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Nota di contenuto	The Evolution of Red Dwarfs -- Gliese 581, a Planetary System 20 Light-years from Earth -- 'Super-Earths' -- The Development of Life -- Prospects for Sustained Evolution -- Surface Conditions on Super Earths -- Gliese 581 - the Next 400 Billion Years -- Comparison with the Evolution of Earth -- Red Dwarfs - the Final Bastions of Life?.
Sommario/riassunto	Gliese 581 is a red dwarf star some 20.3 light years from Earth. Red dwarfs are among the most numerous stars in the galaxy, and they sport diverse planetary systems. At magnitude 10, Gliese 581 is visible to amateur observers but does not stand out. So what makes this star so important? It is that professional observers have confirmed that it has at least four planets orbiting it, and in 2009, Planet d was described in the letters of The Astrophysical Journal as "the first confirmed exoplanet that could support Earth-like life." Under a Crimson Sun looks at the nature of red dwarf systems such as Gliese as potential homes for life. Realistically, what are prospects for life on these distant worlds? Could life evolve and survive there? How do these planetary surfaces and geology evolve? How would life on a red dwarf planet differ from life on Earth? And what are the implications for finding further habitable worlds in our galaxy? Stevenson provides readers with insight into the habitability of planets and how this changes as time progresses and the central star evolves. Explore with him in this engaging, fascinating book the possibilities for finding life, from bacteria to more complex and even intelligent organisms, on red

dwarf system planets.
