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ACG034-P01

会場:コンベンションホール

時間:5月27日 14:00-16:30

## チーク年輪を用いた古気候復元の基礎的研究 A Fundamental Study on paleoclimate reconstruction using tree-ring of Teak

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In this study, in order to assess the reliability of various parameters in tree-rings as climate proxies, we performed a systematic comparison between temporal variation of meteorological data (precipitation, relative humidity and hours of sunlight) and those of four parameters (ring width, mean vessel area of earlywood, d13C and d18O) in tree-rings collected from Java Island, Indonesia.

The analyzed Teak sample was collected from a site in Indramayu, West Java, Indonesia. Precipitation records from Indramayu show a large seasonal cycle, which oscillated between a dry season (around May to October) and a wet season (around November to April). Seasonal cycle forms annual growth rings in Teak. The sample was cut down in December of 2003 and was observed 30 of tree-ring, showing that its growth spanned the interval from 1974 to 2003. We investigated the correlations between four parameters of tree-rings and climate parameters during 1974-2004.

In this presentation, we will present the results of relationship between tree-rings parameters and meteorological data. We will also present the results of FT-IR spectrum, d13C and d18O measurements, in order to confirm purified cellulose from tree-rings.