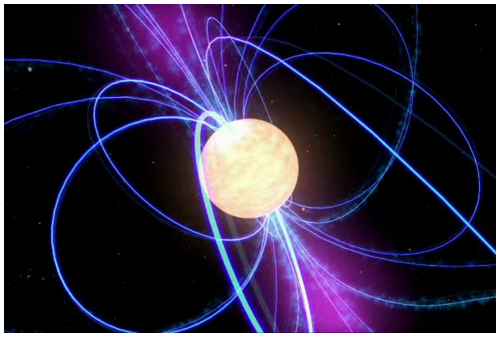

S1 - 17. ARECIBO, TELESCOPE IN THE JUNGLE

Director(s): Pierre-François DIDEK

Writer(s): Serge BRUNIER, Bruno BUCHER

At the heart of the Puerto Rican jungle, we discover giant radar antenna - the largest radio telescope in the world. From the fragile metal footbridge that spans the antenna of 305 meters in diameter, Serge Brunier scrutinizes the sky. This instrument unique in its kind permits to explore the depths of the universe and to study objects or celestial phenomena that can be observed with optical telescopes.
In fact, many stars do not just give off visible light. They also produce other forms of electromagnetic waves such as radio waves. By capturing and analyzing these signals, the astronomers in Arecibo make strange discoveries. Since the 1970s, they are watching out for Pulsars. These are remnants of dead stars of extreme density. They turn on themselves at breakneck speed, sweeping the cosmos with their powerful magnetic beam. Exploring these stars with a core of iron helps us to deepen our knowledge of matter and magnetism. But the Arecibo telescope is not just listening to the sky, it is also a fantastic radar capable of transmitting extremely powerful waves that reach planets or asteroids that pass close to the Earth and thus measurel their surface accurately.
Before leaving Arecibo, Serge tells us about the message that humanity sent with this antenna to the attention of hypothetical civilizations, one fine day in 1974. A bottle thrown into the cosmic seas containing all the hopes of humanity and that will need 25 000 years to reach its destination. We will have to wait quite a bit before we get an answer back...
AVAILABLE FOR VIEWING: French version only.

Categorie(s): Science & Environment, Collections - Series
Tag(s): Nature, Discovery/Adventure, Space, Astronomy

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