# LHOKSEUMAWE SOCIETY RITUALS AT THE SOLAR ECLIPSE

(Study of the Solar Eclipse March 9<sup>th</sup> 2016 and December 26<sup>th</sup> 2019)

Ismail

Lhokseumawe State Islamic Institute (IAIN).

ismail@iainlhokseumawe.ac.id

# **Abstract**

This paper aims to determine the understanding and series of activities carried out by the Lhokseumawe City community during a solar eclipse that is classified as a religious ritual, with an anthropological approach, then get a picture of religiosity in the ritual carried out by the Lhokseumawe City community when a solar eclipse occurs. Referring to two samples of solar eclipse events in Lhokseumawe City, namely the eclipse of March 9, 2016 and December 26, 2019. the form of ritual performed by the people of Lhokseumawe City during a solar eclipse event by visiting the location prepared by the committee and announced several days before the eclipse occurred which begins with remembrance and blessings in congregation while waiting for another call. Then perform eclipse prayers in congregation, then eclipse sermons like holiday sermons. Some pilgrims believe that a solar eclipse is a sign of disaster and rituals are performed as a form of protection from that form of disaster. Some others believe it is a sign of God's power and rituals are performed as a form of gratitude and religious instruction.

**Keyword**: Falak Science, Solar Eclipse, Ritual, Lhokseumawe City

#### **Abstrak**

Tulisan ini bertujuan untuk mengetahui pemahaman dan serangkaian kegiatan yang dilakukan oleh masyarakat Kota Lhokseumawe saat terjadi gerhana Matahari yang tergolong dalam sebuah ritual keagamaan, dengan pendekatan antropologi, maka mendapatkan gambaran religiusitas dalam ritual yang dilakukan oleh masyarakat Kota Lhokseumawe saat gerhana Matahari terjadi. Mengacu pada dua sampel peristiwa gerhana Matahari di Kota Lhokseumawe, yaitu gerhana 9 Maret 2016 dan 26 Desember 2019. bentuk ritual yang dilakukan oleh masyarakat Kota Lhokseumawe saat peristiwa gerhana Matahari dengan mendatangi lokasi yang telah disiapkan oleh panitia dan telah diumumkan beberapa hari sebelum gerhana terjadi yang diawali dengan zikir dan shalawat secara berjamaah sambil menunggu jamah yang lain. selanjutnya melakukan salat gerhana secara berjamaah,

Al-Hilal: Journal of Islamic Astronomy, Vol. 2, No. 1, Tahun 2020

kemudian khutbah gerhana layaknya khutbah hari raya. Sebahagian jamaah meyakini bahwa gerhana Matahari merupakan sebuah tanda akan terjadinya bencana dan ritual yang dilakukan sebagai bentuk perlidungan dari bentuk bencana tersebut. Sebahagian yang lain meyakininya sebagai tanda kekuasaan Allah dan ritual yang dilakukan sebagai bentuk syukur dan perintah agama.

Kata Kuci: Ilmu Falak, Gerhana Matahari, Ritual, Kota Lhokseumawe.

#### A. Introduction

This paper aims to discuss the form of rituals and the understanding of the people of Lhokseumawe City, Aceh Province regarding the solar eclipse, from this study it is hoped that a description and explanation of the rituals performed by the people of Lhokseumawe City will be found when the solar eclipse occurs and the meaning behind the rituals carried out. So far, studies on solar eclipses have been carried out by many researchers, including Muh. Rasywan Syarif<sup>1</sup> (2017) has explained the understanding and culture of the Bugis people in Bone in responding to the solar eclipse. Rusydi Sulaiman<sup>2</sup> (2017) has examined the relationship between humans and eclipses with a wujud (form) philosophical approach. Sayful Mujab<sup>3</sup> (2016) has also discussed eclipses from the side of myth, science and Islam.

Toni Kus Indratno, et al<sup>4</sup> (2016) has examined the effect of a solar eclipse on the acceleration of Earth's gravity. Ismail<sup>5</sup> (2020) has described how to know the events of the solar and lunar eclipses by reckoning. And Qamaruzzaman<sup>6</sup> (2016) has explained eclipses from the perspective of Islamic law and astronomy. From these studies, it is clear that no one has discussed specifically about the rituals of the people of

<sup>&</sup>lt;sup>1</sup>Muh Rasywan Syarif, "Islam Fenomenalis Gerhana Matahari di Indonesia: Studi budaya â€~Siemme Matanna Essoeâ€<sup>TM</sup> pada perempuan Bugis Bone," *ARICIS PROCEEDINGS* 1, no. 0 (27 January 2017), https://jurnal.ar-raniry.ac.id/index.php/aricis/article/view/971.

<sup>&</sup>lt;sup>2</sup>Rusydi Sulaiman, "Gerhana Dan Keharusan Kosmologis Manusia: Tinjauan Filsafat Wujud," *Edugama: Jurnal Kependidikan Dan Sosial Keagamaan* 3, no. 2 (31 December 2017): 104–26, https://doi.org/10.32923/edugama.v3i2.725.

<sup>&</sup>lt;sup>3</sup>Sayful Mujab, "Gerhana; Antara Mitos, Sains, Dan Islam," YUDISIA: Jurnal Pemikiran Hukum Dan Hukum Islam 5, no. 1 (18 January 2016), https://doi.org/10.21043/yudisia.v5i1.700.

<sup>&</sup>lt;sup>4</sup>Toni Kus Indratno, Ginanjar A. Muhammad, dan Widiyaka Adinugraha, "Pengaruh Gerhana Matahari Terhadap Nilai Percepatan Gravitasi Bumi: Sarana Pembelajaran untuk Mendekatkan Fisika pada Kehidupan Sehari-hari" 3, no. 1 (2016): 10–12.

<sup>&</sup>lt;sup>5</sup>Ismail, "Hisab Urfi Gerhana Matahari Dan Gerhana Bulan," *Al-Marshad: Jurnal Astronomi Islam dan Ilmu-Ilmu Berkaitan* 6, no. 1 (29 May 2020): 45-59–59, https://doi.org/10.30596/jam.v6i1.4411.

<sup>&</sup>lt;sup>6</sup>Qomaruz Zaman, "Gerhana Dalam Perspektif Hukum Islam Dan Astronomi," *EMPIRISMA: JURNAL PEMIKIRAN DAN KEBUDAYAAN ISLAM* 25, no. 2 (2 November 2016), https://doi.org/10.30762/empirisma.v25i2.299.

Lhokseumawe City during a solar eclipse. This study is important in astronomy, apart from providing information about the understanding and forms of rituals of the people of Lhokseumawe City during a solar eclipse, it is also useful in inheriting a culture of religious education for future generations. The solar eclipse ritual can be a measure of people's intelligence, awareness of the surrounding environment and the ability to interpret the role of celestial bodies in the cosmology of the human mind.

Solar eclipses have attracted human attention since ancient times. Humans view eclipses as a mystery that must be found out for their cause and meaning. Human interpretation of the eclipse is very dependent on religious norms, beliefs, and communities at the time he was. Often, eclipse interpretations originate from the mythical event of a solar eclipse and it must be admitted that myths about eclipses around the world are often associated as a sign that there will be a threat of danger or a warning of a disaster, he stressed. However, in the course of astronomical history there is also an interpretation of an eclipse event that has a positive connotation, such as an eclipse event before the birth of the Prophet Muhammad. the liberation of the city of Constantinople, and the discovery of the corona rays during a total solar eclipse.

In ancient Greek myth, for example, an eclipse was interpreted as a warning of a disaster. The sun is considered a symbol for something that is stable, bright and eternal, so that when dark or light disappears, it is considered a disturbance of stability which is a symbol of goodness.<sup>8</sup> In other cultures and civilizations also have different interpretations, the eclipse event is interpreted as an attack, in which the Sun is being attacked by certain entities to eat it. In Vietnam for example, when an eclipse occurs it is assumed that the Sun is being attacked by a giant frog. In Korean society the culprit is a giant ferocious dog. Whereas in the traditional Serrano society in California, the eclipse of the sun is an event where the spirits of the previous people gather to try to eat the sun.<sup>9</sup>

In Indonesia, the myth of an eclipse also thrives and is unique, depending on the ethnicity and society. For example, the Bugis tribe in Sulawesi, where the solar

<sup>&</sup>lt;sup>7</sup>Mujab, "Gerhana; Antara Mitos, Sains, Dan Islam." page 85-101

<sup>&</sup>lt;sup>8</sup>LAPAN, *The Eclipse Gerhana Matahari Total (Catatan Peristiwa 9 Maret 2016)* (Jakarta: LAPAN, 2016). page. 7-8

<sup>&</sup>lt;sup>9</sup>LAPAN. page 7-10.

eclipse is considered an event where the Sun is eaten by a giant and the solar eclipse event has good and bad effects for humans on Earth as understood in astrology. In the Bugis tradition, women have more roles in welcoming the solar eclipse than men. Although there have been many changes due to the Islamization of rituals during a solar eclipse, it can be illustrated that some of the rituals carried out by the Bugis Sulawesi community are taboo and some are blessed. The prohibition of having sex with husband and wife, which is considered to result in hereditary defects and prohibits young children from being directly exposed to the sun's eclipse, all comes from the understanding that there are bad effects from the solar eclipse. From the other side, the Bugis people also think that there is an element of blessing during a solar eclipse such as taking coconuts to be stored and used as oil which is believed to have many benefits, storing water that is used when observing an eclipse which is considered to have a blessing and visiting gardens and livestock to pray during the eclipse Sun. <sup>10</sup> All of these rituals are carried out due to the influence of mythology that develops in society which will be eroded along with the development of science and technology.

In Indonesia, the influence of mythology on the dangers of a solar eclipse was still evident until 1983, when the total solar eclipse occurred on June 11, 1983. This total eclipse path passed through parts of Java Island, part of Sulawesi, and part of Irian Jaya. The 1983 total solar eclipse has become a dark historical record that should be known so that it does not repeat itself in Indonesia, where at that time there was a lot of information circulating through the media that was foolish and made the Indonesian people feel meaningless fear. Broadly speaking, the issue that was very dominant and killed the steps and the desire to witness a total solar eclipse at that time was blindness. There was a circular prohibiting the public from watching the solar eclipse, all people at that time were urged to enter the house and close the windows tightly so that they do not enter the sun. There are even zoos where the eyes of the animals are deliberately covered to prevent blindness. All these heartbreaking events must have occurred due to limited public understanding of astronomical events such as a solar eclipse.

<sup>&</sup>lt;sup>10</sup>Syarif, "Islam Fenomenalis Gerhana Matahari di Indonesia." Page 520-534.

<sup>&</sup>lt;sup>11</sup>Kompas, Sihir Gerhana (artikel pilihan kompas) (Jakarta: Kompas, 2016). Page 145-148

#### B. Method

Departing from these past events, this research tries to see and record the understanding and rituals of the Acehnese people when the solar eclipse occurs. The samples taken were the total solar eclipse on March 9, 2019 and the ring solar eclipse on December 26, 2019. The research location chosen was Lhokseumawe City, Aceh Province, where this city is also one of the points where there is an established preparation for welcoming the two eclipses even though it is not included in the path of totality and ring at that time. By using an anthropological approach, it is expected to find an understanding and meaning of the rituals of the people of Lhokseumawe City during the solar eclipse. The data collection method in this research is by observation and interviews. Observations are needed to see the community phenomenon and the rituals of the people of Lhokseumawe City when the solar eclipse occurs, while interviews are needed to deepen the understanding of the Lhokseumawe City community about the solar eclipse and the meaning of each ritual performed.

#### C. Discuss and Result

# C.1. Solar Eclipses in the View of Falak Science.

An eclipse is an astronomical event that cannot be separated from the problem of the phases of the Moon, because an eclipse occurs only when the Moon is in conjunction or when it is in opposition to the Sun. Solar eclipses only occur when the Moon is dead or the Moon is new, whereas lunar eclipses only occur when the Moon is full. Therefore, the essence of knowing an eclipse is knowing the journey of the Moon and Earth in orbiting the Sun. The orbits of the Earth and the Moon around the Sun are always "fixed" with their respective laws of orbit, this makes it easier for ancient Muslim astronomers to model the shape of the Earth's and Moon's orbits into algorithms. This algorithm then makes it easier for mankind to calculate the circulation of the Moon and Earth in their respective orbits to find out when an eclipse occurs.

The regularity of the orbits of the Earth and the Moon around the center of their respective orbits and the shape of the orbits that are always fixed, indicate that the

<sup>&</sup>lt;sup>12</sup>Kementerian Agama RI, *Ilmu Falak Praktik* (Jakarta: Sub Direktorat Pembina Syariah dan Hisab Rukyat, 2013). Page 109-118.

<sup>&</sup>lt;sup>13</sup>Alimuddin Alimuddin, "Gerhana Matahari Di Abad 21," *Al Daulah : Jurnal Hukum Pidana Dan Ketatanegaraan* 5, no. 2 (15 December 2016): 427–43, https://doi.org/10.24252/ad.v5i2.4859.

eclipse of the Sun and Moon has existed since the Sun, Earth, and Moon existed. Narrating the eclipse of the Sun and the Moon as a rare event or just recently eclipses have often occurred including ignorance and unscientific. In fact, in one year there must be at least four eclipses, namely two solar eclipses and two lunar eclipses and a maximum or at most 7 eclipses like the one that happened in 1982 (4 solar eclipses and 3 lunar eclipses), it's just that the location of the eclipse is visible on the Earth's surface which is not obliged to be the same every year. It is possible that this year there will be no eclipse in Indonesia, but one can be seen in other regions. In one year there can also be 5 solar eclipses, such as what happened in 1805, 1935 and will occur in 2206 and five lunar eclipses, such as what happened in 1676, 1694, 1749, and will occur in 2132. So, the eclipse of the Sun and the eclipse of the Moon are not rare events, so rare events should be narrated for the transit events of Venus and Mercury, which are astronomically less frequent than the eclipses of the Sun or Moon.

A solar eclipse is an event where the lunar disc covers (kusuf) the disc of the sun, both the whole (total eclipse), part (partial eclipse), and middle (ring eclipse), this occurs when the position of the Sun, Moon, and Earth is on one ecliptic line. When the Moon is parallel between the Earth and the Sun, the Moon's shadow will be hit by the Earth's surface, the area that is hit by the Moon's shadow will see a solar eclipse. <sup>15</sup> The elliptical shape of the moon's orbit with a plane that does not coincide with the plane of the Earth's orbit causes the distance of the moon to Earth is not fixed and every conjunction of the position of the Sun, Moon and Earth is not always aligned, this causes a solar eclipse not every month. <sup>16</sup>

<sup>&</sup>lt;sup>14</sup>Rinto Anugraha, Mekanika Benda Langit (Yogyakarta: MIPA UGM, 2012). Page 128-130.

<sup>&</sup>lt;sup>15</sup>Kemenag RI, Almanak Hisab Rukyat (Jakarta: Proyek Pembinaan Badan Peradilan Agama Islam, 2010). Page 176-179

<sup>&</sup>lt;sup>16</sup>Abdul Karim dan M. Rifa Jamaluddin Nasir, *Mengenal Ilmu Falak: Teori dan Implementasi* (Yogyakarta: Qudsi Media, 2012). Page 35-50.

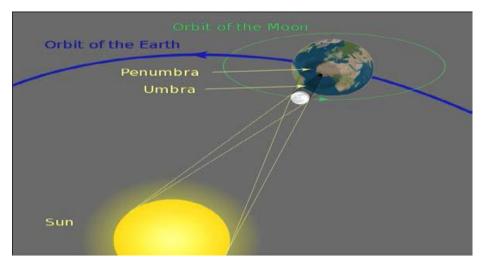


Figure 1, Illustration of a solar eclipse<sup>17</sup>

There are four known types of solar eclipses:

- 1. Total solar eclipse. It is said to be a total solar eclipse, when the peak of the eclipse, the entire solar disc is covered by a lunar disc so that the surface of the Earth through which this totality path passes will experience darkness like night in a few minutes.
- 2. Partial solar eclipse. It is called a solar eclipse, when the peak of the solar eclipse occurs, only part of the solar disc is covered by the lunar disc.
- 3. Ring solar eclipse. It is called a ring solar eclipse because when the peak of the solar eclipse occurs, only the central disc of the sun is covered by the lunar disc so that the edge of the circle of the solar disc is still visible circular light that looks like a ring.<sup>18</sup>
- 4. A hybrid solar eclipse. A hybrid eclipse is an event of a solar eclipse where at one location a ring solar eclipse is seen and in another place a total solar eclipse is seen.<sup>19</sup> This type of solar eclipse is included in the rare category compared to the previous 3 types of eclipses.

# C.2. Total solar eclipse March 9th, 2016 and ring solar eclipse December 26th, 2019.

The total solar eclipse on March 9, 2016 became an important note in the history of the revival of astronomy in Indonesia, where the early history of the

<sup>&</sup>lt;sup>17</sup>Syarif, "Islam Fenomenalis Gerhana Matahari di Indonesia." Page 523

<sup>&</sup>lt;sup>18</sup>Muhammad Jayusman, "Fenomena Gerhana Dalam Wacana Hukum Islam dan Astronomi," *AL-'ADALAH* 10, no. 2 (2011): 237–50.

<sup>&</sup>lt;sup>19</sup>Rinto Anugraha, Mekanika Benda Langit. Page 177

frightening myth of a solar eclipse began to fade and people began to prioritize scientific understanding in narrating the solar eclipse. Thanks to the cooperation and hard work in disseminating the observation of the solar eclipse by all parties, the Indonesian people enjoy this event which is a sign of the power of Allah. This is influenced by the role of the media which always reports on every eclipse, be it a solar or lunar eclipse. The role of the media, especially social media, is currently very important in educating the nation's children and breaking the bonds of myths that have taken root in Indonesian society. Currently, the essence of the eclipse has changed from a frightening natural event to a natural, religiously educative event.<sup>20</sup>

In the records of the National Space Aviation Institute (LAPAN) there are at least 8 locations that are used as observation locations with international standards, namely the Palembang Ampera Bridge, Tanjung Kelayang Beach Belitung, Palangkaraya Central Kalimantan, Parigi Moutong Central Sulawesi, Palu Central Sulawesi, Poso Central Sulawesi, Ternate Maluku Utara, and Maba Halmahera. However, in other places that are not traversed by the path of totality, observations of solar eclipses are also open to the public. For the Aceh region, there were only 2 locations that had been prepared and announced in advance for the observation of the solar eclipse at that time, namely Lhokseumawe City which was driven by the Falakiyah Team, IAIN Lhokseumawe Campus and Banda Aceh City which was led by the Falakiyah Team of the Regional Office of Aceh Province. 22

The ring solar eclipse of 26 December 2019 is also special for the people of Indonesia, where the ring path can be witnessed in mainland Indonesia and even more especially for the people of Aceh because this ring solar eclipse coincides with the anniversary of the all-powerful disaster, the tsunami that occurred last December 26, 2004. These two eclipse events deserve to be used as samples in seeing the understanding and form of the Lhokseumawe City community rituals in welcoming the

<sup>&</sup>lt;sup>20</sup>Novi Fitia Maliha, "Pengaruh Media Sosial Pada Gerhana Bulan Super Blue Blood Moon," *The Journal of Society and Media* 2, no. 1 (30 Juli 2018): 1–12, https://doi.org/10.26740/jsm.v2n1.p1-12.

<sup>&</sup>lt;sup>21</sup>LAPAN, The Eclipse Gerhana Matahari Total (incident record of March 9, 2016).
<sup>22</sup>Kompas Cyber Media, "Sebagian Warga Banda Aceh Baru Pertama Kali Ini Saksikan Gerhana Matahari," KOMPAS.com, accessed June 12, 2020, https://regional.kompas.com/read/2016/03/09/15543001/Sebagian.Warga.Banda.Aceh.Baru.Pertama.Kali.Ini. Saksikan.Gerhana.Matahari.

solar eclipse. The total solar eclipse on March 9 2016 was the first experience for the people of Lhokseumawe City to witness and pray the eclipse in congregation in the open. Meanwhile, the ring solar eclipse on December 26, 2019 was the second time for the people of Lhokseumawe City to welcome the solar eclipse. This was as expressed by a resident of Lhokseumawe Rahmawati<sup>23</sup> (47 years) who was interviewed at the location of the observation of the cinci solar eclipse on December 26, 2019.

In the digital era where all information is so easy and fast to find, it is only natural for all parties to make every astronomical event such as a solar eclipse a religious educational event so that all generations of the nation can enjoy and understand natural events as they should. The phenomenon of the solar eclipse has become a phenomenal event for the millennial generation, they are no longer consumed by myths, this can be seen from the many generations of students who dominate every eclipse event held in Lhokseumawe City. However, if this natural event is not well organized, these millennials will welcome the eclipse in their own way, don't be surprised if more people will observe it just for selfies, no longer contemplating the greatness of Allah SWT. To be thankful, unfortunately, there will be no more eclipse prayers in every eclipse.

# C.3. Solar Eclipse Ritual in Lhokseumawe City

Lhokseumawe City is one of the municipalities resulting from the division of North Aceh Regency in Aceh Province which consists of 4 districts, namely Blang Mangat District, Muara Dua District, Muara Satu District, and Banda Sakti District. Lhokseumawe is a city that is developed in terms of education where in this city there are 3 large state campuses, namely the IAIN Lhokseumawe campus, the Malikussaleh State University campus, and Lhokseumawe State Polytechnic and added with several other private campuses.<sup>24</sup> In this case, of course, greatly affects the paradigm of thinking of the people of Lhokseumawe City in responding to any phenomena that may be interpreted elsewhere in certain mythology, such as the solar eclipse. The paradigm that is built in a community will form a culture and ritual that is different from people in other places.

<sup>&</sup>lt;sup>23</sup>Rahmawati, Interview about the solar eclipse, HP, December 2019, IAIN Lhokseumawe Campus Mosque.

<sup>24</sup>Kota

Lhokseumawe, "Sejarah Lhokseumawe." December 2019, Kota https://www.lhokseumawekota.go.id/profile.php?id=1.

From a cultural perspective, the role of religion cannot be separated from its adherents, because religion takes on a function as a system of knowledge and a reference in action. In this case, religion is interpreted, lived, and expressed in patterns of action in accordance with the environment and the problems at hand. Therefore, religion is alive and adaptive to the environment of its adherents. In social life, the adaptive function of religion for its adherents can be realized by the presence of supernatural powers, value systems, and norm systems that can be used as a support in responding to any situation at hand. <sup>25</sup>From this general description, this study tries to find out how the ritual forms and their meanings are carried out by the people of Lhokseumawe during the solar eclipse.

For the people of Lhokseumawe, the solar eclipse is also a big event in the universe. The event of welcoming the solar eclipse in congregation by carrying out eclipse prayers accompanied by eclipse sermons and direct observation in the field for the first time occurred in the people of Lhokseumawe City when commemorating the total solar eclipse on March 9 2016, at which time the people of Lhokseumawe City gathered at the KP3 field in Banda Sakti City Lhokseumawe. The author saw directly at the location of the event, around a thousand people from Lhokseumawe City packed the eclipse observation event which was led by the STAIN Malikussaleh Lhokseumawe campus. The eclipse can be witnessed in Lhokseumawe City at the same time the sun rises from the eastern horizon, so that people begin to arrive starting after dawn prayers.

A large field has been provided with tents and seats, so that the people who first came immediately took positions such as saf prayer to carry out the holiday prayers. Some of the congregation were seen carrying mineral water and box cakes which were distributed to the visitors. Salbiah<sup>27</sup> (47 years old), who was the author of the interview, brought along cookies and mineral water as much as she could as alms which was ordered during the solar eclipse and she learned about this recommendation while attending recitation at a mosque in Lhokseumawe City. According to Salbiah, the

<sup>&</sup>lt;sup>25</sup>Mudjahirin Thohir, *Orang Islam Jawa Persisir* (Semarang: Fasindo Press, 2006). Page 1-3

<sup>&</sup>lt;sup>26</sup>Abdul Rahman, Solar Eclipse Interview December 26 2019, December 2019, IAIN Lhokseumawe Campus Mosque.

<sup>&</sup>lt;sup>27</sup>Salbiah, Interview about the solar eclipse, 9 March 2016, KP3 Field Lhokseumawe City.

purpose of the suggestion to give alms is to avoid reinforcements, because one of the functions of charity is to refuse reinforcements.

The results of the author's observations on the welcoming activity of the solar eclipse, all the community while waiting for the congregation to arrive at 08.30 WIB as the time that has been announced as the time for the eclipse prayer, the author's observations, the congregation who was already present continued to read istighfar, remembrance and guided excursions by one of the congregation through the microphone. After arriving at 8:30 a.m., all the participants stood to arrange saf to carry out the solar eclipse prayer in congregation like the holiday prayer where the male congregation saf in front of the female congregation's saf. The eclipse prayers are carried out in a sir manner, not chanted like the holiday prayers, the prayers are led by Fauzan and the prayers are performed two rak'ahs with two cycles per rak'ah. Then read the sermon like the holiday prayers read by Abu Asnawi (Chairman of the Lhokseumawe City Ulama Consultative Council) with the contents of the sermon inviting the public to repent from all dausa and increase the deeds of goodness, this solar eclipse is a sign of Allah Almighty over all of His creatures, when Allah gives eclipse no other force can prevent it from happening, therein lies the power of God that we must believe in. After finishing the sermon, all the congregation shook hands with each other while dispersing to return to their respective places.

The Solar Eclipse of December 26, 2019 is the second eclipse that can be witnessed in Lhokseumawe City after the first on March 9, 2016. This ring solar eclipse has become a serious concern for some people of Lhokseumawe City, considering that this event coincided with the big calamity that had befallen Aceh, namely the tsunami of 26 December 2004 which caused millions of people to die at that time. However, the coincidence of the tsunami with the solar eclipse of 26 December 2019 did not dampen the enthusiasm of the people of Lhokseumawe City to attend eclipse observations and eclipse prayers which were centered at the IAIN Lhokseumawe Campus Mosque. Hundreds of people and students were seen to witness the eclipse. Some brought small children to see the solar eclipse with a telescope provided by the committee.

Children who are millennial age have no fear of eclipses and according to them the solar eclipse occurs because the moon covers the sun "the black color is the moon

covering the sun" said the teenagers who saw the solar eclipse.<sup>28</sup> However, behind the joy of the people of Lhokseumawe City in enjoying the event of the sign of Allah's greatness, there was also a video lecture of a Kyai who tried to narrate it as an event of jammed celestial travel. This can be interpreted as a narrative that tries to facilitate the understanding of the general public in interpreting the solar eclipse as a warning to return to a good path.<sup>29</sup>

From the results of interviews and observations of the solar eclipse that occurred in Lhokseumawe City on March 9, 2016 and December 26, 2019, it can be concluded that the rituals carried out by the people of Lhokseumawe City when the solar eclipse occurs are giving alms, dzikir, shalawat, istighfar, prayers for the solar eclipse, and the solar eclipse sermon. Participants who attended the eclipse observation program and solar eclipse prayer in Lhokseumawe City were quite enthusiastic, where those who attended were from 7 years old to the elderly, this indicated that the people of Lhokseumawe City were not haunted by fear of seeing the solar eclipse. All the actions of the people of Lhokseumawe City, when related to the social theory above, are clearly seen as the results of the encouragement and religious knowledge possessed by the community.

# C.5. The Meaning of an Eclipse in the Views of the Lhokseumawe People

According to Clifford Greertz, as quoted by Efa Ida Amaliyah, religion functions as a symbol system to reinforce a strong mood and motivation for its adherents to formulate symbolic conceptions into the realm of reality. From this symbolic system humans can communicate, find a system of meaning from one meaning to another in each of their cultures. <sup>30</sup>According to Durkheim, as described by George Ritzer, society is able to create religion by defining certain phenomena as sacred and others as worldly. A sacred thing must be fulfilled by two elements. First, there must be a development of a set of religious beliefs, these beliefs are representations that reveal the essence of sacred

<sup>&</sup>lt;sup>28</sup>Muazir, Interview with the solar eclipse 26 December 2019, December 2019, IAIN Lhokseumawe Campus Mosque.

<sup>&</sup>lt;sup>29</sup>Abiya Jeunib, "ABIYA JEUNIB || Gerhana Leubeh Bahaya Nibak Sunami - YouTube," 2019, https://www.youtube.com/watch?v=0flUKSLZ2L4.

<sup>&</sup>lt;sup>30</sup>Efa Ida Amaliyah, "Nilai-Nilai Kearifan Lokal Dalam Tradisi Perang Obor Di Tegalsambi-Jepara Sebagai Karakteristik Islam Nusantara," *Jurnal Lektur Keagamaan* 16, no. 2 (31 December 2018): 395–416, https://doi.org/10.31291/jlk.v16i2.552.

things and the relationships that are maintained by society. Second, we need a set of religious rituals in the form of rules of behavior that determine how a person should carry himself in the presence of these sacred objects. <sup>31</sup>Starting from this statement, we can also see the meaning behind the solar eclipse and the rituals carried out by the people of Lhokseumawe City. Understanding the meaning of a ritual is important considering this meaning it can be seen that sacred things are considered the spirit of religion by the community, as well as the motivation and perceptions in society about a ritual that is performed.

From a series of rituals carried out by the people of Lhokseumawe City during a solar eclipse, they can be grouped into 3 groups, namely alms, zikir, and eclipse prayers. Almsgiving is interpreted as a ritual that can keep away from harm or can reject disaster (disaster) which is marked by the occurrence of a solar eclipse. This is a result of the formulation of the meaning of the eclipse as a sign of disaster, this meaning is understood by people aged 35 years. on. Meanwhile, people at the millennial age interpret a celestial phenomenon that has nothing to do with a sign of a disaster. However, all people in Lhokseumawe City believe that the eclipse is not dangerous to see and participate in observing events. This is strengthened by the presence of all people in the community to the location of the eclipse observation program, from small children to elderly people.

Zikir and eclipse prayers are interpreted as rituals by which to avoid disasters and munkar which are marked by the event of a solar eclipse. Some people interpret it as worship that is ordered because there is an eclipse like the Friday prayer and holiday prayers, this was conveyed by Abdul Rahman<sup>32</sup> (33 years), one of the eclipse prayer congregations. From the other side, we also found the meaning of an eclipse as an abnormal natural phenomenon in the sky that has fatal consequences or threatens the safety of the inhabitants of the Earth. Rituals are performed and ordered as an effort by the inhabitants of the earth to help the Earth, Sun, and Moon run normally as before. This meaning is understood from the content of a lecture by a boarding school leader in

<sup>&</sup>lt;sup>31</sup>George Ritzer, Teori Sosiologi: dari Sosiologi Klasik Sampai Perkembangan Terakhir Postmodern, Saut Pasaribu, Dkk, 8 (Yogyakarta: Pustaka Pelajar, 2012). Page 167-169.

Aceh after the solar eclipse on December 26, 2019.<sup>33</sup> However, this narrative is more about an effort to frighten people into leaving wrongdoing and increasing devotion to Allah SWT. These are 3 meanings that can be understood from the rituals of the people of Lhokseumawe City during a solar eclipse.

Referring to the anthropological theory above, all the meanings of the rituals carried out by the Lhokseumawe City Community are expressions of meaning patterns from knowledge of the eclipse which are found from religious knowledge. The ritual is performed as a symbol in communicating with the creators of natural events who are expected to fulfill the desired celebration, namely avoiding bad events marked by a solar eclipse. With this ritual, the perpetrators feel satisfied and motivated again in their activities because all the things that are feared have been submitted to the Almighty in the universe and will feel regretful and cautious if they do not have time to do one of these ritual forms and this is proof that the ritual during an eclipse The sun happened to be in the sacred category for the people of Lhokseumawe City.

#### D. Conclution

From the above explanation, it can be concluded that the rituals carried out by the people of Lhokseumawe City when the solar eclipse occurs are alms, dhikr, istiqhfar, selawat, eclipse prayers, and eclipse sermons. Eclipse is interpreted as a celestial event created by Allah SWT. as a sign of impending disaster, crime and reinforcements. There are those who interpret a solar eclipse as an ordinary celestial event and there are also interpreting it as an odd event in the sky. From this meaning, it can be understood that the ritual carried out is an effort to protect against danger or bad things that will happen and the ritual functions as a helper for the Sun, Earth and Moon so that they can run again normally. All of these meanings are the result of interpretations of what the people of Lhokseumawe City have understood in religion and of course the meaning of a ritual will shift over time. The meaning of ritual that should be understood is as gratitude to Allah for the display of events of His power, which by these events can increase faith and devotion to Allah SWT.

<sup>&</sup>lt;sup>33</sup>Abiya Jeunib, "ABIYA JEUNIB || Gerhana Leubeh Bahaya Nibak Sunami - YouTube."

# E. Bibliography

Abdul Karim, dan M. Rifa Jamaluddin Nasir. Mengenal Ilmu Falak: Teori dan Implementasi. Yogyakarta: Qudsi Media, 2012.

- Abdul Rahman. Wawancara Gerhana Matahari 26 Desember 2019, Desember 2019. Masjid Kampus IAIN Lhokseumawe.
- Abiya Jeunib. "ABIYA JEUNIB || Gerhana Leubeh Bahaya Nibak Sunami YouTube," 2019. https://www.youtube.com/watch?v=0flUKSLZ2L4.
- Alimuddin, Alimuddin. "Gerhana Matahari Di Abad 21." Al Daulah: Jurnal Hukum Pidana Dan Ketatanegaraan 5, no. 2 (15 Desember 2016): 427-43. https://doi.org/10.24252/ad.v5i2.4859.
- Amaliyah, Efa Ida. "Nilai-Nilai Kearifan Lokal Dalam Tradisi Perang Obor Di Tegalsambi-Jepara Sebagai Karakteristik Islam Nusantara." *Jurnal Lektur Keagamaan* 16, no. 2 (31 Desember 2018): 395–416. https://doi.org/10.31291/jlk.v16i2.552.
- George Ritzer. Teori Sosiologi: dari Sosiologi Klasik Sampai Perkembangan Terakhir Postmodern. Saut Pasaribu, Dkk. 8. Yogyakarta: Pustaka Pelajar, 2012.
- Ismail. "Hisab Urfi Gerhana Matahari Dan Gerhana Bulan." Al-Marshad: Jurnal Astronomi Islam dan Ilmu-Ilmu Berkaitan 6, no. 1 (29 Mei 2020): 45-59-59. https://doi.org/10.30596/jam.v6i1.4411.
- Kemenag RI. Almanak Hisab Rukyat. Jakarta: Proyek Pembinaan Badan Peradilan Agama Islam, 2010.
- Kementerian Agama RI. *Ilmu Falak Praktik*. Jakarta: Sub Direktorat Pembina Syariah dan Hisab Rukyat, 2013.
- Kompas. Sihir Gerhana (artikel pilihan kompas). Jakarta: Kompas, 2016.
- Kota Lhokseumawe. "Sejarah Kota Lhokseumawe," Desember 2019. https://www.lhokseumawekota.go.id/profile.php?id=1.
- LAPAN. The Eclipse Gerhana Matahari Total (Catatan Peristiwa 9 Maret 2016). Jakarta: LAPAN, 2016.
- Maliha, Novi Fitia. "Pengaruh Media Sosial Pada Gerhana Bulan Super Blue Blood Moon." *The Journal of Society and Media* 2, no. 1 (30 Juli 2018): 1–12. https://doi.org/10.26740/jsm.v2n1.p1-12.
- Media, Kompas Cyber. "Sebagian Warga Banda Aceh Baru Pertama Kali Ini Saksikan Gerhana Matahari." KOMPAS.com. Diakses 12 Juni 2020. https://regional.kompas.com/read/2016/03/09/15543001/Sebagian.Warga.Banda. Aceh.Baru.Pertama.Kali.Ini.Saksikan.Gerhana.Matahari.

- Muazir. Wawancara gerhana matahari 26 Desember 2019, Desember 2019. Masjid Kampus IAIN Lhokseumawe.
- Mudjahirin Thohir. Orang Islam Jawa Persisir. Semarang: Fasindo Press, 2006.
- Muhammad Jayusman. "Fenomena Gerhana Dalam Wacana Hukum Islam dan Astronomi." *AL'ADALAH* 10, no. 2 (2011): 237–50.
- Mujab, Sayful. "Gerhana; Antara Mitos, Sains, Dan Islam." *YUDISIA: Jurnal Pemikiran Hukum Dan Hukum Islam* 5, no. 1 (18 Januari 2016). https://doi.org/10.21043/yudisia.v5i1.700.
- Rahmawati. Wawancara tentang gerhana matahari. HP, Desember 2019. Masjid Kampus IAIN Lhokseumawe.
- Rinto Anugraha. Mekanika Benda Langit. Yogyakarta: MIPA UGM, 2012.
- Salbiah. Wawancara tentang gerhana matahari, 9 Maret 2016. Lapangan KP3 Kota Lhokseumawe.
- Sulaiman, Rusydi. "Gerhana Dan Keharusan Kosmologis Manusia: Tinjauan Filsafat Wujud." Edugama: Jurnal Kependidikan Dan Sosial Keagamaan 3, no. 2 (31 Desember 2017): 104–26. https://doi.org/10.32923/edugama.v3i2.725.
- Syarif, Muh Rasywan. "Islam Fenomenalis Gerhana Matahari di Indonesia: Studi budaya â€~Siemme Matanna Essoe' pada perempuan Bugis Bone." *ARICIS PROCEEDINGS* 1, no. 0 (27 Januari 2017). https://jurnal.arraniry.ac.id/index.php/aricis/article/view/971.
- Toni Kus Indratno, Ginanjar A. Muhammad, dan Widiyaka Adinugraha. "Pengaruh Gerhana Matahari Terhadap Nilai Percepatan Gravitasi Bumi: Sarana Pembelajaran untuk Mendekatkan Fisika pada Kehidupan Sehari-hari" 3, no. 1 (2016): 10–12.
- Zaman, Qomaruz. "Gerhana Dalam Perspektif Hukum Islam Dan Astronomi." *EMPIRISMA: JURNAL PEMIKIRAN DAN KEBUDAYAAN ISLAM* 25, no. 2 (2 November 2016). https://doi.org/10.30762/empirisma.v25i2.299.