

Lunar almanac for Oct 2017

DISTANCES of Moon's Center from Sun, and from Stars EAST of her.									
Star's Name	Date	Noon D.M.S.	IIIh D.M.S.	VIh D.M.S.	IXh D.M.S.	Midn/t D.M.S.	XVh D.M.S.	XVIIIh D.M.S.	XXIh D.M.S.
Hamal	1	81.57.24	80.26.34	78.55.29	77.24.08	75.52.32	74.20.40	72.48.32	71.16.09
	2	69.43.31	68.10.38	66.37.31	65.04.10	63.30.35	61.56.47	60.22.48	58.48.36
	3	57.14.15	55.39.44	54.05.04	52.30.18	---	---	---	---
Markab	1	41.27.51	40.10.40	---	---	---	---	---	---
Aldebaran	2	---	---	---	---	---	---	91.35.26	89.56.46
	3	88.17.44	86.38.22	84.58.39	83.18.35	81.38.11	79.57.26	78.16.21	76.34.56
	4	74.53.11	73.11.07	71.28.43	69.45.59	68.02.57	66.19.37	64.35.58	62.52.01
	5	61.07.48	59.23.17	57.38.30	55.53.27	54.08.09	52.22.36	50.36.49	48.50.48
	6	47.04.34	45.18.07	43.31.28	41.44.38	39.57.38	38.10.27	36.23.07	34.35.39
	7	32.48.02	31.00.18	29.12.28	---	---	---	---	---
	6	---	---	---	---	---	82.23.19	80.37.23	78.51.18
Pollux	7	77.05.07	75.18.50	73.32.27	71.46.00	69.59.30	68.12.57	66.26.23	64.39.47
	8	62.53.12	61.06.38	59.20.07	57.33.38	55.47.14	54.00.55	52.14.43	50.28.39
	9	48.42.43	46.56.58	45.11.25	---	---	---	---	---
	8	---	---	---	---	---	---	87.40.24	85.52.04
Regulus	9	84.03.45	82.15.28	80.27.15	78.39.05	76.50.59	75.02.57	73.15.00	71.27.09
	10	69.39.23	67.51.43	66.04.09	64.16.42	62.29.23	60.42.10	58.55.05	57.08.08
	11	55.21.19	53.34.39	51.48.07	50.01.43	48.15.29	46.29.24	44.43.28	42.57.42
	12	41.12.05	39.26.37	37.41.20	35.56.12	34.11.15	32.26.27	---	---
Sun	9	---	---	---	---	---	---	120.05.21	118.25.14
	10	116.45.13	115.05.17	113.25.27	111.45.43	110.06.07	108.26.37	106.47.15	105.08.00
	11	103.28.53	101.49.55	100.11.05	98.32.24	96.53.51	95.15.28	93.37.14	91.59.10
	12	90.21.15	88.43.30	87.05.55	85.28.30	83.51.15	82.14.10	80.37.15	79.00.31
	13	77.23.57	75.47.34	74.11.22	72.35.20	70.59.29	69.23.49	67.48.20	66.13.02
	14	64.37.55	63.03.00	61.28.15	59.53.42	58.19.20	56.45.10	55.11.11	53.37.24
	15	52.03.49	50.30.26	48.57.16	47.24.17	45.51.31	44.18.58	42.46.38	41.14.31
16	39.42.38	38.10.59	---	---	---	---	---	---	
Spica	12	94.59.02	93.14.16	91.29.40	89.45.13	88.00.56	86.16.49	84.32.53	82.49.06
	13	81.05.30	79.22.05	77.38.50	75.55.47	74.12.54	72.30.12	70.47.42	69.05.22
	14	67.23.15	65.41.18	63.59.34	62.18.02	60.36.41	58.55.33	57.14.38	55.33.55
	15	53.53.25	52.13.08	50.33.05	48.53.16	47.13.41	45.34.21	43.55.16	42.16.27
16	40.37.54	38.59.38	37.21.40	35.44.02	34.06.43	---	---	---	
Antares	16	---	---	---	81.37.13	79.59.19	---	---	---
Altair	21	---	---	---	---	---	---	---	64.38.23
22	63.20.36	---	---	---	---	---	---	---	---
Fomalhaut	21	---	---	---	---	---	---	---	97.08.12
	22	95.43.02	94.18.00	92.53.04	91.28.17	90.03.36	88.39.04	87.14.39	85.50.23
	23	84.26.14	83.02.13	81.38.21	80.14.36	78.51.00	77.27.32	76.04.13	74.41.02
	24	73.17.59	71.55.05	70.32.20	69.09.43	67.47.16	66.24.57	65.02.48	63.40.49
	25	62.18.59	60.57.20	59.35.52	58.14.34	56.53.29	55.32.36	54.11.56	52.51.30
	26	51.31.20	50.11.26	48.51.49	47.32.33	46.13.37	44.55.05	43.36.58	42.19.20
Markab	26	---	65.19.58	63.59.00	62.38.08	61.17.23	59.56.45	58.36.16	57.15.56
	27	55.55.45	54.35.46	53.15.59	51.56.26	50.37.09	49.18.08	47.59.27	46.41.08
	28	45.23.14	44.05.48	42.48.53	41.32.34	40.16.56	---	---	---
Hamal	27	---	---	---	---	---	---	89.20.19	87.52.16
	28	86.23.59	84.55.29	83.26.46	81.57.48	80.28.37	78.59.11	77.29.30	75.59.35
	29	74.29.24	72.58.58	71.28.17	69.57.21	68.26.09	66.54.42	65.23.00	63.51.03
	30	62.18.51	60.46.25	59.13.45	57.40.51	56.07.45	54.34.27	53.00.57	51.27.18
Aldebaran	30	---	91.56.55	90.19.53	88.42.29	87.04.40	85.26.28	83.47.52	82.08.52
31	80.29.27	78.49.37	77.09.23	75.28.44	73.47.39	72.06.10	70.24.15	68.41.56	

Lunar almanac for Oct 2017

DISTANCES of Moon's Center from Sun, and from Stars WEST of her.									
		Noon	IIIh	VIh	IXh	Midn/t	XVh	XVIIIh	XXIh
Star's Name	Date	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.
Antares	1	66.05.56	67.38.29	69.11.21	70.44.34	72.18.07	73.52.00	75.26.14	77.00.48
	2	78.35.43	80.10.59	81.46.35	83.22.32	84.58.50	86.35.29	88.12.28	89.49.48
	3	91.27.28	93.05.29	94.43.50	96.22.31	98.01.32	99.40.52	101.20.32	103.00.30
Altair	3	---	---	---	---	54.13.42	55.37.06	57.01.24	58.26.34
	4	59.52.33	61.19.18	62.46.47	64.14.57	65.43.47	67.13.14	68.43.16	70.13.51
	5	71.44.57	---	---	---	---	---	---	---
Fomalhaut	4	---	---	---	---	---	---	35.03.59	36.28.04
	5	37.53.49	39.21.05	40.49.43	42.19.36	43.50.38	45.22.42	46.55.44	48.29.39
	6	50.04.22	51.39.49	53.15.57	54.52.43	56.30.04	---	---	---
Markab	5	---	---	---	---	---	---	---	35.49.23
	6	37.12.03	38.36.32	40.02.39	41.30.16	42.59.13	44.29.23	46.00.39	47.32.55
	7	49.06.06	50.40.05	52.14.50	53.50.15	55.26.16	57.02.51	58.39.55	60.17.27
Hamal	8	20.17.44	21.32.54	22.52.19	24.15.18	25.41.15	27.09.43	28.40.17	30.12.37
	9	31.46.28	33.21.35	34.57.48	36.34.57	38.12.53	39.51.30	41.30.41	43.10.23
	10	44.50.30	46.30.58	48.11.44	49.52.46	51.34.00	53.15.24	54.56.57	56.38.36
Aldebaran	11	58.20.19	60.02.06	61.43.55	---	---	---	---	---
	11	---	---	---	30.06.02	31.52.15	33.38.19	35.24.14	37.09.59
	12	38.55.36	40.41.02	42.26.19	44.11.26	45.56.23	47.41.10	49.25.47	51.10.14
	13	52.54.31	54.38.38	56.22.34	58.06.20	59.49.56	61.33.21	63.16.36	64.59.40
Pollux	14	66.42.34	---	---	---	---	---	---	---
	14	---	25.51.52	27.27.46	29.04.12	30.41.04	32.18.15	33.55.41	35.33.19
	15	37.11.05	38.48.58	40.26.54	42.04.53	43.42.51	45.20.49	46.58.46	48.36.39
Regulus	16	50.14.28	51.52.12	53.29.51	55.07.24	56.44.51	---	---	---
	16	---	---	---	18.36.19	20.15.36	---	---	---
Spica	21	---	---	---	---	---	---	---	34.59.01
	22	36.27.58	37.56.53	39.25.45	40.54.34	42.23.20	43.52.01	45.20.39	46.49.12
	23	48.17.42	49.46.07	51.14.29	52.42.47	54.11.01	55.39.12	57.07.19	58.35.24
Sun	24	60.03.27	61.31.27	62.59.25	64.27.21	65.55.17	---	---	---
	22	---	---	---	---	---	37.49.10	39.10.48	40.32.21
	23	41.53.48	43.15.10	44.36.28	45.57.40	47.18.49	48.39.53	50.00.53	51.21.50
	24	52.42.43	54.03.34	55.24.23	56.45.09	58.05.54	59.26.37	60.47.20	62.08.03
	25	63.28.46	64.49.30	66.10.15	67.31.01	68.51.50	70.12.42	71.33.37	72.54.36
	26	74.15.39	75.36.47	76.58.01	78.19.21	79.40.48	81.02.21	82.24.03	83.45.53
	27	85.07.52	86.30.01	87.52.20	89.14.49	90.37.30	92.00.23	93.23.28	94.46.46
	28	96.10.18	97.34.04	98.58.05	100.22.21	101.46.53	103.11.42	104.36.47	106.02.10
	29	107.27.51	108.53.50	110.20.08	111.46.45	113.13.42	114.40.59	116.08.37	117.36.35
	30	119.04.55	120.33.36	---	---	---	---	---	---
Antares	23	---	---	---	---	---	---	14.05.12	15.13.17
	24	16.24.34	17.38.22	18.54.13	20.11.43	21.30.34	22.50.31	24.11.25	25.33.06
	25	26.55.27	28.18.24	29.41.51	31.05.45	32.30.04	33.54.45	35.19.47	36.45.07
	26	38.10.45	39.36.40	41.02.50	42.29.17	43.55.58	45.22.55	46.50.06	48.17.32
	27	49.45.13	51.13.09	52.41.19	54.09.45	55.38.26	57.07.22	58.36.35	60.06.04
	28	61.35.49	63.05.51	64.36.10	66.06.47	67.37.42	69.08.55	70.40.27	72.12.18
	29	73.44.29	75.17.00	76.49.50	78.23.02	79.56.34	81.30.28	83.04.43	84.39.21
	30	86.14.20	87.49.42	89.25.27	91.01.34	92.38.05	94.14.59	95.52.17	97.29.58
	31	99.08.02	100.46.31	102.25.23	---	---	---	---	---

Lunar almanac for Oct 2017

DISTANCES of Moon's Center from Planets EAST of her.									
		Noon	IIIh	VIh	IXh	Midn/t	XVh	XVIIIh	XXIh
Star's Name	Date	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.
Venus	8	---	119.26.10	117.47.04	116.07.57	114.28.50	112.49.43	111.10.37	109.31.33
	9	107.52.31	106.13.31	104.34.34	102.55.40	101.16.51	99.38.06	97.59.26	96.20.52
	10	94.42.23	93.04.00	91.25.43	89.47.34	88.09.31	86.31.36	84.53.49	83.16.09
	11	81.38.38	80.01.15	78.24.01	76.46.56	75.10.00	73.33.13	71.56.36	70.20.08
	12	68.43.50	67.07.41	65.31.43	63.55.54	62.20.16	60.44.47	59.09.30	57.34.22
	13	55.59.25	54.24.38	52.50.02	51.15.36	49.41.21	48.07.17	46.33.24	44.59.41
	14	43.26.09	41.52.48	40.19.39	38.46.40	37.13.52	35.41.16	34.08.51	32.36.38
	15	31.04.36	29.32.46	28.01.08	26.29.42	24.58.29	23.27.29	21.56.41	20.26.08
Mars	8	119.23.30	117.39.55	115.56.18	114.12.40	112.29.02	110.45.24	109.01.47	107.18.12
	9	105.34.38	103.51.07	102.07.38	100.24.14	98.40.53	96.57.36	95.14.25	93.31.18
	10	91.48.18	90.05.23	88.22.35	86.39.53	84.57.19	83.14.52	81.32.32	79.50.21
	11	78.08.18	76.26.23	74.44.36	73.02.59	71.21.30	69.40.11	67.59.01	66.18.01
	12	64.37.10	62.56.29	61.15.58	59.35.37	57.55.26	56.15.25	54.35.34	52.55.54
	13	51.16.24	49.37.04	47.57.55	46.18.57	44.40.09	43.01.32	41.23.06	39.44.51
	14	38.06.46	36.28.53	34.51.10	33.13.39	31.36.20	29.59.11	28.22.15	26.45.30
	15	25.08.58	23.32.37	21.56.30	20.20.36	---	---	---	---
Jupiter	10	---	---	---	---	---	---	118.52.23	117.07.20
	11	115.22.24	113.37.36	111.52.56	110.08.25	108.24.02	106.39.49	104.55.44	103.11.48
	12	101.28.02	99.44.25	98.00.58	96.17.40	94.34.33	92.51.35	91.08.48	89.26.10
	13	87.43.43	86.01.26	84.19.20	82.37.24	80.55.38	79.14.03	77.32.39	75.51.25
	14	74.10.22	72.29.29	70.48.48	69.08.17	67.27.57	65.47.49	64.07.51	62.28.05
	15	60.48.29	59.09.05	57.29.53	55.50.52	54.12.02	52.33.24	50.54.59	49.16.45
	16	47.38.43	46.00.54	44.23.17	42.45.53	41.08.41	---	---	---
Saturn	14	---	---	---	---	119.40.05	117.58.51	116.17.48	114.36.54
	15	112.56.12	111.15.39	109.35.18	107.55.07	106.15.06	104.35.17	102.55.38	101.16.11
	16	99.36.54	97.57.49	96.18.54	94.40.11	93.01.39	---	---	---
	21	---	---	---	---	---	---	---	25.38.48
	22	24.09.34	22.40.35	21.11.53	19.43.29	---	---	---	---

Lunar almanac for Oct 2017

DISTANCES of Moon's Center from Planets WEST of her.									
		Noon	IIIh	VIh	IXh	Midn/t	XVh	XVIIIh	XXIh
Star's Name	Date	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.	D.M.S.
Jupiter	1	107.52.30	109.24.47	110.57.22	112.30.16	114.03.27	115.36.58	117.10.47	118.44.55
Saturn	1	53.41.05	55.14.28	56.48.10	58.22.11	59.56.31	61.31.10	63.06.09	64.41.28
	2	66.17.07	67.53.06	69.29.26	71.06.06	72.43.06	74.20.28	75.58.10	77.36.13
	3	79.14.36	80.53.21	82.32.26	84.11.51	85.51.38	87.31.44	89.12.11	90.52.58
	4	92.34.05	94.15.31	95.57.17	97.39.22	99.21.45	101.04.26	102.47.26	104.30.43
	5	106.14.17	107.58.07	109.42.14	111.26.36	113.11.13	114.56.05	116.41.10	118.26.29
Venus	21	---	---	---	---	---	---	---	48.32.30
	22	49.53.47	51.14.53	52.35.51	53.56.40	55.17.21	56.37.53	57.58.17	59.18.34
	23	60.38.43	61.58.46	63.18.42	64.38.31	65.58.15	67.17.54	68.37.28	69.56.57
	24	71.16.22	72.35.43	73.55.01	75.14.16	76.33.29	77.52.41	79.11.51	80.31.00
	25	81.50.09	83.09.18	84.28.29	85.47.40	87.06.53	88.26.09	89.45.28	91.04.50
	26	92.24.17	93.43.48	95.03.25	96.23.07	97.42.56	99.02.52	100.22.56	101.43.07
	27	103.03.28	104.23.58	105.44.39	107.05.29	108.26.31	109.47.45	111.09.12	112.30.51
	28	113.52.44	115.14.51	116.37.12	117.59.49	119.22.42	---	---	---
Mars	21	---	---	---	---	---	---	---	58.39.27
	22	60.05.21	61.31.05	62.56.41	64.22.07	65.47.25	67.12.34	68.37.36	70.02.30
	23	71.27.17	72.51.57	74.16.30	75.40.57	77.05.18	78.29.34	79.53.45	81.17.52
	24	82.41.54	84.05.53	85.29.48	86.53.41	88.17.31	89.41.20	91.05.08	92.28.55
	25	93.52.41	95.16.28	96.40.16	98.04.05	99.27.56	100.51.49	102.15.46	103.39.46
	26	105.03.50	106.27.59	107.52.13	109.16.33	110.41.00	112.05.34	113.30.15	114.55.05
	27	116.20.03	117.45.11	119.10.29	---	---	---	---	---
Jupiter	21	---	---	---	---	---	---	---	26.05.00
	22	27.33.07	29.01.10	30.29.08	31.57.01	33.24.49	34.52.32	36.20.09	37.47.40
	23	39.15.07	40.42.28	42.09.44	43.36.55	45.04.02	46.31.05	47.58.03	49.24.58
	24	50.51.50	52.18.39	53.45.26	55.12.10	56.38.53	58.05.34	59.32.15	60.58.56
	25	62.25.37	63.52.18	65.19.01	66.45.45	68.12.32	69.39.21	71.06.14	72.33.11
	26	74.00.12	75.27.18	76.54.30	78.21.47	79.49.12	81.16.43	82.44.23	84.12.11
	27	85.40.08	87.08.15	88.36.32	90.05.00	91.33.39	93.02.30	94.31.33	96.00.50
	28	97.30.21	99.00.06	100.30.05	102.00.20	103.30.51	105.01.39	106.32.44	108.04.06
	29	109.35.46	111.07.45	112.40.02	114.12.40	115.45.37	117.18.55	118.52.33	---
Saturn	25	---	---	---	---	---	19.05.12	20.32.03	21.59.06
	26	23.26.21	24.53.47	26.21.24	27.49.11	29.17.09	30.45.16	32.13.35	33.42.04
	27	35.10.44	36.39.36	38.08.39	39.37.55	41.07.23	42.37.05	44.07.00	45.37.09
	28	47.07.33	48.38.12	50.09.07	51.40.17	53.11.45	54.43.29	56.15.32	57.47.52
	29	59.20.31	60.53.29	62.26.47	64.00.25	65.34.24	67.08.43	68.43.24	70.18.27
	30	71.53.52	73.29.40	75.05.50	76.42.24	78.19.22	79.56.43	81.34.28	83.12.38
	31	84.51.12	86.30.10	88.09.34	89.49.22	91.29.36	93.10.14	94.51.17	96.32.46

Lunar almanac for Oct 2017

The Sun's							
day	date	Longtde	RA	Dec	Eq of time	diff	SD
		D.M.S	H.M.S	D.M.S			
Sun.	1	188.15.17	12h31m12s	3.22.03 S	10m23s	0.0s	15' 58"
M.	2	189.14.16	12h34m49s	3.45.16 S	10m42s	19.1s	15' 58"
Tu.	3	190.13.17	12h38m27s	4.08.27 S	11m01s	18.8s	15' 59"
W.	4	191.12.20	12h42m05s	4.31.34 S	11m19s	18.4s	15' 59"
Th.	5	192.11.25	12h45m43s	4.54.38 S	11m38s	18.1s	15' 59"
F.	6	193.10.32	12h49m22s	5.17.39 S	11m55s	17.7s	16' 0"
Sa.	7	194.09.42	12h53m01s	5.40.35 S	12m13s	17.3s	16' 0"
Sun.	8	195.08.53	12h56m41s	6.03.27 S	12m30s	16.9s	16' 0"
M.	9	196.08.07	13h00m21s	6.26.15 S	12m46s	16.5s	16' 0"
Tu.	10	197.07.23	13h04m01s	6.48.57 S	13m02s	16.0s	16' 1"
W.	11	198.06.41	13h07m42s	7.11.35 S	13m18s	15.6s	16' 1"
Th.	12	199.06.01	13h11m23s	7.34.06 S	13m33s	15.1s	16' 1"
F.	13	200.05.25	13h15m05s	7.56.31 S	13m48s	14.6s	16' 1"
Sa.	14	201.04.50	13h18m48s	8.18.50 S	14m02s	14.0s	16' 2"
Sun.	15	202.04.18	13h22m31s	8.41.02 S	14m15s	13.5s	16' 2"
M.	16	203.03.48	13h26m15s	9.03.06 S	14m28s	12.9s	16' 2"
Tu.	17	204.03.20	13h29m59s	9.25.03 S	14m41s	12.3s	16' 2"
W.	18	205.02.54	13h33m44s	9.46.52 S	14m52s	11.7s	16' 3"
Th.	19	206.02.31	13h37m30s	10.08.32 S	15m04s	11.1s	16' 3"
F.	20	207.02.09	13h41m16s	10.30.04 S	15m14s	10.5s	16' 3"
Sa.	21	208.01.50	13h45m02s	10.51.26 S	15m24s	9.8s	16' 4"
Sun.	22	209.01.33	13h48m50s	11.12.38 S	15m33s	9.2s	16' 4"
M.	23	210.01.17	13h52m38s	11.33.41 S	15m42s	8.5s	16' 4"
Tu.	24	211.01.03	13h56m27s	11.54.32 S	15m50s	7.8s	16' 4"
W.	25	212.00.51	14h00m16s	12.15.13 S	15m57s	7.1s	16' 5"
Th.	26	213.00.41	14h04m07s	12.35.43 S	16m03s	6.3s	16' 5"
F.	27	214.00.32	14h07m58s	12.56.01 S	16m09s	5.6s	16' 5"
Sa.	28	215.00.26	14h11m49s	13.16.07 S	16m14s	4.8s	16' 5"
Sun.	29	216.00.20	14h15m42s	13.36.00 S	16m18s	4.1s	16' 6"
M.	30	217.00.17	14h19m35s	13.55.40 S	16m21s	3.3s	16' 6"
Tu.	31	218.00.15	14h23m29s	14.15.07 S	16m23s	2.5s	16' 6"

Lunar almanac for Oct 2017

The Moon's							
		Meridian	Longitude		Latitude		
day	date	Age Days	Passage H.M	Noon D.M.S	Midnight D.M.S	Noon D.M.S	Midnight D.M.S
Sun.	1	10	09h00m	315.42.47	321.59.23	0.40.23 N	0.06.30 N
M.	2	11	09h49m	328.21.03	334.48.06	0.27.53 S	1.02.22 S
Tu.	3	12	10h38m	341.20.45	347.59.08	1.36.29 S	2.09.45 S
W.	4	13	11h28m	354.43.15	1.32.56	2.41.39 S	3.11.38 S
Th.	5	14	12h19m	8.27.57	15.27.51	3.39.10 S	4.03.42 S
F.	6	15	13h11m	22.32.08	29.40.08	4.24.45 S	4.41.51 S
Sa.	7	16	14h05m	36.51.08	44.04.20	4.54.37 S	5.02.45 S
Sun.	8	17	15h01m	51.18.57	58.34.11	5.06.04 S	5.04.29 S
M.	9	18	15h59m	65.49.15	73.03.29	4.58.01 S	4.46.47 S
Tu.	10	19	16h58m	80.16.15	87.27.05	4.31.01 S	4.11.03 S
W.	11	20	17h57m	94.35.33	101.41.23	3.47.15 S	3.20.05 S
Th.	12	21	18h55m	108.44.24	115.44.27	2.50.02 S	2.17.37 S
F.	13	22	19h51m	122.41.31	129.35.37	1.43.24 S	1.07.54 S
Sa.	14	23	20h44m	136.26.46	143.15.03	0.31.41 S	0.04.42 N
Sun.	15	24	21h35m	150.00.31	156.43.13	0.40.45 N	1.15.57 N
M.	16	25	22h23m	163.23.11	170.00.25	1.49.49 N	2.21.55 N
Tu.	17	26	23h10m	176.34.56	183.06.39	2.51.52 N	3.19.17 N
W.	18	27	23h56m	189.35.33	196.01.33	3.43.53 N	4.05.24 N
Th.	19	28	24h42m	202.24.35	208.44.36	4.23.37 N	4.38.25 N
F.	20	29	00h38m	215.01.33	221.15.27	4.49.40 N	4.57.21 N
Sa.	21	1	01h24m	227.26.19	233.34.14	5.01.28 N	5.02.02 N
Sun.	22	2	02h10m	239.39.20	245.41.49	4.59.08 N	4.52.53 N
M.	23	3	02h57m	251.41.56	257.40.00	4.43.25 N	4.30.53 N
Tu.	24	4	03h45m	263.36.25	269.31.35	4.15.28 N	3.57.19 N
W.	25	5	04h33m	275.26.02	281.20.17	3.36.38 N	3.13.38 N
Th.	26	6	05h21m	287.14.56	293.10.36	2.48.31 N	2.21.29 N
F.	27	7	06h09m	299.07.57	305.07.40	1.52.46 N	1.22.37 N
Sa.	28	8	06h57m	311.10.24	317.16.53	0.51.17 N	0.19.04 N
Sun.	29	9	07h44m	323.27.46	329.43.40	0.13.45 S	0.46.50 S
M.	30	10	08h32m	336.05.13	342.32.54	1.19.49 S	1.52.16 S
Tu.	31	11	09h21m	349.07.09	355.48.15	2.23.44 S	2.53.45 S

Lunar almanac for Oct 2017

The Moon's Right Ascension									
day	Date	Noon D.M.S.	IIIh D.M.S.	VIh D.M.S.	IXh D.M.S.	Midn/t D.M.S.	XVh D.M.S.	XVIIIh D.M.S.	XXIh D.M.S.
Sun.	1	318.12.44	319.47.59	321.23.14	322.58.30	324.33.45	326.09.01	327.44.17	329.19.34
M.	2	330.54.52	332.30.11	334.05.32	335.40.54	337.16.19	338.51.47	340.27.18	342.02.52
Tu.	3	343.38.31	345.14.14	346.50.03	348.25.57	350.01.58	351.38.06	353.14.21	354.50.45
W.	4	356.27.18	358.04.01	359.40.55	1.18.00	2.55.17	4.32.46	6.10.30	7.48.28
Th.	5	9.26.41	11.05.10	12.43.56	14.23.00	16.02.22	17.42.03	19.22.05	21.02.26
F.	6	22.43.09	24.24.15	26.05.42	27.47.33	29.29.48	31.12.28	32.55.32	34.39.02
Sa.	7	36.22.57	38.07.19	39.52.07	41.37.21	43.23.03	45.09.11	46.55.45	48.42.47
Sun.	8	50.30.15	52.18.09	54.06.29	55.55.14	57.44.25	59.33.59	61.23.57	63.14.18
M.	9	65.05.00	66.56.04	68.47.26	70.39.08	72.31.06	74.23.20	76.15.48	78.08.29
Tu.	10	80.01.21	81.54.23	83.47.32	85.40.48	87.34.07	89.27.29	91.20.52	93.14.13
W.	11	95.07.30	97.00.43	98.53.48	100.46.44	102.39.30	104.32.02	106.24.21	108.16.23
Th.	12	110.08.08	111.59.34	113.50.38	115.41.21	117.31.39	119.21.33	121.11.01	123.00.02
F.	13	124.48.35	126.36.39	128.24.13	130.11.16	131.57.49	133.43.49	135.29.18	137.14.15
Sa.	14	138.58.39	140.42.30	142.25.49	144.08.35	145.50.49	147.32.30	149.13.39	150.54.16
Sun.	15	152.34.22	154.13.57	155.53.01	157.31.36	159.09.42	160.47.19	162.24.28	164.01.10
M.	16	165.37.26	167.13.16	168.48.41	170.23.43	171.58.22	173.32.39	175.06.34	176.40.10
Tu.	17	178.13.26	179.46.24	181.19.05	182.51.29	184.23.38	185.55.33	187.27.14	188.58.42
W.	18	190.29.59	192.01.05	193.32.02	195.02.50	196.33.29	198.04.02	199.34.29	201.04.50
Th.	19	202.35.06	204.05.19	205.35.30	207.05.38	208.35.44	210.05.51	211.35.57	213.06.04
F.	20	214.36.12	216.06.22	217.36.35	219.06.51	220.37.11	222.07.35	223.38.03	225.08.37
Sa.	21	226.39.16	228.10.01	229.40.53	231.11.50	232.42.55	234.14.07	235.45.26	237.16.52
Sun.	22	238.48.26	240.20.08	241.51.57	243.23.55	244.56.00	246.28.13	248.00.33	249.33.02
M.	23	251.05.37	252.38.21	254.11.11	255.44.08	257.17.13	258.50.24	260.23.41	261.57.04
Tu.	24	263.30.33	265.04.07	266.37.47	268.11.31	269.45.19	271.19.11	272.53.07	274.27.07
W.	25	276.01.09	277.35.13	279.09.20	280.43.28	282.17.38	283.51.48	285.25.59	287.00.10
Th.	26	288.34.22	290.08.32	291.42.42	293.16.51	294.50.59	296.25.05	297.59.10	299.33.12
F.	27	301.07.13	302.41.11	304.15.07	305.49.00	307.22.52	308.56.40	310.30.27	312.04.11
Sa.	28	313.37.53	315.11.32	316.45.10	318.18.46	319.52.21	321.25.55	322.59.27	324.32.59
Sun.	29	326.06.31	327.40.04	329.13.37	330.47.11	332.20.47	333.54.26	335.28.08	337.01.53
M.	30	338.35.42	340.09.36	341.43.37	343.17.43	344.51.57	346.26.19	348.00.50	349.35.30
Tu.	31	351.10.21	352.45.24	354.20.39	355.56.08	357.31.51	359.07.50	0.44.05	2.20.37

Lunar almanac for Oct 2017

The Moon's Declination									
day	Date	Noon D.M.S.	IIIh D.M.S.	VIh D.M.S.	IXh D.M.S.	Midn/t D.M.S.	XVh D.M.S.	XVIIIh D.M.S.	XXIh D.M.S.
Sun.	1	15.24.28 S	15.04.21 S	14.43.30 S	14.21.57 S	13.59.40 S	13.36.42 S	13.13.03 S	12.48.43 S
M.	2	12.23.44 S	11.58.07 S	11.31.51 S	11.04.59 S	10.37.31 S	10.09.28 S	9.40.52 S	9.11.43 S
Tu.	3	8.42.02 S	8.11.51 S	7.41.11 S	7.10.03 S	6.38.29 S	6.06.30 S	5.34.06 S	5.01.21 S
W.	4	4.28.15 S	3.54.49 S	3.21.06 S	2.47.07 S	2.12.53 S	1.38.27 S	1.03.49 S	0.29.02 S
Th.	5	0.05.51 N	0.40.50 N	1.15.53 N	1.50.58 N	2.26.03 N	3.01.05 N	3.36.04 N	4.10.56 N
F.	6	4.45.39 N	5.20.13 N	5.54.33 N	6.28.39 N	7.02.29 N	7.35.59 N	8.09.08 N	8.41.54 N
Sa.	7	9.14.14 N	9.46.07 N	10.17.30 N	10.48.22 N	11.18.39 N	11.48.20 N	12.17.22 N	12.45.45 N
Sun.	8	13.13.25 N	13.40.21 N	14.06.30 N	14.31.51 N	14.56.22 N	15.20.01 N	15.42.47 N	16.04.37 N
M.	9	16.25.30 N	16.45.24 N	17.04.19 N	17.22.12 N	17.39.02 N	17.54.49 N	18.09.30 N	18.23.06 N
Tu.	10	18.35.34 N	18.46.55 N	18.57.07 N	19.06.09 N	19.14.02 N	19.20.45 N	19.26.17 N	19.30.39 N
W.	11	19.33.50 N	19.35.50 N	19.36.39 N	19.36.18 N	19.34.47 N	19.32.06 N	19.28.16 N	19.23.17 N
Th.	12	19.17.10 N	19.09.57 N	19.01.37 N	18.52.11 N	18.41.41 N	18.30.09 N	18.17.34 N	18.03.58 N
F.	13	17.49.22 N	17.33.49 N	17.17.18 N	16.59.53 N	16.41.33 N	16.22.21 N	16.02.18 N	15.41.25 N
Sa.	14	15.19.45 N	14.57.19 N	14.34.09 N	14.10.15 N	13.45.41 N	13.20.27 N	12.54.35 N	12.28.08 N
Sun.	15	12.01.06 N	11.33.31 N	11.05.25 N	10.36.50 N	10.07.48 N	9.38.20 N	9.08.27 N	8.38.12 N
M.	16	8.07.36 N	7.36.40 N	7.05.27 N	6.33.58 N	6.02.15 N	5.30.19 N	4.58.11 N	4.25.54 N
Tu.	17	3.53.29 N	3.20.57 N	2.48.20 N	2.15.40 N	1.42.57 N	1.10.14 N	0.37.32 N	0.04.51 N
W.	18	0.27.44 S	1.00.16 S	1.32.41 S	2.04.58 S	2.37.06 S	3.09.04 S	3.40.50 S	4.12.23 S
Th.	19	4.43.41 S	5.14.45 S	5.45.31 S	6.16.00 S	6.46.09 S	7.15.58 S	7.45.26 S	8.14.31 S
F.	20	8.43.13 S	9.11.30 S	9.39.21 S	10.06.45 S	10.33.41 S	11.00.09 S	11.26.06 S	11.51.33 S
Sa.	21	12.16.29 S	12.40.51 S	13.04.40 S	13.27.55 S	13.50.35 S	14.12.38 S	14.34.05 S	14.54.54 S
Sun.	22	15.15.05 S	15.34.36 S	15.53.28 S	16.11.40 S	16.29.10 S	16.45.59 S	17.02.05 S	17.17.29 S
M.	23	17.32.09 S	17.46.05 S	17.59.16 S	18.11.43 S	18.23.24 S	18.34.19 S	18.44.28 S	18.53.51 S
Tu.	24	19.02.26 S	19.10.15 S	19.17.15 S	19.23.28 S	19.28.53 S	19.33.29 S	19.37.17 S	19.40.17 S
W.	25	19.42.27 S	19.43.49 S	19.44.22 S	19.44.05 S	19.43.00 S	19.41.05 S	19.38.22 S	19.34.49 S
Th.	26	19.30.27 S	19.25.16 S	19.19.17 S	19.12.29 S	19.04.52 S	18.56.27 S	18.47.14 S	18.37.13 S
F.	27	18.26.24 S	18.14.48 S	18.02.24 S	17.49.14 S	17.35.17 S	17.20.34 S	17.05.05 S	16.48.51 S
Sa.	28	16.31.52 S	16.14.08 S	15.55.40 S	15.36.29 S	15.16.34 S	14.55.57 S	14.34.38 S	14.12.38 S
Sun.	29	13.49.56 S	13.26.35 S	13.02.34 S	12.37.55 S	12.12.37 S	11.46.42 S	11.20.10 S	10.53.03 S
M.	30	10.25.21 S	9.57.04 S	9.28.15 S	8.58.54 S	8.29.01 S	7.58.39 S	7.27.47 S	6.56.27 S
Tu.	31	6.24.41 S	5.52.29 S	5.19.53 S	4.46.54 S	4.13.33 S	3.39.52 S	3.05.52 S	2.31.35 S

Lunar almanac for Oct 2017

The Moon's							
		Semi Diameter		Horiz. Parallax		Proportional Log	
day	date	Noon M.S	Midnight M.S	Noon M.S	Midnight M.S	Noon	Midnight
Sun.	1	15'10"	15'16"	55'41"	56'01"	5095	5069
M.	2	15'21"	15'27"	56'23"	56'45"	5041	5013
Tu.	3	15'33"	15'40"	57'07"	57'30"	4985	4956
W.	4	15'46"	15'51"	57'52"	58'13"	4928	4902
Th.	5	15'57"	16'02"	58'32"	58'50"	4878	4856
F.	6	16'06"	16'09"	59'06"	59'19"	4836	4820
Sa.	7	16'12"	16'14"	59'30"	59'38"	4807	4797
Sun.	8	16'16"	16'17"	59'43"	59'46"	4791	4788
M.	9	16'17"	16'16"	59'46"	59'43"	4788	4791
Tu.	10	16'15"	16'13"	59'39"	59'33"	4796	4803
W.	11	16'11"	16'08"	59'25"	59'16"	4813	4824
Th.	12	16'06"	16'03"	59'05"	58'54"	4838	4851
F.	13	15'59"	15'56"	58'42"	58'30"	4866	4881
Sa.	14	15'52"	15'49"	58'17"	58'03"	4897	4914
Sun.	15	15'45"	15'41"	57'50"	57'36"	4930	4948
M.	16	15'37"	15'33"	57'21"	57'07"	4967	4985
Tu.	17	15'29"	15'25"	56'52"	56'37"	5004	5023
W.	18	15'21"	15'17"	56'22"	56'07"	5042	5061
Th.	19	15'13"	15'09"	55'52"	55'37"	5081	5100
F.	20	15'05"	15'01"	55'23"	55'10"	5118	5135
Sa.	21	14'58"	14'55"	54'57"	54'45"	5153	5168
Sun.	22	14'52"	14'49"	54'35"	54'25"	5182	5195
M.	23	14'47"	14'46"	54'18"	54'12"	5204	5212
Tu.	24	14'45"	14'44"	54'08"	54'07"	5218	5219
W.	25	14'44"	14'45"	54'07"	54'10"	5219	5215
Th.	26	14'47"	14'49"	54'16"	54'24"	5207	5196
F.	27	14'52"	14'55"	54'35"	54'48"	5182	5164
Sa.	28	15'00"	15'05"	55'04"	55'22"	5143	5120
Sun.	29	15'10"	15'16"	55'42"	56'04"	5094	5065
M.	30	15'23"	15'30"	56'29"	56'54"	5033	5001
Tu.	31	15'37"	15'44"	57'21"	57'48"	4967	4933

Lunar almanac for Oct 2017

The Planet's				
		Right Ascension	Declination	Meridian
day	date	H.M.S	D.M.S	Passage
Venus				
Sun.	1	11h03m06s	7.28.06 N	22h31m
Sa.	7	11h30m41s	4.41.52 N	22h37m
F.	13	11h58m07s	1.49.55 N	22h43m
Th.	19	12h25m32s	1.05.10 S	22h48m
W.	25	12h53m03s	4.00.45 S	22h52m
Mars				
Sun.	1	11h12m18s	6.23.22 N	22h41m
Sa.	7	11h26m20s	4.54.03 N	22h33m
F.	13	11h40m18s	3.23.52 N	22h25m
Th.	19	11h54m13s	1.53.09 N	22h16m
W.	25	12h08m07s	0.22.15 N	22h07m
Jupiter				
Sun.	1	13h45m47s	9.48.54 S	01h14m
Sa.	7	13h50m37s	10.16.23 S	00h57m
F.	13	13h55m31s	10.43.51 S	00h40m
Th.	19	14h00m29s	11.11.10 S	00h22m
W.	25	14h05m29s	11.38.12 S	00h05m
Saturn				
Sun.	1	17h26m36s	22.08.40 S	04h55m
Sa.	7	17h28m11s	22.10.54 S	04h35m
F.	13	17h29m59s	22.13.11 S	04h14m
Th.	19	17h31m58s	22.15.29 S	03h54m
W.	25	17h34m08s	22.17.45 S	03h33m