

2023 年度
創発的研究支援事業 年次報告書

研究担当者	Alexis Gilbert
研究機関名	東京工業大学
所属部署名	地球惑星科学系
役職名	准教授
研究課題名	Isotopomics: towards understanding position-specific isotope signatures at natural abundance
研究実施期間	2023 年 4 月 1 日～2024 年 3 月 31 日

研究成果の概要

In this fiscal year, we mainly focused on applications of existing position-specific isotope analysis methods. In particular, we worked on applications in tracing past and present climates using amino acids and lipids position-specific isotope analysis. We notably sampled sediments from the Amazon fan, a region containing important repositories of information about the Earth's history, in order to evaluate the of position-specific isotope analysis for determining past methane fluxes which is of importance in biogeochemistry. We also initiated a collaborative work with a French team working on cancer diagnosis, with the goal of evaluating position-specific isotope composition as a new tool for cancer diagnosis.