SMOS Results

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| IMAGES | text |
| Globe “ocean and soil”  Length : 14 sec. | This is Earth as seen by SMOS.  It provides a unique view of sea surface salinity and soil moisture with valuable information in several areas - for example showing drought drought in Europe and Africa. |
| Horn of Africa  Length : 20 sec | In the Horn of Africa, SMOS showed that the region’s soil was too dry to grow crops and then mapped it over a period of time.  This confirmed that rains were insufficient for crop cultivation.  In recent years the soil moisture has been lower than average throughout the region - a true overview of the worst drought in decades. |
| Europe  Length 23 sec | It may not be as bad in Europe; however the drought has a severe impact on agriculture, which threatens food security and water shortfalls in households and industry. In severe cases shipping routes may be closed and power plants shut down due to falling water levels in rivers.  SMOS data provide the tools to support water resource management to counter potential future droughts or floods. |

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| Amazon plume  Length : 25 sec | Along with sea surface temperature, variations in ocean salinity drive global three-dimensional ocean-circulation patterns.  Off the coast of South America; one can see the effect of the Amazon on the Atlantic ocean, with the variation from fresh water coming out of the huge Brazilian river.  Ocean circulation is an important component of Earth's heat engine and crucial in regulating weather and climate. |
| Sea Ice SMOS Data  Length 23 sec | Not a primary objective, but still interesting: SMOS detects thin sea ice up to 1metre thick. This is important for weather and climate as it controls the exchange of heat between the ocean and atmosphere.  Ice thickness in that range also has a very practical application, which is the monitoring of ship routes due to ice coverage - especially in the North pole region. |
| Hurricane Sandy  Length 22 sec | Also unexpected but a new and useful application, is the ability of SMOS to look through clouds and rain. This allows tracking of the water surface under big storms and hurricanes - for example Hurricane Sandy on the US East Coast last year. Wind speeds can be calculated, which is important for better prediction of storms and operational forecasting of hurricane strength. |
| SMOS animation  Length 16 sec  Globe | With SMOS data; scientists have gained a full new set of information which, combined with data from other Earth Explorers, leads to a better understanding of climate change and a greater scientific knowledge of our home planet. |
| End A-Roll : TC out 10.02.45 |  |
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| **B-Roll** |  |
| 1302\_018\_BR01 : 2’45’’ | A-Roll split without titles |
| 1302\_018\_BR02 : 50 sec | Anim. Soil Moisture & ocean Salinity |
| 1302\_018\_BR03 : 50 sec | Anim. Soil Moisture |
| 1302\_018\_BR04 : 50 sec | Anim. Sea Surface salinity |
| 1302\_018\_BR05 : 2’10’’ | Anim. Ice tickness |
| 1302\_018\_BR06 : 20 sec | Anim. Sandy wind speed |
| 1302\_018\_BR07 : 16 sec | Anim. Ocean Salinity Amazon |
| 1302\_018\_BR08 : 19 sec | Anim. Horn of Africa |
| End B-Roll : 08’21 ‘’ |  |