Program: Thursday 18th June

Topic of the Day:
Smart cities & policy making

9:00 - 9:40

Kontoes C. (IAASRAS / NOA): EO for Health & Epidemics: Early Warning Systems for epidemics based on Satellite Earth Observation Data.

Short Description: The Centre of EO Research and Satellite Remote Sensing Beyond of the National Observatory of Athenshas developed an operational Early Warning System (EWS) that exploits multi-source datasets including new and enhanced satellite EarthObservation (EO) sensors with the purpose of orecasting and risk mapping mosquito-borne diseases. With the outbreak of Covid-19, the Beyond team leveraging its knowledge on epidemiological modeling, has been actively trying to couple environmental and atmospheric pollution data with Covid-19 outbreaks toward developing a risk assessment tool. Such systems could be used as tools to inform policy makers about an imminent epidemic.

9:40 - 10:20

Bailey J. (IERSD / NOA): Urban Air Quality - Addressing the UN Sustainable Development Goals on urban air quality and exposure through Earth Observation information

Short Description: Theoretical knowledge of the UN SDG 11 and in particular of SDG11.6.2. on the "Annual mean levels of the fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)" and practical exercises on the SMURBS SDG indicator 11.6.2 EO platform: http://apcg.meteo.noa.gr/sdg1162/

10:20 - 10:30 **Break**

10:30 - 11:10

Šulc L., Čupr P. (RECETOX): Air quality and urban population health – the case study of Brno with smart urban solution

Short Description: This presentation will focus on our case study on spatial and temporal assessment of air quality and health of city inhabitants based on current air pollution situation and also on comparison of prediction model to real health status of studied population.

11:10 - 11:50

Mikeš O. (RECETOX): Multi-sensor campaign in Brno: Project ICARUS H2020

Short Description: Low-cost sensors are more frequently considered and used in the studies observing air quality. In our study, placed in 7 Europeans cities, we have tested the combination of several technologies. The presentation will focus on the design of the campaign and some results with spotlight on the study performed in the city of Brno.

11:50 - 11:55 **Break**

11:55- 12:35

Degrendele C., Mikeš O. (RECETOX): Influence of four policy measures on the emissions of atmospheric pollutants and greenhouse gases for the city of Brno

Short Description: In this study, part of the ICARUS project, the baseline emission inventory based on city-specific data has been derived for the city of Brno for the years 2015, 2020 and 2030 for nine air pollutants and three greenhouse gases (GHGs). Following a thorough methodological approach, various policies concerning air quality and/or climate change mitigation were reviewed and among the 67 measures identified, four were selected based on the assumption to be efficient, feasible, acceptable and to have high impacts on air quality and climate change. The emission changes following the implementation of these measures compared to the baseline scenario were assessed for all air pollutants and GHG.