Astronomy Fair 2010

Pyxis

The Mind Museum at Taguig

Astronomy Fair 2010 Isabela Report

The Astronomy Fair event was held from October 1−14 in Isabela Province, Philippines. It was composed of five major events, called stations, namely,

1. Roving Space Shell (Digital Planetarium) from The Mind Museum
2. Travelling Astronomy Museum with 2 galleries
    a. Filipino Astrophoto Gallery
    b. Space Relics Gallery
3. Solar Anatomy Station
4. Film Showing Station
5. Open Forum

The event was organized by Pyxis Astronomy Educational Services (Pyxis) in cooperation with The Mind Museum (TMM) and the tourism office of Isabela.

Stations 1 and 2 were held at the school gym, Station 3 at the basketball court, and Stations 3 and 4 at the Audio Visual Room.

The astronomy team members were deployed as follows:

1. Roving Space Shell − 4 people
    a. Two from TMM
        i. 1 stays inside the dome to operate the projector
        ii. 1 stays outside to ensure participant follow TMM rules
    b. Two from Pyxis
        i. 1 lecturer
        ii. 1 production staff to stamp tickets and help in crowd control
2. Travelling Astronomy Museum − 2 people
    a. 1 lecturer
    b. 1 production staff for setup and crowd control
3. Solar Anatomy Station − 2 people
    a. 1 lecturer
    b. 1 production staff for setup and crowd control
4. Film Showing Station and Open Forum − 2 people
    a. 1 lecturer
    b. 1 production staff for the audio−visual equipment and crowd control

In addition we also have an Event Manager and a Logistics Supervisor to ensure smooth flow of the event.

Following is a report of the event in pictures.

Registration and Entrance

The registration booth was manned by the local organizers.

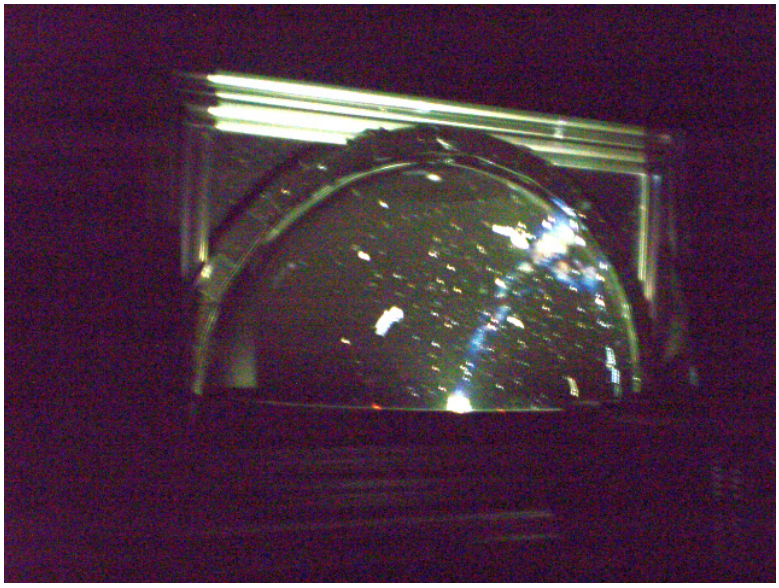
This is the entrance to the gym where two stations, the Roving Space Shell and the Travelling Astronomy Museum, were held.

Roving Space Shell

The Roving Space Shell is the first booth in the Astronomy Fair event. It is an eight−meter digital planetarium from CosmoDome.

The dome was setup in the school gym. It was the noisiest station because the kids were all shouting inside!

Kids are entering the Roving Space Shell.



The MirrorDome system is used to project images into the planetarium dome.

The show was made interactive by lectures handled by Christadelle Bazar of Pyxis.

The projector was controlled by Francisco Ico of The Mind Museum using the Stellarium and Solar System software. Visible in the picture is the air conditioning unit installed to make the dome more comfortable. Exhaust is shown below.

Travelling Astronomy Museum

Gallery 1: Filipino Astrophoto Gallery.

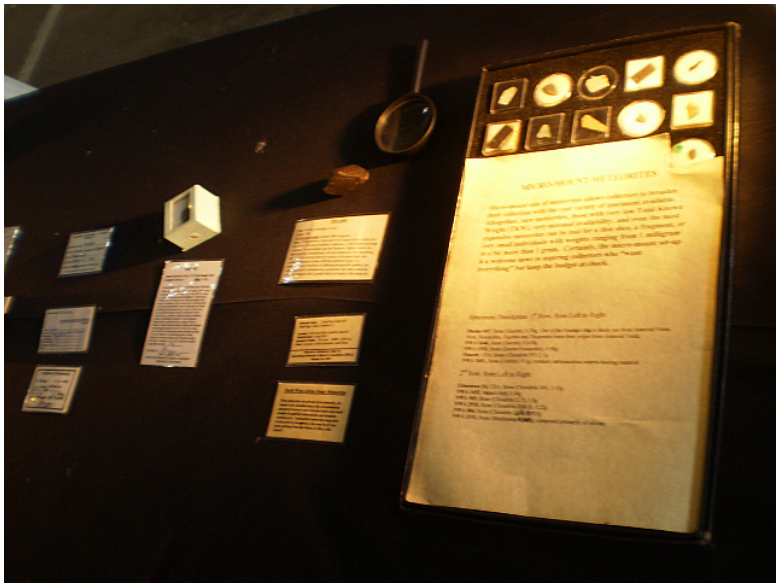
We are proud to say that not a single image in our space photo gallery comes from NASA. All of the images on display are taken by Filipino astrophotographers!

Was the picture above taken by Hubble Space Telescope? No, this picture of a reflection nebula was taken by Eric Africa, a Filipino astrophotographer who used the same filters used by Hubble Space Telescope to create his images, namely, an H−alpha, SII, and OIII filter for the RGB components.

The solar eclipse images above were taken by Kin Enriquez and Erika Valdueza of the UP Astronomical Society. Kin took the picture in Jinshanwei, China as part of a Philippine expedition team to observe the longest eclipse in our lifetime. Erika took hers from Manila Bay, Philippines.

The dome can be seen behind this beautiful image of a nebula taken by John Nassr of Baguio City. Behind them are kids listening to an explanation of the gallery, and how it contributes to making people aware of the Filipino contributions to science.

Gallery 2: Space Relics Gallery



Kids loved our meteorite exhibit, especially when we let them hold several samples. We passed around a specimen of the Bondoc meteorite, found in Quezon Province in Southern Philippines.

Other meteorites we passed around include specimens of from Canyon Diablo in Arizona, Sikhote−Alin Mountains in Russia, and Campo del Cielo in Argentina.

Rochelle Derilo showing kids a sample of the Bondoc Meteorite, found in Quezon Province, the only confirmed meteorite find in the country. Rochelle is an avid amateur astronomer and meteorite collector in the Philippines who has lectured all over the country!

These micromounted meteorites come from Asteroid Vesta. These meteorites, called HEDs, are among the rarest in the world.

Solar Anatomy Station

We call this the solar anatomy station because we have three different telescopes showing three different layers of the sun.

The Hydrogen−Alpha Solar Telescope lets students see the Chromosphere. This is where the Solar Flares and Prominences appear.

A Neutral−Density filter allows students to see the Photosphere of the sun. This is where sunspots appear.

The Lunt Calcium−K Solar Telescope lets students see below the Photosphere. Here we can see sunspots before they show up on the surface!

Film Showing and Open Forum

We showed the kids ***Ring World 2***, a film about the Cassini–Huygens mission to Saturn and its moon Titan.

We received the DVD from NASA because Rochelle Derilo is a member of the NASA–JPL Saturn Observation Campaign Education and Public Outreach program.

http://soc.jpl.nasa.gov/members-country.cfm?country=PH

Aside from this we also showed ***Eyes on the Skies***, the official DVD of IYA2009 celebrating the invention of the telescope, and the IYA2009 trailer.

Ezekiel Rodriguez answers questions from students during the Open Forum. Questions ranged from planets to stars to aliens. One teacher even asked about the connection between astronomy and climate change. (Short answer: Yes there is a relation. It's something about the Milankovitch Cycles.)

Sky Watching and Navigation

As night fell, we set up our night telescopes and pointed them to Jupiter and some deep sky objects such as the Andromeda Galaxy. For many students, this was the first time they saw a planet through a telescope, as opposed to seeing pictures of them in books.

They were also taught how to find the North Star using the constellations, and using that to find other directions such as East, West, and South.

Summary

The Astronomy Fair was a fun event and helped about two thousand students learn about astronomy. Hopefully we have planted a seed in them.