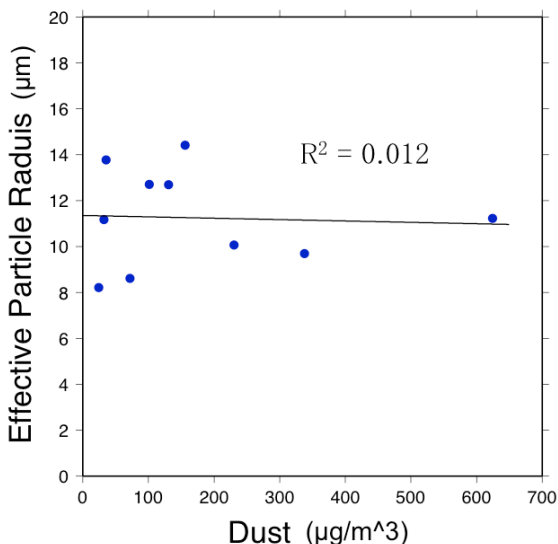


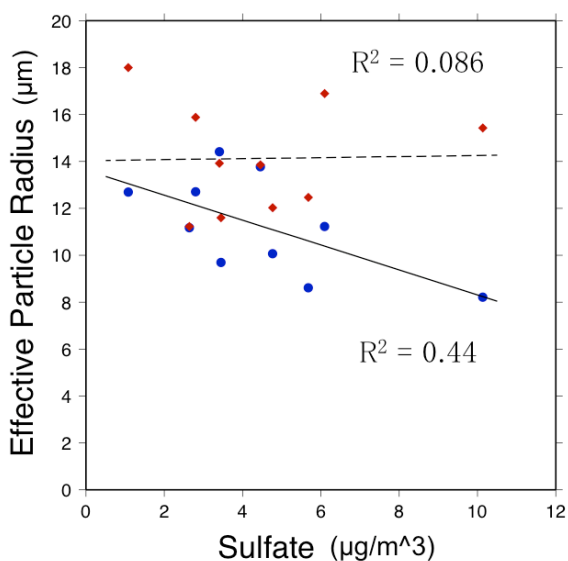
Saito, T., and T. Hayasaka, 2014: Effects of dust aerosols on warm cloud properties over East Asia and the Sahara from satellite data. *J. Meteor. Soc. Japan*, **92A**, 109-123.

<http://dx.doi.org/10.2151/jmsj.2014-A07>



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Figure 1. Correlation between cloud effective particle radius and dust concentration in East Asia.



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Figure 2. Correlation between cloud effective particle radius and sulfate concentration in East Asia. Blue and red dots represents dust-bearing clouds and dust-free clouds, respectively.

- Analysis of the satellite observation data showed that effective particle radius (R_e) for dust-bearing clouds were smaller than those for dust-free clouds and that number concentration of cloud particle (N_c) for dust-bearing clouds were larger than those for dust-free clouds in East Asia. However, it was found that R_e does not decrease with an increase in dust concentration (Fig. 1).
- A decrease in R_e value is correlated with sulfate concentration in only dust-bearing clouds in East Asia (Fig. 2). It suggest that suggests saturation of the indirect effect from a large amount of anthropogenic aerosols, causing dust particles to have a greater impact on warm cloud in regions of heavy air pollution.