

Sun-Earth Day Mission Highlights:

Interview with Nicole Vilmer (RHESSI)

[Troy Cline]

In 2012 the planet Venus will pass directly between the Sun and the Earth. This "Transit of Venus" won't occur again until the year Twenty-One-Seventeen.

[Sound clip]

My name is Troy Cline and welcome to Sun-Earth Day 2012: Shadows of the Sun.

[Music Transition]

Many of our NASA missions play an enormous part telling that incredible story: the story of our dynamic solar environment.

In this podcast, we'll continue our series about the RHESSI mission with Dr. Nicole Vilmer, the Director of Scientific Research at CNRS which is the National Center of Scientific Research at the Paris Observatory. It takes the concerted efforts of scientists and engineers from a variety of backgrounds and cultures to make missions like RHESSI successful.

To get started I asked Nicole to tell us a little bit about herself and how she eventually started her work with the RHESSI mission.

[Nicole Vilmer]

I working at the science observatory I am the director at the National Center of Scientific Research at the Paris Observatory, I've been working there for 13 years now. I study the sun and then in 1979-1980 I transferred 1 year to Berkeley. This is where I learned about x-rays and gamma rays because I was working with the group that worked mainly with radio astronomy. This is where I started working with RHESSI and I am still working with the people at Berkeley. After that I went back to Paris radio emissions radio instruments in the village which is called NESTA, which is 200 kilometers south of Paris. We have heliograph-radio emissions of the sun to make images of the sun of the radio emissions. And then I worked on several missions to study flares at x-ray and gamma wave lengths. Finally I got involved in the RHESSI mission and I'm still working with the RHESSI data, x-rays and gamma ray emissions and combining with these observations with radio observations at NESTA.

[Troy]

Nicole went on to emphasize the importance of observing the solar cycles and conducting solar research over long periods of time.

[Nicole Vilmer]

I've been watching them for 30 years in solar physics that means 3 solar cycles, for each solar cycle it is related to a heliograph when you have enough activity for an observation and you want to study the x-ray emission from the solar flare you x-ray the emission from RHESSI. You need the satellite and for the emission cycles. The cycle I am working with the RHESSI team and for the previous cycle in 1990 I was working with another mission, which was a French Russian mission. The cycle before I had started work on a solar maximum mission which is where I started my career.

[Troy]

I asked Nicole to tell us more about the experiences in her life that inspired her to pursue a career in solar physics.

[Nicole Vilmer]

When I was a student I wanted to work in radio astronomy. We have a solar radio instrument which was a big radio telescope and this is how we measured direction of the galaxy. I was measuring the direction of the galaxy and that is what I wanted to do, to work on galaxies. I started to look at the radio wave lengths of the solar flare and then I left and I went to Berkeley and found solar physics so interesting.

[Troy]

We'd like to thank Nicole for taking the time to talk to us today, and look forward to future podcasts about the RHESSI mission.

[Troy]

You can find all of the information about this year's theme, "Shadows of the Sun", on Sun-Earth Day website at sunearthday.nsa.gov. We'll continue to populate that website the latest information about our upcoming programs, background resources, activities and registration information. With the help of our friends from the Solar Dynamics Observatory mission we've even include a new event based Google Map! One of our main goals is to help you join thousands of people in learning more about the Transit of Venus on June 5-6, 2012, and then again for a total solar eclipse on November 13-14, 2012. I'll share more with about those events in upcoming podcasts.

I hope you enjoyed this Sun-Earth Day Highlights podcast. Upcoming podcasts will include interviews with additional NASA scientists, astronomers, educators and media specialists from the award winning NASA Edge team!

Don't forget to 'like' us on Facebook and follow us on Twitter to join in on the discussion with our growing Sun-Earth Day community.

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!

You can learn more about NASA by simply visiting www.nasa.gov.