**A Euclid Ready for Launch 4 minute video**

| Images | Script (VO and on camera interviews) |
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| Euclid transport video  | VO: ESA’s Euclid space telescope is nearly ready for launch. The spacecraft arrived in Florida on 30 April for final tests and checks. |
| Montage:Exterior shot of ESOCFootage from B-roll | VO: For the team at ESA’s European Space Operations Centre in Darmstadt, Germany, this means that the most intense phase of their work is about to begin. |
| Andreas Rudolph\_EN.mp4Cut in with footage from: <https://www.esa.int/esatv/Videos/2023/01/Euclid_animation_B-Rolls/A_closer_look_at_the_Euclid_satellite> | Euclid is a cosmological mission looking back 10 billion years into the past, at the evolution of our Universe. So, in order to do this, you need very, very sensitive instrument.So, once we are in orbit, one of the things that Euclid is never allowed to do is to look with its telescope and its very, very sensitive instruments into the Sun.To make sure that doesn't happen, we have two things. First of all, we have a so-called sunshield, which is protecting us from the Sun as long as the spacecraft is pointed correctly. And the second thing is we have automatic protection mechanisms, which makes sure that whenever the Sun is approaching the telescope line of sight, we immediately switch into a fallback mode to make sure that it doesn't happen. |
| Montage from B-roll | VO: To build teamwork and expertise, the mission control team run simulations of the launch operations. At first, everything goes smoothly, but as the campaign continues, more and more things go wrong. |
| Tiago Loureiro\_EN.mp4Transition through more B-roll | In simulations, we face all sorts of problems, from failures of the computers, of people suddenly falling ill, or something as serious as a mouse being taped over, and then you cannot move it. We have a simulator that is very representative of the spacecraft. So, the interface we use to talk to the spacecraft is exactly the same that we use in reality. So, sitting there, it feels and looks exactly the same. |
| Tiago Loureiro\_EN.mp4Heading to L2 animation:<https://www.esa.int/esatv/Videos/2023/01/Euclid_animation_B-Rolls/Euclid_on_its_way_to_L2> | After launch, Euclid is heading to a point called the libration point 2 of the Sun-Earth-Moon system. …This is about three times the distance from the Earth to the Moon, so 1.5 million kilometres more or less. And it will take about 30 days – one month – to get there. …And L2 is special because it’s a point where you have the bright objects – the Sun, the Moon, the Earth – ‘behind’ the spacecraft. |
| Montage of science images.<https://www.esa.int/esatv/Videos/2023/01/Euclid_animation_B-Rolls/Euclid_scans_the_sky><https://www.esa.int/esatv/Videos/2023/01/Euclid_animation_B-Rolls/How_Euclid_scans_the_sky><https://www.esa.int/esatv/Videos/2023/01/Euclid_animation_B-Rolls/The_dark_cosmic_web> | VO: Euclid’s six-year mission will explore the so-called dark side of the Universe. Astronomers have discovered that 95% of the cosmos is made up of unknown forms of matter and energy known as ‘dark matter’ and ‘dark energy’. Euclid will map approximately 1.5 to 2 billion galaxies to look for the subtle effects that dark matter and dark energy have on the structure and expansion of the cosmos. Once the analysis is complete, vital clues about the behaviour and characteristics of dark matter and dark energy will be revealed. |
|  | VO: To perform this task as accurately as possible, the team must ensure that the telescope is not affected by the launch itself. |
| Andreas Rudolph\_EN.mp4Cover transition with animations and B-roll | The telescope is sitting upright under the fairing of the rocket before it is lifting off. So any particles that fall – or may fall – from the fairing into the telescope can immediately lead to degradation of the sensitivity of the instruments. And basically, what you do in order to not get particulate contamination is that you have a very, very clean and new fairing. So, this fairing for Euclid has very special requirements. It's a new fairing, it's not one which has been reused from a previous Falcon 9 flight. It also is very clean in order to make sure that we don't get any particulates into the telescope that may degrade it once in orbit. |
| Andreas Rudolph\_EN.mp4 | We make sure the telescope is very, very stable and very well calibrated because what we're looking for is really very difficult to measure, because otherwise we would have measured it already from ground. So, I think in a nutshell, those are the challenges we have here for Euclid. |