HIGH ALTITUDE PLATFORM STATION

HAPS Alliance Member Achievements

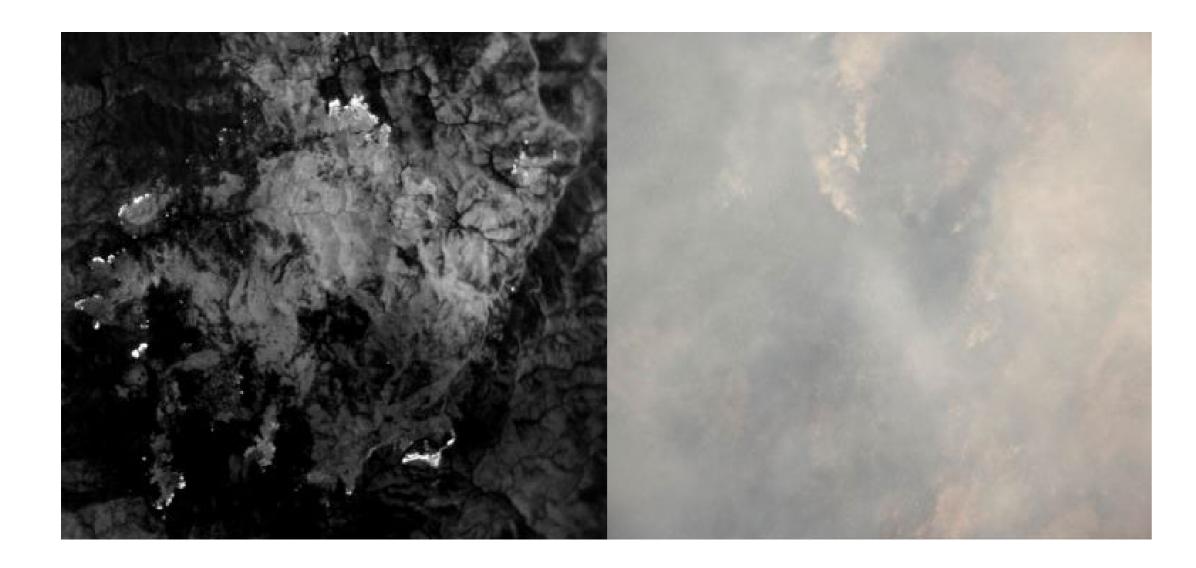
Updated as of Q3 2023





September 2021

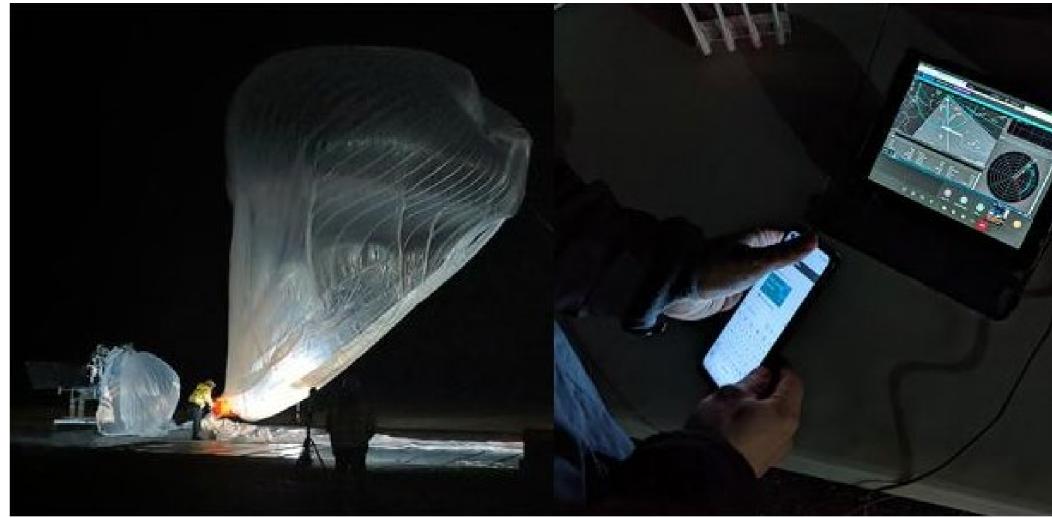
Aerostar Uses Stratospheric Balloon Technology to Monitor Wildfires Details

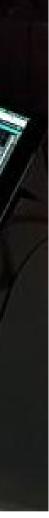




April 2022

Aerostar Provides Cellular Connectivity from the Stratosphere Via Thunderhead Balloon System Details









August 2022

Aerostar teams up with NASA and Forest Service to test special balloons in Northwest to monitor large wildfires. Details





May 2023

Stratospheric balloons reach new heights in U.S. only months after crisis with China **Details**







March 2023

Aerostar Thunderhead Balloons Complete 150+ Day World Tour Details





May 2023 NASA Successfully Completes Globetrotting SuperBIT Balloon Flight Details





Airbus / AALTO HAPS

November 2022

Airbus partners with Space Compass to serve the Japanese market with mobile connectivity and earth observation solutions **Details**





January 2023

Airbus to spin out pioneering solar-powered drone programme **Details**





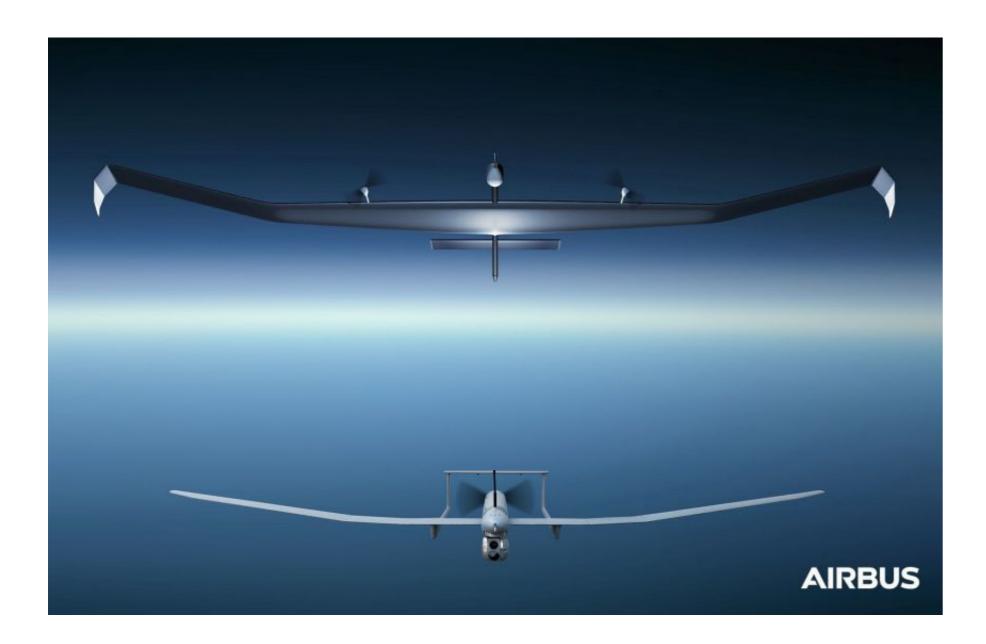




Airbus / NTT Docomo

August 2021

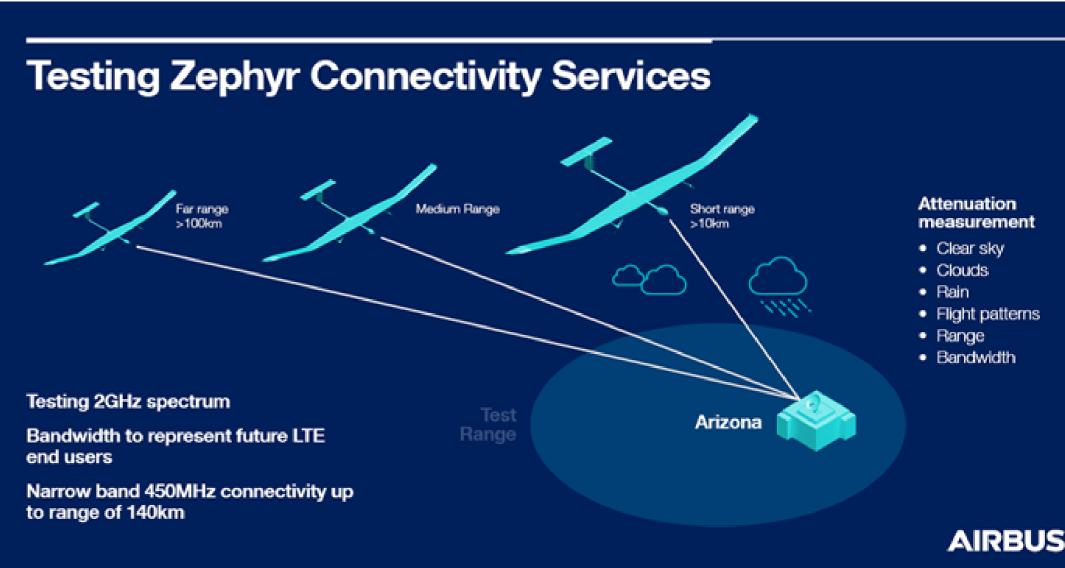
NTT Docomo, Airbus collaboration to use high altitude systems to expand 5G and 6G commercial connectivity **Details**





November 2021

Zephyr High Altitude Platform Station (HAPS) achieves connectivity in trial conducted by Airbus and NTT DOCOMO **Details**





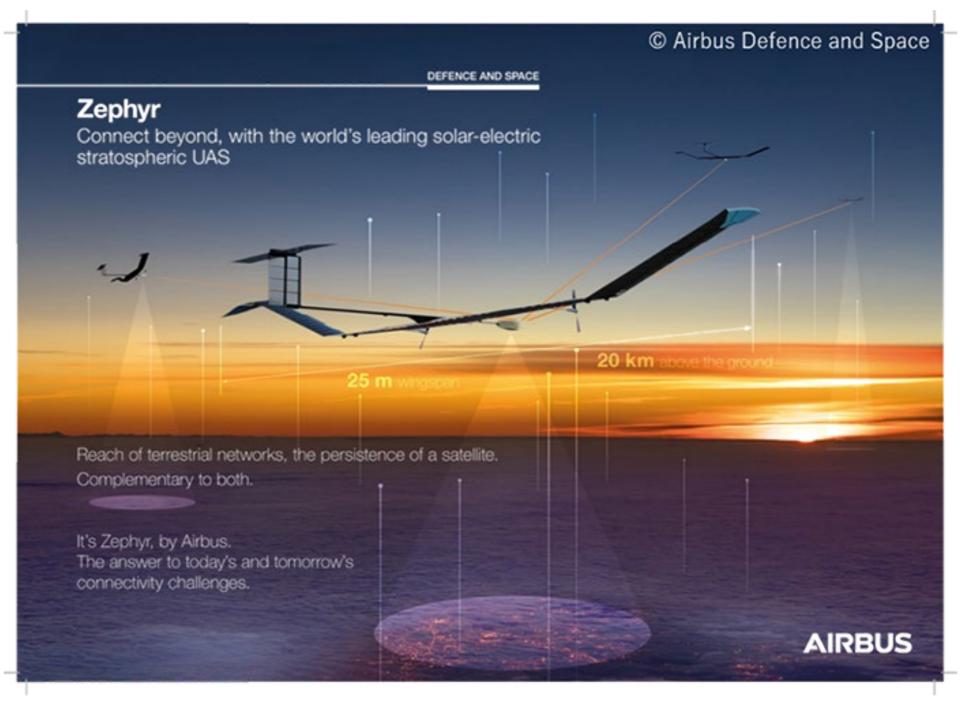




Airbus / NTT Docomo / SKY Perfect JSAT

January 2022

Airbus, NTT, DOCOMO and SKY Perfect JSAT Jointly Studying Connectivity Services from High-Altitude Platform Stations (HAPS) - Targeting future global wireless-connectivity services combining satellites and HAPS **Details**







Deutsche Telekom

February 2023

Deutsche Telekom and European Space Agency strive for maximum resilience **Details**







Kea Aerospace

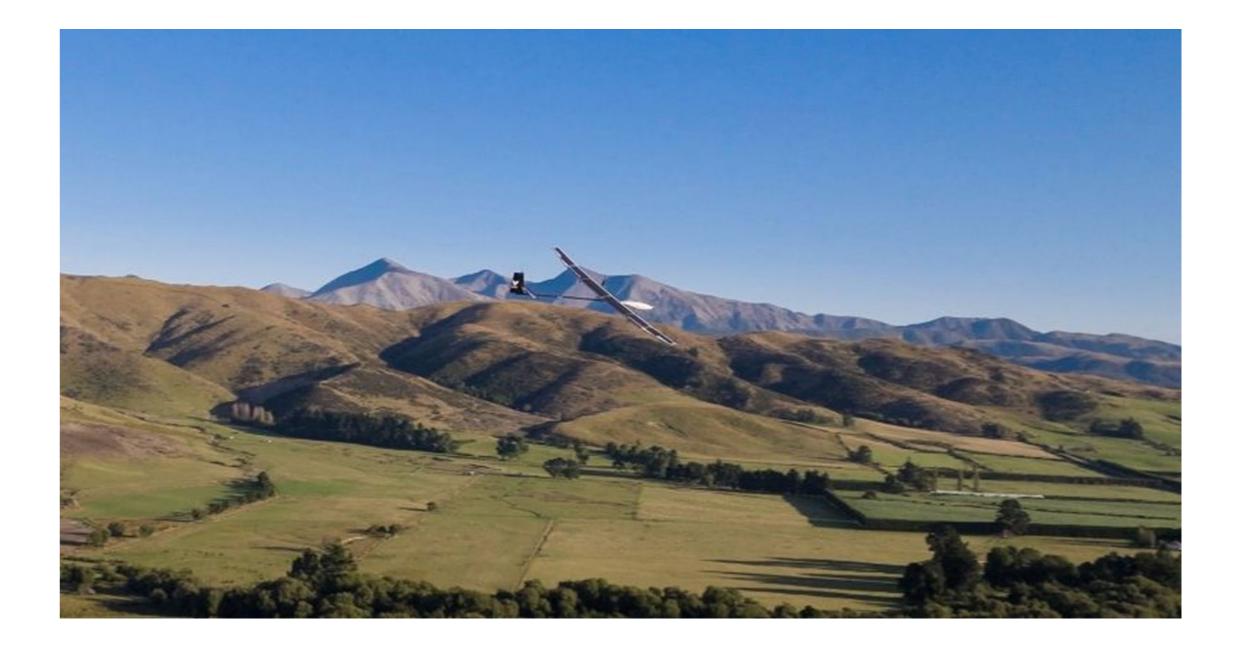
September 2022

New Zealand Stratospheric Aircraft Design Unveiled Details





March 2023 Kea Atmos Mk1 Stratospheric Aircraft Takes Flight Details





Prismatic/BAE Systems

July 2023 BAE Systems' HAPS UAS successfully completes stratospheric flight **Details**





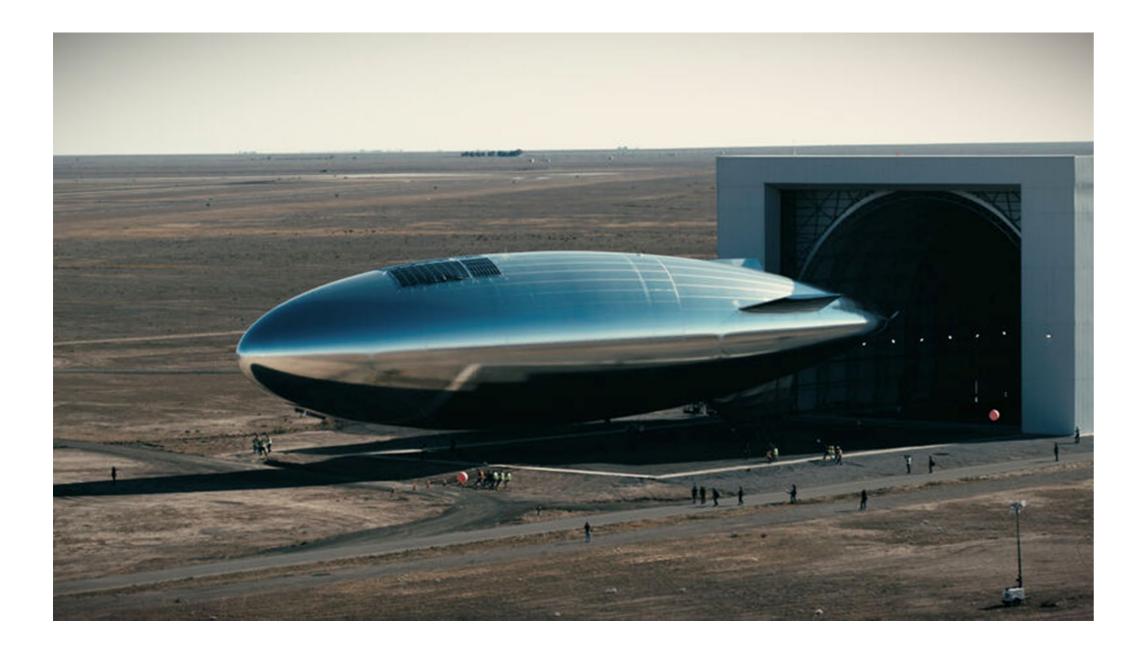






August 2021

EPA, New Mexico collaborate with Sceye on air quality monitoring initiative **Details**





March 2022

Sceye Tests Automated Ascent and Reaches the Stratosphere Again **Details**

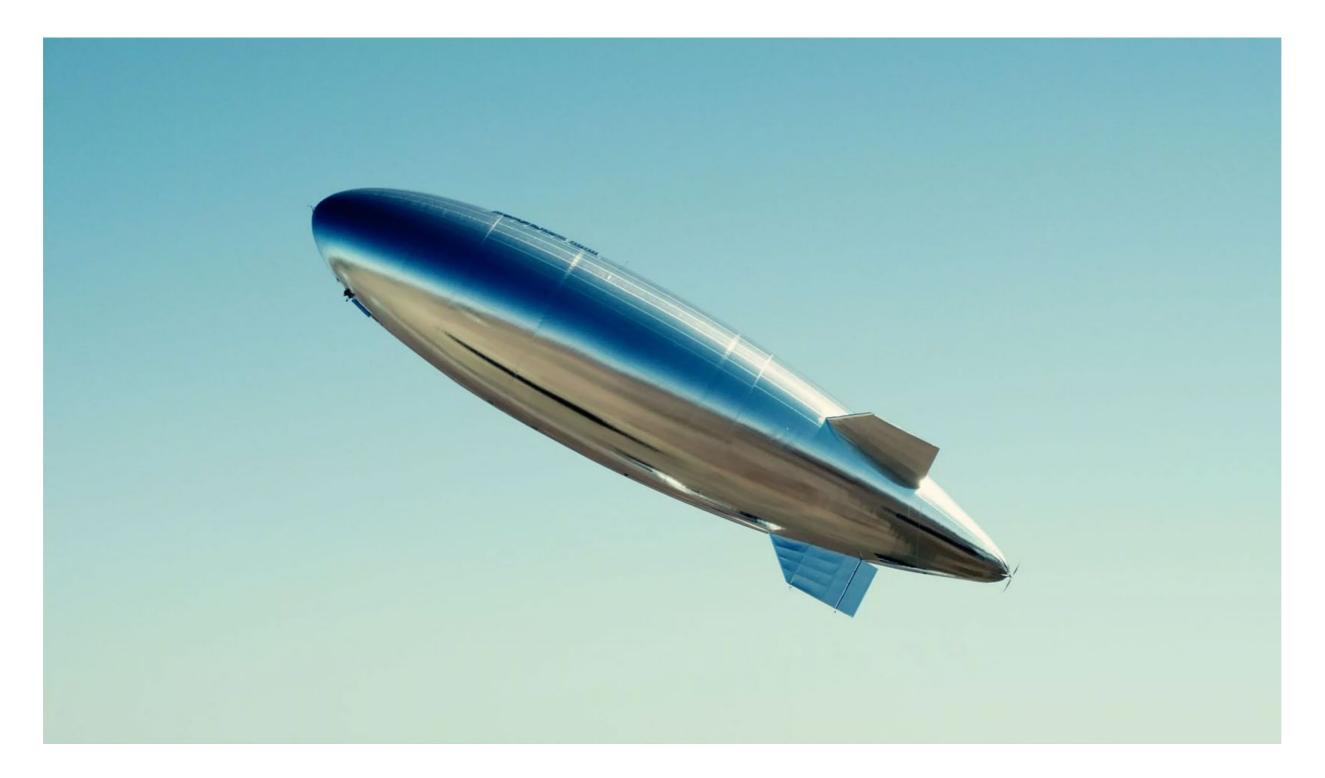








June 2022 Sceye HAPS Ascend to Stratosphere Using Renewable Energy Sources Details







HAPSMobile / SoftBank

October 2020

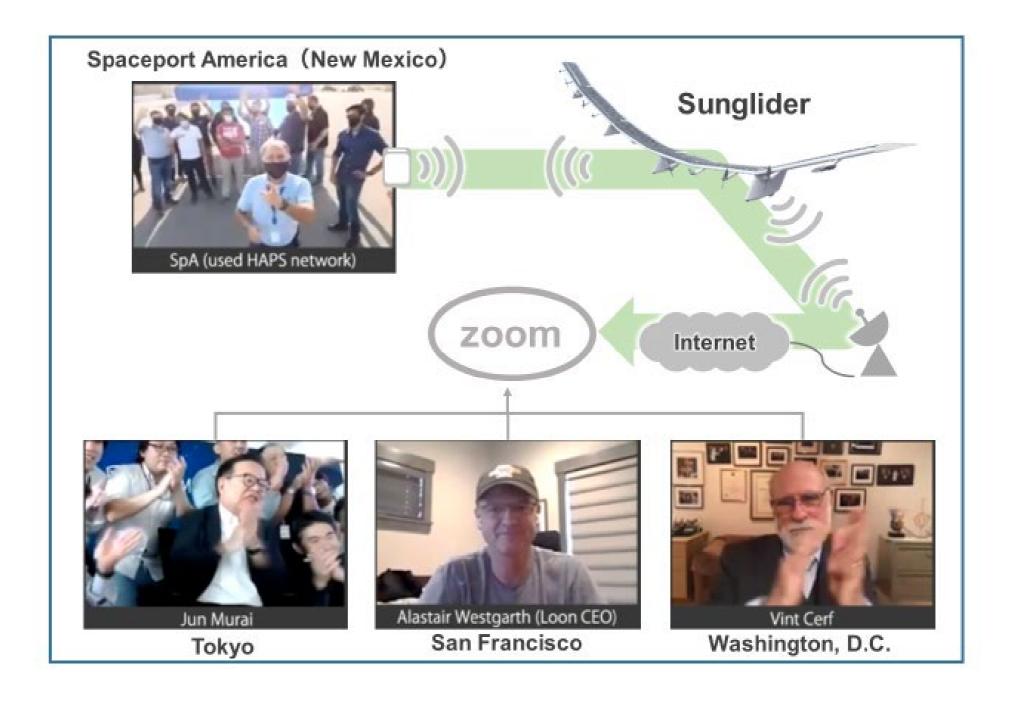
HAPSMobile's Sunglider Succeeds in Stratospheric Test Flight Details





October 2020

HAPSMobile and Loon First in the World to Deliver LTE Connectivity from a Fixed-Wing Autonomous Aircraft in the Stratosphere **Details**





HAPSMobile / SoftBank

September 2021

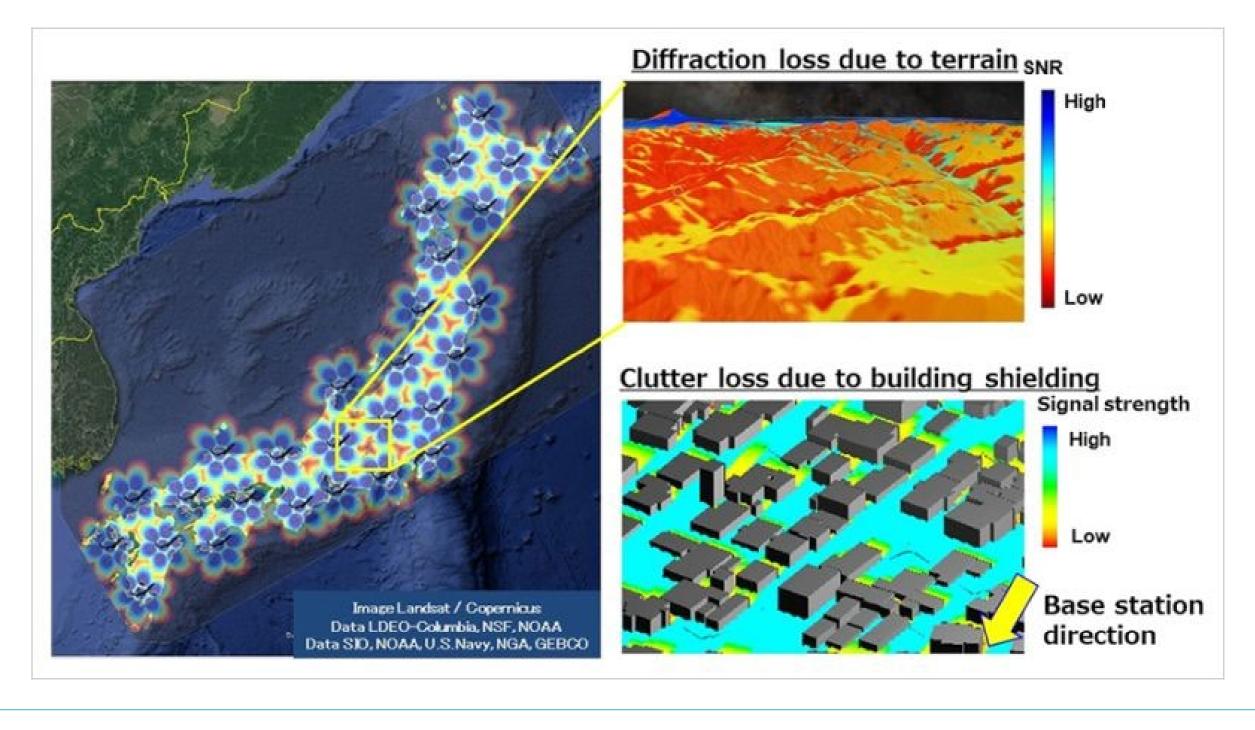
SoftBank Corp. and HAPSMobile Accelerate High Altitude Platform Station (HAPS) R&D to Provide Stable and High-quality Connectivity for Future Commercial Services **Details**





November 2022

SoftBank Corp. and HAPSMobile Develop Radiowave Propagation Simulator for HAPS Based on ITU-R Global Standard Details





HAPSMobile / SoftBank

March 2023

SoftBank Corp. Develops Battery Pack with Next-generation Lithium-metal Battery Cells and Successfully Demonstrates Operation in the Stratosphere **Details**





June 2023

SoftBank Corp. and Nidec Jointly Develop Light-weight, High-efficiency and Highreliability Motor for High Altitude Platform Stations **Details**





Stratospheric Platforms Limited

March 2022

SPL Announces World First 5G Transmission from the Stratosphere Details





July 2023

SPL and BT commenced a trial project for demonstration of SPLs super scale phased array antenna integrated into BTs network. A section of the antenna will be mounted on a tall building at BT's Ad Astral Park research centre. Complex beamforming and handset separation testing will be demonstrated in an outdoor environment.

Details





Stratospheric Platforms Limited

January 2023 BT Group and SPL look to the stratosphere to deliver 4G and 5G coverage to hard-to-reach areas of the UK **Details**









