

The Relationship between Altitude and Natural Radiation

Yushan National Park is located in the central range of Taiwan, it crosses over 10 villages, 4 townships and 4 counties of Hualien, Kaohsiung Nantou, and Chiayi. It is the largest national park in Taiwan.

The highway between Chiayi Chukou to Nantou Shuili belongs to Alishan Highway and New Central Cross-island Highway. The highest region of this highway is Tataga Visitor Center with an altitude of 2,631 meters. In Taiwan, the average dose rate of sea level is 0.04~0.08 $\mu\text{Sv/hr}$. The altitude of Chiayi Chukou is 224 meters, which has a dose rate of 0.096 $\mu\text{Sv/hr}$. Through the Alishan Highway, the dose rate increases to 0.117 $\mu\text{Sv/hr}$ at Alishan National Forest Recreation Area with an altitude of 2,182 meters. The dose rate of Tataga Visitor Center with an elevation of 2,631 meters is 0.123 $\mu\text{Sv/hr}$. The measurement shows that the natural radiation will increase with the higher altitude, because of less shielding of cosmic radiation by the atmosphere at higher altitudes.

All the variations of the natural radiation dose are within the normal range, so there is no need to worry.

Radiation Map of
Yushan National Park

North (N)

