



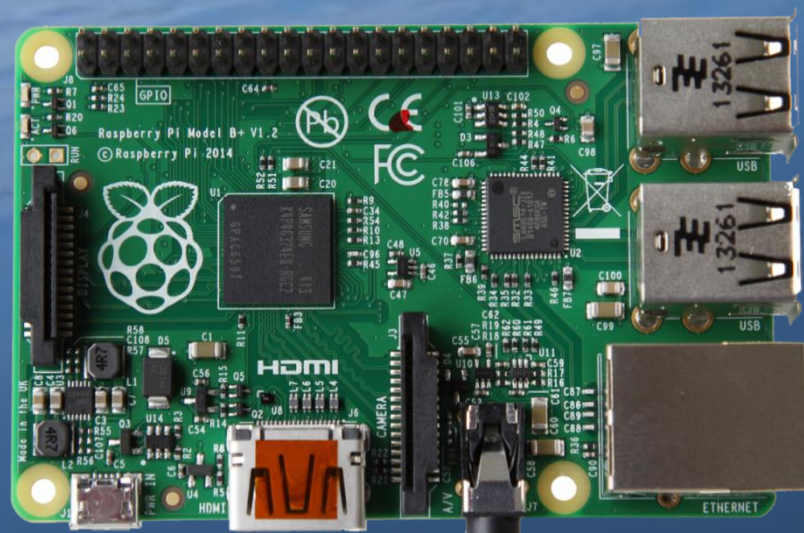
ISS-ABOVE: USING A SINGLE-BOARD COMPUTER TO INCREASE PUBLIC AWARENESS OF THE SPACE STATION

The ISS-Above is a digital signage device for the International Space Station developed via crowdsourced funding from a Kickstarter project in 2014. It is used primarily in private installations (in homes) but it is also being deployed to more public settings (science centers, schools and even offices).



Components

ISS-Above code is written in Python running under the Raspbian Linux operating system.



Raspberry Pi

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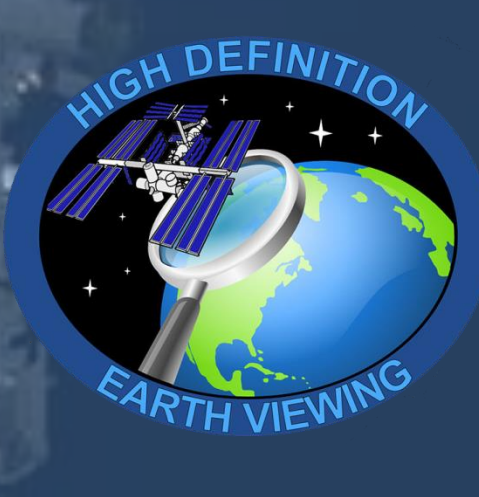
LED RGB Display

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ISS-Above Code

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HDEV via Ustream

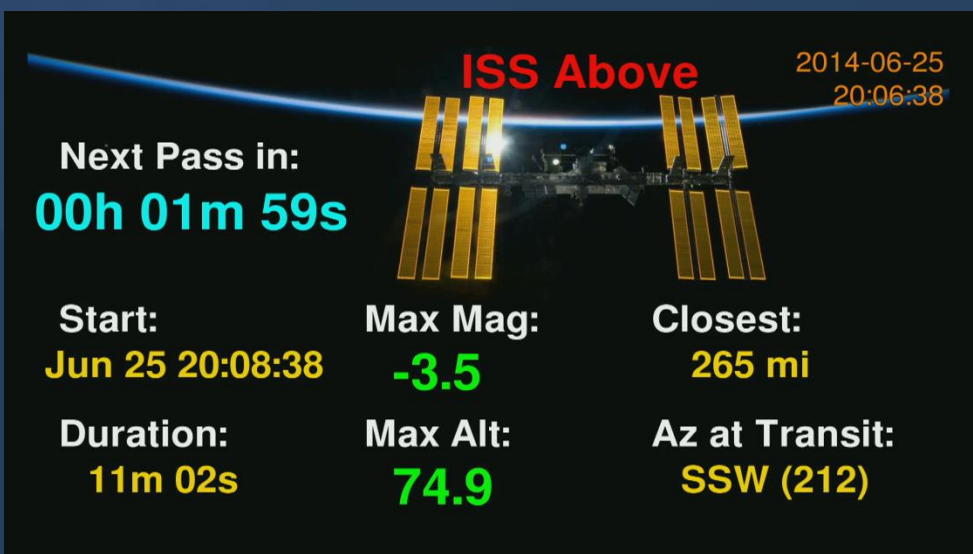
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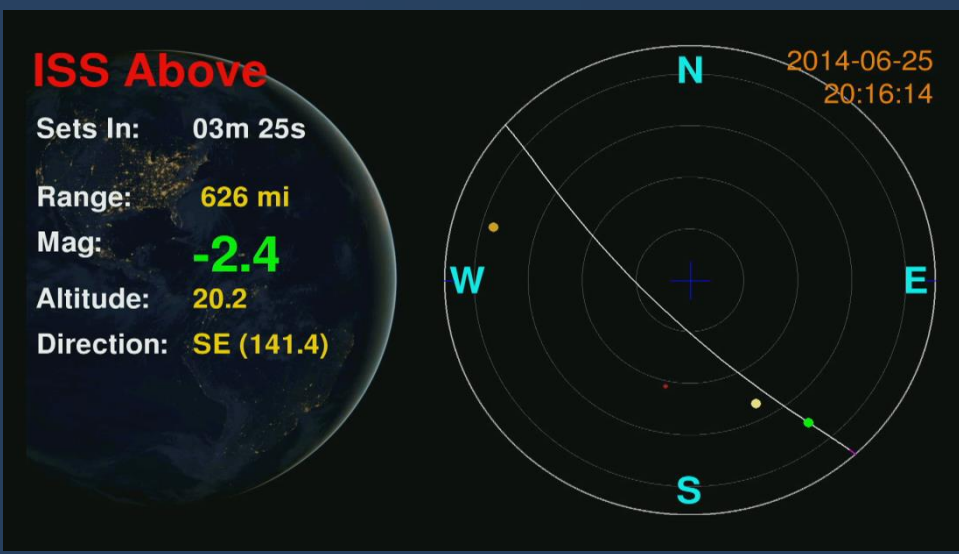
ISS "Mission Control" on any HDMI TV

Information Displays

The following information panels are cycled through to an attached HDMI TV/Monitor



Next Pass of ISS



Active Pass of ISS



Orbital path track



Live HD video via HDEV

Worldwide Impact

EXPEDITION 44 CREW

Scott Kelly
Flight Engineer

Mikhail Kornienko
Flight Engineer

Gennady Padalka
Commander

Kjell Lindgren
Flight Engineer

Oleg Kononenko
Flight Engineer

Kimiya Yui
Flight Engineer

Scheduled launch to the ISS late July 2015

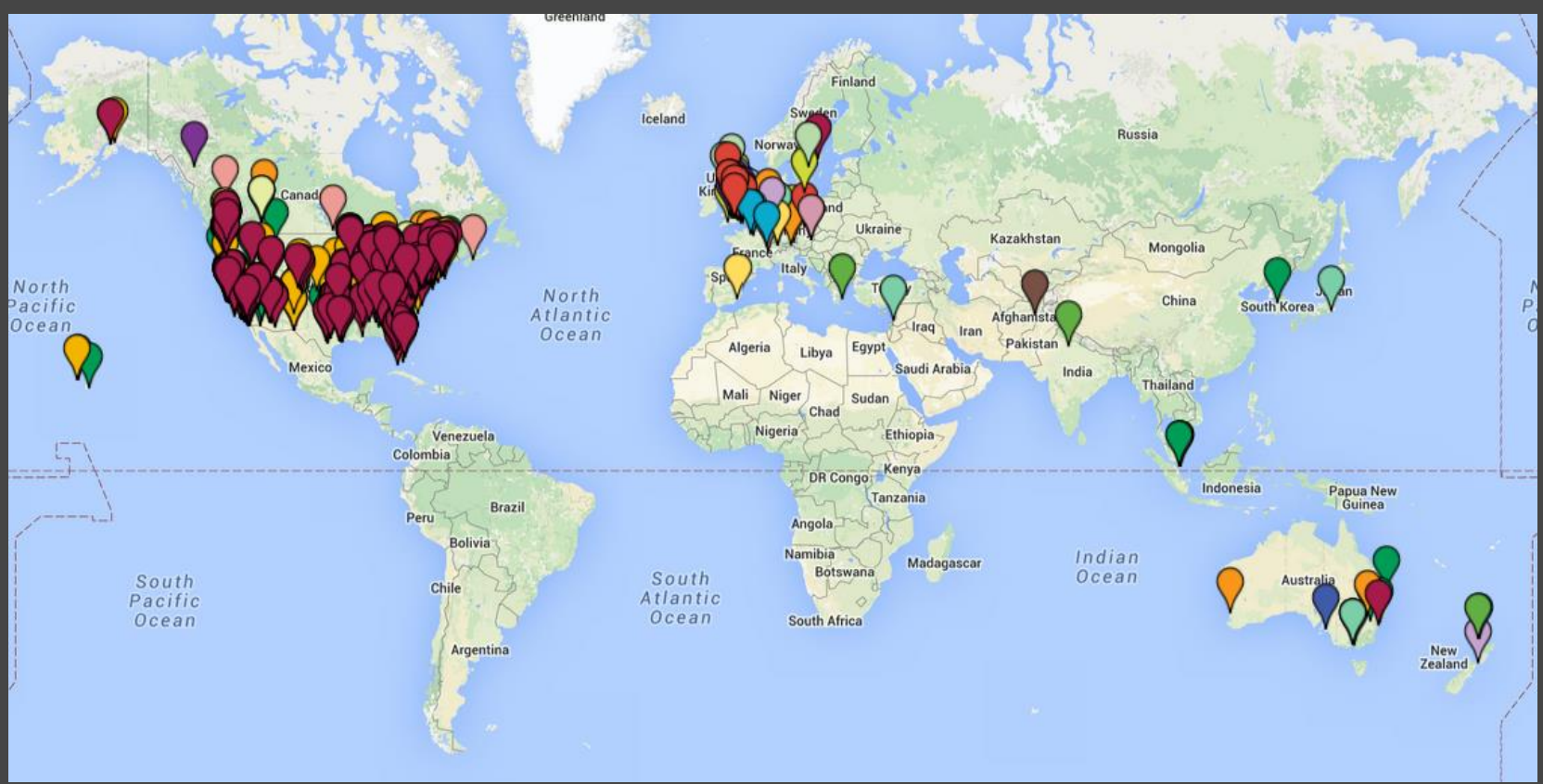
ISS-ABOVE

Crew Information Auto Updated



@ISSAboveYou

75K Tweets have been sent by ISS-Above devices to indicate the ISS has passed "close" to a users location



Over 900 locations worldwide

Results

Survey responses from ISS-Above users

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 mind-blowing to have the ability to see the Earth from space as it is at that moment in time.

I am a Middle School teacher and have the Raspberry Pi attached to a LCD mounted on my wall. It's a great way to integrate science and geography.

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

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.

It is 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!



<http://issabove.com>

*The ISS-Above is not endorsed by NASA, the Raspberry Pi Foundation or Ustream
All data including HDEV content is accessed using methods available to the public.