

Sun-Earth Day Highlights – Team Talk

[Opening Sound Clip]

[Troy Cline]

"Our Sun...Yours to Discover"- The Sun and its impact on the solar system can be understood though studying the universe around us.

[sound clip]

My name is Troy Cline and welcome to the first audio podcast for Sun-Earth Day 2009. Since it is the first podcast for the new theme, I thought I'd start off by answering a few common questions we get about Sun-Earth Day. I'll follow that up with a quick conversation I had with members of the SED team who will fill us in on what we can all expect to see in this years program. So lets get started with a few questions taken right off of the section called 'About Sun-Earth Day' found on the home page of the Sun-Earth Day website.

When is Sun-Earth Day?

This year's main event will be on March 20, 2009. Sun-Earth Day is comprised of a series of programs and events that occur throughout the year culminating with a celebration on or near the Spring Equinox. Middle schools are invited to participate in Solar Week in Spring 2009, a week of games, activities and curriculum about the Sun.

Is Sun-Earth Day just a one-day event?

No. Sun-Earth Day is a combination of programs and events throughout the year ending with a Sun-Earth Day celebration on or near the Spring Equinox in March.

Is Sun-Earth Day's content and focus the same each year?

Absolutely not. Each year the Sun-Earth Day program wraps a fresh new thematic approach around NASA's Sun-Earth Connection science, missions and cutting edge research. This year's(2009) theme is [Our Sun, Yours to Discover](#)

For Sun-Earth Day 2009, we will engage a worldwide audience in the celebration of the International Year of Astronomy (IYA), especially in daytime astronomy. You can see all of key concepts on the [Sun-Earth Day flier](#).

Recently I was able to catch up with 3 members of the Sun-Earth Day team. Lou Mayo, this years Sun-Earth Day lead, Elaine Lewis (our formal education lead) and Carolyn Ng (our informal education lead). Let's hear what they had to say about 'what we can expect in this year's program.

[Elaine]

Our theme is Our Sun Yours to Discover, which is really exciting because in 2001 we started with the basics of the Sun. So now we have an audience who has been with us for 8 years, so in year 9 we go back to looking at the Sun but in more depth. One of the ways we are helping teachers and students do that is with the new Space Weather Viewer. That is an amazing tool! We just launched in yesterday. It has high resolution images, teachers can download them; they can create their own classroom presentations. Our scientists can use it too, because the data is there in one place. It is all updated too, new space craft and data. We will be adding STEREO very soon and we have already added Hinode which gives us x-ray data from ground based telescope and from the satellite. And then we have SOHO data and we added ACE data. And I will be creating a featured activity that students can learn about Sun using the viewer to learn about it.

[Troy]

The viewer that is up now is the first version. We won a great award, the *Pirelli*. *That was awesome!*

[Elaine]

This one is even better, has more in it, the images are sharper and they are new images.

[Troy]

And you don't need any special software to see any of this. Just open up your browser, internet browser and it should work just fine. I know we use it with the formal audience constantly in workshops and teaching about the Sun. But it is not just constricted to the formal audience, teachers, and educators and so forth, anybody can use this viewer. Especially in the informal, like Carolyn here. Hi Carolyn.

[Carolyn]

Hi, Actually what Elaine described will be useful, especially for educators are being trained in museums or for anyone to enjoy the observation of the Sun through NASA satellites and ground based data.

[Troy]

What is really awesome about this viewer is that is launched at the exact same time that our Sun Earth Day website launched. And one of the most exciting things about this year's theme is that our team chose it in support, as Lou said, of IYA, The International Year of Astronomy. Why would that be exciting to an Amateur Astronomer, because I know that is a section that you are heading up again for Sun Earth Day?

[Lou]

Amateur Astronomers and Amateur Astronomy Clubs meet all over the world, monthly and have Star Parties or Sun Parties to get the public interested in space. It is a real opportunity for them to get hundreds or thousands of people looking through telescopes talking about the day and night sky and get excited about this field of astronomy. There is nothing that amateurs like better than having a star party and showing people the cosmos as they talk to them about what they are seeing. So we are hoping we will get lots of help from the amateur astronomy community to gather people, get them looking through a telescope. Our very simple goal is to have everyone on the planet look through a telescope. We only have 6 billion people to go. As they do that we will run a counter on the website and as people send in their numbers from star parties and other events that counter will implement. So let's see where it goes.

[Carolyn]

Actually besides the amateur astronomers who are holding their star parties in parks enjoying the night sky, I'm sure there are planetaria that will host star parties also in conjunction with their museum events and that will be another venue where the general public can enjoy both day and night sky, using safe methods to observe the sun.

[Troy]

You can find all of these ideas in the Outreach Section of Sun Earth Day.

[Elaine]

For the educators, I would love and we are working on this, to create a virtual quilt; where students from all over the world can scan in the pictures they draw, from the sun, using a telescope, their binoculars and send those into us. We will create a quilt according to country or state. When we finish we have a tremendous quilt from all over the world.

[Troy]

Which is a digital quilt, all computer based, internet based. Also in the amateur astronomer area we were talking about having a contest, an image contest where amateur astronomers can send in safe views of the sun.

[Lou]

Their best safe views of the sun, or send in videos and be as creative as they want. A contest where we get people interested in just having fun with astronomy, having fun with the sun. See what they come up with. I'll bet there are a lot of creative ideas out there.

[Elaine]

As we develop these ideas, if people go on Educators, Amateur Astronomers, Museums, and register on our website; we send them monthly emails. The

monthly emails tell them what is new, what is coming up, what has been created for their use. We just share monthly the new things we are featuring.

[Troy]

Plus we will have additional Sun Earth Day highlights podcasts. So anything that is new and upcoming and solid that we want everybody to know about we make a quick podcast, so people can stay updated. Which reminds me, we also have several of our missions now giving legacy footage and video footage, and we are making our new Sun Earth Day video podcast out of these videos. The videos are already produced they come from STEREO, Hinode, SOHO, and missions from heliophysics and we feature them in Sun Earth Day. So make sure you go to the Sun Earth Day website and check out the new Video podcasts.

[Elaine]

And the new Space Weather Viewer also has them in the last section for Videos and click on Missions, the videos are there as well.

[Carolyn]

Besides the legacy missions there are 2 upcoming heliophysics missions that will be launched. One will be launched in 2 weeks (October) that is IBEX. Looking at the very boundary of our solar system and how the sun affects, not only earth but all of the planets. There is another one going up in 9 months. That is a major one Solar Dynamics Observatory. Both will have a lot of videos that we will continue to add to the Sun Earth Day website.

[Troy]

That is great timing, because the next video podcast that is going up will be up shortly after this one is on SDO. And the IBEX one is also on the Space Weather Viewer.

[Elaine]

As I looked at the website with all of the new resources, the images, the articles, the Space Weather Viewer, the education activities, the amateur astronomer activities, the make and take activities and I sent out my first email, I thought what should I put in the email-“this is a treasure chest of resources for anyone who is interested in the Sun.

[Carolyn]

You will receive periodic communication, messages from the team, if you have any questions on any of the topics you can contact us and be connected to scientists and education specialists at NASA.

[Lou]

We are really opening up the theme this year. It is not just the sun's impact on the earth, but the sun's impact on the solar system and other stars and other solar systems outside the solar system, a fascinating and emerging area of

study. And so we have many areas of science that this covers as well as other disciplines. Technology through time emphasizes the history of discovery and how each area of discovery stands on the shoulders of the last one, geography, music, technology, math all of these are addressed.

[Elaine and Lou]

Speaking of music Lou, why don't you end this with the Sun Song. I will be glad to Elaine since you will accompany me! 1-2-3

The Sun is hot the Sun is not a place where we can live,
But here on Earth we need its warmth and all the light it gives.
The Sun is a mass of incandescent gas,
A tremendous nuclear furnace,
It burns turning hydrogen to helium at temperatures of millions of degrees.
That never rhymed- laughter.

[Troy Cline]

I hope you enjoyed this Sun-Earth Day Highlights podcast. We are very interested in hearing your questions and comments. If you have something to say, just send an email to sunearthday@gmail.com . If selected we'll share it on one of our upcoming podcasts!

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

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

Don't forget that you can learn more about NASA by simply visiting www.nasa.gov .