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Aerosol of Forest Fire in Kalimantan, Indonesia on 2018

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Aims

- To analyze Kalimantan's peak moment of forest fire on August 2018 by using satellite data of Himawari-8 and Modis for Aqua-Terra
- To analyze impact of forest fire to air quality in Kalimantan by aerosol data satellite

References

- Bali, K., Mishra, A., & Singh, S. (2017). Impact of anomalous forest fire on aerosol radiative forcing and snow cover over Himalayan region. Atmospheric Environment, 150, 264-275.
- Pandjaitan, Bony S. 2015. Pemanfaatan Data Satelit Cuaca Generasi Baru Himawari 8 Untuk Mendeteksi Asap Akibat Kebakaran Hutan dan Lahan di Wilayah Indonesia (Studi Kasus:Kebakaran Hutan dan Lahan di Pulau Sumatera dan Kalimantan Pada Bulan September 2015). BMKG: Jakarta.
- Holben, B., Eck, T., Slutsker, I., Tanre, D., Buis, J., Setzer, A., Vermote, E., Reagan, J., Kaufman, Y., Nakajima, T., 1998. AERONETda federated instrument network and data archive for aerosol characterization. Remote Sens. Environ. 66 (1), 1-16.

Methodology

Hotspot
MODIS from LAPAN

Wunderground
- Tempeperature
- Rainfall

01 **Visual**
- *RAW from* Himawari-8
- Data from Model Global Spectral

02

03 **Giovanni**
Aqua and Terra

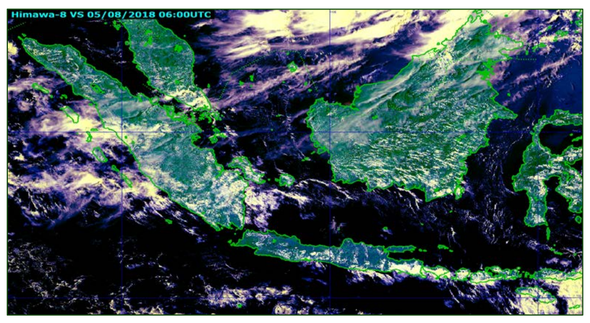
04

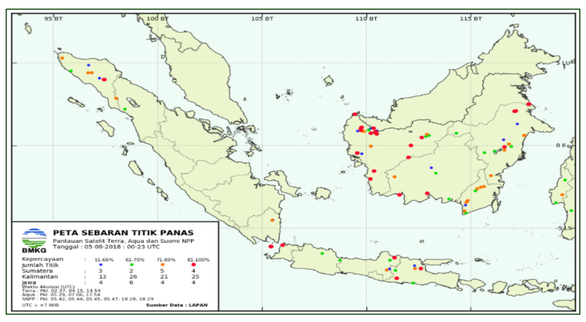
05 **Analysis**

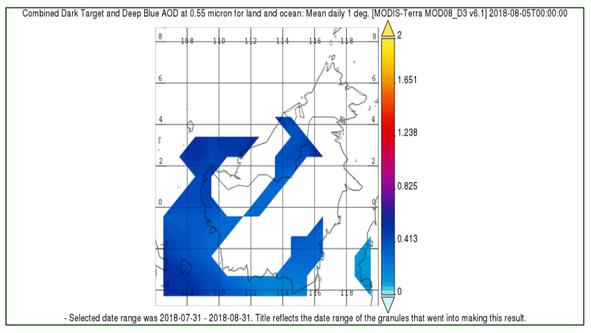
Conclusions

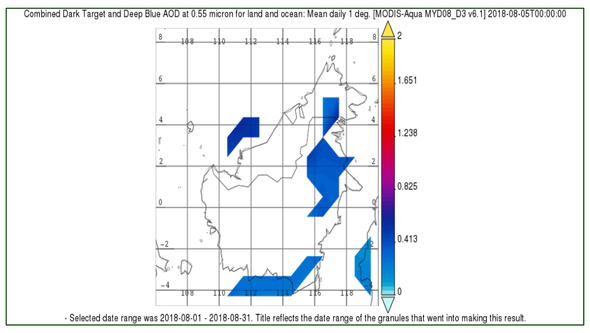
Results and Conclusions

5th August 2018

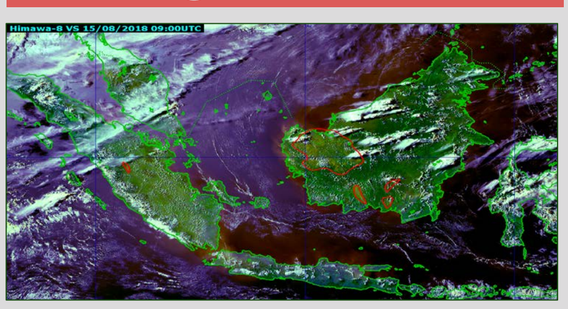


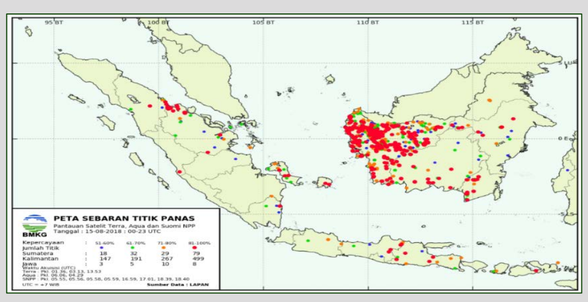


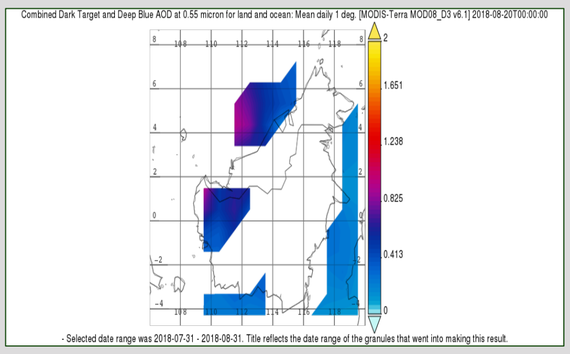


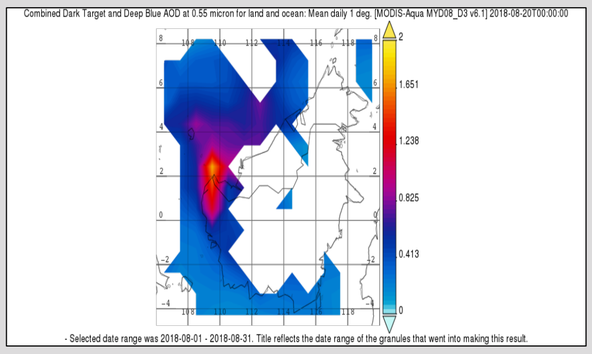


20th August 2018

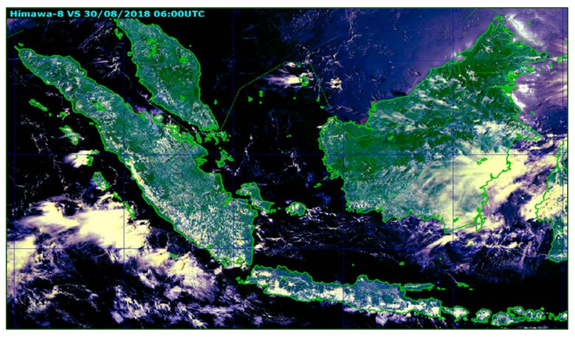


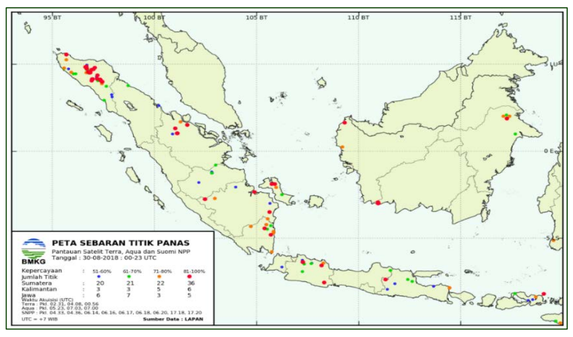


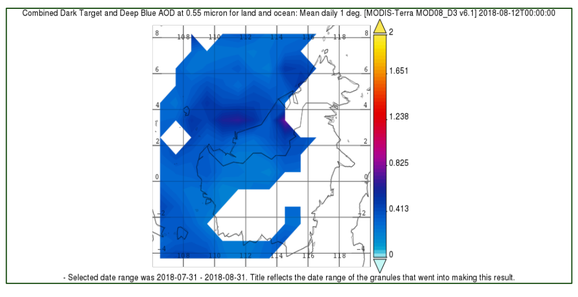


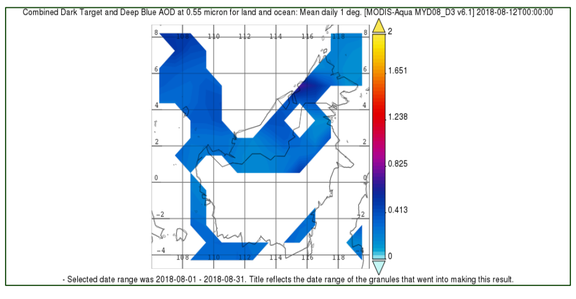


12th August 2018

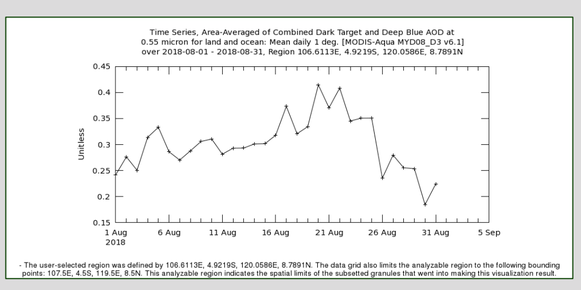


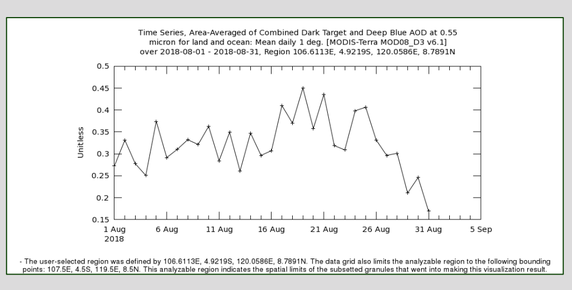






Conclusions





The result shows number of hotspot in Kalimantan is highly increase from 12 to 20 August 2018. Aerosol trend line is high during the peak of forest fire on 16 to 25 August 2018 in nighttime. Meanwhile in the daytime, it shows similar pattern.