and SRON – the Netherlands Institute for Space Research.Ċ”Finding the signature of ionized neon in the spectra of about twenty star systems of different ages is quite exciting for us,” he adds.ĊAccording to Lahuis, the detection of ionized neon is particularly useful because it allows astronomers to track the gas content around young stars during the different stages of their development.ĊVery few chemical elements in the universe are found in their pure form. In the disks surrounding a young star, most elements either bond to form molecules, like water, or condense to a solid state, forming dust grains or ice. These reactions complicate the chemical ”picture” of planet formation around star. However, neon makes things simple. As one of chemistry’s ”noble elements,” neon does not easily make chemical bonds or form larger molecules. Lahuis notes that studying this gas in its pure form may lead to a better understanding of how planets form.ĊTracking Planet FormationĊAstronomers believe that planets form like snowballs over millions of years, as small dust grains clump together to form larger bodies. Some of these cosmic rocks then smash together to form rocky planets, like Earth, or the cores of gas giant planets like Jupiter. The more massive the planetary core is, the more gravity it