

Gan Magnetic Observatory

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**Aerial view of the Island of Gan located in the south of the Maldives archipelago.
The observatory is located just to the south of the center of the main runway**



Gan Observatory

Gan Observatory (IAGA code: GAN)

Location: Gan International Airport,

Addu Atoll, Maldives

Latitude : 00°41'40.55" S

Longitude : 73°09'13.47" E,

Altitude: 3 m

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NOTE:

The data used to produce the following magnetograms has been derived from the system installed in April 2011 and must be regarded as preliminary data only. These plots have been generated to check the operation of the data logging system, scale values have not been checked and only provisional baselines have been allocated.

Gan Observatory was installed by the Institut für Geophysik, ETH Zürich, Switzerland in April 2011. The instruments include a DMI Suspended FGE 3 component fluxgate magnetometer measuring variations in the horizontal (H) and vertical (Z) intensities and the changes in the declination (D) along with temperatures in the sensor head and fluxgate electronics. Total Field (F) is measured by a GEM Systems GSM 90 magnetometer which also supports a GPS receiver used to provide accurate timing control for the data logging. All magnetic components are sampled once a second with magnetometer sampling, data storage and systems housekeeping controlled by a low powered UNIX based PC which operates from a 12 Volt supply. As well as storing the data locally a transmission link has been set up between the observatory and the local Meteorological Office in Gan Airport. At this office Internet facilities are available to transmit all recorded data to Zurich where an on-line display has been set up (<http://koblizek.ethz.ch/gan.html>). The observatory is completely self-contained with all power provided using battery backed solar panels.

To provide absolute control for the fluxgate variometers an absolute observing position has also been established and in September 2011 a program of regular absolute observations commenced carried out by a local observer.



The installation team – left to right, Jakub Velimsky, Chandrasekhar Rao, Lars Pedersen, Ahmed Muslim.

Solar panel array provide a 12 Volt DC supply used to operate the observatory





