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1 **Total OH reactivity measurement in a BVOC dominated temperate forest during a**
2 **summer campaign, 2014**

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22 Key words: Total OH reactivity, Biogenic VOCs, Coniferous forest, Missing OH reactivity

23 **Abstract**

24 A total OH reactivity measurement was conducted in coniferous forest located in Wakayama
25 prefecture, Japan during the summer of 2014. The average total OH reactivity, measured using
26 a laser-induced pump and probe technique was 7.1 s^{-1} . The measured OH reactivity was
27 comparable with other coniferous and temperate forest measurements and much lower than
28 that of tropical forests. OH reactivity varied diurnally and showed moderate linear correlation
29 with temperature ($r^2 = 0.66$) and light ($r^2 = 0.53$). Monoterpene emitters, *Cryptomeria japonica*

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