

## Release Notes:

Date: May 24th, 2017

Field: 22-Orion-IV-2016

## 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: BAb, UBr

Change of exposure time in BAb observations. Be careful when combining.

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:

Initial setups are often short and of lesser quality as fine-tuning is made to the spacecraft. Please treat vet this setup carefully.

BAb:

Setup 1 - initial setup

Setup 2 - Exposure time increased to 1.5 seconds

Setup 3- Number of stars increased from 12 - 14

UBr:

Setup 1 - initial setup

Setup 2 - Raster positions adjusted.

## Individual Stars:

The five 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

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STAR: HD 29248 (Nu Eri)

BAb setup1	247	270	91.5	1521	2514	48	28
BAb setup2	7704	8417	91.5	1521	2514	48	28
BAb setup3	21019	37767	55.7	1521	2514	48	28
UBr setup1	349	405	86.2	1421	2539	48	28
UBr setup2	27716	46657	59.4	1429	2545	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Can be merged (the same raster position).  
 UBr: Offset between setups. Many outliers. Do not merge (offset + different raster postions).

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STAR: HD 30211 (Mu Eri)

BAb setup1	247	270	91.5	1579	2235	48	28
BAb setup2	7708	8417	91.6	1579	2235	48	28
BAb setup3	21268	37767	56.3	1579	2235	48	28
UBr setup1	348	405	85.9	1481	2257	48	28
UBr setup2	28128	46657	60.3	1489	2263	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Can be merged (the same raster position).  
 UBr: Offset between setups. Many outliers. Do not merge (offset + different raster postions).

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STAR: HD 30739 (Pi<sup>2</sup> Ori)

UBr setup1	345	405	85.2	3083	2346	48	28
UBr setup2	27379	46657	58.7	3091	2348	48	28

COMMENTS FOR USERS:

UBr: Small offset between setups. Many outliers. Do not merge (offset + different raster postions).

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STAR: HD 30836 (Pi<sup>4</sup> Ori)

BAb setup1	249	270	92.2	2770	2247	48	28
BAb setup2	7718	8417	91.7	2770	2247	48	28
BAb setup3	21420	37767	56.7	2770	2247	48	28
UBr setup1	342	405	84.4	2672	2275	48	28
UBr setup2	27957	46657	59.9	2684	2275	48	28

COMMENTS FOR USERS:

BAb: Many outliers. BAb 2 and 3 can be merged (the same raster position).

BAb1 has an offset despite the same raster position (different aperture?)

UBr: Offset between setups. Many outliers. Do not merge (offset + different raster positions).

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STAR: HD 31237 (Pi<sup>5</sup> Ori)

UBr setup1	345	405	85.2	2282	2111	48	28
UBr setup2	27992	46657	60.0	2290	2111	48	28

COMMENTS FOR USERS:

UBr: Offset between setups. Many outliers. Do not merge (offset + different raster positions).

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STAR: HD 33328 (Lambda Eri)

UBr setup1	348	405	85.9	901	1353	48	28
UBr setup2	28040	46657	60.1	909	1357	48	28

COMMENTS FOR USERS:

UBr: No clear offset between setups. Many outliers. Do not merge (different raster positions).

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STAR: HD 34085 (Beta Ori = Rigel)

BAb setup1	249	270	92.2	1096	1172	48	28
BAb setup2	7653	8417	90.9	1096	1172	48	28
BAb setup3	21580	37767	57.1	1096	1172	48	28

COMMENTS FOR USERS:

BAb: Many outliers. BAb 2 and 3 can be merged (the same raster position).

BAb1 has a large offset despite the same raster position . Star is saturated. Photometry is unreliable

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STAR: HD 34503 (Tau Ori)

BAb setup1	249	270	92.2	1288	1102	48	28
BAb setup3	21582	37767	57.1	1288	1102	48	28
UBr setup1	344	405	84.9	1195	1123	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

UBr: Very short data.

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STAR: HD 34816 (Lambda Lep)

UBr setup1	346	405	85.4	435	926	48	28
UBr setup2	27519	46657	59.0	435	928	48	28

COMMENTS FOR USERS:

Ubr: Offset between setups. Many outliers. Do not merge (offset + different raster postions).

STAR: HD 35411 (Eta Ori)

BAb setup1	249	270	92.2	1915	977	48	28
BAb setup3	21688	37767	57.4	1915	977	48	28
Ubr setup1	349	405	86.2	1819	1000	48	28
Ubr setup2	28632	46657	61.4	1827	1002	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

Ubr: No clear offset between setups. Many outliers. Do not merge (different raster postions).

STAR: HD 35439 (Psi<sup>1</sup> Ori)

Ubr setup1	343	405	84.7	2382	1090	48	28
Ubr setup2	28252	46657	60.6	2392	1092	48	28

COMMENTS FOR USERS:

Ubr: Offset between setups. Many outliers. Do not merge (offset + different raster postions).

STAR: HD 35468 (Gamma Ori)

BAb setup1	249	270	92.2	3065	1165	48	28
BAb setup3	21272	37767	56.3	3065	1165	48	28
Ubr setup1	342	405	84.4	2970	1188	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

Ubr: Very short data.

STAR: HD 35715 (Psi<sup>2</sup> Ori)

BAb setup1	256	270	94.8	2656	1028	48	28
BAb setup2	7845	8417	93.2	2656	1028	48	28
BAb setup3	22070	37767	58.4	2656	1028	48	28
Ubr setup1	344	405	84.9	2562	1052	48	28
Ubr setup2	28065	46657	60.2	2572	1052	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Some offsets between setups despite the sanme raster position.

Ubr: No clear offset between setups. Many outliers. Do not merge (different raster postions).

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STAR: HD 36486 (Delta Ori)

BAb setup1	249	270	92.2	2238	777	48	28
BAb setup2	7684	8417	91.3	2238	777	48	28
BAb setup3	21677	37767	57.4	2238	777	48	28
UBr setup1	346	405	85.4	2142	801	48	28
UBr setup2	28574	46657	61.2	2150	803	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

UBr: No clear offset between setups. Many outliers. Do not merge  
(different raster postions).

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STAR: HD 36861/36862 (Lambda Ori)

BAb setup1	254	270	94.1	3533	939	48	28
BAb setup2	7625	8417	90.6	3533	939	48	28
BAb setup3	21555	37767	57.1	3533	939	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

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STAR: HD 37043 (Iota Ori)

BAb setup1	249	270	92.2	1516	544	48	28
BAb setup2	7684	8417	91.3	1516	544	48	28
BAb setup3	21826	37767	57.8	1516	544	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

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STAR: HD 37128 (Epsilon Ori)

BAb setup1	249	270	92.2	2144	617	48	28
BAb setup3	21914	37767	58.0	2144	617	48	28
UBr setup1	346	405	85.4	2044	643	48	28
UBr setup2	29118	46657	62.4	2054	645	48	28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

UBr: Offset between setups. Many outliers. Do not merge (offset  
+ different raster postions).

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STAR: HD 37468 (Sigma Ori)

BAb setup1	249	270	92.2	1971	505	48	28
BAb setup2	7697	8417	91.4	1971	505	48	28
BAb setup3	21537	37767	57.0	1971	505	48	28
UBr setup1	345	405	85.2	1875	528	48	28

UBr setup2 28043 46657 60.1 1887 528 48 28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

UBr: Offset between setups. Many outliers. Do not merge (offset + different raster postions).

STAR: HD 37490 (Omega Ori)

UBr setup1 343 405 84.7 2763 673 48 28

UBr setup2 27268 46657 58.4 2770 676 48 28

COMMENTS FOR USERS:

UBr: No clear offset between setups. Many outliers. Do not merge (different raster postions).

STAR: HD 37742/37743 (Zeta Ori)

BAb setup1 249 270 92.2 2070 454 48 28

BAb setup2 7683 8417 91.3 2070 454 48 28

BAb setup3 21458 37767 56.8 2070 454 48 28

UBr setup1 341 405 84.2 1972 477 48 28

UBr setup2 28194 46657 60.4 1982 479 48 28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

UBr: Offset between setups. Many outliers. Do not merge (offset + different raster postions).

STAR: HD 38771 (Kappa Ori)

BAb setup1 249 270 92.2 1123 105 48 28

BAb setup2 7681 8417 91.3 1123 105 48 28

BAb setup3 21618 37767 57.2 1123 105 48 28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).

STAR: HD 39801 (Alpha Ori = Betelgeuse)

BAb setup1 253 270 93.7 3308 269 48 28

BAb setup2 7713 8417 91.6 3308 269 48 28

BAb setup3 21234 37767 56.2 3308 269 48 28

COMMENTS FOR USERS:

BAb: Many outliers. Setups can be merged (the same raster position).