

Long-term Trends of Oxidants in Taiwan: Implications for the Regional Budget

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Ozone concentrations have been increasing by about 10 ppbv over most of Taiwan during the last 10 years. In the same time, nitrogen dioxide concentrations have decreased by about the same amount, resulting in nearly constant concentrations of “total oxidants” ($\text{O}_3 + \text{NO}_2$). While the increases in ozone is obviously due to the decreased titration effect of nitrogen monoxide (i.e. in situ photochemical effect), the invariance of the total oxidants over the last 10 years is puzzling. We will discuss its implications for the long-range transport of oxidants as well as for the in situ photochemical production.