

PLANETSPOTTING

CHaracterising ExOPlanets Satellite (CHEOPS)

NASA Infrared Telescope Facility (IRTF)

Wide-field Infrared Survey Explorer (WISE) Sat

Haleakala Observatory

WASP-South

Winer Observatory

KOINet

Atacama Large Millimeter Array (ALMA)

Mauna Kea Observatory

Acton Sky Portal Observatory

Transiting Exoplanet Survey Satellite (TESS)

KELT-North

Calar Alto Observatory

SuperWASP-South

SuperWASP-North

European Southern Observatory

KMTNet

KELT-South

Apache Point Observatory

Large Binocular Telescope Observatory

Multiple Facilities

Cerro Tololo Inter-American Observatory

K2

United Kingdom Infrared Telescope

Leoncito Astronomical Complex

KELT

HATSouth

Parkes Observatory

Roque de los Muchachos Observatory

Infrared Survey Facility

Qatar

Bohyunsan Optical Astronomical Observatory

Kepler

MEarth Project

Yunnan Astronomical Observatory

Teide Observatory

MOA

Las Campanas Observatory

CoRoT

SuperWASP

Xinglong Station

XO

Gemini Observatory

Spitzer Space Telescope

Palomar Observatory

Kitt Peak National Observatory

HATNet

Thueringer Landessternwarte Tautenburg

TrES

Subaru Telescope

McDonald Observatory

Paranal Observatory

Hubble Space Telescope

Okayama Astrophysical Observatory

OGLE

Anglo-Australian Telescope

La Silla Observatory

W. M. Keck Observatory

Fred Lawrence Whipple Observatory

Lick Observatory

Multiple Observatories

Haute-Provence Observatory

Arecibo Observatory

Oak Ridge Observatory

Since the first exoplanet was discovered in the late 1980s, more and more eyes have looked up and further, screening remote stellar systems for hidden planets, some of which may be just like ours. This bubble chart represents the 4905 exoplanets discovered to date, based on data provided by NASA. The facilities and the year of discovery provide its main structure. The red colour indicates planets that are larger than Earth. The blue colour represents exoplanets with a radius up to 1.1 times that of Earth. The size of a dot is in proportion to the planet's size. The larger the dot, the larger the planet. The transparency is based on the number of stars in the exoplanet's home system. The fainter the dot, the fewer the stars in the system. As the data is limited to the year of discovery, overlapping is inevitable. Zoom in to see in more detail!

A team of astronomers at the European Southern Observatory based in Chile discovered this little gem in our neighbouring solar system. Orbiting in the Goldilocks zone around a red dwarf star, it is believed that it could resemble Earth. It is also the closest exoplanet we know of, making it a good candidate for future robotic exoplanetary exploration.
 Given name: Proxima b
 Size: 1.08 Earth radius
 Distance: 4.2 ly
 Star system: Proxima Centauri
 Constellation: Centaurus
 Best visible: Southern sky, May, 9 pm

This pale blue dot is a rocky outerworld among the first exoplanets discovered. Unlike Proxima b, it is one of the creepiest, hence it was nicknamed 'Draugr', the old Norse word for undead. It orbits a pulsar and is bathed in the star's electromagnetic beams of radiation. Only the undead can survive in this desolate place!
 Given name: PSR B1257+12 b
 Size: 0.33 Earth radius
 Distance: 2300 ly
 Star system: PSR B1257+12
 Constellation: Virgo

discovery facility

1990 1995 2000 2005 2010 2015 2020

year of discovery