



# **EPN2020-RI**

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NA2 (Impact through Outreach and Engagement) Popular Science Videos

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Responsible WP Leader: Science Office, Mariana Barrosa, Anita Heward

Project funded by the European Union's Horizon 2020 research and innovation programme  Dissemination level				
PP	Restricted to other programme participants (including the Commission Service)			
RE	Restricted to a group specified by the consortium (including the Commission Services)			
СО	Confidential, only for members of the consortium (excluding the Commission Services)			

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**Abstract:** Europlanet's Work Package NA2 'Impact through Outreach and Engagement' has produced a series of four popular-science animated videos with the aim of widening engagement with planetary science amongst Europe's citizens. The titles are:

- "The Transit of Mercury"
- "Jupiter and its Icy Moons"
- "Astrobiology Life in the Universe"
- "Space Detectives: The Case of the Rocks from Space"

The language and visual style for the videos were chosen to be appealing even to audiences that normally would not engage in this kind of content, and created a distinctive identity for the whole series.

The themes chosen for the videos relate to topical areas in planetary science and align with research supported through Europlanet 2020 RI, including astrobiology, planetary analogues, comparative planetology and sample analysis.

Where possible, the release dates were chosen to link with special events related to the topics of the videos (e.g. the arrival of Juno at Jupiter, the Transit of Mercury) to add to the momentum of social media campaigns and reach as many people as possible through wide online sharing. The videos are available on YouTube, Vimeo and Facebook on both Europlanet's and Science Office's channels and have been promoted through Facebook, Twitter and Instagram. Mass media use of the videos and supporting graphics has increased the audiences reached. The videos have also been promoted through partner networks (e.g. the Space Group of the Ecsite network of science centres, museums and planetaria). We estimate that the videos overall have had at least 100 000 views to date. The videos are part of Europlanet's legacy and are (and will continue to be) available for use free of charge by the community. The second video in the series, "Jupiter and Its Icy Moons" has been shortlisted for the European Science TV and New Media Festival and Awards 2017/18, which will take place on the 4th of March 2018.

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# 1. Script Topics

The Planetary Video Shorts task is led by Science Office and is managed by Mariana Barrosa with scripts by Dr. Bárbara Ferreira and graphics by the Science Office team of designers and visual artists. The themes chosen for the videos included high profile events related to planetary science (the Transit of Mercury), priorities for the planetary science community (exploration of Jupiter's icy moons) and the key areas of research supported by Europlanet's TA programme (planetary analogues, astrobiology, sample analysis). The topics were chosen through a consultation with the Europlanet community. A questionnaire was set up on Survey Monkey to rate a list of possible topics, or suggest other themes that should be covered, and an invitation to participate was shared through the Europlanet 2020 RI Newsletter.

The scripts were written in collaboration with at least one researcher that specialised in the relevant scientific area, who provided consultancy, input and feedback to ensure the videos' scientific accuracy. The videos are narrated by Olly Mann, a professional presenter and voice artist: <a href="http://www.ollymann.com/">http://www.ollymann.com/</a>

#### 2. Videos

Four animation videos have been produced for this Deliverable and a "bonus" fifth video is under production. Information about the full series of animations, graphics and download options are collated on the Europlanet Outreach website:

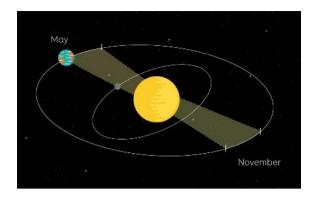
http://www.europlanet-eu.org/outreach/europlanet-animations/

#### 2.1 "The Transit of Mercury"

Release date: 7 April 2016

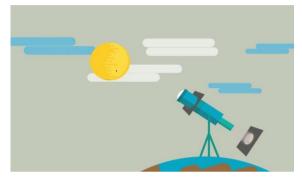
https://www.youtube.com/watch?v=JqFFJ6zdECw

 Number of viewers: approximately 18 000 on Europlanet and Science Office channels; unknown number of views on international online media and social media outlets (estimated 50 000 on Space.com, Guardian)









The first Europlanet video, "The Transit of Mercury", is a 2-minute animation produced to promote awareness of the transit of Mercury on 9th May 2016 and an upcoming transit on 11th November 2019. Transits of Mercury are relatively rare (the following one won't take place until 2032), so this pair of transits provided an important outreach opportunity in the timeframe of the Europlanet 2020 RI project. The video was a focal point of Europlanet's outreach campaign around the transit in May 2016.

The script and animations were developed by the Science Office in close collaboration with Prof. David A Rothery, Professor of Planetary Geosciences at the Open University. The Science Office also created a series of infographics and visuals to complement the video and provide additional content for the social media campaign.

The video was shared online through Europlanet and the Science Office's social media platforms and websites and was also highlighted in a <u>press release</u> by the Europlanet Media Centre about the Transit of Mercury and European media contact points. The widespread use of the Transit video and infographics by the media (including <u>The Guardian</u> and Space.com) and the positive audience response demonstrates the potential of this content to reach large numbers of people and get the scientific message across in a format that is both entertaining and informative.

A dedicated page on the Europlanet Outreach website was made for the Mercury Transit events, which further helped the dissemination of this video: <a href="http://www.europlanet-eu.org/transit-of-mercury-european-events-and-media-contacts/">http://www.europlanet-eu.org/transit-of-mercury-european-events-and-media-contacts/</a>

A social media campaign (#MercuryTransitSelfie) was also launched by Europlanet to accompany the event.

# 2.2 "Jupiter and its Icy Moons"

Release date: 5 July 2016

https://www.youtube.com/watch?v=h18Tzgo9eTk

 Number of viewers: approximately 11 000 on Europlanet and Science Office channels; unknown number of views on international online media and social media outlets.

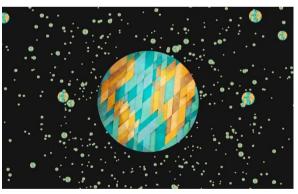












"Jupiter and its Icy Moons" is a 5-minute animation about Jupiter, its multiple moons and what two robotic missions — Juno, from NASA and JUICE, from ESA — expect to discover about this intriguing planet and the icy moons that may harbour the conditions for life. The release of the video coincided with Juno's arrival at Jupiter on 4th July and was part of series of events organized by Europlanet to promote <a href="European involvement in Juno">European involvement in Juno</a>. The premier was shown during a public event at the Coral Hotel in Athens that included a panel discussion by leading European scientists involved in research about Jupiter and its icy

moons, as well as a live link to JPL and the Principal Investigator of the mission, Scott Bolton. The event was attended by 150 people.

A series of promotional materials were developed to support the video and the outreach events including:

- o A flyer/invitation to the public event at Coral Hotel, Athens.
- o A teaser and trailer were released prior to the premier of the video.
- o A series of posters was designed.

All these materials are available for free download and use.

Jupiter and Its Icy Moons has been shortlisted for the European Science TV and New Media Festival and Awards 2017/18, which will take place on the 4<sup>th</sup> of March 2018.

# 2.3 "Astrobiology: Life in the Universe"

Release date: 18 September 2017

https://www.youtube.com/watch?v=SOzZnVxlgsc&t=4s

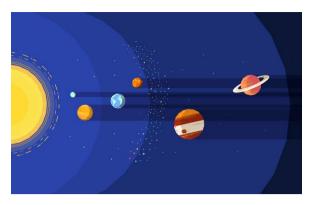
 Number of viewers: approximately 16 500 on Europlanet and Science Office channels; unknown number of views on international online media and social media outlets.













"Astrobiology: Life in the Universe", the third educational video in a series of animations by Europlanet 2020 RI, explores the use of analogue fields sites to study possible forms of life on other planets. To answer the question "Are we alone in the Universe?" the video shows how planetary scientists use the Earth as a laboratory to understand where life might arise on other planets and moons in our Solar System and beyond. The video highlights research linked to analogue field sites like Lake Tirez and Rio Tinto in Spain, and the Danakil depression in Ethiopia, where Europlanet offers access to planetary scientists and astrobiologists to visit and carry out experiments.

Scientific oversight of the script was provided by Dr. Barbara Cavalazzi (University of Bologna) and Dr. Felipe Gomez (INTA-CAB, Spain).

A number of promotional materials were developed to support the video:

- A series of teasers (<u>teaser 1</u>, <u>teaser 2</u>, <u>teaser 3</u>, <u>teaser 4</u>) and a <u>trailer</u> were released prior to the premier of the video.
- A series of posters was designed.

All these materials are available for download and use free of charge.

To increase viewing and sharing on social media, a campaign was launched to give away a set of four printed posters to followers on Twitter, Instagram and Facebook. The campaign was launched in the run-up to Christmas and generated a peak in activity on Europlanet's social media accounts. There were 15 winners (five on Instagram, five on Facebook and five on Twitter) from the UK, Romania, Germany, Cyprus, France, Spain, Greece, Czech Republic Italy, Norway and Serbia.



Winners of the Astrobiology posters giveaway, from Spain

# 2.4 "Planetary Detective: the case of the rocks from space"

Release date: TBD

https://www.dropbox.com/s/w4r1qak6rns5ajj/PD\_v3.mov?dl=0

https://youtu.be/be5YesfPcAU

Estimated number of viewers: N/A













The final video of the Europlanet series deals with the topic of the analysis of rare samples from space and the application of the techniques developed by planetary scientists for these studies to other fields, including forensic sciences.

"Space Detectives: the case of the rocks from space" was designed in a *film noir* style – which is certainly an unusual and original concept for a popular science video.

Scientific consultancy for this video was provided by Prof. Gareth Davies, Vrije Universiteit Amsterdam.

There is no final release date set yet, as the Europlanet Outreach team is considering a number of options for events at which to premier the animation (including the European Week of Astronomy and Space Science (EWASS) from 4-8 April, the Second Mars Sample Return Conference from 25-27 April, or the Ecsite Space Group Pre-Conference from 5-6 June) in order to obtain the best possible results in terms of impact and dissemination.

#### 2.5 "Europlanet activities showreel"

Release date: TBD

An "extra" video showcasing Europlanet's activities is being currently being produced. This will be submitted in response to an EU call for project videos that showcase the impact of EU funded research and innovation on citizens' daily lives. Please see: <a href="http://ec.europa.eu/research/investeuresearch/index.cfm">http://ec.europa.eu/research/investeuresearch/index.cfm</a>

As this video was not part of the original programme of videos planned for this deliverable, and will draw on clips from all four of the animations outlined above, the video will be finalised after the deliverable date for the other animations.

#### 3. Next steps

Now that the series of videos is complete, we are working to have them translated in as many European languages as possible and will continue to seek new opportunities for sharing and disseminating them. Science Office has a strategy to place the series on television channels across Europe for broadcasting.

The very positive response to the videos from viewers and the media, as well as the nomination by the European Science TV and New Media Festival and Awards, demonstrate that the videos are valuable educational tools and can be used to raise awareness and engagement with planetary science.