

High Definition Earth Viewing (HDEV) ONE YEAR ANNIVERSARY April 30 2015

This book is presented to the **NASA HDEV** team at Johnson Space Center on the one year anniversary of the video stream being made available to the public.

As of this date the ISS-Above is installed in close to 900 locations worldwide and the HDEV video stream is the most beloved feature.

I believe this capability is one of the **MOST IMPORTANT** and impactful public outreach tools ever made available by NASA. The live views of the earth from the International Space station provide a unique opportunity for the public to be connected with the human space program in one of the most accessible ways possible.

This is making a real and positive difference in the way the public views NASA and the space program in general and is inspiring people of all ages from around the world.

I asked ISS-Above customers to share their personal message of thanks for the availability of this extraordinary and unique capability.

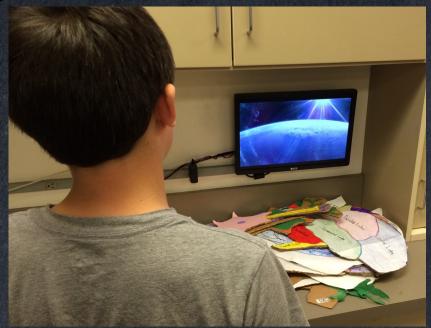
Their words say it all.

THANK YOU.

Liam Kennedy, Inventor of the ISS-Above liam@issabove.com | www.issabove.com



ISS-Above: The gadget that has people feel closer to the 6 humans in space



"I am a Middle School teacher and have the ISS-Above attached to a LCD mounted on my wall. My students enjoy the perspective offered by the video and have even attempted to figure out what part of the Earth the camera is seeing. It's a great way to integrate science and geography.

My 150+ students thank you for your efforts and look forward to future products from your team."

Matthew McCoy, Norman Public Schools, OK USA

"HDEV Video encourages us space dreamers to keep on dreaming, non believers to believe and the earthbound explorers to explore with our eyes. The images we see of our precious blue planet are mankind's medicine. I would like to thank you personally for that gift!"

Allan J Gray, Virgin Galactic Future Astronaut, Westhoughton,
Greater Manchester UK

"So encouraging to those of us who look up to you and can imagine more accurately with live views"

Ron, Seal Beach, CA USA

"you guys rock!"

ISSAbove Customer, Long Beach, CA USA

"Thanks! For exposure to the HDEV experiment and the opportunity to share with my friends & family. It combines an awesome perspective of our Earth as well as a great platform from which discussions & questions can take flight..."

Jim Brigham, West Yarmouth, MA USA

In my lifetime, I have witnessed the public's fascination with space during the '70s and '80s when all of us kids at the time wanted telescopes and dreamed of being Astronauts or Engineers for NASA. I have also witnessed the public's interest steadily wane to the point of nearly forgetting all about space and regarding NASA as an irrelevant relic of the Space Race era. I had come to believe interest in space had become forever extinct.

I'm not sure if the HDEV team and NASA in general can fully appreciate what the impact of the HDEV camera system has had on the public so far. NASA's HDEV streaming video plays all day long on a 50" TV in my house through a Raspberry Pi device and ISS-Above software that tracks the space station and shows its current location.

It has created a buzz of excitement in my family, friends, and visitors. Most express disbelief at first that the images they are witnessing are real, live feeds. Several people have silently sat on my sofa with their hands over their mouths, simply staring as though they are seeing an unprecedented achievement of mankind.

Afterwards, they are searching all things NASA and space on the internet. Children began wanting telescopes and talking about working for NASA when they grow up. Making the HDEV system available to the public has done more to kindle interest in space and NASA than any other single thing I have ever seen in my lifetime. It is inspiring minds and rekindling a sense of awe that I have only seen back when the Space Shuttles were first developed.

Thank you so much for enriching our lives.

Please continue the HDEV program and start similar programs that the public can be part of. After all, the NFL probably wouldn't exist if it wasn't for the fact that its televised for all to share in the experience.

Wyatt Gaikowski, Whitefish, MT USA



"When I was a little girl, I wanted to be an Astronaut when I grew up. The HDEV experiment has allowed part of that dream to come true because we can see what the Astronauts see!

Thankyou for making dreams come true & inspiring the world to look up and #isswave"

Nikki Young, Liphook, Hamps UK

"Greetings HDEV Team,

Just wanted to let you know how much I love the views from the ISS that you have enabled me (and the rest of the world) to see. As I sit at my computer, whether reading email or doing some other task, I often watch the views from the ISS on my small 7 inch screen connected to my "ISS Above" Raspberry PI. Although the screen is small, the views you send are magnificent and make me really appreciate the ISS. Before I was able to know when the ISS was above and was able to see the live views you have provided, I was a bit of a ho-hum fan of the ISS. Now, I am so much more engaged with the ISS and the whole space program.

Thank you,

Dianne Saunders, Sarasota, FL USA

"Thanks for making me think about space in a whole new light."

Ilan Chait, Nederland, CO USA

"Thank you! I use the view to relax at work."

David sweetest, Carriage Trade Service Company Woburn, MO USA "Thank You for the great views of our planet. My wife and I really enjoy showing off the ISS above to our friends. It's truly impressive!!!!"

Dave and Laurie Probst, San Jose, CA USA

"Been wonderful to see the world from a vantage point I can never hope to have - THANKS!!"

ISS-Above Customer, South Grafton, MA USA

"I really enjoy watching the live video from the HD cameras mounted on the space station. Thank you for making it possible, for anyone connected to the Internet, to view the HD video feeds from outside the space station."

Greg Rudisel, Portland OR USA

"This is such a fantastic project! If a picture is worth a thousand words, an HD stream can't be described in just words. --Other than 'Thank you'".

Don Crossman, Pasadena, CA USA

"Thanks so much for doing this - my neighbors even appreciate our "big blue marble" more. It has sparked several environmental conversations, including one that led to cleaning up the neighborhood."

ISS-Above Customer, South Grafton, MA USA

"Thank you so much for this. I have two girls 8 and 3 and we are constantly talking about ISS and watched it fly over last night. HDEV has been a beautiful experience and is the trigger that got them interested."

George Matthes, Edison, NJ USA

"Looking forward to a view of Mars. In the meantime I appreciate the special views from ISS."

Ed Nachman, Jefferson, GA USA

"I think that I speak for everyone (who doesn't work for NASA or ESA) when I say that we all far too easily forget that there are 6 people up there in the ISS all the time. And being able to stream the HD views from the ISS for me means a lot because to see our Planet from up there has given me more then once Goosebumps because of it's beauty. Having the ISS-Above HD here on my desk I have my little HD screen on while working and so many times it makes me smile in awe during the day when I see the sun rise, I spot the moon in the background or see the solar panels from the Dragon in the down view.

I just love it and I hope you will NEVER stop streaming those amazing views to us people who always dreamed to see it for ourselves one day.

So many, MANY thanks from me to you all! Keep those amazing views coming!"

Tanja Glittenberg, Croydon, UK





"Great works and awesome NASA HDEV team!. Me and my family are grateful that you had given us the opportunity to look into our beloved and God given planet Earth. Everyone here are dreaming to go to outer space! Thank you and Cheers!"

Ramon Ponsones, Silicon Laboratories, Singapore

"What you guys are doing is pushing the boundaries of science for mankind. Keep it up and thanks for sharing your experience."

ISS-Above Customer

"Thanks for letting us fly along with the ISS! It's amazing to get to see our beautiful Earth from above."

Debbie Schilling, Carmel, IN USA

"Seeing exactly what the ISS crew see adds even more to the excitement of standing in my front yard watching the night-visual over passes. Even my family have been drawn in to watching them now. Fabulous. Many thanks."

Dale (Slim) Haines, Biggin Hill, Kent UK

"Nothing is cooler than watching our planet from above!!."

James Coburn, Los Angeles, CA USA

"Dear NASA HDEV Team:

Thank you so much for the opportunities you have given to us to experience and see God's creation from the ISS. Every view is new and awesome. We live in a beautiful world and thanks to you we have been given the opportunity to be a part of these views through your excellent work. Thank you"

ISS-Above Customer, Floyd, VA USA

"This is just awesome. I have enjoyed having to explaining my ISSAbove that is in my kitchen. Now we just step into the living room and turn on the feed and ride along with the crew. This is truly just AWESOME! Thank you for sharing their view."

Dave Hruska and Family, Brook Park, OH USA

"The live video from the ISS is simply amazing - providing a view that only a handful of humans will ever experience from an orbiting spacecraft. HDEV has brought that experience to a big screen HDTV in my family room and many of the views are simply breathtaking. We especially like the beauty of cloud formations against the blue oceans and the transitions from light to darkness. We sincerely appreciate your continued support of this amazing window into orbital space flight."

ISS-Above Customer, Brookfield, IN USA

"Thank you very much for making this feed available. It really shows that human progress is in constant motion and reminds us that even though each of us are just a small part, we are all moving forward together."

"It's fascinating and instructive to have the privilege to watch the video stream from your ISS cameras through the ISS-Above Pi program. Thanks!"

ISS-Above Customer, New York, NY USA

Kevin Prochaska, Keller, TX USA

"Thank you to all the team who have worked to provide access to this amazing imagery from space around the globe, and just giving a new perspective of this Earth."

James Skilton, Malvern, Worcs UK

"Thank you. There are no words to describe the beauty you have given us. Not only have you presented us views of our mother earth, but you made all of us realize the magnitude of our home. As an Aerospace Engineering Undergraduate student, your hard work is inspiring. One day I want to give such a spectacular gift to the world as well. Thank you one more time"

Ben Serano, Capitol Technology University, Laurel, MD USA

"Greetings HDEV Team,

Just wanted to let you know how much I love the views from the ISS that you have enabled me (and the rest of the world) to see. As I sit at my computer, whether reading email or doing some other task, I often watch the views from the ISS on my small 7 inch screen connected to my "ISS Above" Raspberry PI.

Although the screen is small, the views you send are magnificent and make me really appreciate the ISS. Before I was able to know when the ISS was above and was able to see the live views you have provided, I was a bit of a ho-hum fan of the ISS. Now, I am so much more engaged with the ISS and the whole space program. Thank you"

Dianne Saunders, Sarasota, FL USA

"This is the closest we can get to having the perspective of space here on the ground. Being able to view these cameras every day has increased my love for space."

Johnny Steverson, Real Space Education, Alvin, TX USA

"Seeing the world from the perspective of the ISS is a privilege that is never taken for granted. Thanks for all that you do!"

ISS-Above Customer, San Francisco, CA USA

"Thank you for sharing your view of this special planet we all share..."

Jeff Burkhardt, Boise, ID USA

"Thank you for sharing the real time view from ISS. This connection is an extraordinary gift to humanity!"

Don Williams, Las Vegas, NV USA

"Thanks for the great shots! It's just an amazing view. Thank You! Any chance you got an extra seat available? Ps, I hear the Italians brought a nice new espresso machine. I'll bring the coffee."

Jim, Lincoln, NE USA

"This is the most enthralling thing in my living room!"

ISS-Above Customer, Tallahassee, FL USA



"I cancelled our lobby cable TV December 2014 and replaced it with the live ISS video feed. The views (and as important) the Teamwork of the multi-national astronauts is inspirational for me, my staff and anyone that comes through our lobby. Providing the visual aspect is very powerful. The sunrises and sunsets are awe inspiring and I see real emotions surface from people who can't believe how the view they are seeing is 'live; and the dedication of the men and women working on behalf of all of us is occurring right now.

Thank you,"

Steven White, ITEX, Bellevue, WA USA

"Thank you for sharing the wonder that is seeing our world from space."

ISS-Above Customer, Glendale, AZ USA

"Listening to the world News can be so depressing....

However watching the world from on high lifts our spirits

and gives a fantastic perspective of being on ONE planet!"

Alex Stewart, Sydney, NSW Australia

"HDEV Rocks! It opens our eyes onto the World around us, showing us how beautiful and fragile our One Planet is."

Wayne Matrejek, Webster, TX USA

"Our family loves our ISS Above, especially the HDEV camera shots. Thank you to all those who help bring those to us. Keep up the good work.

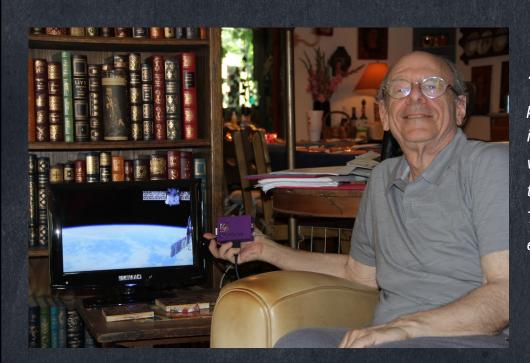
ISS-Above Customer, Sunland, CA USA

"I am a teacher, journalist and proud space geek, among many things. Every chance I get, I show our ISS through the ISS-Above unit that my husband and I have in our living room. It's akin to having been able to actually see the Nina, Pinta and Santa Maria heading west in real time.

Although the analogy is flawed, being able to put pictures to something that can seem so remote, your videos bring us closer to you, and you closer to us. It's thrilling to know that our people are up there.

Finally, I personally want to inspire more girls in particular to imagine themselves part of the space program. Although I'm not even remotely a religious person, I can't imagine Noah's Ark without an equal number of females on it. When we explore space, we're going to need the eyes of experience and vision that can often be so different for females. We need us up there too"

Ellen Snortland, Altadena, CA USA



"Thank you for creating this system. Being able to see the planet I live on from orbit never ceases to touch, move and inspire both myself and anyone else who happens to be here while the system is on. It is a constant reminder that we are truly one world, and that what we do affects everyone else. The HDEV stream lets us all reflect on what Carl Sagan so eloquently called 'The Pale Blue Dot' Thanks again."

Ken Gruberman, The Tech Daddy, Altadena, CA USA

"So few have skirted the boundary of the unexplored, with its last commanding view of home, but you brought us all."

Miles Smith, Jet Propulsion Laboratory, Altadena CA USA

"Awesome! Since receiving the gizmo (as a gift) to allow me to access the HDEV camera system, I have pretty much left it on continuously and have been enjoying with considerable amazement views of the beautiful planet on which we live. Thank you for the opportunity to see at least a bit of what you see from the ISS."

Bill Doody, Wilmot, NH USA

"The dreams of our ancestors are found in your creation. You have brought the heavens to the earth. Thank you."

Wes Walker, Charleston, SC USA

"Thank you! "

Andrew Strutt, DARPA, Arlington, VA

"Thanks for giving us the opportunity to view our home from the outer limits!"

Atley Joseph, KAIULA, HI USA

"Thank You NASA HDEV team for sharing the breath taking images, it's truly appreciated! Seeing those images makes it feel one step closer to actually being there."

Alex Sadowsky, Prince George, BC CANADA

"GREAT, we really enjoying the images. It is the next best thing to being up there with you guys and gals."

Dennis Cummins, San Diego, CA USA

"I love the HDEV webcast, because the "aerial" (spatial!) views from the ISS as it zooms across Earth are very captivating to my family and guests. And the views of the ISS itself have sparked a few conversations as well, e.g. "Why are there two Soyuz docked there? What happened to the American spacecraft?"

Jim Vanderveen, Sacramento, CA USA

"Every time I look down on Earth through the HDEV cameras - rolling past at what appears to be walk-ing pace - I am reminded of how incredible it is that I actually have this live view on a screen in my living room. Thank you for letting me and every other person on earth enjoy the views that, not very long ago, only a handful of people could.

As a geneticist I study the small and nearly invisible bits that make us who we are. Over the years my work has served to show me how interconnected and interdependent genetic systems are. Looking at Earth from high in the ISS' orbit shows me exactly the same thing. We are one planet. One large biological system thriving on a watery rock, surrounded by a wispy layer of air, hanging in space. It serves to show me how ephemeral our *borders* are, how everything on this world is linked and most important of all, how incredible it is that I am alive today, when I can see all of this every day, and it never ceases to amaze me.

All visitors to my home, whether they be adults or kids notice my ISS-Above HD flickering away in my living room right away and when the HDEV feed switches on, I wish you could see their jaws drop.

I leave my ISS-Above HD on 24x7 because every time it flashes, I am reminded of our incredible achievements as a species and of the amazing people who got us there - of all you scientists and astronauts and engineers.

Thank you for bringing the joy and wonder of space to my living room and so many other homes all over the planet. You guys are amazing."

Prajwal Bhattaram, The University of Queensland, Brisbane, QLD Australia

"Thanks for providing everyone the opportunity to view Gods beautiful Earth via your HDEV camera system."

Marc Drastata, Allen, TX USA

"Its incredible to watch, live, our beautiful earth and marvel at the fact that people are actually living and working so far above us. Our friends and family have gone from not being at all engaged in ISS activity to actively becoming totally fascinated and very interested!"

ISS-Above Customer, Droitwich Spa, Worcestershire UK

"Hello HDEV-Team, thank you very much for making this great images available to us! Best."

Martin Neumann, Horn-Bad Meinberg, Germany

"We love our most beautiful view of the Earth every morning. The camera shots are mesmerizing! It reminds us each day how small, but significant our place in the universe is."

ISS-Above Customer, Dease Lake, BC Canada



"Thanks very much, I enjoy watching the earth move below the station - in fact i did not realise quite how quick it does move. If you could develop a night vision mode that would make it even better!"

Mike Corfield, Farnborough, Hampshire UK

*That is Mike's chocolate lab Alfie in the photo.

"I have only recently got my ISS Above device so have not been viewing the wonderful live video feeds for very long.

I can already see the potential this brings to engage with people who are not particularly interested in science and technology.

My neighbor came round a couple of days ago, and saw the video feed working, and sat and watched it and asked questions.

Now trust me had there just been the info panels on view, interesting as they are to a geek like me :) he would not have taken much interest.

Please do continue with these video feeds up to and beyond 2017."



Dennis Thomas, Tamworth, Staffs, UK

"Thanks for making the HDEV cameras available to the public. I am absolutely mesmerized every time I watch. It is a great reminder to all of us about how fragile and beautiful our home is. It is also a really fun and educational tool that I use as a JPL Solar System Ambassador. The educational possibilities are endless.

Congratulations on your 1-year anniversary. I hope this continues for years to come."

Kelley Miller -JPL Solar System Ambassador, Quinlan, TX USA

"Thank you for the HDEV system . I have followed the space program since before the 1st Mercury missions. A lot of the time I can watch launches from my house in Jacksonville. Thank you"

Kendal G. Bryan, Jacksonville, FL USA

"This is an incredible technology and view. Thanks for allowing us "earthlings" to share in the view. My nerd sons and son-in-law are envious that I got this for Christmas. I ordered this for myself when I read in the newspaper (that is a hint to my age) that Bill Nye had this as his background screensaver. Be safe!"

Gary B. Strong, MD, Fort Worth, TX USA

"The ISS Above is almost always on in our house. The views you see in person every day are magnificent. It is relaxing to just sit and stare (and try to figure out what part of earth you are flying over). Thank you for sharing your beautiful views with us earthlings!! We bought a telescope and will look for you when we know you are on our horizon. Wave to us!!"

Krista McKerracher, Bronxville, NY USA

"I would just like to say thank you! When you see that video you can't help but think about all we've done ... and where we are going! The live video feed is very popular in our household and its a really important contribution to the world as well. Thanks again!"

Bill Murray, Vista, CA USA

"You are doing a great job. Thank you."

ISS-Above Customer

"Thx for those wonderful pictures from our 'small' planet, keep on broadcasting. Best regards"

Mikel, Kerken, NRW Germany

"Hi Liam- pls thank the team and support staff members for us. My second grade granddaughter and I pour over the video feed and talk about the Great Up There. All the best to you on the Earth & Space Day!"

Charles Fertig, Stilwell, KS USA

"The pictures have been fantastic and enjoyed by all who have seen them"

Greg Smith, i3Detroit Makers Space, Troy, MI USA

"To see the earth move by every morning (we put it on for coffee!) has been an extraordinary experience. We get excited seeing the Nile River, the Sahara Desert, the Andes, the blue waters off Australia, the cloud formations and the ocean waves. It brings us closer to our Earth and reminds us why what NASA does is so important. Thank you for the amazing gift!!!"

Kristin Walker, Charleston, SC USA

"The HD view from ISS is fantastic. I've shown it to many friends and family and the not only think it's awesome but it has kindled their interest in what's going on with ISS, brings back the magic of space flight, which has to be a good thing for NASA and your team! Many, many thanks, please keep it going!"

Matt Aslin, San Juan Capistrano, CA



"A great project. Haven't watched the space program as much since I lived in Houston in the late 60's. Keep up the innovation." "The HDEV project has brought home to me a few things; how lonely it could be in space, but equally how brilliantly modern technology has brought us all so close to each other - and how teamwork brings such amazing rewards. The HDEV images I display at home fascinate me, my family and friends. Thank you all for helping make this possible."

Nicholas Booth, Dorking, Surrey UK

"My heart jumps out sometimes and other times I almost go into a meditative trance when I'm watching the live access. This has given me a whole new appreciation and view (duh, I guess) of the earth. Thanks, all!"

Brenda Peick, Apple Valley, MN USA

"Hi I would Just like to thank you for the HDEV and live views you provide no one has done this before, Views of Earth have always been low - res or a still image. I love to the see the ISS pass overhead, now I can look down on Earth too. The HDEV makes us feel part of the ISS, there is something about it being live that makes it special. I hope the HDEV experiment is kept running for many years to come."

Paul Clougher, Bebington, Wirral UK

Richard Wade, Redmond, WA USA

"Dear NASA,

First, I would like to thank Isaac Newton for his law of gravity that defines the attractive force between all objects that possess mass. Understanding the law of gravity, one of the fundamental forces of physics, offers profound insights into the way our universe functions.

Now, because of that, I want to say Thank You for the "relationship" created by this law:

You've attracted me completely by your continuous effort, great goals and dreams that have inspired me and so many others. I wasn't attracted by your "mass" but by the size of your inspirations. In the same equation, I've been attracted you in my life and let you entered my mind, body and spirit by embracing your existence and ideas. Together we can dream big and Thank you for bringing the Universe closer to my eyes through HDEV project.

Looking forward to more HD ISS-Above cameras on ISS and keep up the awesome work you do! Space it is the final frontier, indeed. Lets get on this journey together."

Ovi Horvat, Farmingdale, NY USA

"Thank you for the amazing feed and all you do for us space geeks! Keep it up :-)"

Khalil Sehnaoui, Krypton Security, Rabieh, Beirut Lebanon

"I absolutely love the HDEV. During the weekend I have it on my TV and when the cameras switch on for another Sunrise I can't contain my excitement and have to drop everything I'm doing to gaze at our Mother Earth. So beautiful and peaceful, and just the idea of Man living on the edge of space. Absolutely awesome!"

Bram Vanoirbeek, London, UK

"We stream the live views of Earth from the ISS on our tv and our three children (James, 13; Liam, 10; Harriet, 7) are enthralled. It has attuned them to the space station as well as all other space projects. They are curious about them, and are avid fans. We're raising supporters of space programs! The amazing real-time images of Earth from space convey to all of us a sense of our planet and a reminder of the global community in which we all live. Being able to see these images is inspiring. Thank you!"

Paul and Gillian Sowell, New York, NY USA



"My TV is now tuned to the space station all day long, interrupted only by Anthony Bourdain. A couple of weeks ago I noticed that it was going to make a pass nearly overhead about an hour after sunset and was concerned that by then it would be in shadow. It wasn't, but something was chasing it, what in the world? Were they going to get a ticket? No, nothing quite so exciting, just the resupply ship. Fantastic that I was able to see that. Made me think of Gemini and the Agena."

Phil Brown, Portland, OR USA

"Dear NASA: I am a 70 year old guy who has lived a life watching the marvels of human ingenuity unfold. Nothing surpasses what I have seen though the accomplishments of NASA. How it has been able to gather the talented people and help them create what it has is a gift to everyone on this earth is a marvel. As I sit in front of my screens, (yes I have more than one), watching the images from The High Definition Earth Viewing experiment, what comes to me is a profound gratitude to those who made this possible. Thank you NASA. Thank you for everything."

"I can't find the words to adequately express my thanks to all of you for your devotion, modesty and zeal in applying your skills in what I feel is a service to humanity. I gave one of Liam's units to the school attended by my four grandchildren. All best wishes for a safe and successful voyage."

Louis J. Lyell, Jackson, MS USA

Van Garner, Claremont, CA USA

"Thank you! I love looking at the images from the ISS. It brings home how special the Earth is and our place on it."

Pam Winegar, Palm Bay, FL USA



"I get a thrill every time I see the view from your cameras, it is mind-blowing to have the ability to see the Earth from space as it is at that moment in time. Brilliant indeed! I just want to show everyone how incredible it is. Huge high-five from Madison, Wisconsin - Thank you for your efforts."

Sarah Swanson, University of Wisconsin, Madison WI USA

"My most recent obsession is this gizmo called ISS-Above that tells you when the International Space Station is overhead. It's linked to the cameras aboard the ISS, so you can run an HDMI cable to your television and see the earth from space. I do it all day. I leave it on more than is reasonable. It's just a beautiful thing."*

Bill Nye The Science Guy

*Quote from The Wall Street Journal—Nov 22 2014



Bill Nye is an ardent supporter of NASA's HDEV and here he presents Liam Kennedy (inventor of the ISS-Above) with a \$5 Canadian Note (ISS on the back).