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 Phan 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 ₂ changes in Ukraine. (<i>Peer-reviewed paper</i>)	Big Earth Data, 2023, DOI:10.1080/20964471. 2023.2265105	
	3.2. Impacts of the Covid-19 pandemic lockdown and the conflict with Russia on Sentinel 5P NO ₂ changes in Ukraine. (<i>Poster</i>)	13 th International Symposium on Digital Earth, 2023	
	3.3. Unusual response of O ₃ and CH ₄ to NO _x emissions reduction in Japan during the Covid-19 pandemic. (<i>Peer-reviewed paper</i>)	International Journal of Digital Earth, 2023, DOI:10.1080/17538947. 2023.2297844	
	3.4. Impacts of Covid pandemic on Sustainable Development in Japan. <i>(Story map)</i>	17 th 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>)	IGARSS 2022 IEEE International Geoscience and Remote Sensing Symposium, Kuala Lumpur, Malaysia, 2022, pp. 4343-4346, DOI:10.1109/IGARSS46 834.2022.9883037	

	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
第 5 章 Carbon neutrality roadmaps platform	4.3. FluxFormer: Upscaled Global Carbon Fluxes from Eddy Covariance Data with Multivariate Timeseries Transformer. (<i>Preprint</i>)	EarthArXiv, 2023, DOI:10.31223/X5BQ2H
	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 5(4), 2021, pp. 476-496, DOI:10.1080/20964471. 2021.1948677
	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>)	12 th 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 prospects	なし	