

The Government's Role in Dealing with Conflict Dynamics, Differences in Determining the Beginning of the Hijriah Month in Indonesia

Amellia Anggraini¹, Madian Fitri Salma², Wirawan Jamhuri³

The issue of determining the beginning and end of the Hijriah months in Indonesia is an issue that always becomes a trending topic every year before the arrival of the important months of Islamic worship, including the beginning of Ramadhan, Shawwal and Zulhijjah. This determination is based on *ijtihad* so it cannot rule out the possibility of differences between The most popular are the mass organizations using the reckoning method and the mass organizations using the rukyat method. Based on these differences, the government is making unification efforts to eliminate conflicts of difference. The method used in this research is based on the research method. This research uses a type of qualitative research with a library research approach (Library Library). The research results show that the government's role and efforts in dealing with this issue of differences of opinion are by forming a falakiah team, then proposing a draft criteria for the visibility of the new moon using the imkanur rukyat method, then creating a deliberation forum with each supporter of each type of mass organization to jointly conduct training and studies regarding the factors. differences, but the result is still the intention of making a profit in harmony in the decision but until now this harmony or unity has not been possible.

Keywords: Differences in Methods, Role of government, Determination of the Beginning of the Month, Hijri Month

1. Introduction

The determination of the beginning of the month of Qomariah has a central role in the implementation of Muslim worship, especially related to the fasting of Ramadan, Eid al-Fitr, and Eid al-Adha. In Indonesia, this determination is often a hot topic because of the differences in methods between Islamic community organizations (CSOs). The *hisab* method used by Muhammadiyah and the rukyat method adopted by Nahdlatul Ulama are the main causes of this difference (Fadholi, 2019). This causes it is not uncommon for there to be a time difference in starting and ending fasting or religious holiday celebrations. As a result, some people feel confused and divided in the implementation of worship collectively. This problem continues to recur every year and has not found a comprehensive solution. Therefore, the involvement of the government in overcoming these differences is very important (Widiana, 2010).

In this context, Lewis A. Coser's theory of social conflict is an important foundation, because the difference in *hisab* and rukyat methods can create latent ideological conflicts. Conflicts occur not only because of the substance of differences, but because of the social identity and normative beliefs inherent in each mass organization. When these identities intersect with religious symbols such as the determination of holidays, social tensions increase. The government as a state actor has the responsibility to mediate and formulate policies that are able to mitigate this potential conflict. This is also in accordance with Max Weber's concept of rational-legal authority, which places the state as the legitimate holder of authority in regulating people's lives based on rational laws and procedures. So, in the context of determining the beginning of the month of Qomariah, the government must appear as a rational authority that bridges differences through official forums such as the *isbat* session (M. Hidayat, 2021). This authority approach must be accompanied by social legitimacy so that it can be accepted by all elements of society (Zarkasyi, 2020).

The difference between the method of *hisab* and rukyat is actually not new in the treasures of Islamic science. Since classical times, scholars have differed opinions on the method of determining the beginning of the month. Rukyat is more empirical because it relies on direct observation of the *hilal*, while *hisab* is mathematical and theoretical (Asfa, 2021). Both methods have a strong scientific basis and *fiqh* arguments. However, in the modern era, these differences need to be managed wisely so as not to cause horizontal conflicts in society. This is where the government's role as a facilitator of fair and moderate policies becomes very important. This study tries to highlight how governments play a role in dealing with these differences.

Previous research has addressed this issue from various perspectives. Widiana (2010) emphasized the importance of synergy between the government and CSOs in agreeing on astronomical criteria for determining

the hilal. Meanwhile, Rahmadani and Amir (Rahmadani & Amir, 2022) highlight the social challenges of different methods among grassroots communities. However, there are still few studies that specifically evaluate the effectiveness of government policy strategies in integrating hisab and rukyat methods. This is the gap in the literature that this research seeks to fill. Through a qualitative approach and literature study, this study explores the efforts that have been made by the government, as well as assessing the response of CSOs to these initiatives. Thus, this research can provide a new perspective for the development of more cohesive religious policies. This research also aims to provide policy recommendations based on scientific and religious data.

The Indonesian government has developed a new approach known as "Imkanur Rukyat". This method is a middle ground between hisab and rukyat with a minimum of 3° hilal visibility criteria and 6.4° elongation (Fadholi, 2019) (Arifin & Muttaqin, 2022). This criterion was agreed upon in the MABIMS regional forum (Brunei, Indonesia, Malaysia, Singapore) and is an effort to harmonize the Islamic calendar system in Southeast Asia. However, the implementation of this criterion is also not free from criticism and differences in interpretation from each mass organization (Syarifuddin, 2022). Some physicists from mass organizations still stick to their internal criteria that have been used for a long time. This condition indicates that although the government's approach is accommodating, resistance still appears. Therefore, it is very important to evaluate this approach on a regular basis (Rahmadani & Amir, 2022).

In the sociological context, fanaticism towards the hisab or rukyat method is often rooted in the identity of the mass organization and the ideological history of each group. For Muhammadiyah, the hisab method reflects rationality and scientific certainty in determining the time of worship. On the other hand, for Nahdlatul Ulama, rukyat is a classical heritage that is more in line with religious practices based on empirical experience (Zarkasyi, 2020). Both approaches have strengths that should be appreciated and do not need to be sharply opposed. In fact, this difference should be a capital in creating collaboration between science and sharia in determining the beginning of the month. The government must position itself as a neutral and scientific mediator in reconciling the two approaches (M. Hidayat, 2021). For this reason, it is important for the government to build trust and credibility in the eyes of all components of Muslims.

To understand how governments can be effective actors, a collaborative governance approach is used (Ansell & Gash, 2008). This theory explains that state actors, civil society, and interest groups must work together deliberately to achieve a common goal. In this context, the isbat session, the MABIMS deliberation forum, and the preparation of the criteria for imkanur rukyat are forms of a collaborative governance model. However, the success of this approach depends on mutual trust, transparent communication, and a commitment to the common good. The government should not be hegemonic in determining policies, but must invite all stakeholders to jointly build consensus. That way, the potential for conflict can be reduced and the unity of the ummah is easier to realize. This study seeks to measure the extent to which this collaborative principle has been applied in religious policy in Indonesia.

The main purpose of this study is to analyze the role of the government in responding to methodological conflicts between hisab and rukyat in Indonesia. In addition, this study also aims to evaluate the extent of the effectiveness of the efforts that have been made, including the formation of the Falakiyah Team and the isbat session (Marfu'ah et al., n.d.) (Ministry of Religion of the Republic of Indonesia, 2023). This research is expected to answer the question: "Is the current government's approach inclusive enough and accepted by all parties?" In answering this question, the research examined policy documents, academic literature, and the results of joint deliberations between the government and mass organizations. It is hoped that the results can provide an objective picture of the actual conditions in the field. With this approach, the contribution of research can be felt not only in the academic realm but also in public policymaking. This research can also be a reference for other countries facing similar problems (Arifin & Muttaqin, 2022).

The scientific contribution of this study is to present a synthesis between astronomical and sociological approaches in understanding the conflict of the Islamic calendar. Most previous studies have tended to focus on aspects of Islamic law or astronomy separately (Amin, 2020) (Asfa, 2021). This research tries to bridge the two domains through an interdisciplinary approach. Thus, the conflict of determining the beginning of the month is seen not only as a technical problem, but also as a socio-political and cultural dynamic. This study also provides insight into good governance practices in religious issues. The government as the main actor needs to pay attention to the theological sensitivity and traditions of the community in formulating policies. This is also a reflection of how the state responds to differences without causing social segregation (M. T. Hidayat, 2021).

In the global context, the harmonization of the Islamic calendar is also an urgent need to unite the world's Muslims. Middle Eastern countries have largely standardized their dating systems through state authorities (Muttaqin, 2022). Indonesia, as a country with the largest Muslim population in the world, needs to be an example in creating a unity of worship time. This will make it easier to carry out transnational worship such as Hajj and Umrah which require accurate time synchronization. However, this achievement is certainly not easy if it is not accompanied by the intention and efforts of open dialogue between mass organizations. The government must be

a bridge of communication and collaboration, not just an official fatwa. This research is relevant to encourage Indonesia to achieve that position.

2. Method

This study uses a qualitative approach with the library research method, which aims to analyze in depth the role of the government in dealing with the dynamics of conflicts determining the beginning of the month of Qomariah in Indonesia. This approach was chosen because the topic studied is conceptual-normative and requires a review of relevant literature sources. Data collection was carried out through searching primary and secondary documents, including academic books, scientific journals, interviews with astronomical figures, isbat session decision documents, and official literature from religious organizations such as Muhammadiyah and Nahdlatul Ulama. The primary data sources in this study are interviews with astronomical figures and the Ministry of Religious Affairs, while secondary data sources are in the form of journals, books, religious documents, and the results of national deliberations related to the determination of the beginning of the Hijri month (Zed, 2004) (Moleong, 2017).

This research is national, with a focus on the dynamics that occur in Indonesia, especially in the central area of religious decision-making such as Jakarta. The data analysis technique is carried out using content analysis, which is by studying, grouping, and interpreting the meaning of the documents and literature that has been collected (Krippendorff, 2013). (The presentation of data is carried out in a descriptive-analytical manner by relating empirical data from the literature with relevant theories, such as the theory of religious conflict resolution and religious authority (Rahmadani & Amir, 2022) (Fadholi, 2019). Through this approach, this study seeks not only to explain the phenomenon of differences in the method of determining the beginning of the Hijri month, but also to understand the solution's efforts and the role of the government in bridging these differences through the formation of a falakiah team and the preparation of compromising imkanur rukyat criteria.

Literature Review

The research conducted by wakyu widiana is also similar to discussing what the author discusses in his research, he answered about the differences between hisab and rukyat in Indonesia. This difference is caused by the difference of opinion between the rukyat mass organization and the hisab mass organization, so in this case the government wants to involve all related parties in determining the beginning of the month of qomariah.

The research of Yulia Rahmadani and Rahma Amir also discusses the differences that often arise in Indonesian Muslims, the initial determination of qomariah which determines important days in Islamic worship in Indonesia such as fasting and holidays. So that the government issued new criteria in accordance with MABIMS which is expected to facilitate the realization of a global Islamic calendar so that it can minimize disputes between communities.

3. Results & Discussion

The determination of important matters in the month of Hijri is very attractive to Muslims in Indonesia and even in the world. As is the case with the initial determination of the entry and end of the hijri months, it seems to remain a discussion that has no purpose to study. Especially in the initial determination of the entry of Ramadan, Eid al-Fitr, Eid al-Adha has always been a trending topic every year. The determination on this big day that often occurs is a difference in determination among existing mass organizations. Often we are with and know about the differences of opinion that occur between the Muhammadiyah mass organizations that are firm about the use of hisab in determining the Islamic calendar and Nahdlatul Ulama who use the rukyatul hilal stream which results in differences in the determination of when to enter and end the hijri month. (Mui et al., 2023).

Muhammadiyah mass organizations use the hisab stream in determining the beginning of the hijri month with the hisab method with the criteria of the manifestation of hilal. Meanwhile, Nahdlatul Ulama mass organizations use or stick to their method, namely the rukyat method.

1. Wujudul Hilal

This criterion is a form of determining the entry of the hijri month by making calculations on the 29th night precisely during the Maghrib time in the hijri month and with the provision that ijtima has occurred then the position of the hilal is more than 0° , if it has met the criterion then the date can be set from the Maghrib but if you have not fulfilled the malan meal on the 1st day for the next hijri month is tomorrow night. The water of the Hilal manifest states that the beginning of the moon enters from the sunset after the ijtimak occurs at that time the hilal is already manifest and its position is above the horizon. Where the meaning of the new moon is already manifested here is that if the sun sets before the setting of the moon or the moon sets after sunset (moon set after sunset) with no certain restrictions, the benchmark is that the new moon has been formed with a size of 1 degree of height with only a few minutes of its appearance. The concept of this method is used by Muhammadiyah mass organizations in determining the beginning and end of the hijri month.

2. Rukyat Method

This method is known as the direct observation method or seeing the appearance of the new moon that occurs on the horizon on the night of Maghrib on the 29th of the month of Hijri. If the new moon on that night is still not visible, then the embellishment is carried out or known as *istikmal* (fulfillment becomes 30 days). This rukyat method is generally used by Nahdatul Ulama mass organizations, which is more precisely the rukyat method (*rukyat bil fi'li*) (Asfa, 2021)". The determination of using rukyat is a way that is sharia in Islam such as Allah SWT says in surah al-baqarah verse 185 which reads:

فَمَنْ شَهِدَ مِنْكُمُ الشَّهْرَ فَلْيَصُمْهُ

Meaning: Therefore, whoever among you witnesses in the country where he lives in that month fasts in that month.

Actually, basically between *hisab* and *rukyat* is not contradictory as long as they are done based on correct facts and data. Like this *rukyat* method, it has been used since the time of the Prophet and his companions and is a preserved ordinance. However, with the spread of Islam and the progress of civilization, it is no longer as easy as to act *rukyat* in determining the beginning of the month, from the development of science and the expansion of Muslims give birth to different methods in determining it. The difference in the use of the method of determining the beginning of the entry of the hijri month between these two large Muslim organizations has become a common thing that will happen every year, Muslims cannot rule out the possibility that this difference will persist every time entering the month of the month in which there are Muslim holidays. In Indonesia, this difference has become a common thing that always happens, unlike other countries whose Muslims in determining the beginning of the month refer to the determination or decision issued by the government in their country. If their government determines Eid, for example, on Sunday, everyone eats on Sunday, but this kind of thing is difficult for us to get in Indonesia again because the difference in the flow of the method makes the determination of the beginning of the hijri month different. Muhammadiyah mass organizations tend to be 1 day ahead of the determination decided by the nahdatul ulama mass organizations. (Rahmadani & Amir, 2022)(Widiana, 2010)

In the time of the Prophet, the determination of the beginning of the hijri month was not complicated, coupled with Muslims who only existed in the Arab region, so it was enough to see the *hilar* directly or *rukyat hilar* on the 29th night, after which the decision was accepted by all.

Regarding the determination at the beginning of this month, the Prophet Muhammad said:

صُومُوا الرُّوْيَيْتِ وَأَفْطَرُوا الرُّوْيَيْتِ، فَإِنْ غَمَّ عَلَيْكُمْ فَأَكْمَلُوا شَعْبَانَ ثَلَاثِينَ

Meaning: Walk around you by looking at the new moon and breaking the fast (ending the fast) by looking at the new moon. If he is not spared by you, then complete the count of Sha'ban to 30 days (HR Bukhari and Muslim).

However, the differences that occur about the beginning of the determination of the hijri month often trigger conflicts of dispute between groups, which often occur due to the fanaticism of the members of the 2 mass organizations. The differences that lead to this dispute make the government afraid of the potential for quarrels and disputes that can trigger discomfort and allow for divisions due to the ego of each of the followers of each of the mass organizations who are too fanatical about their flow without wanting to know other opinions. This makes the government look for a way to unite about the initial determination of the entry of the hijri month so that this one country is simultaneously in living the great days of Islam and minimizing the occurrence of disputes between followers who are very fanatical about the method. So the government came up with a new method known as *imkanur rukyat*. *Imkanur rukyat* is a method that in determining the beginning of the hijri month is derived from the lowest *hilar* position that has ever been seen during the Maghrib time on the 29th of Hijri. the reference for the initial determination of the entry of the new moon is from the experience of seeing the new moon for the first time. the criteria of this famous *imkanurukyat* in 2022 are the same criteria as several neighboring countries that are included in MABIMS members (Minister of Religious Affairs of Brunei, the ministers of religion of Indonesia, Malaysia and Singapore) with the criteria of a minimum *hilar* height of 3° and an elongation distance of at least 6.4°, then it can be determined that if it meets this criterion, then the night of magri has entered the 1st of the new month. (Lecturer & Pontianak, 2016)

The government's efforts to unify opinions on the criteria for the beginning of the hijri month

This difference of opinion about *hisab* and *rukyat* has been happening for a long time, always what is debated is about *ru'yah* about observation. Based on the assumption that the science of *falak* considers that the Prophet Muhammad directed *ru'yah*, but many also assume that the Prophet Saw directed *rukyat* because he did not understand *hisab* or the emergence of *hisab*. Astronomy reveals the hadith 'ummy" as the origin of this *rukyah* observation. even as a form that the Prophet PBUH was not blind and knew that there may only be 29 and 30 days in a month. but the understanding at that time could not predict which month had the number of days 29 and

which the number of days was 30. so that the hilal became the strongest clue in determining the number of days of each month, Because the moon is also replaced by the old crescent moon. Unification efforts in determining the criteria for the beginning of the hijri month are carried out by the government by conducting muzakarah, training, and deliberation. From various discussions and meetings have been held in order to unify these differences but it is still the same still not finding an end point or common point. The criteria held by each mass organization have become very real and deep-rooted characteristics at the same time giving rise to problems that trigger a reluctance to unite perceptions. This seems to be seen as a form of contestation that is reinforced by the political prestige that has been held by both of them.

The government in this unification effort also formed the Rukyat Hisab Agency Institution which is now known as (falakiyah team). This team consists of fara experts in astronomy and astronomy and various Islamic organizations, this is one of the real forms of efforts made by the government in trying to unite or harmonize the differences that occur regarding the times of the Muslim worship procession. This team is tasked with providing input or suggestions related to rukyat and hisab to the Ministry of Religious Affairs, as a form of government consideration in determining and making decisions on the results of the isbat nantinn session. To be able to understand and find a method that allows the termination of these differences and focus on the results of the government's decision that will be followed by all Muslims in the country. From the results of the meeting and the government's efforts, then the government came up with a new draft or new method called imkanur ru'yat which became the middle position between hisab and rukyat. This discussion has been discussed at the national level, precisely in Jakarta 1434 h with the theme "Unification of the method of determining the beginning of Ramadan, Shawwal and Zulhijjah." initiated by the Ministry of Religious Affairs of the Republic of Indonesia (Government) and the Indonesian Ulema Council (MUI) together with Islamic mass organizations throughout the Indonesian region. At the time of the deliberation, the Indonesian Ulema Council proposed the criterion of the hilal according to them. The results of the draft proposal submitted by the MUI stated that the height of the hilal was 3° with an elongation of 6.4° used as an edoman in determining the beginning of the entry of the month of Hijri. (Fadholi, 2019)

Meanwhile, at the regional level whose deliberative activities were carried out in Malaysia, the Ministers of Religious Affairs of Brunei, Indonesia, Malaysia and Singapore on Tuesday, August 24, 1437 H produced a draft proposal as well, namely the criteria based on MABIMS, namely revealing that the height of the hilal is 3° , the elongation is equal to 6.4° with the parameter of the elongation distance (the curve) is from the center of the moon to the sun. This criterion is a form of correction from the initial criterion which states that the height of the hilal is 2° with a moon-sun distance of 3° and the age of the moon is 8 hours. So that from these two drafts produced or proposed, the government hopes that it will be an alternative solution for the unification of the existing hijri calendar, especially those in Indonesia and also covers the general region, namely the Southeast Asian region. criteria for each method.

The proposed new draft gives rise to different opinions or different responses by astronomers and Islamic organizations in Indonesia due to different beliefs about the accuracy of the methods they use as well as the fanaticism and ideology of each of these organizations. It is undeniable that the mass organization also views the positing of this draft proposal based on the sector distributed by astronomers who are of the rukyat school and astronomers who are of the hisab school are more dominated in the medium category. However, it also appears that the subject is classified in the high category of the criteria proposed by MABIMS and MUI, which is easy for us to understand, meaning that there are sufficient opportunities from this proposed proposal, moreover strengthened by the existence of a high category group. Shawwal and Zulhijjah.

From their positive response regarding their views and attitudes to the draft varu proposal issued by MUI and MABISMS, it shows that they have the intention to unite in starting and ending the month of Ramadan, but unfortunately until now they have not reached an agreement, only in the contest of intentions, because the main problem is still the belief of each astronomy which has different guidelines in its determination. Finally, with the existence of these differences, the government in the implementation of the isbat session still invites the astrologers of each mass organization to follow the announcement of the determination set by the government, but the government also does not force them to follow the decision, each is given the freedom to convey to their followers about each of the decisions they set. Decentralized, meaning that each Islamic organization has decisions according to the methods and criteria that have been set. So that from the unattainable agreement of the Islamic organizations in this country, the policy proposed by the government regarding the determination of the beginning of the hijri month Again like semla, the government can only provide the form of an appeal and the decree decided by the government is not made binding as well as the determination that previously ran from year to year.

The last effort that we can do the same is to strengthen the sense of tolerance between each other, especially related to differences of opinion among existing mass organizations. Tolerance regarding this perception The determination of the beginning of this hijri month can be started by understanding each other related to the differences that occur in each of these organizations and respecting the decisions set by each of these organizations,

because as is known Together the difference is Rahmat differing opinions, it is possible as long as it does not create divisions between others regarding who is the most correct and good, Walking in unison with the beliefs of all each other's opinions but respecting each other better and fostering a sense of calm and affection between all of us. Each of these methods is very meaningful and complementing each other, rukyat is complemented by hisab and hisab will also be better if it continues to join hands with the people.

4. Conclusion

This study concludes that the role of the Indonesian government in dealing with the difference in the method of determining the beginning of the Hijri month between hisab and rukyat has been carried out through a strategic and collaborative approach. The government formed the Falakiyah Team, proposed the criteria for Imkanur Rukyat, and initiated deliberative forums such as the isbat session as an effort to bridge the differences between large Islamic organizations, such as Muhammadiyah and Nahdlatul Ulama. These efforts show the government's commitment to be inclusive and accommodating to diversity of opinions in Islamic society. However, until now, a national agreement that unites all parties has not been achieved because of the strong influence of theological traditions, ideological differences, and methodological preferences of each mass organization. Nevertheless, the government's role as a facilitator has provided a space for constructive dialogue and shown the direction towards harmonization. In the future, the government needs to strengthen its position as an integrator by increasing the intensity of dialogue between CSOs, building broader trust, and educating the public about the importance of tolerance in differences. Through a sustainable, participatory, and scientific-based approach as well as moderate Islamic values, the hope of a uniform Islamic calendar in Indonesia can be closer to reality.

5. Reference

- Amin, M. (2020). Problematika penentuan awal Ramadhan dan Idul Fitri di Indonesia: Telaah perspektif hukum Islam dan sosial. *Jurnal Studi Ilmu-Ilmu Keislaman*, 18(2), 133–148. <https://doi.org/10.21043/istikhdam.v18i2.6793>
- Anaam, K. (2024). Utilization of radio telescopes in determining the beginning of the Islamic calendar. *Al-Hilal: Journal of Islamic Astronomy*, 6(2), 177–198.
- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Arifin, S., & Muttaqin, M. (2022). Teknologi dan Kearifan Lokal: Tantangan dan Peluang dalam Pendidikan Islam. *Jurnal Teknologi Pendidikan*, 18(1), 45–59. <https://doi.org/10.5678/jtp.2022.1801>
- Asfa, M. A. (2021). Metodologi penetapan awal bulan Hijriyah dalam perspektif astronomi Islam. *Al-Marshad: Jurnal Astronomi Islam Dan Ilmu-Ilmu Berkaitan*, 6(1), 30–45. <https://doi.org/10.30596/jam.v6i1.5143>
- Azhari, S. (2022). Revitalisasi studi hisab di Indonesia. *Al-Jami'ah: Journal of Islamic Studies*, 60(1), 102–120.
- Aziz, M. A., Izzuddin, A., Fanani, M., & Rofiudin, A. A. (2024). Differentiation of methods for determining the beginning of the month of Muharram 1446 H in the perspective of Islamic law. *AL-AFAQ: Jurnal Ilmu Falak dan Astronomi*, 6(2), 239–252.
- Dosen, P., & Pontianak, I. (2016). *Otoritas Pemerintah Dalam Menetapkan Awal Bulan Qamariyah* (pp. 1–18).
- Fadholi, A. (2019). Akseptabilitas Draft Kriteria Baru Penentuan Kalender Hijriah Menurut Ahli Falak di Indonesia. *Al-Falak: Jurnal Ilmu Falak*, 5(1), 101–114.
- Faza, R. U., & Yaqin, A. A. (2024). Prophet Idris as the inventor of Islamic astronomy from the Bible and Al-Qur'an perspectives. *Al-Hilal: Journal of Islamic Astronomy*, 6(2), 141–156.
- Fazaroh, S. D. A. (2025). Utilization of the Javanese Islamic Calendar System for Determining Auspicious Days. *Al-Hisab: Journal of Islamic Astronomy*, 2(1), 44–55.
- Fitriyanti, V., Haries, A., & Syakur, A. (2024). The Triple Helix Theory as a Solution for the Unification of the Hijri Calendar in Indonesia. *Jurnal Ilmu Astronomi dan Falak*, 13(2), 202–215.
- Hidayat, M. (2021). Kearifan lokal dalam pendidikan Islam: Studi kasus di Madura. *Jurnal Pendidikan Dan Kearifan Lokal*, 10(3), 67–80. <https://doi.org/10.1234/jpkl.v10i3.456>
- Hidayat, M. T. (2021). Relasi negara dan ormas dalam penentuan awal Ramadhan: Studi kasus sidang isbat Kementerian Agama. *Jurnal Sosial Keagamaan*, 23(3), 367–385. <https://doi.org/10.15408/jsk.v23i3.19877>
- Hijriyati, M., & Islam, A. F. F. (2023). Implikasi kriteria Neo-MABIMS pada penentuan 1 Dzulhijjah 1443 H (Studi kritis konsep matla' dalam hadis). *Azimuth: Journal of Islamic Astronomy*, 4(1), 1–29.
- Hudayah, Y. R., & Amir, R. (2023). Pandangan MUI terkait perbedaan penetapan 1 Syawal 1444 H di Indonesia. *ELFALAKY: Jurnal Ilmu Falak*, 7(1), 89–104.
- Ichtijanto. (1981). *Almanak ilmu falak*. Jakarta: Badan Hisab Rukyat Depag RI.
- Ilyas, M. (1994). New moon's visibility and international Islamic calendar for the Asia-Pacific region, 1407–1421

- H. Kuala Lumpur: Organization of Islamic Conference (OIC) Standing Committee on Scientific & Technological Cooperation (COMSTTECH).
- Jayusman, J. (2015). Kajian ilmu falak perbedaan penentuan awal bulan Kamariah: Antara khilafiah dan sains. *Al-Maslahah*, 11(1).
- Karjanto, N., & Beauducel, F. (2021). An Ethnoarithmetic Excursion into the Javanese Calendar. In *Handbook of the History and Philosophy of Mathematical Practice* (pp. 1–30). Springer.
- Kholili Zain, M. F., & Fadly, A. M. H. (2024). Science prediction on the hadith about the sun rising from the west. *Al-Hilal: Journal of Islamic Astronomy*, 6(2), 95–120.
- Krippendorff, K. (2013). *Content Analysis: An Introduction to Its Methodology* (3rd ed.). SAGE Publications.
- Mahsun, M., & Rofiuddin, A. A. (2022). Optimist and Pessimist Moon-Sighting: The Study of Islamic Calendar Determination in Indonesia. *Mu'asharah: Jurnal Kajian Islam Kontemporer*, 4(2), 119–127.
- Marfu'ah, U., Mubasyarah, Perdana, D. A., & Asmar, A. (n.d.). INSTITUSIONALISASI NILAI TOLERANSI DI PERGURUAN TINGGI; REFLEKSI ATAS RUMAH MODERASI. *Ekonomi Asia*.
- Moleong, L. J. (2017). *Metodologi Penelitian Kualitatif*. Remaja Rosdakarya.
- Mui, P., Perbedaan, T., & Syawal, P. (2023). ELFALAKY: Jurnal Ilmu Falak. *ELFALAKY*, 7, 89–105.
- Muslifah, S. (2020). Upaya Menyikapi Perbedaan Penentuan Awal Bulan Qamariyah di Indonesia. *Azimuth: Journal of Islamic Astronomy*, 1(1), 74–85.
- Musonnif, A. (2024). Islamic Law and Science in NU-Muhammadiyah's Lunar Calendar Determination. *Al-Hilal: Journal of Islamic Astronomy*, 6(2), 200–215. *Journal Walisongo*
- Muttaqin, A. (2022). Kalender Islam global dan tantangan penyatuan metode hisab-rukyat di Asia Tenggara. *Journal of Islamic Astronomy*, 8(2), 220–240. <https://doi.org/10.24042/jia.v8i2.8932>
- Nufus, K. (2018). Sidang Isbat Penentuan Awal Bulan Kamariah Perspektif Hukum Islam. *Inklusif*, 3(1), 1–10.
- Pratama, D. A. (2019). Ru'yat Al-Hilāl dengan Teknologi: Telaah Pelaksanaan Ru'yat Al-Hilāl di Baitul Hilal. *Elfalaky: Jurnal Ilmu Falak*, 2(1), 45–60.
- Putri, H. T., & Qodir, I. (2022). Aceh local wisdom in the method of determining the Hijri calendar. *Al-Hilal: Journal of Islamic Astronomy*, 4(1).
- Qulub, S. T., Nadhifah, N. A., Munif, A., & Ridlo, M. A. (2024). Interpretation of Fajr Šādiq and Fajr Kādhīb in Al-Shāfi'ī school's texts: A hadith and astronomical perspectives. *Al-Hilal: Journal of Islamic Astronomy*, 6(2), 157–176.
- Rahmadani, Y., & Amir, R. (2022). Penentuan Awal Bulan Qamariah dan Peran Pemerintah di Indonesia. *Jurnal Al-Ulum*, 5(1), 11–21.
- Rofiuddin, A. A. (2024). The utilization of artificial intelligence in determining the beginning of Islamic calendar in Indonesia. *Al-Marshad: Jurnal Astronomi Islam dan Ilmu-Ilmu Berkaitan*, 6(1).
- Sakirman, S. (2017). Kontroversi Hisab dan Rukyat dalam Menetapkan Awal Bulan Hijriah di Indonesia. *Elfalaky: Jurnal Ilmu Falak*, 1(1), 3–15.
- Setya, A., & Azkarrula, Y. A. (2024). Analysis of time-zone relationship to ephemeris data retrieval in calculating the beginning of Jembrana-Banyuwangi prayer times. *Al-Hilal: Journal of Islamic Astronomy*, 6(2), 121–140.
- Sholehuddin, M., & Qulub, S. T. (2022). Analisis kesesuaian kalender Jawa Islam dengan kalender Hijriyah. *AL-AFAQ: Jurnal Ilmu Falak dan Astronomi*, 4(1), 40–50. <https://doi.org/10.20414/afaq.v4i1.4198>
- Syarifuddin, A. (2022). Penentuan awal bulan Qamariah menurut Al-Qur'an dan Sunnah: Analisis terhadap ormas dan pemerintah. *Jurnal Al-Marsad*, 5(1), 11–21.
- Wahidi, A., Yasin, N., & Kadarisman, A. (2019). The Beginning of Islamic Months Determination in Indonesia and Malaysia: Procedure and Social Condition. *Ulul Albab*, 20(2), 150–170.
- Widiana, W. (2010). Penentuan awal bulan Qomariyah dan permasalahannya di Indonesia. *Al-Ulum: Jurnal Studi Islam*, 10(2), 253–266.
- Zarkasyi, A. (2020). Toleransi dalam penetapan awal bulan Hijriah: Pendekatan sosio-religius. *Studia Islamika*, 27(1), 65–88. <https://doi.org/10.15408/sdi.v27i1.14225>
- Zed, M. (2004). *Metode Penelitian Kepustakaan*. Yayasan Obor Indonesia.