# **Sun-Earth Day Highlights**

## **Troy Cline:**

We live in the atmosphere of a dynamic, magnetic star that interacts with the Earth, the solar system and space beyond.

My name is Troy Cline and welcome to another Sun-Earth Day Highlights podcast. In this edition I'll share my experience at this year's Astronomical Society of the Pacific conference in Chicago.

Founded in 1889 in San Francisco, the Astronomical Society of the Pacific or ASP, long ago outgrew its regional sounding name to become one of the nation's leading organizations devoted to improving people's understanding, appreciation and enjoyment of astronomy and space as an avenue for advancing science literacy.

What a perfect place to learn more about the latest in astronomy education and of course...Sun-Earth Day. So, with that in mind, I grabbed my handy digital recorder and headed to Chicago where I recorded highlights and reactions from 2 incredible sessions.

The first session I attended was, of course, about the Sun Earth Day program and was called, "Space Weather Around the World: Using educational Technology to engage and Audience and Increase Interest in Science Content". Sound good? Well it was! Presenters Elaine Lewis, Lou Mayo and yours truly discussed and demonstrated how space science content can be presented to a variety of audiences using proven education technology techniques including green screen technology, podcasts, webcasts and distance learning events.

One of the participants, Amanda Maynard, shared her thoughts about the potential impact of podcasting. Amanda is the senior Educator for Formal Programs at the Adler Planetarium in Chicago.

#### **Amanada Maynard:**

Podcasting has been very successful for our institution as well. We put out a podcast every two weeks on the night and day in the Chicago Skies at night time and of course during the day. It started off kind of small with just a couple hundred people; and now it's at least two thousand downloads per episode. We have regular subscribers. Not only does it give people additional information for people that can't come to our institution; like teachers in the classroom where funding is hard to come by. When you have additional resources like that and they can essentially bring our wealth of information from our institution into their classrooms that easily, it's definitely a positive. Podcasting has been very successful for us.

By the way, as an aside I can't very well talk about our podcasting without letting you all know that If you go to <a href="www.adlerplanetarium.org">www.adlerplanetarium.org</a> you can download our Adler Night and Day podcasts. So subscribe to that.

#### **Troy Cline:**

During part of the session an interesting discussion developed about the Amateur Astronomy community and the tremendous impact they can have on educational outreach. This is what Lou Mayo and Amanda Maynard has to say.

#### Lou Mayo:

There are huge numbers of people who are either officially amateur astronomers because they belong to a club or they may identify themselves as amateur astronomers even if they don't belong to a club. Just people who are just interested in amateur astronomy.

### **Amanada Maynard:**

I think that a lot of what we've talked about today is good for me in a sense that it reinforces what we're actually doing in our institution as well. For example, with the amateur astronomers we do have a number of affiliations with our planetarium. I think from those affiliations we also have a lot of volunteers from those astronomy clubs. The best part about that is their enthusiasm for astronomy that will volunteer. We have at least a dozen that are very dedicated to the point where they actually have to be certified to work in our observatory. They came out at three in the morning for the lunar eclipse we just had a week and a half ago. So you get a very strong commitment from amateur astronomers; and that's definitely a resource. Especially in an informal institution when it seems like funding and staff time and that type of thing is at a premium sometimes. When you can get people that are that interested in wanting to share that information with the general public it's a strong asset.

With the green screen technology, we actually have a green screen at our institution but we really don't use it. I have been there for two years and I don't think I've ever seen anyone use it. It's ideas that you presented today that I can take back to my colleagues and perhaps better utilize the things that we do have.

# **Troy Cline:**

Elaine Lewis from Goddard Space Flight Center helped to close the session with a few Sun-Earth Day words of advice.

### **Elaine Lewis:**

Within our theme for Sun-Earth day we have podcasts, tech through time, imagery and activities for formal and informal and scientists. We put all types of resources on that web page under that theme. We also archive the past themes so if you still are interested in ancient observatories all that wealth is there, including our webcasts. It's there for you to take and choose and use what you want to create your own program or classroom experience.

### **Troy Cline:**

The next session I attended was ...well what can I say but ...standing room only. Presenters Isabel Hawkins and Felipe Tapia hosted a session called, "The Living Astronomy and People of the Mayan World Today". How could I 'not' attend that?

Just moments before the presentation I was able to interview one of the presenters, Isabel Hawkins from the UC Berkeley space Sciences laboratory,

[Interview with Isabel Hawkins]

#### **Troy Cline:**

Good afternoon, Isabel.

### Isabel Hawkins:

Hi Troy. Good to see you.

# Troy Cline:

Good to see you too. We're at the ASP Conference right now in Chicago and I understand you'll be doing a session on Mayan Astronomy and Culture?

## Isabel Hawkins:

That's right because this conference is all about astronomy and astronomy education. So we very happy to be here in Chicago, the beautiful windy city except that it's hot and muggy (laughs) right now but it's very beautiful. Last night actually we went the Adler Planetarium. It was an open house for the conference participants and some of my colleagues from the Yucatan who now live in San Rafael California went with me to the Adler and we saw a planetarium show that featured

Chichen Itza, one of the Mayan sites, a thousand year old site in the Yucatan that has a pyramid that marks that pass of the seasons through the equinox with a beautiful light and shadow phenomenon. So we're going to show in our presentation, which is actually called the Astronomy and People of the Mayan World Today, we're going to show many different sites in the Yucatan that show astronomical phenomenon particularly marking the equinoxes and solstices.

# **Troy Cline:**

That sounds incredible and right off the top of my head and what comes instantly to my mind is that we had a Sun-Earth Day event that focused on the Yucatan where you were actually in a webcast. People can still download that and see it on the Sun-Earth Day site.

#### Isabel Hawkins:

That's right. If you go to sunearthday.nasa.gov you can actually go to the 'Ancient Observatories' section and see for yourself the beautiful event that we recorded there in which there were 60,000 people next to that pyramid watching that event. So we're trying to bring all of that excitement about Mayan astronomy to the Hispanic community in California and other parts of the United States where there's a large immigrant population from the Yucatan. Some of the people still speak Mayan, the Mayan language. They were their traditional dresses. They share with us all of their beautiful cultural expressions like dancing, ect.

So were going to bring a little bit of everything. If you come to our session you'll hear a little bit of Mayan language. You see a dance performance by children. You'll see the children doing astronomy activities and then we'll also have a presentation by our co-presenter Philip Talpia from the group called 'Yucatecan Pride'.

## **Troy Cline:**

I remember him when we were in the Yucatan with Sun-Earth Day; he was there.

#### Isabel Hawkins:

He's a very active community leader so we're very pleased to be able to collaborate with him.

# Troy Cline:

Wonderful.. On our supporting podcast page for this particular podcast, we'll make sure that we have some images of the experience today and from Sun-Earth Day. We'll also put up any links that you think will be helpful to the communities out there listening to us right now.

#### Isabel Hawkins:

That would be wonderful. We really hope to spread this program to other parts of the country. So look for us and keep the 'Mayan World Today' insight.

## **Troy Cline:**

Well lets join you session in just a few moments and I'll record some of the singing or dancing that we'll hear while we're there.

# Isabel Hawkins:

Excellent. Thank you so much for your support Troy. It's great!

[End of interview]

#### **Trov Cline:**

The session started with an introduction in Yucatec Maya, the language spoken by more that 1 million people in the Yucatan today.

[Yucatec Maya language being spoken and translated into Spanish and English] Isabel Hawkins translating:

We are here to share with you the work we are doing in behalf of our children on Mayan astronomy and on Mayan culture.

# **Troy Cline:**

That introduction was followed by presentation that gave us a glimpse of the living culture of the Mayan people in the Yucatan, where science and astronomy are practiced in a manner that integrates every other aspect of their culture into a native science.

As the session progressed, we were guided through several activities specifically developed to position astronomy with in its cultural context as an effective means of capturing the interest and enabling authentic participation of under-represented populations in science.

As many of you many know, the Maya built great cities containing buildings aligned with the sun, Moon and the stars to mark important times of the year. However, during the session we learned that many of the Mayan astronomical traditions are still practiced today by the Maya of the Yucatan peninsula, Southern states in Mexico, and other areas in Mesoamerica.

At the close of the session we were rewarded with a traditional dance by an impeccably dressed Mayan family. As you can hear, the music was quite festive!

# [Yucatan music plays while people clap]

I hope you enjoyed this edition of Sun-Earth Day Highlights. We are very interested in hearing your questions and comments about the Sun-Earth Day podcasts. If **you** have something to say, send an email to

sunearthdaypodcast@mail630.gsfc.nasa.gov .

For all other details about the Sun-Earth Day program including information about our past SED themes be sure to visit our website at <u>sunearthday.nasa.gov</u>.

While there, don't forget to register in order to receive Sun-Earth Day updates!