

Press Release

Green City Watch Wins Copernicus Masters 2019 Competition

Copernicus Data and AI to Combat Climate Change

Europe's Earth observation programme Copernicus provides open access to up-to-date information on topics such as climate, atmosphere, land, marine, security and emergency management. Such data holds huge potential for companies, entrepreneurs and startups to develop new solutions to tackle global challenges. Green City Watch combines big data from space with artificial intelligence (AI) to measure the quality of urban green space. This pioneering technology was honoured as the 2019 Overall Winner of the international innovation competition Copernicus Masters during its Awards Ceremony on 4 December in Helsinki, Finland.

Helsinki, 5 December 2019 – According to research published by the United Nations Office for Disaster Risk Reduction in October 2018, extreme weather events already account for 91% of all major disasters and 77% of recorded economic losses from natural disasters. Our climate is changing because of different factors influencing Earth as a whole. Earth observation satellites provide unique information that greatly assists in the understanding and management of climate change.



Left to right: Jim Groot, Green City Watch, Jan Wörner, ESA Director General, Chris van Diemen, Green City Watch

Urban green space can store huge amounts of CO₂. The 2019 Copernicus Masters Overall Winner Green City Watch came out on top in the competition's Planet "See Change, Change the World" Challenge and went on to edge out the winners of six other categories for the grand prize. The startup can quantify the CO₂ uptake of urban green spaces globally as well as identify and monitor ecological improvements to parks, which even increase CO₂ sequestration. By combining ecological science and high-resolution satellite data with machine learning and AI, Green City Watch provides

actionable insights into green spaces to municipalities and other urban green space managers, including real estate developers and landscape architecture firms, faster and more efficiently than ever before. Green City Watch relies on satellite data from Sentinel-2 MSI (MultiSpectral Instrument) for vegetation analytics, Sentinel-1 SAR imagery to assess urban flood risks, Planet's SkySat, RapidEye, and ±2x daily revisit times to map illegal tree removal and much more. Together with cities, Green City Watch is tackling green space management head-on, sketching out concepts, and reducing the turnaround time required to get ideas implemented.

"The Copernicus Masters has proven to be an excellent example for boosting economic growth and tackling global challenges for our planet," stated Jan Wörner, ESA's Director General, at the Awards

Ceremony in Helsinki. “I am proud that this innovation competition is always one step ahead in addressing the latest state-of-the-art topics, with this year’s winning solutions now focusing on AI and other disruptive Earth observation technologies of the future.”



[6 more Challenge winners](#) were recognised during the Awards Ceremony by high-ranking industry and institutional representatives, such as the European Space Agency (ESA), the German Aerospace Center (DLR), Planet, BayWa AG, Astrosat Ltd., Airbus and sobloo, the German Federal Ministry of Transport and Digital Infrastructure (BMVI), and AZO Anwendungszentrum GmbH Oberpfaffenhofen, the organiser of the Copernicus Masters.

“The Copernicus Masters functions as a deal flow generator for Copernicus,” explained Thorsten Rudolph, CEO of AZO. “With the competition, we have managed to establish a new market for ‘big data from space’ in Europe and trigger a startup boom with more than 100 young EO companies already. In the 2019 edition of the Copernicus Masters, 432 participants submitted 182 new EO business cases from 52 different countries.”

Copernicus Masters is an international innovation competition with the objective to drive entrepreneurial talent and new business models that are needed to build up EO data into sustainable services for a wide variety of industries. Many industries and areas of public interest benefit from the progress of the Copernicus programme. Innovative technologies such as cloud computing, machine learning and artificial intelligence (AI) support the objective to efficiently and meaningfully process these large amounts of digital data. The close cooperation of the Copernicus Masters with institutional, industrial and regional partners promotes the development of high-tech products and services for Europe on a global scale.

The 2019 Copernicus Masters Awards Ceremony took place as the festive highlight of the European Space Week 2019 in Helsinki, Finland. Next year’s Copernicus Masters submission phase will start on 1 April 2020.

About the Copernicus Masters

AZO Anwendungszentrum GmbH Oberpfaffenhofen launched the Copernicus Masters in 2011 on behalf of the European Space Agency (ESA) and with the strong support of world-class partners. The Copernicus Masters is an international competition with the objective to drive Copernicus User Uptake of Earth observation (EO) data and thus respective business cases. With partners such as European Space Agency (ESA), the European Commission (EC), the German Aerospace Center (DLR), CGI, Planet, BayWa AG, Stevenson Astrosat Ltd., Airbus, and the German Federal Ministry of Transport and Digital Infrastructure (BMVI), the competition awards prizes to innovative solutions for business and society. With the expansion of the Copernicus Space Component every year, new prize categories enable solutions that tackle global challenges. For more information www.copernicus-masters.com.

About AZO

AZO Anwendungszentrum GmbH Oberpfaffenhofen is an international networking and branding company initiating the most important space-related innovation competitions with more than 15,000 participants, over 200 industrial & public - and 400 international stakeholders. The Masters Series, presented by AZO consists of the Galileo Masters, Copernicus Masters, and INNOspace Masters. Additionally, AZO organises the Copernicus Hackathons by the European Commission. AZO runs a very successful business angel network which invested more than EUR 50 million Venture Capital in 2018. Additionally, AZO manages its ESA Incubation Centres (ESA BIC) Bavaria and Northern Germany. The ESA BIC Bavaria incubation programme has supported more than 162 company foundations solely in Bavaria to date. Since May 2019, AZO jointly operates the ESA BIC Northern Germany (NG) located in Bremen. For more information, please visit www.azo-space.com.

Press contact:

Regine Heue
Head of Marketing & Communications
marketing@azo-space.com

AZO

Anwendungszentrum GmbH Oberpfaffenhofen
Friedrichshafener Str. 1
82205 Gilching