

Star System E-13

A large quadruple star system with a host of gas giants of varying compositions accompanied by a collection of rocky worlds and a massive amount of asteroids and small planetoids making the system incredibly resource rich if tricky to navigate.

System Information

The four stars are arranged in a double binary configuration with the two smaller, cooler stars orbiting a common centre of mass while the two larger, hotter stars orbit their own common centre of mass. The relatively close proximity of these two binary systems has allowed them to fall into a stable orbit with each other, forming the heart of the system.

The four stars are orbited by fifteen planetary bodies with long orbits that wouldn't be possible in a smaller star system. eight of which being gas giants of one variety or another. The abundance of material in the inner asteroid field, the outer asteroid field, and in small pockets of scattered material throughout the system suggest that at one point there may have been more planetary bodies in the system that did not survive to the present date.

The system is notable for an unusually high concentration of noble gasses which are present in conspicuous quantities on almost all of the planets in the system.

System Data

- System Name: E-13
- Quadruple system
- Stars: Orange main sequence dwarf, yellow dwarf main sequence, white main sequence, white main sequence
- Star Names: E-13a, E-13b, E-13c, E-13d
- Types: One K, One G, Two A
- Surface Temperatures: 5,240 K, 5,810 K, 10,800 K, 9870 K
- Average Mass (In comparison to earth's sun): 1.8
- Radiuses (In comparison to earth's sun): 0.8, 1.2, 3.1, 2.9
- Yerkes Luminosity: Type V
- Number of Planets: 15

Planetary Data

It is important to note that the distance from star is actually a distance from the outer portion of the system's stellar orbits. Due to the dynamic nature of the star system the actual distance from the planet to any given star can vary.

Inner Debris Field

Between the system's stars and the nearest planet is a large field of mineral rich asteroids suggesting the previous existence of other stellar bodies closer to the stars. Occupying a space between 5 and 6 AU from the outer orbit of stars the field is quite large and tends to filter the radiation of the stars creating an illusion similar to shimmering.

While the majority of the mass in the debris field is aligned with the stellar 'disk' of the system, there is a sizeable amount of material scattered in a near spherical distribution around the stars. The relative stability and infrequent impacts between the chunks of rock and ice suggest that the formation is quite old.

E-13 I

- Terrain: Terrestrial
- Atmosphere: Argon, Oxygen, Nitrogen, Helium, Neon
- Primary Composition: Carbon, Calcium, Lithium, Iron
- Moons: 2
- Distance From Star: 8.3AU

Notable Features

Curiously pristine. It is a medium sized terrestrial world orbited by a pair of small rocky moons. Its most notable features are tall mountain ranges and a topology that leaves all bodies of water on the planet land locked.

E-13 II

- Terrain: Barren World
- Atmosphere: Traces of hydrogen and neon
- Primary Composition: Silicon, Iron, Titanium, Carbon
- Moons: 5
- Distance From Star: 9.35AU

Notable Features

The surface of the fairly large planet is pockmarked with craters with a history suggesting multiple savage meteor impacts. As a result the planet retains only a trace atmosphere and a collection of malformed moons that may once have been the fragments of another celestial body.

E-13 III

- Terrain: Malformed World
- Atmosphere: Non-existent
- Primary Composition: Silicon, Titanium, Iridium
- Moons: 0
- Distance From Star: 10.47AU

Notable Features

Appears to have been shattered by some colossal force, it is roughly equivalent in mass to E-13 II. As a damaged sphere the ill fitting pieces grind against each other as it orbits leading to unstable seismic activity across the entire planet.

E-13 IV

- Terrain: Malformed Paradise Planet
- Atmosphere: Nitrogen, Oxygen, Neon,
- Primary Composition: Silicon, Copper, Aluminum, Carbon
- Moons: 3
- Distance From Star: 13.7AU

Notable Features

Features a “floating Continent” composition with an ocean surrounding the core. Covered in thriving plant life, many varieties of which have captured atmospheric neon using the gas to float and glow. Features a complex hydrosphere leading to frequent, though curiously gentle rainfall across the planet that serves to maintain a complex network of waterfalls, lakes, and rivers.

E-13 V

- Terrain: Barren World
- Atmosphere: Trace Neon on the surface, below ground there larger quantities of Neon along with Nitrogen, Oxygen, and the presence of organic compounds suggest some form of life.
- Primary Composition: Carbon, iron, copper,
- Moons: 1
- Distance From Star: 17.1AU

Notable Features

While largely barren on the surface save for a trace atmosphere, the warmth of the planet partially due

to the tidal forces imparted by its large moon suggest a possible underground ecosystem.

E-13 VI

- Terrain: Barren Metallic
- Atmosphere: Traces of Argon and Krypton
- Primary Composition: Manganese, Molybdenum, Tungsten, Cobalt
- Moons: None
- Distance From Star: 25.5AU

Notable Features

Largely composed of an odd assortment of metals the planet exists as somewhat of an oddity, may have been a rogue planet captured by the system. Notably the planet features the most powerful electromagnetic field in the system.

E-13 VII

- Terrain: Gas Giant
- Primary Composition: Krypton, Xenon, Fluorine, Silicon
- Moons: None
- Distance From Star: 28AU

Notable Features

Notable immediately for being a gas giant without any moons, the planet's odd composition and suggestion of large quantities of silicates beneath the gas layer makes it notable among the planets of the system.

E-13 VIII

- Terrain: Gas Giant
- Primary Composition: Oxygen, Hydrogen, Sulphur, Chlorine, Xenon
- Moons: 15
- Distance From Star: 35.7AU

Notable Features

Large beautiful green and blue planetary rings composed of large quantities of lazurite and jadeite. Matching the rings the moons are muddled masses of greens and blues nestled among more common varieties of stone.

E-13 IX

- Terrain: Gas Giant
- Primary Composition: Helium, Nitrogen, Boron, Nitrogen, Iodine, Hafnium
- Moons: 36
- Distance From Star: 36.4AU

Notable Features

Features a small set of glittering planetary rings composed primarily of ice and metallic dust. The orbiting moons are notably metallic in composition though a few appear to be of similar composition to the moons of E-13 VIII suggesting a shared source.

E-13 X

- Terrain: Ice World
- Atmosphere: Nitrogen, Hydrogen, Oxygen, Neon
- Primary Composition: Aluminium, carbon, nickel, copper
- Moons: 12
- Distance From Star: 39.65AU

Notable Features

Fanning out from the equator are large beautiful planetary rings that shift in colour much like a sunset as the materials differ from the inner rings to the outer portions. There are a few channels carved in the rings due to the orbit of the planet's moons which has created a pattern in the rings themselves adding to the beauty.

Despite the rings present in orbit there are surprisingly few meteor impacts within the past few centuries implying that the planet has been relatively undisturbed for a time and that any ring material that would fall planet-side already has.

Should the planet be thawed it could potentially make for an oceanic paradise world.

E-13 XI

- Terrain: Gas Supergiant
- Primary Composition: Helium, Boron, Nitrogen, Iodine, Zirconium
- Moons: 14
- Distance From Star: 44.7AU

Notable Features

A supergiant with a healthy collection of moons of varied compositions, powerful electrical storms throughout the atmosphere produce near constant, randomized flashing in the atmosphere.

Intermediary Debris Field

Located between the eleventh and twelfth planets is another field of rocky, and icy planetary debris suggesting that there was at one time at least one celestial body in the ring of space. Dispersed ice crystals of varying elements and compounds litter the band forming nebula like clouds.

E-13 XII

- Terrain: Gas Giant
- Primary Composition: Nitrogen, Hydrogen, Oxygen, Neon, Gallium
- Moons: 17
- Distance From Star: 52.3AU

Notable Features

Notable for two of its moons which feature sizable surface deposits of gold.

E-13 XIII

- Terrain: Ice Giant
- Primary Composition: Hydrogen, Helium, Nitrogen, Xenon, Oxygen
- Moons: 27
- Distance From Star: 64AU

Notable Features

Notable for being the coldest and most stable of the gas giants in the system, its moons are notable for being metallic and relatively large.

E-13 XIV

- Terrain: Ice Supergiant
- Primary Composition: Oxygen, Nitrogen, Hydrogen, Argon, Neon
- Moons: 40
- Distance From Star: 75.5AU

Notable Features

Notable for having the most satellites in the system, also has a large quantity of metallic moons suggesting the capture of the remnants of a foreign body.

E-13 XV

- Terrain: Ice Giant
- Primary Composition: Oxygen, Nitrogen, Hydrogen, Neon
- Moons: 20
- Distance From Star: 80AU

Notable Features

Tidal interactions between the planet and it's many moons have allowed a curious balance of thermal activity below the surface of many moons. The presence of thick atmospheres containing gasses in breathable mixtures have created an odd ecology with primitive forms of plant life despite the distance from the stars in the system.

Outer Asteroid Field and Outer Orbital Belt.

Usually the first feature of the system encountered by a visiting starship, the outer field and belt contains countless micro asteroids; comets; asteroids; clouds of frozen materials and dusts; and a large number of dwarf planets in varying states of integrity. Closer to the heart of the system the debris field becomes more dense featuring broken chunks of rock and frozen ice sometimes larger than the dwarf planets that precede it.

A curious side effect of this field of rock and debris is that the entire system is banded by a large hill sphere like effect that prevents easy FTL access from the edge of the system forcing ships to navigate the outer debris field before jumping further in system or to come from the 'top' or 'bottom' of the system to avoid the obstacle.

OOO Notes

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