



EPN2020-RI

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Deliverable D13.5 AstroEDU Collections

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Dissemination level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Service)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (excluding the Commission Services)	

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Author (s)	T.R. Sankatsing Nava, P. Russo

Abstract: Europlanet and IAU astroEDU (Leiden University) have identified, edited and developed 6 education collections around Europlanet topics (e.g. astronomy, planetary sciences, geology). These collections include a total of 31 educational activities for primary and secondary school education, and consist of 3 new collections and 3 expanded collections on existing relevant topics. The educational activities are part of the Europlanet collections of IAU astroEDU: the platform for peer-reviewed astronomy educational activities (www.iau.org/astroEDU). The astroEDU peer-review method is similar to publishing a scientific paper and allows the authors to improve the resource according to the comments received from the reviewers (consisting of one educator and one scientist). The astroEDU collections related to Europlanet topics available are:

1. The Planets & their Moons (new)

Activity collection by Europlanet: The Solar System, in which we live, consists of our Sun as its central star, eight planets with their moons and several dwarf planets. Explore the planets and moons of our Solar System and discover the amazing distances and scales in our neighborhood.

- Link: <http://astroedu.iau.org/en/collections/planetsandmoons/>

5 activities in this collection:

- 1) Sun, Earth, Moon model: <http://astroedu.iau.org/en/activities/1614/sun-earth-and-moon-model/>
- 2) Know Your Planets <http://astroedu.iau.org/en/activities/1615/know-your-planets/>
- 3) Solar System Model on a City Map <http://astroedu.iau.org/en/activities/1512/solar-system-model-city-map/>
- 4) Solar System Model <http://astroedu.iau.org/en/activities/1505/solar-system-model/>
- 5) Design Your Alien <http://astroedu.iau.org/en/activities/1303/design-your-alien/>

2. Children's Planetary Maps (new)

Activity collection by Europlanet: Using the maps of planets and moons specifically designed for children, students will have an insight to the geography, environmental conditions, astrobiological potential and exploration opportunities of Pluto, Charon, Titan, Io, Moon, Mars and Venus.

- Link: <http://astroedu.iau.org/en/collections/planetarygeology/>

6 activities in this collection:

- 1) Children's Planetary Maps: Pluto & Charon <http://astroedu.iau.org/en/activities/1644/childrens-planetary-maps-pluto-charon/>
- 2) Children's Planetary Maps: Titan <http://astroedu.iau.org/en/activities/1718/childrens-planetary-maps-titan/>
- 3) Children's Planetary Maps: Io <http://astroedu.iau.org/en/activities/1719/childrens-planetary-maps-io/>
- 4) Children's Planetary Maps: The Moon <http://astroedu.iau.org/en/activities/1720/childrens-planetary-maps-the-moon/>
- 5) Children's Planetary Maps: Mars <http://astroedu.iau.org/en/activities/1721/childrens-planetary-maps-mars/>
- 6) Children's Planetary Maps: Venus <http://astroedu.iau.org/en/activities/1722/childrens-planetary-maps-venus/>

3. Asteroids, Comets and Meteors (new)

Activity collection by Europlanet: Discover the differences between asteroids, comets and meteors. Learn how to track an asteroid, count craters on Earth and build your own asteroid in this collection of activities.

- Link: <http://astroedu.iau.org/en/collections/asteroidscometsmeteors>

4 activities in this collection:

- 1) What is a meteorite? <http://astroedu.iau.org/en/activities/1638/what-is-a-meteorite/>
- 2) Identifying and tracking asteroids <http://astroedu.iau.org/en/activities/1639/identifying-and-tracking-asteroids/>
- 3) Crater Count Tectonics <http://astroedu.iau.org/en/activities/1640/crater-count-tectonics/>
- <http://astroedu.iau.org/en/activities/1641/impact-craters/>
- 4) Creating Asteroids <http://astroedu.iau.org/en/activities/1642/creating-asteroids/>

4. Moon

The Moon is the Earth's only natural satellite and the fifth largest moon in the Solar System. It was formed 4.6 billion years ago. The Moon is in synchronous rotation with Earth meaning the same side is always facing the Earth. Observe and explore Earth's companion through this collection. Developed with support from Europlanet.

- Link: <http://astroedu.iau.org/en/collections/moon/>

4 activities in this collection:

- 1) Lunar Day: <http://astroedu.iau.org/en/activities/1504/lunar-day/>
- 2) Meet Our Neighbours: <http://astroedu.iau.org/en/activities/1408/meet-our-neighbours-moon/>
- 3) Deadly Moons: <http://astroedu.iau.org/en/activities/1404/deadly-moons/>
- 4) Lunar Landscape <http://astroedu.iau.org/en/activities/1311/lunar-landscape/>

5. Exploring the Earth

Earth is the only planet in our solar system known to harbour life. It is the third planet from the Sun and the fifth-largest of the eight planets in the Solar System. Roughly 71 percent of Earth's surface is covered by water, most of it in the oceans. Explore and learn more about our home planet. Developed with support from Europlanet.

- Link: <http://astroedu.iau.org/en/collections/exploringtheearth/>

6 activities in this collection:

- 1) Let's map the earth: <http://astroedu.iau.org/en/activities/1610/lets-map-the-earth/>
- 2) How to travel Earth: <http://astroedu.iau.org/en/activities/1609/how-travel-earth-without-getting-lost/>
- 3) Day and night in the world: <http://astroedu.iau.org/en/activities/1605/day-and-night-world/>
- 4) Meet our home: Planet Earth <http://astroedu.iau.org/en/activities/1406/meet-our-home-planet-earth/>
- 5) Why Do We Have Day and Night? <http://astroedu.iau.org/en/activities/1310/why-do-we-have-day-and-night/>
- 6) How High is the Sky? <http://astroedu.iau.org/en/activities/1309/how-high-is-the-sky/>

6. Sun

The Sun or Sol, is the star at the centre of our solar system and is the largest object - about 109 times the diameter of Earth. It contains more than 99.8% of the total mass of the Solar System. Through this collection you can explore and observe the behaviour and characteristics of the Sun. Developed with support from Europlanet.

- Link: <http://astroedu.iau.org/en/collections/sun/>

6 activities in this collection:

- 1) Sun's shadow: <http://astroedu.iau.org/en/activities/1503/suns-shadow/>
- 2) Making a sundial <http://astroedu.iau.org/en/activities/1608/making-a-sundial/>
- 3) Measure the Solar Diameter <http://astroedu.iau.org/en/activities/1305/measure-the-solar-diameter/>
- 4) Counting Sunspots

<http://astroedu.iau.org/en/activities/1301/counting-sunspots/>

- 5) Meet Our Neighbours - Sun:

<http://astroedu.iau.org/en/activities/1308/meet-our-neighbours-sun/>

- 6) Build a Safe Sun Viewer:

<http://astroedu.iau.org/en/activities/1409/safe-sun-viewer/>

Additional information

Since the start of *EUROPLANET2020 Research Infrastructure*, the IAU astroEDU website had 43 435 user from 1 September 2015 to 24 August 2017. The review of the activities developed for these collections involved 23 experts (12 scientists and 11 educators)