Highlights Mid-2017

The Paris Airshow is the occasion to look back at the past year and at the European space agency ESA achievements these last months. Indeed, the second half of 2016 and the first half of 2017 marked the end of some historic missions, milestones for new breakthrough missions and a successful ministerial conference where Europe’s space programmes were reinforced for the future.

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| 10:00:00 | ESA leader |
| 10:00:10 | Title: Highlights Mid-2017 |
| 10:00:10* Animation: Rosetta in space, approaching and landing on comet P67 – ESA –2016
* Stills: Philae on comet P67 as seen by Rosetta – ESA -2016
* Animation: Comet orbiting the sun – ESA -2016
* Shot of comet P67
* Animation: beauty shot of Rosetta passing the sun.
 | After an adventure which has lasted more than a decade, September 30th 2016 marked the end of ESA’s comet chaser Rosetta as the spacecraft made a grand finale with a controlled landing on the comet Churyumov–Gerasimenko. Only two weeks earlier Rosetta had managed to locate its lost lander Philae as a farewell present. New, out of this world images were obtained and the data gathered by Rosetta will be studied for years to come. It was the first time a full cycle of a comet orbiting the sun was observed as it was accompanied by a spacecraft while its activity changed from dormant to highly active and back to sleep again. |
| 10:00:48* Animations: ExoMars, arriving at Mars, TGO in orbit, orbital paths TGO
* Animations: ExoMars uncoupling of Schiaparelli lander, descent and parachute deployment – ESA – 2016
* Animations: EXOMARS 2020 Rover on mars – ESA – 2016
 | Another solar system mission was ExoMars.The mission was launched in March 2016 and in October it arrived at the red planet. The mission consisted of two elements. The first one is the Trace Gas Orbiter, which was placed successfully into orbit around Mars and has completed many calibration tests since. Now it is aerobraking as to achieve a circular orbit by spring next year.The Second element was the Schiaparelli Mars lander. It journeyed to Mars with the orbiter, but did not land softly onto the planet’s surface after a computer error lead to a wrong altitude calculation, causing the parachute to deploy prematurely.However, the lander demonstrator collected almost all of its expected data before the impact and in doing so provides crucial knowledge for the preparation of the upcoming ExoMars 2020 mission when this time ESA and Roscosmos will send a rover on the surface of mars to search for past or present signs of life.  |
| 10:01:44* EXT. Launch Ariane 5 of Galileo 15-18 – Ariane Space, Kourou, French-Guiana – ESA – 17/11/2016
* Animation: Galileo constellation
* INT. Galileo initial services announcement – Brussels, Belgium – EC – 15/12/2016
* EXT cityscapes – Lucern, Switzerland – ESA – DEC 2016
* INT. ESA Ministerial – Lucerne, Switzerland – ESA- Dec. 2016
 | Back to Earth now with Galileo, Europe's own satellite navigation system. Last November ESA launched 4 Galileo satellites for the first time on top of an Ariane 5. Now 18 Galileo satellites are on orbit and in December Galileo initial services started meaning Galileo is operational and can be used. A Major achievement for the European commission and ESA. Then, in early December, during the ministerial council in the Swiss city of Lucerne, the Ministers in charge of Space representing the Member States of ESA agreed to further endorse European Navigation approving an Innovation and Support Programme based on ESA’s expertise for consolidating and improving Europe ´s positioning satellite system.  |
| 10:02:32* INT. ESA Ministerial – Lucerne, Switzerland – ESA- Dec. 2016
* Animation: Ariane 6 lift-off – ESA- June 2017
* EXT. Ariane 6 Launch pad construction – Ariane Space, Kourou, French-Guiana – ESA – May 2017
* EXT. ISS in space – ESA – unknown dates
* INT. Thomas Pesquet at ISS – ESA – 2016-2017
* INT. Thomas Pesquet Departure for ISS – Baikonour, Kazachstan - ESA – Nov. 2016
* INT. Thomas Pesquet in Soyuz – ESA – Nov. 2016
* EXT. Soyuz ISS docking – ESA- Nov. 2016
* INT. Thomas Pesquet at ISS – ESA – 2016-2017
* EXT. Thomas Pesquet EVA at ISS – ESA – 2016-2017
* INT. Paolo Nespoli Training – unknown location – unknown date
 | In Lucerne Ministers also emphasized the importance of Europe’s independent access to space. Even before the conference the full development of Ariane 6 and Vega C had already been confirmed. Ariane 6’s first flight is planned for 2020 and the building of its launch pad is underway in Kourou.At this conference further support for the international space station, ISS, until 2024 was also agreed upon. At this time French ESA astronaut Thomas Pesquet had recently begun his stay at the ISS for ESA’s 9th long duration mission. Launched to the ISS on the 17th of November 2016 he has become the 10th Frenchman in space. During his 196 days stay Pesquet performed 100 60 scientific experiments in many domains and made two spacewalks outside the ISS. He has just returned to earth on the 2nd of June. By the end of July Italian astronaut Paolo Nespoli will return to the iSS for the third time. It will be another long duration mission for the Italian Space Agency and ESA. |
| 10:03:43* INT. Thomas Pesquet at ISS Cupola – ESA – 2016-2017
* Animation: Globe with sentinel satellites – ESA – 2016
* INT. Sentinel-2B in cleanroom – ESTEC, Noordwijk, the Netherlands – ESA- 2016
* Animation: Sentinel-2 scanning in orbit – ESA – 2016
* Animation: Sentinel-2 in orbit, closer up of multispectral imager and data transmission – ESA -2016
* INT. Office – ESA - 2016
 | Just like the astronauts aboard the ISS enjoying the view of our planet the Sentinel Earth Observation satellites are monitoring earth in particular as part of the European union and ESA’s Copernicus programme. On march 7 ESA launched Sentinel-2B on a Vega Rocket from Kourou and it joined its twin satellite in orbit. Both Sentinel 2 carry a wide-swath high-resolution multispectral imager offering a fresh perspective on land usage and vegetation with an improved revisit time for surface area of only 5 days. And users are looking forward to mapping global land cover at an unprecedented 10 m resolution . |
| 10:04:23* EXT. Hispasat 36W-1 launch – Ariane Space, Kourou, French-Guiana – ESA- 27/01/2017
* Animation: SmallGeo unveiling – ESA -2016
* Animations – Hispasat 36W-1 in orbit – ESA - 2016
 | In January, also from Europe ´space port in French-Guiana Hispasat 36W-1 was launched on a Soyuz. This telecommunications satellite was the first in orbit to be based upon ESA’s SmallGEO platform. SmallGEO is Europe’s response for flexible modular telecom satellite platforms. This is a good illustration of the solid partnership between ESA and the European Industry to make sure Europe is always ahead providing the best Space technology. |
| 10:04:58 | BROLL |
| 10:04:58 | **Ariane 6 – Animations – ESA – June 2017** |
| 10:06:21 | **Exomars - Animations – ESA - 2016** |
| 10:10:57 | **SmallGeo – Animations – ESA 2016** |
| 10:12:58 | **Rosetta Descent – Animations – ESA - 2016** |
| 10:14:03 | END |