Supplemental Information

A key indicator of transboundary particulate matter pollution derived from Indonesian peatland fires in Malaysia

Yusuke Fujii[1*], Mastura Mahmud[2], Masafumi Oda[1], Susumu Tohno[1], Junko Matsumoto[3], and Akira Mizohata[3]

[1] Department of Socio-Environmental Energy Science, Graduate School of Energy Science, Kyoto University, Sakyo-ku, Kyoto 606-8501, Japan.

[2] Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, Bangi, 43600 Selangor, Malaysia.

[3] Research Organization for University-Community Collaborations, Osaka Prefecture University, Sakai, Naka-ku, Osaka 599-8531, Japan.

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[*] Corresponding author. Tel: +81-75-753-5618; Fax: +81-75-753-5619

E-mail address: fujii.yusuke.86n@st.kyoto-u.ac.jp

Analyte	m/z used for quantification	Internal Standard
levoglucosan	217	methyl β-L-arabinopyranoside
mannosan	217	methyl β-L-arabinopyranoside
galactosan	217	methyl β-L-arabinopyranoside
p-hydroxybenzoic acid	267	methyl β-L-arabinopyranoside
vanillic acid	297	palmitic acid-d_{31}
syringic acid	297	palmitic acid-d_{31}
vanillin	194	1,2,3-hexanetriol
syringaldehyde	224	1,2,3-hexanetriol
acetovanillone	238	1,2,3-hexanetriol
acetosyringone	238	1,2,3-hexanetriol
homovanillic acid	326	(*S*)-(+)-ketopinic acid
homosyringic acid	326	(*S*)-(+)-ketopinic acid
dehydroabietic acid	239	palmitic acid-d_{31}
cholesterol	368	cholesterol-d_7

Table. S1

Compounds	Addition [μg]	Recovery ratio [%]	Recoveries of Target/IS [-]
levoglucosan	1.73	73.9±4.83	0.933±0.0137
mannosan	1.17	76.9±5.79	0.970±0.00820
galactosan	1.11	96.1±1.29	0.961±0.0129
p-hydroxybenzoic acid	0.808	76.2±5.53	1.11±0.0130
vanillic acid	0.755	86.8±8.45	1.03±0.0236
syringic acid	0.778	87.7±7.26	1.04±0.00403
vanillin	0.740	80.3±9.13	1.09±0.0392
syringaldehyde	0.815	74.3±7.79	1.01±0.0700
acetovanillone	0.825	78.4±5.23	1.07±0.0314
acetosyringone	0.880	89.2±6.55	1.07±0.0358
homovanillic acid	0.805	89.2±6.55	0.941±0.0234
homosyringic acid	0.800	91.5±8.70	0.964±0.0228
dehydroabietic acid	0.250	83.0±10.9	0.985±0.0228
cholesterol	0.750	91.2±8.05	1.05±0.0247
methyl β-L-arabinopyranoside	2.04	79.3±6.06	-
palmitic acid-d_{31}	0.810	84.3±10.5	-
1,2,3-hexanetriol	0.763	73.5±6.72	-
(*S*)-(+)-ketopinic acid	0.78	94.9±7.81	-
cholesterol-d_7	0.480	86.6±7.34	-

Table S2

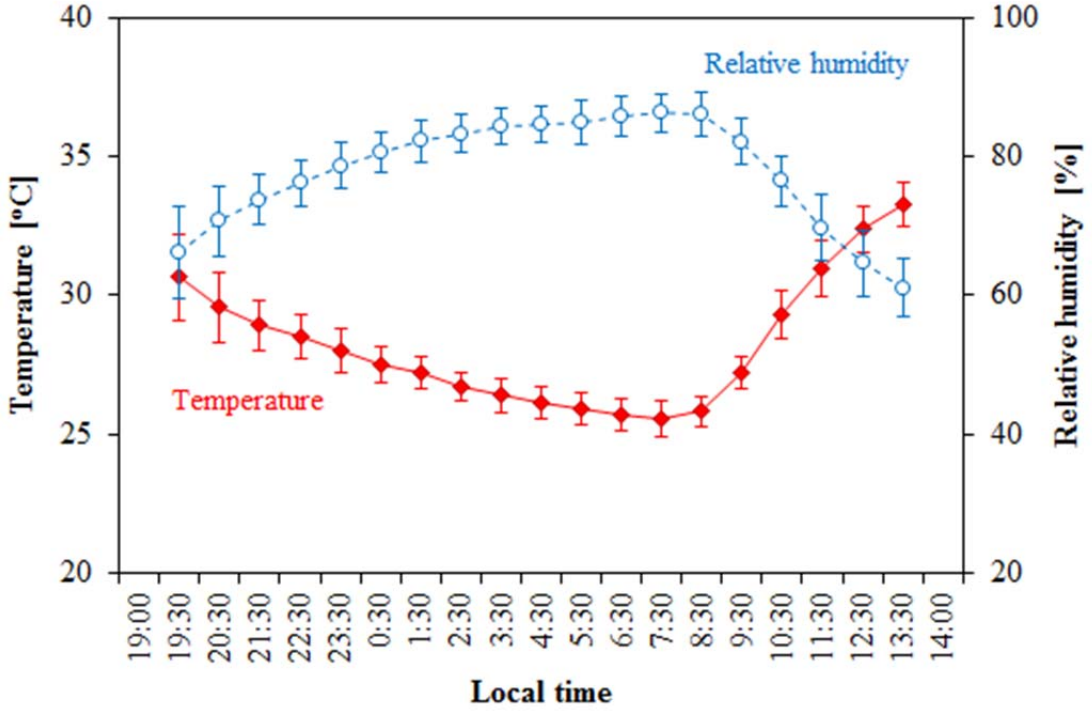
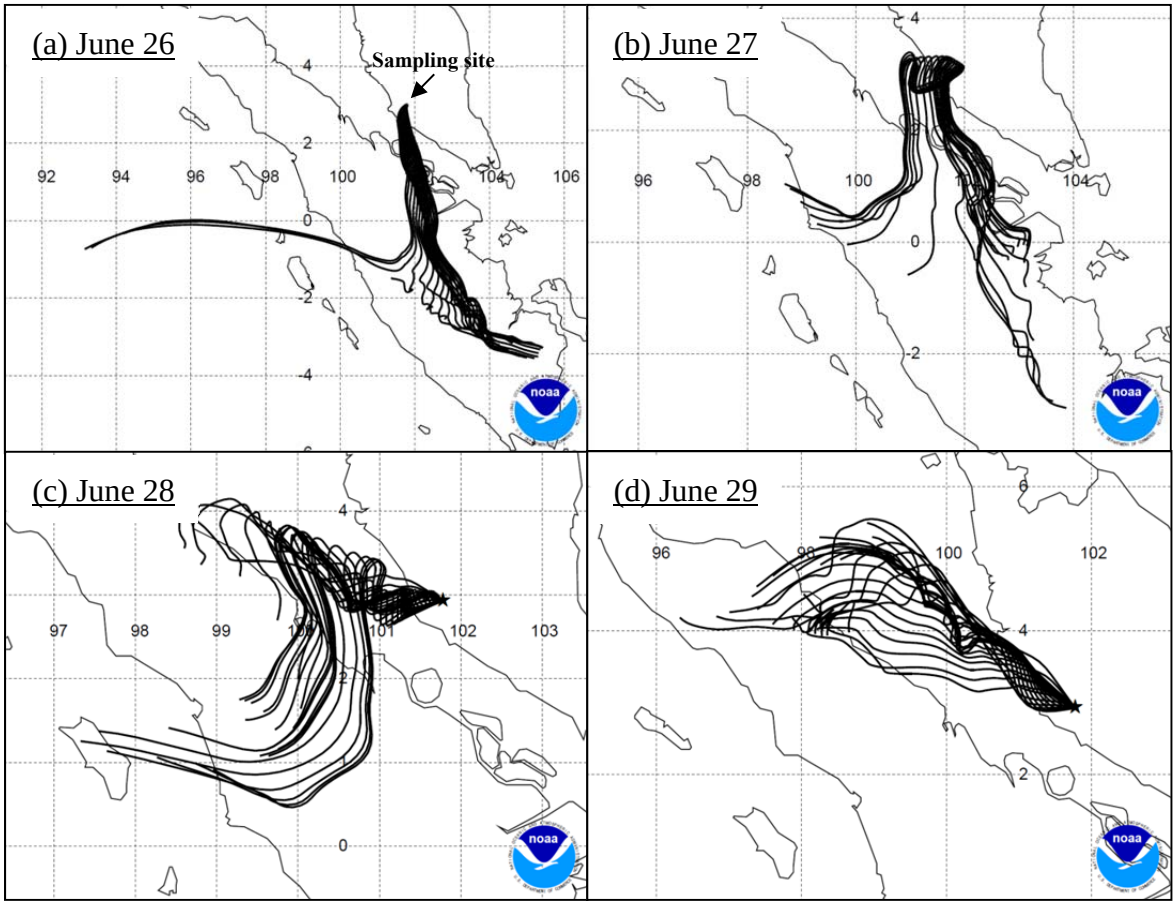
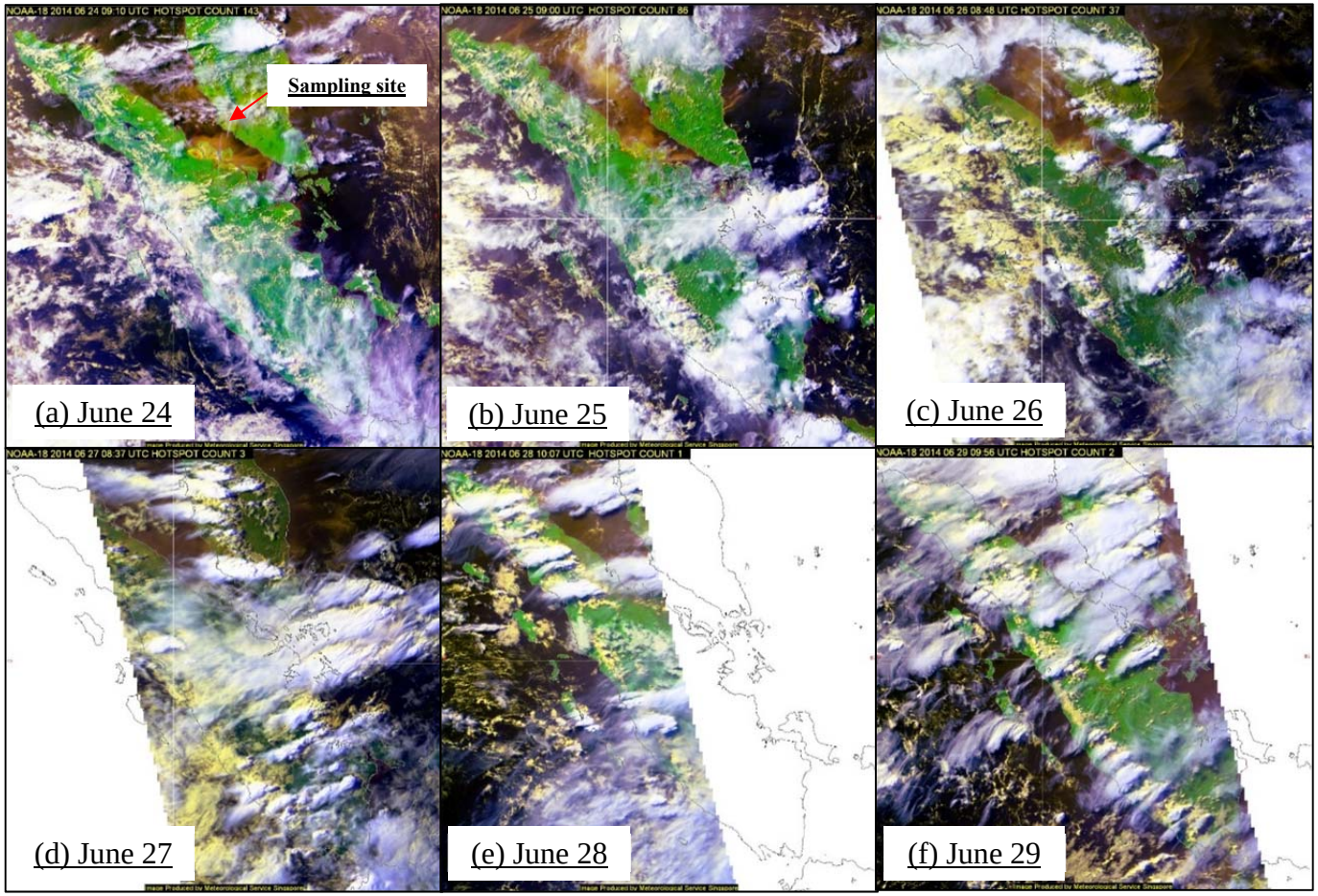

Relative humidity
Temperature
Temperature [°C]
Relative humidity [%]
Local time
40
35
30
25
20
100
80
60
40
20
19:00
19:30
20:30
21:30
22:30
23:30
0:30
1:30
2:30
3:30
4:30
5:30
6:30
7:30
8:30
9:30
10:30
11:30
12:30
13:30
14:00

Fig. S1



The 3-days backward air trajectories every 1 hours with 500 m above ground level arriving at the sampling site in local time were calculated during the sampling periods by the Hybrid Single Particle Lagrangian Integrated Trajectory model.

Fig. S2



data from Singapore National Environmental Agency (http://www.weather.gov.sg/wip/web/ASMC/home).

Fig. S3