

Atmospheric Monitoring of the Malaysia Meteorological Department, Ministry of Science, Technology and Innovation, Malaysia.

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The Malaysian baseline Global Atmosphere Watch (GAW) station in Danum Valley, Sabah was established in October 2004. It is located at latitude $4^{\circ} 58' 53''$ North, longitude $117^{\circ} 50' 37''$ East, elevation 426m above MSL in the State of Sabah, Malaysia. The station is in a conservation area surrounded by tropical lowland forest. The goals of establishing the GAW station in Danum Valley are to obtain long-term, reliable, comprehensive observations of the chemical composition and selected physical characteristics of the atmosphere on a global scale.

At present, the GAW station monitors the following parameters:

1. Carbon dioxide using the Australian LoFlo System with intakes at three levels.
2. CFCs, Methane and Nitrous oxide by flask sampling and analysis by the University of Tokyo, Japan.
3. Precipitation chemistry with the Ecotech wet-only collector and analysis by the national laboratory for the East Asia Acid Deposition Network (EANET).
4. Aerosol characteristics such as aerosol loading, back scattering, black carbon and aerosol optical depth.
5. Reactive gases by filter-pack method for EANET.
6. Persistent organic pollutants by passive sampling.
7. Surface ozone
8. Meteorological parameters with the Viasala Automatic Weather System

The station is also part of the East Asia Acid Deposition Monitoring Network (EANET) and supports research activities that are conducted at the Danum Valley Field Centre by scientists from the British Royal Society, which manages the centre.

Total column ozone and UV radiation measurements using the Mark II Brewer Spectrophotometer No. 90 are carried out at the urban station in Petaling Jaya while ozone profile soundings using the Vaisala Digicora system are made twice a month at the Kuala Lumpur International Airport Meteorological Station. UV-B and ozone data from the measurements made by the Brewer Spectrophotometer and the sondes since 1992 are submitted to the world data centres regularly. A number of joint studies and papers were published based on the information generated by this activity.



Figure 1. Danum Valley, Sabah GAW station.