**ESA Preview 2023**

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| 10:00:00 | ESA leader |
| 10:00:08 | Title: ESA Preview 2023 |
| * Combined images of Solar orbiter, Cosmic kiss space walk set against storyblocks background aerial of firework celebrations above lima city SBV-339018027-4K / 2023 ©ESA * Combined images of ESA flag, Eartchcare, Andreas mogensen in training pool and Euclid against storyblocks background realistic sunrise seen from planet earth orbit SBV-346708663-4K / 2023 ©ESA * Stock footage: aerial-germany-berlin-june-2018-sunset-30mm-4k-inspire-2-prores-aerial-video-of-dow-SBV-332345924-4K ©Storyblocks (not to be reused for different video) * Stock footage: crowd-of-people-on-street-in-barcelona-spain-2-SBV-300075045-HD ©Storyblocks (not to be reused for different video) * Stock footage: a-young-man-and-woman-standing-in-the-office-working-together-consulting-a-project-SBV-326706128-4K ©Storyblocks (not to be reused for different video) | With 2022 behind us, the European Space Agency ESA readies itself with enthusiasm for the challenges and opportunities of 2023. Another year in which it will strive to support and realize Europe’s bold ambitions in space.  These ambitions and programmes do not only benefit the citizens of Europe but also the global community. |
| 10:00:30:19   * GV’s MTG-I1 Spacecraft, Thales Alenia Space - Cannes, France/ 2022 ©ESA (2shots) * GV’s MTG-I1 Launch, Europe’s Spaceport, French Huinana / 13/12/22 ©ESA/CNES/Airanespace * Animation MTG-I instrument opens / 2022 ©ESA/Mlabspace * Animation MTG-Iin orbit/ 2022 ©ESA/Mlabspace * Stock footage: man-with-an-umbrella-walking-down-the-street-in-the-rain-SBV-322352497-4K ©Storyblocks (not to be reused for different video) * Stock Footage: long-shot-of-a-jet-plane-taking-off-the-runway-that-is-covered-with-snow-SBV-337754821-4K ©Storyblocks (not to be reused for different video) * Stock Footage: small-icebergs-and-ice-floes-in-the-sea-near-iceland-SBV-346398505-4K ©Storyblocks (not to be reused for different video) * GV’s Sentinel-1C arrives in Cannes, Thales Alenia Space – Cannes, France / 2022 ©Thales Alenia Space (3shots) * Sentinel-1 satellite launch animation / unknown date ©ESA/ATG Medialab (2shots) * Composited video Copernicus with storyblocks stock footage /2023 ©ESA | A prime example of this are the six Meteosat Third Generation-satellites which ESA has developed with EUMETSAT. The first of this new generation weather satellites was launched at the end of 2022 and will soon deliver its first images. The MTG-I1 and its still to be launched siblings will allow for an earlier detection of storms and extreme weather events, serve to improve aviation safety, and contribute to our understand of Earth’s changing climate.  Monitoring our planet from space is also a task for the Copernicus Sentinel-1C satellite. This third Sentinel-1 satellite will be lifted into orbit on top of a Vega-C. It will replace the sentinel-1B, and will provide day-and-night radar imagery of the Earth’s surface. Strengthening the European Union’s Copernicus programme, which is the most expansive Earth observation programme in the world. |
| 10:01:32:06   * Cosmic animation / 2013©Euronews * Hublle space telescope digitized sky survey 2 – unknown date©ESA/NASA  Hubble sees galaxies galore (Credit: ESA/NASA)  * Euclid leaving the vacuum chamber, thales Alenia Space – Cannes, France/ 2022 ©ESA (2shots) * Galaxy cluster MACS J0717/ ©NASA/ESA * GV’s JUICE fully integrated, Airbus Defence & Space – Toulouse, France / 2022 ©ESA (2shot) * Animation Juice Ganymede flyby / 2022 ©ESA/Lightcurve Films * Animation Juice Calisto flyby / 2022 ©ESA/Lightcurve Films * Animation Juice Europa flyby / 2022 ©ESA/Lightcurve Films * Animation The orbits of the Galilean moons/ 2021 ©ESA/ATG medialab * GV’s Airane 5 launcher with JWS, Europe Spaceport – French Guiana / 2021 ©ESA/CNES/Airanespace (2shots) | To understand the Universe and our place in it, ESA will launch two new astronomy missions in 2023.  The innovative Euclid spacecraft is scheduled for launch in the summer of 2023 and has been designed to help us understand Dark Matter and Dark Energy. Two fundamental yet elusive forces governing the universe. But how, we do still not fully understand.  Earlier, in the spring, ESA’s Jupiter Icy Moons Explorer, JUICE, will be launched. The spacecraft will make detailed observations of the gas giant and its three large ocean-bearing moons: Ganymede, Calisto and Europa. By studying the wider Jupiter system in depth, it could help to better understand the population of gas giants across the Universe.  Juice will be launched on top of an Ariane 5 rocket - Europe’s soon to be retired but until then uncontested workhorse launcher. |
| 10:02:34:06   * TRANSFER OF THE LAUNCHER TO THE ARIANE 6 LAUNCH PAD, Europe Spaceport / July 2022 ©ESA/CNES/Airanespace (2shots) * ARIANE 6 CTLI - ASSEMBLY ULPM LLPM, Europe Spaceport / July 2022 ©ESA/CNES/Airanespace (2shots) * TRANSFER OF THE LAUNCHER TO THE ARIANE 6 LAUNCH PAD, Europe Spaceport / July 2022 ©ESA/CNES/Airanespace (2shots) * GV’s Inaugural flight of Vega-C, Europe Spaceport – Kourou, French Guiana / 13 july 2022 ©ESA/CNES/Airanespace * Ariane 6 launch animation / 2019 ©ESA (2shots) | After its retirement Ariane 5 is to be followed by the newly developed Ariane 6, which will make its maiden voyage later this year and for which preparations at Europe Spaceport are ongoing.  Ariane 6 combines Ariane 5’s reliability with a more flexible launcher configuration and more efficient assembly process. It also shares its P120C solid rocket motors with the Vega-C, ESA’s cost-efficient lightweight launcher.  With this varied and competitive launcher portfolio Europe consolidates its position in the global launcher market and ensures independent access to space. |
| 10:03:13:04   * ESA astronaut announcement- Paris, France / 23 november 2022 ©ESA (2shots) * Matthias Maurer at EAC, Neutral Buoyancy Facility – Cologne, Germany / 2022©ESA (2Shots) * Andreas Mogensen centrifuge Training, Wirght-Patterson Air Force Base – Ohio, USA / Sept 2022 ©ESA (2shots) * Andreas Mogensen flight to ISS / 2015 ©ESA/NASA * Andreas Mogensen POGO EVA traning, Johnson Space Center – Houston, Texas, USA / Sept 2022 ©ESA (2shots) * Andreas Mogensen EVA traning Neutral Bouyancy laboratory, Johnson Space Center – Houston, Texas, USA / Sept 2022 ©ESA (2shots) * Gv’s Cosmic Kiss Mission launch and docking, Cape Canaveral – Florida, USA / 11 November 2021 ©ESA/NASA/SpaceX (2shots) | 2023 will also be an important year for the new class of ESA career-astronauts. In the spring they will start their basic training preparing them for future missions to low Earth orbit, the Moon or even beyond.  Another ESA astronaut who is training is Danish ESA astronaut Andreas Mogensen. In 2015 Andreas became the first Dane in space and later this year, he will fly to the ISS for his first long-duration mission onboard the ISS. His arrival will re-establish European presence on the International Space Station since the departure of Samantha Cristoforetti. Andreas is also expected to be the first European to pilot a SpaceX dragon capsule. |
| 10:04:02:05   * ESA ESTEC drone footage – Noordwijk, the Netherlands / 2021 ©ESA * GV’s ESA ESTEC test centre – Noordwijk, The Netherlands / 2017 ©ESA * Euclid leaving the vacuum chamber, thales Alenia Space – Cannes, France/ 2022 ©ESA (2shots) * Space Rdier animation /2022 ©ESA (3shots) * GV’s Hera spacecraft, Avio – Colleferro, Italy / Sept 2022 ©ESA * Animation Hera: ESA's planetary defence mission /2019 ©ESA * Artemis stacked in VAB, Kennedy Space Center – Florida, USA / 2021 ©ESA * GV’s European Service Module-2 in the Operations and Checkout Centre, Kennedy Space Centre – Florida, USA / Okt 2021 ©ESA * Artemis-I highlights ESM moon flyby /2022 @ESA/NASA (3shots) * GV’s European Service Module-2 in the Operations and Checkout Centre, Kennedy Space Centre – Florida, USA / Okt 2021 ©ESA (2shots)ESM-2 Arriving at Kennedy Space Center – Florida, USA / 2021 @ESA * GV EarthCare solar array Deploymen Test, ESTEC – Noordwijk, The Netherlands / 2022 @ESA (3shots) * Earthcare Animatie / 2022 @ESA * Stock footage: aerial-above-the-beautiful-clouds-in-morning-sun-SBV-306791511-4K ©Storyblocks (not to be reused for different video) * Stock Footage: the-flight-above-mountains-on-the-picturesque-sunrise-background-hyperlapse-SBV-336689599-4K ©Storyblocks (not to be reused for different video) * Stock Footage: timelaps-of-moving-clouds-in-the-evening-moody-sky-and-sunset-lonely-oak-tree-in-a--SBV-324317395-4K ©Storyblocks (not to be reused for different video) * Stock Footage: flying-over-the-clouds-during-morning-sunrise-in-san-francisco-with-skyscrapers-ris-SBV-337740877-4K ©Storyblocks (not to be reused for different video) * Earthcare Animatie / 2022 @ESA | Meanwhile the development and testing of ESA missions will continue throughout the year with ESA working in collaboration with institutional partners and European industry. These range from drop tests for ESA’s return vehicle Space Rider to the continued development on Hera; the first probe to rendezvous with a binary asteroid system and Europe’s flagship planetary defender.  For humanspace flight ESA continues to collaborate with NASA on the Artemis programme producing the crucial European Service Module which supplies the Orion capsule with oxygen, water, nitrogen and power during its trip the Moon. After a successful maiden flight for Orion and ESM-1 on the Artemis-1, ESM-2 is prepared for the next flight and ESM-3 will soon ship to the States.  Another mission worth mentioning, and another symbol of international cooperation is the ESA/JAXA EarthCARE – Cloud, Aerosol and Radiation Explorer – mission. This new satellite is the most complex Earth explorer to date and will advance our understanding of the role that clouds and aerosols play in reflecting incident solar radiation back into space and trapping infrared radiation emitted from Earth's surface. It is scheduled for launch in 2024. |
| 10:05:33:03   * GV’s Hera spacecraft, Avio – Colleferro, Italy / Sept 2022 ©ESA (3shots) * ECSAT flags; Harwell, UK – unknown date ©ESA * ECSAT establishing shot; Harwell, UK – unknown date ©ESA * Stock Footage: multi-ethnic-business-group-meeting-using-computer-green-screen-researching-data-in-SBV-346808424-4K ©Storyblocks (not to be reused for different video) * Stock footage: business-people-attending-a-business-seminar-4k-SBV-346582791-4K ©Storyblocks (not to be reused for different video) * Stock footage: businesswoman-using-laptop-in-the-business-seminar-4k-SBV-346582860-4K ©Storyblocks (not to be reused for different video) * ESA Ministerial council 2022; Berlin, Germany – Nov 2022 ©ESA * Composited shots ESA ambition / 2023 ©ESA * ESA Ministerial council 2022; Berlin, Germany – Nov 2022 ©ESA (2shots) * Spacesummit Press conference – Toulouse, France / feb 2022 ©ESA * Spacestation animation, exploring new worlds video /2022 ©ESA * ESM animation, exploring new worlds video /2022 ©ESA * Gateway station animation, exploring new worlds video /2022 ©ESA * Mars Sample return mission animation, exploring new worlds video /2022 ©ESA * Space Rider animation, exploring new worlds video /2022 ©ESA | All these missions bring together the brightest minds and greatest skill across Europe and far beyond. To do this ESA can rely on support of its member states. By the end of the year another Space Summit will be held in Valencia, where under the leadership of Director General Josef Aschbacher, ESA will continue to push towards high ambitions for space in Europe just like it did in 2022 where the ministerial council in Paris rallied behind the European Space Agency with an increased budget. The plans and missions laid out by ESA at this Summit 2023 might echo for years and bring a bright future for space in Europe. |
|  | B-roll |
|  | MTG-I launch and deployment animations  2022  ©ESA/Mlabspace |
|  | JUICE animation compilation  Jupiter system tour and flyby of Calisto, Ganymede and Europa  2022  ©ESA/Lightcurve Films |
|  | Earthcare animation  2022  ©ESA/ATG Medialab |
|  | ESA END Credits |
|  | END |