**PREVIEW 2019**

**With 2019 rapidly approaching ESA is looking forward to another interesting year in space. ESA Astronaut Luca Parmitano return to the ISS and in science Cheops to look for exoplanets, while the EDRS-C satellite will start the era of superfast data in space. In Kourou an upgraded Vega should lift-off for the first time and at a ministerial conference in November ESA space19+ vision will be submitted.**

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| 10:00:00 | ESA leader |
| 10:00:10 | Title: **Preview 2019** |
| * EXT. ISS Timelapse of progress launch by A. Gerst – ESA -2018 (1shot) * INT. ISS Luca Parmitano during Volare Mission – ESA – 2013 (1 shot) * INT. Kenndy Space center Orion Mock-up L. Parmitano, T. Peake, M. Maurer – ESA – 2018 (1 Shot) * ANIMATION. Beyond Logo – 2018 -ESA * INT. Kenndy Space center Orion Mock-up L. Parmitano, T. Peake, M. Maurer – ESA – 2018 (1 Shot) * INT. Training L. Parmitano – 2018- ESA (1 Shot) * EXT. Alexander Gerst Soyuz Launch – Baikonur, Kazachstan – Roscosmos – June 2018 (1 shot) * INT. Alexander Gerst Soyuz Launch – Roscosmos – June 2018 (1shot) * EXT. ISS Soyuz approach – 2018 – ESA/NASA (1Shot) * INT. Alexander Skvortsov Baikonur Cosmodrome, Kazachstan – Unknown date – Roscosmos (1Shot) * EXT. ISS as seen from spaceshuttle – unknown date – NASA (1Shot) | In 2019 ESA’s presence in space will continue with a second long duration mission for Italian astronaut Luca Parmitano aboard the International Space Station, ISS. During the second half of the mission, which is named ‘Beyond’ Luca will become the third ESA astronaut to serve as commander of the ISS and the first Italian to do so. He will launch on a Soyuz alongside NASA-astronaut Andrew Morgan and Russian cosmonaut Alexander Skvortsov from Baikonur this summer |
| 10:00:44:20   * EXT. Kennedy Space Center, FL, USA – 2018 – NASA (2 shots) * INT. Orion capsule in NASA Cleanroom – Kennedy Space Center, FL, USA – NASA – 2018 (1shot) * INT. Kennedy Space Center Orion Mock-up L. Parmitano, T. Peake, M. Maurer – ESA – 2018 (3 Shots) * INT. ESM in NASA Cleanroom – Kennedy Space Center, FL, USA – NASA – 2018 (1shot) * ANIMATION. Orion spacecraft in flight – NASA – 2017 (2Shots) | In parallel preparations for the Orion Multi-Purpose Crew Vehicle are underway at Kennedy Space Centre, in Florida. This will be NASA’s new capsule for deep space exploration. In this project NASA has entrusted ESA with the development of a critical element for the Orion Spacecraft: its service module. The European Service Module will provide propulsion, power and cooling for the capsule during its first unmanned trip around the moon in 2020. |
| 10:01:19:18   * INT. Cheops test, RUAG Space, Switserland – 2016 – ESA (2shots) * ANIMATION. CHEOPS in Orbit – 2017 – ESA * ANIMATION. Stars and exoplanets – 2017 – ESA (4Shots) | In Autumn a new science mission called Cheops, or CHaracterising ExoPlanet, will be launched from Kourou on top of a Soyuz.  It is the first mission dedicated **to studying**exoplanets with ultra-high precision photometry on bright stars already known to host such planets. CHEOPS will measure the precise sizes of planets larger than Earth and smaller than **Saturn in order to determine their density,**further enabling studies of their internal structure, composition, formation and evolution. |
| 10:01:52:08   * INT. EDRS-C in OHB Cleanroom – OHB, Bremen, Germany – 2017 – ESA (3Shots) * ANIMATION. EDRS in space – 2015 - ESA * STILL. AIS illustration – unknown date – unknown origin * EXT. Ship at sea – 2017 - Euronews * INT. Italian coastguard office screen insert – 2017 – Euronews * ANIMATION. Spacebus Neo Satellite – 2018 - Thales Alenia Space/Master Image Programmes * STILL. Eutelsat Quantum – unknown date – Eutelsat * ANIMATION. Eutelsat Quantum – 2018 - Eutelsat | For telecom, several innovative projects in partnership with industry and satellite operators will be launched. EDRS-C will complete the European Data Relay System this summer. This Airbus SpaceDataHighway uses laser communications to transmit Big Data to Earth in near-real time.  LuxSpace's automatic identification system microsatellite will provide ship detection and maritime anti-collision services, while the first all-electric Spacebus Neo platform with Thales Alenia Space will supply broadband to Europe and Africa. Eutelsat Quantum will mark a first, as the world's only software-defined satellite. |
| 10:02:41:12   * EXT. Ariane 5 launch - Arianespace, Kourou French-Guiana – unknown date -ESA (2 shots) * EXT. Aeolus Vega launch – Arianespace Kourou, French Guiana – ESA - August 2018 (2shot) * STILL. SSMS dispenser artist impression – ESA (1shot) * EXT. Arianespace, Kourou, French-Guiana – 2017 – ESA (2shots) * EXT. Vega Gantry and launchpad – Arianespace, Kourou , French-Guiana – 2018 – ESA (1shot) * ANIMATION. VEGA-C Launch – 2018 – ESA (1Shot) * EXT. P120C test firing – Arianespace, Kourou French-Guiana – July 2018 – ESA (1shot) * ANIMATION Ariane 6 and Vega-C Sharing P10C booster – 2018 – ESA (1Shot) | Meanwhile ESA continues to secure independent access to space for Europe.  With a first flight of the Small Satellites Mission Service dispenser on a Vega rocket, ESA will demonstrate the capacity to launch multiple micro satellites together for both institutional and commercial needs.  At the European Spaceport in French Guiana, preparation is underway for the first launch of Vega C, a version of the Vega rocket with enhanced payload capacity.  It will use a new and more powerful first stage,: the P120C. This same motor will also be used as solid rocket boosters for Ariane 6, the future European heavy-lift launch. |
| 10:03:31:00   * ANIMATION. ARIANE 6 on launchpad – 2017 – Arianespace (3shots) * STILL Space19+ logo – ESA – 2018 (1Shot) * INT. Cleanroom with James Webb Space telescope – 2018 – ESA/NASA * ANIMATION. IRIS system – 2018 – ESA * EXT. Person using satellite services – unknown date – ESA * ANIMATION. ARIANE 6 launch – 2017 – Arianespace (1shots) * ANIMATION. ESA Moonlander – 2016 - ESA | With a consolidated space transportation system that will allow to launch any satellite on any orbit ESA can envisage to go further in space.  This will be discussed in November during Space19 +, ESA’s Council at ministerial level, in Seville, Spain.  ESA will propose to its Member states a complete portfolio: Science and Exploration, Space safety and security, Applications, and Access to space. With Space19+ the European Space Agency has the ambition to get the means for a bold future for a strong Europe in space. |
| **10:04:15:02** | **B-ROLL** |
| * INT. Kenndy Space Center Orion Mock-up L. Parmitano, T. Peake, M. Maurer – ESA – 2018 | **GV's ESA Astronauts training**  **Tim Peake, Matthias Maurer, Luca Parmitano**  **at Orion Capsule Mock up**  **Johnson Space Center, Houston, Texas, USA**  **April 2017** |
| 10:06:15:17   * INT. Cheops test, RUAG Space, Switserland – 2016 – ESA | **GV's CHEOPS in cleanroom**  **University of Bern, Switzerland**  **ESA** |
| 10:08:12:07   * ANIMATION. Orion spacecraft in flight – NASA – 2017 | **Animation Orion and ESM flight around the moon**  **NASA** |
| 10:09:56:20   * ANIMATION. ARIANE 6 – 2017 – Arianespace | **Animation Ariane 6**  **ArianeGroup** |
| 10:11:57:01   * ANIMATION. EDRS in space – 2015 - ESA | **EDRS Animations**  **ESA** |
| 10:14:57:04 | **END** |