United Federation of Planets

Potential planet candidates for settling

SNTag

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Intro

The Kepler satellite has collected a myriad of information on planets.

The satellite was retired in 2018. It has been an important source of information on habitable planets in our galaxy.

When Humanity is ready to settle among the stars, the Kepler dataset can point out high-priority targets with habitable solar systems.

Very few planets meet the requirements for sustainable life (for example, exist in the Goldilocks zone)

Understanding the Application

This application will only identify preliminary planets.

Further investigation of planets will be needed in step 2 (iron composition, star composition, etc.). While this data is available, it is not investigated here.

The data can be combed for planets by their radius, distance from earth, and a ‘score’ that measures a variety of figures.

This application aims to rapidly identify planets for further investigation.

How-to

The data can be combed for planets by their radius, distance from earth, and a 'score' that measures a variety of figures.

Radius is measured using R_E This measure is relative to Earth's radius. planets with a radius 1.5 R_E are suspected to have an inhospitable atmosphere.

While we want hospitable planets, we need to find ones within a capable flight plan (measured in Parsecs).

The score is comprimised from a variety of factors. However, due to discrepincies in error, data processing, etc, it may be lacking. 1 is preferred, 0 is not.

Shiny application

This application is run from 1 file.

files are found here: shiny application