

Introduction of the experiment to understand solar diurnal motion effectively



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Have you **ever** watched nights with
the midnight sun?



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SPACE EDUCATION IN JAPAN (JAXA)

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Why do you think
the Sun does not set?



We can **test** the phenomenon
using this lab **equipment**

The **E**arth (A terrestrial globe)

The **S**un (An LED light)

Please look at the state that I test.

作成者1

The experiment method

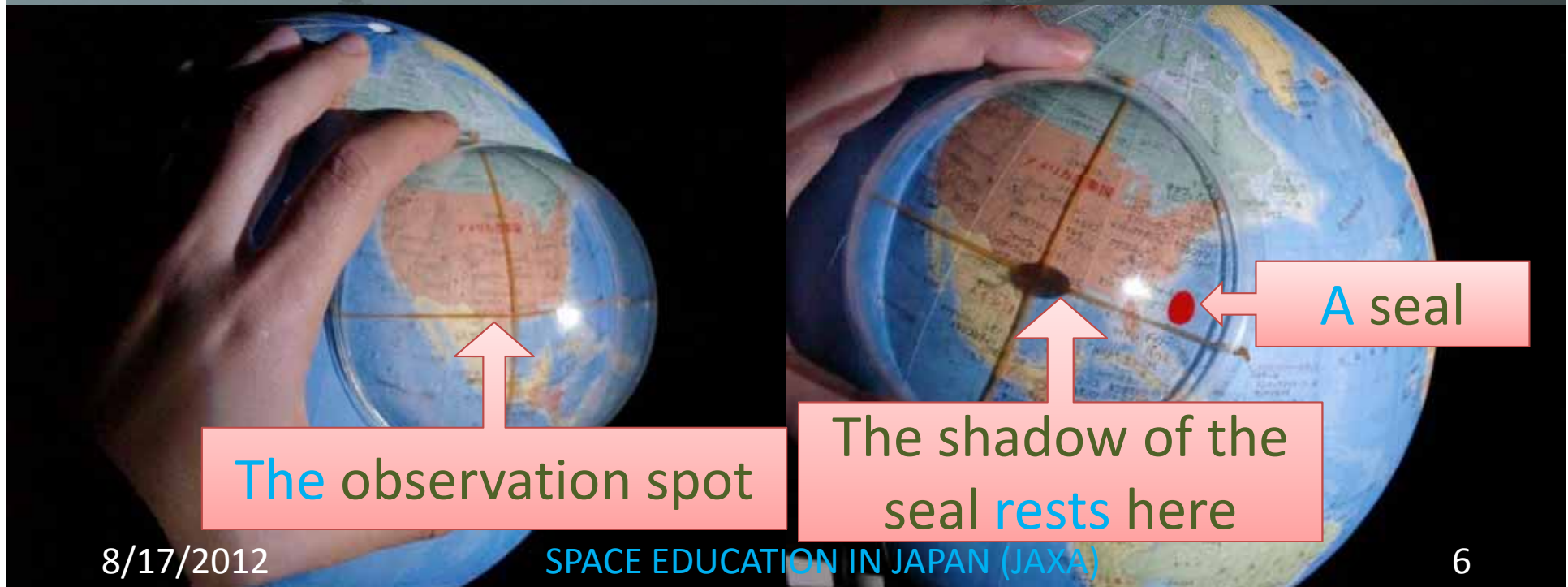
Expose a terrestrial globe to the LED light and let the globe rotate .



The experiment method

Put a transparent hemisphere with a cross so that the center sits above the observation spot.

Put another transparent hemisphere over the first and place a seal so as to create a shadow at the observation spot.



The experiment method

Place a seal on the transparent hemisphere while letting the globe rotate so a series of shadows rest upon the observation spot.



This is **the** state of the shadows **that were** made when you turned **the** globe.

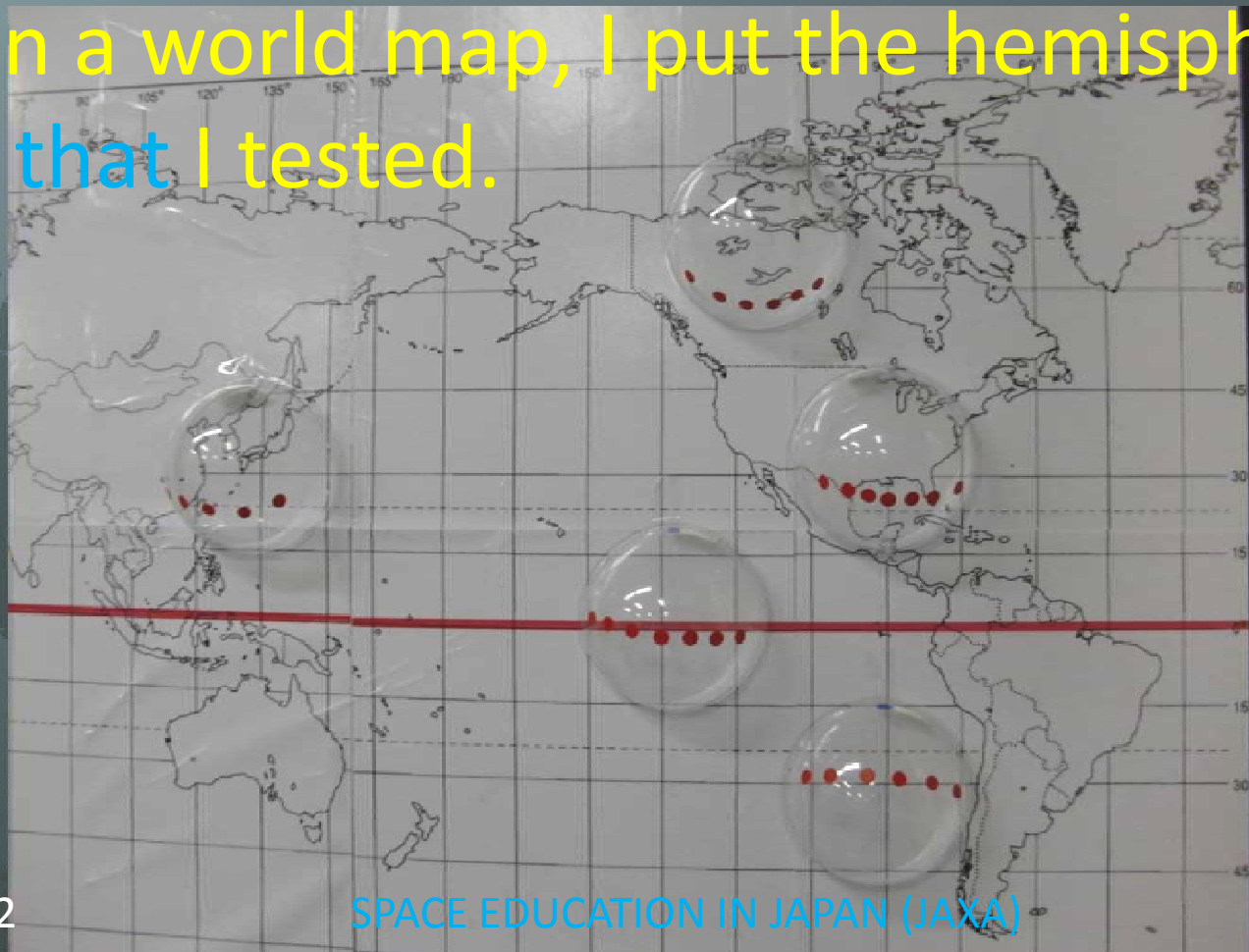


Please do an experiment to examine **solar**
diurnal motion at the spot that you like in
your favorite season!



An experiment example : The state of solar diurnal motion in some spots on the day of Vernal Equinox (the Northern Hemisphere)

On a world map, I put the hemispheres that I tested.



Understand it from an experiment example

The sun sets from above, due east to west.

Even if the longitude is different, at the same point of latitude, the solar path is the same.

The sun travels south in the Northern Hemisphere, right along the equator, and north in the Southern Hemisphere.

A high degree in the south lowers so that the latitude is high. (Altitude in the south rises so that it is almost the equator.)

Understand it from an experiment example

Understand that a sunbeam hits the Earth parallel when a world map is bent.



Introduction of the
experiment to understand
solar diurnal motion effectively

That is the end of this
presentation.

Thank you.

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