

THE CRESCENT OBSERVATION IN MALAYSIA

(An Analysis Study of the Activity of Crescent Observation's Method

Applied by Baitul Hilal Teluk Kemang Malaysia)

UNDERGRADUATE THESIS

Submitted to Shariah Faculty in
Partial Fulfillment of the Requirement for Undergraduate Degree In
Islamic Law



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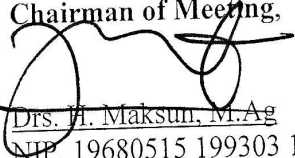
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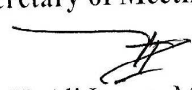
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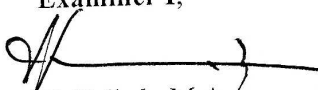
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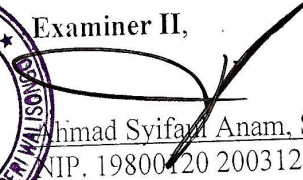
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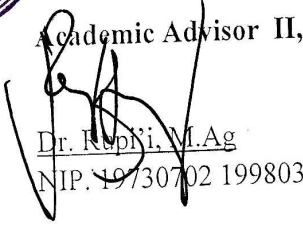
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MOTTO

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Show us the straight way

The way of those on whom Thou hast bestowed Thy grace,
Those whose (portion) is not wrath, and who go not astray¹

¹ Abdullah Yusuf Ali, *The Holy Qur'an*, Kuala Lumpur : Percetakan Zafar, 2004. p. 19.

DEDICATION

This thesis is dedicated to:

My beloved Parents who introduce me everything

Evi Zulhakim & Endang Dwi Purwantini

My great motivator

Alm. mbah Saroni and alm. Baba' Muhammad

Rest in peace, may Allah gives you His mercies and blessing

My lovely Brothers and Sister

Muhammad Bayu Alkafi, Tomy Satria Tarmizi and Mutia Khairunnisa Z

Let's be our best to do everything

Asātidz and Ustādzāt in Assalam Islamic Boarding School Sukabumi

and All of teachers who have taught me everything

A big family of Islamic Astronomy Concentration 10 (The Renaissance)

Especially De'Inay who help me much in providing data

and

Everybody who appreciates my work

THESIS STATEMENT

I certify that this thesis is definitely my own work. I am completely responsible for content of this thesis. Other writer's opinions or findings included in the thesis are quoted or cited in accordance with ethical standards.

Semarang, June 05th, 2012

The writer,

A handwritten signature in black ink, appearing to read 'Dito Alif Pratama', with a long horizontal line extending to the right.

Dito Alif Pratama
NIM. 102111090

ABSTRACT

Baitul Hilal Teluk Kemang is one of the centers in implementing the crescent observation activity in Malaysia. Baitul Hilal located at coordinate latitude North 2° 26' 44'' and longitude East 101°51'21'' with altitude about 25 meters above the sea surface, and it more precisely located at the observatory complex of Baitul Hilal Teluk Kemang Port Dickson, Malaysia. Baitul Hilal becomes one of the most frequently crescent observation's place in crescent sighting for determining the beginning of Ramadhan, Shawwal and Zulhijah in Malaysia. So far recorded, among others on : Shawwal 1392/1972, Shawwal 1393/1973, Ramadan 1394/1974, Shawwal 1396/1976 Shawwal 1401/1981, Shawwal 1404/1984, Shawwal 1422/2001.

This research aims to know on how is the implementation of crescent observation at Baitul Hilal Teluk Kemang Malaysia and its contributions in the implementation of crescent observation activity in Malaysia.

The category of this research is a *qualitative research* which is also categorized into *field research* which has two data source types, namely primary and secondary data source. The main source and the data input of this research is some main books of crescent observation in Malaysia and some information of people who are also responsible on managing the mechanism of implementation of crescent observation at Baitul Hilal. The secondary data sources of this research are books, newspapers, magazines, working papers related to this research. Next, these data are analyzed by descriptive analysis method.

The results of this research as follows, *firstly*, the method of crescent observation at Baitul Hilal is effective as Baitul Hilal Teluk Kemang is placed in a strategic and suitable place for crescent observation activity. Baitul Hilal is also supported by some observers of Malaya University who officially certified by the government, so far Baitul Hilal Teluk Kemang also helped by some modern and advance astronomical equipment, such as telescope, theodolite and DSLR camera for having a capture of image of observation during the crescent observation activity for implementing the crescent observation activity. *Secondly*, Baitul Hilal surely gives the good contribution to the crescent activity in Malaysia, Baitul Hilal support the development of study of astronomy in Malaysia in conducting astronomical activity, providing astronomical data which can be researched and analyzed by other astronomer. So far, by analyzing the crescent observation data, Baitul Hilal Teluk Kemang in collaboration with the Physics and space Laboratory of University Malaya, Astronomical Unit for Islamic Development, Department of Malaysia, Astronomical Unit for Islamic Development Department of Negeri Sembilan, and Department of Surveying and Mapping of Malaysia (JUPEM), incentive to do research on the new Moon which intended to formulate a criteria of *Imkān ar-rukayah* which can be more established in the future.

Keywords : *Baitul Hilal, Crescent, Crescent Observation, Method.*

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All praises be to Allah, the Lord of the world, the Master of the Day After, the creator of everything in this universe, He has no partner. Glory to God who created all, to man He gave special place in His creation. He honored man to be His agent, and to that end, endued him with understanding, purified his affections and gave him spiritual insight. Peace and Salutation always be upon to prophet Muhammad (PBUH) as Messenger, preaching and working in the dim twilight of history. He stood for all humanity, orphans, women, slaves, and whom the world neglected or oppressed.

This final assignment entitled THE CRESCENT OBSERVATION IN MALAYSIA (An Analysis Study of the Activity of Crescent Observation's Method Applied by Baitul Hilal Teluk Kemang Malaysia) will not be finished on time if not with the help and encouragement of those who always take their time to help me accomplishing this final task:

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Semarang, June 05th, 2014
The writer,



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NIM. 102111090

ENGLISH TRANSLITERATION SYSTEM²

1. Consonant

Arabic	Latin	Arabic	Latin
ء	A	ض	ẓ
ب	B	ط	ṭ
ت	T	ظ	ḍ
ث	Th	ع	‘
ج	J	غ	G
ح	ḥ	ف	F
خ	Kh	ق	Q
د	D	ك	K
ذ	Dz	ل	L
ر	R	م	M
ز	Z	ن	N
س	S	و	W
ش	Sh	ه	H
ص	ṣ	ي	Y

2. Vowel

Short		Long	
َ	A	ا	Ā
ُ	U	و	Ū
ِ	I	ي	Ī

3. Double and Diphthong

Double		Diphthong	
يَ	<i>iiy</i> (final form i)	أَوْ	<i>au</i> or <i>aw</i>
وَ	<i>uww</i> (final form u)	أَيَّ	<i>ai</i> or <i>ay</i>

All *al ta'rīf* (ال تعريف) are written with “al-” except if related with the word *dīn* or *al-asmā' al-ḥusnā*. For example, *shihābuddīn*, *uṣṣūluddīn*, *abdullāh*, etc.

² Quoted from *Pedoman Penulisan Skripsi*, Fakultas Ushuluddin IAIN Walisongo, Semarang, 2007, p 120-121.

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ENCLOSURES

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