

SPATIAL DISTRIBUTION OF THE BUDDHISM FAITH-BASED CULTURAL TOURISM ATTRACTIONS IN NAKHON SI THAMMARAT, THAILAND

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Abstract: Cultural tourism in the form of faith-based tourism is becoming very popular among both Thai and foreign tourists. This can be seen from the religious activities that occur almost all year round. This type of tourism often creates encouragement for tourists who come to experience it. Nakhon Si Thammarat is an ancient city with cultural and artistic significance. With its potential in tourism, Nakhon Si Thammarat has become a city that tourists have continuously traveled to experience up until now. The objective of this research is to find the spatial distribution of cultural tourism sites of the type of faith-based tourism in Buddhism in Nakhon Si Thammarat Province, Thailand, and to create a map of the cultural tourism route of faith-based tourism in Buddhism using geographic information technology. The methodology was obtained from field surveys by recording the coordinates of faith-based cultural tourism attractions with Global Positioning System (GPS) and using geographic information systems for mapping. It also adopts the principle of analyzing the density of attractions with Kernel Density. The results of the study found that the Kernel Density showed a high level of density in the eastern coastal plain region of the study area. It can be divided into 3 zones: the northern zone, the central zone, and the urban zone. The northern zone showed that the density of cultural tourist attractions is between 0.002-0.006 km². The central zone showed that the density of cultural tourist attractions was between 0.006-0.014 km². And the urban zone showed that the density of cultural tourist attractions was more than 0.014 km². In addition, there are as many as 16 Buddhist faith-based cultural tourist attractions, including temples, ancient sites, antiques, government offices, and naturally occurring sites. The tourism planning map can be organized within 4 days and 3 nights for tourism in 3 zones in Nakhon Si Thammarat Province. For planning each day's tourism, it can be seen that on the first day, it is recommended to finish touring the northern zone first, because it takes time to travel to various places because they are far apart. On the second day, it will be touring the central part of the study area, mostly ancient cities, important historical sites. On the third day, it will be touring the Nakhon Si Thammarat city area, where each tourist attraction is close to each other. This research is useful for tourism agencies, local communities, local tour guides, and both Thai and foreign tourists.

Keywords: cultural tourism attraction, spatial distribution, faith-based cultural tourism, Nakhon Si Thammarat, Buddhism faith-based cultural

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INTRODUCTION

Currently, faith-based cultural tourism is becoming popular in the tourism industry in Thailand (Maneenetr & Tran, 2014; Anuwichanont et al., 2020; Ruengmak & Dejpawuttikul, 2024). Such tourism forms are often based on religion and personal beliefs that are linked to the motivation to travel (Sharpley & Sundaram, 2005; Wang et al., 2016, Durán-Sánchez et al., 2018). This results in the physical and mental development of travelers, as well as religious activities related to beliefs and faith in the sacred objects in that place. In some cases, tourists who visit sacred places are motivated by religious reasons, astrology, fortune, and the worship of amulets to enhance stability in life and fulfillment (Das et al., 2024; Zhang & He, 2024). In addition, tourists also gain knowledge about history, local arts and culture, traditional festivals, and the cultural heritage and wisdom of the community. Therefore, faith-based tourism is an activity and relationship that arises from the occasional leisure trip of tourists, motivated primarily by religion and belief.

In Thailand, there are many different forms of tourism. In 2023, the Tourism Authority of Thailand conducted a survey of foreign tourists traveling to Thailand. It was found that tourists from 5 countries are popular for faith-based tourism: China, Singapore, Malaysia, Hong Kong, India, and countries with Chinese descent (Fakfare et al., 2022; Adebayo et al., 2023; Khemthong et al., 2024). This shows that faith-based tourism is gaining interest in the global market, and Thailand itself is a tourist destination with a distinctive culture and unique identity. According to the Ministry of Commerce, in 2022, pilgrimage tourism was able to generate income in the system as high as 10,800 million baht. It was also found that faith-based tourism has a tendency to grow exponentially, expected to create a three-fold increase in global economic value within the next 10 years, from a value of more than 13.7 billion US dollars in 2022, and is expected to increase to US\$40.9 billion by 2033 (Ministry of Tourism and Sports, 2023). In 2023, faith-based tourism was pushed to be more tangible by the Tourism Authority of Thailand,

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which has created a project “Enhance the power of merit, support the power of mind” presented under the concept of “Amazing Mutiverse” from June 30 – July 2, 2023. 12 major routes have been designated (Sawasdee Thailand, 2023). The North has 3 routes, the Central 3 routes, 2 routes in the Northeast, 2 routes in the East, and 2 routes in the South. Especially these 2 southern routes, there are routes in Phuket and Trang provinces only. Mutiverse comes from the words Mutelu and Universe. Mutelu is a Thai word meaning a person who believes, has faith, and is interested in supernatural things (Eamvijit, 2024). Therefore, this research selected Nakhon Si Thammarat Province as one of the options. Because Nakhon Si Thammarat is an ancient city with a history of more than 1,800 years, it is a place rich in ancient sites, beliefs, religions, arts, cultures and traditions.

Nakhon Si Thammarat is an ancient city with cultural and artistic significance. It was the center of politics and administration during the 12th-14th centuries as it was an important port city in Southeast Asia (Munro-Hay, 2000; Noonsuk, 2013; Patnukao et al., 2024). During that period, there was a strong ruling king, the Sri Dharma Sokaraja dynasty. His important royal duties were to establish the Sri Lankan Buddhism in this land, which became the center of culture, religion, politics, administration, and economy (Guy, 2014; Ling, 2023). As a result, cultural heritage has been passed down to the present in the form of lifestyle, traditions, and culture. There is also archaeological evidence in various forms, such as antiques and historical sites, which show that Nakhon Si Thammarat has been known and has had contact with other nations since ancient times. Nakhon Si Thammarat is currently promoted as one of the 12 must-see cities, which appears in the 2nd Tourism Development Plan 2017-2021 by the Ministry of Tourism and Sports (Taengkliang et al., 2022; Arporn et al., 2024). This is because Nakhon Si Thammarat is a province with potential for tourism in all aspects, whether it is natural resources, traditions, culture, food, and interesting local lifestyles. With these factors, the number of tourists has continuously increased. From January to December 2022, there were a total of 242,870 Thai and foreign tourists traveling to Nakhon Si Thammarat. With its potential in tourism, Nakhon Si Thammarat has become a city that tourists have continuously traveled to experience up until now.

From the review of research on faith-based cultural tourism, it was found that such tourism generates millions of US dollars from foreign tourists. It not only creates local jobs, but also promotes industrial growth in other sectors (Soh et al., 2024). As can be seen from the research of Woodward (2004), it was mentioned that faith-based tourism in many religions is a catalyst for economic development, creating jobs and supporting local businesses. Therefore, proper planning and management of the use of tourist attractions should be carried out, for example, several cathedrals in the United Kingdom, Kandy in Sri Lanka, and Makkah in Saudi Arabia. Huang et al. (2019) explored the spiritual values and factors influencing faith tourism in China, and showed that tourists seek a balance in life by finding their identity through rituals, traditions, temples or places of worship. Sarker (2021) showed that Bangladesh has opportunities for growth from faith-based tourism due to its rich religious, cultural and archaeological heritage. Iliev (2020) said that the evolution of religious tourism has been gradual in development and change over the years. Such developments are reflected in the tourism market share, with the development of new identities of faith-based tourist attractions, which provide more choices for tourists.

In summary, it can be seen that faith-based cultural tourism is based on beliefs, and currently there has been development of such tourist attractions with various techniques to attract tourists to visit. This research aims to find the spatial distribution of faith-based cultural tourism in Buddhism in Nakhon Si Thammarat Province, Thailand, and create a map of cultural tourism routes in the category of faith-based tourism in Buddhism by applying geographic information technology. For the creation of such a map, the location, planning, and spatial development were determined using geographic information systems to enhance local communities to have tools for planning and managing areas. The Buddhism faith-based cultural tourist attractions map in Nakhon Si Thammarat Province will be able to help tourists travel to tourist attractions conveniently, and can also be a navigation tool for tour guides in the community and tourists to use. The map will be able to enhance the potential of the local area and support the tourism development that will occur in the future.

MATERIALS AND METHODS

1. Study area

Nakhon Si Thammarat is a province in the southern region of Thailand. It has an area of 9,942.502 km². It is the second largest province in the South after Surat Thani. Nakhon Si Thammarat is approximately 780 kilometers from Bangkok. Nakhon Si Thammarat is located between latitudes 7°45' N to 9°30' N and longitudes 98°00' E to 100°30' E (Figure 1). The topography of Nakhon Si Thammarat can be divided into 3 regions: the central mountain range region, the eastern coastal plain region, and the western plain region. The central mountain range is the Nakhon Si Thammarat Mountain range. This mountain range is laid out in a north-south direction. The geological characteristics of the mountain range are mostly Triassic Granite. Some areas have Permian Limestone mountains in the northern part of Nakhon Si Thammarat Province in Khanom District. The highest point of the Nakhon Si Thammarat Mountain range is Khao Luang, with an elevation of 1,835 meters (mean sea level) in Phipun District. This mountain range is important because it is an important watershed mountain range. It is the source of the headwaters of canals that flow into the Gulf of Thailand and the Andaman Sea. In particular, the Tapi River, an important river in the South, originates from this mountain range. In addition, at the foothill of the mountain range, there are colluvial and residual deposits that run north-south. The area is characterized by alluvial fan morphology that was carried from the Nakhon Si Thammarat Mountain range. The Eastern Coastal Plain is a plain area in the east that extends from north to south. Geological features are various types of alluvial plains, including Fluvial deposits, Lagoonal deposits, Tidal flat deposits, Old beach ridged deposits, and Beach deposits. This region has the most settlements, as the flat land is suitable for agriculture. It is also the location of the old city of Nakhon Si Thammarat, Tambralinga Kingdom or Tanmaling (in Chinese). At present, the Eastern Coastal Plain is an area for agriculture, fisheries, tourism, and is an important commercial area of Nakhon Si Thammarat Province. The Western Plains region is an area of plains alternating with undulating plains. This region is covered with Alluvial deposits and Terrace deposits. The sedimentary mountains in the southern part of this region are from the Upper Jurassic to Lower Cretaceous periods. This area is mostly agricultural land for field crops such as rubber and oil palm.

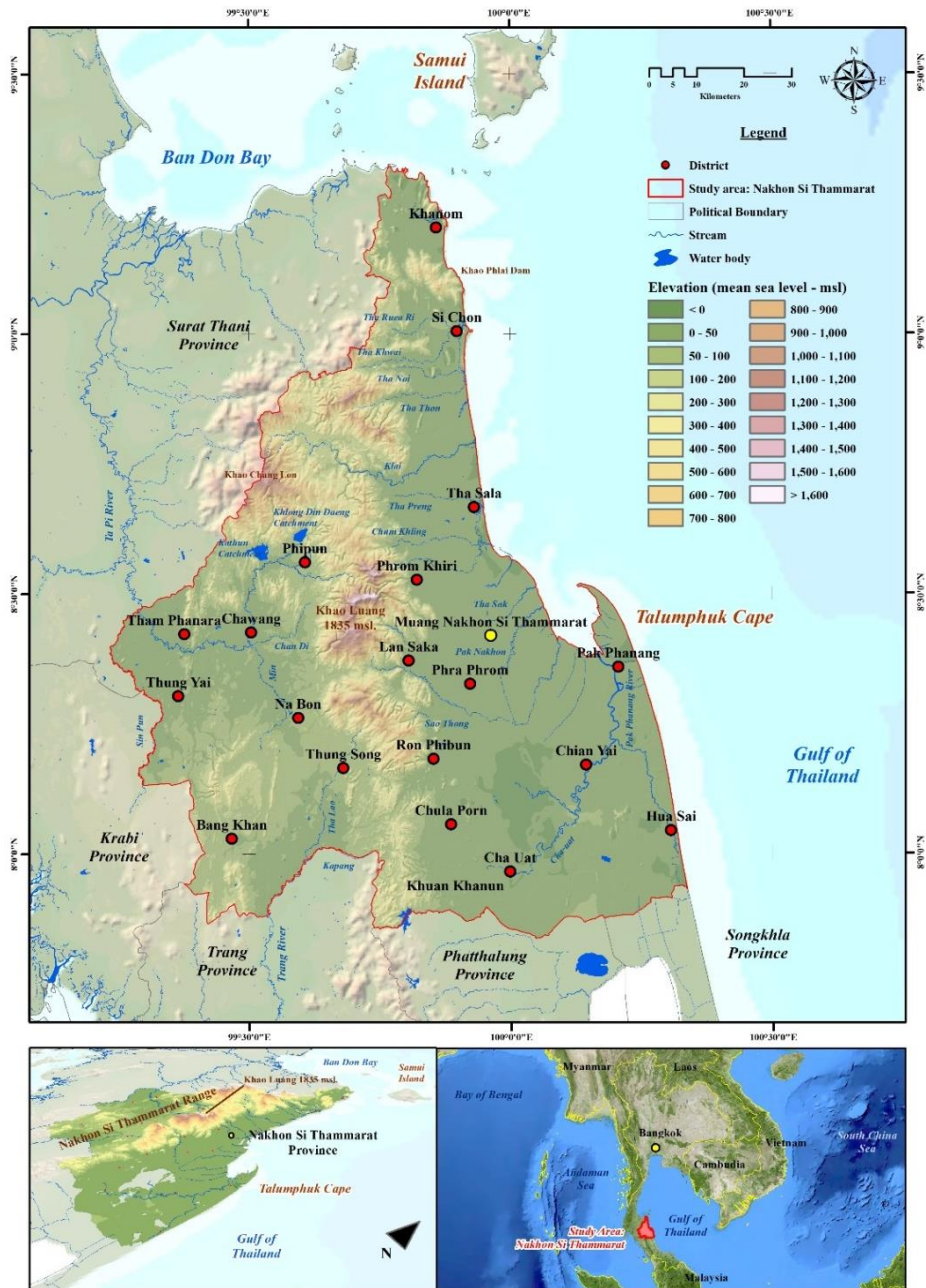


Figure 1. Location of Nakhon Si Thammarat Province, Thailand (Source: collected and processed by authors)

2. Data Preparation and Methodology

This research collected data on cultural tourist attractions of the Buddhism faith-based tourism in Nakhon Si Thammarat Province. The data was compiled into a digital database in GIS format, with reference data from Topographic Map scale 1:50000 from the Royal Thai Survey Department and data from field surveys by measuring and recording the coordinates of cultural tourist attractions with the Global Positioning System (GPS) (Mou et al., 2022; Schmücker & Reif, 2022). Data from field surveys included temples, ancient sites, antiques, government offices, and naturally occurring places.

Cartographic method or the purpose of design (choice of the coordinate system and map projection), generalization (reduction of the content according to the selected scale), and visualization (depiction of point, linear and area objects) (Waiyasuri & Tananonchai, 2022; Seidualin et al., 2024). Spatial and statistical analysis related to cartography, ArcMap 10.2 software will be used to collect and analyze numerical data, including data editing, validation and visualization in digital map format. Data analysis in terms of the distribution of cultural tourist attractions in Nakhon Si Thammarat can be analyzed using the Kernel Density (Equation 1). This principle can be analyzed from GIS, which is part of the mathematical functions in ArcMap 10.2 software. The results indicate the density of tourist attractions and use these results to plan cultural tourism. The Kernel Density (Silverman, 1986) is calculated from the following equation (Nistor & Nicula, 2021):

$$\int_h (x) = \frac{1}{n} \sum_{i=1}^n \binom{n}{k} K_h(x - x_1)$$

where f is density f ; K is the kernel — a non-negative function; $h > 0$ is a smoothing parameter called the bandwidth; x_1, x_2, \dots, x_n is univariate independent and identically distributed sample.

RESULTS AND DISCUSSION

From the field survey from measuring and recording the geographic coordinates of the Buddhism faith-based cultural tourist attractions with GPS between October 16-19, 2024, the location and details of the tourist attractions were recorded, as shown in Table 1 and Figure 2. After that, the location data was imported into the Geographic Information System to map and analyze the distribution pattern of the data using the Kernel Density principle, as shown in Figure 3.

Table 1. Coordinates of the Buddhism faith-based cultural tourist attractions in Nakhon Si Thammarat Province

No.	Location	District	Northing	Easting
1	Footsteps of Luang Pu Thuat on Fresh Sea Water	Khanom	9° 18' 54"	99° 47' 30"
2	Coral Pagoda	Khanom	9° 16' 51"	99° 48' 56"
3	Khanom City Pillar Shrine	Khanom	9° 10' 57"	99° 51' 6"
4	Vessavana (Suchon Temple)	Si Chon	9° 1' 56"	99° 54' 17"
5	Ai Kai (Chedi Temple)	Si Chon	8° 54' 40"	99° 50' 44"
6	Ta Pran Boon (Yang Yai Temple)	Tha Sala	8° 43' 1"	99° 54' 41"
7	Khao Khun Phanom Temple	Phrom Khiri	8° 32' 37"	99° 50' 39"
8	Nakhon Si Thammarat City Pillar Shrine	Muang Nakhon Si Thammarat	8° 25' 49"	99° 57' 44"
9	King Sri Thammastokrat Monument	Muang Nakhon Si Thammarat	8° 25' 38"	99° 57' 45"
10	Phra Phutthasahing Hall	Muang Nakhon Si Thammarat	8° 25' 8"	99° 57' 49"
11	Phra Borommathat Chedi	Muang Nakhon Si Thammarat	8° 24' 39"	99° 57' 58"
12	Phra Wihan Sung	Muang Nakhon Si Thammarat	8° 25' 49"	99° 57' 42"
13	Phaisan Sathit Temple	Muang Nakhon Si Thammarat	8° 35' 38"	99° 57' 21"
14	Tumpang Archeological Site	Tha Sala	8° 38' 46"	99° 52' 24"
15	Wat Khun Khlong Historic Site	Tha Sala	8° 36' 30"	99° 53' 57"
16	Wat Moklan Archaeological Site	Tha Sala	8° 34' 50"	99° 55' 50"

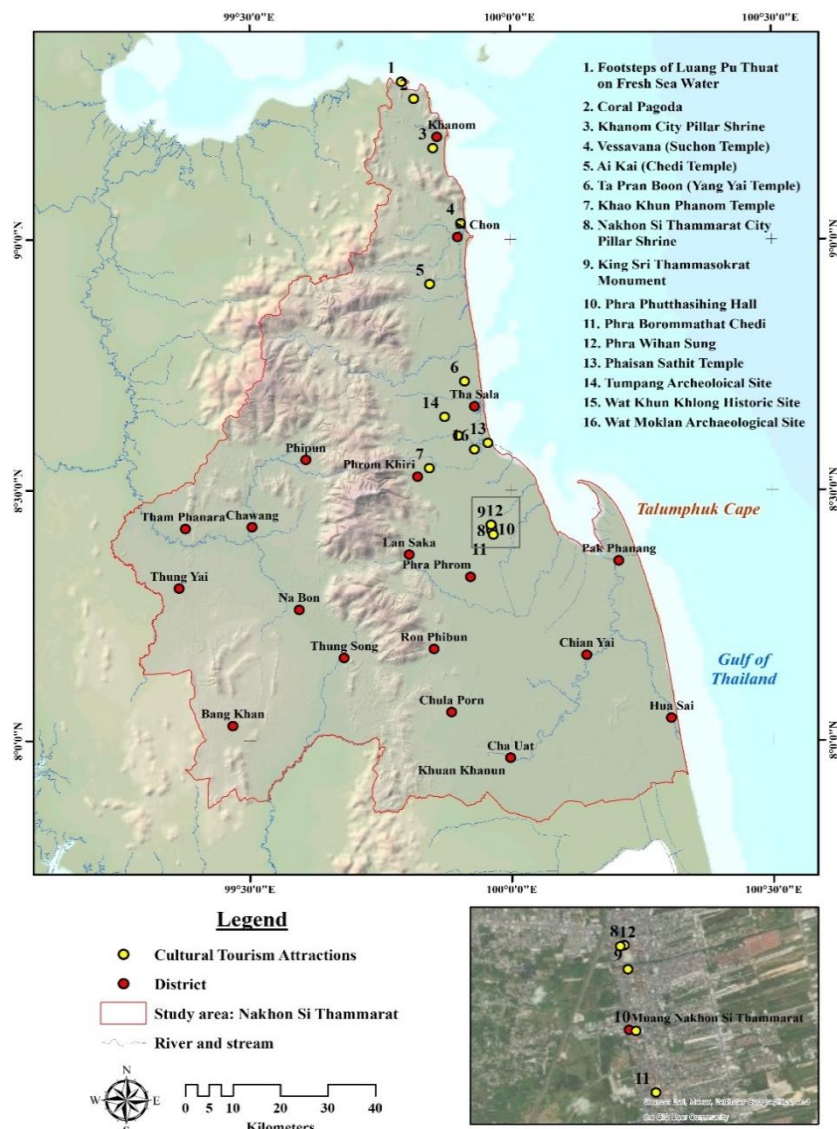


Figure 2. Spatial distribution of the Buddhism faith-based cultural tourist attractions in Nakhon Si Thammarat Province (Source: collected and processed by authors)

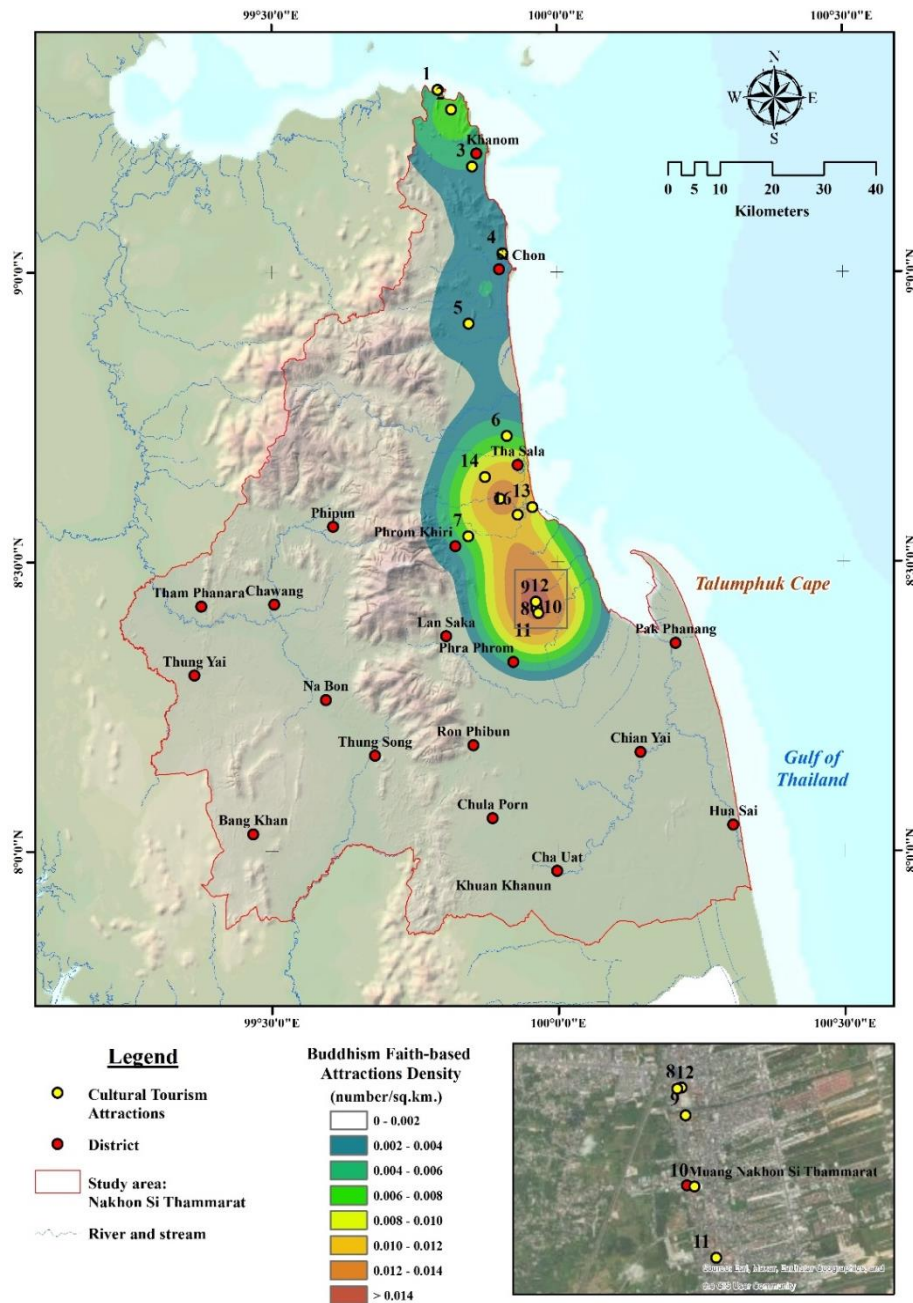


Figure 3. Buddhism Faith-based Cultural Attractions Density Map in Nakhon Si Thammarat Province (Source: collected and processed by authors)

The results of the study on the location of Buddhist faith-based cultural tourist attractions in Nakhon Si Thammarat Province, found that the distribution of tourist attractions is mostly in the coastal plain region on the eastern side of the study area. It can be divided into 3 zones: the northern zone, the central zone, and the urban zone.

Northern Zone found a total of 5 tourist attractions, 3 of which are in Khanom District: Footsteps of Luang Pu Thuat on Fresh Sea Water, Coral Pagoda, and Khanom City Pillar Shrine. And, 2 of which are in Sichon District: Vessavana (Suchon Temple) and Ai Kai (Chedi Temple). The study results show that the density of cultural tourist attractions is between 0.002-0.006 km², which is quite low because each tourist attraction is more than 20-30 kilometers away.

Footsteps of Luang Pu Thuat on Fresh Sea Water is located on Nui Island, a small island in the Khanom Sea. It is special because there is a freshwater well that looks like a human footprint on this island. But when the tide is high, the sea will flood this well. Therefore, during March-April, which is the low tide, it is recommended to go. This island has a Buddhist belief related to the legend of Luang Pu Thuat stepping on fresh sea water (Maud, 2016). Therefore, on the island, there are things to worship Luang Pu Thuat with the belief that if you come to pay homage and chant his mantra, you will receive blessings for safe travel and escape from all dangers. In terms of trade, you will be successful in trade negotiations. In addition, nearby there are also programs for boat trips to see pink dolphins and Pancake Rock (or Permian Limestone rock) (Figure 4a). Coral Pagoda, an ancient site in Khanom Province, is believed to be over 1,000 years old. It is located on top of Khao That in Jantatutaram temple. The pagoda is in the shape of an inverted bowl with a diameter of about 5-6 meters. It was built using coral stones to create the entire pagoda. Around the pagoda, there are

Buddha images carved from red sandstone, showing that this place used to be a center of Buddhist civilization. It is possible to see the view of Ao Thong Nian from the top of Khao That (Figure 4b).

Vessavana in Suchon Temple is located in Sichon District. It is an ancient temple that enshrines the image of Vessavana in the posture of Dhanabodi Setthi Champhon, which is more than 1,200 years old. The deity is characterized by being plump, with a big belly, a big face, and a strong body. He is serious but also has compassion. His upper body is bare, decorated with necklaces, diamonds, and bracelets. The whole body is full of precious gems, indicating wealth and countless properties. Local people like to ask for blessings for good luck, money, increasing wealth, and eliminating bad luck. The worship consists of incense sticks, a red cloth to write the name; surname; and date of birth before tying it to the statue of Vessavana, along with a tray of fake roses for worship, and gold leaf to cover the statue of Thao Wessuwan (Figure 4c). Ai Kai of Chedi Temple is located in Sichon District. Ai Kai is a legend related to Luang Pu Thuat. The current location of Chedi Temple, Luang Pu Thuat, a famous monk in the southern region, went on a pilgrimage and set up a tent in that area. As for Ai Kai, it is believed that he is the spirit of a child about 9-10 years old, a disciple who followed Luang Pu Thuat. When Luang Pu Thuat arrived at the said place, he found a lot of valuable assets and important religious places.

So he let Ai Kai reside and guard the treasures. This spirit guarded and protected the country's assets and has been at this temple ever since. From the belief that people believe that "Always get the blessing", there are many people who come to pay homage to Ai Kai or Ta Kai to ask for blessings and fortune, and popularly come to pay their vows with images of fighting cocks, military uniforms, slingshots, various toys, etc. (Ruengmak & Dejpawuttikul, 2024) (Figure 4d).



Figure 4. Tourist attractions in the northern part of Nakhon Si Thammarat (a) Footsteps of Luang Pu Thuat on Fresh Sea Water, (b) Coral Pagoda, (c) Vessavana in Suchon Temple, and (d) Ai Kai of Chedi Temple (Source: collected and processed by authors)

Central Zone found a total of 6 tourist attractions, 4 of which were in Tha Sala District: Ta Pran Boon (Yang Yai Temple), Tumpang Archeological Site, Wat Khun Khlong Historic Site, and Wat Moklan Archaeological Site. In Muang Nakhon Si Thammarat District, 1 site was found: Phaisan Sathit Temple, and in Phrom Khiri District, 1 site was found: Khao Khun Phanom Temple. The results of the study showed that the density of cultural tourist attractions was between 0.006-0.014 km², which was at a high to very high level because each tourist attraction was close to each other, no more

than 10 kilometers apart. Ta Pran Boon (Pran Boon the Hunter) of Yang Yai Temple is located in Thasala District. “Pran Boon” is considered the best hunter. According to the legend, Pran Boon is a person with great magical knowledge. He can travel in the Himavanta forest. Once, Pran Boon used his knowledge to help the Naga King named Thao Chompoo Chit to escape death. Thao Chompoo Chit then took Phran Boon to the Naga realm for 7 days and gave him a magic glass with a promise that if Pran Boon wanted anything in the future, he would come to him. He would give anything he asked for in return to save Thao Chompoo Chit’s life. People therefore respect Pran Boon’s abilities as being very powerful and outstanding in terms of fortune and wealth. Therefore, in terms of belief, people respect Pran Boon. It is believed that when worshipped, one will receive benefits such as good business, charm to people around, be kind and popular, and anyone who sees him will love and care for him. It also helps protect from dangers and various black magic spells (Figure 5a).

Wat Moklan Archaeological Site is located in Thasala District. The ancient city of Moklan has excavated temples, ancient sites, ancient objects, and ancient ponds in the Brahman religion, which shows the prosperity of the Shaivite Brahman religion in this area before. Later, with the influence of Buddhism that spread and flourished in this area, the Moklan community converted to Buddhism as well. It is assumed that in the beginning, it was probably Theravada Buddhism or Hinayana Buddhism, which flourished in this area after around 1250-1350 AD during the Sukhothai Kingdom (Figure 5b).

Khao Khun Phanom Temple is a small limestone hill located in Phrom Khiri District. This is an ancient temple that has been around since the Ayutthaya period. It is important in terms of history and archaeology. There is a cave with a brick wall and sema stone, similar to the city wall. The front wall has stucco decorations decorated with Chinese porcelain. This temple is believed to be the residence of King Taksin, who came to stay and observe the precepts in this cave. In front of the temple is an ancient holy well, believed to be a sacred well, offered to King Taksin for his personal use. Interesting things inside include the monument of King Taksin the Great. The temple has a brick wall and mortar and sema stones, similar to the city wall. The front wall has stucco decorations decorated with Chinese porcelain. Inside the cave, which is on the top and requires walking up about 250 steps, there are about 30 bronze Buddha statues and a bronze footprint of the Buddha. Regarding the history of this temple, it is assumed that it was the residence of King Taksin the Great (King Taksin fled to become a monk until his death). However, some say that it was a resting place for Princess Kesini, daughter of Prince Narasuriyawong (King Taksin’s granddaughter), ruler of Nakhon Si Thammarat during 1769-1776 (Figure 5c).



Figure 5. Tourist attractions in the central part of Nakhon Si Thammarat (a) Ta Pran Boon (Pran boon the hunter) of Yang Yai Temple (b) Wat Moklan Archaeological Site, and (c) Khao Khun Phanom Temple (Source: collected and processed by authors)

In the urban area, there were 5 tourist attractions in total, all in Muang Nakhon Si Thammarat District: Nakhon Si Thammarat City Pillar Shrine, King Sri Thammasokrat Monument, Phra Phutthasihing Hall, Phra Borommthath Chedi, and Phra Wihan Sung. The results of the study showed that the density of cultural tourist attractions was more than 0.014 km², which is at a very high level, because each tourist attraction is very close to each other, no more than 5 km apart. The City Pillar Shrine is Nakhon Si Thammarat City Pillar Shrine located in the center of Nakhon Si Thammarat city. Its design art is similar to Srivijaya art. There are four small buildings, which are considered as the four directions, called Chatulokthep Shrine, consisting of Phra Suea Mueang Shrine, Phra Song Mueang Shrine, Phra Phrom Mueang Shrine, and Phra Bandan Mueang Shrine. The city pillar is made of golden teak wood, which came from Phu Yot Luang in Nakhon Si Thammarat. The top of the pillar is in the shape of Chatukham Ramatthep (four faces) or the guardian angel of the city. At the top is a flame on the top of the head, which is the city pillar's victory point. The carving style is imaginative from the belief in Mahayana Buddhism, which has had an influence on the art in the South and Nakhon Si Thammarat since ancient times (Figure 6a).

King Sri Thammasokrat Monument is located in Sri Thammasokrat Public Park in the center of Nakhon Si Thammarat. King Sri Thammasokrat was the king who ruled the ancient city of Nakhon Si Thammarat during the time when it was still called “Tamburlinga”. He was the first king of the Sri Thammasokrat dynasty or Padmawong dynasty of Siam that used to have power to rule the Sri Thammarat Kingdom, which ruled 12 major cities in the Malay Peninsula, called the twelve zodiac cities. When Sukhothai was powerful, it was a Thai kingdom in the north and central regions. The Sri Thammarat Kingdom also had power in the south. The Sri Thammarat Kingdom was a good friend of the Sukhothai Kingdom. There was an exchange of cultures, especially Buddhism. Monks were sent to the Sukhothai Kingdom to spread Buddhism. There

is clear evidence that the Sri Dharmaraja Kingdom agreed to join the Ayutthaya Kingdom during the Suphannabhumi Dynasty with the capital city of Ayutthaya Sri Ramthep Nakhon (Patnukao et al., 2024) (Figure 6b).

Phra Phutthasihing Hall is located in the Nakhon Si Thammarat Provincial Hall. Phra Phuttha Sihing is considered an important Buddha image and a symbol of Nakhon Si Thammarat. It is believed that the Buddha image was created by the King of Sri Lanka in 157 AD from Sri Lanka. Phra Phuttha Sihing is a Buddha image in the Mara-Vijaya posture, sitting in the diamond meditation posture, cast in bronze, with a lap width of 32 cm and a height of 42 cm, covered with a gold-plated metal umbrella with a perforated pattern. It is believed that worshiping Phra Phuttha Sihing is suitable for praying for blessings regarding legal cases, or for those who have obstacles in their work (Figure 6c).

Phra Borommathat Chedi is located in Phra Mahathat Woramahawihan Temple, a temple that is a symbol of Nakhon Si Thammarat. It is not clear when it was built, but it has been widely known for at least 1,800 years. The Phra Borommathat Chedi enshrines the relics of the Lord Buddha. The architecture of the Phra Borommathat Chedi is in the shape of an inverted bell, with a highlight at the top of the chedi, which is covered with pure gold. In addition, there is a tradition of bringing a long piece of cloth up to cover the Phra Borommathat Chedi on important religious days. The people of Nakhon have joined hands to donate money according to their faith. The money they received was used to buy cloth, sew it together into a long row of thousands of yards, and then organize a procession to bring the cloth up to cover the Phra Borommathat Chedi. The cloth that is used to cover the Phra Borommathat Chedi is called “Phra Bod”. The colors are usually white, yellow, and red. It is believed that whoever brings the cloth up to the chedi will have their wish come true (Figure 6d).



Figure 6. Tourist attractions in the urban area of Nakhon Si Thammarat (a) Nakhon Si Thammarat City Pillar Shrine, (b) King Sri Thammasokrat Monument, (c) Phra Phutthasihing Hall, and (d) Phra Borommathat Chedi (Source: collected and processed by authors)

Distribution of Buddhism faith-based cultural tourism attractions in Nakhon Si Thammarat, this research has created a 4-day, 3-night tourism planning map in Nakhon Si Thammarat Province, to provide information to tourism agencies, local communities, local tour guides, and both Thai and foreign tourists, especially foreign tourists from China, Hong Kong, Taiwan, Singapore, etc., who are starting to be more interested in Buddhist faith tourism. For planning each day's tourism, it can be seen that on the first day, it is recommended to finish touring the northern zone first, because it takes time to travel to various places because they are far apart. On the second day, it will be touring the central part of the study area, mostly ancient cities, important historical sites. On the third day, it will be touring the Nakhon Si Thammarat city area, where each tourist attraction is close to each other. The tourism in each area has been made into a map, as shown in Figure 7.

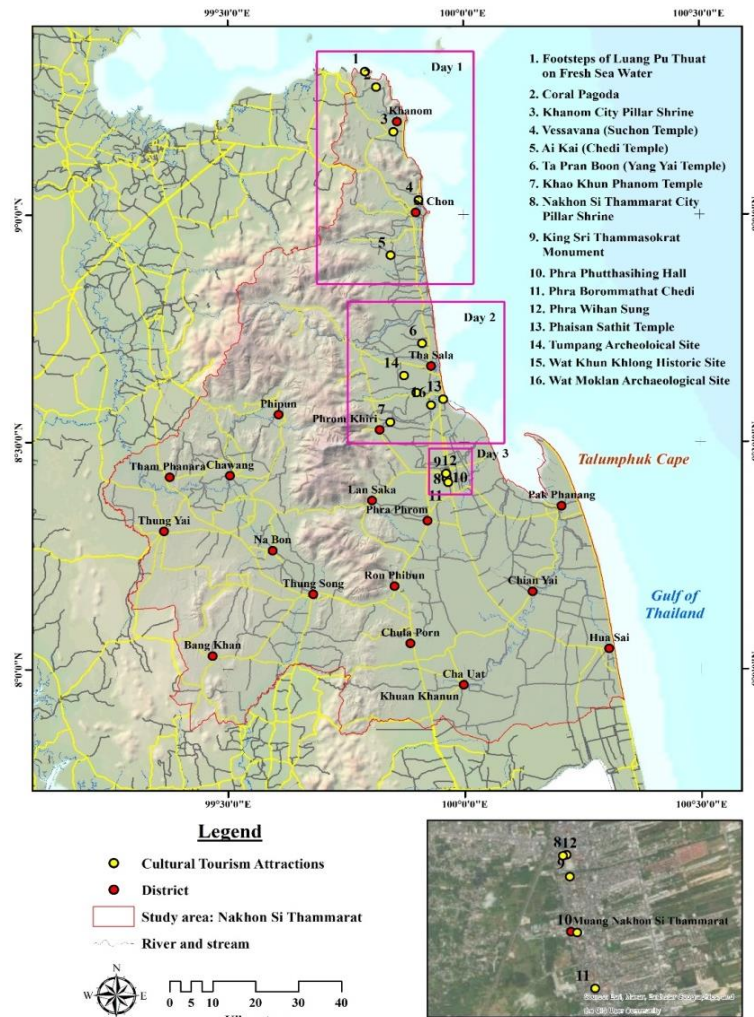


Figure 7. Map of the tourist route for all 3 zones for a 4-day, 3-night trip in Nakhon Si Thammarat Province (Source: collected and processed by authors)

CONCLUSION

Faith-based cultural tourism is an ancient form of tourism that has become increasingly popular again. In this research, data were collected and analyzed spatially using GIS by simulating the density of tourist attractions with the Kernel Density. It can be seen that the density of such places is mostly in the coastal plains to the east of the study area. The Kernel Density analysis shows the efficiency of the research results very well. The reason for the distribution of faith-based tourist attractions in the area is because the area used to be an ancient city and an ancient community since before the Christian era. For this reason, Nakhon Si Thammarat has a great potential for faith-based tourism. Both Thai and foreign tourists, especially Asians, travel to find the meaning of life according to their beliefs. The limitation of this research is the spatial analysis of faith-based cultural tourism attractions only. Other types of tourist attractions were not included due to budget constraints for research that affected the survey in collecting data of these tourist attractions. This research has created a 4-day, 3-night tourism planning map in Nakhon Si Thammarat Province to enhance the community to use it in planning and spatial development. In addition, local people have tools for planning cultural tourist attractions to enhance their potential in terms of living, loving and cherishing their hometown, and increasing income for local people, leading to the development of tourism that will occur in the future.

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REFERENCES

- Adebayo, T. S., Akadiri, S. S., Asuzu, O. C., Pennap, N. H., & Sadiq-Bamgbopa, Y. (2023). Impact of tourist arrivals on environmental quality: a way towards environmental sustainability targets. *Current Issues in Tourism*, 26(6), 958-976. <https://doi.org/10.1080/13683500.2022.2045914>
- Anuwichanont, J., Serirat, S., Mechinda, P., & Archarungroj, P. (2020). Examining Tourists' Attitude Towards the Religious Tourism in Thailand. *Review of Integrative Business and Economics Research*, 9(3), 55-66.
- Arporn, V., Khompot, S., & Marddent, A. (2024). Centralised Development and Inactive Business Sector: The Case of Nakhon Si Thammarat City Municipality. *Journal of Current Southeast Asian Affairs*, 43(2), 220-239. <https://doi.org/10.1177/18681034241266274>
- Das, A., Kondasani, R. K. R., & Deb, R. (2024). Religious tourism: a bibliometric and network analysis. *Tourism Review*, 79(3), 622-634. <https://doi.org/10.1108/TR-08-2022-0387>
- Durán-Sánchez, A., Álvarez-García, J., del Río-Rama, M., & Oliveira, C. (2018). Religious tourism and pilgrimage: Bibliometric overview. *Religions*, 9(9), 249. <https://doi.org/10.3390/rel9090249>
- Eamvijit, S. (2024). From Ong to idols: hyper-real religions, spiritual practices, and popular culture among Thai youth. *Inter-Asia Cultural Studies*, 25(5), 784-798. <https://doi.org/10.1080/14649373.2024.2389714>
- Fakfare, P., Lee, J. S., & Han, H. (2022). Thailand tourism: A systematic review. *Journal of Travel & Tourism Marketing*, 39(2), 188-214. <https://doi.org/10.1080/10548408.2022.2061674>
- Guy, J. (2014). *Principal Kingdoms of Early Southeast Asia. Lost Kingdoms: Hindu-Buddhist Sculpture of Early Southeast Asia*, The Metropolitan Museum of Art, New York, USA.
- Huang, K., Pearce, P., Guo, Q., & Shen, S. (2020). Visitors' spiritual values and relevant influencing factors in religious tourism destinations. *International Journal of Tourism Research*, 22(3), 314-324. <https://doi.org/10.1002/jtr.2337>
- Iliev, D. (2020). The evolution of religious tourism: Concept, segmentation and development of new identities. *Journal of Hospitality and Tourism Management*, 45, 131-140. <https://doi.org/10.1016/j.jhtm.2020.07.012>
- Khemthong, S., Luenam, P., Frank, T. D., & Ingsrisawang, L. (2024). Identifying the determinants of tourism receipts of Thailand and relevant determinant-determinant interactions. *Plos one*, 19(8), e0308153. <https://doi.org/10.1371/journal.pone.0308153>
- Ling, T. (2023). *Buddhism, Imperialism and War: Burma and Thailand in modern history*. Routledge, London, UK.
- Maneenetr, T., & Tran, T. H. (2014). SWOT analysis of religious tourism in Nong Khai province, Thailand proposed guidelines to incorporate temple stay program. *Mediterranean Journal of Social Sciences*, 5(23), 696. <https://doi.org/10.5901/mjss.2014.v5n23p696>
- Maud, J. (2016). 9 New Routes for the Venerable Ancestor: A Growth Triangle, the Border, and an Emergent Sacred Landscape in the Thai-Malay Borderland. In *Religion, Place and Modernity* (pp. 245-269). Brill.
- Ministry of Tourism and Sport (2023). International Tourist Arrivals to Thailand. <https://www.mots.go.th/news/category/706#>
- Ministry of Tourism and Sports (2024). *Tourism Statistic*. <https://www.mots.go.th/news/category/411>
- Mou, N., Liu, Z., Zheng, Y., Mkkonen, T., Yang, T., & Zhang L. (2022). Cycling in Tibet: An analysis of tourists' spatiotemporal behavior and infrastructure. *Tourism Management*, 88, 104418. <https://doi.org/10.1016/j.tourman.2021.104418>
- Munro-Hay, S. C. (2000). A plan of Nakhon Sri Thammarat (Southern Thailand) of c. 1825 in the collection of the Royal Asiatic Society. *Journal of the Royal Asiatic Society*, 10(1), 61-70. <https://doi.org/10.1017/S1356186300011949>
- Nistor, M., & Nicula, A. (2021). Application of GIS Technology for Tourism Flow Modelling in the United Kingdom. *Geographia Technica*, 16(1), 1-12. https://doi.org/10.21163/GT_2021.161.01
- Noonsuk, W. (2013). Kingdom on the beach ridges: a landscape archaeology of Tambralinga in peninsular Siam. *Asian Perspectives*, 52(2), 268-299. <https://doi.org/10.1353/asi.2013.0016>
- Patnukao, A., Cheewinsriwat, P., Bamrungkhul, S., & Vannamete, E. (2024). Tracing human settlements: analyzing the spatio-temporal distribution of Buddhist temples in Nakhon Si Thammarat, Thailand. *GeoJournal*, 89(2), 60. <https://doi.org/10.1007/s10708-024-11056-z>
- Ruengmak, A., & Dejjawuttikul, T. (2024). The emergence of the 'Ai Khai' worship and the social revival in post-COVID-19 southern Thailand: the interplay between local folklore and sacred tourism. *Cogent Arts & Humanities*, 11(1), 2313845. <https://doi.org/10.1080/23311983.2024.2313845>
- Sarker, J. U. (2021). The opportunity for religious tourism: In the perspective of Bangladesh. *Journal of Business*, 6(4), 01-10. <https://doi.org/10.18533/job.v6i4.209>
- Sawasdee Thailand (2023). *Revitalizing Tourism with "Amazing Mutiverse"*. https://www.thailand.go.th/issue-focus-detail/001_02_394
- Schmücker, D., & Reif, J. (2022). Measuring tourism with big data? Empirical insights from comparing passive GPS data and passive mobile data. *Annals of Tourism Research Empirical Insights*, 3, 100061. <https://doi.org/10.1016/j.annale.2022.100061>
- Seidualin, D. A., Mukanov, A. H., Agybetova, R. Y., Mussina, K. P., Berdenov, Z. G., Babkenova, L. T., & Zhensikbayeva, N. Z. (2024). Development of a geographical information system for optimizing tourist routes in the Ulytau national natural park. *GeoJournal of Tourism and Geosites*, 52(1), 351-359. <https://doi.org/10.30892/gtg.52134-1211>
- Sharpley, R., & Sundaram, P. (2005). Tourism: A sacred journey? The case of ashram tourism, India. *International Journal of Tourism Research*, 7(3), 161-171. <https://doi.org/10.1002/jtr.522>
- Silverman, B. W. (1986). *Density Estimation for Statistics and Data Analysis*. Chapman and Hall, New York, USA.
- Soh, A. N., Kuek, T. H., & Puah, C. H. (2024). Constructing tourism market vulnerability indicator in Thailand. *Environment, Development and Sustainability*, Articles in press. <https://doi.org/10.1007/s10668-024-05552-y>
- Taengkliang, B., Inprom, M., Kaewpibal, P., & Daengphet, M. (2022). Linking Tourism Routes by using a Logistics management system in Chawang District, Nakhon Si Thammarat Province. *Central European Management Journal*, 30(4), 1286-1295. <https://doi.org/10.57030/23364890.cemj.30.4.131>
- Waiyasusri, K., & Tananonchai, A. (2022). Spatio-temporal development of coastal tourist city over the last 50 years from landsat satellite image perspective in takua pa district, phang-nga province, Thailand. *GeoJournal of Tourism and Geosites*, 43(3), 937-945. <https://doi.org/10.30892/gtg.43313-907>
- Wang, W., Chen, J. S., & Huang, K. (2016). Religious tourist motivation in Buddhist Mountain: The case from China. *Asia Pacific Journal of Tourism Research*, 21(1), 57-72. <https://doi.org/10.1080/10941665.2015.1016443>
- Woodward, S. C. (2004). Faith and tourism: Planning tourism in relation to places of worship. *Tourism and Hospitality Planning & Development*, 1(2), 173-186. <https://doi.org/10.1080/1479053042000251089>
- Zhang, H., & He, X. (2024). The effect of awe on tourists' responsible behavioral intention in a mountainous religious tourism destination: evidence from China. *Journal of Sustainable Tourism*, 1-19. <https://doi.org/10.1080/09669582.2024.2354315>