

Earth and Planetary Science members

Period of Stay June 26 ~ August 6, 2024

Name of Hosting Faculty Member (Title)	Research Topic & Research Description	Can be changed to online when it is difficult to conduct in person
	Special academic conditions required for research	
Takehiko HIRAGA (Professor) Website	Experimental investigations on rheological properties of Earth's crustal and mantle rocks. 1) Prerequisite knowledge and/or specific skill and its proficiency No need. 2) Required major field(s) No need. 3) Academic background or research project experience to be considered at selection Geology and/or material science. 4) Selection and evaluation criteria, if any: No.	NO.
Yosuke AOKI (Associate Professor) Website	Topic: Exploring explosive eruptions with Global Navigation Satellite System Description: Global Navigation Satellite System (GNSS), including GPS, is supposed to measure the coordinates of the GNSS antenna, but it can be also used to probe explosive eruptions by measuring the decay of the GNSS signals and ionospheric disturbance by the explosion. This internship explores the physics behind these observations with the observation of, e.g., the 2022 Tonga volcanic eruption. 1) Prerequisite knowledge and/or specific skill and its proficiency Experience with Mac OS or Linux. 2) Required major field(s) Earth and Planetary Science, Physics, Mechanical Engineering, or related field 3) Academic background or research project experience to be considered at selection Strong background in mathematics, physics, or both is desired. 4) Selection and evaluation criteria, if any:	NO.
Shingo WATADA (Associate professor) Website	Application of a wave interferometry technique to seismic waves and tsunamis. A student will learn a novel data processing method which retrieves virtual seismic waves and tsunamis from continuous ground motion and ocean bottom pressure records. These virtual waves will be compared with numerical simulations. 1) Prerequisite knowledge and/or specific skill and its proficiency Basic knowledge of computer programming (C, C++, or Python) 2) Required major field(s) Basic (1st and 2nd year) physics and mathematics 3) Academic background or research project experience to be considered at selection Background in earth science (geophysics, geology) is preferred but not required 4) Selection and evaluation criteria, if any: Priority will be given to junior class students who are interested in future graduate study in seismology and related subjects at the University of Tokyo.	NO.