

From: Thomas Hockey et al. (eds.). *The Biographical Encyclopedia of Astronomers*, Springer Reference. New York: Springer, 2007, p. 740

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science+business media

[http://dx.doi.org/10.1007/978-0-387-30400-7\\_906](http://dx.doi.org/10.1007/978-0-387-30400-7_906)

## Marwarrūdhī: Khālīd ibn ‘Abd al-Malik al-Marwarrūdhī

Marvin Bolt

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*Flourished* **Damascus, (Syria), 832**

Along with ‘**Alī ibn ‘Īsā al-Aṣṭurlābī** and a party of surveyors, Khālīd ibn ‘Abd al-Malik al-Marwarrūdhī traveled to the Plain of Sinjār under orders of ‘Abbāsīd Caliph **Ma’mūn** to determine the size of the Earth by making accurate measurements of one degree of latitude. Marwarrūdhī designed instruments, including an armillary and an astrolabe, for observations made in Baghdad. Following the death of **Yahyā ibn Abī Manṣūr**, ‘**Abbās ibn Sa‘īd al-Jawharī** selected Marwarrūdhī to prepare appropriate instruments for placement at the Dayr Murrān monastery on Mount Qāsiyūn near Damascus. There, he led the yearlong series of solar and lunar observations *circa* 832, though he encountered considerable difficulties with the warping and expansion of the copper and iron instruments. The first of three generations of astronomers, he also took part in the project *circa* 843/844 in Baghdad concerning observations for determining the length of the spring season.

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