

# 15 Habitable Planets Found Near Our Solar System

TOKYO: Scientists have discovered 15 new planets -- including one 'super-Earth' that could harbour liquid water -- orbiting small, cool stars near our solar system.

The stars, known as red dwarfs, are of interest for studies of planetary formation and evolution, said the team led by Teruyuki Hirano from the Tokyo Institute of Technology. "Red dwarf systems, especially coolest red dwarfs, are just beginning to be investigated, so they are very exciting targets for future exoplanet research," Hirano said.

One of the brightest red dwarfs -- K2-155 that is around 200 light years away from Earth -- has three transiting "super-Earths", which are slightly bigger than our own planet.

Of those three "super-Earths", the outermost planet, K2-155d,



with a radius 1.6 times that of Earth, could be within the host star's habitable zone, the researchers noted in the study appeared in The Astronomical Journal. The team found that K2-155d could potentially have liquid water on its surface based on

three-dimensional global climate simulations.

To reach this conclusion, the team sifted through data from NASA Kepler spacecraft's second mission, K2, and follow-up observations using ground-based telescopes, including the Subaru

Telescope in Hawaii and the Nordic Optical Telescope (NOT) in Spain. A more precise estimate of the radius and temperature of the K2-155 star would be needed to conclude definitively whether K2-155d is habitable.

Achieving such precision

would require further studies, for example, using interferometric techniques, the researchers said.

The researchers also investigated the relationship between planet radius and metallicity of the host star.

"Large planets are only discovered around metal-rich stars and what we found was consistent with our predictions. The few planets with a radius about three times that of Earth were found orbiting the most metal-rich red dwarfs," Hirano noted.

With the planned launch of NASA's Transiting Exoplanet Survey Satellite (TESS) in April this year, Hirano is hopeful that even more planets will be discovered.

"TESS is expected to find many candidate planets around bright stars closer to Earth," he said.

## Canadian Firm To Supply Special Equipment For SpaceX

QUEBEC CITY: Canadian company Creepex is about to deliver the first mechanic creeper specially designed to work and inspect the belly of Falcon 9 rockets produced by SpaceX.

After trying the Body-Guard creeper -- a patented Creepex product presented at the SEMA show in Las Vegas and presented by TV host Jay Leno on Jay Leno's Garage -- a SpaceX engineer has contacted the Quebec City based company to develop a specially designed and engineered creeper enabling their engineers to work and inspect comfortably the belly of their Falcon 9 rockets.

While the code name of the new device is URM (Under Rocket Mobility), its manoeuvrability and ease of adjustment make it fit for many other applications such as: aeronautical,



trains and subways, machinery, tunnel boring machines as well as any other industry that requires very precise and secure working positions.

About Creepex

Founded in 2011 by Erik Sieb and Andre Wagner, Creepex Inc. designs, manufactures and distributes innovative garage equipment, mainly mechanic creepers and its flagship model, the FastBack, awarded "2017 Best mechanic creeper" by P-Ten magazine. (Professional Tool & Equipment News)

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About SpaceX

SpaceX designs, manufactures and launches advanced rockets and spacecraft in Hawthorne California. SpaceX has gained worldwide attention for a series

of historic milestones. It is the only private company ever to return a spacecraft from low-Earth orbit, which it first accomplished in December 2010.

The company made history again in May 2012 when its Dragon spacecraft delivered cargo to and from the International Space Station.

In 2017, SpaceX successfully achieved the first reflight of an orbital class rocket. Recently, SpaceX has launched the most powerful rocket currently active, the Falcon Heavy, with a Tesla Roadster as payload to orbit Mars.

SpaceX has over 7000 employees working at facilities in Hawthorne California, McGregor, Texas and Cape Canaveral, Florida. Its majority shareholder is Elon Musk (Tesla, Neuralink, Solar city, The Boring Company).

## New Mobile Application Can Help Reduce Stroke Risk

London: Researchers have developed a new mobile application that can detect atrial fibrillation, a leading cause of stroke, and can timely prevent heart-related complications. Atrial fibrillation is an irregular and often rapid heart rate that can increase the risk of stroke, heart failure and other

heart-related complications.

Timely detection of atrial fibrillation is crucial for effective stroke prevention. "This is the first time that ordinary consumer electronics have achieved such reliable results that they can be actually beneficial for the patient's medical care," said co-au-

thor Juhani Airaksinen, Professor of Cardiology from Turku University Hospital in Finland.

"The results are remarkable as intermittent atrial fibrillation is not always detected even at the doctor's office," Airaksinen added. Detecting atrial fibrillation has been a worldwide medical chal-

lenge for years, but affordable solutions available for all have been lacking, the researcher added.

For the study, published in the journal Circulation, researchers studied 300 patients with heart problems, half of whom had atrial fibrillation.

The researchers managed to identify the patients with atrial fibrillation from the other group with a smartphone. The application developed at the Department of Future Technologies of the

University of Turku can detect patients with atrial fibrillation to upto 96 per cent accuracy, the researchers said.

"The results are also significant in that the group included different kinds of patients, some of whom had heart failure, coronary disease, and ventricular extrasystole at the same time," said Tero Koivisto from the Department of Future Technologies. The application has been under development for almost seven years.



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## Oculus GO VR Headset

SAN FRANCISCO: Facebook is mulling to launch its Oculus Go stand-alone Virtual Reality (VR) headset at its F8 developer conference, beginning May 1. The company first announced the device, which will sell for \$199 and up, in October 2017," Variety reported.

Oculus VR headset is based on the same software as Samsung's Gear VR headset which means that it will be out of the box offer access to thousands of VR games and 360-degree vid-

eo experiences, including apps from Netflix, HBO and Hulu. Unlike the Gear VR, it integrates a display and all of its computing power directly into the headset, doing away with the need to use a phone or PC for VR.

The \$199 variant of the device could come with a 32 GB of onboard storage, with Facebook selling a 64 GB version for a higher price. Unlike the company's pricier Oculus Rift headset, Oculus Go does not use any positional tracking technology.

## Apple Devices Said To Be Sending SOS Alerts

SAN FRANCISCO: Apple users have been complaining about their devices accidentally sending emergency SOS alerts to the police when worn or used in a wrong way, the media reported.

"If you sleep on your Apple Watch the wrong way, you might get a wake-up call from the police. That's what happened to Jason Rowley, who tweeted about the incident earlier this week. It's a problem for iPhones too, since the same alert can be triggered through the side button," The Verge reported late on Sunday.

"Using his watch as a sleep tracker, he ended up holding down the crown button to trigger an emergency call to the police, who showed up in his bedroom at

1 a.m.," the report added.

The man reportedly said that the police were friendly and helpful and "accustomed to WatchOS misdiagnoses" like this. The feature is called "Emergency SOS" which was rolled out as part of WatchOS 4 and iOS 11 OS.

It works when a user is in danger or otherwise in need of help. It is a potentially life-saving feature but errors are going to be more common than emergencies.

Meanwhile, several Apple users have been reporting about similar incidents on Twitter. A user named Colin Weir tweeted last week: "Apple Watch really needs a 'I'm changing bands please don't trigger emergency SOS or password wipe' mode."