**Copernicus Sentinel-6 Michael Freilich: Preparing for launch (FINAL)**

[UPDATE INTRO AS NECESSARY BEFORE TX]

A European satellite built to carry out precise measurements of sea level changes has arrived in California in preparation for launch. The Sentinel-6 Michael Freilich satellite forms part of the European Union’s Copernicus Earth Observation programme and will employ radar to map sea surface topography.

The mission will be used to monitor the height of the sea surface to understand long-term change. It will also measure wave height and wind speed. The satellite will provide fundamental data for climate science, policy-making and protecting the 600 million people who live in vulnerable coastal areas.

Data are provided to Copernicus services in near-real time to improve marine and weather forecasts used by maritime and coastal communities.

The mission is a collaboration between ESA, the European Commission, EUMETSAT, NASA and NOAA, with support from the French Space Agency CNES.

It is named Michael Freilich after NASA’s former Director of Earth Science and is scheduled for launch on 10 November on a SpaceX Falcon 9 rocket from the Vandenberg Air Force Base.

This A-roll contains Copernicus Sentinel-2 images of the Maldives, new in-orbit animations and clean-room footage from testing in Germany.

**A-ROLL**

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| **Pictures and notes for editor** | **Script** |
| 10:00:10  Maldives from Sentinel-2 | The Maldives…as seen by Sentinel-2.  Made up of some 1200 islands in the Indian Ocean, the nation hosts a rich marine ecosystem, provides a popular holiday destination and is home to more than half a million people.  But with most of the country barely above sea level, it could be lost forever. |
| 10:00:32  Ice images – Antarctic, Greenland and satellite images - videoblock stock images | As the world warms, due to climate change, water once locked in ice sheets is melting. |

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| 10:00:43  Sea level rise animation  <https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-62/A_rising_threat>  City stock images - videoblock stock images | 25 years of satellite data reveals that sea levels have not only risen but the rate is increasing.  Scientists predict this extra water – up to a metre by the end of the century –could put thousands of coastal communities, major cities and hundreds of millions of people around the world, including in Europe, at risk. |
| 10:01:01  Sentinel-6 clean room – IABG, Germany November 2019 | Equipped with a radar altimeter [BRITISH PRON], Sentinel-6 will make the most accurate measurements yet of sea level.  Seen here during final testing in Germany at the end of 2019, it will provide an internationally agreed reference for all other satellite altimeter missions that measure the ocean surface.  An identical second Sentinel-6 satellite will be launched in five years-time, giving scientists at least ten years of continuous data. |
| 10:01:31  Pierrik Vuilleumier, Sentinel-6 Project Manager | *Sea level is a very direct symptom of global warming, so it’s very important to measure it accurately. And sea level increase is related to the measurement of ice of the poles, it’s also related to the accumulation of heat in the oceans, so these two elements together make the product of Sentinel-6 very relevant for society.* |
| 10:01:56  Sentinel-6 in-orbit animation | Sentinel-6 will map up to 95 percent of the world’s oceans every ten days.  Taking continuous measurements of sea surface and wave height, as well as wind speed, the satellite will also provide vital safety information for shipping through marine and meteorological forecasts. |
| 10:02:16  Copernicus partners and animation | A joint project between Europe and the United States, Sentinel-6 will operate alongside other Sentinel satellites as part of the Copernicus Programme… |
| 10:02:25  Josef Aschbacher, ESA Director of Earth Observation | *Europe today really has a leadership in Earth Observation and it has the largest Earth Observation programme in the world with all the satellites we are developing – there are three areas – there are the Earth Explorers which are the science missions, the Copernicus missions, the Sentinels and the meteorological missions. And the totality of those missions together with national missions from the various member states of ESA are today the biggest Earth Observation capacity in the world.* |
| 10:02:53  Images of the Earth from space | The Sentinel satellites are giving us a new view of how our planet is changing…vital information for governments, local authorities…all of us…to act on. |

**B-ROLL**

10:03:12:01

**Josef Aschbacher, ESA Director of Earth Observation (English)**

*Recorded at IABG, Ottobrunn, Germany, Nov 2019*

Benefit of two consecutive satellites

International partnerships

10:05:27:02

**Josef Aschbacher, ESA Director of Earth Observation (German)**

*Recorded at IABG, Ottobrunn, Germany, Nov 2019*

Role of Sentinel-6 within the Copernicus programme

Cooperation between different partners for Sentinel-6

Benefit of two consecutive satellites

10:08:18:18

**Pierrik Vuilleumier, Sentinel-6 Project Manager (English)**

*Recorded at IABG, Ottobrunn, Germany, Nov 2019*

Objective of Sentinel 6

Importance of measuring sea level

Consecutive Sentinel-6 satellites

Sentinel-6 obits

10:11:16:08

**Pierrik Vuilleumier, Sentinel-6 Project Manager (French)**

*Recorded at IABG, Ottobrunn, Germany, Nov 2019*

Objective of Sentinel-6

Sentinel-6 launched with Falcon 9

The importance of measuring sea level

10:12:42:06

**Sandra Kaufmann, Director of Earth Science Division, NASA (English)**

*Recorded at IABG, Ottobrunn, Germany, Nov 2019*

Partnership between ESA and NASA

Historical importance of the mission

Why the mission is needed

10:14:42:05

**Alain Ratier, Director General, EUMETSAT (English)**

*Filmed in IAGB lobby, Ottobrunn, Germany, Nov 2019*

Role of EUMETSAT in Sentinel-6 programme

Objectives of Sentinel-6

Ocean forecasting

Impact of oceans on meteorology and the role of Sentinel-6 (mention of France)

Sentinel-6 orbit and continuation of time-series of data

10:18:24:17

**Astrid Koch, Senior Expert Copernicus Programme, European Commission (English)**

*Filmed in IAGB lobby, Ottobrunn, Germany, Nov 2019*

Copernicus programme and services

What services are offered

Ocean service and Sentinel-6

10:21:17:01

**GVs of Sentinel-6 in the IABG cleanroom**

*Filmed November 2019 during final testing of the satellite*

10:26:14:17

**The Maldives from space**

*Sentinel-2 images of the Maldives from space (released by ESA Sept 2020)*

10:28:11:00

**Sentinel-6 Animation**

*New animation Sept 20*

**ENDS**