

1 **Supplementary Information for**

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3 **Total Atmospheric Mercury Deposition in Forest Areas in Korea**

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**QA/QC**

*Dry deposition for GOM and PBM*

*Relative percent difference (RPD) analyses for replicate GOM and PBM measurements were 19.4% and 22.9%, respectively. Relative Standard Deviation (RSD) measured by injecting mercury vapor standards at the same concentration seven times averaged 2 ~ 5%, within EPA Method 1631 requirements ( $\pm 25\%$ ).*

*TM in wet deposition and throughfall*

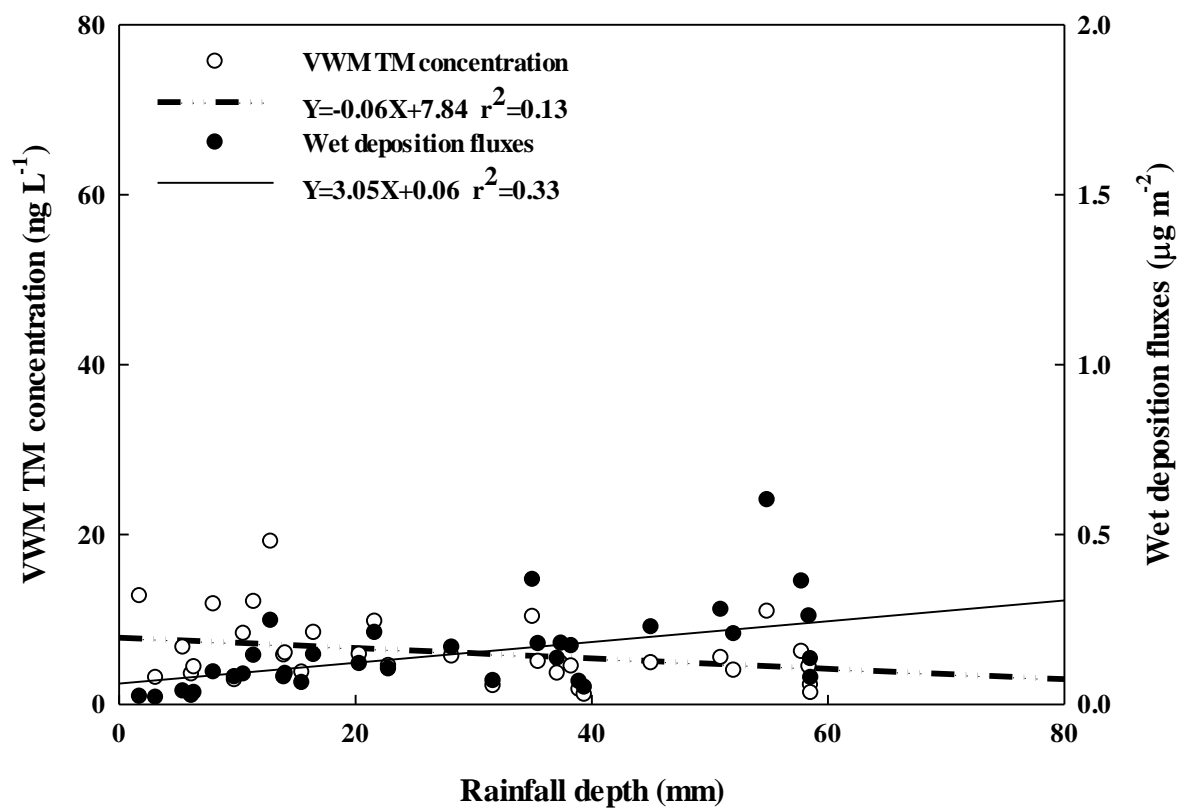
*Initial (IPR) and on-going (OPR) precision and recovery measured every 15 samples at the start of the analysis ranged from 80 ~ 107% ( $92.2 \pm 7.0\%$  in average) and 81 ~ 117% ( $96.9 \pm 13.7\%$  in average), respectively with an RPD of 3 ~ 13%. Field blanks were collected monthly from September to December and Hg concentration was  $0.36 \text{ ng L}^{-1}$ . The average lab blank ( $n = 44$ ) concentration was  $0.2 \text{ ng L}^{-1}$ .*

**Table S1. Monthly dry deposition of GOM ( $\mu\text{g m}^{-2} \text{ yr}^{-1}$ ) under forest**

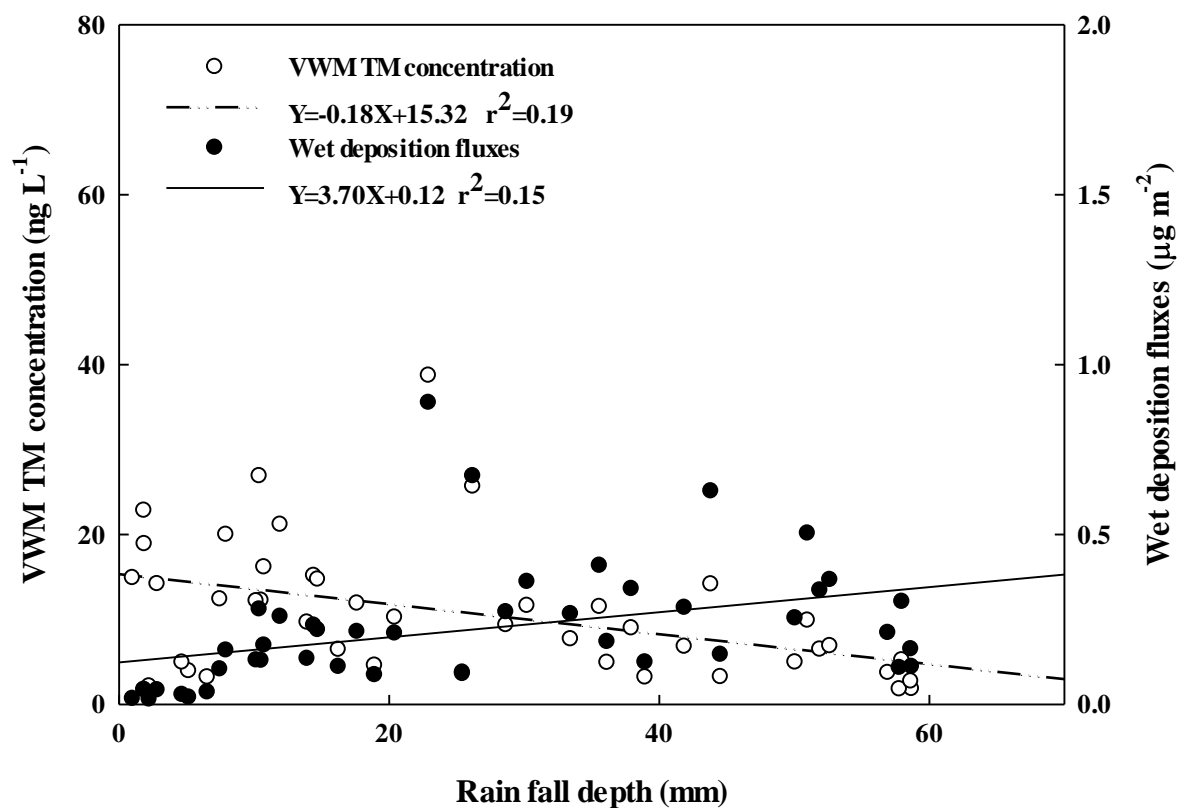
<b>08-Sep</b>	<b>08-Oct</b>	<b>08-Nov</b>	<b>08-Dec</b>	<b>09-Jan</b>	<b>09-Feb</b>	<b>09-Mar</b>	<b>09-Apr</b>	<b>09-May</b>
3.08	1.43	1.26	1.70	2.84	10.86	8.41	13.43	8.24
<b>09-Jun</b>	<b>09-Jul</b>	<b>09-Aug</b>	<b>09-Sep</b>	<b>09-Sep</b>	<b>09-Nov</b>	<b>09-Dec</b>	<b>10-Jan</b>	<b>10-Feb</b>
9.39	6.83	1.22	0.42	2.74	0.35	1.01	11.19	1.70

**Table S2. Monthly dry deposition of PBM ( $\mu\text{g m}^{-2} \text{ yr}^{-1}$ ) under forest**

<b>08-Sep</b>	<b>08-Oct</b>	<b>08-Nov</b>	<b>08-Dec</b>	<b>09-Jan</b>	<b>09-Feb</b>	<b>09-Mar</b>	<b>09-Apr</b>	<b>09-May</b>
4.91	1.91	2.13	2.19	3.30	6.02	6.25	1.85	1.79
<b>09-Jun</b>	<b>09-Jul</b>	<b>09-Aug</b>	<b>09-Sep</b>	<b>09-Sep</b>	<b>09-Nov</b>	<b>09-Dec</b>	<b>10-Jan</b>	<b>10-Feb</b>
7.98	19.38	1.54	1.60	0.79	1.10	1.76	12.15	2.08



**Figure S1. Relationship between rainfall depth and VWM TM concentration and fluxes in precipitation.**



**Figure S2. Relationship between rainfall depth and VWM TM concentration and fluxes in throughfall.**