

Huddersfield

Longitude W001 47
Latitude N53 39

Civil Date			Twilight	Sunrise	Transit	Shadow 1	Shadow 2	Sunset	Twilight
Year	mth	d	h m	h m	h m	h m	h m	h m	h m
2025	1	1	06 13	08 24	12 11	13 43	14 11	15 58	18 09
2025	1	2	06 13	08 24	12 11	13 44	14 12	15 59	18 10
2025	1	3	06 13	08 24	12 12	13 45	14 14	16 00	18 11
2025	1	4	06 13	08 23	12 12	13 46	14 15	16 01	18 12
2025	1	5	06 13	08 23	12 13	13 47	14 16	16 03	18 13
2025	1	6	06 12	08 22	12 13	13 48	14 17	16 04	18 14
2025	1	7	06 12	08 22	12 14	13 49	14 19	16 06	18 15
2025	1	8	06 12	08 21	12 14	13 51	14 20	16 07	18 16
2025	1	9	06 12	08 21	12 14	13 52	14 21	16 08	18 18
2025	1	10	06 11	08 20	12 15	13 53	14 23	16 10	18 19
2025	1	11	06 11	08 19	12 15	13 54	14 24	16 11	18 20
2025	1	12	06 10	08 18	12 16	13 56	14 26	16 13	18 21
2025	1	13	06 10	08 18	12 16	13 57	14 27	16 15	18 23
2025	1	14	06 09	08 17	12 16	13 58	14 29	16 16	18 24
2025	1	15	06 08	08 16	12 17	14 00	14 30	16 18	18 25
2025	1	16	06 08	08 15	12 17	14 01	14 32	16 20	18 27
2025	1	17	06 07	08 14	12 17	14 02	14 33	16 21	18 28
2025	1	18	06 06	08 13	12 18	14 04	14 35	16 23	18 29
2025	1	19	06 05	08 11	12 18	14 05	14 37	16 25	18 31
2025	1	20	06 05	08 10	12 18	14 07	14 38	16 27	18 32
2025	1	21	06 04	08 09	12 18	14 08	14 40	16 29	18 34
2025	1	22	06 03	08 08	12 19	14 10	14 42	16 30	18 35
2025	1	23	06 02	08 06	12 19	14 11	14 44	16 32	18 37
2025	1	24	06 01	08 05	12 19	14 13	14 45	16 34	18 38
2025	1	25	06 00	08 03	12 19	14 14	14 47	16 36	18 40
2025	1	26	05 59	08 02	12 20	14 16	14 49	16 38	18 42
2025	1	27	05 57	08 01	12 20	14 17	14 51	16 40	18 43
2025	1	28	05 56	07 59	12 20	14 19	14 53	16 42	18 45
2025	1	29	05 55	07 57	12 20	14 20	14 54	16 44	18 46
2025	1	30	05 54	07 56	12 20	14 22	14 56	16 46	18 48
2025	1	31	05 52	07 54	12 21	14 23	14 58	16 48	18 50
2025	2	1	05 51	07 52	12 21	14 25	15 00	16 50	18 51
2025	2	2	05 50	07 51	12 21	14 26	15 02	16 52	18 53
2025	2	3	05 48	07 49	12 21	14 28	15 04	16 54	18 55
2025	2	4	05 47	07 47	12 21	14 30	15 06	16 56	18 56
2025	2	5	05 45	07 45	12 21	14 31	15 07	16 58	18 58
2025	2	6	05 44	07 44	12 21	14 33	15 09	17 00	19 00
2025	2	7	05 42	07 42	12 21	14 34	15 11	17 02	19 01
2025	2	8	05 40	07 40	12 21	14 36	15 13	17 04	19 03
2025	2	9	05 39	07 38	12 21	14 37	15 15	17 06	19 05
2025	2	10	05 37	07 36	12 21	14 39	15 17	17 08	19 07
2025	2	11	05 35	07 34	12 21	14 40	15 18	17 10	19 08
2025	2	12	05 33	07 32	12 21	14 42	15 20	17 12	19 10
2025	2	13	05 32	07 30	12 21	14 43	15 22	17 14	19 12
2025	2	14	05 30	07 28	12 21	14 45	15 24	17 16	19 14
2025	2	15	05 28	07 26	12 21	14 46	15 26	17 18	19 16
2025	2	16	05 26	07 24	12 21	14 48	15 28	17 20	19 17
2025	2	17	05 24	07 21	12 21	14 50	15 29	17 22	19 19
2025	2	18	05 22	07 19	12 21	14 51	15 31	17 24	19 21
2025	2	19	05 20	07 17	12 21	14 52	15 33	17 25	19 23
2025	2	20	05 18	07 15	12 21	14 54	15 35	17 27	19 25
2025	2	21	05 16	07 13	12 21	14 55	15 36	17 29	19 27
2025	2	22	05 14	07 11	12 21	14 57	15 38	17 31	19 28
2025	2	23	05 12	07 08	12 20	14 58	15 40	17 33	19 30

NOTE: These times are in GMT, except between 0100 on Mar.30 and 0100 on Oct.26, when they are in BST (1 hour in advance of GMT).

Twilight = Start and End of Astronomical Twilight
 Shadow 1 = Times when the length of the shadow cast by a vertical stick is equal to its length plus length of its shadow at transit
 Shadow 2 = Times when the length of the shadow cast by a vertical stick is equal to twice its length plus length of its shadow at transit
 Transit = Time of Meridian passage of Sun

© Crown Copyright. This information is protected by international copyright law. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission from The UK Hydrographic Office, Admiralty Way, Taunton, TA1 2DN, United Kingdom (www.ukho.gov.uk). Data generated using algorithms developed by HM Nautical Almanac Office.

Computed on 15-Nov-2024

15.11.2024 @ 14:58

HM Nautical Almanac Office

Page 2/7

Huddersfield

Longitude W001 47

Latitude N53 39

Civil Date	Twilight	Sunrise	Transit	Shadow 1	Shadow 2	Sunset	Twilight
Year mth d	h m	h m	h m	h m	h m	h m	h m
2025 2 24	05 09	07 06	12 20	15 00	15 42	17 35	19 32
2025 2 25	05 07	07 04	12 20	15 01	15 43	17 37	19 34
2025 2 26	05 05	07 02	12 20	15 03	15 45	17 39	19 36
2025 2 27	05 03	06 59	12 20	15 04	15 47	17 41	19 38
2025 2 28	05 01	06 57	12 20	15 05	15 49	17 43	19 40
2025 3 1	04 58	06 55	12 19	15 07	15 50	17 45	19 42
2025 3 2	04 56	06 52	12 19	15 08	15 52	17 47	19 44
2025 3 3	04 54	06 50	12 19	15 09	15 54	17 49	19 46
2025 3 4	04 51	06 48	12 19	15 11	15 55	17 51	19 48
2025 3 5	04 49	06 45	12 19	15 12	15 57	17 53	19 50
2025 3 6	04 46	06 43	12 18	15 13	15 59	17 55	19 52
2025 3 7	04 44	06 41	12 18	15 15	16 00	17 57	19 54
2025 3 8	04 41	06 38	12 18	15 16	16 02	17 58	19 56
2025 3 9	04 39	06 36	12 18	15 17	16 03	18 00	19 58
2025 3 10	04 36	06 33	12 17	15 19	16 05	18 02	20 00
2025 3 11	04 34	06 31	12 17	15 20	16 07	18 04	20 02
2025 3 12	04 31	06 29	12 17	15 21	16 08	18 06	20 04
2025 3 13	04 28	06 26	12 17	15 22	16 10	18 08	20 06
2025 3 14	04 26	06 24	12 16	15 23	16 11	18 10	20 08
2025 3 15	04 23	06 21	12 16	15 25	16 13	18 12	20 10
2025 3 16	04 20	06 19	12 16	15 26	16 14	18 13	20 12
2025 3 17	04 18	06 17	12 15	15 27	16 16	18 15	20 15
2025 3 18	04 15	06 14	12 15	15 28	16 17	18 17	20 17
2025 3 19	04 12	06 12	12 15	15 29	16 19	18 19	20 19
2025 3 20	04 09	06 09	12 14	15 31	16 20	18 21	20 21
2025 3 21	04 07	06 07	12 14	15 32	16 22	18 23	20 24
2025 3 22	04 04	06 04	12 14	15 33	16 23	18 25	20 26
2025 3 23	04 01	06 02	12 14	15 34	16 25	18 26	20 28
2025 3 24	03 58	05 59	12 13	15 35	16 26	18 28	20 30
2025 3 25	03 55	05 57	12 13	15 36	16 28	18 30	20 33
2025 3 26	03 52	05 55	12 13	15 37	16 29	18 32	20 35
2025 3 27	03 49	05 52	12 12	15 38	16 30	18 34	20 37
2025 3 28	03 46	05 50	12 12	15 39	16 32	18 36	20 40
2025 3 29	03 43	05 47	12 12	15 40	16 33	18 37	20 42
2025 3 30	04 40	06 45	13 11	16 41	17 35	19 39	21 45
2025 3 31	04 37	06 42	13 11	16 42	17 36	19 41	21 47
2025 4 1	04 34	06 40	13 11	16 43	17 37	19 43	21 50
2025 4 2	04 31	06 38	13 11	16 44	17 39	19 45	21 52
2025 4 3	04 28	06 35	13 10	16 45	17 40	19 47	21 55
2025 4 4	04 25	06 33	13 10	16 46	17 41	19 49	21 58
2025 4 5	04 21	06 30	13 10	16 47	17 43	19 50	22 00
2025 4 6	04 18	06 28	13 09	16 48	17 44	19 52	22 03
2025 4 7	04 15	06 25	13 09	16 49	17 45	19 54	22 06
2025 4 8	04 12	06 23	13 09	16 50	17 47	19 56	22 08
2025 4 9	04 08	06 21	13 09	16 51	17 48	19 58	22 11
2025 4 10	04 05	06 18	13 08	16 52	17 49	20 00	22 14
2025 4 11	04 02	06 16	13 08	16 53	17 50	20 01	22 17
2025 4 12	03 58	06 14	13 08	16 54	17 52	20 03	22 20
2025 4 13	03 55	06 11	13 08	16 55	17 53	20 05	22 23
2025 4 14	03 51	06 09	13 07	16 56	17 54	20 07	22 26
2025 4 15	03 48	06 07	13 07	16 56	17 55	20 09	22 29
2025 4 16	03 44	06 04	13 07	16 57	17 57	20 11	22 32
2025 4 17	03 41	06 02	13 07	16 58	17 58	20 12	22 35
2025 4 18	03 37	06 00	13 06	16 59	17 59	20 14	22 39

NOTE: These times are in GMT, except between 0100 on Mar.30 and 0100 on Oct.26, when they are in BST (1 hour in advance of GMT).

Twilight = Start and End of Astronomical Twilight
 Shadow 1 = Times when the length of the shadow cast by a vertical stick is equal to its length plus length of its shadow at transit
 Shadow 2 = Times when the length of the shadow cast by a vertical stick is equal to twice its length plus length of its shadow at transit
 Transit = Time of Meridian passage of Sun

© Crown Copyright. This information is protected by international copyright law. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission from The UK Hydrographic Office, Admiralty Way, Taunton, TA1 2DN, United Kingdom (www.ukho.gov.uk). Data generated using algorithms developed by HM Nautical Almanac Office.

Computed on 15-Nov-2024

15.11.2024 @ 14:58

HM Nautical Almanac Office

Page 3/7

Huddersfield

Longitude W001 47

Latitude N53 39

Civil Date			Twilight	Sunrise	Transit	Shadow 1	Shadow 2	Sunset	Twilight
Year	mth	d	h m	h m	h m	h m	h m	h m	h m
2025	4	19	03 33	05 57	13 06	17 00	18 00	20 16	22 42
2025	4	20	03 30	05 55	13 06	17 01	18 01	20 18	22 45
2025	4	21	03 26	05 53	13 06	17 02	18 03	20 20	22 49
2025	4	22	03 22	05 51	13 06	17 02	18 04	20 22	22 52
2025	4	23	03 18	05 49	13 05	17 03	18 05	20 23	22 56
2025	4	24	03 14	05 46	13 05	17 04	18 06	20 25	23 00
2025	4	25	03 10	05 44	13 05	17 05	18 07	20 27	23 03
2025	4	26	03 06	05 42	13 05	17 06	18 08	20 29	23 07
2025	4	27	03 02	05 40	13 05	17 06	18 10	20 31	23 11
2025	4	28	02 57	05 38	13 05	17 07	18 11	20 33	23 15
2025	4	29	02 53	05 36	13 04	17 08	18 12	20 34	23 20
2025	4	30	02 49	05 34	13 04	17 09	18 13	20 36	23 24
2025	5	1	02 44	05 32	13 04	17 09	18 14	20 38	23 29
2025	5	2	02 39	05 30	13 04	17 10	18 15	20 40	23 33
2025	5	3	02 34	05 28	13 04	17 11	18 16	20 42	23 38
2025	5	4	02 29	05 26	13 04	17 12	18 17	20 43	23 43
2025	5	5	02 24	05 24	13 04	17 12	18 19	20 45	23 49
2025	5	6	02 18	05 22	13 04	17 13	18 20	20 47	23 55
2025	5	7	02 12	05 20	13 04	17 14	18 21	20 49	24 01
2025	5	8	02 05	05 18	13 04	17 15	18 22	20 50	24 08
2025	5	9	01 58	05 16	13 04	17 15	18 23	20 52	24 16
2025	5	10	01 50	05 14	13 04	17 16	18 24	20 54	24 26
2025	5	11	01 41	05 12	13 03	17 17	18 25	20 56	24 38
2025	5	12	01 28	05 11	13 03	17 17	18 26	20 57	** **
2025	5	13	** **	05 09	13 03	17 18	18 27	20 59	** **
2025	5	14	** **	05 07	13 03	17 19	18 28	21 01	** **
2025	5	15	** **	05 06	13 03	17 19	18 29	21 02	** **
2025	5	16	** **	05 04	13 03	17 20	18 30	21 04	** **
2025	5	17	** **	05 02	13 04	17 21	18 31	21 06	** **
2025	5	18	** **	05 01	13 04	17 21	18 31	21 07	** **
2025	5	19	** **	04 59	13 04	17 22	18 32	21 09	** **
2025	5	20	** **	04 58	13 04	17 23	18 33	21 10	** **
2025	5	21	** **	04 57	13 04	17 23	18 34	21 12	** **
2025	5	22	** **	04 55	13 04	17 24	18 35	21 13	** **
2025	5	23	** **	04 54	13 04	17 24	18 36	21 15	** **
2025	5	24	** **	04 53	13 04	17 25	18 37	21 16	** **
2025	5	25	** **	04 51	13 04	17 25	18 38	21 18	** **
2025	5	26	** **	04 50	13 04	17 26	18 38	21 19	** **
2025	5	27	** **	04 49	13 04	17 27	18 39	21 21	** **
2025	5	28	** **	04 48	13 04	17 27	18 40	21 22	** **
2025	5	29	** **	04 47	13 05	17 28	18 41	21 23	** **
2025	5	30	** **	04 46	13 05	17 28	18 41	21 25	** **
2025	5	31	** **	04 45	13 05	17 29	18 42	21 26	** **
2025	6	1	** **	04 44	13 05	17 29	18 43	21 27	** **
2025	6	2	** **	04 43	13 05	17 30	18 44	21 28	** **
2025	6	3	** **	04 42	13 05	17 30	18 44	21 29	** **
2025	6	4	** **	04 41	13 06	17 31	18 45	21 30	** **
2025	6	5	** **	04 41	13 06	17 31	18 46	21 31	** **
2025	6	6	** **	04 40	13 06	17 32	18 46	21 32	** **
2025	6	7	** **	04 39	13 06	17 32	18 47	21 33	** **
2025	6	8	** **	04 39	13 06	17 32	18 47	21 34	** **
2025	6	9	** **	04 38	13 06	17 33	18 48	21 35	** **
2025	6	10	** **	04 38	13 07	17 33	18 48	21 36	** **
2025	6	11	** **	04 38	13 07	17 34	18 49	21 37	** **

NOTE: These times are in GMT, except between 0100 on Mar.30 and 0100 on Oct.26, when they are in BST (1 hour in advance of GMT).

Twilight = Start and End of Astronomical Twilight
 Shadow 1 = Times when the length of the shadow cast by a vertical stick is equal to its length plus length of its shadow at transit
 Shadow 2 = Times when the length of the shadow cast by a vertical stick is equal to twice its length plus length of its shadow at transit
 Transit = Time of Meridian passage of Sun

** ** indicates that the phenomenon does not occur

© Crown Copyright. This information is protected by international copyright law. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission from The UK Hydrographic Office, Admiralty Way, Taunton, TA1 2DN, United Kingdom (www.ukho.gov.uk). Data generated using algorithms developed by HM Nautical Almanac Office.

Computed on 15-Nov-2024

Huddersfield

Longitude W001 47

Latitude N53 39

Civil Date	Twilight	Sunrise	Transit	Shadow 1	Shadow 2	Sunset	Twilight
Year mth d	h m	h m	h m	h m	h m	h m	h m
2025 6 12	** **	04 37	13 07	17 34	18 49	21 37	** **
2025 6 13	** **	04 37	13 07	17 34	18 50	21 38	** **
2025 6 14	** **	04 37	13 07	17 35	18 50	21 38	** **
2025 6 15	** **	04 37	13 08	17 35	18 50	21 39	** **
2025 6 16	** **	04 36	13 08	17 35	18 51	21 40	** **
2025 6 17	** **	04 36	13 08	17 36	18 51	21 40	** **
2025 6 18	** **	04 36	13 08	17 36	18 51	21 40	** **
2025 6 19	** **	04 37	13 09	17 36	18 52	21 41	** **
2025 6 20	** **	04 37	13 09	17 36	18 52	21 41	** **
2025 6 21	** **	04 37	13 09	17 37	18 52	21 41	** **
2025 6 22	** **	04 37	13 09	17 37	18 52	21 41	** **
2025 6 23	** **	04 37	13 09	17 37	18 52	21 41	** **
2025 6 24	** **	04 38	13 10	17 37	18 53	21 41	** **
2025 6 25	** **	04 38	13 10	17 37	18 53	21 41	** **
2025 6 26	** **	04 39	13 10	17 37	18 53	21 41	** **
2025 6 27	** **	04 39	13 10	17 37	18 53	21 41	** **
2025 6 28	** **	04 40	13 10	17 38	18 53	21 41	** **
2025 6 29	** **	04 40	13 11	17 38	18 53	21 41	** **
2025 6 30	** **	04 41	13 11	17 38	18 53	21 40	** **
2025 7 1	** **	04 42	13 11	17 38	18 53	21 40	** **
2025 7 2	** **	04 43	13 11	17 38	18 52	21 40	** **
2025 7 3	** **	04 43	13 11	17 38	18 52	21 39	** **
2025 7 4	** **	04 44	13 12	17 38	18 52	21 38	** **
2025 7 5	** **	04 45	13 12	17 37	18 52	21 38	** **
2025 7 6	** **	04 46	13 12	17 37	18 52	21 37	** **
2025 7 7	** **	04 47	13 12	17 37	18 51	21 37	** **
2025 7 8	** **	04 48	13 12	17 37	18 51	21 36	** **
2025 7 9	** **	04 49	13 12	17 37	18 51	21 35	** **
2025 7 10	** **	04 50	13 13	17 37	18 50	21 34	** **
2025 7 11	** **	04 52	13 13	17 36	18 50	21 33	** **
2025 7 12	** **	04 53	13 13	17 36	18 49	21 32	** **
2025 7 13	** **	04 54	13 13	17 36	18 49	21 31	** **
2025 7 14	** **	04 55	13 13	17 36	18 48	21 30	** **
2025 7 15	** **	04 57	13 13	17 35	18 48	21 29	** **
2025 7 16	** **	04 58	13 13	17 35	18 47	21 28	** **
2025 7 17	** **	04 59	13 13	17 35	18 47	21 27	** **
2025 7 18	** **	05 01	13 13	17 34	18 46	21 25	** **
2025 7 19	** **	05 02	13 13	17 34	18 45	21 24	** **
2025 7 20	** **	05 03	13 14	17 33	18 45	21 23	** **
2025 7 21	** **	05 05	13 14	17 33	18 44	21 21	** **
2025 7 22	** **	05 06	13 14	17 32	18 43	21 20	** **
2025 7 23	** **	05 08	13 14	17 32	18 42	21 18	** **
2025 7 24	** **	05 09	13 14	17 31	18 41	21 17	** **
2025 7 25	** **	05 11	13 14	17 31	18 41	21 15	** **
2025 7 26	** **	05 13	13 14	17 30	18 40	21 14	** **
2025 7 27	** **	05 14	13 14	17 29	18 39	21 12	** **
2025 7 28	** **	05 16	13 14	17 29	18 38	21 10	** **
2025 7 29	** **	05 17	13 14	17 28	18 37	21 09	** **
2025 7 30	** **	05 19	13 14	17 27	18 36	21 07	24 56
2025 7 31	01 32	05 21	13 14	17 27	18 35	21 05	24 41
2025 8 1	01 47	05 22	13 13	17 26	18 34	21 03	24 30
2025 8 2	01 57	05 24	13 13	17 25	18 32	21 02	24 22
2025 8 3	02 05	05 26	13 13	17 24	18 31	21 00	24 15
2025 8 4	02 13	05 27	13 13	17 23	18 30	20 58	24 08

NOTE: These times are in GMT, except between 0100 on Mar.30 and 0100 on Oct.26, when they are in BST (1 hour in advance of GMT).

Twilight = Start and End of Astronomical Twilight
 Shadow 1 = Times when the length of the shadow cast by a vertical stick is equal to its length plus length of its shadow at transit
 Shadow 2 = Times when the length of the shadow cast by a vertical stick is equal to twice its length plus length of its shadow at transit
 Transit = Time of Meridian passage of Sun

** ** indicates that the phenomenon does not occur

© Crown Copyright. This information is protected by international copyright law. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission from The UK Hydrographic Office, Admiralty Way, Taunton, TA1 2DN, United Kingdom (www.ukho.gov.uk). Data generated using algorithms developed by HM Nautical Almanac Office.

Computed on 15-Nov-2024

Huddersfield

Longitude W001 47
Latitude N53 39

Civil Date			Twilight	Sunrise	Transit	Shadow 1	Shadow 2	Sunset	Twilight
Year	mth	d	h m	h m	h m	h m	h m	h m	h m
2025	8	5	02 19	05 29	13 13	17 22	18 29	20 56	24 02
2025	8	6	02 25	05 31	13 13	17 22	18 28	20 54	23 56
2025	8	7	02 31	05 33	13 13	17 21	18 26	20 52	23 50
2025	8	8	02 36	05 34	13 13	17 20	18 25	20 50	23 45
2025	8	9	02 41	05 36	13 13	17 19	18 24	20 48	23 40
2025	8	10	02 46	05 38	13 12	17 18	18 22	20 46	23 35
2025	8	11	02 50	05 39	13 12	17 17	18 21	20 44	23 30
2025	8	12	02 55	05 41	13 12	17 16	18 20	20 42	23 26
2025	8	13	02 59	05 43	13 12	17 14	18 18	20 40	23 21
2025	8	14	03 03	05 45	13 12	17 13	18 17	20 38	23 17
2025	8	15	03 07	05 46	13 12	17 12	18 15	20 36	23 13
2025	8	16	03 11	05 48	13 11	17 11	18 14	20 33	23 09
2025	8	17	03 14	05 50	13 11	17 10	18 12	20 31	23 05
2025	8	18	03 18	05 52	13 11	17 09	18 11	20 29	23 01
2025	8	19	03 22	05 53	13 11	17 08	18 09	20 27	22 57
2025	8	20	03 25	05 55	13 10	17 06	18 07	20 25	22 53
2025	8	21	03 29	05 57	13 10	17 05	18 06	20 22	22 49
2025	8	22	03 32	05 59	13 10	17 04	18 04	20 20	22 45
2025	8	23	03 35	06 00	13 10	17 02	18 03	20 18	22 41
2025	8	24	03 38	06 02	13 09	17 01	18 01	20 15	22 38
2025	8	25	03 42	06 04	13 09	17 00	17 59	20 13	22 34
2025	8	26	03 45	06 06	13 09	16 58	17 57	20 11	22 31
2025	8	27	03 48	06 08	13 09	16 57	17 56	20 08	22 27
2025	8	28	03 51	06 09	13 08	16 56	17 54	20 06	22 24
2025	8	29	03 54	06 11	13 08	16 54	17 52	20 04	22 20
2025	8	30	03 56	06 13	13 08	16 53	17 50	20 01	22 17
2025	8	31	03 59	06 15	13 07	16 51	17 49	19 59	22 13
2025	9	1	04 02	06 16	13 07	16 50	17 47	19 57	22 10
2025	9	2	04 05	06 18	13 07	16 48	17 45	19 54	22 06
2025	9	3	04 07	06 20	13 06	16 47	17 43	19 52	22 03
2025	9	4	04 10	06 22	13 06	16 45	17 41	19 49	22 00
2025	9	5	04 13	06 23	13 06	16 44	17 39	19 47	21 57
2025	9	6	04 15	06 25	13 05	16 42	17 37	19 45	21 53
2025	9	7	04 18	06 27	13 05	16 40	17 35	19 42	21 50
2025	9	8	04 20	06 29	13 05	16 39	17 33	19 40	21 47
2025	9	9	04 23	06 30	13 04	16 37	17 31	19 37	21 44
2025	9	10	04 25	06 32	13 04	16 36	17 30	19 35	21 41
2025	9	11	04 28	06 34	13 04	16 34	17 28	19 32	21 38
2025	9	12	04 30	06 36	13 03	16 32	17 26	19 30	21 35
2025	9	13	04 33	06 37	13 03	16 31	17 24	19 28	21 32
2025	9	14	04 35	06 39	13 03	16 29	17 22	19 25	21 29
2025	9	15	04 37	06 41	13 02	16 27	17 19	19 23	21 26
2025	9	16	04 39	06 43	13 02	16 26	17 17	19 20	21 23
2025	9	17	04 42	06 44	13 02	16 24	17 15	19 18	21 20
2025	9	18	04 44	06 46	13 01	16 22	17 13	19 15	21 17
2025	9	19	04 46	06 48	13 01	16 20	17 11	19 13	21 14
2025	9	20	04 48	06 50	13 00	16 19	17 09	19 10	21 11
2025	9	21	04 51	06 51	13 00	16 17	17 07	19 08	21 08
2025	9	22	04 53	06 53	13 00	16 15	17 05	19 05	21 05
2025	9	23	04 55	06 55	12 59	16 13	17 03	19 03	21 02
2025	9	24	04 57	06 57	12 59	16 12	17 01	19 00	21 00
2025	9	25	04 59	06 58	12 59	16 10	16 59	18 58	20 57
2025	9	26	05 01	07 00	12 58	16 08	16 57	18 55	20 54
2025	9	27	05 03	07 02	12 58	16 06	16 54	18 53	20 51

NOTE: These times are in GMT, except between 0100 on Mar.30 and 0100 on Oct.26, when they are in BST (1 hour in advance of GMT).

Twilight = Start and End of Astronomical Twilight
 Shadow 1 = Times when the length of the shadow cast by a vertical stick is equal to its length plus length of its shadow at transit
 Shadow 2 = Times when the length of the shadow cast by a vertical stick is equal to twice its length plus length of its shadow at transit
 Transit = Time of Meridian passage of Sun

© Crown Copyright. This information is protected by international copyright law. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission from The UK Hydrographic Office, Admiralty Way, Taunton, TA1 2DN, United Kingdom (www.ukho.gov.uk). Data generated using algorithms developed by HM Nautical Almanac Office.

Computed on 15-Nov-2024

15.11.2024 @ 14:58

HM Nautical Almanac Office

Page 6/7

Huddersfield

Longitude W001 47
Latitude N53 39

Civil Date	Twilight	Sunrise	Transit	Shadow 1	Shadow 2	Sunset	Twilight
Year mth d	h m	h m	h m	h m	h m	h m	h m
2025 9 28	05 05	07 04	12 58	16 05	16 52	18 51	20 49
2025 9 29	05 07	07 06	12 57	16 03	16 50	18 48	20 46
2025 9 30	05 09	07 07	12 57	16 01	16 48	18 46	20 43
2025 10 1	05 11	07 09	12 57	15 59	16 46	18 43	20 41
2025 10 2	05 13	07 11	12 56	15 57	16 44	18 41	20 38
2025 10 3	05 15	07 13	12 56	15 55	16 42	18 38	20 36
2025 10 4	05 17	07 15	12 56	15 54	16 40	18 36	20 33
2025 10 5	05 19	07 16	12 55	15 52	16 37	18 34	20 30
2025 10 6	05 21	07 18	12 55	15 50	16 35	18 31	20 28
2025 10 7	05 23	07 20	12 55	15 48	16 33	18 29	20 25
2025 10 8	05 25	07 22	12 55	15 46	16 31	18 26	20 23
2025 10 9	05 27	07 24	12 54	15 45	16 29	18 24	20 21
2025 10 10	05 29	07 25	12 54	15 43	16 27	18 22	20 18
2025 10 11	05 30	07 27	12 54	15 41	16 25	18 19	20 16
2025 10 12	05 32	07 29	12 54	15 39	16 23	18 17	20 14
2025 10 13	05 34	07 31	12 53	15 37	16 21	18 15	20 11
2025 10 14	05 36	07 33	12 53	15 36	16 18	18 12	20 09
2025 10 15	05 38	07 35	12 53	15 34	16 16	18 10	20 07
2025 10 16	05 40	07 37	12 53	15 32	16 14	18 08	20 04
2025 10 17	05 41	07 38	12 52	15 30	16 12	18 06	20 02
2025 10 18	05 43	07 40	12 52	15 29	16 10	18 03	20 00
2025 10 19	05 45	07 42	12 52	15 27	16 08	18 01	19 58
2025 10 20	05 47	07 44	12 52	15 25	16 06	17 59	19 56
2025 10 21	05 49	07 46	12 52	15 23	16 04	17 57	19 54
2025 10 22	05 50	07 48	12 52	15 22	16 02	17 54	19 52
2025 10 23	05 52	07 50	12 51	15 20	16 00	17 52	19 50
2025 10 24	05 54	07 52	12 51	15 18	15 58	17 50	19 48
2025 10 25	05 56	07 54	12 51	15 17	15 56	17 48	19 46
2025 10 26	04 57	06 56	11 51	14 15	14 54	16 46	18 44
2025 10 27	04 59	06 57	11 51	14 13	14 52	16 44	18 42
2025 10 28	05 01	06 59	11 51	14 12	14 50	16 42	18 40
2025 10 29	05 03	07 01	11 51	14 10	14 48	16 40	18 38
2025 10 30	05 04	07 03	11 51	14 09	14 47	16 38	18 36
2025 10 31	05 06	07 05	11 51	14 07	14 45	16 36	18 35
2025 11 1	05 08	07 07	11 51	14 06	14 43	16 34	18 33
2025 11 2	05 09	07 09	11 51	14 04	14 41	16 32	18 31
2025 11 3	05 11	07 11	11 51	14 03	14 39	16 30	18 30
2025 11 4	05 13	07 13	11 51	14 01	14 38	16 28	18 28
2025 11 5	05 14	07 15	11 51	14 00	14 36	16 26	18 26
2025 11 6	05 16	07 17	11 51	13 58	14 34	16 24	18 25
2025 11 7	05 18	07 19	11 51	13 57	14 32	16 22	18 23
2025 11 8	05 19	07 21	11 51	13 55	14 31	16 21	18 22
2025 11 9	05 21	07 22	11 51	13 54	14 29	16 19	18 20
2025 11 10	05 22	07 24	11 51	13 53	14 28	16 17	18 19
2025 11 11	05 24	07 26	11 51	13 52	14 26	16 15	18 18
2025 11 12	05 26	07 28	11 51	13 50	14 25	16 14	18 16
2025 11 13	05 27	07 30	11 51	13 49	14 23	16 12	18 15
2025 11 14	05 29	07 32	11 52	13 48	14 22	16 11	18 14
2025 11 15	05 30	07 34	11 52	13 47	14 20	16 09	18 13
2025 11 16	05 32	07 36	11 52	13 46	14 19	16 08	18 12
2025 11 17	05 33	07 37	11 52	13 45	14 18	16 06	18 10
2025 11 18	05 35	07 39	11 52	13 44	14 16	16 05	18 09
2025 11 19	05 36	07 41	11 53	13 43	14 15	16 03	18 08
2025 11 20	05 38	07 43	11 53	13 42	14 14	16 02	18 07

NOTE: These times are in GMT, except between 0100 on Mar.30 and 0100 on Oct.26, when they are in BST (1 hour in advance of GMT).

Twilight = Start and End of Astronomical Twilight
 Shadow 1 = Times when the length of the shadow cast by a vertical stick is equal to its length plus length of its shadow at transit
 Shadow 2 = Times when the length of the shadow cast by a vertical stick is equal to twice its length plus length of its shadow at transit
 Transit = Time of Meridian passage of Sun

© Crown Copyright. This information is protected by international copyright law. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission from The UK Hydrographic Office, Admiralty Way, Taunton, TA1 2DN, United Kingdom (www.ukho.gov.uk). Data generated using algorithms developed by HM Nautical Almanac Office.

Computed on 15-Nov-2024

15.11.2024 @ 14:58

HM Nautical Almanac Office

Page 7/7

Huddersfield

Longitude W001 47

Latitude N53 39

Civil Date			Twilight	Sunrise	Transit	Shadow 1	Shadow 2	Sunset	Twilight
Year	mth	d	h m	h m	h m	h m	h m	h m	h m
2025	11	21	05 39	07 45	11 53	13 41	14 13	16 01	18 06
2025	11	22	05 40	07 46	11 53	13 40	14 12	16 00	18 06
2025	11	23	05 42	07 48	11 54	13 39	14 11	15 59	18 05
2025	11	24	05 43	07 50	11 54	13 38	14 09	15 57	18 04
2025	11	25	05 45	07 52	11 54	13 38	14 09	15 56	18 03
2025	11	26	05 46	07 53	11 55	13 37	14 08	15 55	18 03
2025	11	27	05 47	07 55	11 55	13 36	14 07	15 54	18 02
2025	11	28	05 49	07 57	11 55	13 36	14 06	15 53	18 01
2025	11	29	05 50	07 58	11 56	13 35	14 05	15 53	18 01
2025	11	30	05 51	08 00	11 56	13 35	14 04	15 52	18 00
2025	12	1	05 52	08 01	11 56	13 34	14 04	15 51	18 00
2025	12	2	05 53	08 03	11 57	13 34	14 03	15 50	17 59
2025	12	3	05 55	08 04	11 57	13 33	14 03	15 50	17 59
2025	12	4	05 56	08 05	11 57	13 33	14 02	15 49	17 59
2025	12	5	05 57	08 07	11 58	13 33	14 02	15 49	17 58
2025	12	6	05 58	08 08	11 58	13 32	14 01	15 48	17 58
2025	12	7	05 59	08 09	11 59	13 32	14 01	15 48	17 58
2025	12	8	06 00	08 11	11 59	13 32	14 01	15 47	17 58
2025	12	9	06 01	08 12	12 00	13 32	14 00	15 47	17 58
2025	12	10	06 02	08 13	12 00	13 32	14 00	15 47	17 58
2025	12	11	06 03	08 14	12 00	13 32	14 00	15 47	17 58
2025	12	12	06 04	08 15	12 01	13 32	14 00	15 47	17 58
2025	12	13	06 05	08 16	12 01	13 32	14 00	15 47	17 58
2025	12	14	06 05	08 17	12 02	13 32	14 00	15 47	17 58
2025	12	15	06 06	08 18	12 02	13 32	14 00	15 47	17 58
2025	12	16	06 07	08 19	12 03	13 33	14 01	15 47	17 59
2025	12	17	06 08	08 20	12 03	13 33	14 01	15 47	17 59
2025	12	18	06 08	08 20	12 04	13 33	14 01	15 47	17 59
2025	12	19	06 09	08 21	12 04	13 34	14 01	15 48	18 00
2025	12	20	06 09	08 22	12 05	13 34	14 02	15 48	18 00
2025	12	21	06 10	08 22	12 05	13 35	14 02	15 49	18 01
2025	12	22	06 10	08 23	12 06	13 35	14 03	15 49	18 01
2025	12	23	06 11	08 23	12 06	13 36	14 03	15 50	18 02
2025	12	24	06 11	08 23	12 07	13 36	14 04	15 50	18 02
2025	12	25	06 12	08 24	12 07	13 37	14 05	15 51	18 03
2025	12	26	06 12	08 24	12 08	13 38	14 06	15 52	18 04
2025	12	27	06 12	08 24	12 08	13 38	14 06	15 53	18 04
2025	12	28	06 13	08 24	12 09	13 39	14 07	15 53	18 05
2025	12	29	06 13	08 24	12 09	13 40	14 08	15 54	18 06
2025	12	30	06 13	08 24	12 10	13 41	14 09	15 55	18 07
2025	12	31	06 13	08 24	12 10	13 42	14 10	15 56	18 08

NOTE: These times are in GMT, except between 0100 on Mar.30 and 0100 on Oct.26, when they are in BST (1 hour in advance of GMT).

- Twilight = Start and End of Astronomical Twilight
- Shadow 1 = Times when the length of the shadow cast by a vertical stick is equal to its length plus length of its shadow at transit
- Shadow 2 = Times when the length of the shadow cast by a vertical stick is equal to twice its length plus length of its shadow at transit
- Transit = Time of Meridian passage of Sun

© Crown Copyright. This information is protected by international copyright law. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission from The UK Hydrographic Office, Admiralty Way, Taunton, TA1 2DN, United Kingdom (www.ukho.gov.uk). Data generated using algorithms developed by HM Nautical Almanac Office.

Computed on 15-Nov-2024