

# Measurements of Neglected Double Stars: December 2018 Report

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**Abstract:** This article presents measurements of 30 neglected double stars. The stars were selected from the Washington Double Star Catalog published by the United States Naval Observatory. The photographs were taken by remote telescopes. The measurements were done by the author.

## Methodology

Photographs were taken using telescopes operated by the Open Science Observatory located in the Canary Islands near the west coast of Africa. Those telescopes are located at an elevation of 2,300 meters on the island of Tenerife. The Open Science Observatory has a corrected Dall-Kirkham telescope with an aperture of 420mm, and a focal length of 2,940mm. The methods used to calibrate the instruments of those observatories are unknown to this author.

The camera used most frequently at the Open Sciences Observatory was a ProLine KAF-16803. The photographs were analyzed by the author using the programs SKY X, a product of Software Bisque.

After accumulating the photographs, averages were calculated for the position angles and separations. All of the star patterns were compared with the data from Washington Double Star catalog to insure correctness. The results are listed in Table 1, which contain averages of measurements.

## Report

The following information is reported for each star: the WDS code with constellation, the discoverer code with component, the position angle, the separation, the number of measurements, the calendar date of the last observation, and the Julian date of the last observation.

The column headings are: WDS number/Con = Washington Double Star identifier/Constellation code, DC = Discovery Code and components, PA = position angle, Sep = Separation, Mts = number of measurements, and Date = the last observation date.

## Acknowledgements

This research made use of the SIMBAD database operated at CDS, Strasbourg, France, the Aladin Sky Atlas, and the Washington Double Star Catalog maintained by the United States Naval Observatory.

## References

Mason, B., Washington Double Star Catalog - Northern Neglected Stars List 1

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*Table 1. Measurements*

WDS number/Con	Dis. Code	Position Ang.	Separation	Measures	Calendar Date	Julian Date
00016+3714 AND	ES 2444	249.25	9.5	3	2018 10 21	2458414
01332+3231 TRI	SEI 17	191.9	25.5	3	2018 10 02	2458394
02043+2911 TRI	CHE 34	74.24	13.2	3	2018 08 30	2458361
02053+2836 TRI	CHE 40	141.51	32.2	3	2018 08 30	2458361
02060+2806 TRI	CHE 45	43.17	41.9	3	2018 08 30	2458361
02070+2923 TRI	CHE 49	110.3	32	3	2018 08 30	2458361
02073+2829 TRI	CHE 50	290.77	11.6	3	2018 10 13	2458405
02083+2933 TRI	CHE 56	55.47	28.3	3	2018 08 30	2458361
02085+2833 TRI	CHE 58	291.4	14.7	3	2018 08 30	2458361
02086+2918 TRI	CHE 59AB	216.43	27.5	3	2018 08 30	2458361
02086+2918 TRI	BTG 7AC	209.19	39.9	3	2018 08 30	2458361
02086+2918 TRI	BTG 7AD	297.02	28.5	3	2018 08 30	2458361
02086+2918 TRI	BTG 7BC	196.07	12.6	3	2018 08 30	2458361
02087+2921 TRI	CHE 60	275.05	29.3	3	2018 08 30	2458361
02109 2941 TRI	CHE 64	124.73	16.9	3	2018 08 30	2458361
02109+2846 TRI	CHE 65	126.82	28.7	3	2018 08 30	2458361
07179-0142 MON	BAL 466AB	343.07	14.9	3	2018 10 14	2458361
07179-0142 MON	BAL 466AC	329.32	20.6	3	2018 10 14	2458361
07179-0142 MON	BAL 466BC	299.16	6.9	3	2018 10 14	2458361
07453-0026 MON	HJ 767AB	163.33	21.4	3	2018 10 25	2458417
07453-0026 MON	SIN 31AD	100.36	26	3	2018 10 25	2458417
07453-0026 MON	SIN 31AE	27.99	27.9	3	2018 10 25	2458417
07453-0026 MON	SIN 31AF	160.36	28.2	3	2018 10 25	2458417
07453-0026 MON	SIN 31AG	163.92	31.67	3	2018 10 25	2458417
07453-0026 MON	SIN 31AH	323.25	42.6	3	2018 10 25	2458417
07453-0026 MON	SIN 31AJ	73.81	169.2	3	2018 10 25	2458417
07453-0026 MON	SIN 31AK	63.91	179.2	3	2018 10 25	2458417
09047-0806 HYA	J 2895	170.45	7.9	3	2018 10 20	2458412
10302+3050 LMI	SEI 520	359.78	7.9	5	2018 10 11	2458403
10375+3015 LMI	HJ 487AB	1.11	12.7	3	2018 10 13	2458405
10375+3015 LMI	OPI 17AC	283.52	52.6	3	2018 10 13	2458405
11396+3125 UMA	SEI 526	236.48	412	5	2018 10 24	2458416
12463+0847 VIR	BGH 41	271.39	119	6	2018 08 17	2458348
14505-0527 LIB	HJ 4708	165.62	23.7	5	2018 08 17	2458348
15171+2851 CRB	BGH 57	40.9	575.4	3	2018 08 04	2458335
15565+1540 SER	STT 584AB	325.64	313.9	5	2018 08 17	2458348
16152-0046 SER	HJ 1290	113.2	20.1	3	2018 08 17	2458348
17200-0801 OPH	ENG 60AB	232.55	90.8	3	2018 08 17	2458348
17219-1846 OPH	SLE 14	289.95	16.3	3	2018 08 17	2458348
17349-0044 OPH	BAL 891AB	203.97	20	4	2018 08 30	2458361
17349-0044 OPH	BAL 891AC	193.87	18.5	4	2018 08 30	2458361
17349-0044 OPH	BAL 891BC	89.8	3.8	4	2018 08 30	2458361
17577+0426 OPH	BAR 44	69	145.9	3	2018 08 17	2458348
18176+0333 OPH	BAL2487AB	334.67	11.2	4	2018 10 03	2458395
18176+0333 OPH	BAL2487BC	167.93	31.8	4	2018 10 03	2458395