Supplementary Information:

Manuscript title**: Trans-Pacific and Regional Atmospheric Transport of Polycyclic Aromatic Hydrocarbons and Pesticides in Biomass Burning Emissions to Western North America**

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Measurement of SOCs

The extraction of SOCs from the air sampling media was conducted using an Accelerated Solvent Extractor [17] 300 (Dionex, Sunnyvale, CA). The ASE conditions and solvent compatibility with the sampling media has been described elsewhere [9]. The average percent SOC recoveries (%RSD) from the entire analytical method were 76.7(6.2), 79.3(8.1), and 93.4(2.9) for the QFF, PUF, and XAD-2, respectively [9]. The extracts were concentrated to 300 uL with a stream of nitrogen using a Turbo Vap II (Caliper Life Sciences, Hopkinton, MA) and were analyzed using gas chromatography/mass spectrometry (GC-MS) in selected ion monitoring (SIM) mode [9, 10]. Levoglucosan was measured in the air samples using the method described in Mederios et al [18].

SOCs were extracted from the forest soil samples using the same method for PUF as described elsewhere [9]. The soil extracts were further purified using silica gel adsorption chromatography (Varian, Palo Alto, CA) and a 75:25 hexane:acetone solvent mixture as the elution solvent. The extracts were concentrated with nitrogen and analyzed by GC/MS.

The GC/MS consisted of an Agilent 6890 GC interfaced with an Agilent 5973N mass selective detector. A DB-5ms column (30m, 0.25mm id., 0.25um film thickness, J&W Scientific, USA) was used with an oven temperature program that varied based on the ionization mode of the mass selective detector [10]. Details on the GC temperature programs for both electron capture negative ionization (ECNI) and electron impact ionization (EI), as well as the ions monitored, have been previously reported [10]. The mode of ionization chosen for each SOC was based on which ionization technique gave

the lowest detection limit [10]. EPA method 8280A was used to calculate the estimated detection limits (EDLs) for each SOC in the air samples [19]. For a typical air sample, EDLs ranged from 0.0078 pg/m^3 to 0.19 pg/m^3 in ECNI mode and 0.059 pg/m^3 to 0.73pg/m^3 in EI mode. All reported concentrations were surrogate recovery corrected and field blank subtracted.

Quality Assurance/Quality Control Procedures

Each air sample consisted of both a top and bottom quartz fiber filter (QFF) and the bottom QFF was analyzed separately to check for sorption of gas phase SOCs to the QFF. All SOCs were below the limits of quantitation on the bottom QFF and no correction for SOC sorption was done. The CPO air samples consisted of a two PUF system and the bottom PUF was analyzed separately to check for breakthrough of gas phase SOCs in ~50% of the air samples. Only hexachlorobenzene (HCB) had the potential for gas phase breakthrough and 39 to 44% of the total HCB concentration was measured on the bottom PUF. No correction for the potential breakthrough of HCB was done. However, this suggests that the HCB concentration at CPO may be slightly underestimated. At MPO, a PUF/XAD/PUF gas phase sampling system was used and HCB breakthrough was not observed in the bottom PUF.

Field blanks were collected at both MPO and CPO. At CPO, phenanthrene, fluorene, pyrene, and retene were measured slightly above the quantitation limit, while at MPO, dacthal, chlorpyrifos, HCB, endosulfan I, endosulfan II, endosulfan sulfate, phenanthrene, fluorene, pyrene, and retene were measured slightly above the quantitation limit. All reported concentrations were field blank subtracted.

Figure S.1. Map of air sampling locations (Cheeka Peak Observatory – CPO and Mary's Peak Observatory –MPO) in relation to source regions (boxes) in (A) Asia, Siberia, and the U.S. and (B) urban and agricultural source regions in the United States

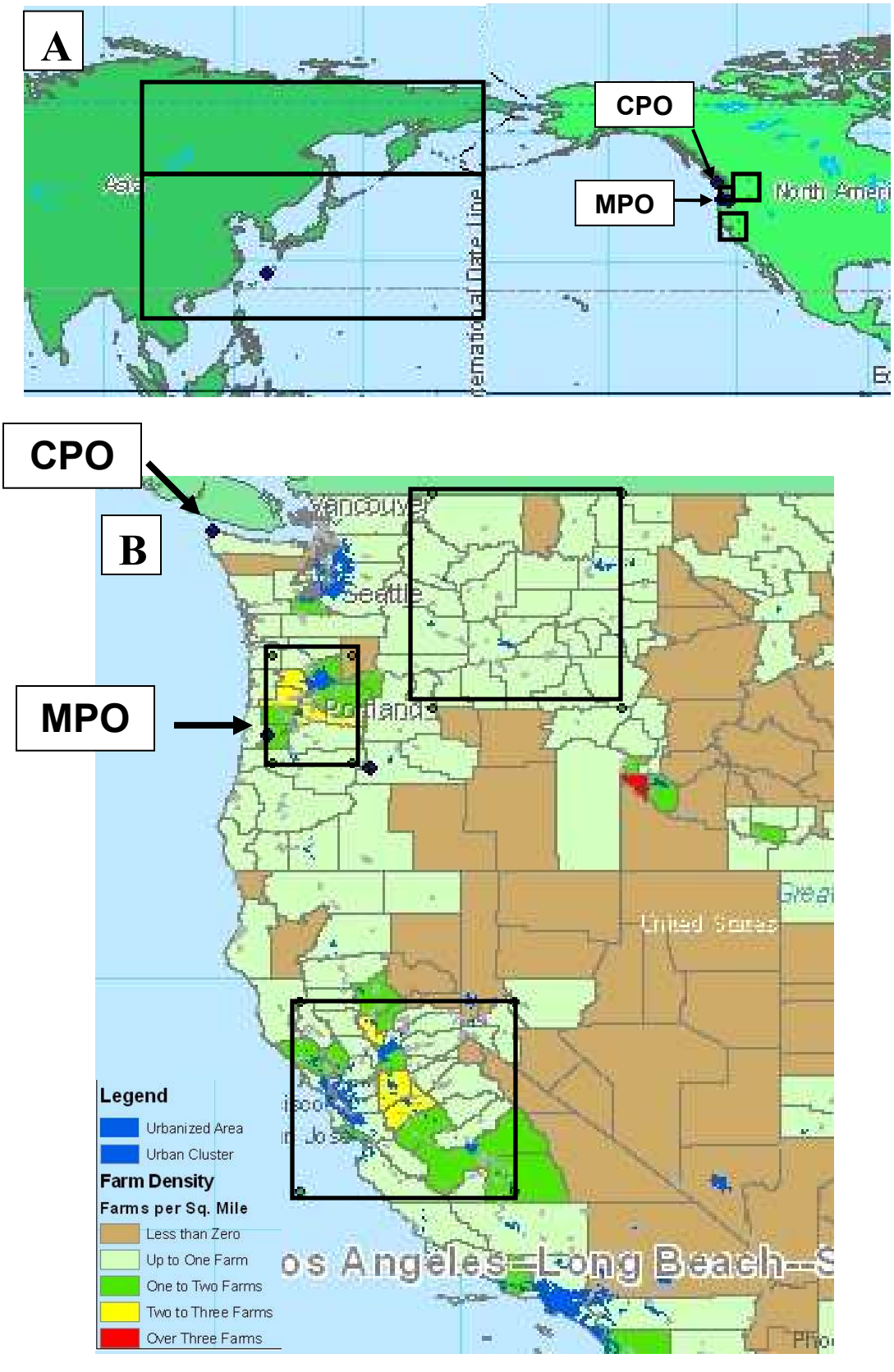


Table S.1. Sample, meteorological, and SRIF information for air samples collected at MPO and CPO during 2003. The %PO indicates the percent of time the air mass spent over the Pacific Ocean relative to land masses along the 10 day back trajectory. The %<BL and %>BL refers to the amount of time an air mass spent below and above the boundary layer (BL) prior to sampling.

Sample #	Sampling Location	Start	Stop	Hours Sampled	m3 of air	Avg Temp (°C)	Average Wind Speed (m/s)	Primary Wind Direction	% Pacific Ocean	%<BL	%>BL	%Siberia	% Asia	% Eastern Oregon and Washington	% Western Oregon	% Central California
1R	CPO	11-Apr	13-Apr	48	675	9.1*	5*	NE*	87.7	81.4	18.6	17.8	17.9	1.5	0.7	0.0
2	CPO	21-Apr	23-Apr	48	664	8.3*	8*	W*	85.0	58.4	41.6	22.1	5.4	0.0	1.1	0.0
3	CPO	2-May	4-May	48	661	9.1*	3.0	W	56.8	71.2	28.8	0.0	0.0	0.0	0.0	0.2
4	MPO	11-May	13-May	48	3041	5.0	5.3	W	29.2	18.9	81.1	0.0	0.0	4.0	7.1	0.0
5	MPO	21-May	23-May	48	3207	12.1	2.5	SW	96.0	16.5	83.5	1.9	5.1	0.0	0.5	0.0
6	MPO	26-May	28-May	48	3207	NA	3.9	NE	94.7	26.5	73.5	0.1	8.9	0.0	0.5	0.0
7	MPO	30-May	1-Jun	48	3207	7.7	5.2	NE	89.2	40.5	59.5	4.8	2.8	0.0	1.8	0.0
8S	MPO	2-Jun	4-Jun	48	3207	9.4	9.1	NE	78.1	3.8	96.2	8.5	4.7	0.0	2.2	0.0
9S	CPO	2-Jun	4-Jun	48	643	12.9*	2.7	W	88.7	32.0	68.0	1.2	0.2	0.0	0.0	0.0
10S	CPO	16-Jun	18-Jun	48	636	14.5*	2.0	W	93.3	45.8	54.2	8.8	4.4	0.0	0.0	0.0
11	MPO	22-Jun	24-Jun	48	2867	4.0	6.8	NE	89.2	25.3	74.7	3.8	2.4	0.0	0.7	0.0
12	MPO	4-Jul	6-Jul	48	2867	13.4	4.9	NE	88.7	33.1	66.9	0.1	1.7	0.0	0.9	0.0
13	CPO	7-Jul	9-Jul	48	636	13.8*	3.2	SW	92.2	83.5	16.5	3.9	6.9	0.0	0.0	0.0
14	MPO	22-Jul	24-Jul	48	1794	18.4	4.4	N	90.4	16.5	83.5	2.9	21.4	0.0	1.8	0.0
15	MPO	2-Aug	4-Aug	48	1794	15.0	2.6	S	95.0	39.9	60.1	0.8	0.6	0.0	0.8	0.0
16S	MPO	4-Aug	5-Aug	24	897	17.0	3.8	SW	87.1	52.9	47.1	4.2	0.0	0.0	0.6	0.0
17S	CPO	4-Aug	6-Aug	48	647	13.9*	2.5	SW	83.5	80.6	19.4	1.7	0.0	0.0	0.0	0.0
18	MPO	8-Aug	10-Aug	48	1794	11.9	4.9	SW	86.2	25.8	74.2	2.6	0.2	0.0	0.8	0.0
19	MPO	12-Aug	14-Aug	48	1794	12.0	4.6	SW	82.2	26.6	73.4	0.0	0.0	0.0	2.9	0.0
20R	MPO	4-Sep	5-Sep	24	897	23.4	2.8	SW	77.5	56.2	43.8	3.3	0.3	2.5	2.5	0.0
21T	MPO	21-Sep	22-Sep	24	897	11.6	13.5	NE	78.2	6.0	94.0	12.6	20.9	0.0	1.9	0.0

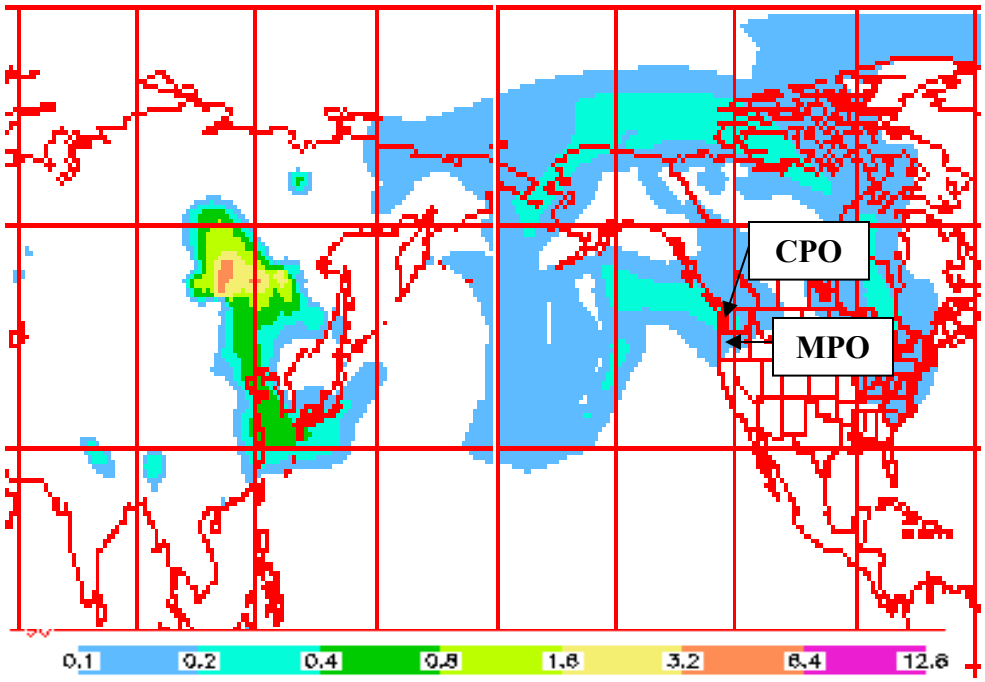
*** CPO data from met station in Quillayute, WA**

S = influenced by Siberian biomass burning

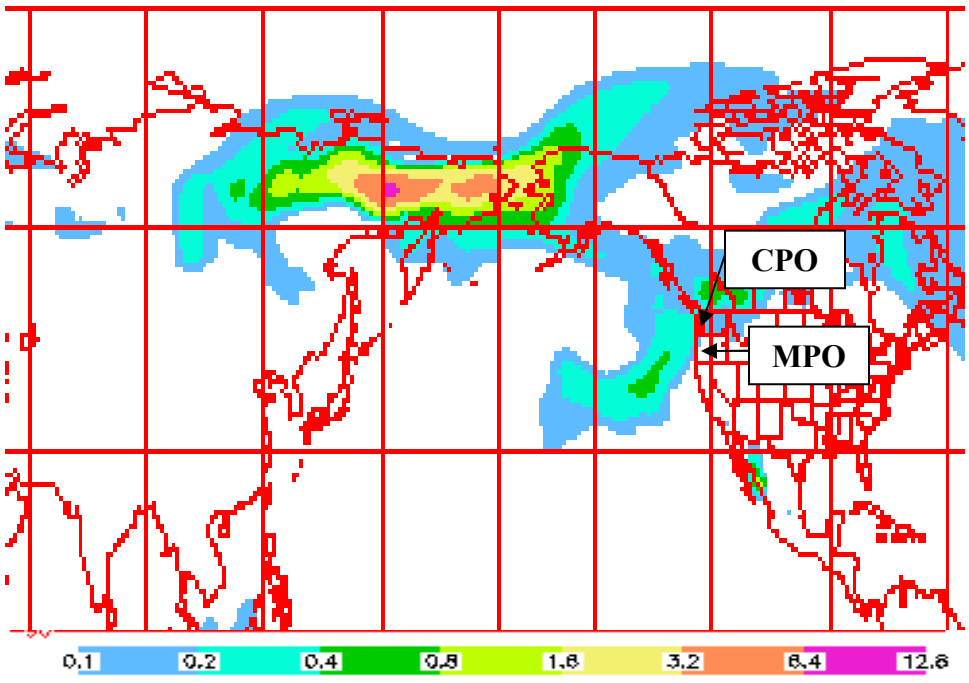
R = influenced by regional biomass burning

T = influenced by trans-Pacific transport

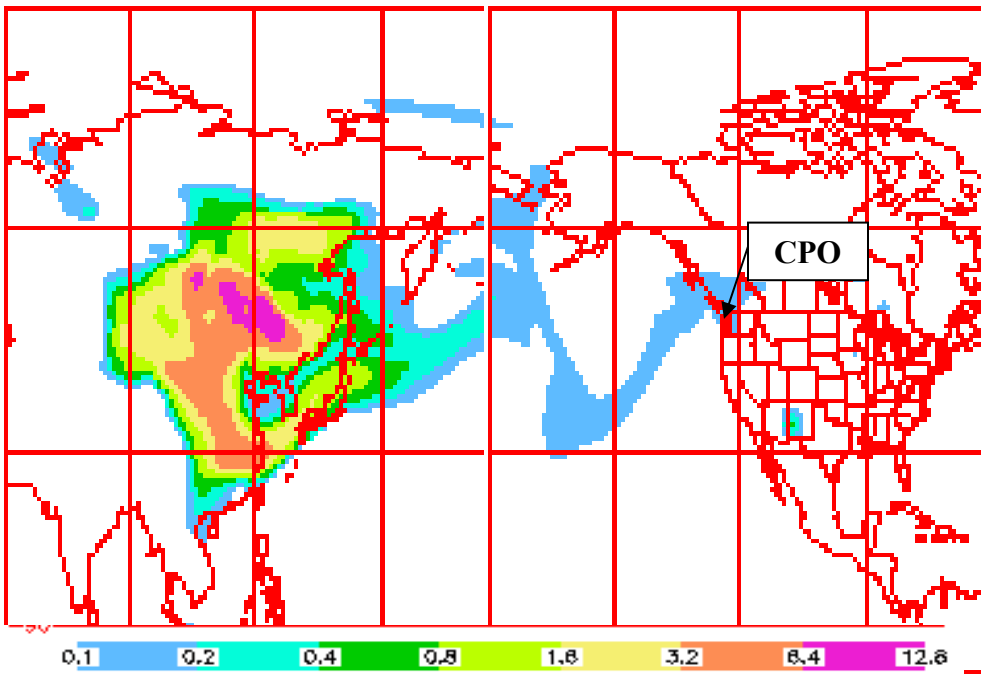
Figure S.2 NAAPs model images depicting the smoke optical depth in sampled air masses influenced by Siberian biomass burning emissions (A, B, and C) and a regional forest fire (D). The legend represents the smoke mass mixing ratio (ug / m^3) at the surface. The contouring begins at 0.1 ug / m^3 and doubles in magnitude for each successive contour [1].



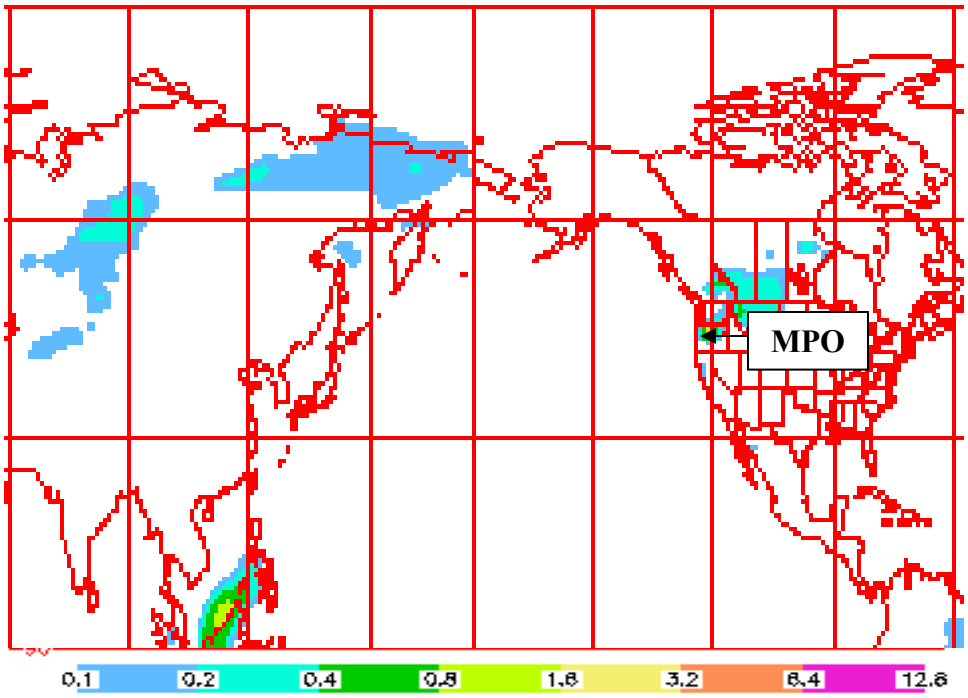
A. Representative image during the June 2 concurrent sampling at CPO and MPO.



B. Representative image during the August 4 concurrent sampling at CPO and MPO.



C. Representative image during the June 16 sampling at CPO.



D. Representative image during the September 4 sampling at MPO.

Table S.2A. Concentrations of PAHs that exist primarily in the gas phase (ACE, FLO, PHE, ANT, FLA, PYR, RET) and particulate phase (BaA, CHR, BbF, BkF, BeP, BaP, IcdP, BghiP) in the atmosphere (pg/m^3) in MPO and CPO air samples collected during 2003.

Sample #	*Sampling Location*	*Sampling start date*	*ACE*	*FLO*	*PHE*	*ANT*	*FLA*	*PYR*	*RET*	*BaA*	*CHR*	*BbF*	*BkF*	*BeP*	*BaP*	*IcdP*	*BghiP*	*LEV*
1R	**CPO**	**11-Apr**	<DL	256	170	<DL	41.0	1.71	<DL	14.8	6.98	<DL	<DL	<DL	<DL	<DL	<DL	16000
2	**CPO**	**21-Apr**	<DL	54.3	75.9	<DL	18.8	12.2	<DL	<DL	<DL	4.96	<DL	1.73	<DL	<DL	<DL	654
3	**CPO**	**2-May**	<DL	49.81	125	<DL	23.2	16.3	<DL	<DL	<DL	9.94	<DL	<DL	<DL	<DL	<DL	381
4	**MPO**	**11-May**	<DL	155	199	<DL	38.1	69.2	38.8	4.47	4.00	<DL	<DL	<DL	<DL	<DL	3.98	<DL
5	**MPO**	**21-May**	<DL	258	558	<DL	81.9	93.6	66.4	5.43	3.83	<DL	<DL	<DL	<DL	<DL	4.75	22600
6	**MPO**	**26-May**	<DL	43.5	55.2	<DL	8.71	19.0	11.3	<DL	<DL	<DL	<DL	<DL	<DL	<DL	1.03	<DL
7	**MPO**	**30-May**	<DL	21.5	27.4	<DL	0.74	25.7	<DL	<DL	<DL	<DL	<DL	1.63	<DL	2.42	1.01	<DL
8S	**MPO**	**2-Jun**	72.4	165	274	<DL	29.5	28.8	21.0	<DL	12.0	8.47	32.6	13.8	<DL	13.7	7.47	32300
9S	**CPO**	**2-Jun**	<DL	55.7	184	<DL	91.5	92.2	41.2	<DL	<DL	<DL	11.2	<DL	<DL	<DL	<DL	<DL
10S	**CPO**	**16-Jun**	<DL	51.5	306	<DL	200	236	84.5	<DL	<DL	<DL	<DL	<DL	<DL	<DL	<DL	<DL
11	**MPO**	**22-Jun**	<DL	38.4	121	<DL	13.4	23.6	23.3	<DL	<DL	<DL	<DL	<DL	<DL	<DL	0.89	3440
12	**MPO**	**4-Jul**	<DL	97.7	127	<DL	28.4	41.8	27.2	5.43	<DL	<DL	<DL	<DL	<DL	2.31	3.05	<DL
13	**CPO**	**7-Jul**	<DL	<DL	68.5	<DL	20.2	21.2	<DL	<DL	<DL	<DL	<DL	<DL	<DL	<DL	<DL	<DL
14	**MPO**	**22-Jul**	149	522	1120	<DL	246	376	156	<DL	<DL	<DL	<DL	<DL	<DL	<DL	<DL	3980
15	**MPO**	**2-Aug**	3.69	56.5	91.6	<DL	29.6	57.0	<DL	<DL	<DL	<DL	<DL	2.97	<DL	3.10	2.00	<DL
16S	**MPO**	**4-Aug**	72.0	205	235	<DL	62.3	115	70.3	<DL	<DL	<DL	<DL	4.90	<DL	<DL	4.23	33800
17S	**CPO**	**4-Aug**	<DL	14.6	169	<DL	107	143	42.1	<DL	<DL	<DL	<DL	<DL	<DL	<DL	<DL	1980
18	**MPO**	**8-Aug**	137	153	656	25.5	102	263	74.7	<DL	<DL	<DL	<DL	52.2	<DL	<DL	2.38	2750
19	**MPO**	**12-Aug**	88.0	240	824	<DL	103	261	80.1	<DL	<DL	<DL	<DL	<DL	<DL	4.30	4.07	0
20R	**MPO**	**4-Sep**	431	483	2230	125	330	1070	303	<DL	<DL	<DL	<DL	321	20.1	<DL	5.96	17100
21T	**MPO**	**21-Sep**	<DL	215	682	<DL	52.8	69.2	48.0	19.9	5.11	<DL	<DL	10.7	35.0	8.91	9.43	472

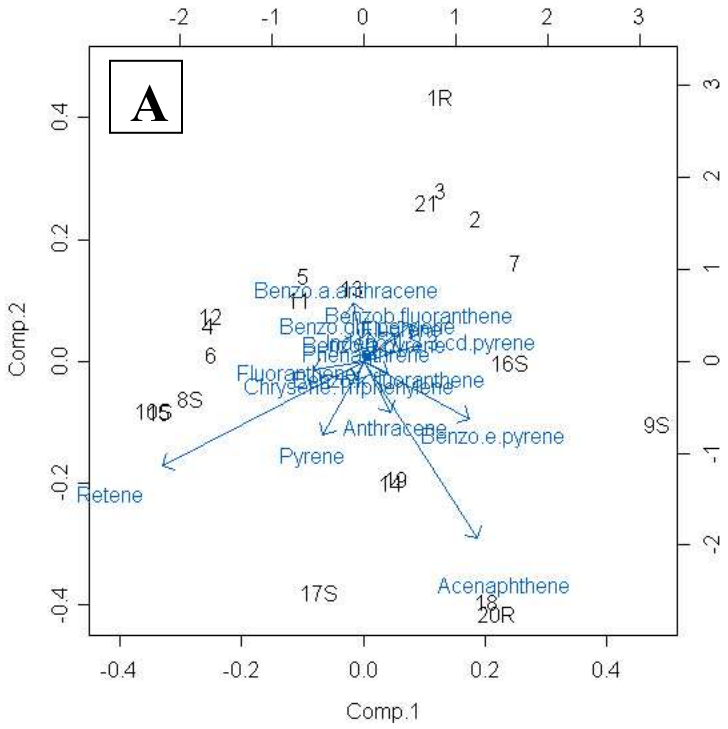
indicates concurrent samples

Abbreviations: **ACE=acenapthene, FLO = fluorene, PHE = phenanthrene, ANT = anthracene, FLA = fluoranthene, PYR = pyrene, RET = retene, BaA = Benzo[a]anthracene = chrysene and triphenylene, BbF = Benzo[b]fluoranthene, BkF = Benzo[k]fluoranthene, BeP = Benzo[e]pyrene, BaP = Benzo[a]pyrene, IcdP = Indeno[1,2,3-cd]pyrene, BghiP = Benzo[ghi]perylene, LEV = levoglucosan, 1,3,5 TPB = 1,3,5 triphenylbenzene**

Table S.2B. Percent of individual PAHs in the particulate phase for each sampling date. NA signifies that a percentage could not be determined because both the gas and particulate phase PAH concentrations were below the detection limit.

Sample #	Sampling Location	Sampling start date	ACE	FLO	PHE	ANT	FLA	PYR	RET	BaA	CHR	BbF	BkF	BeP	BaP	IcdP	BghiP
1R	CPO	11-Apr	NA	2.69	6.42	NA	9.95	NA	100	50.1	49.9	NA	NA	NA	NA	NA	NA
2	CPO	21-Apr	NA	8.29	14.1	NA	10.4	16.9	100	100	100	100	NA	100	NA	100	NA
3	CPO	2-May	NA	15.4	9.27	NA	4.92	10.8	100	100	100	100	100	NA	NA	NA	NA
4	MPO	11-May	NA	NA	11.4	NA	24.9	11.6	24.7	100	100	NA	NA	NA	NA	NA	100
5	MPO	21-May	NA	NA	3.82	NA	15.8	11.5	27.6	100	100	NA	NA	NA	NA	NA	100
6	MPO	26-May	NA	NA	5.88	NA	15.4	9.98	29.1	NA	NA	NA	NA	NA	NA	NA	100
7	MPO	30-May	NA	NA	14.1	NA	NA	8.12	NA	NA	NA	NA	NA	NA	NA	100	100
8S	MPO	2-Jun	100	NA	22.1	NA	31.9	29.6	100	NA	100	100	100	100	NA	100	100
9S	CPO	2-Jun	NA	9.77	5.47	NA	NA	4.81	11.5	NA	NA	NA	80.3	100	NA	NA	NA
10S	CPO	16-Jun	NA	7.78	2.74	NA	NA	1.39	6.07	NA	NA	NA	NA	NA	NA	NA	NA
11	MPO	22-Jun	NA	NA	13.6	NA	9.02	6.71	19.1	NA	NA	NA	NA	NA	NA	NA	100
12	MPO	4-Jul	NA	NA	5.20	NA	8.21	6.51	13.7	0	NA	NA	NA	NA	NA	0	45.9
13	CPO	7-Jul	NA	NA	2.99	NA	NA	3.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	MPO	22-Jul	NA	0	3.05	NA	4.87	3.90	20.2	NA	NA	NA	NA	NA	NA	NA	NA
15	MPO	2-Aug	NA	NA	11.2	NA	11.8	6.64	NA	NA	NA	NA	NA	100	NA	100	100
16S	MPO	4-Aug	NA	NA	8.19	NA	7.06	5.70	32.7	NA	NA	NA	NA	100	NA	NA	100
17S	CPO	4-Aug	NA	NA	4.18	NA	NA	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	MPO	8-Aug	NA	NA	14.5	NA	10.2	3.29	12.0	NA	100	NA	NA	0	NA	NA	100
19	MPO	12-Aug	NA	NA	6.95	NA	7.65	3.62	14.2	NA	NA	NA	NA	NA	NA	100	100
20R	MPO	4-Sep	NA	NA	4.30	NA	6.03	1.57	11.6	NA	NA	NA	NA	0	0	NA	100
21T	MPO	21-Sep	NA	4.16	7.97	NA	23.5	16.8	41.1	100	100	NA	NA	100	0	100	100

Figure S.3. PCA biplot of normalized, centered log ratio transformed (A) PAH and (B) Pesticide concentrations measured at MPO and CPO during 2003. The numbers correspond to sample numbers in Tables SI.2. The letters next to the sample number indicate samples influenced by Siberian biomass burning emissions (S) and regional fires (R).



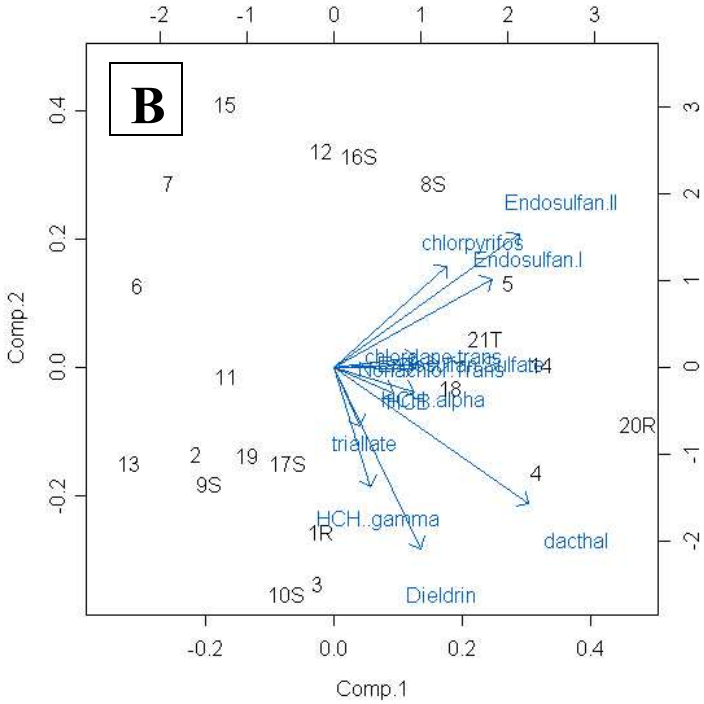


Table S.3. Pesticide concentrations (pg/m^3) in MPO and CPO air samples collected during 2003

Sample #	Sampling Location	Sampling start date	HCB	alpha-HCH	gamma-HCH	alpha HCH / gamma HCH ratio	Triallate	Dacthal	Chlorpyrifos	Chlordane, trans	Endosulfan I	Nonachlor, trans	Dieldrin	Endosulfan II	Endosulfan sulfate
1R	CPO	11-Apr	38.6	13.6	4.57	2.96	6.31	9.44	<DL	0.28	12.1	<DL	3.00	<DL	<DL
2	CPO	21-Apr	43.3	15.6	5.06	3.08	<DL	<DL	<DL	<DL	2.53	<DL	6.46	<DL	<DL
3	CPO	2-May	36.2	14.4	6.70	2.15	2.40	8.79	<DL	0.22	6.49	<DL	11.7	<DL	<DL
4	MPO	11-May	30.1	12.6	5.27	2.39	5.85	32.6	1.88	0.64	62.4	0.56	13.9	6.66	0.62
5	MPO	21-May	29.0	13.3	3.30	4.04	<DL	2.07	4.49	0.96	64.9	0.67	6.38	26.6	1.12
6	MPO	26-May	9.82	3.84	0.96	4.01	<DL	<DL	0.37	0.23	3.86	0.16	<DL	<DL	<DL
7	MPO	30-May	11.3	5.76	1.09	5.27	<DL	0.05	2.49	<DL	5.30	<DL	<DL	0.84	<DL
8S	MPO	2-Jun	35.2	16.2	4.32	3.74	<DL	0.16	3.91	0.61	92.1	0.41	3.03	41.0	0.96
9S	CPO	2-Jun	17.1	21.5	6.35	3.38	<DL	<DL	<DL	<DL	3.24	<DL	13.7	<DL	<DL
10S	CPO	16-Jun	26.2	29.9	14.9	2.00	<DL	2.04	<DL	<DL	3.50	<DL	40.1	<DL	<DL
11	MPO	22-Jun	37.5	25.3	2.51	10.1	<DL	0.51	0.63	0.52	2.81	0.36	1.05	0.35	0.16
12	MPO	4-Jul	13.2	6.41	1.00	6.41	0.31	0.42	12.7	0.37	18.9	0.25	<DL	4.16	0.30
13	CPO	7-Jul	13.7	<DL	4.64	NA	<DL	0.29	<DL	<DL	0.83	<DL	7.13	<DL	<DL
14	MPO	22-Jul	81.1	37.0	7.20	5.13	<DL	3.67	4.16	1.79	24.8	1.42	11.0	14.2	3.23
15	MPO	2-Aug	22.8	9.30	<DL	NA	<DL	0.03	<DL	<DL	61.8	<DL	<DL	4.53	0.30
16S	MPO	4-Aug	25.1	17.1	<DL	NA	<DL	1.48	4.54	<DL	45.4	<DL	<DL	5.23	<DL
17S	CPO	4-Aug	61.7	49.3	10.1	4.91	<DL	<DL	0.70	<DL	7.09	<DL	21.6	0.73	<DL
18	MPO	8-Aug	84.3	53.1	3.91	13.6	<DL	5.65	2.42	0.75	26.2	0.67	4.75	3.26	0.30
19	MPO	12-Aug	28.6	22.9	4.66	4.91	<DL	<DL	0.32	<DL	3.29	<DL	10.0	0.34	2.31
20R	MPO	4-Sep	82.6	29.9	4.99	5.99	<DL	101	3.46	1.37	117	1.41	9.57	9.95	8.16
21T	MPO	21-Sep	80.1	50.4	8.33	6.05	<DL	<DL	2.60	2.45	91.0	1.66	26.7	8.65	1.87

indicates concurrent samples

<DL = below detection limit

NA = not applicable

S= influenced by Siberian biomass burning emissions

R= influenced by regional biomass burning emissions

T = influenced by trans-Pacific transport

Table S.4 Significant Pearson correlation coefficients (R) (p-value <0.05) between PAH and pesticide concentrations measured at MPO: Hexachlorobenzene (HCB), alpha and gamma Hexachlorocyclohexane (a-HCH, g-HCH), Dacthal (Dac), Endosulfan 1(Endo 1), Dieldrin (Dield), Endosulfan II(Endo2), Endosulfan Sulfate (EndoS), Sum Chlordanes (ΣChlor), Sum Endosulfans (ΣEndos), Fluorene (FLO), Phenanthrene (PHE), Anthracene (ANT), Fluoranthene (FLA), Pyrene (PYR), Retene (RET), and Levoglucosan (Lev), NA = not applicable.

	HCB	***aHCH***	***gHCH***	***a/g HCH ratio***	***Dac***	***ENDO1***	***DIELD***	***ENDO2***	***ENDOS***	***Σ Chlor***	***Σ Endo***	***FLO***	***PHE***	***ANT***	***FLA***	***PYR***	***RET***	***Lev***
HCB	NA	0.94	0.78							0.78		0.72	0.79		0.70	0.65	0.66	
aHCH	0.94	NA	0.71							0.65								
gHCH	0.78	0.71	NA				0.87			0.89	0.58	0.70	0.58					
a/g ratio				NA														
Dac					NA	0.66			0.86			0.63	0.82		0.79	0.86	0.83	
ENDO1			0.60			NA					0.97		0.59					
DIELD			0.87				NA			0.77								
ENDO2								NA			0.66							0.57
ENDOS					0.86				NA			0.87	0.96		0.94	0.95	0.96	
Σ Chlor	0.78	0.65	0.89				0.77			NA								
Σ Endo			0.58			0.97		0.66			NA	0.56	0.58					0.54
FLO	0.72		0.70						0.87	0.75	0.56	NA	0.91		0.91	0.84	0.90	
PHE	0.79		0.58		0.82	0.59			0.96	0.69	0.58	0.91	NA		0.97	0.96	0.97	
ANT					0.93				0.87			0.58	0.83	NA	0.84	0.91	0.86	
FLA	0.70				0.79				0.94			0.91	0.97		NA	0.98	0.99	
PYR	0.65				0.86				0.95			0.84	0.96		0.98	NA	0.98	
RET	0.66				0.83				0.96			0.90	0.97		0.99	0.98	NA	
Lev								0.57			0.54							

Table S.5. Significant Pearson correlation coefficients (R) (p-value <0.05) between PAH and pesticide concentrations measured at CPO: Hexachlorobenzene(HCB), alpha and gamma Hexachlorocyclohexane (a-HCH, g-HCH), Dacthal (Dac), Endosulfan 1(Endo 1), Dieldrin (Dield), Endosulfan II(Endo2), Endosulfan Sulfate (EndoS), Sum Chlordanes (ΣChlor), Sum Endosulfans (ΣEndos), Fluorene (FLO), Phenanthrene (PHE), Anthracene (ANT), Fluoranthene (FLA), Pyrene (PYR), Retene (RET), and Levoglucosan (Lev).

	HCB	***aHCH***	***gHCH***	***a/g HCH ratio***	***Dact***	***Endo1***	***Dield***	***Endo2***	***EndoS***	***Σ Chlor***	***Σ Endo***	***FLO***	***PHE***	***ANT***	***FLA***	***PYR***	***RET***	***Lev***
HCB	NA				0.95													
aHCH		NA	0.83		-0.99		0.89								0.92	0.98	0.93	
gHCH		0.83	NA				0.98						0.82		0.83	0.79		
a/g ratio				NA														
Dact	0.95	-0.99			NA												.	
Endo1						NA												0.89
Dield		0.89	0.98				NA								0.83	0.87	0.99	
Endo2																		
EndoS																		
Σ Chlor																		
Σ Endo																		
FLO												NA						0.96
PHE			0.82										NA					
ANT																		
FLA		0.92	0.83				0.83								NA	0.95	0.99	
PYR		0.98	0.79				0.87								0.95	NA	0.95	
RET		0.93					0.99								0.99	0.95	NA	
Lev						0.89						0.96						NA

Table S.6. Concentrations of pesticides and polychlorinated biphenyls (PCBs) (pg/g dry weight) and their percent difference in burned and un-burned soil from the B&B complex fire in the Deschutes National Forest, Oregon, site of the B&B complex forest fire.

	Un-burned soil pg/g dw	**Burned soil pg/g dw**	**% difference**
Trifluralin	2.62	1.73	34
Hexachlorobenzene	140	22.5	84
HCH, alpha	1230	35.8	97
HCH, gamma (Lindane)	99.0	0.00	100
Heptachlor	2.25	0.00	100
Dacthal	62.0	5.92	90
Chlorpyrifos oxon	10.6	0.00	100
Heptachlor epoxide	23.2	0.00	100
Chlordane, trans	24.6	5.63	77
Nonachlor, trans	27.5	5.05	82
Dieldrin	519	0.00	100
Endosulfan II	13.9	6.20	55
Endosulfan sulfate	184	6.35	97
PCB 153 (hexa)	62.7	9.52	85
PCB 138 (hexa)	89.2	17.5	80
PCB 187 (hepta)	31.7	4.76	85
PCB 183 (hepta)	10.6	2.16	80