

## SEVERAL ASPECT RELATES WITH CLIMATE VARIATION, DEVELOPMENT WILDFIRES AND HAZE POLLUTION OVER MARITIME CONTINENT OF INDONESIA DURING 1991-1998

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The compilation and experience from the operational field of National Meteorological Services of Indonesia showed the wildfires and haze pollution occurrences to have closed relation with the drought occurrences such as in 1982, 1987, 1991, 1994 and the last 1997/1998. This relationship is especially prominent during summer monsoon over the northern hemisphere.

Referring with the reality that there are only few studies, both subjects (atmospheric condition and its impact to the environment) seem to be problems up to present time. Otherwise the climatic variability becomes important subject because of their impact to the environment. Previous record showed the wildfires have no correlation with haze pollution until 1987, even though large wildfires occurred. To overcome the lack of the studies, this paper would like to explain development of the wildfires and haze pollution over Indonesia and adjoining area. The explanation is based upon the investigation and experience from the operational basis of the National Meteorological Services with additional information from other sources. Previous occurrences gave us the development of the wildfires mainly during the summer monsoon but last year the fires extended until winter monsoon, coincide with the El Niño episode 1997/1998.

This paper deals with an overview of the overall aspect of the atmospheric phenomena and the environment, the data are collected from several sources mainly from the operational fields. Based upon the investigation operationally found that sea surface temperature of the global scale was key parameter in the monitoring and prediction of the climate variations, where the climate variation is the largest reason to the initiating of fires and transboundary air pollution. In addition, the regional scale aspect of the monsoon, tropical cyclones, inter-tropical convergence zone and the geographical position of the maritime continent area were used as the additional object for describing the development of wildfires and haze pollution. Collecting overall information might be part of the studies toward the impact assessment of global warming and climate change issues. During the last several years, starting 1991 up to present of 1998, large variations of the climate causing the disaster in the Maritime continent should be considered when dealing with the impact studies.

**Key words:** *haze pollution, El Niño, climate variation impacts, forest fire*