

Publication

## Monddaten aus dem Archiv von Illahun: Chronologie des Mittleren Reiches

### **JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**

**ID** 992668

**Author(s)** Gautschy, Rita

**Author(s) at UniBasel** [Gautschy, Rita](#) ;

**Year** 2011

**Title** Monddaten aus dem Archiv von Illahun: Chronologie des Mittleren Reiches

**Journal** Zeitschrift für Ägyptische Sprache und Altertumskunde

**Volume** 138

**Number** 1

**Pages / Article-Number** 1-19

**Keywords** astronomy, lunar data, chronology, Egyptian Middle Kingdom

Last/first sightings of the lunar crescent and new moon epochs between 2000 BC and 2000 AD were calculated using modern up-to-date lunar and solar ephemerides for different locations in Egypt and for Babylon. All results of these calculations are available online. The lunar data from the archive of Illahun are reanalysed and the uncertainties of the data reduction and possible absolute chronological assessments are discussed. The data can be fit best when a reign length of 30 years is allowed for pharaoh Senwosret III, which is in accordance with the given number for this king in the Turin papyrus. The lunar data do not support a low chronology of the Middle Kingdom. Two temporal assignments are possible in combination with the recorded date of a heliacal rising of Sirius on either IIII Peret 16 or 17 in the surrounding of Memphis. The best fit (82.5% reproduced correctly) can be obtained with an assumed beginning of the day with dawn and year 1 of Senwosret III equalling 1872 BC and year 1 of Amenemhet III in 1842 BC respectively. In this case the correct Sirius date of year 7 Senwosret III in 1866 BC must have been IIII Peret 17 in order to match with the lunar data. The second possible fit (72.5% correct) is obtained with an assumed beginning of the day with sunrise and year 1 of Senwosret III equalling 1883 BC and year 1 of Amenemhet III in 1853 BC respectively. The correct Sirius date would be IIII Peret 16 in 1877 BC.

**Publisher** Akademie-Verlag

**ISSN/ISBN** 0044-216X

**edoc-URL** <http://edoc.unibas.ch/dok/A6001720>

**Full Text on edoc** Available;

**Digital Object Identifier DOI** 10.1524/zaes.2011.0002

**ISI-Number** WOS:000292126800002

**Document type (ISI)** Article