Ayuna Santika
Putri
Indonesian Agency for Meteorological, Climatological and Geophysics
Devytasari Yasinta, BMKG
Nahas Alberth, BMKG
Poster
As the largest archipelagic country in Southeast Asia, Indonesia (6N - 11S and 95E - 141E) has 7 big islands which are located along the equator. Islands in Indonesia have various patterns of carbon dioxide (CO?) concentrations due to topographical factors and anthropogenic activities. This study aims to identify carbon dioxide concentration profiles for 2022 on those big islands in Indonesia (Sumatra, Borneo, Java, Sulawesi, Papua, Bali & NTT, Maluku) using daily CO? data from the Orbiting Carbon Observatory (OCO)-2 satellite. The data were analyzed statistically and spatially to obtain monthly averages, minimum, and maximum values for each island. This study shows that the average CO? concentration for each island revealed the highest value in Q1 (February and March) except for Bali & NTT which occurs in Q2 (April) and the lowest values generally occurred in Q4 (at the end of the year ). However, the islands of Java and Bali & NTT had different pattern which have the lowest pattern in January. The highest value of CO? concentration in Indonesia arose on the island of Borneo, reaching 419.2 ppm and the lowest value was on the Papua Island which measured in 408.6 ppm. By emerging this carbon dioxide satellite data, it could be used as the complementary and consideration for providing greenhouse gas information in Indonesia.
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