e-shape

health

EuroGEOSS Showcases: Applications Powered by Europe

EO-based surveillance of mercury pollution

pilot 2.1

will demonstrate integration of satellite and in-situ dataset to support decision-making processes and develop a knowledge hub

mercury

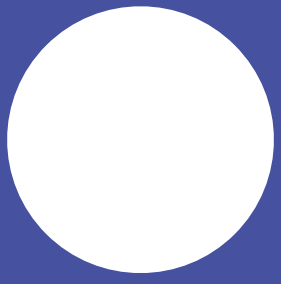
is a pollutant of global concern due its potential impact on human health and the environment

it is released to the atmosphere form a number of anthropogenic and natural sources and deposits to oceans and terrestrial ecosystems affecting the food chain and ultimately human health

surveillance

of mercury pollution and health impact on humans and the environment is necessary

An integrated multi model multi domain computational platform



effort

at European and international level is currently aimed to develop a Transnational Environmental Observation System and a multi model multi domain computational platform in

support

of the implementation of the Minamata Convention on Mercury and the

integration

of real-time monitoring data from various platforms, modelling tools and advanced global e-infrastructure for data sharing

Pilot 2.1 objectives

link

with ERA-PLANET projects, namely iGOSP and iCUPE

develop

web services to report information, assess scenarios, evaluate population risk, and estimate pollution reduction costs

demonstrate

how massive Earth Observation datasets could be translated into knowledge and actions

support

the effectiveness evaluation of measures set by the Conference of Parties of the Minamata Convention on Mercury

Outcomes of the pilot

data catalogue

to share observational data, modelling outputs, and programming components, in a framework linked to GEOSS:

http://sdi.iia.cnr.it/gos4mcat

thesaurus

to better organize concepts, metadata addition and enhancing information searching

knowledge hub

lets users simulate different scenarios about mercury fate at global scale in a quick and interactive way, with numeric results that are strictly coupled with confidence intervals; provides predictions on mercury concentrations in the ocean and in marine biota

http://gos4m.org/kh

Partners

cnr-iia

the Institute on Atmospheric Pollution of the Italian National Research Council studies the impact of air pollution in everyday life and in terms of economic and health costs negatively affecting quality of life

hereon

the Centre for Materials and Coastal Research Helmholtz-Zentrum Hereon generates knowledge and researches new technologies for more resilience and sustainability—for the benefit of the climate, the coasts and the people

unical

the University of Calabria contributes to society through the pursuit of education, learning, and research and is one of the top 1000 campuses in the prestigious QS World University Rankings, as well as one of the most important and dynamic universities in Italy

e-shape

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