

Measurements of 40 Neglected Stars - Report of January 2023

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Abstract

The position angles and separations of 40 neglected double stars were measured from photographs taken remotely. The double stars were selected from the Washington Double Star Catalog, which is published by the United States Naval Observatory. When it was possible, comparisons were made with published data. The photographs were taken at the Open University located on the Canary Islands, Spain. The WDS data was current as of 1 December 2021. The data analyses were done by the author.

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

Data about the Open University site

The observatory is in the Canary Islands, Spain at a latitude of 28 ° 17 '59 "N, a longitude of 16 ° 30' 30" W, and an altitude of 2,360 meters. on the island of Tenerife. The telescope has an aperture of 0.433m and is of the Dall-Kirkham design. The camera is a Proline model KAF 09000 without filters.

Methodology

The photographs were reduced by the author using SKY X version 10.5.0 build 13479, a product of Bisque Software. Several factors, namely ambient temperature, humidity, wind, and visibility were not reported by the observatories. Not all photographs were useful, and the number of possible measurements for each star is reported. A literature search was performed for each star and the data sources were reported.

Report

The information included in this report consists of the WDS identifier, the constellation, the discoverer code, the components, the position angle, the separation, the number of measurements, and the date of the most recent measurement.

00001+3617 AND	GII 75 AB	220.01	1.0	3	2022.7616
GAIA DR2 v3		219.32	1.03		2018
WDS		219	1.0	2	2016

Stelle Doppie reported that the status of this pair is uncertain.

06221+5922 LYN	STF 881 AC	97.81	26.7	3	2022.8767
WDS		98	27.0	10	2017
	STF 881 AD	357.26	100.4	3	2022.8767
Tycho2		357.4	99.82		1991
WDS		358	99.4	10	2017

06377+6129 LYN	STT 563 AB	72.22	181.7	3	2022.8822
Tycho2		74.6	178.8		1991
WDS		74	182.2	14	2003
	BUP 01 AC	90.51	399.5	3	2022.8822
JDSO (Frey)		91.7	393.1		2007

JDSO (Thurman)		91.4	397.50		2021
WDS		91	397.5	9	2017
	BUP 91 BC	105.51	229.6	3	2022.8822
WDS		106	228.5	13	2015
	BUP 91 BE	250.69	71.8	3	2022.8822
WDS		252	72.4	7	2015

06426+5942 LYN	HJ 2325 AB	154.41	28.1	3	2022.9068
WDS		156	27.8	5	2008

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06442+5756 LYN	BAR 5 AB	200.76	86.2	6	2022.9068
WDS		201	84.2	7	2017
	BAR 5 AD	120.26	191.3	6	2022.9068
WDS		121	189.9	7	2014
	BAR 5 DE	155.24	11.5	6	2022.9068
GAIA DR2 v3		157.44	11.94		2018
WDS		157	11.9	5	2014

06482+5542 LYN	STF 958 AC	267.53	177.6	3	2022.9068
WDS		269	176.8	4	2015
	STF 958 BC	268.58	171.6	3	2022.9068
WDS		269	172.4	7	2015

06542+5438 LYN	LDS 3722 AB	258.48	110.8	3	2022.9123
WDS		262	111.0	4	2015

07057+5245 LYN	STF 1009 AB	146.53	4.4	3	2022.8356
GAIA DR2 v3		147.90	4.34		2018
OAG (Tobalal)		150.2	4.5		1989.753
Tycho2		149.2	4.204		1991
WDS		148	4.4	175	2019
	STF 1009 AC	132.36	180.4	3	2022.8356
WDS		133	179.4	5	2017
	STF 1009 BC	132.32	178.3	3	2022.8356
WDS		132	175.7	9	2017

07084+5022 LYN	UC 1536 AB	316.34	46.1	3	2022.8739
WDS		316	46.4	5	2015

07097+6124 LYN	LDS 2526 AB	130.98	19.5	3	2022.9561
WDS		131	19.5	6	2015

07121+5829 LYN	LDS 2528 AB	50.15	10.6	4	2022.8301
GAIA DR2 v3		49.74	10.90		2018
WDS		50	10.9	4	2015

Stelle Doppie reported that the nature of this pair is uncertain.

07127+4501 LYN	UC 1550 AB	45.17	27.8	3	2022.8877
WDS		45	27.7	5	2015

07128+5548 LYN	STF 1025 AB	130.26	26.8	3	2022.9698
GAIA DR2 v3		129.05	26.81		2018
Tycho2		130.5	26.173		1991
WDS		130	27.0	72	2018
	STF 1025 AC	253.24	233.4	3	2022.9698
WDS		254	231.4	7	2015
	STF 1025 CD	200.81	22.9	3	2022.9698
GAIA DR2 v3		200.99	22.85		2018
WDS		201	22.9	5	2015

07228+5038 LYN	UC 1569 AB	356.22	23.5	3	2022.9698
GAIA DR2 v3		355.51	23.30		2018
WDS		356	23.3	6	2016

07253+4606 LYN	UC 1580 AB	108.48	31.7	3	2022.9897
WDS		109	31.0	5	2015

07260+5310 LYN	ES 772 AB	101.16	1.2	3	2022.9897
GAIA DR2 v3		99.10	1.10		2018
Tycho2		98.4	1.13		1991
WDS		100	1.1	8	2016
	ES 772 AC	359.11	10.5	3	2022.9897
WDS		359	10.3	5	2015

07276+5908 LYN	LDS 2535 AB	175.86*	18.4	3	2022.9897
GAIA DR2 v3		356.58	20.08		2018
WDS		176	17.8	6	2015

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*If measured from B to A, the position angle is 355.86.

07335+5937 LYN	CBL 25 AB	297.76	9.2	1	2022.9697
WDS		299	9.6	6	2015

07402+4206 LYN	ES 1386 AB	68.59	8.3	1	2022.9698
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GAIA DR2 v3		66.81	8.31		2018
Tycho2		66.8	8.86		1991
WDS		67	8.9	32	2019
	SIN 29 AC	12.09	13.8	1	2022.9698
WDS		10	13.4	8	2014
	SIN 29 AD	359.09	42.7	1	2022.9698
WDS		358	41.2	7	2015
	SIN 29 AE	227.25	65.2	1	2022.9698
WDS		227	65.2	8	2015

07410+5925 LYN	LDS 2542 AB	16.71	7.1	3	2022.8027
GAIA DR2 v3		95.26	7.86		2018
WDS		17	7.0	1	1966

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07545+4548 LYN	TOI 1709 AB	233.63	4.1	3	2022.8602
WDS		240	5.8	1	2015

07555+5436 LYN	TOI 1733 AB	56.42	29.7	5	2022.9698
WDS		57	29.5	2	2015
	TOI 1733 AC	58.64	30.8	5	2022.9698
WDS		58	30.2	1	2015

08169+3331 LYN	SEI 490 AB	131.82	16.4	3	2022.8027
WDS		133	16.0	1	1894
	SEI 491 AC	139.53	28.1	3	2022.8027
WDS		141	28.1	1	1894

08213+3419 LYN	LEP 31 AB	87.03	74.2	6	2022.8301
WDS		87	74.2	5	2015
	BVD 161 AC	97.53	74.6	6	2022.8301
WDS		99	72.6	15	2015

08419+3546 LYN	SEI 508 AB	59.47	26.2	3	2022.8739
WDS		61	25.7	1	1895

08515+4610 LYN	ES 1146 AB	170.26	5.7	3	2022.8027
WDS		170	5.5	10	2019
	SIN 40 AC	30.66	47.4	3	2022.8027
WDS		30	46.6	2	2019

08561+4341 LYN	STF 3120 AB	347.95	1.4	3	2022.8954
GAIA DR2 v3		1.01	1.35		2018
Tycho2		359.5	1.378		1991

WDS		348	1.5	36	2017
	STF 3120 AC	115.54	7.5	3	2022.8954
WDS		116	8.1	4	2015
09015+3604 LYN	ALI 354 AB	55.67	9.7	3	2022.8301
WDS		55	9.1	1	1932

09047+3441 LYN	ALI 122 AB	32.62	5.7	5	2022.9899
JDSO (Bryant)		32	5.66		2017
WDS		32	5.7	1	1933

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09188+3648 LYN	DRS 44 AE	52.02	101.1	4	2022.8822
WDS		53	98.3	3	2015
	STF 1334 BC	216.91	79.4	4	2022.8822
WDS		217	78.9	7	2017
	STF 1334 BD	261.31	173.3	4	2022.8822
WDS		262	172.3	6	2015

21016+6810 CEP	LI 6 AB	167.56	2.5	3	2022.5123
GAIA DR2 v3		167.79	2.55		2018
WDS		164	2.3	2	1996`

21096+0550 EQU	TDT 2793 AB	353.85	0.5	2	2022.7753
Tycho2		351	0.4		1991
WDS		353	0.3	2	2016

21101+0919 EQU	GWP 3039 AB	61.38	73.1	3	2022.7753
WDS		62	72.5	2	2020

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21128+0729 EQU	UC 4405 AB	271.81	36.1	3	2022.7753
WDS		273	35.9	3	2010

21156+0419 EQU	TDT 2865 AB	111.72	2.1	3	2022.7508
WDS		111	2.3	1	1991

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21482+5407 CYG	LDS 5928 AB	45.77	7.1	3	2022.6356
WDS		46	7.0	1	1960`

22496+7802 CYG	LDS 2012 AB	294.68`	6.2	3	2022.6164
WDS		295	6.4	6	2015

22524-1115 AQR	LDS 2529 AB	334.36	43.4	3	2022.5945
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WDS		337	40.0	1	1953
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23027+3758 AND	ES 2535 AB	203.35	6.2	3	2022.5096
GAIA DR2 v3		203.18	6.27		2018
JDSO (Knapp)		203.916	6.301		2018
WDS		203	6.3	10	2016

23545+4814 AND	ES 551 AB	89.85	33.03	3	2022.1315
WDS		89	32.7	9	2015
	ES 551 AD	12.13	30.3	3	2022.1315
WDS		12	30.3	11	2015
	ES 551 BC	313.89	5.4	3	2022.1315
GAIA DR2 v3		313.94	5.44	4	2018
WDS		314	5.4	7	2015

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Website of Stelle Doppie <http://stelledoppie.it/>