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Development of Venus Live Telescope as Teaching Material

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To teach students astronomy at school, we would like students to actually look at the stars. Unfortunately, the chances of seeing stars at school is very few due to the inability to see stars during the day time and due to bad weather conditions.

For students to observe stars during the day time, I created the Venus Live Telescope. Venus can be seen during the daytime through a telescope, but not through the naked eye. So, I created a system that can observe Venus by using a telescope in real time. Then the telescope transmits live images to a monitor that is inside the classroom. Currently, this system is being used at junior high schools .

To view Venus during the day time, I used the SKYPOD. It can find where Venus is located at, automatically. The product is not so expensive, which is nice. In order to find Venus, face the telescope towards the sun in the west horizon and then the telescope will find Venus naturally. It can also chase and follow the movement of Venus.

For shooting images, I used the CCD eyepiece from NexImage. By installing the device on the telescope, I can take pictures of stars by using a computer. A wireless connection between the computer and a telescope outside can be done.

I showed junior high students live video of stars through a large monitor inside the classroom. We can operate the telescope wireless in the classroom, then we can observe and follow Venus for a very long time.

I used the *motor focuser* to focus on Venus and we can do this by watching the monitor. I used a small and light telescope, the SE-120. It is easy to carry since it is light and battery functional.

The time to set up the telescope for schools to use is important. After you set up the telescope, find Venus, and transmit images to the monitor, one hour would have already passed.

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