

IAF EARTH OBSERVATION SYMPOSIUM (B1)
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A STATE-OF-THE-ART EARTH OBSERVATION SYSTEM: SUPERVIEW CONSTELLATION

Abstract

SuperView Constellation started with SuperView One (SV-1) Constellation comprising four 50cm optical satellites launched in 2015 and 2018. SuperView Two (SV-2) launched in 2021 is a 40cm optical satellite with 8 spectral bands: PAN, RGBNIR/Coast Blue, Red Edge and Yellow. On 29 April 2022, two SuperView NEO (SV-NEO) at 30cm GSD had been launched. Two 50cm X-band SV-SAR were launched on 18 October 2022. To date, SuperView Constellation has 9 Very High-Resolution Satellites in orbit including 7 optical satellites and 2 SAR satellites. In addition to its high-resolution imaging capabilities, the SuperView Constellation is also equipped with a range of advanced sensors and instruments, including multispectral and hyperspectral sensors, which can be used to capture a wide range of data about the Earth's surface. This data can be used to monitor changes in land use, detect changes in vegetation cover, and identify areas of environmental concern, among other applications.

The paper will present the technical specifications of SV-1, SV-2, SV-NEO and SV-SAR satellites and image products delivered. Four SV-NEO satellites are scheduled to be launched in the middle of 2023 and four SV-SAR satellites are planned for launch at the end of 2023. One 50cm wider swath satellite shall also be added to the constellation before the end of 2023. The operator of SuperView Constellation is SIWI. HEAD Aerospace is the strategic partner with SIWI for the exploration of the International Market. This paper shall be concluded with the future deployment plan of SuperView Constellation.