

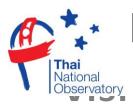
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Location and Weather

The general area of Chiang Mai and the Thai National Observatory is shown in the map below. Chiang Mai has an elevation of about 350m a.s.l., and enjoys a tropical climate with distinct dry and rainy seasons. The rainy season lasts from approximately May to early October – the exact start and end can vary from year to year. In the rainy season the TNO is closed for observations. The rest of the year has markedly dry conditions, with scarce precipitation. Winter nights are cool with temperatures falling below 15C before sunrise. March and April can be rather hot with high temperatures in the 35C-40C range. For the visitor wishing to spend some time in Chiang Mai, the city is the largest in northern Thailand and rich in attractions. It receives about 5 million visitors per year, of which almost half are foreigners.

Climate data for Chiang Mai (1961-1990) [hid											[hide]		
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C (°F)	34.1	37.3	39.5	41.3	41.4	37.5	37.5	36.5	36.1	35.3	34.5	33.0	41.4
	(93.4)	(99.1)	(103.1)	(106.3)	(106.5)	(99.5)	(99.5)	(97.7)	(97)	(95.5)	(94.1)	(91.4)	(106.5)
Average high °C (°F)	28.9	32.2	34.9	36.1	34.1	32.3	31.7	31.1	31.3	31.1	29.8	28.3	31.8
	(84)	(90)	(94.8)	(97)	(93.4)	(90.1)	(89.1)	(88)	(88.3)	(88)	(85.6)	(82.9)	(89.2)
Daily mean °C (°F)	20.5	22.9	26.4	28.7	28.1	27.3	27.0	26.6	26.5	25.8	23.8	21.0	25.4
	(68.9)	(73.2)	(79.5)	(83.7)	(82.6)	(81.1)	(80.6)	(79.9)	(79.7)	(78.4)	(74.8)	(69.8)	(77.7)
Average low °C (°F)	13.7	14.9	18.2	21.8	23.4	23.7	23.6	23.4	23.0	21.8	19.0	15.0	20.1
	(56.7)	(58.8)	(64.8)	(71.2)	(74.1)	(74.7)	(74.5)	(74.1)	(73.4)	(71.2)	(66.2)	(59)	(68.2)
Record low °C (°F)	3.7	7.3	10.0	15.8	19.6	20.0	20.5	20.7	16.8	13.3	6.0	5.0	3.7
	(38.7)	(45.1)	(50)	(60.4)	(67.3)	(68)	(68.9)	(69.3)	(62.2)	(55.9)	(42.8)	(41)	(38.7)
Rainfall mm (inches)	6.9	4.6	13.0	50.1	158.4	131.6	160.8	236.0	227.6	121.9	52.8	19.8	1,183.5
	(0.272)	(0.181)	(0.512)	(1.972)	(6.236)	(5.181)	(6.331)	(9.291)	(8.961)	(4.799)	(2.079)	(0.78)	(46.594)
Avg. rainy days	1	1	2	6	15	17	19	21	17	11	6	2	118
Mean monthly sunshine hours	282.1	276.9	279.0	270.0	266.6	180.0	155.0	142.6	174.0	223.2	234.0	257.3	2,740.7

Figure 1. Chiang Mai Weather (from Wikipedia)



Temperatures at the TNO site are typically about 10C lower than in Chiang Mai. Both humidity and precipitation at the TNO site can be quite significant especially in the wet season, however in the best winter nights humidity can also be extremely low, with recorded values below 10%.

Table 1. Coordinates of the TNO site

Elevation	2457 m					
Longitude	E 98º 28' 56".06					
Latitude	+18° 34′ 25″.41					

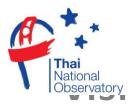
Specific information about the site and the telescope can be found at NARIT web site.



Figure 2. Location of Doi Inthanon

International Travel to Chiang Mai

The Chiang Mai airport (CNX) is connected with frequent daily flights to Bangkok (both Suvarnabhumi and Don Muang airports) by several companies, as well as to other cities in Thailand. Internationally, CNX has direct flights to several Asian countries, and to the rest of the world via Bangkok.



The CNX airport has one domestic and one international terminal, which are housed in the same building and are separated by a very short distance. A few facts for first time visitors:

- if you land in CNX from Bangkok following an international flight, your immigration formalities will be carried out in the Bangkok airport. Your luggage, if checked through, will be delivered at the international terminal in CNX even if you are coming with a domestic flight from Bangkok.
- Taxis are readily available at both the international and domestic terminals in CNX. Proceed to one of the several taxi booths, where you can pay in advance and receive a voucher. From airport to most destinations in the city, fares will be around 150-200 Baht and the ride will take approximately 15-20 minutes.
- Car rental is widely available at the airport although it is recommended to book online in advance for better fares.
- Currency exhange booths and ATMs are available at both the international and domestic terminals in CNX, and ATMs are also very frequent around the city. All major credit cards are accepted.

Although a far cry from the congested roads of Bangkok, traffic in Chiang Mai can be a problem especially during rush hours. For most visitors, a combination of walking and "red buses" is probably the best option to get around the city. Also bycicles and scooters are easily available for rent, especially around the old city.

Local Travel to Doi Inthanon

Road distances are:

Chiang Mai Airport to Doi Inthanon Park Headquarters: approx 100 km. The Headquarters are at about 1,000m elevation, and the last part of the road approaching Doi Inthanon is winding and moderately steep.

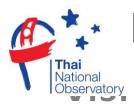
Doi Inthanon Park Headquarters to TNO site: approx 15km. The road is paved and in good conditions, however it is very winding and quite steep.

There are two check gates, one upon reaching the base of Doi Inthanon, and another one past the Park Headquarters. If you are driving on your own, make sure to obtain or print yourself a NARIT logo to show on your car, to gain access and avoid tolls.

Normally, visiting astronomers will arrange transportation with NARIT and be driven to the mountain with a NARIT car. The total travel time will be almost 2 hours.

Accomodation on Doi Inthanon

NARIT has two buildings ("Base Camp") close to the Park Headquartes, one for offices and workspace, and one for sleeping. A total of 10 rooms are available over two floors. The rooms will typically have two single beds and a private bathroom, as well as a work



desk. They do not have individual cooking facilities nor a fridge, however a common kitchen area is available. Wi-Fi is available, at the moment only in the office building.

Next to the Park Headquarters there are also a number of simple restaurants, which cater mainly to tourists. They are open for breakfast, lunch, and dinner (typically non-stop during the day until about 8pm). A convenience store is also present, as well as an ATM.

At the TNO site, two large sleeping rooms are available but they are intended mainly for temporary rest and generally used by the Night Assistants. They are not suitable as a proper accomodation. In the control building there is the possibility to refrigerate or warm up simple food (microwave, tea & coffee makers), but there is not a proper kitchen. Please note that in spite of the relatively short distance, travel from the Base Camp to the TNO site can be lengthy: account for about 1hr round trip time, and if possible plan your meals at the Base Camp well ahead.

Working at the TNO site, Safety, Rules.

- Visiting Astronomers shall not remain alone at the site. Please plan meals and transportation needs well in advance with the local staff.
- The Telescope shall be operated by the local staff only. Opening and closing the dome will be the sole decision of the local staff based on the NARIT rules for weather conditions.
- Apart from a first-aid kit and basic CPR-trained staff, medical assistance is not available at the site. Basic medical assistance can be requested from the Park Headquarters or from the Air Base. Transportation to a suitably equipped hospital will require a lengthy travel to Chiang Mai. Therefore, if you have special medical concerns that require specific consideration please inform the NARIT staff in advance of your visit.
- Between sunset and sunrise, all cars shall drive with dimmed lights.
- The TNT site buildings (telescope, control) are to be entered without shoes. Slippers are provided. In case of cold weather, make sure to wear proper warm socks. No jackets or other warm clothes are provided, therefore please plan to bring your own. If you need snacks or drinks during the night, please plan in advance and bring your own. Water-boilers are provided.
- Wi-Fi is available at the TNT site, please inquire with the NARIT staff to obtain a password.
- Please keep the site and the buildings as clean as you would like to find them. Janitor services are very limited, therefore please take care of what you use.



Remote Observing

An experimental Remote Observing mode is also available. For this, a station is available in the main NARIT building in Chiang Mai. The station features a brodband link to the telescope site, with a remote desktop connection that allows to control the telescope and the instruments and includes a video link. Note that this mode is still under testing and not all functionalities might be fully implemented. In particular, some actions might have to be carried out by local staff at the TNT site.

Observers wishing to take advantage of the Remote Observing mode should contact NARIT at least 10 days in advance of their run, so that proper scheduling and allocation can be planned.

Contact Information

TNO Important Phone Numbers

<u>NARIT staff, Name Phone & e-Mail</u> Boonrucksar 081-783-7861 boonrucksar@narit.or.th Saran 081-681-1767 saran@narit.or.th

OPD staff

Apichat (OPD manager) 083-4707711 apichat@narit.or.th Somsawat (Head operator) 081-259-9292 somsawat@narit.or.th Sawang (Operator) 083-480-7670 sawang@narit.or.th Nikom (Operator) 087-256-3458 nikom@narit.or.th Kanthanakron (Operator) 086-850-3720 kanthanakorn@narit.or.th Apirat (Engineer) 086-659-9001 apirat@narit.or.th Pitipong (Engineer) 083-217-5523 pitipong@narit.or.th

Base camp staff Patompong 087-193-8391 patompong@narit.or.th

<u>Car reservation staff</u> Natapit 082-930-2755 natapit@narit.or.th

<u>Emergency</u> Police (Jom-Tong) 053-341193, 053-362178 Electric Company (Jom-Tong) 053-341448 Air Force (Doi Intanon) 087-4697273 Hospital (Jom-Tong) 053-341218-9, 053-341011-2 National Park Office 053-311608 TOT 053-224776