

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	<p>3.1. Quantifying the impacts of the Covid-19 pandemic lockdown and the armed conflict with Russia on Sentinel 5P column NO₂ changes in Ukraine. (<i>Peer-reviewed paper</i>)</p> <p>3.2. Impacts of the Covid-19 pandemic lockdown and the conflict with Russia on Sentinel 5P NO₂ changes in Ukraine. (<i>poster</i>)</p> <p>3.3. Unusual response of O₃ and CH₄ to NO_x emissions reduction in Japan during the Covid-19 pandemic. (<i>Peer-reviewed paper</i>)</p> <p>3.4. Impacts of Covid pandemic on Sustainable Development in Japan. (<i>Story map</i>)</p>	<p>Big Earth Data, 2023, DOI:10.1080/20964471.2023.2265105</p> <p>13th International Symposium on Digital Earth, 2023</p> <p>International Journal of Digital Earth, 2023, DOI:10.1080/17538947.2023.2297844</p> <p>17th GIS Community Forum Online, 2021</p>
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/IGARSS46834.2022.9883037

<p>第 5 章 Carbon neutrality roadmaps platform</p>	<p>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>)</p> <p>4.3. FluxFormer: Upscaled Global Carbon Fluxes from Eddy Covariance Data with Multivariate Timeseries Transformer. (<i>Preprint</i>)</p> <p>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>)</p> <p>5.2. Building a Digital Earth Platform to support the creation of Carbon Neutral Roadmaps. (<i>Oral presentation</i>)</p> <p>5.3. Use cases of digital earth in various space-times for SDGs and sustainable earth. (<i>Poster</i>)</p> <p>5.4. The Drawdown Japan. (<i>Story map</i>)</p>	<p>19th GIS Community Forum Online, 2022</p> <p>EarthArXiv, 2023, DOI:10.31223/X5BQ2H</p> <p>Big Earth Data 5(4), 2021, pp. 476-496, DOI:10.1080/20964471.2021.1948677</p> <p>International Conference on Materials and Systems for Sustainability, 2023</p> <p>12th International Symposium on Digital Earth, 2021</p> <p>19th GIS Community Forum Online, 2022</p>
<p>第 6 章 Conclusions and future prospects</p>	<p>なし</p>	