

New weather radar at Tai Mo Shan comes into operation

The new Tai Mo Shan weather radar (TMSWR) of the Hong Kong Observatory (HKO) was installed in March 2024 and has come into operation to provide essential observation data for monitoring various inclement weather conditions including thunderstorms, rainstorms and tropical cyclones.

The Director of the HKO, Dr Chan Pak-wai said, "Situated on the highest peak in Hong Kong, the weather radar at Tai Mo Shan has been an indispensable observing equipment for the HKO in weather monitoring. The commissioning of the new TMSWR is of paramount importance to the HKO to meet growing challenges of extreme weather".

At a cost of around \$31 million, the new TMSWR is the second dual-polarisation S-band Doppler weather radar in Hong Kong. It is capable of identifying hail areas and raindrop sizes in the air, and is useful for monitoring hail and rainfall rates. Compared to the first dual-polarisation S-band Doppler weather radar at Tate's Cairn (TCWR) that started operation in 2015, the new TMSWR is equipped with more advanced hardware and software modules, providing higher power for the transmission of radar pulses, smaller attenuation of radar signals, lower system noise, a better graphic user interface and more software utility functions for easier radar control. These new technologies enable the generation of higher-quality products to facilitate weather analysis.

The new TMSWR is operating in tandem with the TCWR to provide round-the-clock radar images for severe weather monitoring. The public can access the regularly updated radar images via the [HKO website](#) and the mobile application "[MyObservatory](#)".