OPEN ACCESS
Al-Wadh'iyyah: Journal of Sharia Law and Legal Studies
Vol. 1 No. 2. December 2025, pp. 60-68 DOI. XX.XXXXX/jslls.vxix.xxx

Research Article

ANALYSIS OF DETERMINING THE BEGINNING OF THE LUNAR MONTH IN INDONESIA: A COMPARATIVE STUDY OF THE RUKYAH AND HISAB METHODS

Yan Faisal[1]
[1] Mahmud Yunus State Islamic University of Batusangkar, Batusangkar, Indonesia

Corresponding Author:

Yan Faisal,
Faculty of Sharia, Mahmud Yunus State Islamic University, Batusangkar.
Email: yanfaisal@uinmybatusangkar.ac.id

Article Info
Received: October 19, 2025
Revised: November 02, 2025
Accepted: November 23, 2025
Online Version: December 23, 2025

Abstract
The determination of the beginning of Qamariyah months in Indonesia often leads to differences among Islamic groups, especially in marking the start of Ramadan, Shawwal, and Dhu al-Hijjah. This issue involves not only technical aspects of moon sighting and astronomical calculations but also diverging epistemological paradigms and religious authority. This study aims to conduct a comparative analysis of the rukyah (moon sighting) and hisab (astronomical calculation) methods in determining the beginning of the lunar months, while examining their interaction with Indonesia's socio-religious context. Employing a qualitative approach and library research method, data were collected through a review of primary and secondary literature, including official documents from the Ministry of Religious Affairs and the results of sidang isbat (decree sessions). The findings reveal that the hisab method emphasizes astronomical precision and scientific rationality, while the rukyah method prioritizes empirical observation and traditional religious authority. The relationship between the two is not always antagonistic but is often shaped by the ideological stance of religious organizations. The study concludes that integrating both methods requires a more inclusive epistemological approach and open dialogue among religious authorities to establish a comprehensive and sustainable national Islamic calendar system.

Keywords: Determining the Beginning of the Month, Hisab Method, Rukyah Method

Journal Homepage https://journal.zmsadra.or.id/index.php/jslls
How to cite: Faisal, Y. (2025). Analysis of Determining the Beginning of the Lunar Month in Indonesia: A Comparative Study of the Rukyah and Hisab Methods. *Al-Wadh'iyyah: Journal of Sharia Law and Legal Studies, 1*(2), 60–68. https://doi.org/XX.XXXXX/jslls.v1i2.1420
Published by: Yayasan Zia Mulla Sadra

INTRODUCTION

The determination of the beginning of the Qamariyah (Hijri) months in Indonesia, particularly regarding the start of Ramadan, Shawwal, and Dhu al-Hijjah, remains a subject of ongoing public debate (Hefni, 2020; Muslifah, 2020; Wusqa dkk., 2020). This issue largely stems from the differing methods employed by major Islamic organizations—Nahdlatul Ulama (NU), Muhammadiyah, and Persatuan Islam (Persis)—in determining the new moon, namely the rukyah (moon sighting) and hisab (astronomical calculation) methods. NU generally adopts direct visual observation (rukyah bil fi'li), Muhammadiyah relies on the calculation of lunar visibility (hisab wujudul hilal), and Persis applies a combination through the imkan rukyah criteria. These differing approaches have often led to discrepancies in the timing of Islamic rituals and festivals, causing confusion and polarization within the Muslim community. Although the Indonesian Ministry of Religious Affairs has attempted to mediate through the sidang isbat (official declaration sessions) and the issuance of a national Islamic calendar, such efforts have not fully resolved the inconsistencies in practice. Hence, a comprehensive and comparative study is necessary to examine these methods, their implementation, and their implications within the framework of Islamic astronomy and religious dynamics in Indonesia.

Existing literature reveals that the debate between rukyah and hisab methods in determining the start of the lunar months has persisted for decades both nationally and globally (Haryanto, 2023). Several previous studies have examined the strengths and limitations of each method from scientific and fiqh-based perspectives. However, much of the literature remains focused on normative-theological arguments without thoroughly comparing the practical applications of both methods by Indonesian Islamic organizations. Moreover, few studies have combined the analysis of official Ministry documents with direct interviews involving religious leaders from NU, Muhammadiyah, and Persis. Such integration is crucial to fully understand the roots of the differences and the potential for harmonization. This research gap indicates a pressing need for a comprehensive and comparative approach that examines both theoretical frameworks and empirical practices. Therefore, the present study seeks to address these gaps and contribute to a more integrated understanding of lunar calendar determination in the Indonesian Muslim context.

This study pursues several interconnected objectives. First, it aims to analyze comparatively the rukyah and hisab methods in determining the beginning of the lunar months in Indonesia, both in theory and practice. Second, it seeks to explore the perspectives of major Islamic organizations such as NU, Muhammadiyah, and Persis on the use of these methods, including the theological and scientific reasoning behind their respective choices. Third, it examines the role of the Ministry of Religious Affairs in formalizing the beginning of the Qamariyah months through the sidang isbat mechanism and official documents issued as religious policy. Fourth, the study aims to synthesize these various approaches to provide a comprehensive understanding of the challenges, dynamics, and potential for integrating hisab and rukyah methods. Thus, the research aspires to offer meaningful scholarly contributions to the field of Islamic astronomy, national religious policy, and the harmonization of Islamic worship practices in Indonesia.

The urgency of this research stems from the recurring and unresolved problem of discrepancies in the lunar calendar, which continues to affect religious life in Indonesia. The social tension and confusion resulting from different Eid dates show that this issue goes beyond theological debates and enters the realm of socio-administrative concern. Additionally, the lack of integrative approaches that take into account both organizational perspectives and state policy intensifies the need for comprehensive investigation. By examining the rukyah and hisab methods comparatively and linking them to official policy and the insights of religious authorities, this study seeks to fill a scholarly gap that has been largely overlooked. This research holds not only academic relevance but also practical value in offering potential pathways toward a unified Islamic calendar in Indonesia. Consequently, this study is necessary

as part of broader efforts to enhance astronomical literacy and guide the diverse Indonesian Muslim community toward greater cohesion in religious observance.

The hisab method refers to an approach in Islamic astronomy (ilm al-falak) that utilizes mathematical and astronomical calculations to determine the positions of the moon and sun for the purpose of setting the beginning of the lunar (Qamariyah) months (Hartono & Yunus, 2025; Herman dkk., 2024; Taufiqurachman dkk., 2024). In practice, hisab involves the use of astronomical data such as lunar elongation, crescent altitude, azimuth, and conjunction time (Anwar & Akib, 2022). This method has developed alongside advancements in astronomical science and technology, enabling highly precise predictions far in advance of the actual sighting events. Within Islamic discourse, hisab is viewed as a rational effort to facilitate the observance of religious duties, including the start of Ramadan and Eid celebrations (Misbahudin, 2024). Although fiqh perspectives may differ, hisab is recognized as a legitimate method when it adheres to both scientific and religious standards. Thus, understanding the concept of hisab is essential in contemporary falak studies, particularly in reconciling scientific accuracy with Islamic legal requirements.

The hisab method encompasses several categories that reflect the diversity of scholarly and institutional approaches. One key form is hisab hakiki (actual calculation), which relies on precise astronomical data to determine the actual positions of celestial bodies (Aisyah, 2021; Mahmud, 2024; Putri, 2020). This is further divided into classical hakiki—based on manual calculations—and contemporary hakiki, which employs computerized algorithms. Another form is hisab urfi, a simplified method based on the average duration of lunar months without real-time astronomical verification. In Indonesia, Muhammadiyah employs hisab hakiki wujudul hilal, meaning a new month begins if conjunction occurs before sunset and the crescent is above the horizon, regardless of its visibility. This differs from imkan rukyah, which requires the crescent to be potentially visible. These categories show that while all hisab approaches rely on calculation, their criteria and interpretive frameworks can vary significantly across institutions.

The rukyah method is an empirical approach to determining the beginning of lunar months through direct observation of the crescent moon (hilal) after sunset on the 29th day of the Hijri month (Fitriyani dkk., 2024; Rahman dkk., 2020). Observation may be conducted with the naked eye or aided by optical devices such as telescopes. Linguistically, "rukyah" derives from Arabic, meaning "to see" or "to observe" (Purwanto & Pamungkas, 2024; Ridhayanti, 2022; Rokhim, 2024). In Islamic jurisprudence, rukyah is validated by a hadith of the Prophet Muhammad (PBUH): "Fast when you see it (the crescent) and break your fast when you see it" (Narrated by Bukhari and Muslim). As such, this method holds strong legitimacy in classical fiqh traditions. Furthermore, modern rukyah also considers astronomical data such as the moon's altitude, weather conditions, and geographic location. Although observational in nature, rukyah today often works in tandem with hisab to determine the likelihood of visibility. Therefore, rukyah is a visual-empirical method that still requires scientific integration.

The rukyah method manifests in various forms depending on the criteria and institutional framework. One form is rukyah bil fi'li, or actual field observation, where teams directly observe the hilal (Reskiani & Subhan, 2022). Another distinction lies in global rukyah versus local rukyah: the former accepts crescent sightings from anywhere in the world, while the latter limits recognition to specific regions. In Indonesia, Nahdlatul Ulama follows a local rukyah approach, aggregating reports from different regions for validation through the Ministry's sidang isbat. Additionally, imkan rukyah is a hybrid model, using visibility criteria such as a minimum altitude of 2 degrees and a certain elongation threshold. Modern rukyah also benefits from technological tools like telescopes and image processing. These categories reflect how rukyah has evolved from a purely traditional practice to a structured and scientifically informed method.

The determination of the beginning of Qamariyah months refers to the process of identifying the first day of the lunar calendar, based on the moon's orbit around the Earth. In Islam, this process holds religious significance, as it affects the observance of key rituals such as fasting in Ramadan, Eid celebrations, and Hajj. Astronomically, the month begins following the occurrence of conjunction (ijtima') and the potential sighting of the crescent after sunset (Fauzan dkk., 2023; Rohmah, 2020). Islamic tradition allows for this determination via either rukyah or hisab, and in many contexts, the two are used complementarily. The process is not merely technical or scientific but also involves legal, social, and religious dimensions. Hence, the study of moon onset determination is essential not only for astronomical sciences but also for Islamic legal and ritual considerations in modern societies.

The determination of lunar months appears in various forms, depending on the methodology and criteria adopted. Broadly, three primary models exist: pure rukyah, pure hisab, and an integrated rukyah-hisab approach (Uzlifah, 2022). Pure rukyah relies solely on visual observation, often favored by traditional scholars. In contrast, pure hisab dismisses visual sighting if calculations confirm the conditions for a new month. The integrated model combines both, where hisab forecasts visibility and rukyah confirms it, as employed in Indonesia's sidang isbat. On a global scale, Muslim-majority countries differ: Saudi Arabia often applies global rukyah, while Turkey uses purely astronomical hisab. In Indonesia, efforts to harmonize remain challenged by institutional differences. Understanding these various manifestations is crucial to grasp the complexity and future direction of lunar calendar practices in contemporary Islamic astronomy.

RESEARCH METHOD

The object of this study is the determination of the beginning of Qamariyah months in Indonesia, particularly in the context of the commencement of Ramadan, Shawwal, and Dhu al-Hijjah. This issue remains a subject of public debate due to methodological differences between rukyah (moon sighting) and hisab (astronomical calculation) used by religious organizations such as Nahdlatul Ulama (NU), Muhammadiyah, and Persatuan Islam (Persis). These differences result in varied religious observances, often leading to public controversy. Although the Indonesian Ministry of Religious Affairs has made efforts to unify these perspectives through official isbat meetings and decisions, discrepancies persist. Therefore, a comprehensive and comparative study is necessary to examine the implementation of both rukyah and hisab methods, including their application in determining the beginning of Qamariyah months using astronomical and religious organization perspectives.

This research applies a qualitative approach using a library research methodology. The primary data consists of relevant literature related to the determination of Qamariyah months, particularly the beginnings of Ramadan, Shawwal, and Dhu al-Hijjah. Primary data sources include books, journals, scientific articles, and official documents from Islamic organizations and the Ministry of Religious Affairs. Secondary data include previous research, reports, and related papers.

The main sources of information in this study include the concept of the Qamariyah calendar, which is based on the lunar cycle. Determining the beginning of the Qamariyah month is crucial for setting Islamic rituals such as fasting and Eid celebrations. The rukyah method involves direct observation of the new moon using the naked eye or optical tools, while the hisab method relies on astronomical calculations. NU follows rukyah bil fi'li, Muhammadiyah adheres to hisab hakiki wujudul hilal, and Persis applies hisab imkan rukyah. The Ministry of Religious Affairs serves as a facilitator in unifying the determination of the new month through isbat meetings.

The research stages include data collection techniques through literature study. The researcher examined books, journal articles, papers, reports, and magazines relevant to the study of the determination of the beginning of Qamariyah months. The literature used includes Islamic astronomy theories, fiqh of worship, and government policies concerning isbat meetings and rukyah-hisab data.

The data analysis technique used is content analysis, which involves analyzing the content of collected literature to identify themes, patterns, and relationships between concepts. This approach enables the researcher to reveal the differences and similarities between the hisab and rukyah methods and how these methods are understood and implemented by Islamic organizations and the government.

RESULTS AND DISCUSSION

A literature review of the hisab method shows that this method has long been used to determine the beginning of the lunar month, especially by classical and modern astronomers. The hisab method relies on astronomical calculations based on the geometric positions of the sun, moon, and earth. The literature states that hisab can be classified into two main forms: true hisab and urfi hisab. True hisab is based on accurate astronomical data, while urfi hisab is more conventional and relies on the average lunar orbit. Over time, the hisab method has been equipped with astronomical software technology, further increasing the accuracy of predicting the visibility of the crescent moon.

The explanation of the data indicates that the hisab method developed within a highly rational and objective scientific framework. The validation of hisab data can be tested mathematically, allowing for advance predictions regarding the appearance of the crescent moon. Furthermore, contemporary true hisab (actual calculation) uses crescent visibility criteria, such as the Imkan Rukyat (probability of sighting the crescent), which combines astronomical aspects and empirical probability. This makes the hisab method an important tool in formulating the Islamic calendar systematically and scientifically.

The relationship between descriptive and explanatory data from the hisab method and the reality of problems in Indonesia shows that although the hisab method is highly accurate and objective, its acceptance is not yet fully unequal among Muslims. Differences in interpretation of the hisab criteria, as well as the tendency of some mass organizations to prioritize rukyah (seeing the crescent), mean that hisab results are not always the primary basis for determining the beginning of the lunar month. Thus, while hisab offers scientific precision, social and cultural challenges still influence its implementation.

A literature review of the rukyah method shows that this method is based on direct observation of the hilal (first crescent moon) after sunset on the 29th of the Hijri month. Rukyah can be performed by direct observation or with the aid of optical instruments such as telescopes. Literature states that ruqyah has a strong basis in the hadith of the Prophet Muhammad, which states, "Fast when you see the crescent moon, and break your fast when you see it." In the Indonesian context, ruqyah is often performed at various strategic locations determined by the Indonesian Ministry of Religious Affairs.

The explanation of the data illustrates that the rukyah method has high religious legitimacy and places a strong emphasis on empirical-visual aspects. In practice, rukyah is often used as an authoritative basis in isbat (confirmation) sessions to determine the start of Ramadan, Shawwal, and Dzulhijjah. However, the effectiveness of rukyah depends on weather, geographical conditions, and the skills of the observers. In many cases, failure to sight the crescent moon results in the decision being postponed to the following day, even though the crescent moon is already above the horizon according to hisab (the crescent moon).

The relationship between descriptive and explanatory data from the rukyah method and social realities in Indonesia shows that rukyah remains the dominant method for determining the start of the month due to its strong religious and traditional dimensions. However, this dependence on weather and geographical conditions makes rukyah an inconsistent method. This creates discrepancies with the hisab results, especially when the rukyah fails to sight the crescent moon even though the hisab indicates its visibility is possible.

A literature review on determining the beginning of the lunar month states that normatively, this determination can be made through hisab (calculation), rukyah (observation), or a combination of both. In Indonesia, the system for determining the beginning of the lunar month is facilitated by the Ministry of Religious Affairs through isbat (concerning) meetings involving hisab elements, rukyah data from various regions, and representatives of Islamic organizations. The literature indicates that since 2004, the Ministry of Religious Affairs has implemented the imkan (concerning) rukyat approach as a basis for a compromise between the two methods.

The explanation of this data shows that the process of determining the beginning of the lunar month is simultaneously administrative, religious, and scientific. The isbat meeting provides a space for dialogue between various methods and religious authorities, taking into account both astronomical data and rukyah results. The role of the state is crucial as a facilitator of integration between normative-religious and scientific-empirical approaches, in order to maintain the unity of the community in carrying out worship together.

The relationship between descriptive and explanatory data regarding the determination of the beginning of the month and the actual reality shows that this process is not only scientific and religious, but also political and sociological. Disparities in hisab and rukyah results often lead to differences in prayer times, which impacts the unity of the community. However, the integrative approach through the isbat session demonstrates efforts at moderation and inclusivity in unifying diverse perspectives, although it has not yet fully resolved these differences. Below, the researcher presents research findings arranged based on research objectives.

Table 1. Research Findings Arranged Based on Research Objectives

No.	Research Objectives	Key Findings
1	To comparatively analyze the rukyah and hisab methods in determining the beginning of Qamariyah months in Indonesia	The *hisab* method emphasizes systematic and objective astronomical calculation, while the *rukyah* method prioritizes direct observation of the new moon as a textual and traditional practice. Both methods have their own strengths and limitations.
2	To describe the perspectives of Islamic organizations such as NU, Muhammadiyah, and Persis on each method	NU prioritizes *rukyah* supported by *hisab* as an auxiliary tool; Muhammadiyah strictly adopts *hisab wujudul hilal*; Persis uses *hisab imkanur rukyah*. These differences reflect their respective epistemological orientations.
3	To examine the role and policy of the Ministry of Religious Affairs in determining the beginning of lunar months	The Ministry acts as a mediator through the *sidang isbat*, which considers both *hisab* data and *rukyah* reports from across Indonesia. Although the session serves as a religious consensus forum, national unification has yet to be fully achieved.
4	To formulate a synthesis that provides a	An inclusive epistemological approach and inter-organizational dialogue are needed. Integrating both

comprehensive understanding of the dynamics and challenges of method integration	methods requires a consensus-based policy reform that respects methodological diversity while moving toward a unified national Hijri calendar.

This study reveals that the fundamental differences between the hisab (calculation) and rukyah (observation) methods are not merely technical but also rooted in distinct epistemological orientations. The hisab method reflects a rational and scientific approach, while rukyah is based on empirical and textual traditions. These findings emphasize that the discrepancy in determining the beginning of the lunar month in Indonesia is not solely a methodological issue but also a manifestation of diverse paradigms in interpreting religious texts and cosmic realities.

In the context of Islamic organizations in Indonesia, NU, Muhammadiyah, and Persis apply different approaches in using hisab and rukyah. NU prioritizes rukyah while still considering hisab as a supporting tool; Muhammadiyah consistently adheres to hisab wujudul hilal; and Persis applies the imkan rukyat criteria, serving as a middle ground between the two. These differences illustrate the dynamic nature of Islamic thought that is responsive to scientific advancement while also indicating that religious authority is not monolithic in interpreting lunar calendar methods.

The findings also show that the isbat meeting facilitated by the Ministry of Religious Affairs serves as a negotiation platform between religious authorities and astronomical scientists. Through this mechanism, the state plays a strategic role as a moderator to bridge the methodological and doctrinal differences. Although the isbat meeting has not yet fully unified all perspectives, its existence provides a formal framework and strong legitimacy for collective religious decisions on a national scale.

The dynamics of integrating hisab and rukyah methods are inseparable from epistemological and sociological challenges. Such integration requires interdisciplinary understanding, combining astronomy, Islamic jurisprudence (fiqh), and sociology of religion. The fact that Indonesian Muslims still often differ in beginning Ramadan or celebrating Eid reflects the suboptimal realization of this integration. This suggests that the challenges are not only theoretical but also cultural and structural.

This research contributes to the formulation of a synthesized understanding between hisab and rukyah by promoting collective awareness of the importance of an integrative approach. Rather than positioning the two methods in opposition, the findings support the synergy through imkan rukyat as a moderate middle path. This approach offers not only scientific accuracy but also ensures religious legitimacy and wider social acceptance.

Thus, this discussion demonstrates that determining the beginning of the lunar month is not merely a matter of hisab versus rukyah, but a dialectical interaction between science and faith, tradition and modernity, as well as religious and state authority. Future policy directions should encourage the strengthening of integrative astronomical education, intensive training for moon observers, and enhanced communication among Islamic organizations and between these organizations and the state to foster inclusive and unified religious awareness.

CONCLUSION

One of the most surprising findings of this study is that despite the existence of a well-structured sidang isbat (decree session) system in Indonesia—which includes experts in astronomy and representatives from Islamic organizations—the divergence in determining the beginning of Qamariyah months persists annually. This ongoing discrepancy is not solely caused by methodological differences between rukyah and hisab, but more profoundly rooted in the distinct epistemological paradigms each Islamic organization adheres to in interpreting

religious authority and legal frameworks. It reveals that the disagreement lies not merely in technical procedures but in the fundamental religious worldview, which is inherently difficult to unify.

This research contributes significantly to the theoretical discourse in contemporary Islamic astronomy by examining rukyah and hisab not only as technical tools but as sociological and institutional constructs. Practically, the findings can serve as a foundation for the Ministry of Religious Affairs, Islamic organizations, and astronomy scholars to develop more profound dialogical approaches, aiming for an integrative, inclusive, and sustainable national Islamic calendar system.

The limitation of this study lies in its scope, which is confined to three major Islamic organizations and selected literature within the Indonesian context. It does not encompass the perspectives of Islamic authorities from other countries that may employ different approaches in integrating rukyah and hisab. Future research should explore comparative international studies on Qamariyah calendar determination, including the potential role of digital technology and artificial intelligence in enhancing global hilal visibility assessments.

REFERENCES

Aisyah, N. (2021). Peranan Ilmu Hisab Dalam Penentuan Waktu Imsakiah Di Kabupaten Gowa. *Elfalaky: Jurnal Ilmu Falak*, *5*(1). https://doi.org/10.24252/ifk.v5i1.23946

Anwar, R. F., & Akib, F. (2022). KORELASI PENENTUAN AWAL BULAN KAMARIAH MENGGUNAKAN PROGRAM HILAL CALC 3.0 DAN ACCURATE TIMES TERHADAP RUKYATUL HILAL. *HISABUNA: Jurnal Ilmu Falak*, *3*(2), 161–190. https://doi.org/10.24252/hisabuna.v3i2.22740

Fauzan, A., Zakiah, A. K., Mumtaza, A., Hakiki, D. R., Alfiyahni, F. S., & Amin, I. (2023). Penetapan Awal Bulan Hijriyah Dan Integrasinya Dengan Perhitungan Matematika. *Religion: Jurnal Agama, Sosial, dan Budaya*, *2*(1), 107–130. https://doi.org/10.55606/religion.v1i1.58

Fitriyani, F., Isfihani, I., & Octasari, A. (2024). Implikasi Kriteria Imkanur Rukyat Mabims Baru Terhadap Penyatuan Awal Bulan Kamariah Di Indonesia. *Jurnal Mediasas: Media Ilmu Syari'ah dan Ahwal Al-Syakhsiyyah*, *7*(2), 462–482. https://doi.org/10.58824/mediasas.v7i2.197

Hartono, R., & Yunus, M. (2025). Analisis Penentuan Awal Bulan Hijriyah Dengan Metode Pendekatan Hisab dan Rukyat. *Jurnal Al-Mizan*, *12*(1), 17–32. https://doi.org/10.54621/jiam.v12i1.997

Haryanto, A. M. (2023). Hisab Dan Rukyat Dalam Penentuan Awal Bulan Qamariyah Di Indonesia Perspektif Hadis. *Al-Mu'tabar*, *3*(2), 45–60. https://doi.org/10.56874//almutabar.2024.v3i2/1553

Hefni, W. (2020). Komodifkasi Agama dalam Polemik Penentuan Awal Bulan Qamariah di Indonesia. *Al-Marshad: Jurnal Astronomi Islam dan Ilmu-Ilmu Berkaitan*, *6*(1), 75–117. https://doi.org/10.30596/jam.v6i1.4505

Herman, M. A., Gassing, Q., & Shuhufi, M. (2024). Kontroversi Hisab dan Rukyat Dalam Penentuan Kalender Islam di Era Modern Pendekatan Fikih Kontemporer. *Media Hukum Indonesia (MHI)*, *2*(4). https://doi.org/10.5281/zenodo.14253182

Mahmud, H. (2024). Dasar-Dasar Ilmu Falak: Pengenalan terhadap Astronomi dalam Perspektif Islam. *Indonesian Journal of Islamic Jurisprudence, Economic and Legal Theory*, *2*(4), 2278–2286. https://doi.org/10.62976/ijijel.v2i4.1031

Misbahudin, F. (2024). Penggunaan Metode Hisab Sullam al-Nayyirain dalam Penetapan Awal Bulan Islam Tinjauan Sosiologi Dakwah. *LANTERA: Jurnal Komunikasi dan Penyiaran Islam*, *3*(1), 1–14. https://doi.org/10.30999/lantera.v3i1.3419

Muslifah, S. (2020). Upaya menyikapi perbedaan penentuan awal bulan qamariyah di indonesia. *Azimuth: Journal of Islamic Astronomy*, *1*(1), 74–100. https://doi.org/10.15642/azimuth.v1i1.788

Purwanto, S. R. P. U., & Pamungkas, W. S. A. (2024). Contextualization of Hadith About Rukyat and Hisab Perspective M. Syuhudi Ismail. *al-Afkar, Journal For Islamic Studies*, *7*(4), 1176–1190. https://doi.org/10.31943/afkarjournal.v7i4.1115

Putri, H. T. (2020). Tinjauan Astronomi Terhadap Hisab Gerhana Bulan dalam Kitab Ittif? Q?? T al-Bain Karya Moh. Zubair Abdul Karim. *Al-Marshad: Jurnal Astronomi Islam dan Ilmu-Ilmu Berkaitan*, *6*(2), 162–180. https://doi.org/10.30596/jam.v6i2.5186

Rahman, F., Pujiono, P., & Muslifah, S. (2020). Penentuan Awal Bulan Kamariah Untuk Ibadah. *FENOMENA*, *12*(2), 107–138. https://doi.org/10.21093/fj.v12i2.2264

Reskiani, A., & Subhan, R. (2022). Analisis Visibilitas Hilal sebagai Acuan Penentuan Awal Bulan Kamariyah. *ELFALAKY: Jurnal Ilmu Falak*, *6*(1), 96–110. https://doi.org/10.24252/ifk.v6i1.26772

Ridhayanti, N. R. (2022). Problematika Kesaksian Rukyatul Hilal Orang Non Muslim. *Al-Afaq: Jurnal Ilmu Falak Dan Astronomi*, *4*(2), 181–191. https://doi.org/10.20414/afaq.v4i2.5188

Rohmah, N. (2020). IJTIMAK SEBAGAI PRASARAT PERGANTIAN BULAN BARU DALAM KALENDER HIJRIYAH (Studi Analisis Ijtimak Awal Bulan Syawwal 1441H): Membahas perbedaan dalam penentuan ijtimak. *AL-MIKRAJ Jurnal Studi Islam dan Humaniora (E-ISSN 2745-4584)*, *1*(1), 78–87. https://doi.org/10.37680/almikraj.v1i1.509

Rokhim, A. (2024). Telaah Argumen Metode Hisab Dan Rukyat Dalam Perspektif Tafsir Kontekstual. *Jurnal Bimas Islam Vol*, *17*(1), 24. https://doi.org/10.37302/jbi.v17i1.1166

Taufiqurachman, T., Nurmadhan, W., Islami, B. N., Fatah, A. T. N., & Azzahra, A. (2024). Analisis Perbandingan Antara Metode Hisab dan Rukyat dalam Menentukan Awal Bulan Ramadhan di Indonesia. *JIIP-Jurnal Ilmiah Ilmu Pendidikan*, *7*(11), 12473–12481. https://doi.org/10.54371/jiip.v7i11.6203

Uzlifah, E. (2022). KALENDER HIJRIAH KRITERIA 29 DALAM TINJAUAN FIKIH. *ELFALAKY: Jurnal Ilmu Falak*, *6*(2), 298–314. https://doi.org/10.24252/ifk.v6i2.32383

Wusqa, U., Salma, S., & Yudhiani, W. (2020). Dinamika Penentuan Awal Ramadan di Sumatera Barat. *Al-Manahij: Jurnal Kajian Hukum Islam*, *14*(2), 317–334. https://doi.org/10.24090/mnh.v14i2.3729