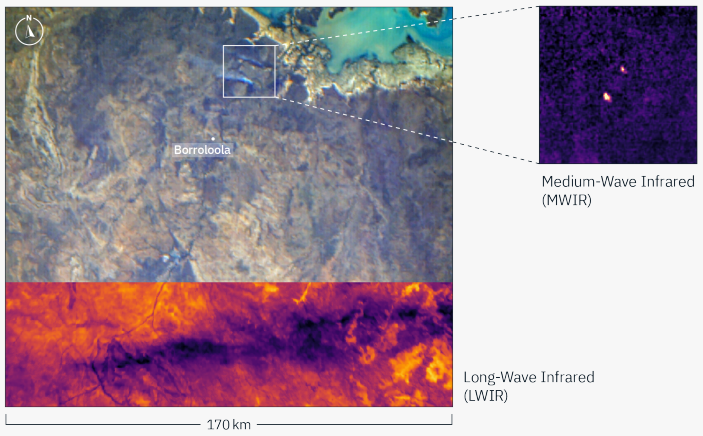
Wildfire Monitoring Satellite: OroraTech Successfully Proves Technology in Space

OroraTech's nanosatellite with a novel infrared camera was launched with SpaceX in January 2022. First images of bushfires in Australia exceed expectations.



Bushfire in Australia seen from Space

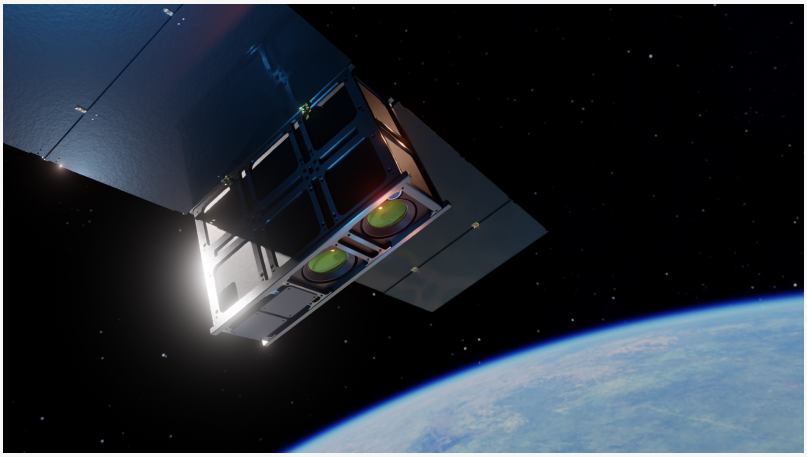
MUNICH, BAVARIA, GERMANY, June 20, 2022 /EINPresswire.com/ --
OroraTech proves nanosatellite technology to revolutionize wildfire monitoring from space
The system is highly cost-efficient and scalable
Worldwide temperature measurements allow for variety of environmental applications

Munich-based NewSpace intelligence startup OroraTech has successfully achieved the mission goals for FOREST-1, its first satellite dedicated to environmental monitoring, specifically for wildfire detection. The satellite is the first of its kind to combine a thermal, mid-infrared and visible camera into a compact design that does not require cooling. It also operates a graphics processing unit (GPU) in space which is used to process the data on-orbit and includes an inter-satellite modem for the real-time downlink of information. The satellite was launched in January 2022 as part of the SpaceX launch in Florida, USA.

> This is an important milestone for the company as our team has proven that thermal-infrared technology on a nanosatellite can outperform existing technology."
>
> *Thomas Grübler, CEO OroraTech*

Current satellites in low earth orbit fall short when monitoring wildfires in the afternoon, which is the peak time for fires. In some instances, eight hours can go by before a satellite can report on a wildfire which can have disastrous results. The groundbreaking technology of FOREST-1 allows for significantly higher accuracy and faster global coverage while cutting down data processing time and delivering high-resolution images at a far

lower cost than previously possible.


OroraTech's Thermal Infrared Satellite

“This is an important milestone for the company as our team has proven that thermal-infrared technology on a nanosatellite can outperform existing technology,” said Thomas Grübler, CEO at OroraTech. “We will launch the next eight satellites by the end of 2023 that will allow us to serve insights to our customers during peak burn time in the afternoon, where there is currently no data. In the next few years, we will achieve a detection time of 30 minutes worldwide with our entire satellite constellation.”

As of now, the company relies on various external satellite data sources for its wildfire intelligence platform. FOREST-1 is the first step toward OroraTech’s future fleet of nanosatellites. The technology is highly scalable and will provide extremely cost-efficient worldwide coverage of high-resolution temperature measurements. This data will pave the way to improve our climate resilience by serving applications requiring a seamless flow of information such as urban heat monitoring, irrigation of agricultural land, or accurate carbon emission tracking.

For more information go to www.ororatech.com.

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Download press-kit here

About OroraTech

OroraTech is a NewSpace intelligence startup headquartered in Munich, Germany, providing services to improve climate resilience. Their leading wildfire intelligence service is used by clients all over the globe, protecting more than 170 million hectares of forest. The service will be complemented by OroraTech’s own fleet of nanosatellites: Heat signals captured by novel thermal-infrared cameras in space will be processed on the satellites to speed up notifications from hours to minutes. The company was founded in 2018 by Thomas Grübler, Björn Stoffers, Florian Mauracher, and Rupert Amann with a shared vision to use NewSpace intelligence for a sustainable earth, employing 75 people worldwide.

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