

〔国際会議発表〕

発表研究者	東京大学生産技術研究所 特任助教 Prakhar Misra	2192109
参加会議	21st William T. Pecora Memorial Remote Sensing Symposium and the 38 th International Symposium on Remote Sensing of Environment (Pecora21/ISRSE-38)	
開催場所	Baltimore, Maryland · USA	
出張期間	2019 年 10 月 5 日～2019 年 10 月 11 日	
発表論文	Assessing population sensitivity to urban air pollution using Google Trends and remote sensing datasets	

概 要 :

Urban air pollution causes premature mortality of 3.8 million persons, mainly in developing countries. Despite existence of several mitigation policies, acceptance of those depends on people's perception of air pollution as a risk. We propose a new approach to evaluating perception using satellite remote sensing and web-based social sensing big data. We performed this study over 7 Asian megacities with diverse environmental conditions and socio-economics standards. We found that people's perception of air pollution as a risk is primarily affected with their baseline historic experience of pollution concentrations and temperature rather than their absolute values. This implies that as citizens in polluted cities get more used to high concentrations, their perception of what pollutant concentration is risky also gets adjusted accordingly. Several interesting questions were asked during this presentation, e. g. role of other pollutants and comparison of the cities. Now we are working to incorporate these ideas into our research and hope to publish this as a journal manuscript soon. The visit to conference also provided interesting opportunity to meet researchers working in health remote sensing as well as NASA's forest fire remote sensing researchers. I observed the growing importance of the web-cloud based platform data processing and will now make efforts to share this thinking with researchers in Japan. Overall this was a very important chance (thanks to Tateisi Foundation) to learn about cutting edge research questions in the field of environmental remote sensing.