

English Vol. 4 2021.12.1 - 2022.02.28

# **Winter Starry Sky**

The winter sky is full of bright stars, making it a fun season for stargazing. The Orion constellation is one of the most easily recognizable stars in the winter sky. Four bright stars surround the three stars of Orion's waist. The red star in the upper left is Betelgeuse, and the blue-white star in the lower right is Rigel, both of which are first magnitude stars. Winter triangle is formed by three stars in the winter.

Sirius (the brightest star in the sky) in the constellation Canis Major, the first-magnitude star Procyon in the constellation Canis Major, and Betelgeuse in the constellation Orion, are the three stars that make up the Winter Triangle.

### **Screening Schedule**

For detailed information on each program, please visit the website.

	10:10	11:30	13:30	14:40	15:50
Weekdays	For pre-reserved groups only	Starry Sky Commentary Program	Original Program	Special Program	
Saturdays, Sundays, and Holidays Winter break from 12/25-1/7	Children's Program * 1	Starry Sky Commentary Program	Original Program	Children's Program	Special Program

\*\*1 Every Saturday at 10:10 AM 「Educational Program」 will be played

- Please refrain from leaving and entering during showtimes.
- There is no age limit for each program
- Wheelchair accessible (If there are many people, you may be asked to sit in a chair)
- When fully booked, children under the age of 3 may be asked to view from a guardian's lap

#### Information

9:50-16:00 (Last admission 30 minutes before closing)

X Other than the months of January and February, the center closes at 17:00

<u>Closures</u> • Mondays (next day if it is a holiday)

Closed on Mondays and Tuesdays in January and February Only the exhibition hall is open from January 12-14 and February 26

#### <u>Admission Fee</u>

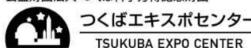
**Admission ticket** - Adult: 500 Yen - Child: 250 Yen (Child applies to ages 4 to high school, children under 3 are free)

Planetarium ticket - Adult: 1000 Yen - Child: 500 Yen **Planetarium added** - Adult: 500 Yen - Child: 250 Yen Annual Passport - Adult: 2500 Yen - Child: 1000 Yen [Precautions]



- Groups of 20 people or more require a reservation
- An annual passport will be issued on the same day each year
- If you would like to buy a planetarium ticket after entering the museum, please purchase it at the ticket counter

#### 公益財団法人 つくば科学万博記念財団



## https://www.expocenter.or.jp/

Mid-Feb - 19:00

Tel: 029-858-1100

2-9 Azuma, Tsukuba City, Ibaraki Prefecture 305-0031

### **This Winter's Starry Night Guide:**

On December 3rd, the moon and Mars approach each other in the eastern sky at dawn. In addition, December 14th is the most active day of the Geminid meteor shower. Geminid meteor shower is a large meteor shower where many shooting stars may be observed. Please try and observe.

January 4th is the most active day of the Quadrantids meteor shower. The Quadrantids meteor shower varies in size depending on the year. This time it is expected to peak at 6 am Japan time. This day is the day after the new moon, so there is no moonlight, which is the best condition for observing a meteor shower.



Dec. 8: Maximum luminosity of Venus in the evening

Dec. 14: Geminid meteor shower Dec. 22: Winter solstice



Jan. 4: Quadrantids meteor shower



Feb. 9: Maximum luminosity of Venus at dawn

\*\*All our shows are 40 minutes long

# <u>Original Program</u>

# Secrets of Shooting Stars

For audiences 5th grade and above Airing every day 13:30

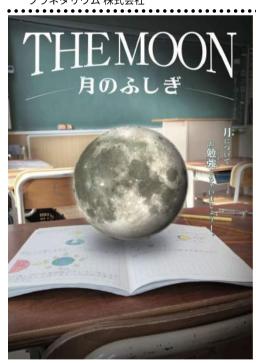


A shooting star with a romantic image of fulfilling your wishes. It is the dust of the universe that exists innumerably. What is the source of the dust? Where does it come from? Enjoy beautiful meteor observations with aliens who have come to visit the earth.

# <u>Children's Program</u>

#### The Mystery of The Moon

Children's Educational Program (for 5th grade and above) 【製作・配給】 コニカミノルタ Airing Saturdays 10:10 ラネタリウム 株式会社



About a month in elementary school science, to arouse interest. Produced as live-action time-lapse footage. The sun, moon, and earth as seen from outer space. The positional relationship is replicated.

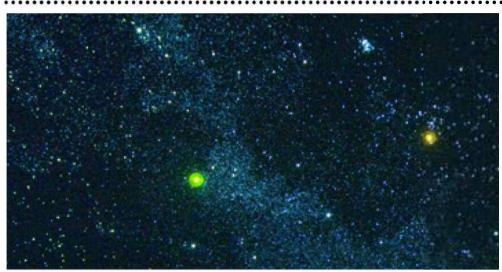
Pocket Monster: Airing Saturdays, Sundays, Holidays 14:40

Anpanman: Airing Sundays, Holidays 10:10

# **Today's Starry Sky**

Airing every day 11:30 For all audiences

Our staff will give a live explanation of the starry sky



If all the lights in the city could be turned off there would be a sky full of stars. How to find the constellations you can see tonight and how the starry sky changes a little bit every day.

# <u>Special Program</u> Remains of the Dinosaurs

For audiences 5th grade and above

Airing weekdays 14:40 Saturdays, Sundays, Holidays 15:50



While many creatures were born throughout Earth's long history, the dinosaur stands out. What is their true appearance? What is its ecology? How did they go extinct? Or did they? The legacy of dinosaurs was evoked by scientists for a long time.

In cooperation with Tsukuba International School. **Created by Dharshith Kumar, Noah Barnes**