Prediction of the Start of Month of Zul-Hejja 1429 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

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

Prediction: [(30 Zul-Qada 1429 Hejriah, 28 November 2008)]
[(01 Zul-Hejja 1429 Hejriah, 29 November 2008)]

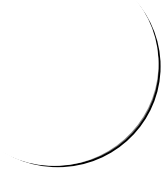
New Moon of Zul-Hejja Occurs on Sunday 27 November 2008 at 7:56 p.m.

Day	(2008) Date	Sun Rise	Moon Rise	Sun Set	Moon Set	Moon altitude & azimuth at sunset	According to: UmmUlQura	Prediction
Thu.	27 / 11	6:39	6:20	17:37	17:16	Below horizon	29 Zul-Qada	29 Zul-Qada
Fri.	28 / 11	6:40	7:13	17:38	18:04	4.5 ° , 238 °	30 Zul-Qada	30 Zul-Qada
Sat.	29 / 11	6:40	8:05	17:38	18:54	13.9 ° , 233 °	01 Zul-Hejja	01 Zul-Hejja
Sun.	7 / 12	6:45	13:15	17:39	1: 05	**Arafa Day**	09 Zul-Hejja	09 Zul-Hejja

According to the astronomical calculations, the birth of the new moon (conjunction) occurs about two hours and twenty minutes after the sunset on Thursday 27 November 2008 in Makkah AlMukkaramah and the moon sets about 20 minutes before 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 4 ° below the horizon) as indicated in the above table. But on the evening (just after the sunset) of Friday 28 November 2008, which should be the 30th of Zul-Qada 1429 H, it may be possible with extreme difficulty to sight the crescent only by using optical aids and only in the southwest of the Kingdom. The age of the moon at that moment will be about 22 hours, stays about 26 minutes above the horizon, and the magnitude of its visible part is about 0.9 % of that of the full moon.

Note that birth of the "visible" crescent moon happens after the new moon (conjunction) which may not exceed half a day or it may extend to a day or more depending on the Moon location relative to the Sun, duration of its presence above the horizon, its luminosity (phase), crescent width, and of course the atmospheric condition just after sunset. Adding to that, the physical, psychological, health conditions, eye sensitivity and its speed of adaptation to light and accumulated experience of the person doing the sighting should be considered as important factors. Usually the contract is very small between the color and brightness of the crescent and the sky, which adds difficulty to observation.

For crescent sighting: Find a dark area away from cities, 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 4 °, it will be about 9 degrees to the left (south) of the setting sun (32 ° south of west), its elongation about 10 °, 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 Zul-Hejja may be (In-Shaa-Allah) on Saturday 29 November 2008 as shown in the table.

The conclusion is that, Inn-Shaa-Allah, Saturday 29 November 2008 may be the first day of the month of Zul-Hejja 1429 H, the **Arafa Day** (the ninth day of month of Zul-Hejja) may fall on Sunday 7 December, and Eid Al-Adhha (Eid of Sacrifice) may fall on Monday 8 December 2008 and Allah has the knowledge (wAllahuAllam).

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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