

Prediction of the Start of Month of Muharram 1430 Hejriah

The Calculations are done for the Longitude and Latitude of Makkah AlMukarramah Area and the times are for the Local Time of Saudi Arabia (GMT + 3.0)

Makkah Al-Mukarramah: Latitude = 21.43 ° N , Longitude = 39.82 ° E

Prediction: [(30 Zul-Hejjah 1429 Hejriah, 28 December 2008)]
 [(01 Muharram 1430 Hejriah, 29 December 2008)]

New Moon of Muharram Occurs on Saturday 27 December 2008 at 3:24 p.m.

Day	(2008) Date	Sun Rise	Moon Rise	Sun Set	Moon Set	Moon altitude & azimuth at sunset	According to:	
							UmmUIQura	Prediction
Sat.	27 / 12	6:57	6:51	17:47	17:43	Below the horizon	29 Zul- Hejjah	29 Zul- Hejjah
Sun.	28 / 12	6:57	7:37	17:48	18:36	8.9 ° , 240 °	30 Zul- Hejjah	30 Zul- Hejjah
Mon.	29 / 12	6:58	8:20	17:48	19:30	19.5 ° , 237 °	01 Muharram	01 Muharram

According to the astronomical calculations, the birth of the new moon (conjunction) occurs about two hours and twenty four minutes before the sunset on Saturday 27 December 2008 in Makkah AlMukkaramah and the moon sets about four minutes before the the sunset, therefore and according to calculations and actual sighting, it is impossible to sight the moon on that evening due to its absence (It is about 1° below the horizon) as indicated in the above table. But on the evening (just after the sunset) of Sunday 28 December 2008, which should be the 30th of Zul-Hejjah 1429 H, it may be possible to sight the crescent with increasing chance toward the southwest region of the Kingdom. The age of the moon at that moment will be about 27 hours, stays about 49 minutes above the horizon, and its visible part is about 1.1 % of the full moon.

For crescent sighting: provided that the sky is clear and free of clouds and dust, one should face approximately toward southwest at the sunset where the altitude of the moon above the horizon will be about 9°, it will be about 6 degrees to the left (south) of the setting sun (31° south of west), Its elongation about 11°, and the shape of the crescent moon will be slightly tilted to the left as shown in the figure.



Accordingly, previous calculation and possibility of actual sighting indicate that the first day of Muharram may be (In-Shaa-Allah) on Monday 29 December 2008 as shown in the table.

The above prediction is based on astronomical formulas and calculations and may be used for the purpose of a general guidance and one should go with the method of actual sighting of the moon, the method which, our Prophet Mohammad SallAllhuAlihiWassallam (ﷺ) guided and ordered us to observe and follow, and Allah has the knowledge.

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