## 学位論文の各章別既発表論文とその対比表

学位論文題目: Estimating intervention-induced air pollution changes and tracking carbon neutrality progress employing the Digital Earth Systems Approach: Applications and Policy Implications (デジタル アース システムズ アプローチによる「介入事象がもたらした大気汚染の変化推定」と「カーボン ニュートラルの進捗状況の追跡」: その応用、政策への示唆)

	学位論文審査申請者P	nan Anh
学位論文の各章	対応する発表研究論文の題目	発表誌
第1章 Introduction	なし	なし
第 2 章 Background	なし	なし
第 3 章 Impact of interventions on air quality	3.1. Quantifying the impacts of the Covid-19 pandemic lockdown and the armed conflict with Russia on Sentinel 5P column NO <sub>2</sub> changes in Ukraine. ( <i>Peer-reviewed paper</i> )	Big Earth Data, Published, 2023
	3.2. Impacts of the Covid-19 pandemic lockdown and the conflict with Russia on Sentinel 5P NO <sub>2</sub> changes in Ukraine. ( <i>poster</i> )	13th International Symposium on Digital Earth, 2023
	3.3. Peculiar response of O <sub>3</sub> and CH <sub>4</sub> to NO <sub>x</sub> reduction in Japan during the Covid-19 pandemic. ( <i>Peer-reviewed paper</i> )	International Journal of Digital Earth, Accepted, 2023
	3.4. Impacts of Covid pandemic on Sustainable Development in Japan. <i>(Story map)</i>	17th GIS Community Forum Online, 2021
第 4 章 Terrestrial carbon fluxes estimation	4.1. Forest-Related SDG Issues Monitoring for Data-Scarce Regions Employing Machine Learning and Remote Sensing - A Case Study for Ena City, Japan. ( <i>Conference proceeding</i> )	In the Proceedings of 2022 IEEE International Geoscience and Remote Sensing Symposium, Published, 2022
	4.2. 地域共生圏創成へ向けた森林資源量把握の 手法の検討. ( <i>Poster</i> )	19th GIS Community Forum Online, 2022

	4.3. FluxFormer: Upscaled Global Carbon	
	Fluxes from Eddy Covariance Data with Multivariate Timeseries Transformer. ( <i>Preprint</i> )	2023
第 5 章 Carbon neutrality roadmaps platform	5.1. Digital Earth: A platform for the SDGs and green transformation at the global and local level, employing essential SDGs variables. ( <i>Peer-reviewed paper</i> )	Big Earth Data, Published, 2021
	5.2. Building a Digital Earth Platform to support the creation of Carbon Neutral Roadmaps. ( <i>Oral presentation</i> )	International Conference on Materials and Systems for Sustainability, 2023
	5.3. Use cases of digital earth in various spacetimes for SDGs and sustainable earth. ( <i>Poster</i> )	12th International Symposium on Digital Earth, 2021
	5.4. The Drawdown Japan. <i>(Story map)</i>	19th GIS Community Forum Online, 2022
第6章 Conclusions and future	なし	
prospects		