SENTINEL-3B VNR

Intro text for web

In April 2018 the Sentinel-3B earth observation satellite will be launched into orbit form the Plesetsk cosmodrome in northern Russia. On orbit it will join its twin brother Sentinel-3A and become part of Copernicus, the European system monitoring our planet.

Sentinel-3B will improve our understanding of Earth, in particular oceans and land coverage, providing operational services to many users on the ground.

This A & B roll shows Sentinel-3B in preparation before being shipped to Russia. It includes interviews with Bruno Berruti (Sentinel 3 Project Manager, ESA) in English andItalian, Susanne Mecklenburg (Sentinel 3 Mission Manager, ESA ) in English and German**,** Craig Donlon (Sentinel 3 Mission Scientist, ESA) in English, Kristof Gantois (Sentinel 3 Engineering and AIV Manager, ESA) in Dutch and Jean-Francois Flamand (Sentinel 3 Product Assurance and Safety Manager, ESA) in French**.**

|  |  |
| --- | --- |
| Image | Text |
| **10:00:00:00** | **ESA Leader + title: Sentinel-3B VNR** |
| 10:00:10:00   * EXT. Shot of earth from ISS – Unknown date – NASA/ESA * STILL. Sentinel-3A image of France – 23/06/2017 – ESA * ANIMATION. Animated world map composed of Sentinel-3A images visualising change in chlorophyll levels in vegetation – 06/07/2017 – ESA * EXT. Aerial of ochard in bloom- unknown date – Videoblocks * EXT. Close-up of magnolia flower – unknown date – videoblocks * EXT. Sentinel-3A launch, Plesetsk Cosmodrome – Russia – 16/02/2016 – ESA * ANIMATION. Sentinel-3 fly-by – 2015 – ESA * ANIMATION. Sentinel-3 scanning earth surface temperature – 2016 – ESA | Earth observation from space allows us to view earth in a completely different way, helping us to better understand our planet.  For example, data provided by the Sentinel-3A satellite is used to measure the changing amounts of chlorophyll in vegetation. Thusly visualising the progress of spring greening in the Northern hemisphere.  Launched in 2016, the Sentinel-3A satellite gathers data on land cover, vegetation health and the oceans. Its unique information already is the source for several services on the ground within Copernicus, the European Commission’s programme for monitoring Earth. |
| 10:00:48:11   * ITW. Susanne Mecklenburg – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Susanne Mecklenburg – Sentinel-3 Mission manager, ESA**  The sentinel-3 mission actually is a very versatile mission in the sense that it serves a large variety of different Copernicus services. So we are not just working with the marine environment services. We are also working with the land, with the atmosphere and with the climate services. The marine services is probably the most developed for the moment it is already using data over the ocean, in particular the ocean colour data which tells us something about the marine eco system, about the health of the sea and can basically also predict something like harmful algal blooms. |
| 10:01:24:02   * ANIMATION. Sentinel-3 delivery on orbit, roll, solar panel unfolding – 2015 – ESA * ANIMATION. Sentinel-3 earth Colour scanning – 2016 – ESA * EXT. Aerial of sea surface – unknown date – Videoblocks * EXT. Aerial of waves rolling in on beach – unknown date – Videoblocks * EXT. Aerial of sea ice, Greenland – 2016 -Danish Meteorological Institute | Soon these services will be further enhanced as Sentinel-3B will join its twin brother Sentinel-3A on polar orbit. Depending on the instrument, the pair of Sentinel 3 satellites will provide global coverage every two days, with data available for users in near real time.  Sentinel-3 primarily focusses on our oceans. It measures the temperature, colour and height of the sea surface as well as sea ice thickness. These measurements are needed to study changes in sea level, marine pollution and biological productivity. Already Sentinel-3A has yielded interesting results. |
| 10:02:04:03   * ITW. Craig Donlon – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Craig Donlon – Sentinel-3 Mission Scientist, ESA**  We learned a lot. We have scientists working in Europe and all over in the international operational laboratories as well as in the research institutes using satellite data from Sentinel-3 together with other instruments on other satellites that address a whole variety of different questions. For example the great barrier reef, sentinel-3 sea and land surface radiometer is providing us with the best sea surface temperatures in the world and these are helping us understand coral bleaching. And together with the OLCI-instrument we can look at the ocean colour and how the marine productivity is responding to changes in the climate. |
| 10:02:42:12   * ANIMATION. Sentinel-3 technical view – 2016 – ESA * INT. GV’s Sentinel-3B – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | Sentinel-3 is the most complex of all sentinel missions, carrying no lees than 4 instruments that work in synergy: the Sea and Land Surface Temperature Radiometer - SLSTR, the Ocean and Land Colour Instrument - OLCI , a dual-frequency synthetic aperture radar altimeter - SRAL and dual-channel microwave radiometer –MWR.  The Sentinel 3 mission is a collaboration between ESA, the European Commission and Eumetsat, the European organisation for the exploitation of meteorological satellites.  The mission is jointly managed by ESA and Eumetsat, with ESA processing the land products for Copernicus services and Eumetsat the marine products.  Being an operational mission Sentinel 3 will last until 2040 at least so ESA is already preparing the future with new sentinel-3 satellites. |
| 10:03:36:12   * ITW. Bruno Berruti – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Bruno Berruti – Sentinel-3 Project manager, ESA**  So A and now B will be in space soon. The C and D model which are a replica of this one are under manufacturing now and will be completed by the end of the decade. And they are excepted to be launched in a 2023-24 timeframe to cover basically the sentinel-3 mission until 2030 but already now we are starting working on the next sentinel 3 generation, we call the next generation. Which is suppost to take over this mission after 2030. |
| 10:04:04:21   * STILL. Sentinel-3A image of Calefornia forest fires – 11/10/2017 – ESA * STILL. Sentinel-3A image of Hurricane Ophelia forest fires – 17/10/2017 – ESA * ANIMATION. Animated world map composed of Sentinel-3A images visualising earths temperature – 06/07/2017 – ESA * ANIMATION. Sentinel-3 microwave radiometer scanning – 2017 – ESA * ANIMATED STILL. Copernicus Logo – 2018 – ESA * ANIMATION. Sentinel-3 fly-by – 2015 – ESA | Whether it’s monitoring forest fires blazing through California, watching hurricanes develop in the ocean or sensing the Earths heat. The Sentinel-3 mission has already provided a wealth of data and imagery to Copernicus, the most ambitious Earth observation programme to date and with Sentinel-3B soon on orbit this wealth can only increase. |
| **10:04:27** | **B-Roll** |
| ITW. Susanne Mecklenburg – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Susanne Mecklenburg – Sentinel-3 Mission manager, ESA - ENGLISH**   * Different applications of sentinel-3 data |
| 10:06:25  ITW. Susanne Mecklenburg – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Susanne Mecklenburg – Sentinel-3 Mission manager, ESA - German**   * Different applications of sentinel-3 data |
| 10:09:01  ITW. Bruno Berruti – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Bruno Berruti – Sentinel-3 Project manager, ESA - ENGLISH**   * The future of the Sentinel-3 mission |
| 10:10:19  ITW. Bruno Berruti – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Bruno Berruti – Sentinel-3 Project manager, ESA – Italian**   * The future of the Sentinel-3 mission |
| 10:11:45  ITW. Kristof Gantois – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Kristof Gantois – Sentinel 3 Engineering and AIV Manager, ESA - Dutch**   * The technical achievement of Sentinel-3 |
| 10:13:13  ITW. Jean-Francois Flamand – Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **ITW Jean-Francois Flamand - Sentinel 3 Product Assurance and Safety Manager, ESA - French**   * What does sentinel-3 do? |
| 10:14:01  Thales-Alenia Cleanroom, Cannes, FRANCE – 30/01/2018 -ESA | **GV’s Sentinel-3B in cleanroom** |
| **10:15:02** | **END** |