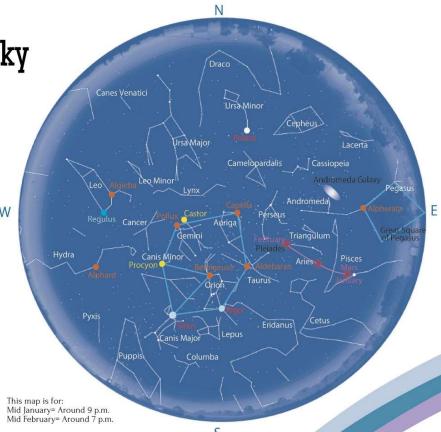


Winter Starry Night Sky

The most recognizable group of stars on a clear night in winter is Orion. The three stars that make up the waistline of Orion are surrounded by 4 bright stars. Both Betelgeuse, the red star seen in the upper-left region of the diagram, and Rigel seen in the lower-right region are first magnitude stars. W

Another prominent shape that can be found in the winter sky is the Winter Triangle, made up of the stars Betelgeuse (in Orion constellation), Sirius (in Canis Major constellation), and Procyon (in Canis Minor constellation).

Furthermore, in this season, Mars can be observed on the west side of the Winter Triangle, which has just recently become close on October 6th, 2020.



Planetarium Guide

2020.11.28~ 2021.2.28 English Vol.3



Light Blue: Only for groups (20 or more people)

Light Green: Crayon Shin-Chan ~The seven mysteries of the starry sky and of school~

Yellow: Supernova Explosion: ~Will Betelgeuse disappear from Orion?!~

Orange: Star Camp: Travels Through the Milky Way on the Galactic Railway

Blue: Detective Conan: The Red-Hot Galaxy Railroad

Red Hayabusa 2-Reborn

Dark Pink: Live Program of the Seasonal Night Sky

Purple: Hayabusa -Back to the Earth-

Grey: Hayabusa 2-Return to the Universe



Date		Time				
11/28~12/28	Weekday	10:10	12:00	14:00	16:00	
	Weekend	10:10	12:00	14:00	15:30	16:50
1/4, 6, 8, 10		10:10	11:30	13:00	14:10	15:30
1/5, 7, 9, 11		10:10	11:30	13:00	14:10	15:30
1/16~1/31	Weekday	10:10	11:30	13:00	14:10	15:30
	Weekend Holidays	10:10	11:30	13:00	14:10	15:30
2/1~2/28	Weekday	10:10	11:30	13:00	14:10	15:30
	Weekend Holidays	10:10	11:30	13:00	14:10	15:30

Special Programs -

Hayabusa -Back to the Earth-



<u>Date:</u> 2020/11/28~12/27 (weekends only); 2021/1/16~31 (weekends only)

The turbulent and moving exploration journey of the Japanese space probe "Hayabusa", which confronts many difficulties as it explores the mystery of the birth of the solar system, is depicted by amazing computer graphics spanning across the large 360degree dome of the planetarium at Expo Center. It is the exciting, first program of the "Hayabusa" series.

Orginal Program

An original program produced by Tsukuba Expo Center.

Star Camp: Travels Through the Milky Way on the Galactic Railway

(Recommended ages: From higher elementary school grades to adults)



(<u>Japanese Title</u>): Hoshizora Gakkou) <u>Date:</u> 2020 12/1~2021 1/11

Every year in this season, a special star camp is held. This year's theme at the camp is Kenji Miyazawa's book, Night on the Galactic Railroad. We will follow the story on a virtual trip along the Milky Way, from the Northern Cross to the Southern Cross, using the latest astronomical images. As our protagonist learns new things about the galaxy, which even Kenji could not have known, will her interest in astronomy blossom? How about yours?

Children's Program

Crayon Shin-Chan ~The seven mysteries of the starry sky and of school~



Date: 2020/12/5 ~

Shinnosuke and his friends join an astronomical viewing event at school. While observing the starry sky from the school's rooftop, they suddenly hear the sound of a piano from an empty music room. Come to find out their journey to figure out the "Seven Mysteries of School" that is transmitted to the students!

Hayabusa 2 -Return to the Universe-



Date: 2021 1/4(Mon.), 6 (Wed.), 8 (Fri.), 10 (Sun.)

Take off, Hayabusa 2! The voices of many people who supported this asteroid mission from all over Japan come together, as this second mission finally gets off the ground. This program about the asteroid explorer will introduce details of the mission, while also introducing key features of the Hayabusa 2 probe, which follows after the highly successful first Hayabusa mission.

Revival Program

An encore screening of a previous, original program by Tsukuba Expo Center. A timely subject, back by popular demand.

Supernova Explosion: ~Will Belelgeuse disappear from Orion?!~

(Recommended ages: From higher elementary school grades to adults)



Date: 2021 1/16~

Orion, is a familiar symbol of the night sky in winter. However, recently something strange is happening in the bright red star "Betelgeuse" that shines on the right shoulder of Orion. What is going on? Watch to find out!

Hayabusa 2 -Reborn (Long Version)-



<u>Date:</u> 2020 12/1~25 (weekdays only),2021 1/5 (Tue.), 7 (Thur.), 9 (Sat.), 11 (Mon. Holiday), 2021 1/27~29,2021 2/2~28

To bring back fragments of the asteroid Ryugu, Hayabusa 2 is the second Japanese mission to take off into outer space for attempting to touch down on an asteroid. What challenges did Hayabusa 2 have to overcome on this mission and how did it achieve its goals? What did the probe discover on Ryugu? Find out during this exciting program!

Live Program of the Seasonal Night Sky

A live presentation by our expert staff, to explain about the universe and the seasonal night sky.

Explore the wonders of tonight's starry sky

(Recommended for all ages)



Date: 2020 12/1~2021 2/28

If we could turn off all the electric lights in the city, a spectacular night sky filled with stars would come into view! Well, our planetarium can provide this experience virtually. In this live presentation, you can learn how to identify some key constellations and learn about the dynamic motions of stars and planets, which appear from Earth to change every day, little-by-little.

Detective Conan: The Red-Hot Galaxy Railroad



Date: 2020/12/5~

Conan and his friends get a ride on the Galactic Railroad train. However, the Phantom Thief Kid intervenes, and a battle for a treasure unfolds. The latest planetarium program of Detective Conan/Case Closed has finally arrived!

