

1. Introduction



The Mohammed Bin Rashid Space Centre (MBRSC) is integral to the strategic initiative put in place by the Dubai government to inspire scientific innovation, technological advancement, and to advance sustainable development in the United Arab Emirates.

The centre was originally established in 2006 as the Emirates Institution for Advanced Science & Technology (EIAST), accumulating knowledge, recruiting engineers, and launching advanced scientific projects, until the MBRSC was established in 2015 by Sheikh Mohammed bin Rashid.

The establishment decree saw EIAST integrated with the newly founded MBRSC, which would now take charge of the UAE's advanced science and technology projects, and take responsibility for contributing towards the UAE's move into a knowledge-based economy.

The Centre's main line of business includes research and development in the area of outer space, manufacture of satellites and development of systems, space imaging and applications development, and ground station services and support to satellite missions.

Our vision is *"To Be a Leading Global Centre for Science and Technology."* As for the mission, the centre aims to build a sustainable space science and technology sector and contribute to the establishment of a knowledge-based national economy by launching quality projects and creating a new generation of national pioneers and scientists in order to lead our country towards a promising future.

2. Remote Sensing Resources



Products and services offered by the MBRSC include high-resolution earth satellite imagery, satellite image analysis, ground station service, antenna hosting service, environmental monitoring services, and global disaster management support.

The MBRSC has a mid-latitude ground station that is designed to specifically act as a command centre for emergency, or other urgent situations. The fully manned station is able to facilitate operations of every kind, from routine maintenance to remote procedures, and is readily available for use by clients wishing to utilise our technology for communication with their own satellites as they pass over the region. The recently refurbished 11 m S and X-band antenna was built in 2009 to support DubaiSat-1 and is currently supporting DubaiSat-2 and other entities willing to purchase available capacity.

Currently, the MBRSC offers images taken by DubaiSat-2, a high performance remote sensing satellite, which provides 1 m GSD panchromatic image and 4 m GSD multi-spectral image data. DubaiSat-2 was launched into a sun synchronous low Earth orbit on the 21st of November, 2013. The MBRSC can specifically task DubaiSat-2 in order to meet your required demands. We can deliver customised imagery at a variety of tilt angles in just 3-5 days, depending on the satellite's position at the time of the application.

Additionally, the data imagery provided by our UAE-engineered satellites provides a vital source of instant information and reference for a variety of projects. From analysis, forecasting and monitoring, to managing resources and activities globally, MBRSC products are an integral component in a range of applications, including disaster management, civil management, civil engineering, land planning, natural resources exploration, geographical information studies, and environmental projects.

Furthermore, launched our third satellite, KhalifaSat. After calibration, KhalifaSat will provide satellite imaging capabilities at an industry competitive ground sampling distance of 0.7m panchromatic and 4m in multispectral bands.