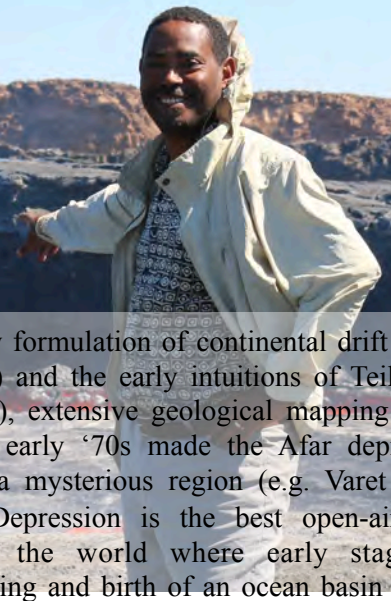


# Brief History of Geoscience Research at One of The World's Unique Incipient Oceanic Rift, Afar Depression, Ethiopia

世界的に特異な初期海洋リフトのひとつである  
エチオピア・アファー凹地での地球科学的探究の歴史



Since the early formulation of continental drift theory (Wegner 1929) and the early intuitions of Teilard de Chardin (1930), extensive geological mapping in the late '60s and early '70s made the Afar depression known to be a mysterious region (e.g. Varet et al., 1975). Afar Depression is the best open-air field laboratory in the world where early stages of continental rifting and birth of an ocean basin can be witnessed with easy sub-aerial access and studied in detail with diverse geo-scientific techniques. For instance, in September 2005, the seismo-volcanic crisis that had occurred in the Manda-Hararo branch of the depression opened up a 60 meters long and 6 meters wide fissure in response to a dyke emplacement episode (Ayele et al. 2007).

After, the pioneer magnetic anomaly study in the Gulf of Aden, has led to the discovery that the Aden Mid-Oceanic rift propagated into Afar land (Courtilot et al. 1980) and since the first paleomagnetic study has led to the determination of large crustal vertical axis block rotations due to rift propagation and overlap (Courtilot et al. 1984); combined tectonics, paleomagnetism and geochronology research had been successfully undertaken (Manighetti et al. 1997, 1998, 2001b; Acton et al. 2000; Kidane et al. 1999, 2003; Muluneh et al. 2013; Kidane, 2016; Hyeon-seon et al. 2016). These studies have made Afar Depression one of the densely paleomagnetically and geochronologically mapped place in the world. The temporal & spacial paleomagnetic investigations together with the corresponding radio-isotopic dating were used both in the interpretations of the Earth's past magnetic field variations and tectonics of Afar from the onset of the rifting.

Currently new joint research projects; to look at the sedimentary record in Northern Ethiopia in order to understand the marine flooding and desiccation history of the basin is underway together with Scientists from Switzerland and Belgium (Atnafu et al. 2015). Second one, with geo-scientists from Japan Universities (P.I. from Kyoto University) investigates the geomagnetic anomaly on the Manda-Hararo rift.

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専門分野：地質学，古地磁気学

エチオピア・アファー凹地は、大陸の分裂から海洋底が形成されるプロセスを陸上で見ることができる、極めて特異な地域です。この地域の構造発達史を精力的に研究されているKidane先生から、アファー地域の地球科学的な魅力とこれまで研究成果、今後の研究の展望をご紹介します。

日時：2016年7月11日（月）

講演会 18:15-19:30

懇親会 19:40-20:40

場所：人環棟233演習室

\*ご講演は英語で行われます。