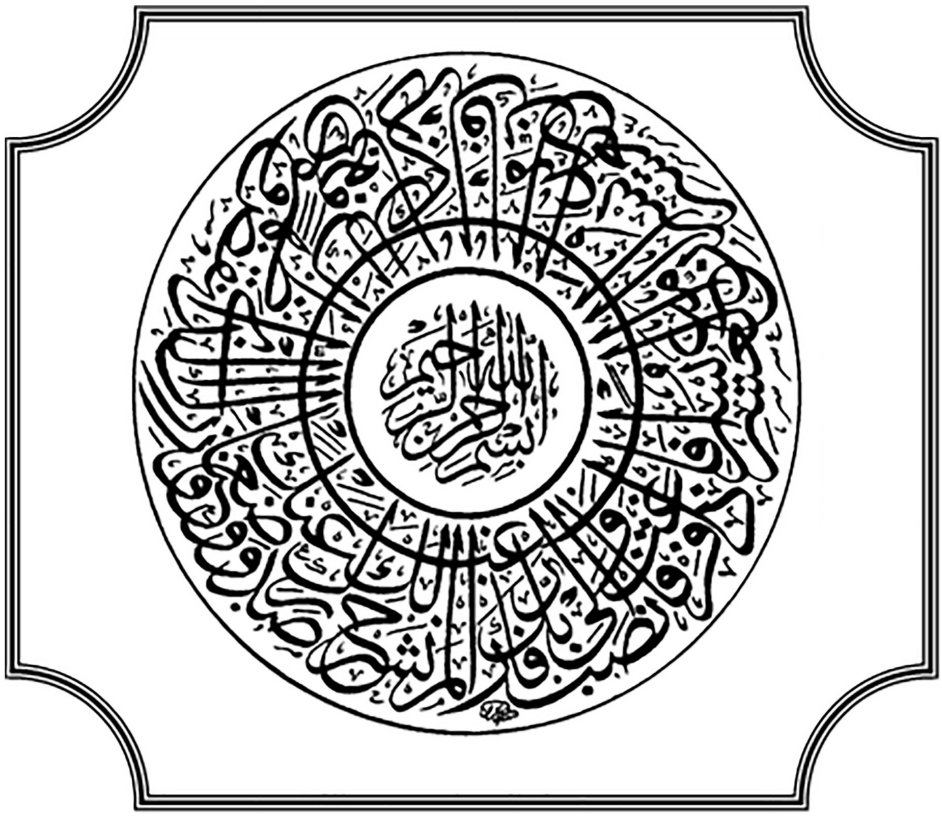
Arab Republic of Egypt
Ministry of Higher Education and Scientific Research
National Research Institute of Astronomy
and Geophysics
(NRIAG)
Helwan - Cairo

The Astronomical Guide for the Hijri year calendar, 1442 H.

High image quality of the solar corona , taken by the research team of the Solar Research Laboratory using Williams 5-inch telescope and ultra-sensitive digital camera during the total solar eclipse on March 29, 2006 at Salloum's plateau. Egypt



BY

Prof. Mohamed G. Rashed

Professor of solar physic,

Reviewed by

Prof. Rabab H. Abdul Hamid

Professor of solar physics

Department of the solar and space research

Supervision

Prof. Gad M. EL - Qady

President of the National Research Institute
of Astronomy and Geophysics
(NRIAG)

New Moon conjunctions and the beginning of Hijri months For the year 1442 A.H.

New Moon conjunctions and the beginnings of Hijri months For the year 1442 A.H

The Month	New Moon conjunction	Circumstances of crescent visibility according to the crescent lag after sunset (On the sight day)	Begin of Hijri month	Length of Hijri month (day)
Mohar'rum	h m 02 42 Wednesday 19/8/2020 29/12/1441	On the sighting day (Wednesday,19/8/2020), The crescent lags (20 - 42 minutes) after sunset in all Arab and Islamic countries.	Thursday 20/8/2020	29
Safar	h m 11 00 Thursday 17/9/2020 29/1/1442	On the sighting day (Thursday,17/9/2020), The crescent lags (2 - 27 minutes) after sunset in Arab and Islamic countries.	Friday 18/9/2020	30
Rabee Al'awal	h m 19 31 Friday 16/10/2020 29/2/1442	on the sighting day (Friday, 16/10/2020) The lunar crescent is absent after sunset in all Arab and Islamic countries.	Sunday 18/10/2020	29
Rabee Al'akher	h m 05 07 Sunday 15/11/2020 29/3/1442	On the sighting day (Sunday,15/11/2020), The crescent lags (11 - 31 minutes) after sunset in Arab and Islamic countries.	Monday 16/11/20	30
Jumade Al'oula	h m 16 17 Monday 14/12/2020 29/4/1442	on the sighting day (Monday,14/12/2020) The lunar crescent is absent after sunset in all Arab and Islamic countries.	Wednesday 16/12/2020	29
Jumade Al'akhera	h m 05 00 Wednesday 13/1/2021 29/5/1442	On the sighting day (Wednesday,13/1/2021), The crescent lags (11 - 29 minutes) after sunset in Arab and Islamic countries.	Thursday 14/1/2021	30

Time, described above, according to the universal time

New Moon conjunctions and the beginnings of Hijri months For the year 1442 A.H (cont.)

The Month	New Moon conjunction	Circumstances of crescent visibility according to the crescent lag after sunset (On the sight day)	Begin of Hijri month	Length of Hijri month (day)
Rajab	h m 19 06 Thursday 11/2/2021 29/6/1442	on the sighting day (Thursday,11/2/2021) The lunar crescent is absent after sunset in all Arab and Islamic countries, Except Dakar.	Saturday 13/2/2021	29
Sha'aban	h m 10 21 Saturday 13/3/2021 29/7/1442	On the sighting day (Saturday,13/3/2021), The crescent lags (1- 17 minutes) after sunset in Arab and Islamic countries.	Sunday 14/3/2021	30
Ramadan	h m 02 31 Monday 12/4/2021 30/8/1442	on the sighting day (Sunday, 11/4/2021) The lunar crescent is absent after sunset in all Arab and Islamic countries.	Tuesday 13/4/2021	30
Shawal	h m 19 00 Tuesday 11/5/2021 29/9/1442	on the sighting day (Tuesday,11/5/2021) The lunar crescent is absent after sunset in Arab and Islamic countries, Except Dakar ,Nouakchott, Marrakech and Fez.	Thursday 13/5/2021	29
Thul'kada	h m 10 53 Thursday 10/6/2021 29/10/1442	On the sighting day (Thursday, 10/6/2021), The crescent lags (5 - 17 minutes) after sunset In the majority of Arab and Islamic countries.	Friday 11/6/2021	30
Thul'hejja	h m 01 17 Saturday 10/7/2021 30/11/1442	on the sighting day (Friday, 9/7/2021) The lunar crescent is absent after sunset in all Arab and Islamic countries.	Sunday 11/7/2021	29

Time, described above, according to the universal time

Glossary

Conjunction (New Moon):

Is the event when the Earth, Moon and Sun are approximately in a straight line; with the sun and Earth on opposite sides of the Moon. This alignment leaves the side of the Moon that faces the Earth in complete darkness.

The crescent:

The illuminated part of the moon that occurs when the angle between the center of the Moon and the Sun as seen from the Earth is 8 degrees.

Duration:

The time interval separating Sunset And Moonset, i.e. the time interval during which the Moon stays above the western horizon after Sunset.
Sign (-) means that Moonset occurs before sunset. Sign (+) means that Moonset occurs after sunset.

Crescent coordinates: defined by

(a) Relative altitude (degree): height above the horizon at sunset, and
(b) Relative azimuth(degree): the horizontal deviation from the solar disk at sunset.

Quarter:

50 % of the Moon surface is illuminated.

Full Moon:

100 % of the Moon surface is illuminated.

Sight Day:

the day to seek the crescent, it is the twenty-ninth day of every Higric month.

Hhjric and Gregorian:

H and D.


Mohar’rum

Birth day conditions of Mohar'rum - crescent,1442 A.H.

Mohar'rum's crescent exist after the conjunction that occurs on Wednesday, 29 Thul'hejja, 1441A.H. , corresponding to 19/8/2020 A.D. (Sight Day) at two o'clock and 42 minute a.m. (U.T.)

On the sight day (Wednesday, 19/8/2020 A.D):

- **The crescent lags sunset in Makkah by 35 minutes.**
- **The crescent lags sunset in Cairo by 37 minutes.**
- **Generally the Crescent lags by (20 - 42 minutes) after sunset in Arab and Islamic countries.**

Consequently,The first day of Mohar'rum 1442 A.H. is adopted to be Thursday, 20.8.2020 A.D. according to the astronomical calculations.

Ephemeris of Mohar'rum, 1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
 Wednesday, 19.8.2020 A.D. 02 h 42 m	 Wednesday, 25.8.2020 A.D. 17 h 58 m	 Wednesday, 2.9.2020 A.D. 05 h 22 m	 Thursday, 10.9.2020 A.D. 09 h 26 m
First day	Last day	Length	
Thursday, 120.8.2020 A.D.	Thursday, 17.9.2020 A.D.	29 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	18	01	18	36	35	6.993	1.706 S
Toshka	18	20	18	56	36	7.121	1.872 S
Aswan	18	18	18	54	36	7.048	2.111 S
Qena	18	21	18	57	36	6.985	2.457 S
Al'kharga	18	30	19	06	36	7.076	2.402 S
Assiut	18	28	19	05	37	6.986	2.667 S
Sohag	18	25	19	02	37	6.997	2.548 S
Fayoum	18	32	19	09	37	6.903	3.029 S
Tur	18	20	18	56	36	6.880	2.772 S
Saint Catherine	18	19	18	55	36	6.859	2.815 S
Taba	18	16	18	53	37	6.795	2.941 S
Cairo	18	31	19	08	37	6.858	3.138 S
Tanta	18	33	19	10	37	6.828	3.265 S
Alexandria	18	38	19	15	37	6.831	3.367 S
Port Said	18	29	19	06	37	6.772	3.306 S
Salloum	18	57	19	35	38	6.927	3.560 S

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	30	19	12	42	Makkah	18	47	19	22	35
Nouakchott	18	27	19	09	42	Jerusalem	18	18	18	55	37
Marrakech	19	10	19	52	42	Baghdad	18	43	19	19	36
Fez	19	01	19	43	42	Aden	18	18	18	51	33
Lagos	18	58	19	36	38	Riyadh	18	24	18	58	34
Algiers	18	33	19	14	41	Kuwait	18	24	18	59	35
Tunis	19	05	19	45	40	Manama	18	10	18	44	34
Tripoli - Libya	18	47	19	27	40	Tehran	18	48	19	24	36
Khartoum	18	10	18	45	35	Doha	18	5	18	39	34
Mogadishu	18	07	18	38	31	Abu Dhabi	18	53	19	26	33
Ankara	18	39	19	17	38	Dubai	18	50	19	23	33
Amman	18	15	18	52	37	Muscat	18	35	19	08	33
Damascus	18	15	18	52	37	Karachi	19	02	19	34	32
Jazan	18	32	19	06	34	Kuala Lumpur	19	22	19	45	23
Medina	18	51	19	27	36	Jakarta	17	54	18	14	20

(2) In some Western capitals (L.T.)

Washington	18	56	19	45	49	Cape Town	18	19	18	47	28
Ottawa	19	02	19	51	49	Brasilia	18	04	18	47	43
London	19	14	19	56	42	Santiago	18	17	19	02	45
Moscow	19	55	20	35	40	Lima	18	04	18	53	49

(D) Mohar'rum,1442 A.H.

The first day of Mohar'rum 1442 A.H. is adopted to be Thursday, 20.8.2020 A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			3	22	10	29	17	5	24	12
Sunday			4	23	11	30	18	6	25	13
Monday			5	24	12	31	19	7	26	14
Tuesday			6	25	13	Sep.	20	8	27	15
Wednesday			7	26	14	2	21	9	28	16
Thursday	1	20	8	27	15	3	22	10	29	17
Friday	2	21	9	28	16	4	23	11		


Safar

Birth day conditions of Safar - crescent,1442 A.H.

Safar's crescent is born immediately after the conjunction that occurs on Thursday, 29 Muharram 1442 A.H. , corresponding to 17/9/2020 A.D. (Sight Day) at elven o'clock a.m. (U.T.)

On the sight day (Thursday, 17/9/2020 A.D.):

- **The crescent lags sunset in Makkah by 19 minutes.**
- **The crescent lags sunset in Cairo by 23 minutes.**
- **Generally the Crescent lags by (2 - 27 minutes) after sunset in Arab and Islamic countries.**
- **In Jakarta, the crescent will not be born before sunset on that day.**

Consequently, The first day of Safar 1442 A.H. is adopted to be Friday, 18.9.2020 A.D. according to the astronomical calculations.

Ephemeris of Safar,1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Thursday, 17.9.2020 A.D. 11 h 00 m	Thursday, 24.9.2020 A.D. 01 h 55 m	Thursday, 1.10.2020 A.D. 21 h 05 m	Saturday, 10.10.2020 A.D. 00 h 40 m
First day	Last day	Length	
Friday, 18.9.2020 A.D.	Saturday, 17.10.2020 A.D.	30 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	17	34	17	54	20	3.786	1.590 N
Toshka	17	53	18	13	20	3.919	1.428 N
Aswan	17	49	18	10	21	3.931	1.299 N
Qena	17	51	18	12	21	3.980	1.087 N
Al'kharga	18	00	18	21	21	4.026	1.088 N
Assiut	17	57	18	19	22	4.036	0.939 N
Sohag	17	55	18	16	21	4.012	1.018 N
Fayoum	17	58	18	21	23	4.076	0.712 N
Tur	17	47	18	09	22	3.996	0.908 N
Saint Catherine	17	46	18	08	22	3.993	0.886 N
Taba	17	42	18	04	22	3.987	0.821 N
Cairo	17	57	18	20	23	4.076	0.649 N
Tanta	17	58	18	21	23	4.090	0.566 N
Alexandria	18	02	18	25	23	4.118	0.488 N
Port Said	17	53	18	16	23	4.067	0.558 N
Salloum	18	22	18	46	24	4.224	0.302 N

(c) Observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	09	18	34	25	Makkah	18	21	18	40	19
Nouakchott	18	04	18	29	25	Jerusalem	17	42	18	05	23
Marrakech	18	34	19	01	27	Baghdad	18	05	18	27	22
Fez	18	23	18	50	27	Aden	17	59	18	15	16
Lagos	18	45	19	05	20	Riyadh	17	54	18	13	19
Algiers	17	52	18	19	27	Kuwait	17	50	18	10	20
Tunis	18	23	18	49	26	Manama	17	39	17	58	19
Tripoli-Libya	18	10	18	35	25	Tehran	18	08	18	30	22
Khartoum	17	49	18	08	19	Doha	17	35	17	54	19
Mogadishu	17	56	18	09	13	Abu Dhabi	18	24	18	42	18
Ankara	17	54	18	19	25	Dubai	18	20	18	38	18
Amman	17	39	18	01	22	Muscat	18	06	18	24	18
Damascus	17	38	18	01	23	Karachi	18	33	18	50	17
Jazan	18	09	18	27	18	Kuala Lumpur	19	11	19	16	05
Medina	18	23	18	43	20	Jakarta	17	49	17	51	02

(2) In some Western capitals (L.T.)

Washington	18	12	18	47	35	Cape Town	18	39	18	46	07
Ottawa	18	09	18	45	36	Brasilia	18	06	18	30	24
London	18	09	18	41	32	Santiago	18	36	19	00	24
Moscow	18	40	19	12	32	Lima	18	04	18	33	29

(D) Safar,1442 A.H.

The first day of Safar 1442 A.H. is adopted to be Friday, 18.9.2020 A.D.

DAY	H	D	H	D	H	D	H	D	H	D	H	D
Saturday			2	19	9	26	16	3	23	10	30	17
Sunday			3	20	10	27	17	4	24	11		
Monday			4	21	11	28	18	5	25	12		
Tuesday			5	22	12	29	19	6	26	13		
Wednesday			6	23	13	30	20	7	27	14		
Thursday			7	24	14	Oct.	21	8	28	15		
Friday	1	18	8	25	15	2	22	9	29	16		


Rabee Al’awal

Birth day conditions of Rabee Al'awal - crescent,1442 A.H.

Rabee Al'awal's crescent is born immediately after the conjunction that occurs on Friday, 29 Safar 1442 A.H. , corresponding to 16/10/2020 A.D. (Sight Day) at seven o'clock and 31 minutes p.m. (U.T.)

On the sight day (Friday, 16/10/2020 A.D.):

- **In Cairo and in all Arab and Islamic countries, the crescent will not be born before sunset on that day.**
- **On that day the crescent lags Sunset in the majority of Arab and Islamic countries despite the conjunction will occur after sunset.**
- **Therefore, Saturday, 17.10.2020 A.D. is the day completing the month of Safar 1442 A.H.**

Consequently,The first day of Rabee Al'awal 1442 A.H. is adopted to be Sunday, 18.10.2020 A.D. according to the astronomical calculations.

Ephemeris of Rabee Al'awal, 1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
 Friday, 16.10.2020 A.D. 19 h 31 m	 Friday, 23.10.2020 A.D. 13 h 23 m	 Saturday, 31.10.2020 A.D. 14 h 49 m	 Suday, 8.11.2020 A.D. 13 h 46 m
First day	Last day	Length	
Sunday, 18.10.2020 A.D.	Sunday, 15.11.2020 A.D.	29 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	17	07	17	08	01	Moon not new	
Toshka	17	26	17	27	01	Moon not new	
Aswan	17	20	17	22	02	Moon not new	
Qena	17	20	17	23	03	Moon not new	
Al'kharga	17	30	17	33	03	Moon not new	
Assiut	17	25	17	28	03	Moon not new	
Sohag	17	23	17	26	03	Moon not new	
Fayoum	17	25	17	29	04	Moon not new	
Tur	17	14	17	18	04	Moon not new	
Saint Catherine	17	13	17	17	04	Moon not new	
Taba	17	08	17	12	04	Moon not new	
Cairo	17	22	17	27	05	Moon not new	
Tanta	17	23	17	28	05	Moon not new	
Alexandria	17	27	17	32	05	Moon not new	
Port Said	17	17	17	22	05	Moon not new	
Salloum	17	45	17	51	06	Moon not new	

(c) Observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities* (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	17	49	17	54	05	Makkah	17	55	17	55	Zeroo
Nouakchott	17	40	17	46	06	Jerusalem	17	05	17	10	05
Moroco	17	58	18	07	09	Baghdad	17	27	17	32	05
Fez	17	44	17	54	10	Aden	17	40	17	36	-04
Lagos	18	30	18	30	Zeroo	Riyadh	17	25	17	25	Zeroo
Algeria	17	09	17	19	10	Kuwait	17	16	17	18	02
Tunisia	17	41	17	50	09	Manama	17	08	17	09	01
Tripoli - Libya	17	32	17	40	08	Tehran	17	27	17	32	05
Khartoum	17	28	17	27	-01	Doha	17	05	17	05	Zeroo
Mogadishu	17	46	17	38	-08	Abu Dhabi	17	54	17	54	Zeroo
Ankara	17	07	17	16	09	Dubai	17	50	17	50	Zeroo
Oman	17	02	17	07	05	Muscat	17	38	17	37	-01
Damascus	17	00	17	05	05	Karachi	18	04	18	02	-02
Jizan	17	47	17	45	-02	Kuala Lumpur	19	00	18	45	-15
Medina	17	54	17	55	01	Jakarta	17	45	17	25	-20

(2) In some Western capitals (L.T.)

Washington	17	27	17	46	19	Cape Town*	19	01	18	43	-18
Ottawa	17	14	17	35	21	Brasilia	18	10	18	12	02
London*	17	04	17	22	18	Santiago	18	57	18	57	Zeroo
Moscow*	17	25	17	45	20	Lima	18	05	18	12	07

(D) Rabee Al'awal,1442 A.H.

The first day of Rabee Al'awal 1442 A.H. is adopted to be Sunsday, 18.10.2020 A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			7	24	14	31	21	7	28	14
Sunday	1	18	8	25	15	Nov.	22	8	29	15
Monday	2	19	9	26	16	2	23	9		
Tuesday	3	20	10	27	17	3	24	10		
Wednesday	4	21	11	28	18	4	25	11		
Thursday	5	22	12	29	19	5	26	12		
Friday	6	23	13	30	20	6	27	13		

(*) Moon not new


Rabee Al’akher

Birth day conditions of Rabee Al'akher - crescent,1442 A.H.

Rabee Al'akher's crescent is born immediately after the conjunction that occurs on sunday, 29 Rabee Al'awal's 1442 A.H. , corresponding to 15/11/2020 A.D. (Sight Day) at five o'clock and seven minutes a.m. (U.T.)

On the sight day (Sunday, 15/11/2020 A.D.):

- **The crescent lags sunset in Makkah by 22 minutes.**
- **The crescent lags sunset in Cairo by 23 minutes.**
- **Generally the Crescent lags by (11 - 31 minutes) after sunset in Arab and Islamic countries.**

Consequently, the first day of Rabee Al'akher 1442 A.H. is adopted to be Monday, 16.11.2020 A.D. according to the astronomical calculations.

Ephemeris of Rabee Al'akher,1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Sunday, 15.11.2020 A.D. 05 h 07 m	Sunday, 22.11.2020 A.D. 04 h 45 m	Monday, 30.11.2020 A.D. 09 h 30 m	Tuesday, 8.12.2020 A.D. 00 h 37 m
First day	Last day	Length	
Monday, 16.11.2020 A.D.	Tuesday, 15.12.2020 A.D.	30 days	

(b) Observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	16	50	17	12	22	3.979	2.009 S
Toshka	17	08	17	31	23	4.098	2.164 S
Aswan	17	02	17	25	23	3.989	2.288 S
Qena	16	59	17	21	22	3.882	2.485 S
Al'kharga	17	10	17	33	23	3.987	2.487 S
Assiut	17	03	17	26	23	3.864	2.622 S
Sohag	17	02	17	25	23	3.887	2.549 S
Fayoum	17	01	17	24	23	3.745	2.822 S
Tur	16	52	17	14	22	3.741	2.644 S
Saint Catherine	16	50	17	12	22	3.715	2.661 S
Taba	16	45	17	07	22	3.637	2.714 S
Cairo	16	58	17	21	23	3.690	2.874 S
Tanta	16	58	17	20	22	3.649	2.944 S
Alexandria	17	01	17	24	23	3.646	3.014 S
Port Said	16	52	17	14	22	3.588	2.945 S
Salloum	17	20	17	43	23	3.734	3.190 S

(c) Observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	17	37	18	08	31	Makkah	17	38	18	00	22
Nouakchott	17	26	17	56	30	Jerusalem	16	39	17	01	22
Moroco	17	33	18	00	27	Baghdad	16	59	17	20	21
Fez	17	16	17	43	27	Aden	17	30	17	51	21
Lagos	18	25	18	53	28	Riyadh	17	06	17	27	21
Algeria	16	38	17	03	25	Kuwait	16	53	17	13	20
Tunisia	17	09	17	34	25	Manama	16	47	17	7	20
Tripoli - Libya	17	05	17	30	25	Tehran	16	57	17	16	19
Khartoum	17	16	17	39	23	Doha	16	45	17	05	20
Mogadishu	17	44	18	06	22	Abu Dhabi	17	35	17	55	20
Ankara	16	32	16	53	21	Dubai	17	30	17	50	20
Amman	16	36	16	58	22	Muscat	17	20	17	39	19
Damascus	16	31	16	53	22	Karachi	17	44	18	02	18
Jazan	17	34	17	56	22	Kuala Lumpur	18	57	19	09	12
Medina	17	34	17	56	22	Jakarta	17	49	18	00	11

(2) In some Western capitals (L.T.)

Washington	16	53	17	28	35	Cape Town	19	27	19	55	28
Ottawa	16	32	17	04	32	Brasilia	18	21	19	00	39
London	16	10	16	33	23	Santiago	19	23	20	08	45
Moscow	16	21	16	40	19	Lima	18	13	18	56	43

(D) Rabee Al'akher,1442 A.H.

the first day of Rabee Al'akher 1442 A.H. is adopted to be Monday, 16.11.2020 A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			6	21	13	28	20	5	27	12
Sunday			7	22	14	29	21	6	28	13
Monday	1	16	8	23	15	30	22	7	29	14
Tuesday	2	17	9	24	16	Dec.	23	8	30	15
Wednesday	3	18	10	25	17	2	24	9		
Thursday	4	19	11	26	18	3	25	10		
Friday	5	20	12	27	19	4	26	11		


Jumade Al’oula

Birth day conditions of Jumade Al'oula - crescent, 1442 A.H.

Jumade Al'oula's crescent is born immediately after the conjunction that occurs on Monday, 29 Rabee Al'akher's 1442 A.H. , corresponding to 14/12/2020 A.D. (Sight Day) at four o'clock and 17 minutes p.m. (U.T.)

On the sight day (Monday, 14/12/2020 A.D.):

- **In Cairo and in all Arab and Islamic countries, the crescent will not be born before sunset on that day except Dakar, Nouakchott, Moroco, Fez and Lagos.**
- **In both Makkah and Cairo Moonset will occur before Sunset by 9minutes.**
- **In Arab and Islamic countries Moonset will occur before Sunset by (2 - 18 minutes)**
- **Therefore, Tuesday, 15.12.2020 A.D. is the day completing the month of Rabee Al'akher 1442 A.H.**

Consequently, The first day of Jumade Al'oula 1442 A.H. is adopted to be Wednesday, 16/12/2020A.D. according to the astronomical calculations.

Ephemeris of Jumade Al'oula,1442 A.H.

(a) Phases of the Moon (U.T.)

Conjuction	First Quarter	Full Moon	Last Quarter
			
Monday, 14.12.2020 A.D. 16 h 17 m	Monday, 21.12.2020 A.D. 23 h 41 m	Wednesday, 30.12.2020 A.D. 03 h 28 m	Wednesday, 6.01.2021 A.D. 09 h 37 m
First day	Last day	Length	
Wednesday, 16.12.2020 A.D.	Wednesday, 13.01.2021 A.D.	29 days	

(b) Observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	16	51	16	42	-09	Moon not new	
Toshka	17	10	17	02	-08	Moon not new	
Aswan	17	03	16	54	-09	Moon not new	
Qena	16	59	16	50	-09	Moon not new	
Al'kharga	17	10	17	02	-08	Moon not new	
Assiut	17	03	16	54	-09	Moon not new	
Sohag	17	02	16	53	-09	Moon not new	
Fayoum	16	59	16	50	-09	Moon not new	
Tur	16	51	16	42	-09	Moon not new	
Saint Catherine	16	49	16	39	-10	Moon not new	
Taba	16	43	16	33	-10	Moon not new	
Cairo	16	56	16	47	-09	Moon not new	
Tanta	16	55	16	46	-09	Moon not new	
Alexandria	16	59	16	50	-09	Moon not new	
Port Said	16	49	16	39	-10	Moon not new	
Salloum	17	17	17	08	-09	Moon not new	

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	17	42	17	43	01	Makkah*	17	40	17	31	-09
Nouakchott	17	30	17	30	Zeroo	Jerusalem	16	36	16	26	-10
Moroco	17	29	17	26	-03	Baghdad*	16	56	16	44	-12
Fez	17	12	17	70	-05	Aden*	17	36	17	26	-10
Lagos	18	33	18	31	-02	Riyadh*	17	60	16	55	-11
Algeria	16	32	16	25	-07	Kuwait*	16	51	16	39	-12
Tunisia*	17	30	16	56	-07	Manama*	16	47	16	35	-12
Tripoli - Libya*	17	01	16	54	-07	Tehran*	16	51	16	38	-13
Khartoum*	17	20	17	13	-07	Doha*	16	46	16	34	-12
Mogadishu*	17	53	17	45	-08	Abu Dhabi*	17	36	17	24	-12
Ankara*	16	24	16	12	-12	Dubai*	17	30	17	18	-12
Oman*	16	33	16	22	-11	Muscat*	17	21	17	80	-13
Damascus*	16	28	16	17	-11	Karachi*	17	44	17	30	-14
Jizan*	17	38	17	29	-09	Kuala Lumpur*	19	60	18	48	-18
Medina*	17	35	17	25	-10	Jakarta*	18	02	17	44	-18

(2) In some Western capitals (L.T.)

Washington	16	46	16	51	05	Cape Town	19	52	19	52	Zeroo
Ottawa	16	20	16	22	02	Brasilia	18	38	18	48	10
London*	15	51	15	40	-11	Santiago	19	48	20	04	16
Moscow*	15	55	15	37	-18	Lima	18	28	18	42	14

(D) Jumade Al'oula,1442A.H.

The first day of Jumade Al'oula 1442 A.H. is adopted to Wednesday, 16/12/2020 A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			4	19	11	26	18	2	25	9
Sunday			5	20	12	27	19	3	26	10
Monday			6	21	13	28	20	4	27	11
Tuesday			7	22	14	29	21	5	28	12
Wednesday	1	16	8	23	15	30	22	6	29	13
Thursday	2	17	9	24	16	31	23	7		
Friday	3	18	10	25	17	Jan.	24	8		

(*) Moon not new


Jumade Al’akhera

Birth day conditions of Jumade Al'akhera - crescent,1442 A.H.

Jumade Al'akhera's crescent is born immediately after the conjunction that occurs at five o'clock a.m. (U.T.) on Wednesday, 29 Jumade Al'oula 1442A.H., corresponding to 13/01/2021 A.D. (Sight Day).

On the sight day (Wednesday, 13/01/2021 A.D.):

- **The crescent lags sunset in Makkah by 17 minutes,**
- **The crescent lags sunset in Cairo by 16 minutes,**
- **Generally Crescent lags by (9 - 29 minutes) after sunset in Arab and Islamic countries.**

Consequently,The first day of Jumade Al'akhera 1442 A.H. is adopted to be Thursday, 14.01.2021 A.D. according to the astronomical calculations.

Ephemeris of Jumade Al'akhera,1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
 Wednesday, 13.01.2021 A.D. 05 h 00 m	 Wednesday, 20.01.2021 A.D. 21 h 02 m	 Thursday, 28.01.2021 A.D. 19 h 16 m	 Thursday, 4.02.2021 A.D. 17 h 37 m
First day	Last day	Length	
Thursday, 14.01.2021 A.D.	Friday, 12.02.2021 A.D.	30 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	17	09	17	27	18	2.904	4.508 S
Toshka	17	28	17	46	18	3.030	4.585 S
Aswan	17	20	17	38	18	2.840	4.700 S
Qena	17	17	17	34	17	2.637	4.858 S
Al'kharga	17	28	17	46	18	2.789	4.836 S
Assiut	17	21	17	38	17	2.579	4.953 S
Sohag	17	21	17	38	17	2.629	4.900 S
Fayoum	17	18	17	34	16	2.363	5.105 S
Tur	17	09	17	25	16	2.394	4.990 S
Saint Catherine	17	07	17	23	16	2.350	5.007 S
Taba	17	02	17	17	15	2.224	5.053 S
Cairo	17	15	17	31	16	2.272	5.147 S
Tanta	17	15	17	30	15	2.200	5.198 S
Alexandria	17	18	17	33	15	2.184	5.242 S
Port Said	17	08	17	23	15	2.109	5.206 S
Salloum	17	36	17	52	16	2.290	5.342 S

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	17	58	18	27	29	Makkah	17	58	18	15	17
Nouakchott	17	47	18	15	28	Jerusalem	16	56	17	10	14
Moroco	17	49	18	11	22	Baghdad	17	15	17	27	12
Fez	17	32	17	52	20	Aden	17	52	18	11	19
Lagos	18	48	19	16	28	Riyadh	17	24	17	39	15
Algeria	16	53	17	10	17	Kuwait	17	10	17	23	13
Tunisia	17	24	17	40	16	Manama	17	05	17	19	14
Tripoli - Libya	17	21	17	39	18	Tehran	17	12	17	21	90
Khartoum	17	37	17	57	20	Doha	17	04	17	18	14
Mogadishu	18	07	18	29	22	Abu Dhabi	17	54	18	08	14
Ankara	16	45	16	56	11	Dubai	17	49	18	02	13
Oman	16	52	17	06	14	Muscat	17	38	17	52	14
Damascus	16	47	17	01	14	Karachi	18	02	18	14	12
Jizan	17	55	18	13	18	Kuala Lumpur	19	20	19	33	13
Medina	17	53	18	09	16	Jakarta	18	15	18	29	14

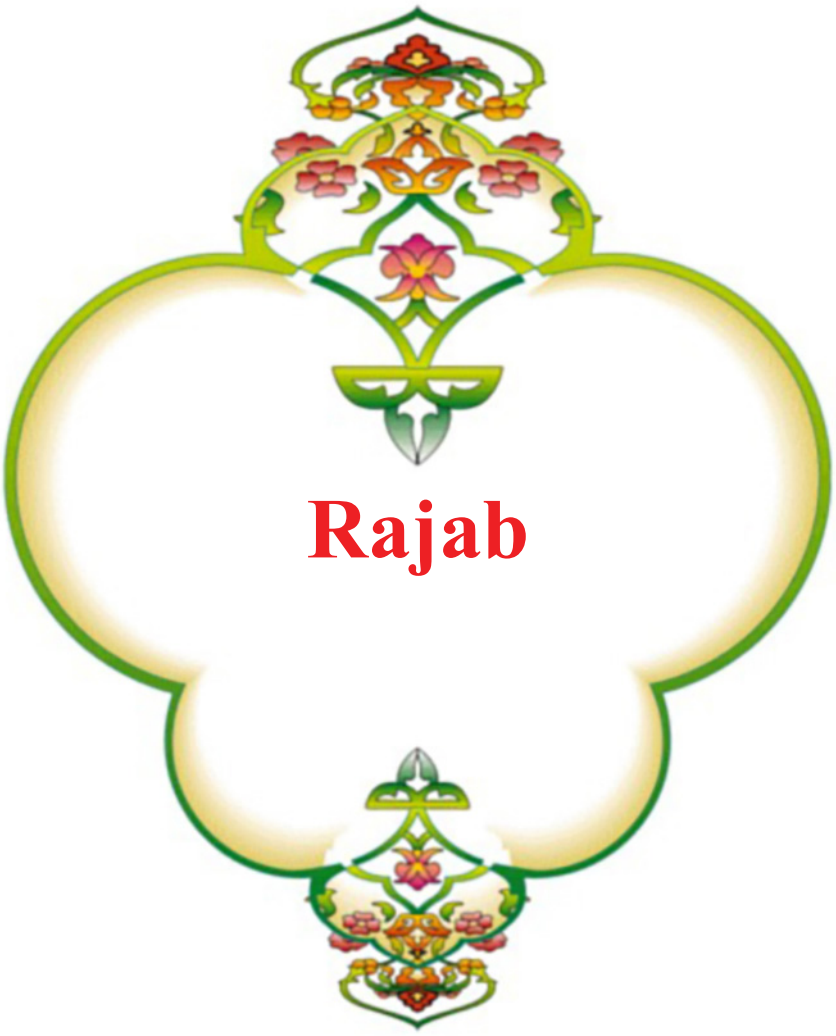
(2) In some Western capitals

Washington	17	08	17	39	31	Cape Town	20	00	20	35	35
Ottawa	16	43	17	10	27	Brasilia	18	49	19	29	40
London	16	18	16	24	06	Santiago	19	55	20	42	47
Moscow*	16	25	16	17	-08	Lima	18	39	19	23	44

(D) Jumade Al'akhera,1442 A.H.

The first day of Jumade Al'akhera 1442A.H. is adopted to be Thursday, 14.01.2021A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			3	16	10	23	17	30	24	6
Sunday			4	17	11	24	18	31	25	7
Monday			5	18	12	25	19	Feb.	26	8
Tuesday			6	19	13	26	20	2	27	9
Wednesda			7	20	14	27	21	3	28	10
Thursday	1	14	8	21	15	28	22	4	29	11
Friday	2	15	9	22	16	29	23	5	30	12


Rajab

Birth day conditions of Rajab - crescent, 1442 A.H.

Rajab's crescent is born immediately after the conjunction that occurs at seven o'clock and six minutes p.m. (U.T.) on Thursday, 29 Jumade Al'akhera 1442 A.H., corresponding to 11/02/2021 A.D. (Sight Day).

On the sight day (Thursday, 11/02/2021 A.D.):

- **In Cairo and in all Arab and Islamic countries, the crescent will not be born before sunset on that day, except Dakar.**
- **In Makkah Moonset will occur before Sunset by 15 minutes.**
- **In Cairo Moonset will occur before Sunset by 18 minutes.**
- **In Arab and Islamic countries Moonset will occur before Sunset by (2 - 26 minutes).**
- **Therefore, Friday, 12.02.2021 A.D. is the day completing the month of Jumade Al'akhera 1442 A.H.**

Consequently, The first day of Rajab 1442 A.H. is adopted to be Saturday, 13.02.2021 A.D. according to the astronomical calculations.

Ephemeris of Rajab,1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Thursday, 11.02.2021 A.D. 19 h 06 m	Friday, 19.02.2021 A.D. 18 h 47 m	Saturday, 27.02.2021 A.D. 08 h 18 m	Saturday, 6.03.2021 A.D. 01 h 31 m
First day	Last day	Length	
Saturday, 13.02.2021 A.D.	Saturday, 13.03.2021 A.D.	29 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	17	28	17	13	-15	Moon not new	
Toshka	17	47	17	33	-14	Moon not new	
Aswan	17	41	17	26	-15	Moon not new	
Qena	17	39	17	23	-16	Moon not new	
Al'kharga	17	50	17	35	-15	Moon not new	
Assiut	17	44	17	27	-17	Moon not new	
Sohag	17	43	17	27	-16	Moon not new	
Fayoum	17	43	17	25	-18	Moon not new	
Tur	17	33	17	15	-18	Moon not new	
Saint Catherine	17	31	17	13	-18	Moon not new	
Taba	17	27	17	08	-19	Moon not new	
Cairo	17	40	17	22	-18	Moon not new	
Tanta	17	40	17	21	-19	Moon not new	
Alexandria	17	44	17	25	-19	Moon not new	
Port Said	17	34	17	15	-19	Moon not new	
Salloum	18	02	17	44	-18	Moon not new	

c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	12	18	10	-02	Makkah*	18	16	18	01	-15
Nouakchott*	18	03	17	58	-05	Jerusalem	17	22	17	02	-20
Moroco*	18	15	18	02	-13	Baghdad *	17	43	17	20	-23
Fez*	18	00	17	45	-15	Aden*	18	04	17	53	-11
Lagos*	18	57	18	55	-02	Riyadh*	17	45	17	27	-18
Algeria*	17	24	17	06	-18	Kuwait*	17	34	17	13	-21
Tunisia*	17	55	17	36	-19	Manama*	17	27	17	08	-19
Tripoli - Libya*	17	48	17	31	-17	Tehran*	17	42	17	16	-26
Khartoum*	17	52	17	41	-11	Doha*	17	25	17	06	-19
Mogadishu*	18	14	18	07	-07	Abu Dhabi*	18	14	17	55	-19
Ankara*	17	19	16	53	-26	Dubai*	18	11	17	50	-21
Oman*	17	19	16	58	-21	Muscat*	17	58	17	39	-19
Damascus*	17	15	16	53	-22	Karachi*	18	23	18	02	-21
Jizan*	18	10	17	57	-13	Kuala Lumpur*	19	27	19	12	-15
Medina*	18	13	17	57	-16	Jakarta*	18	16	18	05	-11

(2) In some Western capitals (L.T.)

Washington	17	41	17	36	-05	Cape Town*	19	42	19	54	12
Ottawa	17	24	17	13	-11	Brasilia	18	45	18	58	13
London*	17	08	16	35	-33	Santiago	19	38	20	00	22
Moscow*	17	25	16	36	-49	Lima	18	38	18	53	15

(D) Rajab,1442 A.H.

The first day of Rajab 1442 A.H. is adopted to be Saturday, 13.02.2021 A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday	1	13	8	20	15	27	22	6	29	13
Sunday	2	14	9	21	16	28	23	7		
Monday	3	15	10	22	17	March	24	8		
Tuesday	4	16	11	23	18	2	25	9		
Wednesda	5	17	12	24	19	3	26	10		
Thursday	6	18	13	25	20	4	27	11		
Friday	7	19	14	26	21	5	28	12		

(*) Moon not new


Sha’aban

Birth day conditions of Sha'aban - crescent, 1442 A.H.

Sha'aban's crescent is born immediately after the conjunction that occurs at ten o'clock and 21 minutes a.m. (U.T.) on Saturday, 29 Rajab 1442 A.H. , corresponding to 13/03/2021A.D. (Sight Day).

On the sight day (Saturday, 13/03/2021 A.D.):

- **The crescent lags sunset in Makkah by 8 minutes.**
- **The crescent lags sunset in Cairo by 6 minutes.**
- **Generally Crescent lags by (1 - 17 minutes) after sunset in Arab and Islamic Countries except Tehran Moonset occurs with Sunset.**

Consequently, The first day of Sha'aban 1442 A.H. is adopted to be Sunday, 14.03.2021 A.D. according to the astronomical calculations.

Ephemeris of Sha'aban,1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Saturday, 13.03.2021 A.D. 10 h 21 m	Sunday, 21.03.2021 A.D. 14 h 41 m	Sunday, 28.03.2021 A.D. 18 h 48 m	Sunday, 4.04.2021 A.D. 10 h 03 m
First day	**Last day**	**Length**	
Sunday, 14.03.2021 A.D.	Monday, 12.04.2021 A.D.	30 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	17	42	17	50	08	1.239	4.855 S
Toshka	18	01	18	09	08	1.354	4.863 S
Aswan	17	57	18	05	08	1.199	4.938 S
Qena	17	57	18	04	07	1.040	5.028 S
Al'kharga	18	07	18	15	08	1.168	4.999 S
Assiut	18	03	18	10	07	1.002	5.073 S
Sohag	18	01	18	08	07	1.038	5.046 S
Fayoum	18	04	18	10	06	0.839	5.158 S
Tur	17	53	17	59	06	0.849	5.110 S
Saint Catherine	17	51	17	57	06	0.814	5.121 S
Taba	17	48	17	53	05	0.713	5.152 S
Cairo	18	02	18	08	06	0.769	5.184 S
Tanta	18	03	18	08	05	0.716	5.211 S
Alexandria	18	07	18	12	05	0.710	5.230 S
Port Said	17	58	18	03	05	0.641	5.223 S
Salloum	18	26	18	32	06	0.817	5.261 S

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	20	18	37	17	Makkah	18	29	18	37	08
Nouakchott	18	13	18	29	16	Jerusalem	17	46	17	50	04
Moroco	18	39	18	50	11	Baghdad	18	09	18	11	02
Fez	18	26	18	36	10	Aden	18	10	18	20	10
Lagos	18	58	19	14	16	Riyadh	18	01	18	07	06
Algeria	17	54	18	01	07	Kuwait	17	55	17	59	04
Tunisia	18	25	18	31	06	Manama	17	45	17	50	05
Tripoli - Libya	18	14	18	21	07	Tehran	18	10	18	10	Zeroo
Khartoum	18	00	18	10	10	Doha	17	42	17	46	04
Mogadishu	18	11	18	23	12	Abu Dhabi	18	31	18	35	04
Ankara	17	53	17	54	01	Dubai	18	27	18	31	04
Oman	17	43	17	47	04	Muscat	18	14	18	18	04
Damascus	17	41	17	44	03	Karachi	18	40	18	42	02
Jizan	18	19	18	28	09	Kuala Lumpur	19	25	19	30	05
Medina	18	30	18	36	06	Jakarta	18	07	18	14	07

(2) In some Western capitals

Washington	18	13	18	33	20	Cape Town	19	07	19	31	24
Ottawa	18	07	18	24	17	Brasilia	18	27	18	54	27
London	18	02	18	02	Zeroo	Santiago	19	03	19	34	31
Moscow	18	29	18	17	-12	Lima	18	23	18	52	29

(D) Sha'aban,1442 A.H.

The first day of Sha'aban 1442A.H. is adopted to be Sunday, 14.03.2021 A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			7	20	14	27	21	3	28	10
Sunday	1	14	8	21	15	28	22	4	29	11
Monday	2	15	9	22	16	29	23	5	30	12
Tuesday	3	16	10	23	17	30	24	6		
Wednesday	4	17	11	24	18	31	25	7		
Thursday	5	18	12	25	19	Apr.	26	8		
Friday	6	19	13	26	20	2	27	9		


Ramadan

Birth day conditions of Ramadan - crescent, 1442 A.H.

Ramadan's crescent is born immediately after the conjunction that occurs at two o'clock and 31 minutes a.m. (U.T.) on Monday, 12/04/2021 A.D. (The next day of sight day).

On the sight day (Sunday, 11/04/2021 A.D.):

- **In Cairo and in all Arab and Islamic countries, the crescent will not be born before sunset on that day.**
- **In Makkah Moonset will occur before Sunset by 26 minutes.**
- **In Cairo Moonset will occur before Sunset by 30 minutes.**
- **In Arab and Islamic countries Moonset will occur before Sunset by (16 - 46 minutes).**
- **Therefore, Monday, 12.4.2021 A.D. is the day completing the month of Sha'aban 1442 A.H.**

Consequently, The first day of Ramadan 1442 A.H. is adopted to be Tuesday, 13.04.2021 A.D. according to the astronomical calculations.

Ephemeris of Ramadan, 1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Monday, 12.04.2021 A.D. 02 h 31 m	Tuesday, 20.04.2021 A.D. 06 h 59 m	Tuesday, 27.05.2021 A.D. 03 h 32 m	Monday, 3.05.2021 A.D. 19 h 50 m
First day	Last day	Length	
Tuesday, 13.04.2021 A.D.	Wednesday, 12.05.2021 A.D.	30 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	17	52	17	26	-26	Moon not new	
Toshka	18	11	17	45	-26	Moon not new	
Aswan	18	08	17	41	-27	Moon not new	
Qena	18	10	17	42	-28	Moon not new	
Al'kharga	18	20	17	53	-27	Moon not new	
Assiut	18	17	17	49	-28	Moon not new	
Sohag	18	15	17	47	-28	Moon not new	
Fayoum	18	20	17	51	-29	Moon not new	
Tur	18	08	17	39	-29	Moon not new	
Saint Catherine	18	07	17	38	-29	Moon not new	
Taba	18	04	17	34	-30	Moon not new	
Cairo	18	20	17	50	-30	Moon not new	
Tanta	18	21	17	51	-30	Moon not new	
Alexandria	18	26	17	56	-30	Moon not new	
Port Said	18	17	17	46	-31	Moon not new	
Salloum	18	45	18	15	-30	Moon not new	

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)*

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	23	18	07	-16	Makkah	18	38	18	12	-26
Nouakchott	18	19	18	02	-17	Jerusalem	18	05	17	34	-31
Moroco	18	58	18	33	-25	Baghdad	18	30	17	56	-34
Fez	18	48	18	21	-27	Aden	18	12	17	49	-23
Lagos	18	54	18	39	-15	Riyadh	18	13	17	44	-29
Algeria	18	19	17	49	-30	Kuwait	18	12	17	40	-32
Tunisia	18	50	18	19	-31	Manama	17	59	17	28	-31
Tripoli - Libya	18	34	18	05	-29	Tehran	18	34	17	57	-37
Khartoum	18	30	17	41	-23	Doha	17	54	17	24	-30
Mogadishu	18	40	17	45	-19	Abu Dhabi	18	42	18	12	-30
Ankara	18	23	17	46	-46	Dubai	18	40	18	09	-31
Oman	18	20	17	30	-32	Muscat	18	25	17	55	-30
Damascus	18	20	17	29	-33	Karachi	18	52	18	20	-32
Jizan	18	25	18	00	-25	Kuala Lumpur	19	19	18	54	-25
Medina	18	41	18	14	-27	Jakarta	17	54	17	32	-22

(2) In some Western capitals (L.T.)*

Washington	18	41	18	23	-18	Cape Town	18	27	18	27	Zeroo
Ottawa	18	44	18	22	-22	Brasilia	18	06	18	04	-02
London	18	50	18	09	-41	Santiago	18	24	18	30	-06
Moscow	19	27	18	33	-54	Lima	18	05	18	05	Zeroo

(D) Ramadan,1442 A.H.

The first day of Ramadan 1442 A.H. is adopted to be Tuesday, 13.04.2021 A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			5	17	12	24	19	May	26	8
Sunday			6	18	13	25	20	2	27	9
Monday			7	19	14	26	21	3	28	10
Tuesday	1	13	8	20	15	27	22	4	29	11
Wednesday	2	14	9	21	16	28	23	5	30	12
Thursday	3	15	10	22	17	29	24	6		
Friday	4	16	11	23	18	30	25	7		


Shawal

Birth day conditions of Shawal - crescent, 1442 A.H.

Shawal's crescent is born immediately after the conjunction that occurs at Seven o'clock p.m. (U.T.) on Tuesday, 29 Ramadan 1442 A.H. , corresponding to 11/05/2021 A.D. (Sight Day).

On the sight day (Tuesday, 11/05/2021 A.D.):

- **In Cairo and in all Arab and Islamic countries, the crescent will not be born before sunset on that day except Dakar, Nouakchott, Moroco and Fez.**
- **In Makkah and in Cairo Moonset will occur before Sunset by 12 minutes.**
- **In Arab and Islamic countries Moonset will occur before Sunset by (3 - 17 minutes).**
- **Therefore, Wednesday, 12.05.2021 A.D. is the day completing the month of Ramadan 1442 A.H.**

Consequently, The first day of Shawal 1442 A.H. is adopted to be Thursday, 13.05.2020 A.D. (Eid al-Fitr) according to the astronomical calculations.

Ephemeris of Shawal, 1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Tuesday, 11.05.2021 A.D. 07 h 00 m	Wednesday, 19.05.2021 A.D. 07 h 13 m	Wednesday, 26.05.2021 A.D. 11 h 14 m	Wednesday, 2.06.2021 A.D. 07 h 25 m
First day	**Last day**	**Length**	
Thursday, 13.05.2021 A.D.	Wednesday, 10.06.2021 A.D.	29 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	18	04	17	52	-12	Moon not new	
Toshka	18	23	18	12	-11	Moon not new	
Aswan	18	22	18	10	-12	Moon not new	
Qena	18	26	18	14	-12	Moon not new	
Al'kharga	18	34	18	23	-11	Moon not new	
Assiut	18	34	18	22	-12	Moon not new	
Sohag	18	31	18	19	-12	Moon not new	
Fayoum	18	39	18	26	-12	Moon not new	
Tur	18	26	18	13	-13	Moon not new	
Saint Catherine	18	25	18	12	-13	Moon not new	
Taba	18	23	18	10	-13	Moon not new	
Cairo	18	38	18	26	-12	Moon not new	
Tanta	18	41	18	28	-13	Moon not new	
Alexandria	18	46	18	33	-13	Moon not new	
Port Said	18	37	18	23	-14	Moon not new	
Salloum	19	06	18	54	-12	Moon not new	

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	29	18	26	-03	Makkah *	18	50	18	38	-12
Nouakchott	18	28	18	24	-04	Jerusalem*	18	26	18	12	-14
Moroco	19	18	19	12	-06	Baghdad *	18	52	18	37	-15
Fez	19	11	19	03	-08	Aden *	18	16	18	05	-11
Lagos*	18	54	18	49	-05	Riyadh *	18	28	18	14	-14
Algeria*	18	45	18	35	-10	Kuwait *	18	30	18	15	-15
Tunisia	19	16	19	5	-11	Manama *	18	15	18	00	-15
Tripoli - Libya	18	56	18	46	-10	Tehran*	18	59	18	42	-17
Khartoum*	18	10	18	00	-10	Doha *	18	09	17	55	-14
Mogadishu*	18	01	17	51	-10	Abu Dhabi *	18	57	18	42	-15
Ankara*	18	53	18	38	-15	Dubai *	18	54	18	39	-15
Amman *	18	23	18	9	-14	Muscat *	18	38	18	23	-15
Damascus *	18	25	18	11	-14	Karachi *	19	07	18	50	-17
Jazan *	18	32	18	20	-12	Kuala Lumpur*	19	17	19	00	-17
Medina *	18	56	18	43	-13	Jakarta *	17	44	17	29	-15

(2) In some Western capitals (L.T.)

Washington	19	10	19	12	02	Cape Town*	17	56	17	54	-02
Ottawa	19	22	19	23	01	Brasilia	17	49	17	52	03
London	19	40	19	26	-14	Santiago	17	53	17	59	06
Moscow*	20	27	20	03	-24	Lima	17	52	17	58	06

(D) Shawal,1442 A.H.

The first day of Shawal 1442 A.H. is adopted to be Thursday, 13.05.2021 A.D. (Eid al-Fitr)

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			3	15	10	22	17	29	24	5
Sunday			4	16	11	23	18	30	25	6
Monday			5	17	12	24	19	31	26	7
Tuesday			6	18	13	25	20	June	27	8
Wednesday			7	19	14	26	21	2	28	9
Thursday	1	13	8	20	15	27	22	3	29	10
Friday	2	14	9	21	16	28	23	4		

(*) Moon not new

Thul’kada

Birth day conditions of Thul'kada crescent, 1442 A.H.

Thul'kada's crescent is born immediately after the conjunction that occurs at ten o'clock and 53 minutes a.m. (U.T.) on Thursday, 29 Shawal 1442 A.H. ,corresponding to 10/06/2021 A.D. (Sight Day).

On the sight day (Thursday, 10/06/2021 A.D.):

- **The crescent lags sunset in Makkah by 8 minutes.**
- **The crescent lags sunset in Cairo by 11 minutes.**
- **Generally the crescent lags by(5 - 17 minutes) after sunset in Arab and Islamic countries.**
- **In Jakarta, the crescent will not be born before sunset on that day.**
- **In Jakarta Moonset will occur before Sunset by 5 minutes.**
- **In Kuala Lumpur Moonset will occur before Sunset by 3 minutes.**

Consequently, The first day of Thul'kada 1442 A.H. is adopted to be Friday, 11.06.2021 A.D. according to the astronomical calculations.

Ephemeris of Thul'kada, 1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Thursday, 10.06.2021 A.D. 10 h 53 m	Friday, 18.06.2021 A.D. 03 h 54 m	Thursday, 24.06.2021 A.D. 18 h 40 m	Thursday, 1.07.2021 A.D. 21 h 11 m
First day	**Last day**	**Length**	
Friday, 11.06.2021 A.D.	Saturday, 10.07.2021 A.D.	30 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	18	16	18	25	09	1.294	0.154 N
Toshka	18	36	18	46	10	1.427	0.100 N
Aswan	18	35	18	45	10	1.424	0.014 N
Qena	18	41	18	51	10	1.456	0.112 S
Al'kharga	18	49	18	59	10	1.512	0.091 S
Assiut	18	49	18	59	10	1.509	0.192 S
Sohag	18	46	18	56	10	1.488	0.146 S
Fayoum	18	55	19	06	11	1.540	0.332 S
Tur	18	42	18	52	10	1.457	0.231 S
Saint Catherine	18	41	18	51	10	1.451	0.247 S
Taba	18	40	18	50	10	1.437	0.294 S
Cairo	18	55	19	06	11	1.536	0.375 S
Tanta	18	58	19	09	11	1.548	0.426 S
Alexandria	19	04	19	15	11	1.579	0.468 S
Port Said	18	54	19	05	11	1.519	0.441 S
Salloum	19	24	19	36	12	1.703	0.552 S

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	38	18	54	16	Makkah	19	02	19	10	08
Nouakchott	18	39	18	55	16	Jerusalem	18	44	18	55	11
Moroco	19	37	19	54	17	Baghdad	19	11	19	21	10
Fez	19	30	19	47	17	Aden	18	25	18	31	06
Lagos	19	00	19	11	11	Riyadh	18	41	18	49	08
Algeria	19	06	19	23	17	Kuwait	18	47	18	55	08
Tunisia	19	37	19	53	16	Manama	18	29	18	36	07
Tripoli - Libya	19	15	19	29	14	Tehran	19	19	19	28	09
Khartoum	18	20	18	28	08	Doha	18	23	18	30	07
Mogadishu	18	05	18	09	04	Abu Dhabi	19	10	19	17	07
Ankara	19	16	19	29	13	Dubai	19	09	19	15	06
Oman	18	41	18	52	11	Muscat	18	52	18	58	06
Damascus	18	44	18	55	11	Karachi	19	20	19	25	05
Jizan	18	42	18	49	07	Kuala Lumpur	19	21	19	18	-03
Medina	19	09	19	18	09	Jakarta*	17	45	17	40	-05

(2) In some Western capitals (L.T.)

Washington	19	33	20	03	30	Cape Town	17	43	17	43	Zeroo
Ottawa	19	50	20	22	32	Brasilia	17	46	18	00	14
London	20	17	20	39	22	Santiago	17	41	17	52	11
Moscow	21	12	21	30	18	Lima	17	50	18	08	18

(D) Thul'kada,1442 A.H.

The first day of Thul'kada 1442A.H. is adopted to be Friday, 11.06.2021 A.D.

DAY	H	D	H	D	H	D	H	D	H	D	H	D
Saturday			2	12	9	19	16	26	23	3	30	10
Sunday			3	13	10	20	17	27	24	4		
Monday			4	14	11	21	18	28	25	5		
Tuesday			5	15	12	22	19	29	26	6		
Wednesday			6	16	13	23	20	30	27	7		
Thursday			7	17	14	24	21	July	28	8		
Friday	1	11	8	18	15	25	22	2	29	9		

(*) Moon not new


Thul’hejja

Birth day conditions of Thul'hejja - crescent, 1442 A.H.

Thul'hejja's crescent is born immediately after the conjunction that occurs at one o'clock and 17 minutes a.m. (U.T.) on Saturday, 29 Thul'kada 1442 A.H. , corresponding to 10/07/2021 A.D. (The next day of sight day).

On the sight day (Friday, 9/07/2021 A.D.):

- **In Cairo and in all Arab and Islamic countries, the crescent will not be born before sunset on that day.**
- **In Makkah Moonset will occur before Sunset by 16 minutes.**
- **In Cairo Moonset will occur before Sunset by 11 minutes.**
- **In Arab and Islamic countries Moonset will occur before Sunset by (4 - 35 minutes).**
- **Therefore, Saturday, 10.07.2021 A.D. is the day completing the month of Thul'kada 1442 A.H.**

Consequently, The first day of Thul'hejja 1442 A.H. is adopted to be Sunday, 11.07.2021 A.D. according to the astronomical calculations.
Consequently, a pause Arafat 1442 A.H. is adopted to be Monday, 19.07.2021 A.D. according to the astronomical calculations.
Consequently, Eid al-Adha 1442 A.H. is adopted to be Tuesday, 20.07.2021 A.D. according to the astronomical calculations.

Ephemeris of Thul'hejja, 1442 A.H.

(a) Phases of the Moon (U.T.)

Conjunction	First Quarter	Full Moon	Last Quarter
			
Saturday, 10.07.2021 A.D. 01 h 17 m	Saturday, 17.07.2021 A.D. 10 h 11 m	Saturday, 24.07.2021 A.D. 02 h 37 m	Saturday, 31.07.2021 A.D. 13 h 16 m
First day	Last day	Length	
Sunday, 11.07.2021 A.D.	Sunday, 8. 08.2021 A.D.	29 days	

(b) observing conditions in Egypt for the crescent on the sight day (L.T.)

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags (m)	Relative altitude (degree)	Relative azimuth (degree)
	h	m	h	m			
Halayib	18	21	18	06	-15	Moon not new	
Toshka	18	40	18	26	-14	Moon not new	
Aswan	18	39	18	25	-14	Moon not new	
Qena	18	44	18	31	-13	Moon not new	
Al'kharga	18	53	18	40	-13	Moon not new	
Assiut	18	53	18	40	-13	Moon not new	
Sohag	18	49	18	36	-13	Moon not new	
Fayoum	18	59	18	47	-12	Moon not new	
Tur	18	45	18	33	-12	Moon not new	
Saint Catherine	18	45	18	33	-12	Moon not new	
Taba	18	43	18	31	-12	Moon not new	
Cairo	18	59	18	48	-11	Moon not new	
Tanta	19	02	18	51	-11	Moon not new	
Alexandria	19	07	18	56	-11	Moon not new	
Port Said	18	58	18	47	-11	Moon not new	
Salloum	19	27	19	17	-10	Moon not new	

(c) observing conditions of the crescent on the sight day

(1) In some Arab and Islamic cities (L.T.)*

City	Sunset (Local time)		Moonset (Local time)		Crescent Lags	City	Sunset (Local time)		Moonset (Local time)		Crescent Lags
	h	m	h	m	m		h	m	h	m	m
Dakar	18	43	18	33	-10	Makkah	19	06	18	50	-16
Nouakchott	18	43	18	34	-09	Jerusalem	18	47	18	36	-11
Moroco	19	40	19	35	-05	Baghdad	19	14	19	02	-12
Fez	19	33	19	29	-04	Aden	18	30	18	10	-20
Lagos	19	05	18	49	-16	Riyadh	18	45	18	29	-16
Algeria	19	09	19	05	-04	Kuwait	18	50	18	36	-14
Tunisia	19	40	19	35	-05	Manama	18	33	18	17	-16
Tripoli - Libya	19	18	19	11	-07	Tehran	19	22	19	11	-11
Khartoum	18	25	18	08	-17	Doha	18	27	18	11	-16
Mogadishu	18	11	17	47	-24	Abu Dhabi	19	14	18	57	-17
Ankara	19	19	19	12	-07	Dubai	19	12	18	55	-17
Oman	18	44	18	33	-11	Muscat	18	56	18	38	-18
Damascus	18	47	18	36	-11	Karachi	19	24	19	06	-18
Jizan	18	47	18	29	-18	Kuala Lumpur	19	27	18	55	-32
Medina	19	13	18	58	-15	Jakarta	17	51	17	16	-35

(2) In some Western capitals (L.T.)*

Washington	19	35	19	43	08	Cape Town	17	51	17	16	-35
Ottawa	19	51	20	03	12	Brasilia	17	53	17	36	-17
London	20	17	20	24	07	Santiago	17	49	17	27	-22
Moscow	21	10	21	18	08	Lima	17	57	17	46	-11

(D) Thul'hejja,1442 A.H.

The first day of Thul'hejja 1442 A.H. is adopted to be Sunday, 11.07.2021A.D.

DAY	H	D	H	D	H	D	H	D	H	D
Saturday			7	17	14	24	21	31	28	7
Sunday	1	11	8	18	15	25	22	Aug.	29	8
Monday	2	12	9	19	16	26	23	2		
Tuesday	3	13	10	20	17	27	24	3		
Wednesday	4	14	11	21	18	28	25	4		
Thursday	5	15	12	22	19	29	26	5		
Friday	6	16	13	23	20	30	27	6		

(*) Moon not new

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