

Release Notes:

Date: July 6th, 2018

Field: 31-Tau-I-2017

General Notes:

Abbreviations: QCT: Quality Control Team (led by Bert Pablo),
RK - Rainer Kuschnig (Satellite Operation Center),
APo - Adam Popowicz (reductions).
Satellites: BAb - BRITE-Austria, UBr - UniBRITE, BTr - BRITE-Toronto,
BLb - Lem, BHr - Heweliusz.

Observing Telescopes: BLb, BTr

We refer to time in JD not HJD and we use truncated JD (TJD) = JD - 2457000.0. That's because JD is the same for all stars (HJD is not).

Setup Notes:

In general, the run is strongly affected by the Moon effect, which was predicted for this field (see the paper on instrumental effects, <https://arxiv.org/pdf/1802.09021.pdf>) because Moon passes through it. It is much stronger in the red filter (BTr) than in the blue one (BLb), but its strength changes from star to star. One may suspect that the Moon elongation is the main factor. There are also several rasters in both satellites that contain two targets

BLb -- Moon effect, generally not strong.

BLb1 -- Periods of large scatter

BLb2 -- OK

BLb3 -- OK

BLb4 -- OK

BTr -- substantial number of outliers. Strong moonshine effects. Offsets between setups commons.

BTr1 - Poor performance. Not recommended for analysis.

BTr2- Poor performance. Not recommended for analysis.

BTr3 - OK

BTr4 - OK

BTr5 - OK

BTr6 - OK

BTr7 - 4 second exposure time. Overlaps setup 9

BTr8 - 0.1 second exposure time.

BTr9 - 0.2 second exposure time. Overlaps setup 7 and 10.

BTr10 - 4 second exposure time. Overlaps setup 9.

Individual Stars:

The nine columns following star name denote:

- (1) satellite
- (2) setup,
- (3) data points after reduction
- (4) original number of frames,
- (5) (in per cent)
- (6) ROIxpos
- (7) ROIypos
- (8) ROIxsiz
- (9) ROIysiz

NOTES ON SATELLITES/SETUPS:

In general, the run is strongly affected by the Moon effect, which was predicted for this field (see the paper on instrumental effects, <https://arxiv.org/pdf/1802.09021.pdf>) because Moon passes through it. It is much stronger in the red filter (BTr) than in the blue one (BLb), but its strength changes from star to star. One may suspect that the Moon elongation is the main factor. For this field the effect does not cause a single brightening like it was for other fields - here we have double or even triple-peaked maximum.

NOTES ON STARS:

STAR: HD 27371 (Gamma Tau)
BTr setup6 9245 12916 71.6 352 739 48 28

COMMENTS FOR USERS:
BTr: OK, but scattered.

STAR: HD 27397 (57 Tau)
BTr setup6 9710 12916 75.2 357 543 48 28
BTr setup7 18648 21360 87.3 353 541 48 28

COMMENTS FOR USERS:
BTr: OK, but scattered.

STAR: HD 27459 (58 Tau)
BTr setup3 183 283 64.7 376 670 48 28
BTr setup4 2528 5265 48.0 376 670 48 28
BTr setup5 6072 14124 43.0 374 670 48 28
BTr setup6 9697 12916 75.1 374 670 48 28
BTr setup7 18574 21360 87.0 368 670 48 28

COMMENTS FOR USERS:
BTr: OK. End of BTr5, BTr6 & BTr7 much more scattered than the rest.

STAR: HD 27628 (60 Tau)
BTr setup6 9693 12916 75.0 412 538 48 28

COMMENTS FOR USERS:
BTr: OK, but scattered.

STAR: HD 27697 (Delta¹ Tau)
BTr setup6 9569 12916 74.1 440 972 48 28

COMMENTS FOR USERS:
BTr: The magnitude increase (double peaked) in the middle of the setup is a Moon effect.

STAR: HD 27934 (Kappa¹ Tau)
BLb setup1 9665 12788 75.6 663 1609 48 28
BLb setup2 18420 20560 89.6 663 1609 48 28
BLb setup3 14656 15280 95.9 662 1601 48 34
BLb setup4 15310 18213 84.1 660 1601 48 34
BTr setup3 174 283 61.5 556 1575 48 32
BTr setup4 2502 5265 47.5 556 1575 48 32
BTr setup5 6094 14124 43.1 556 1575 48 32
BTr setup6 9624 12916 74.5 556 1575 48 32
BTr setup7 18202 21360 85.2 556 1575 48 32
BTr setup10 6058 9500 63.8 556 1575 48 32

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1, but they decorrelate well.

Offsets between setups.

BTr: Moon effect (double peaked) in some setups.

Offsets between setups.

STAR: HD 27962 (Delta^3 Tau)

BLb setup1	9697	12788	75.8	633	1041	48	28
------------	------	-------	------	-----	------	----	----

COMMENTS FOR USERS:

BLb: Some periods of larger scatter, but they decorrelate well.

STAR: HD 28024 (Upsilon Tau)

BLb setup1	9708	12788	75.9	695	1674	48	28
BLb setup2	18442	20560	89.7	695	1674	48	28
BLb setup3	14672	15280	96.0	695	1674	48	28
BLb setup4	15365	18213	84.4	691	1674	48	28
BTr setup3	188	283	66.4	584	1649	48	28
BTr setup4	2630	5265	50.0	584	1649	48	28
BTr setup5	6223	14124	44.1	590	1649	48	28
BTr setup6	9852	12916	76.3	590	1649	48	28
BTr setup7	18759	21360	87.8	590	1649	48	28
BTr setup10	6257	9500	65.9	590	1649	48	28

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1, but they decorrelate well.

Offsets between setups.

BTr: Strong Moon effect (double peaked) in some setups.

Offsets between setups.

STAR: HD 28052 (71 Tau)

BLb setup1	9718	12788	76.0	649	742	48	28
BLb setup2	18459	20560	89.8	649	742	48	28
BLb setup3	14675	15280	96.0	649	742	48	28
BLb setup4	15172	18213	83.3	646	740	48	28
BTr setup3	181	283	64.0	532	714	48	28
BTr setup4	2568	5265	48.8	532	714	48	28
BTr setup5	6139	14124	43.5	532	714	48	28
BTr setup6	9531	12916	73.8	532	714	48	28
BTr setup7	18207	21360	85.2	532	714	48	28
BTr setup10	6043	9500	63.6	532	714	48	28

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1. Offsets between setups.

BTr: Weak Moon effect. Offsets between setups.

STAR: HD 28305 (Epsilon Tau)
BLb setup3 14677 15280 96.1 727 1195 48 28
BTr setup6 9548 12916 73.9 615 1168 48 28

COMMENTS FOR USERS:

BLb: Moon effect in BLb3.
BTr: Strong Moon effect.

STAR: HD 28319 (Theta² Tau)
BLb setup1 9728 12788 76.1 715 766 48 34
BLb setup2 18437 20560 89.7 715 766 48 34
BLb setup3 14677 15280 96.1 715 766 48 34
BLb setup4 15273 18213 83.9 711 766 48 34
BTr setup3 185 283 65.4 595 742 48 32
BTr setup4 2601 5265 49.4 595 742 48 32
BTr setup5 6152 14124 43.6 595 742 48 32
BTr setup6 9442 12916 73.1 595 742 48 32
BTr setup7 17932 21360 84.0 595 742 48 32
BTr setup10 5926 9500 62.4 595 742 48 32

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1. Offsets between setups.
BTr: Strong Moon effect. Offsets between setups. Bimodal behaviour in all setups,
in BTr10 even tri-modal associated with different positions within raster.

STAR: HD 28527
BLb setup1 9710 12788 75.9 770 804 48 28
BLb setup2 18428 20560 89.6 770 804 48 28
BTr setup3 195 283 68.9 656 774 48 28
BTr setup4 2723 5265 51.7 656 774 48 28
BTr setup5 6382 14124 45.2 656 774 48 28

COMMENTS FOR USERS:

BLb: Offsets between setups.
BTr: Moon effect.

STAR: HD 28910 (Rho Tau)
BLb setup1 9711 12788 75.9 865 620 48 28
BLb setup2 18458 20560 89.8 865 620 48 28
BTr setup3 188 283 66.4 746 591 48 28
BTr setup4 2640 5265 50.1 746 591 48 28
BTr setup5 6314 14124 44.7 746 591 48 28

COMMENTS FOR USERS:

BLb: Offsets between setups. Weak Moon effect.
BTr: Offsets between setups. Strong Moon effect.

STAR: HD 29139 (Alpha Tau)

BLb setup1	9664	12788	75.6	934	826	48	28
BLb setup2	18401	20560	89.5	931	826	48	28
BLb setup3	14686	15280	96.1	931	826	48	28
BLb setup4	15509	18213	85.2	927	826	48	28
BTr setup5	6120	14124	43.3	814	801	48	28
BTr setup7	16466	21360	77.1	814	799	48	28
BTr setup8	955	1280	74.6	814	800	48	28
BTr setup9	9824	14336	68.5	814	800	48	28

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1. Offsets between setups.

BTr: Strong Moon effect. Offsets between setups. For longer exposure times,

star is saturated. Careful analysis will be required.

STAR: HD 29140 (88 Tau)

BLb setup2	18474	20560	89.9	935	45	48	28
BLb setup3	14683	15280	96.1	935	45	48	28
BLb setup4	15392	18213	84.5	931	45	48	28
BTr setup6	9788	12916	75.8	805	9	48	28
BTr setup7	18687	21360	87.5	805	9	48	28
BTr setup10	6133	9500	64.6	805	9	48	28

COMMENTS FOR USERS:

BLb: OK.

BTr: OK. Large scatter due to smearing.

STAR: HD 29388 (90 Tau)

BLb setup2	18468	20560	89.8	997	314	48	28
------------	-------	-------	------	-----	-----	----	----

COMMENTS FOR USERS:

BLb: Strong Moon effect (two epochs).

STAR: HD 29763 (Tau Tau)

BLb setup1	9726	12788	76.1	1153	1675	48	28
BLb setup2	18497	20560	90.0	1153	1675	48	28
BLb setup3	14669	15280	96.0	1153	1675	48	28
BLb setup4	15976	18213	87.7	1153	1675	48	28

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1. Offsets between setups.

Strong Moon effect. Discontinuity within setup for. Strong long

long term trend.

STAR: HD 30780 (97 Tau)

BTr setup3	191	283	67.5	1303	1080	48	28
------------	-----	-----	------	------	------	----	----

BTr setup4	2663	5265	50.6	1303	1080	48	28
BTr setup5	6413	14124	45.4	1303	1080	48	28

COMMENTS FOR USERS:

BTr: Offsets between setups. Strong Moon effect.

STAR: HD 30959 (Omikron¹ Ori)
BTr setup5 6238 14124 44.2 1322 469 48 28
BTr setup6 9824 12916 76.1 1322 469 48 28
BTr setup7 18704 21360 87.6 1322 469 48 28

COMMENTS FOR USERS:

BTr: Offsets between setups. Strong Moon effect.

STAR: HD 31283 (6 Ori)
BLb setup2 18428 20560 89.6 1518 144 48 28

COMMENTS FOR USERS:

BLb: OK.

STAR: HD 32301 (Iota Tau)
BLb setup1 9723 12788 76.0 1793 1477 48 28
BLb setup2 18434 20560 89.7 1793 1477 48 28

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1. Strong Moon effect.

STAR: HD 32549 (11 Ori)
BLb setup1 9720 12788 76.0 1834 645 48 28
BLb setup3 14681 15280 96.1 1834 645 48 28
BLb setup4 16337 18213 89.7 1831 645 48 28

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1. Strong Moon effect.

STAR: HD 32977 (106 Tau)
BLb setup3 14660 15280 95.9 1939 1318 48 28

COMMENTS FOR USERS:

BLb: Strong Moon effect.

STAR: HD 32990 (103 Tau)
BLb setup2 18449 20560 89.7 1948 1836 48 28
BLb setup3 14661 15280 95.9 1948 1836 48 28
BLb setup4 16238 18213 89.2 1948 1836 48 28

COMMENTS FOR USERS:

BLb: Strong Moon effect. Offsets between setups.

STAR: HD 33276 (15 Ori)
BLb setup4 16274 18213 89.4 1997 672 48 28
BTr setup5 6265 14124 44.4 1875 629 48 28

COMMENTS FOR USERS:
BLb: OK.
BTr: Weak Moon effect.

STAR: HD 35296 (111 Tau)
BTr setup3 196 283 69.3 2349 866 48 28
BTr setup4 2727 5265 51.8 2349 866 48 28

COMMENTS FOR USERS:
BTr: Moon effect.

STAR: HD 35497 (Beta Tau = Gamma Aur)
BLb setup1 9321 12788 72.9 2480 2401 48 28
BLb setup2 18457 20560 89.8 2478 2402 48 28
BLb setup3 14668 15280 96.0 2478 2402 48 28
BLb setup4 16250 18213 89.2 2475 2404 48 28
BTr setup3 191 283 67.5 2383 2360 48 28
BTr setup8 953 1280 74.5 2384 2361 48 28
BTr setup9 9836 14336 68.6 2384 2361 48 28

COMMENTS FOR USERS:
BLb: Weak Moon effect.
BTr: Weak Moon effect, offsets between setups.

STAR: HD 35708 (114 Tau)
BLb setup1 9820 12788 76.8 2557 1529 48 28

COMMENTS FOR USERS:
BLb: Some periods of larger scatter in BLb1.

STAR: HD 36389 (119 Tau)
BTr setup3 196 283 69.3 2595 1032 48 28
BTr setup4 2783 5265 52.9 2595 1032 48 28
BTr setup7 18662 21360 87.4 2594 1032 48 28

BTr: Strong Moon effect, offsets between setups.

STAR: HD 36653 (35 Ori)
BTr setup5 6099 14124 43.2 2655 467 48 28

BTr: OK.

STAR: HD 37202 (Zeta Tau)

BLb setup1	9700	12788	75.9	2867	1435	48	28
BLb setup2	18511	20560	90.0	2867	1435	48	28
BLb setup3	14680	15280	96.1	2867	1435	48	28
BLb setup4	16358	18213	89.8	2865	1435	48	28
BTr setup4	2526	5265	48.0	2757	1380	48	28
BTr setup5	6035	14124	42.7	2757	1380	48	28
BTr setup6	9241	12916	71.5	2757	1380	48	28
BTr setup7	17395	21360	81.4	2757	1380	48	28
BTr setup8	894	1280	69.8	2757	1380	48	28
BTr setup9	9825	14336	68.5	2757	1380	48	28
BTr setup10	5792	9500	61.0	2755	1380	48	28

COMMENTS FOR USERS:

BLb: Offsets between setups. Strong Moon effect. Bimodal light curve when Moon effect strong.

BTr: Offsets between setups. BTr9 overlaps with BTr7 and BTr10.

STAR: HD 37367 (V433 Aur)

BTr setup5	6060	14124	42.9	2752	2439	48	28
BTr setup6	9822	12916	76.0	2752	2439	48	28
BTr setup7	18776	21360	87.9	2752	2439	48	28
BTr setup10	6237	9500	65.7	2752	2439	48	28

COMMENTS FOR USERS:

BTr: Offsets between setups.

STAR: HD 37438 (125 Tau)

BLb setup2	18455	20560	89.8	2889	2064	48	28
BLb setup3	14682	15280	96.1	2889	2064	48	28
BLb setup4	16266	18213	89.3	2885	2064	48	28
BTr setup6	9896	12916	76.6	2792	2013	48	28
BTr setup7	18776	21360	87.9	2792	2013	48	28

COMMENTS FOR USERS:

BLb: Weak Moon effect. Offsets between setups.

BTr: Strong Moon effect. Offsets between setups.

STAR: HD 37711 (126 Tau)

BLb setup1	9741	12788	76.2	3000	830	48	28
BLb setup3	14689	15280	96.1	3000	829	48	28
BLb setup4	16313	18213	89.6	2998	829	48	28

COMMENTS FOR USERS:

BLb: Some periods of larger scatter in BLb1. Weak Moon effect. Offsets between setups.

STAR: HD 38622 (133 Tau)

BTr setup5	6080	14124	43.0	3085	441	48	28
BTr setup6	9833	12916	76.1	3085	441	48	28

BTr setup7	18767	21360	87.9	3085	441	48	28
BTr setup10	6326	9500	66.6	3085	441	48	28

COMMENTS FOR USERS:

BTr: Weak Moon effect.

STAR: HD 38899 (134 Tau)

BLb setup4	16316	18213	89.6	3239	362	48	28
------------	-------	-------	------	------	-----	----	----

COMMENTS FOR USERS:

BLb: OK.

STAR: HD 39357 (136 Tau)

BLb setup3	14686	15280	96.1	3232	2283	48	28
------------	-------	-------	------	------	------	----	----

COMMENTS FOR USERS:

BLb: Strong Moon effect.

STAR: HD 39587 (Chi¹ Ori)

BTr setup5	6008	14124	42.5	3265	1286	48	28
BTr setup6	9535	12916	73.8	3265	1286	48	28
BTr setup7	18166	21360	85.0	3265	1286	48	28
BTr setup10	6054	9500	63.7	3265	1286	48	28

COMMENTS FOR USERS:

BTr: Weak Moon effect.

STAR: HD 40111 (139 Tau)

BLb setup3	14686	15280	96.1	3380	2079	48	28
BLb setup4	16300	18213	89.5	3378	2079	48	28
BTr setup6	9882	12916	76.5	3310	2036	48	28
BTr setup7	18765	21360	87.9	3306	2036	48	28

COMMENTS FOR USERS:

BLb: OK.

BTr: Strong Moon effect.

STAR: HD 41116 (1 Gem)

BTr setup3	180	283	63.6	3509	1694	48	28
BTr setup4	2484	5265	47.2	3509	1694	48	28

COMMENTS FOR USERS:

BTr: OK.

STAR: HD 41753 (Nu Ori)

BTr setup6	9797	12916	75.9	3649	614	48	28
BTr setup7	18625	21360	87.2	3649	614	48	28
BTr setup10	6240	9500	65.7	3649	614	48	28

COMMENTS FOR USERS:

BTr: Weak Moon effect.
