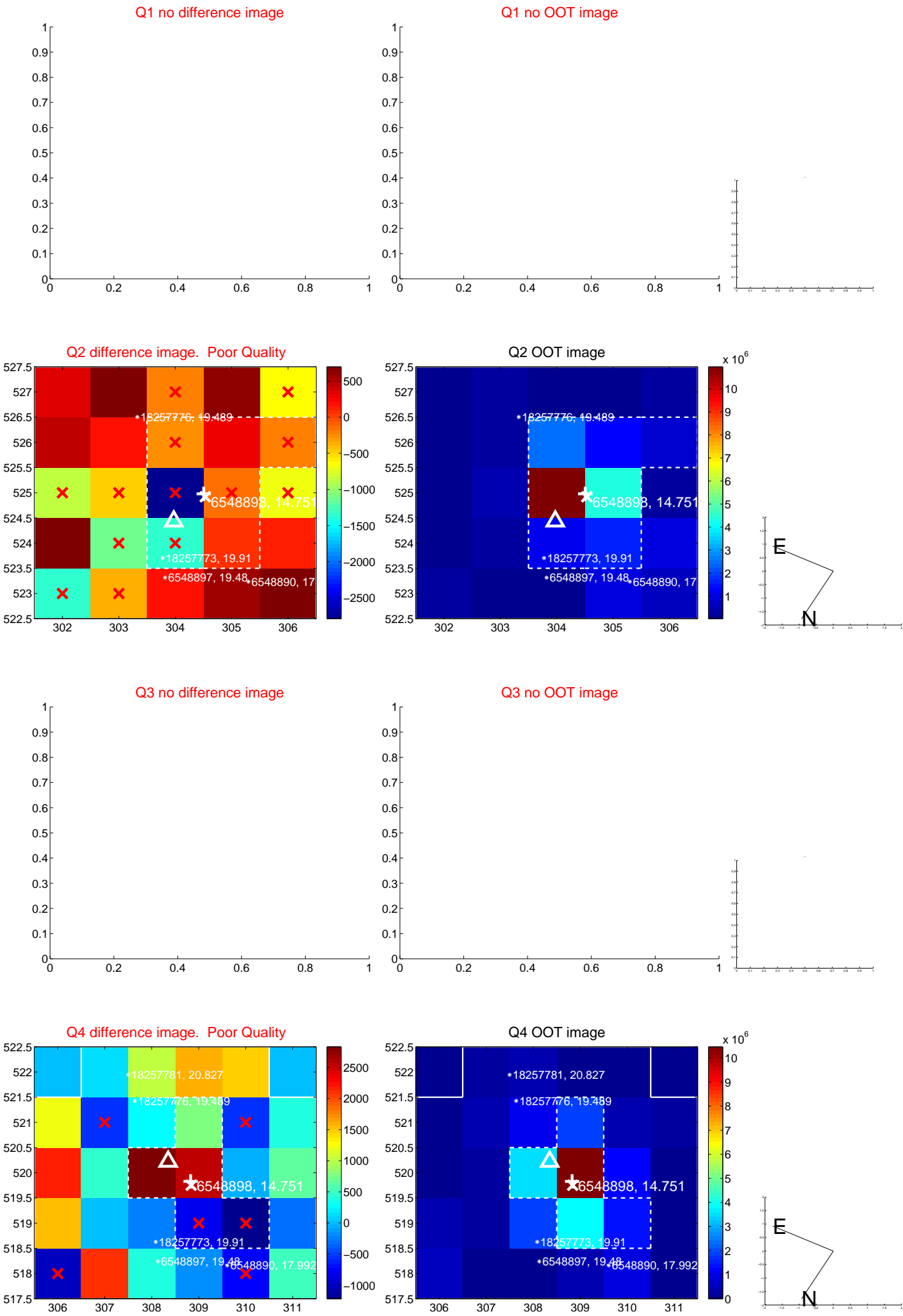


offset from photometric centroids

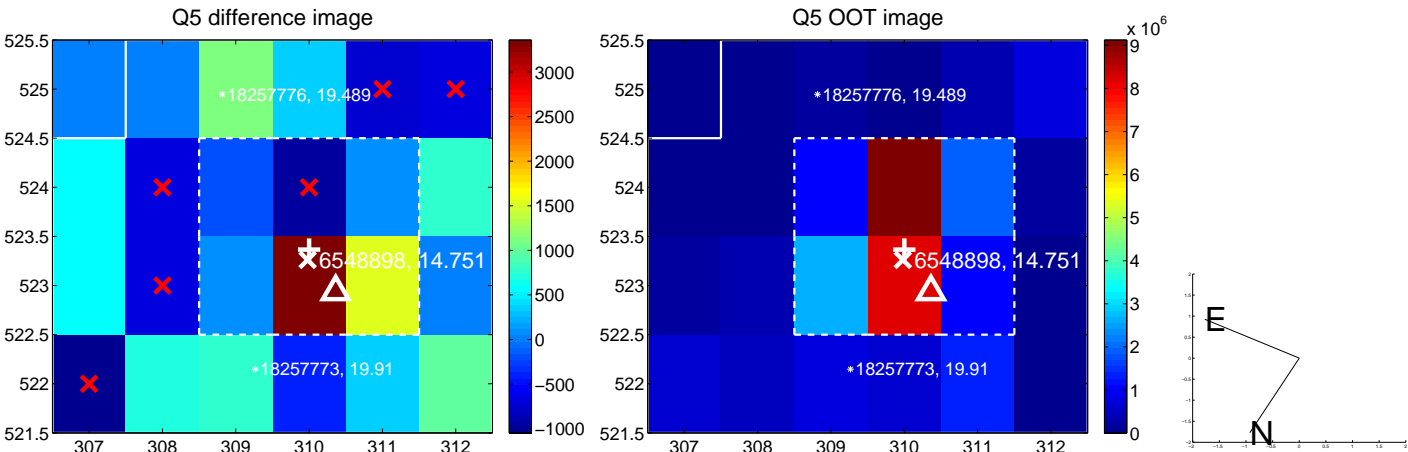


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

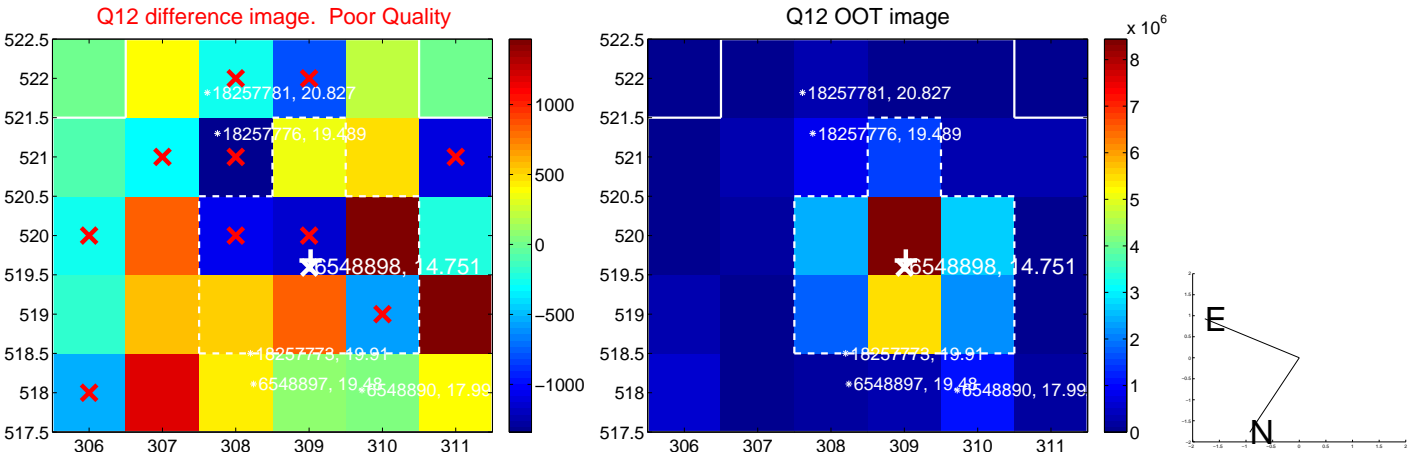
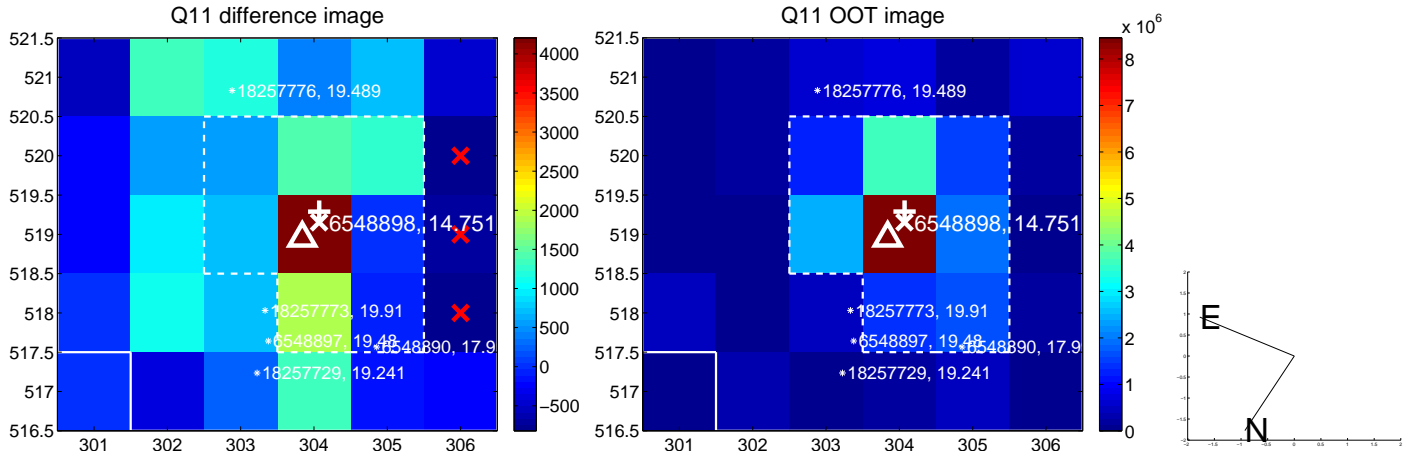
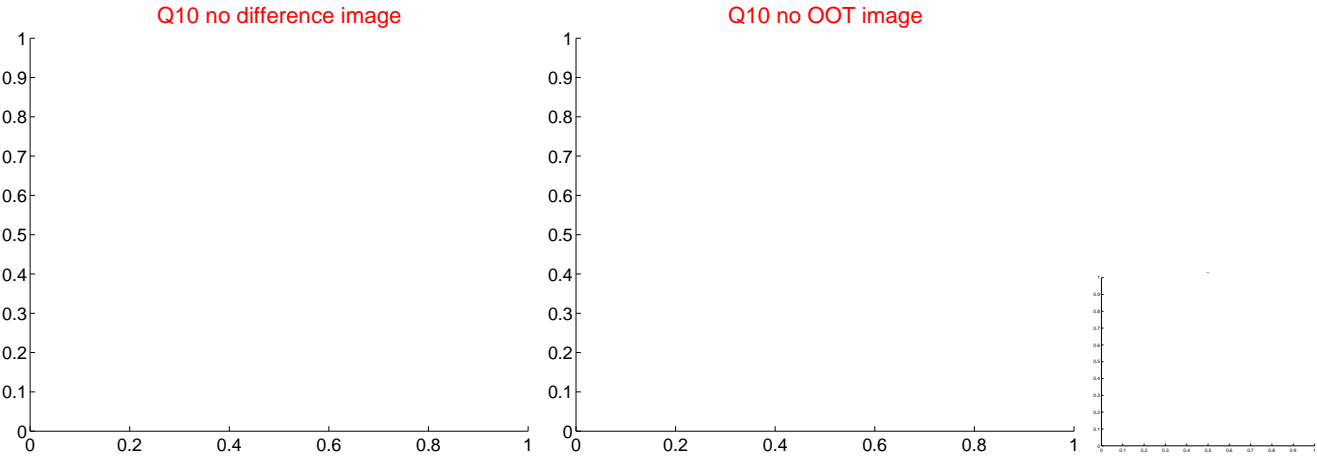
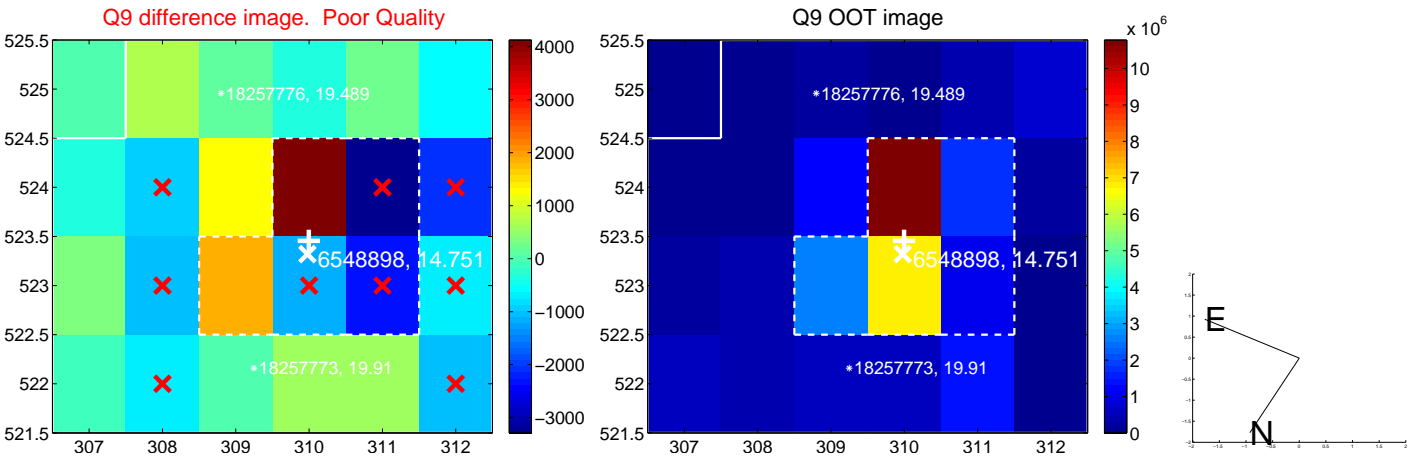
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



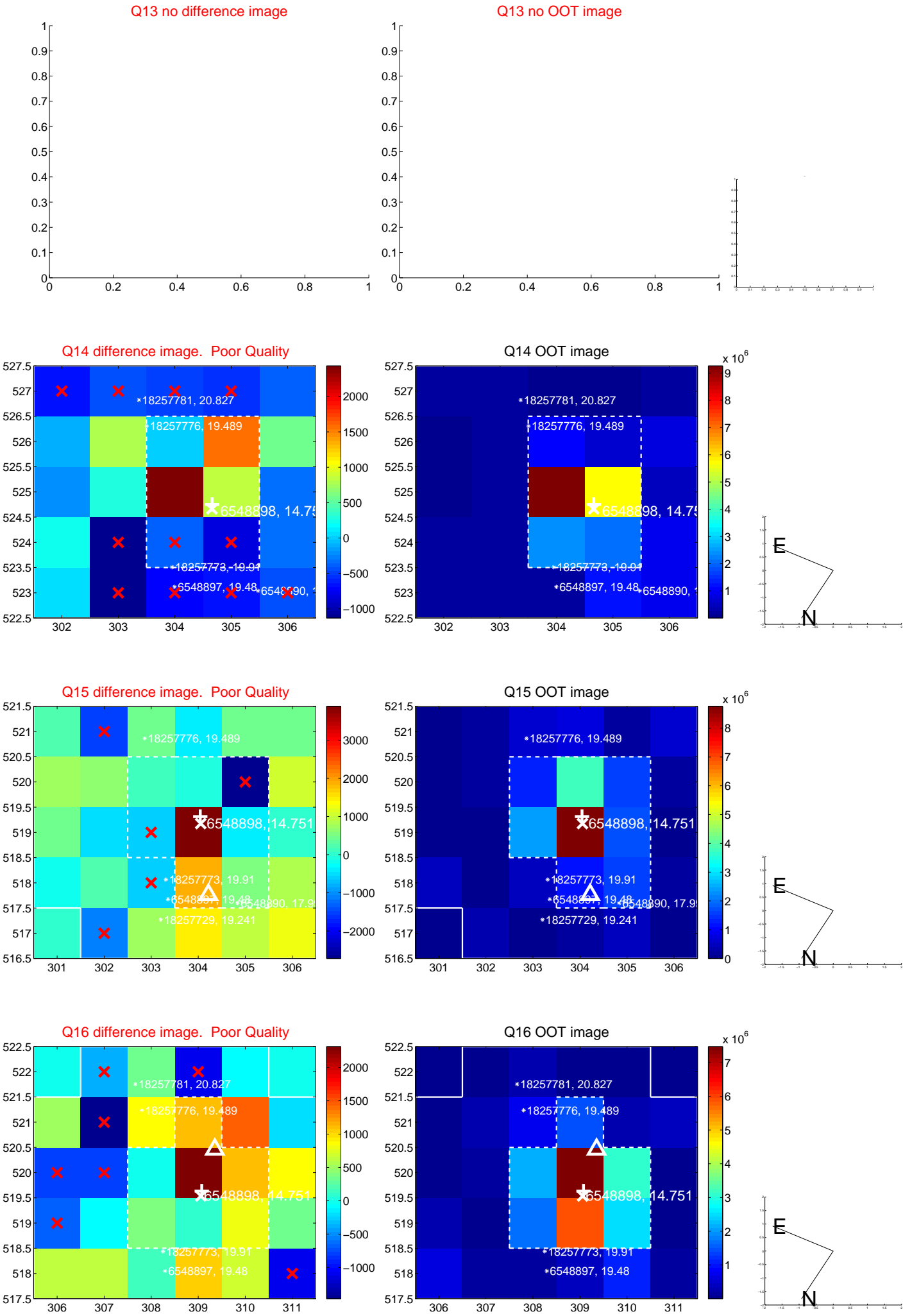
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



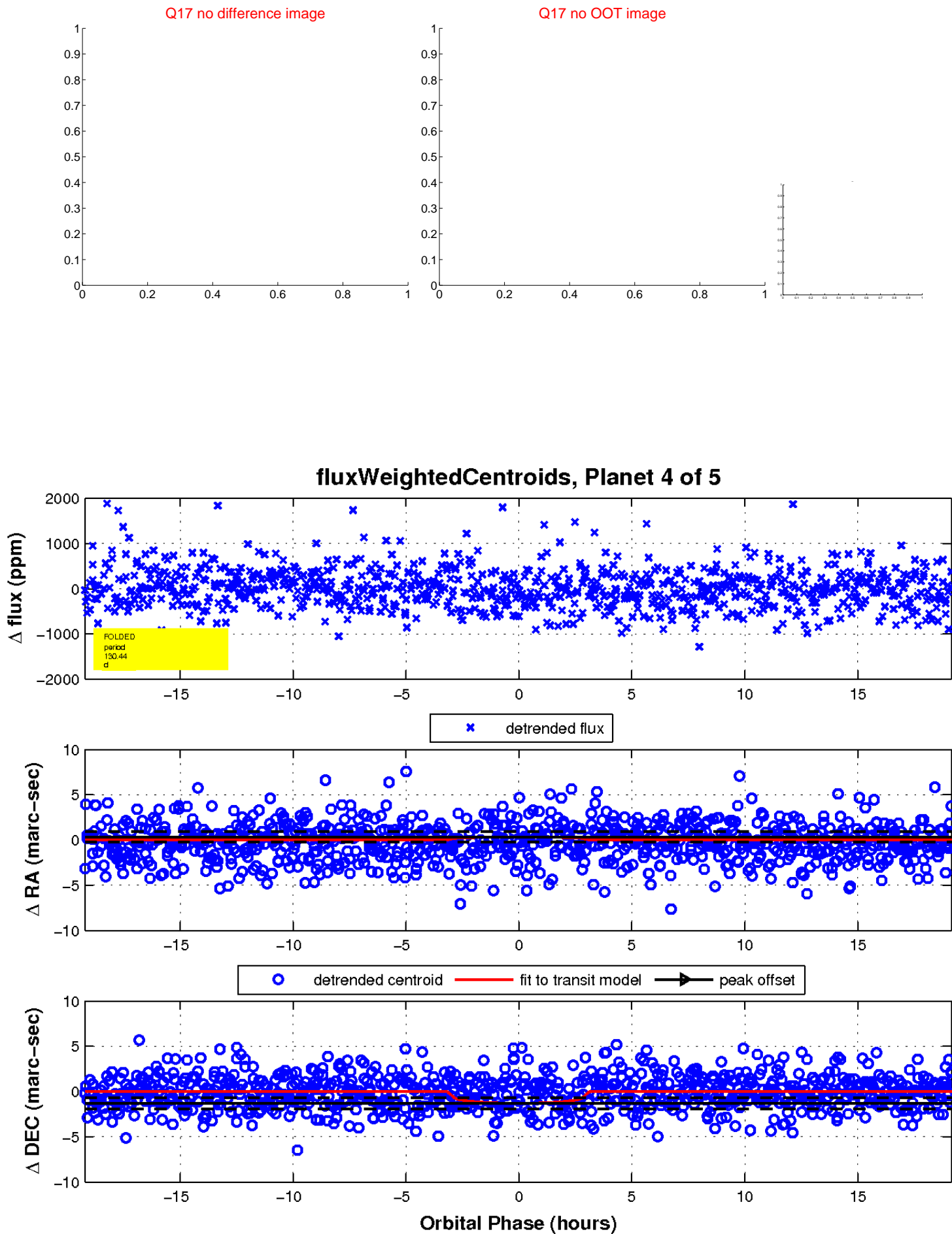
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

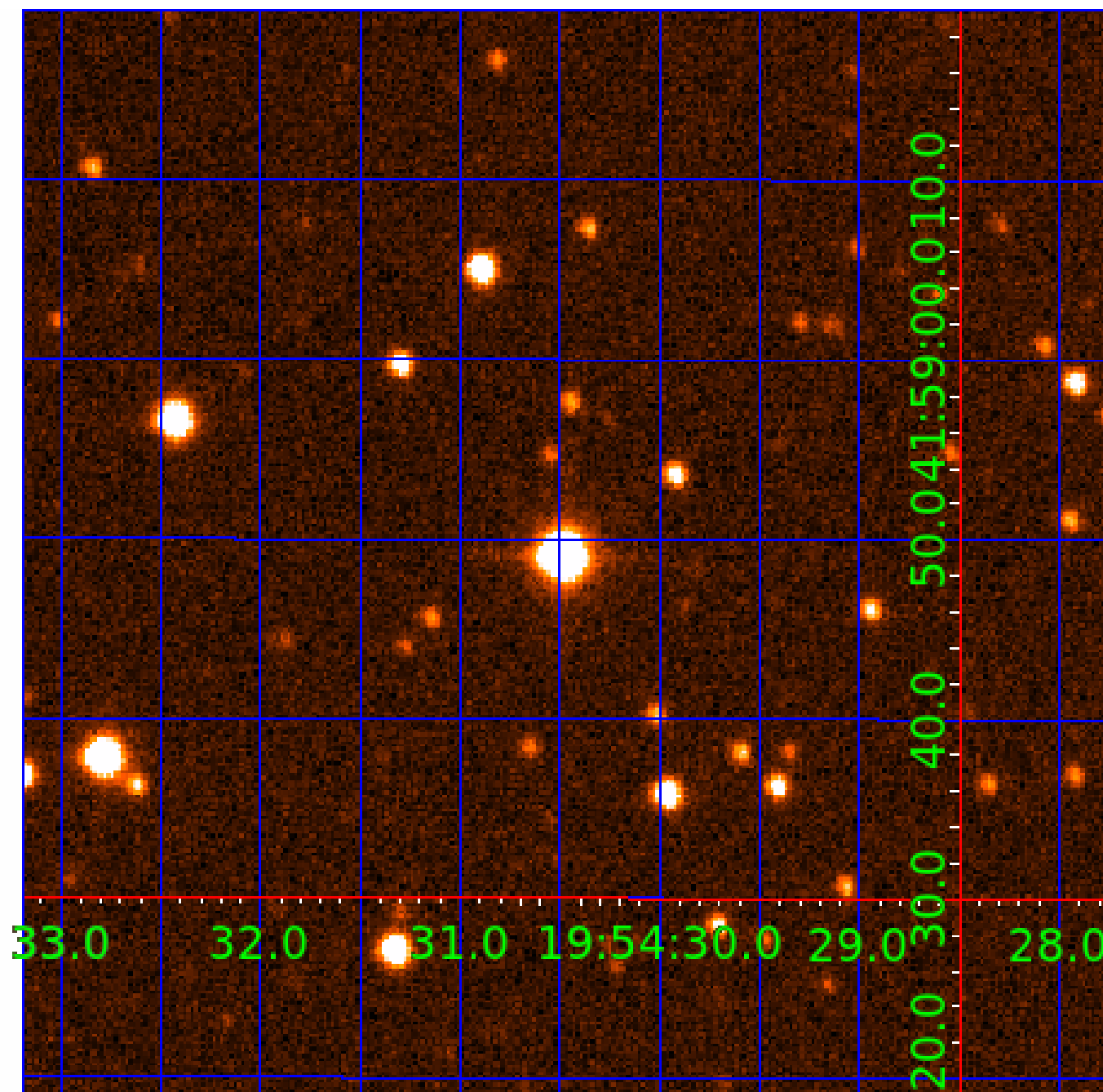


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006548898

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})
006548898-01	OBS	No	0.964485	132.401555	44.1	4.854	10.8	8.2	0.61	3830	0.39	271.70
006548898-02	OBS	No	184.453924	312.014894	656.9	9.455	15.3	7.0	0.61	3830	1.66	0.25
006548898-03	OBS	No	144.113449	156.046462	813.1	4.218	11.3	8.8	0.61	3830	1.88	0.34
006548898-04	OBS	No	130.442857	236.613313	473.5	6.407	8.0	6.0	0.61	3830	1.51	0.39
006548898-05	OBS	No	223.313792	194.600350	706.1	3.013	7.6	7.4	0.61	3830	1.89	0.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006548898-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
006548898-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006548898-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006548898-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
006548898-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS

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

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

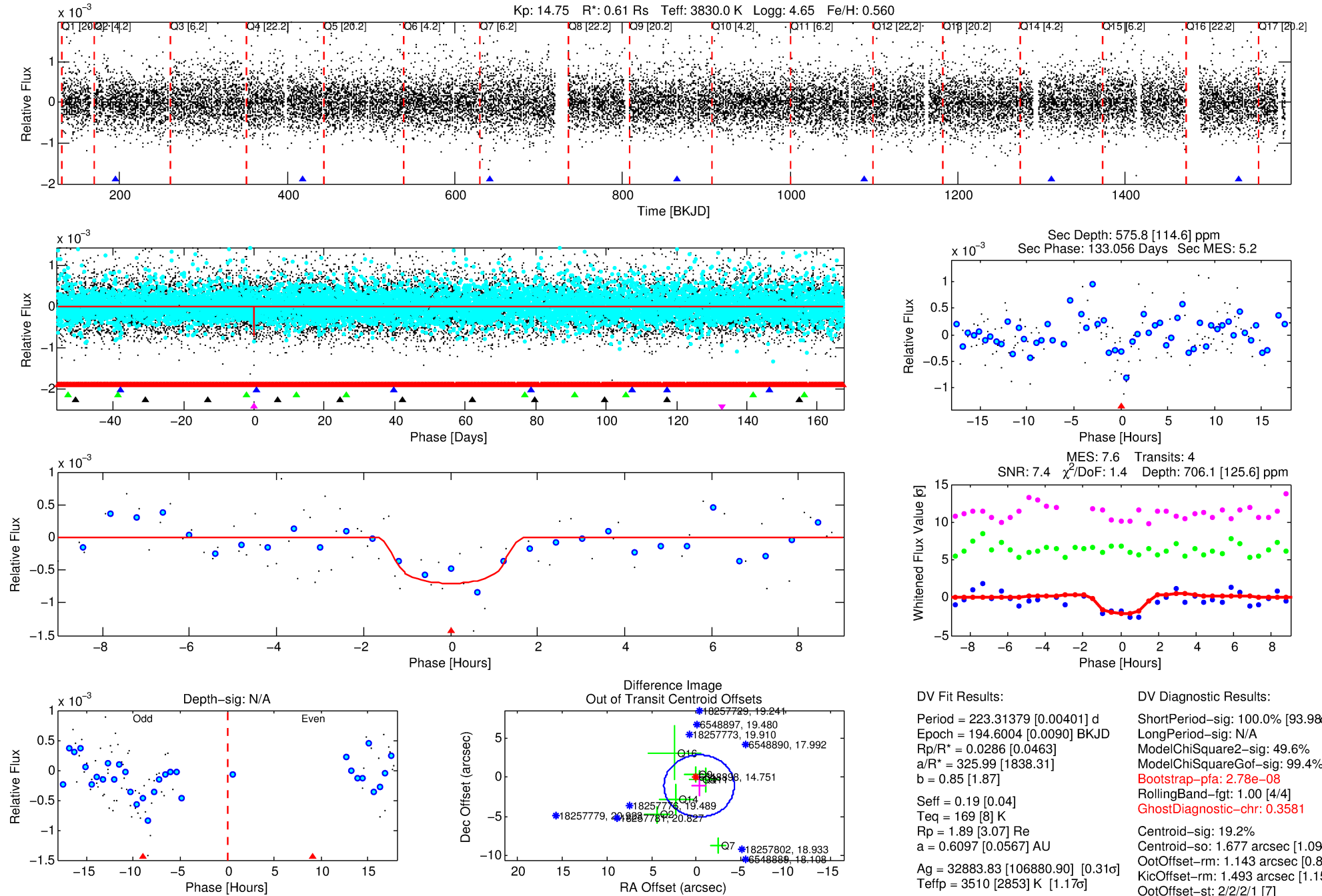
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006548898-05

No Significant Match Found

DV One-Page Summary

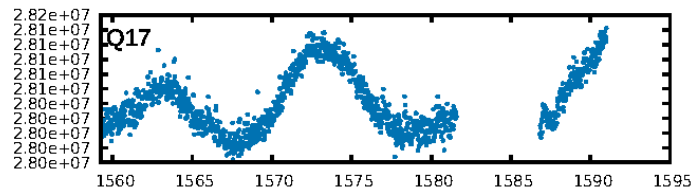
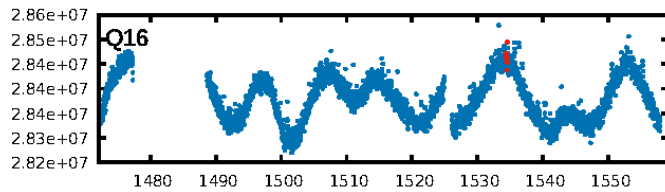
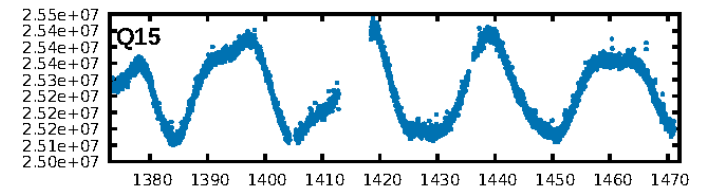
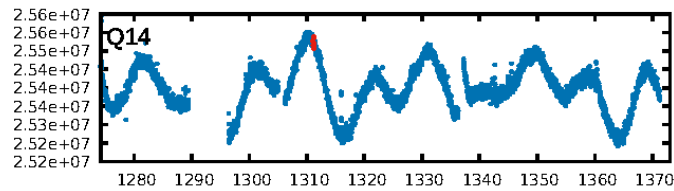
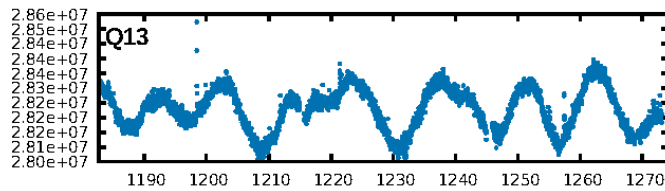
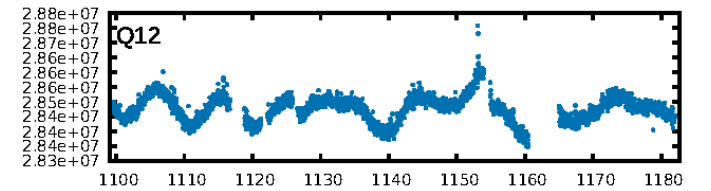
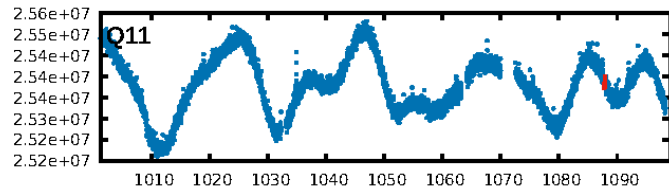
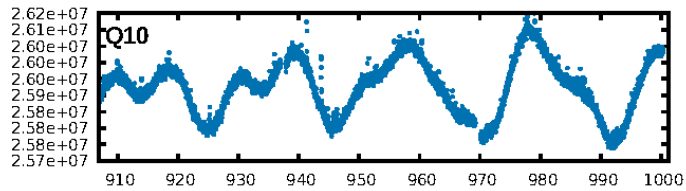
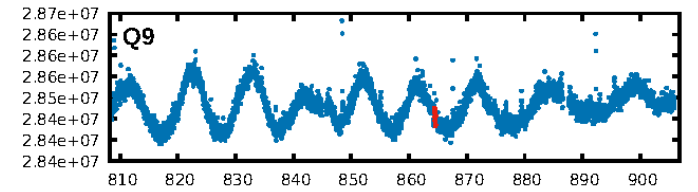
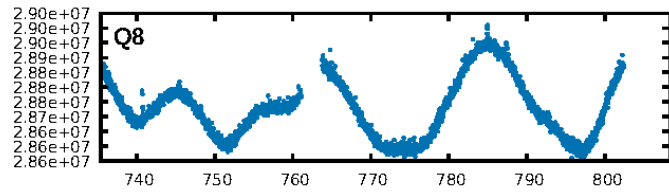
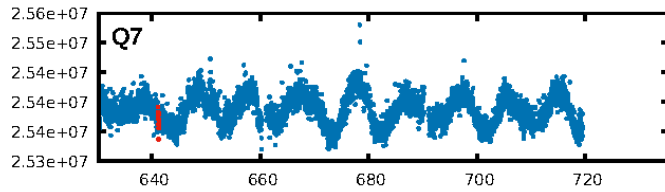
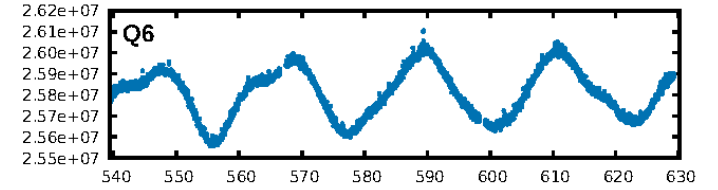
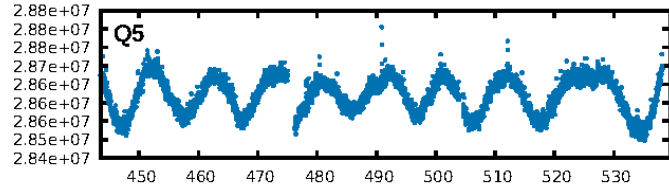
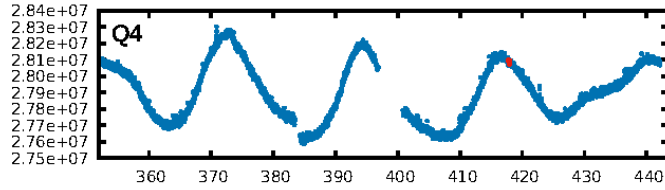
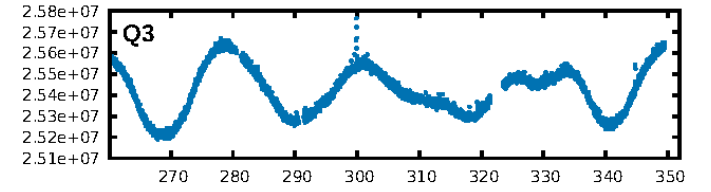
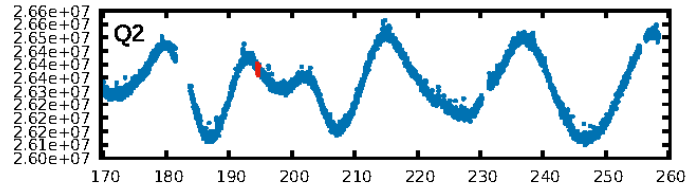
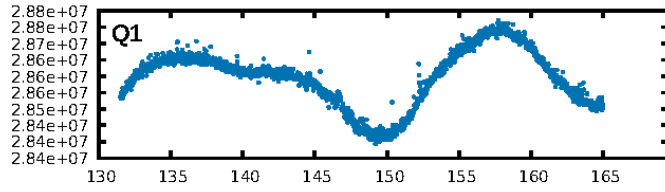
KIC: 6548898 Candidate: 5 of 5 Period: 223.314 d



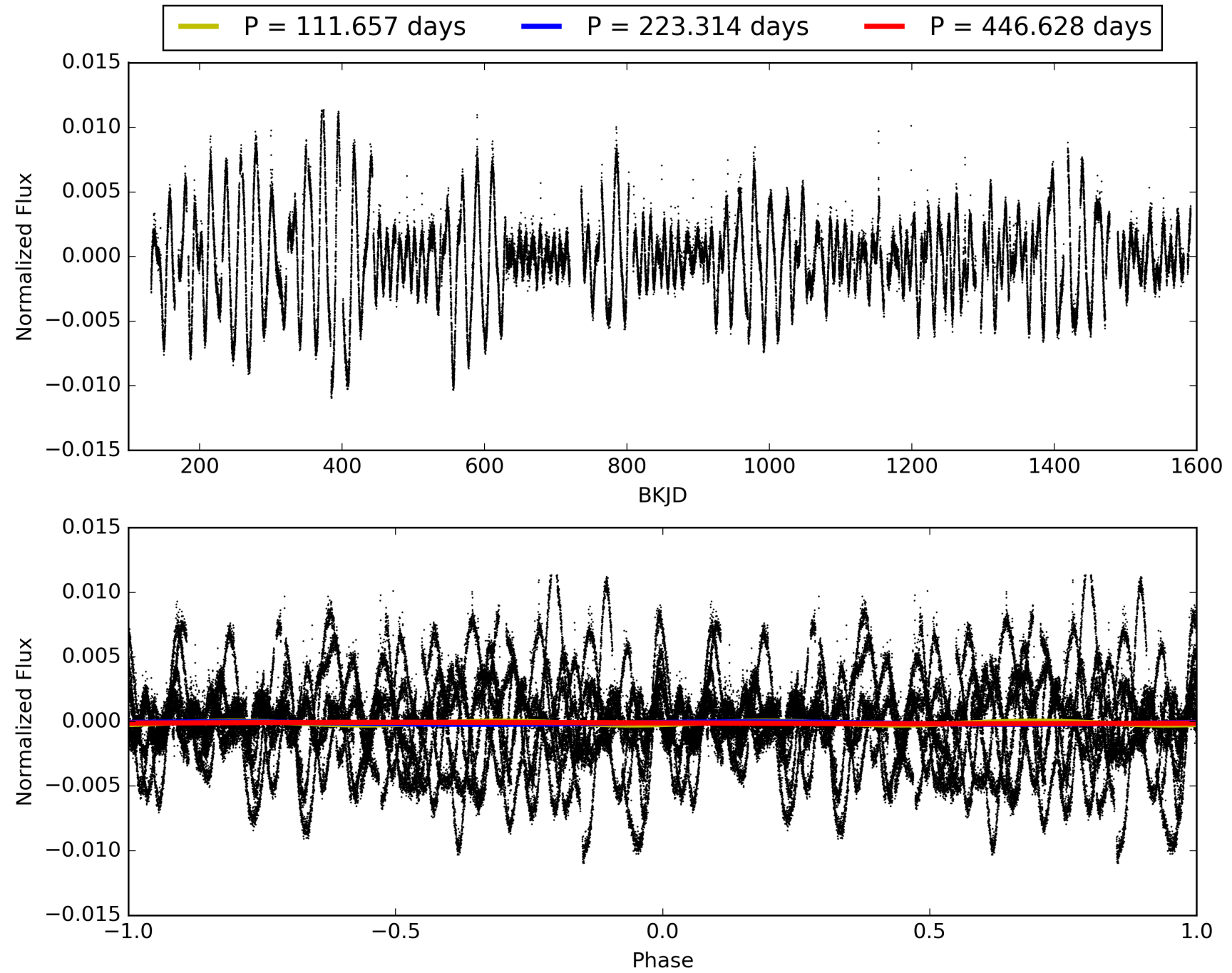
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:50:18 Z

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

TCE 006548898-05, PDC Light Curves

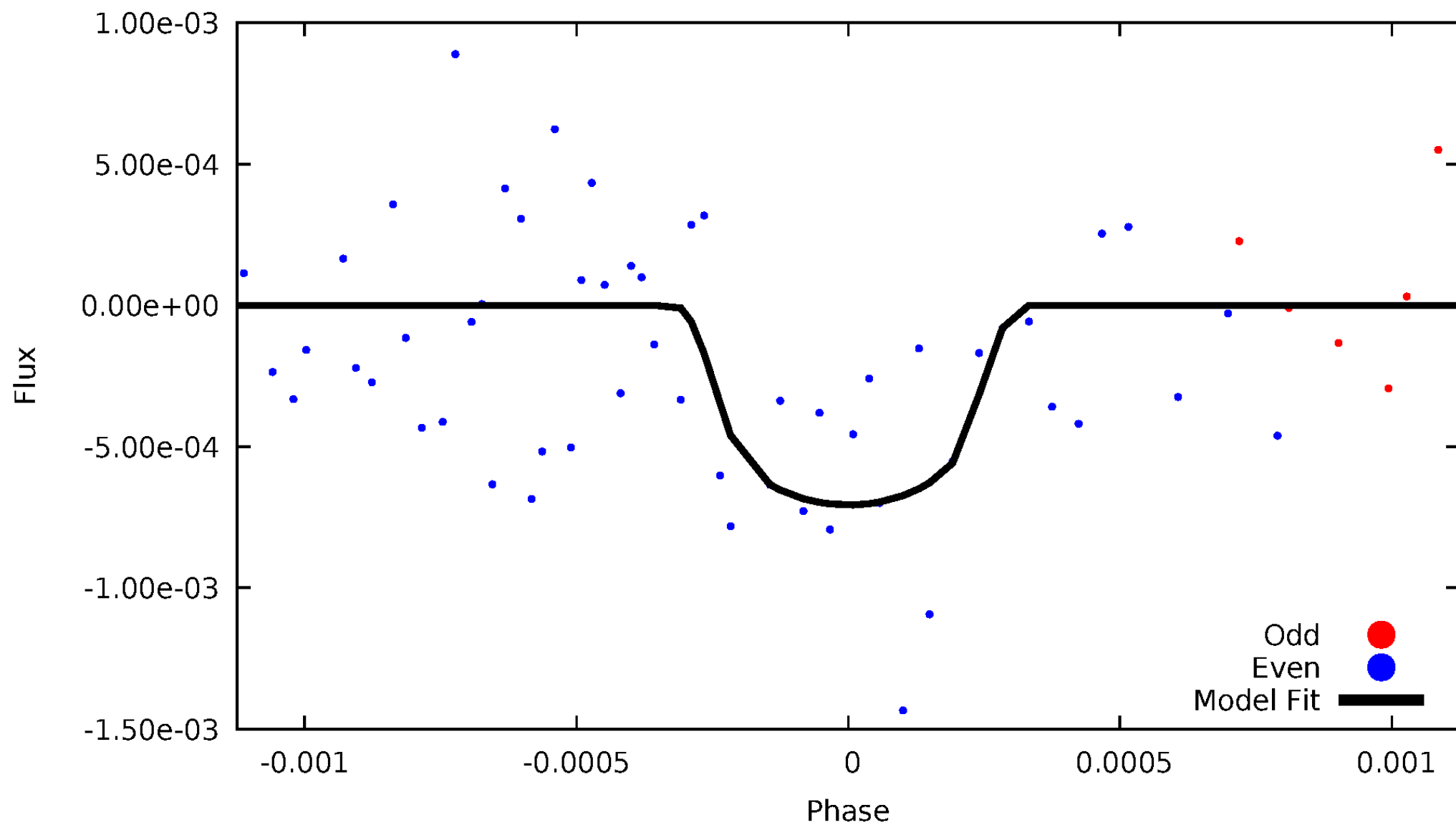


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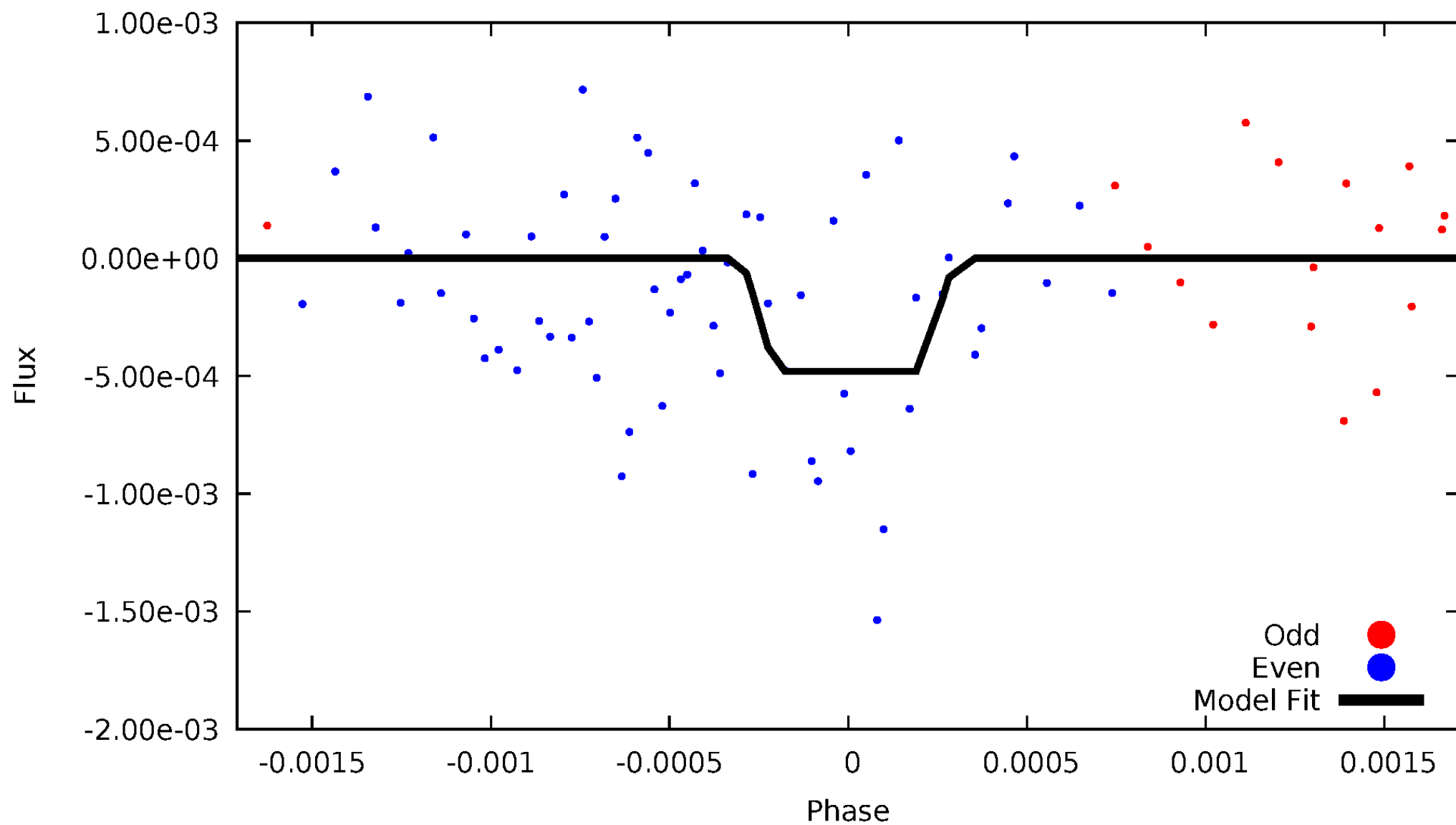
DV Odd/Even

TCE 006548898-05



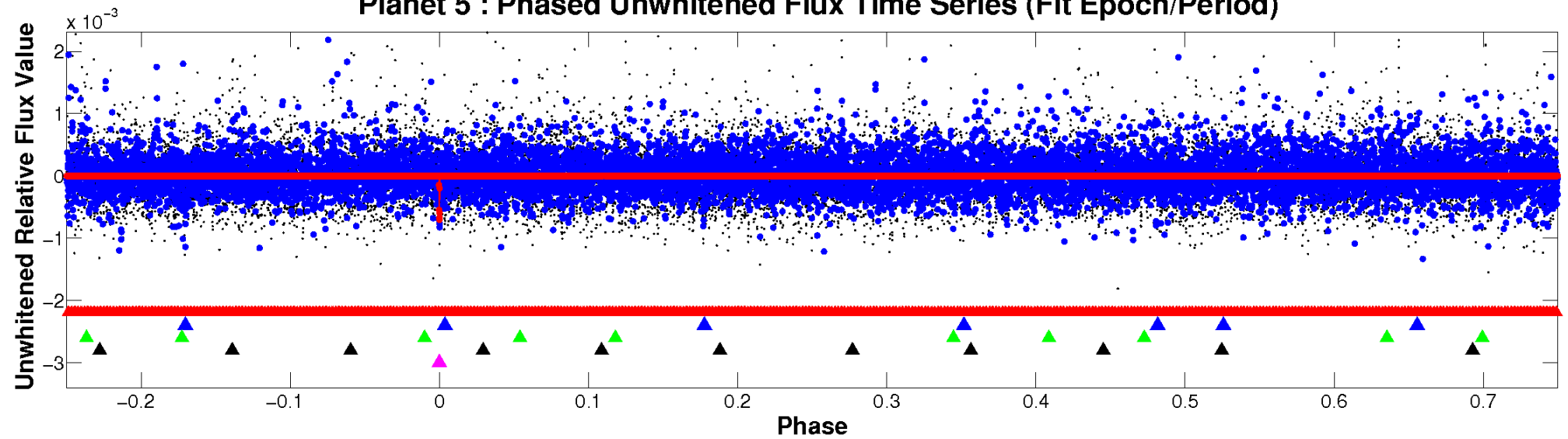
ALT Odd/Even

TCE 006548898-05

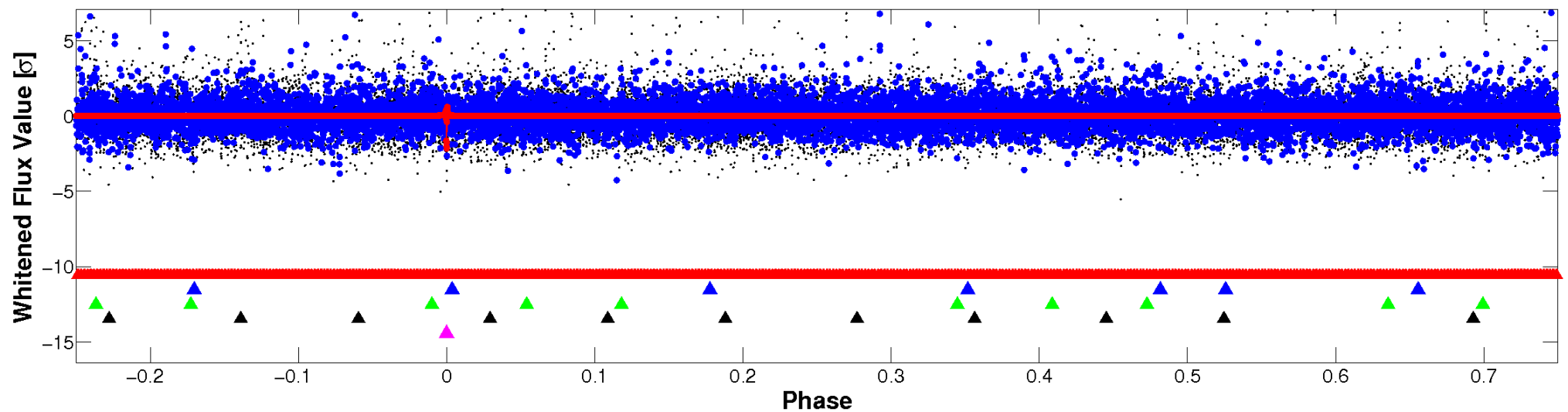


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

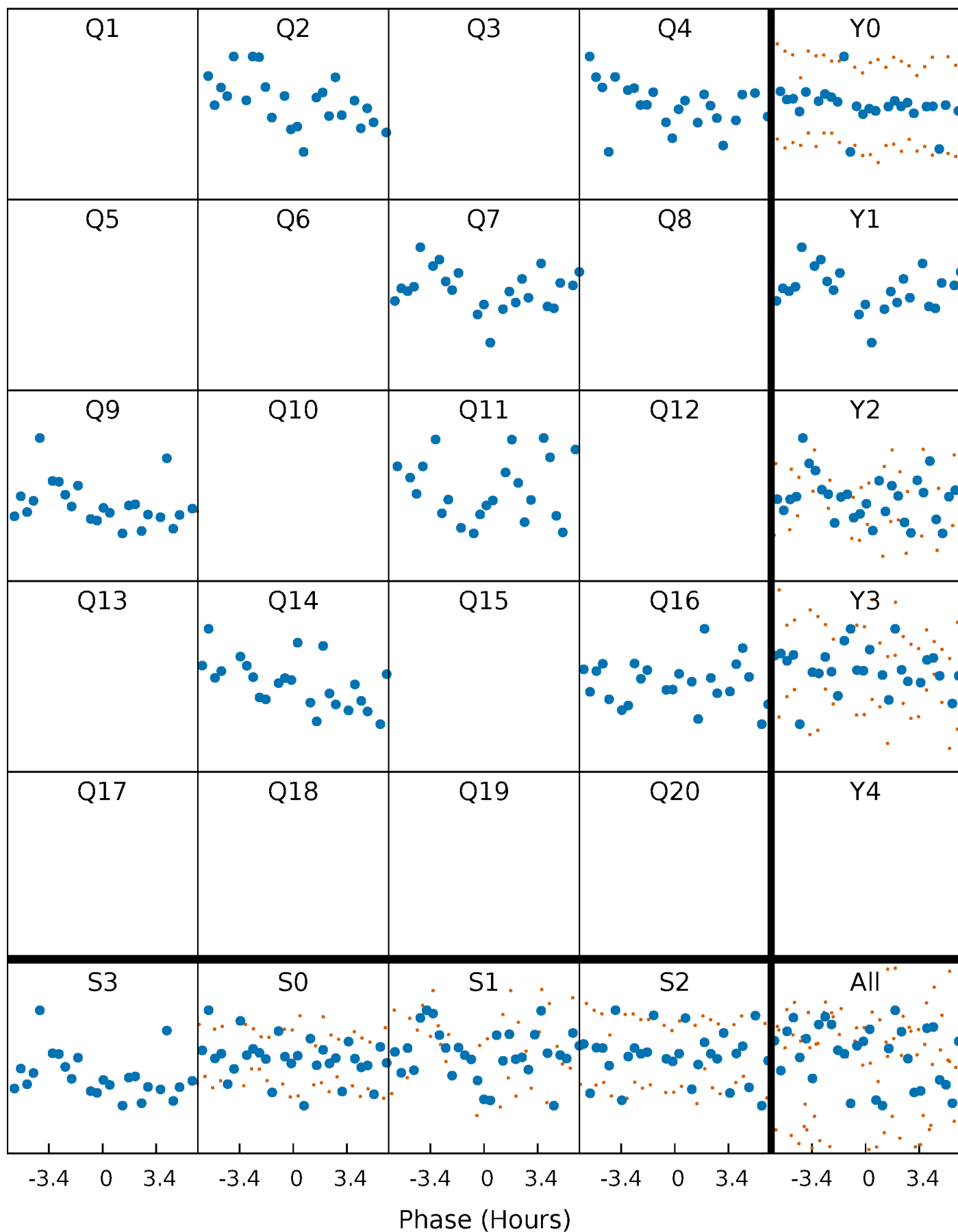


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



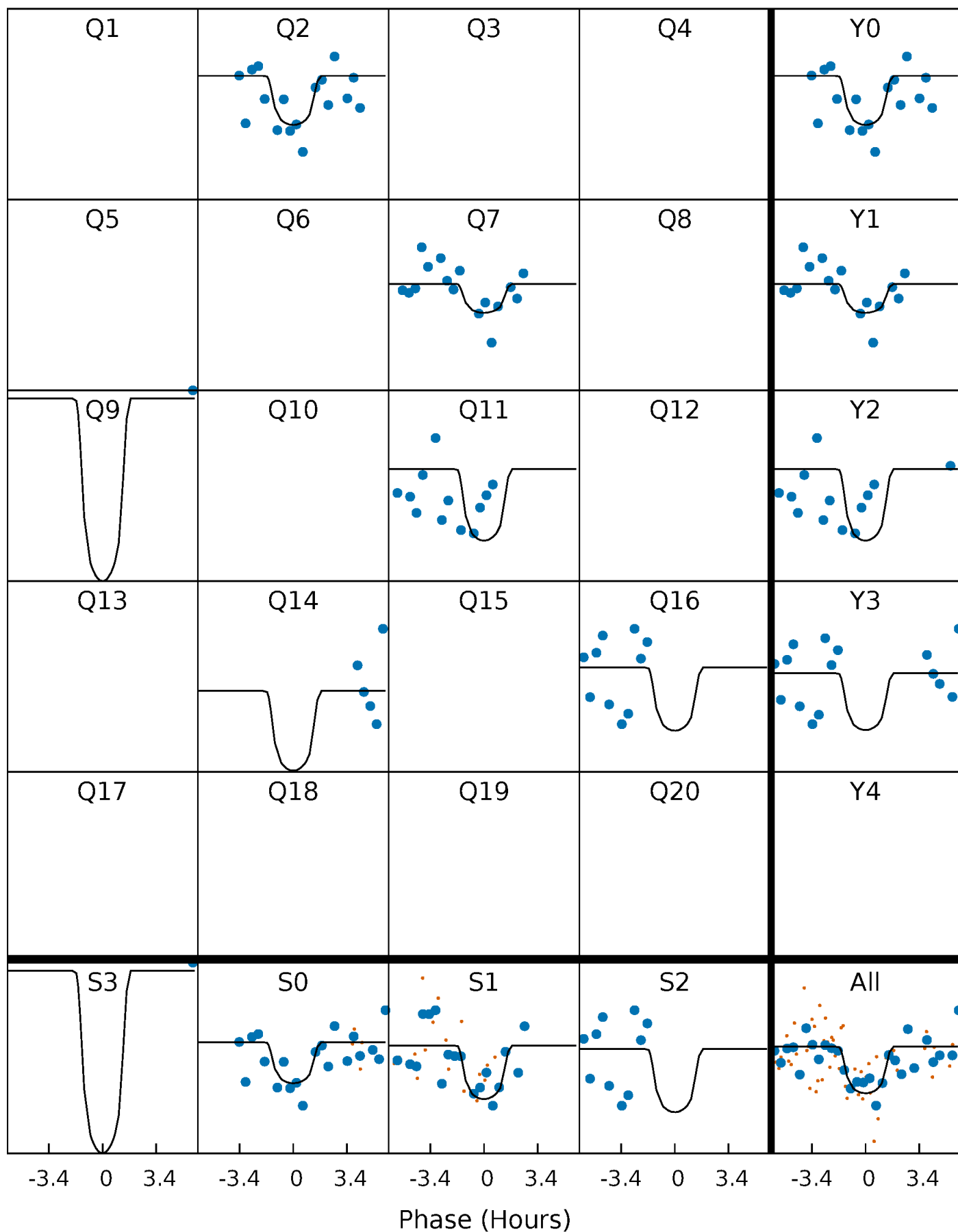
PDC Quarter-Phased Transit Curves

TCE 006548898-05 $P=223.313792$ Days $T_0=194.600350$ (BKJD)



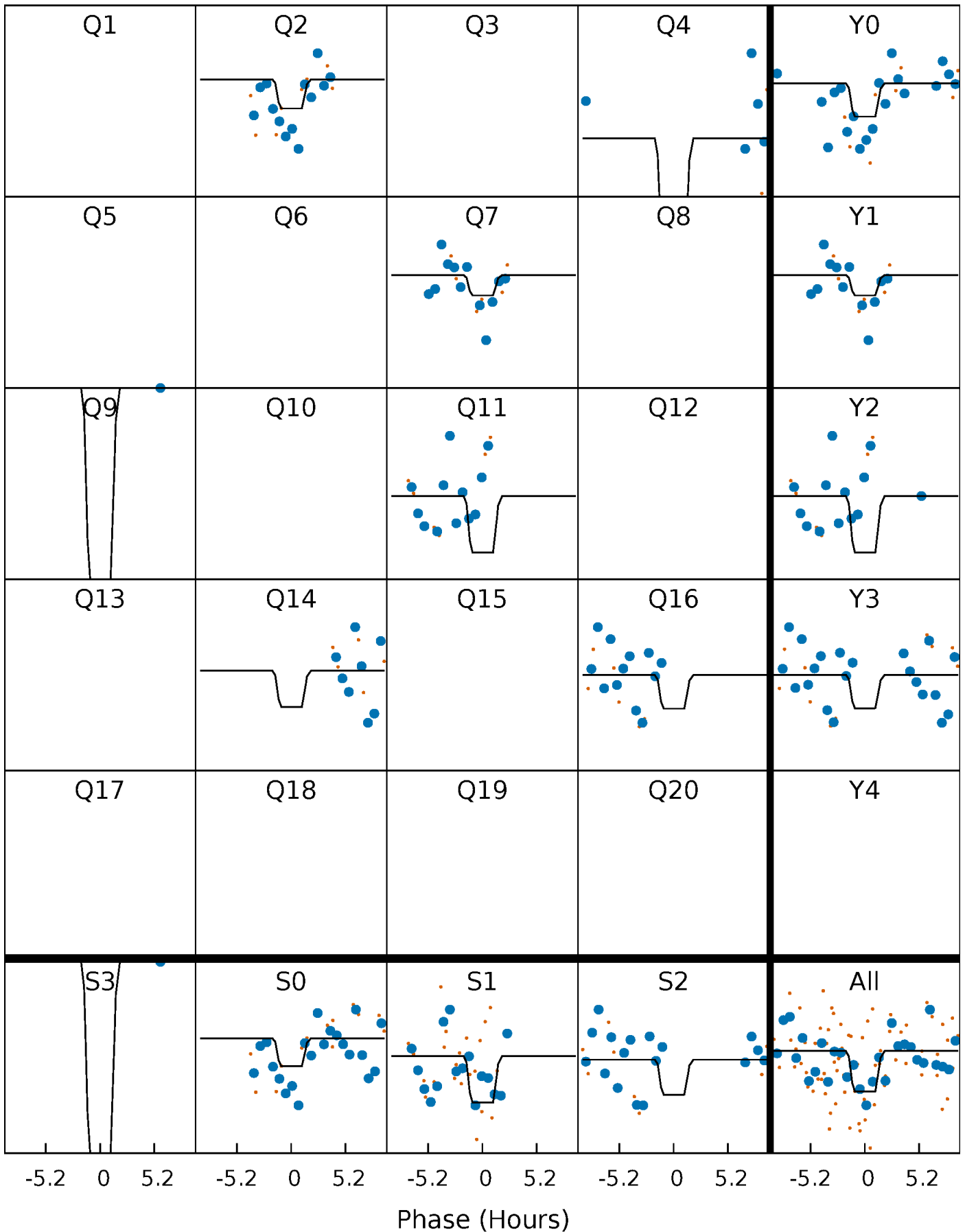
DV Quarter-Phased Transit Curves

TCE 006548898-05 $P=223.313792$ Days $T_0=194.600350$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

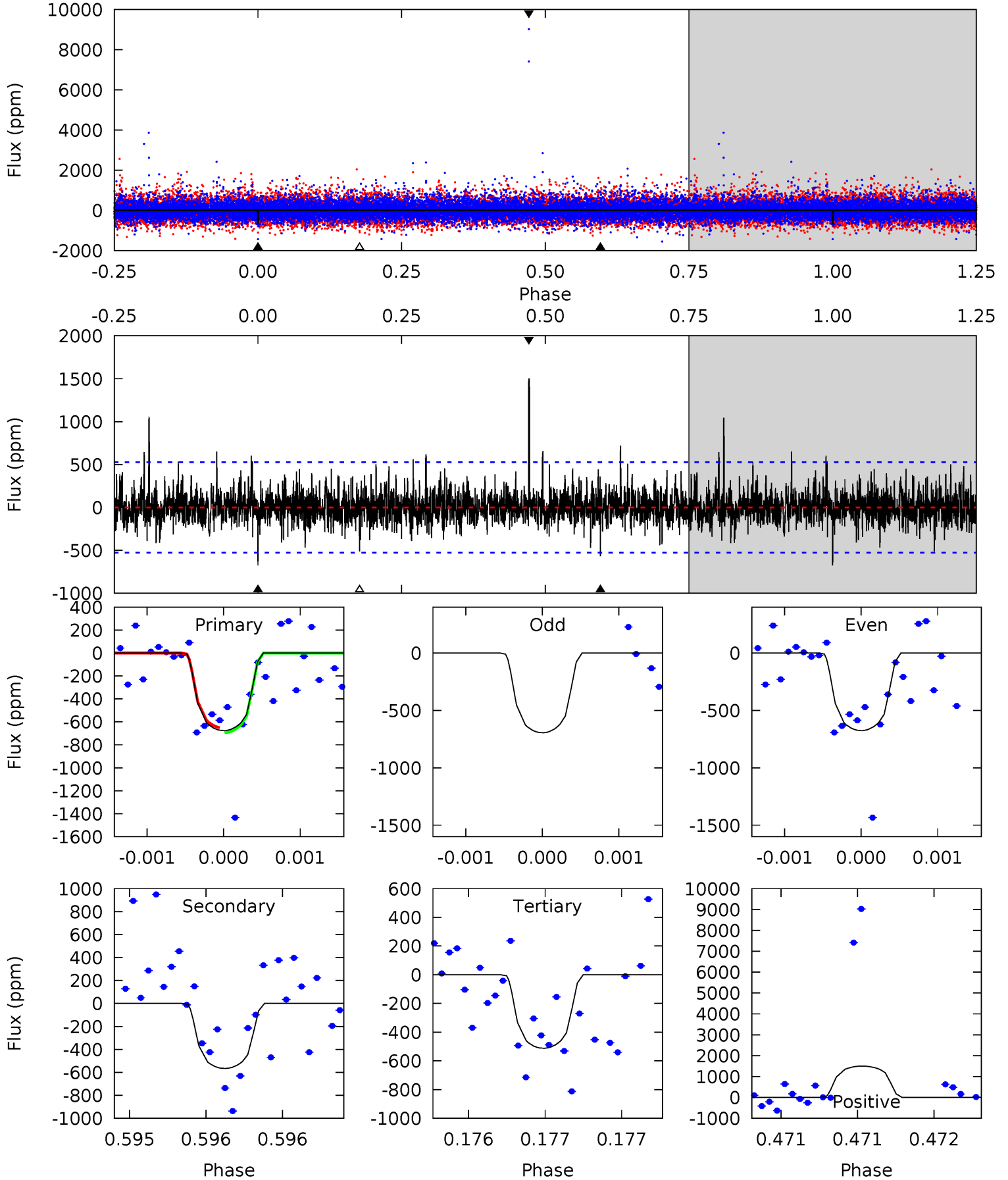
TCE 006548898-05 $P=223.310296$ Days $T_0=194.611790$ (BKJD)



DV Model-Shift Uniqueness Test

006548898-05, P = 223.313792 Days, E = 194.600350 Days

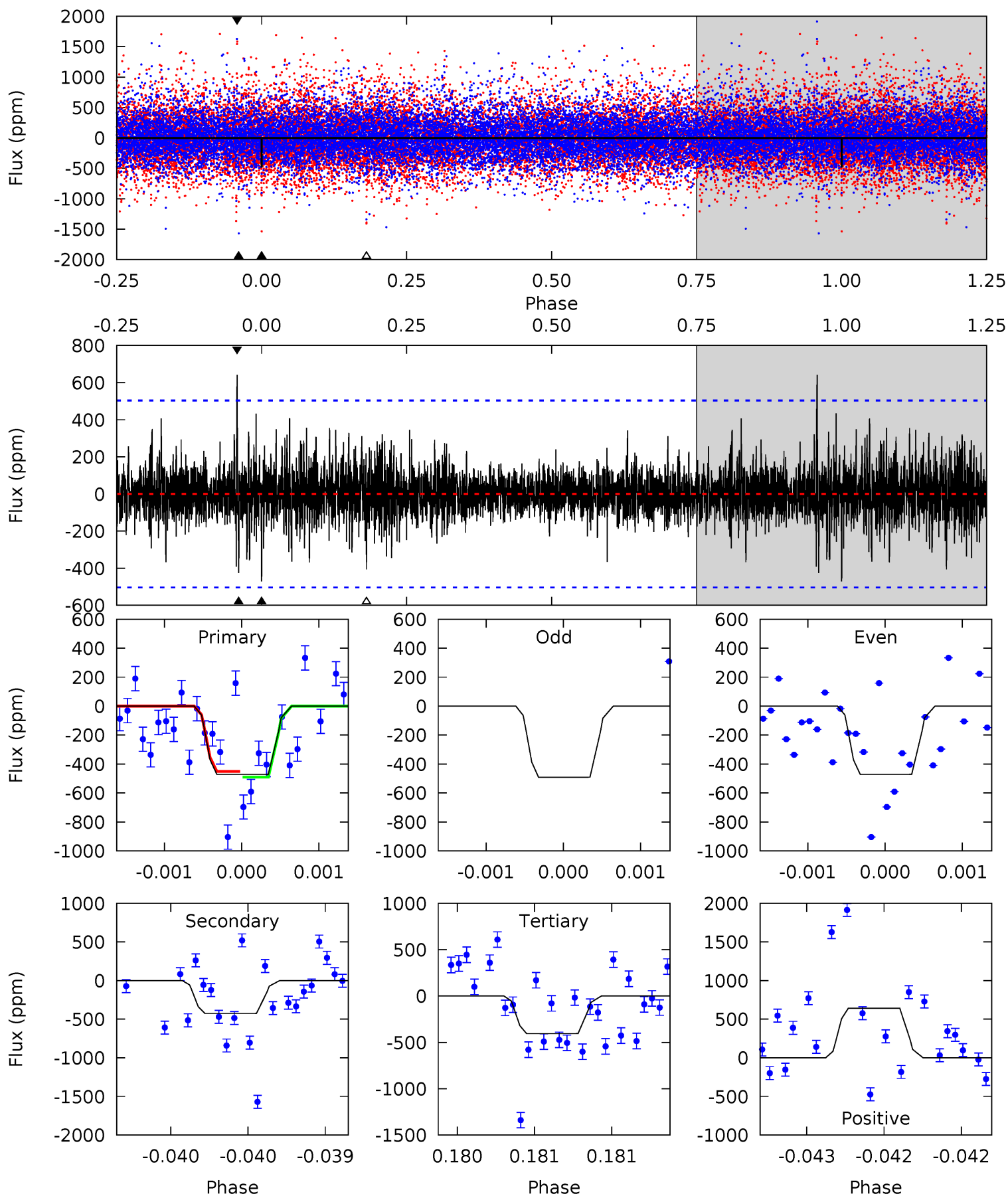
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.08	5.93	5.36	15.7	5.53	3.41	1.52	1.71	-8.64	0.57	-9.79	0.11	0.86	0.69	0.23



Alt Model-Shift Uniqueness Test

006548898-05, P = 223.310296 Days, E = 194.611790 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.20	4.70	4.47	7.07	5.56	3.46	1.06	0.73	-1.87	0.23	-2.37	0.12	0.66	0.58	0.22



Stellar Parameters For KIC 006548898

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3830^{+120}_{-147}	$4.654^{+0.068}_{-0.016}$	$0.560^{+0.050}_{-0.300}$	$0.607^{+0.028}_{-0.070}$	$0.606^{+0.035}_{-0.060}$	$3.808^{+1.215}_{-0.336}$
	+3%/-4%	+1%/-0%	+9%/-54%	+5%/-12%	+6%/-10%	+32%/-9%
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 006548898-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-566 ± 95	$2.97^{+2.43}_{-2.11}$	233^{+9}_{-10}	3124^{+1639}_{-510}	$13364^{+138020}_{-9630}$
Alt.	-426 ± 91	$2.59^{+2.57}_{-1.77}$	232^{+8}_{-10}	3068^{+1444}_{-494}	$12346^{+105734}_{-9260}$

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 $A_{obs} \gg 1.0$

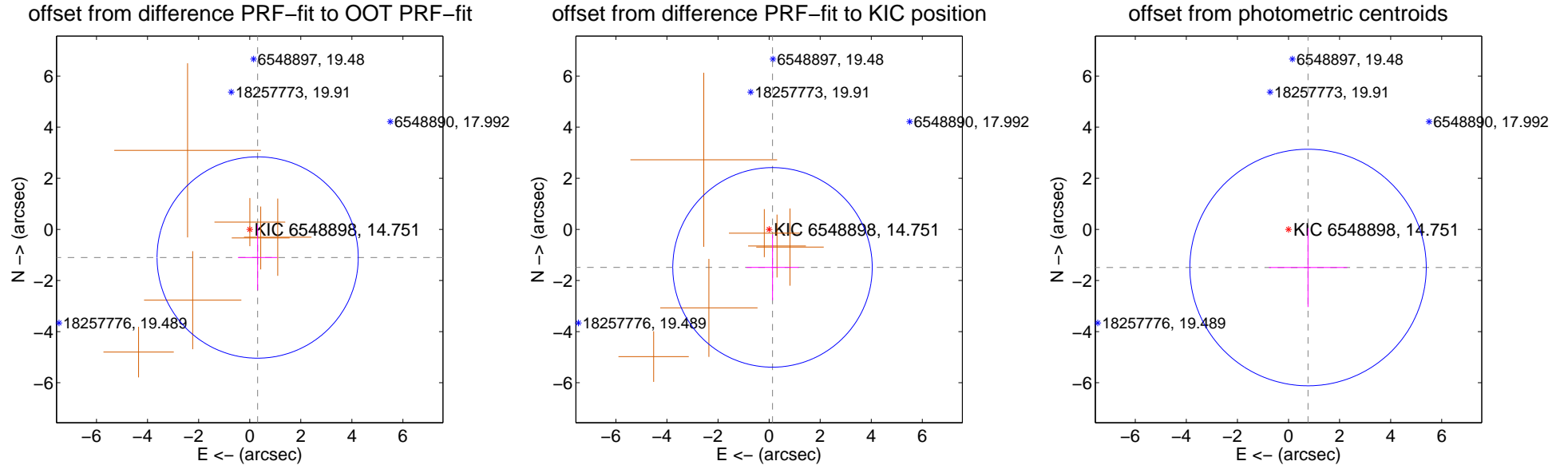
DV Centroid Data

Supplemental centroid analysis for 006548898-05. Kepler magnitude: 14.75. Transit SNR 7.42

There are 0 quarters with good PRF difference image offsets

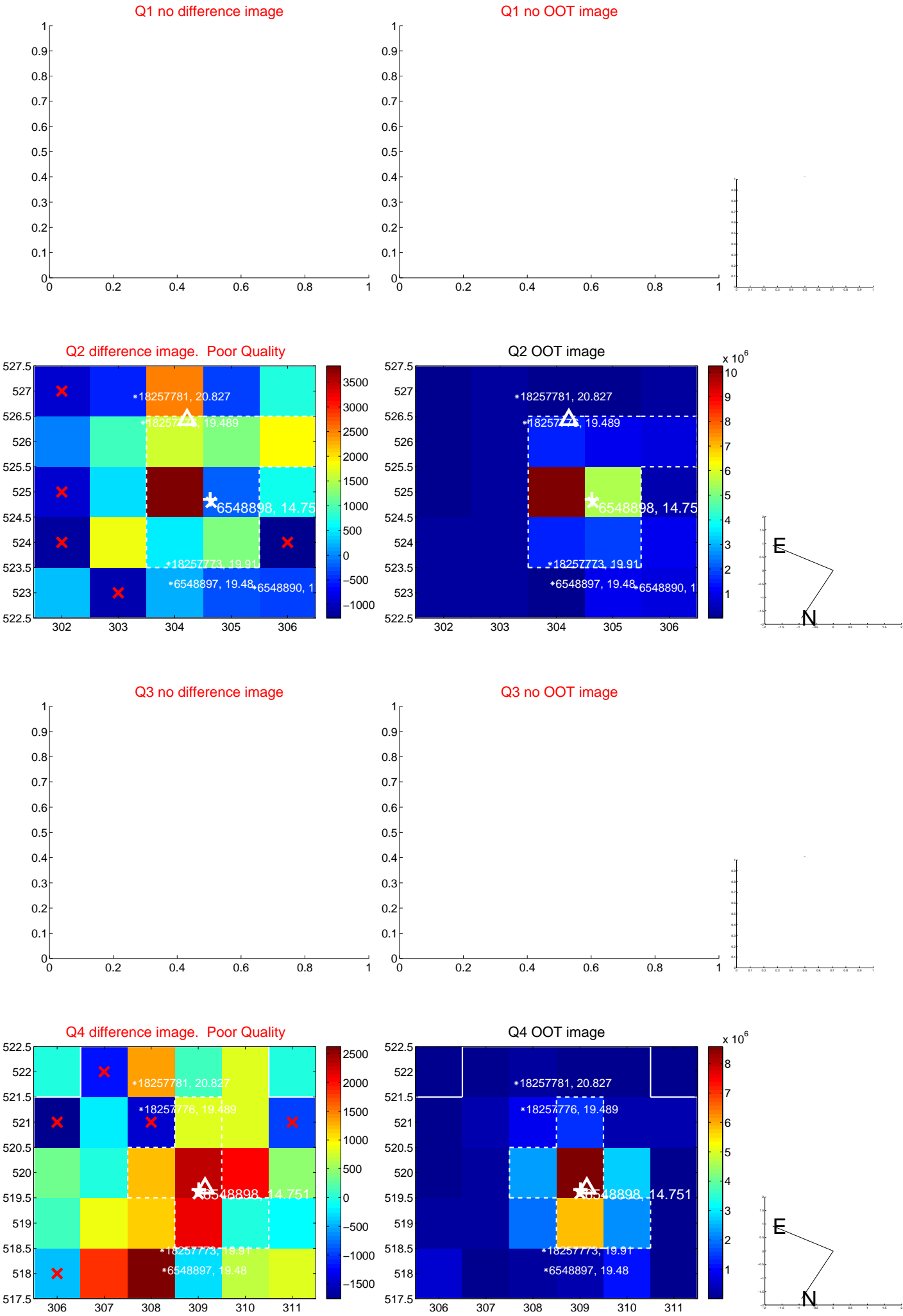
The direct PRF centroid is offset from the target star catalog position by about 0.39 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.143 ± 1.313	0.87	-0.311 ± 0.775	-1.100 ± 1.277
PRF-fit source offset from KIC position	1.493 ± 1.301	1.15	-0.133 ± 1.024	-1.487 ± 1.284
photometric centroid source offset	1.68 ± 1.54	1.09	-0.77 ± 1.53	-1.49 ± 1.54



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.

Q5 no difference image



Q5 no OOT image



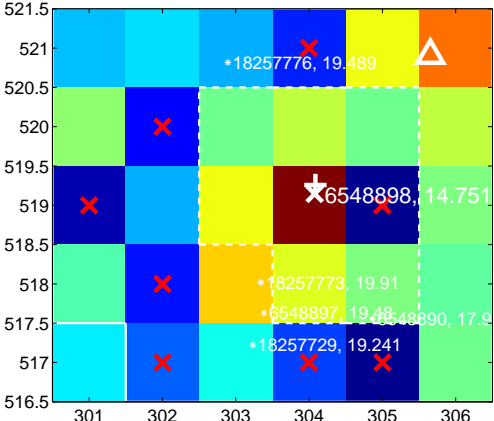
Q6 no difference image



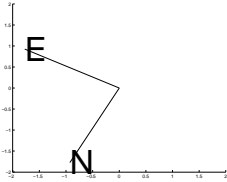
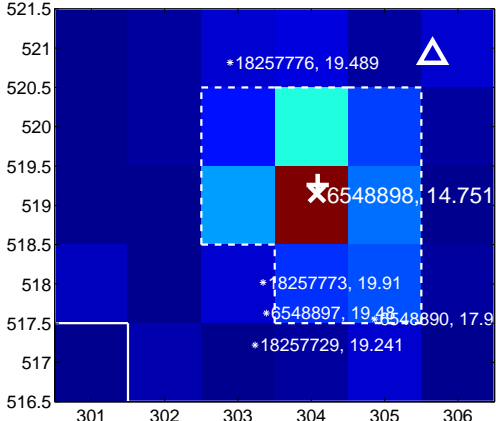
Q6 no OOT image



Q7 difference image. Poor Quality



Q7 OOT image



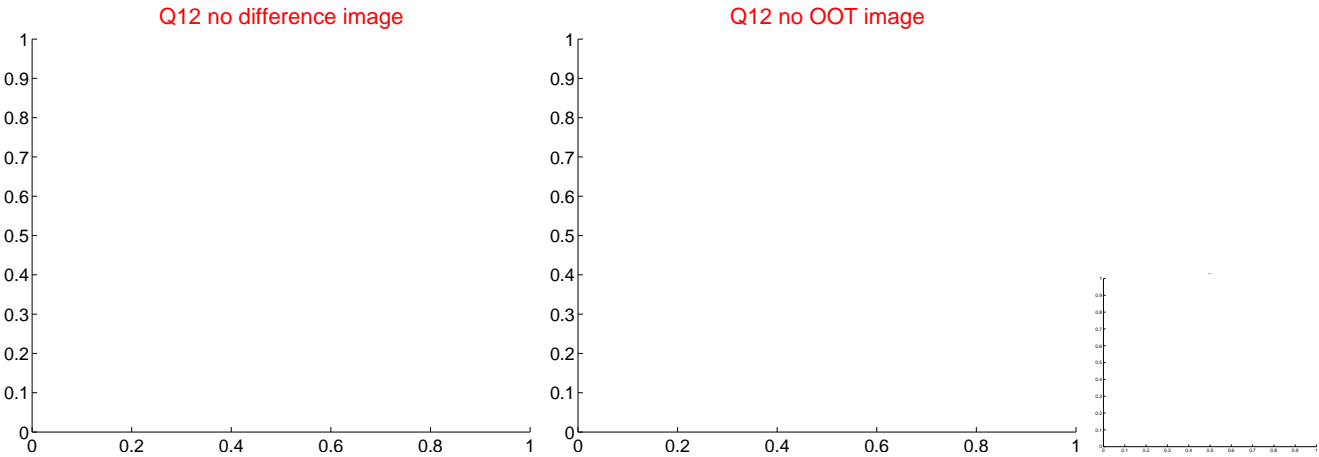
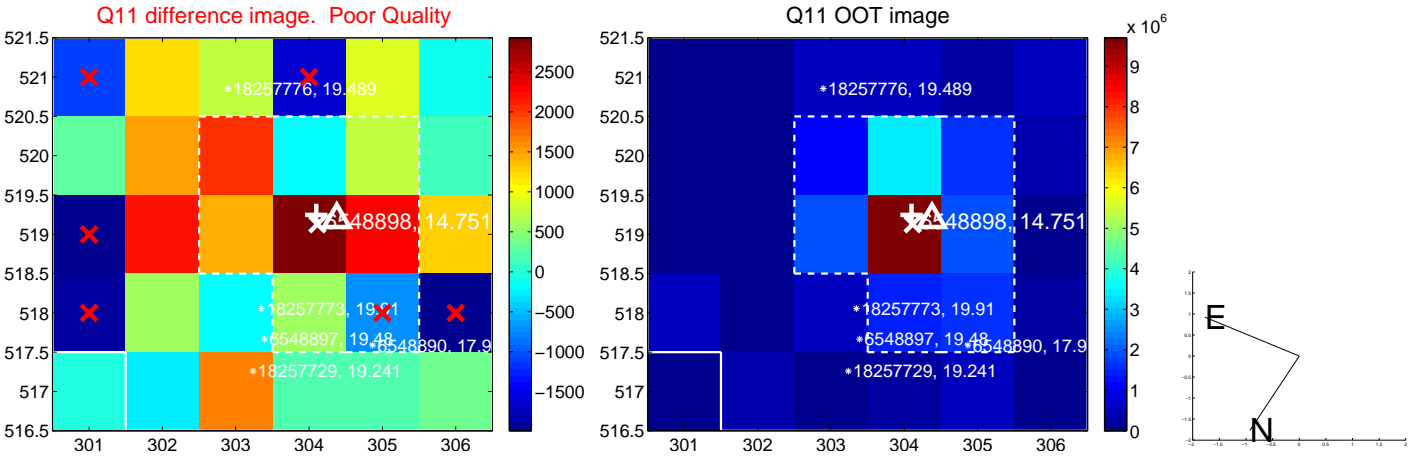
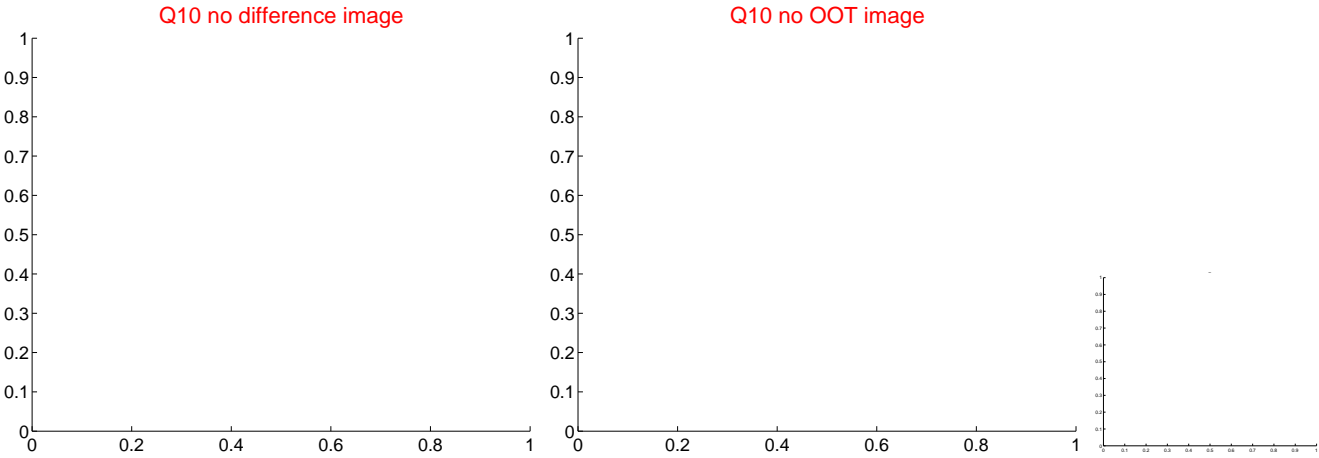
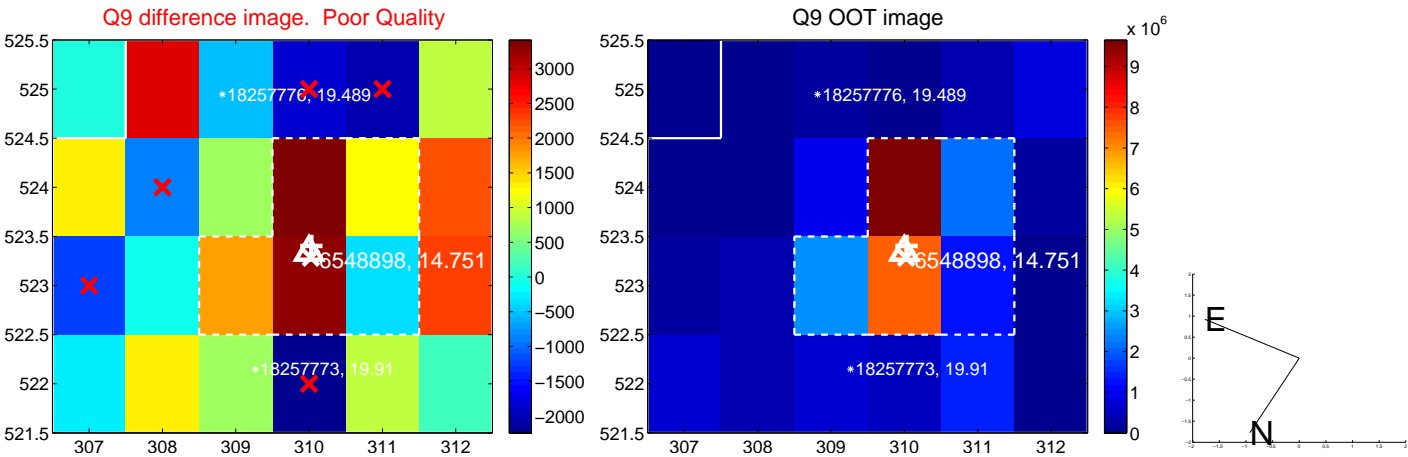
Q8 no difference image



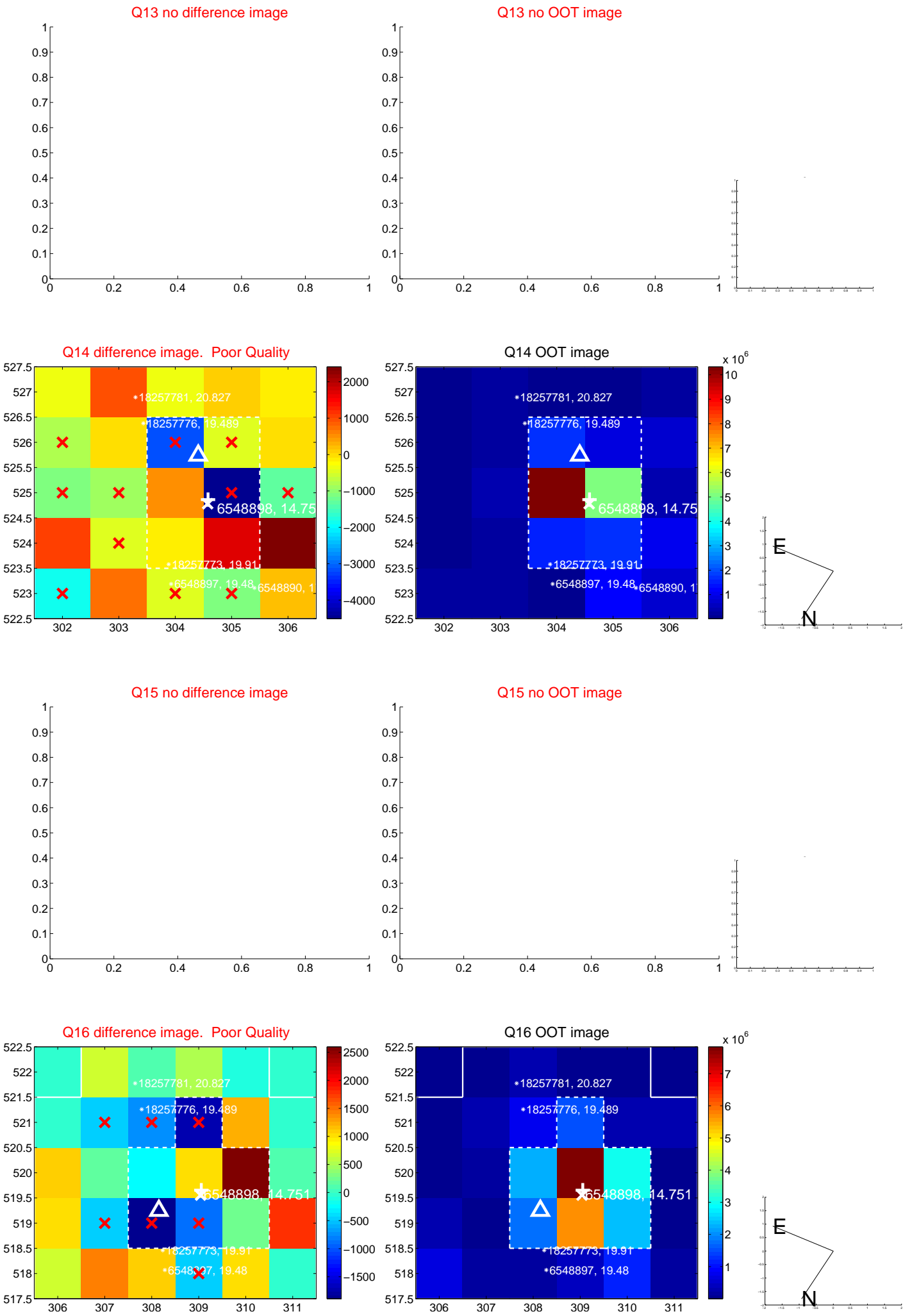
Q8 no OOT image



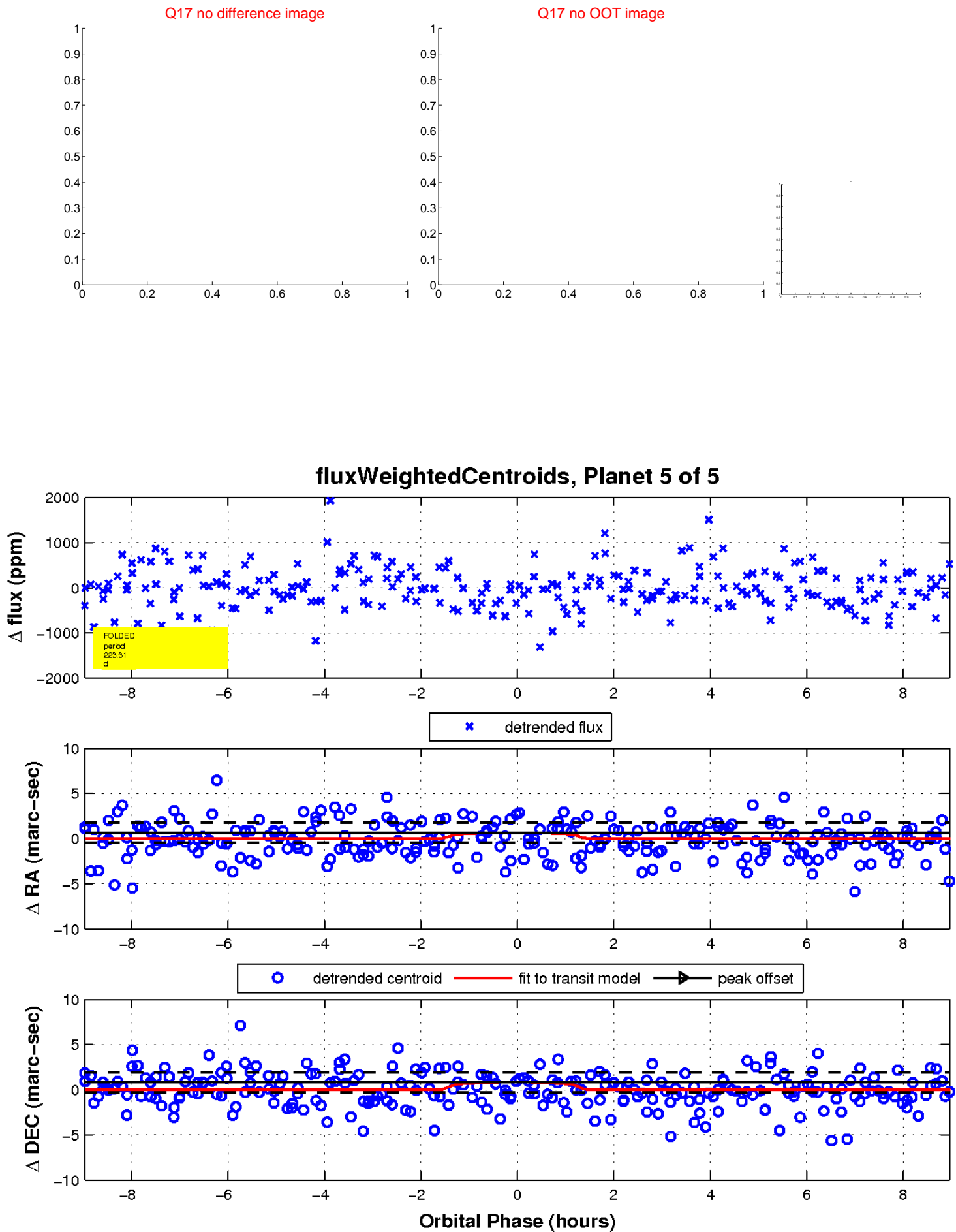
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

