

Supplementary Material

MANUSCRIPT TITLE: PAHs in Chinese environment: levels, inventory mass,
source and toxic potency assessment

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Table S1. Basic information of natural source and economic and social development (all of these data were obtained from a database called Scientific Database of Chinese Academy of Sciences ¹).

	Land area (km ²)	Watershed area (km ²)	Glacier/desert area (km ²)	Urban area (km ²)	Rural area (km ²) ^a	Transportation area (km ²) ^b	Total water resources volume (× 10 ⁸ m ³)
Northern China							
Beijing	1.6E+04	1.1E+02	0.0E+00	5.5E+03	9.9E+03	3.6E+02	4.1E+01
Tianjing	1.2E+04	3.0E+02	0.0E+00	4.3E+03	7.0E+03	3.3E+02	1.5E+01
Hebei	1.9E+05	6.3E+02	1.1E+03	5.8E+03	1.8E+05	3.1E+03	2.4E+02
Shanxi	1.6E+05	5.6E+02	1.6E+03	8.8E+03	1.4E+05	1.6E+03	1.4E+02
Inner Mongolia	1.2E+06	4.0E+03	2.5E+05	1.3E+04	9.1E+05	3.2E+03	5.1E+02
Total	1.5E+06	5.6E+03	2.5E+05	3.8E+04	1.2E+06	8.6E+03	9.4E+02
Northeastern China							
Liaoning	1.6E+05	1.5E+03	0.0E+00	1.5E+04	1.5E+05	2.2E+03	3.6E+02
Jilin	1.8E+05	1.2E+03	4.0E+01	5.9E+04	1.2E+05	2.3E+03	3.9E+02
Heilongjiang	4.6E+05	4.8E+03	0.0E+00	1.7E+03	4.4E+05	4.6E+03	7.8E+02
Total	8.0E+05	7.5E+03	4.0E+01	7.5E+04	7.1E+05	9.1E+03	1.5E+03
Eastern China							
Shanghai	7.1E+03	1.3E+03	0.0E+00	2.6E+03	3.0E+03	1.9E+02	2.7E+01
Jiangsu	1.0E+05	1.4E+04	1.6E+02	6.0E+03	7.9E+04	2.8E+03	3.3E+02
Zhejiang	1.0E+05	1.4E+03	0.0E+00	8.5E+03	8.9E+04	1.0E+03	9.0E+02
Anhui	1.4E+05	4.9E+03	2.0E+00	7.5E+03	1.3E+05	2.6E+03	6.8E+02
Fujian	1.2E+05	5.6E+02	0.0E+00	1.0E+04	1.1E+05	9.1E+02	1.2E+03
Shandong	1.6E+05	1.3E+03	8.8E+02	2.7E+04	1.2E+05	4.6E+03	3.4E+02
Total	6.3E+05	2.3E+04	1.0E+03	6.2E+04	5.3E+05	1.2E+04	3.4E+03
Central China							
Jiangxi	1.7E+05	5.1E+03	0.0E+00	5.7E+03	1.6E+05	1.2E+03	1.4E+03
Henan	1.6E+05	1.9E+03	1.5E+03	8.0E+03	1.4E+05	3.8E+03	4.1E+02

Hubei	1.9E+05	4.6E+03	0.0E+00	1.8E+04	1.6E+05	2.1E+03	9.8E+02
Hunan	2.1E+05	4.3E+03	0.0E+00	1.6E+04	1.9E+05	1.5E+03	1.6E+03
Total	7.3E+05	1.6E+04	1.5E+03	4.7E+04	6.5E+05	8.7E+03	4.4E+03
Southern China							
Guangdong	1.9E+05	8.5E+03	0.0E+00	1.6E+04	1.6E+05	1.3E+03	2.1E+03
Guangxi	2.4E+05	1.2E+03	0.0E+00	1.7E+04	2.2E+05	1.3E+03	1.9E+03
Hainan	3.5E+04	8.1E+01	0.0E+00	2.2E+03	3.2E+04	2.6E+02	
Total	4.6E+05	9.8E+03	0.0E+00	3.5E+04	4.1E+05	2.9E+03	4.0E+03
Western China							
Sichuan	5.7E+05	1.8E+02	1.3E+04	2.3E+04	5.3E+05	9.2E+02	3.1E+03
Guangzhou	1.8E+05	5.4E+01	0.0E+00	9.0E+03	1.6E+05	2.7E+03	1.0E+03
Yunnan	3.8E+05	6.6E+02	1.5E+03	8.4E+03	3.7E+05	8.3E+02	2.2E+03
Xizang	1.2E+06	2.2E+04	4.5E+04		1.1E+06	2.5E+03	4.5E+03
Shaanxi	2.1E+05	2.8E+02	7.5E+03	8.4E+03	1.9E+05	2.3E+02	4.4E+02
Gansu	4.0E+05	2.4E+02	6.1E+04	1.6E+04	3.2E+05	1.4E+03	2.7E+02
Qinghai	7.1E+05	1.2E+04	6.2E+04	3.5E+02	6.4E+05	1.7E+03	6.3E+02
Ningxia	5.2E+04	5.2E+02	4.6E+03	1.8E+03	4.4E+04	4.4E+02	9.9E+00
Xinjiang	1.7E+06	5.2E+03	6.5E+05	1.0E+04	1.0E+06	3.4E+02	8.8E+02
Total	5.4E+06	4.2E+04	8.4E+05	7.7E+04	4.4E+06	1.1E+04	1.3E+04

^a: Transportation area was considered as urban area. ^b: rural area was calculated by total land area excluding watershed area, glacier/desert, urban area and transportation area.

Table S2. The geometric mean concentration of individual PAHs and Σ_{14} PAH in China's and global air (ng/m³), soil (ng/g), freshwater (ng/L), seawater (ng/L), terrestrial sediment (ng/g) and marine sediment (ng/g) for. All data were obtained from the previously published papers listed in Tables S4

Compound	abbreviation	air		soil		fresh water		seawater		sediment		marine sediment	
		China	global	China	global	China	global	China	global	China	global	China	global
acenaphthene	Ace	6.1	1.0	5.0	7.5	29	7.9	3.7	3.8	16	15	9.4	5.5
fluorene	Fl	21	2.2	9.2	7.5	44	7.4	17	4.5	25	14	15	8.4
phenanthrene	Phe	50	7.5	44	48	63	11	30	5.5	64	37	35	30
anthracene	Ant	3.3	0.30	6.5	11	14	3.6	3.4	1.8	19	22	14	12
fluoranthene	Flu	12	1.6	28	46	27	13	7.0	8.2	51	40	32	35
pyrene	Pyr	8.0	1.0	25	35	24	14	7.3	4.1	47	50	36	40
benzo[a]anthracene	BaA	1.5	0.10	15	24	7.0	7.6	3.1	1.1	29	23	20	17
chrysene	Chr	2.5	0.20	19	30	6.6	9.3	8.4	3.2	38	39	27	32
benzo[b]fluoranthene	BbF	1.8	0.30	22	52	7.7	12	2.0	3.2	36	23	23	21
benzo[k]fluoranthene	BkF	0.90	0.30	14	25	5.4	5.9	1.4	10	25	18	15	15
benzo[a]pyrene	BaP	0.90	0.10	14	16	8.3	5.0	1.4	0.4	25	21	18	18
indeno[1,2,3-cd]pyrene	Ind	1.2	0.20	12	18	4.8	3.8	1.7	3.4	24	41	26	28
dibenzo[a,h]anthracene	DahA	0.40	0.0	9.2	4.9	8.5	3.1	1.4	1.5	22	13	11	7.9
benzo[ghi]perylene	BghiP	1.4	0.20	13	23	7.6	5.1	2.2	0.90	29	44	27	34
Σ_{14} PAH		110	15	240	350	260	110	89	52	450	400	310	300

Table S3. The areas and water volumes of each sea in China, the data were from the reference²

	Area (km ²)	Water volume (m ³)
South China Sea ^a	1.8×10 ⁶	1.84×10 ¹⁴
East China Sea ^a	5.3×10 ⁵	4.4×10 ¹³
Yellow Sea	3.8×10 ⁵	1.7×10 ¹³
Bohai Sea	7.7×10 ⁴	1.4×10 ¹²

^a: the fraction with the water depth more than 200 m were not contained

Table S4. The data sources

Atmosphere				
China:				
<i>Location</i>	<i>Sampling time</i>	<i>Sampling area</i>	<i>References</i>	
Tianjin (*)	2006	Residence/business sites	3	
Hangzhou	2006	Public sites	4	
Hangzhou(*)	2006/2007	Residence sites	5	
Hangzhou	1999/2000	Residence kitchen	6	
Hangzhou	2006	Urban area	7	
Hong Kong (*,+,-)	1999/2000	Traffic sites	8	
Hong Kong	2000	Urban sites	9	
Taiwan(*,+,-)	2001	Suburban	10	
Taiwan (*)	2002/2003	Industrial/university sites	11	
Taiwan	Unknown	Industrial area	12	
Guangzhou (*)	2001/2002	Urban site	13	
Guangzhou	2005/2006	Urban area	14	
Waliguan, Qinghai	2005	Rural site	15	
China	2005	Urban/rural sites	16, 17	
Shenzhen	2006-2007	Urban area	18	
Beijing-Tianjin	2007-2008	rural/urban area	19	
Xiamen	2008	urban area	20	
Heilongjiang	2008-2009	urban area	21	
Zhangzi Island	2008-2009	Rural area	22	
Global:				
<i>Country</i>	<i>Location</i>	<i>Sampling time</i>	<i>Sampling area</i>	<i>Reference</i>
Japan	Shizuoka	1996	Home	23
Japan	Fuji/Shimizu	1999/2000	Urban area	24

Singapore	Kent Ridge	2006	suburban area	25
Iran	Tehran	2004/2005	Urban area	26
Brazil	State of Amazonas	2001	Urban/forst	27
Brazil	Campo Grande,	2003	Urban/industrial sites	28
USA	Florida	2002	Near estuary	29
USA	Lake Superior	1986	Lake sites	30
USA	Chicago	1994/1995	Urban/Lake	31
USA	Chicago	1995	Residence/commercial area	32
USA	Lower Manhattan, NY	2001	Urban area	33
USA	New Jersey	1997/1998	Traffic/coastal area	34
Australia	Brisbane	2002	Urban/traffic sites	35
Australia	South Brisban	2002	Unknown	36
Australia	Brisbane	Unknown	Urban area	37
Canada	Southern Ontario	2001/2002	Forest/rural area	38
Canada	Alert/Tagish	1992/1994	Rural area	39
Greece	Athens	2003	Suburban	40
Sweden	Stockholm,	2003	Indoor	41
UK	Lancaster	1995	Rural	42
UK	Birmingham	1992/1997	Urban/rural area	43
UK	London/Manchester	1991/1992	Urban area	44
Russia	Dunai	1992/1994	Rural area	39
Belgium	Flanders	2001/2002	Urban/suburban/traffic/industrial sites	45
Spain	Masnou Harbor	2001	Rural area	46
Turkey	Izmir	2003/2004	suburban/urban area	47
Turkey	Bursa	2004/2005	Urban area	48
Turkey	Zonguldak	2007/2008	Industrial area	49
Bosnia	Banja Luka	2008	Urban/rural area	50
Mediterranean sea	Mediterranean sea	2000/2002	Rural area	51
Pacific Ocean	North Pacific Ocean	2003	Rural sites	52
Atlantic Ocenan	Atlantic transect	2001	Rural area	53

Soil

China: Northern China

<i>Location</i>	<i>Sampling time</i>	<i>Sampling area</i>	<i>Depth (cm)</i>	<i>Reference</i>
<i>Rural</i>				
Beijing (*,-)	2004	Suburban area/town ^a	0–10	54
Beijing	Unknown	Farmland	0–10	55
Tianjin	2002	Less contaminated area	0–20	56
Tianjin(*,-)	2001	Rural/Urban area ^a	0–10	57
Beijing-Tianjin	2008	Agricultural soil	0–20	58
<i>Urban</i>				
Beijing(+)	2004	Suburban area/town ^a	0–10	54
Beijing	2008	urban area	0–20	59
Tianjin	2002	Urban area	0–20	56
Tianjin(+)	2001	Rural/urban area ^a	0–10	57
Taiyuan (*,+,-)	Unknown	Urban area	0–20	60
Benxi	2008	Industrial areas	0–10	61
Beijing-Tianjin	2007	Urban area	0–5	62
Eastern China				
<i>Rural</i>				
Zhejiang Province (*,-)	2005/2006	Urban/rural area ^a	Unknown	63
MinJiang River (*,+,-)	1999	Agricultural soil	Unknown	64
Yangtze Delta (*,+)	2003	Farmland	0–20	65
Jiangsu	2004	Ecological demonstration area	5–15	57
Jiangsu (*,+,-)	Unknown	Agricultural area	0–15	66

Huaian	Unknown	Farmland	0–20	67
Shanghai	2007	Agricultural area	0–15	68
Shandong	2008	Agricultural area	0–15	69
<i>Urban</i>				
Zhejiang Province (+)	2005/2006	Urban/rural area ^a	Unknown	63
Yangtze River Delta (*,+,-)	Unknown	Industrial areas and roadsides	Unknown	70
Nanjing	Unknown	Industrial area	0–10	71
Xuzhou (*,+,-)	Unknown	Industrial area	Unknown	72
Huaian	Unknown	Traffic/urban area	0–20	67
Anhui	2007	Coal mine area	unknown	73
Shanghai	2007	Urban area	5–10	74
Western China				
<i>Rural</i>				
Mt. Qomolangma(-)	2005	Urban/Rural ^a	Unknown	75
Lanzhou	2006	Uncultivated/farmland	0–10	76
Chengdu(+,-)	2006	Unknown	0–20	77
East Qingzang Plateau	2004/2005	Rural	0–3	78
Guiyang	Unknown	Suburb	0–20	79
<i>Urban</i>				
Mt. Qomolangma(+)	2005	Urban/Rural ^a	Unknown	75
Guiyang	Unknown	Urban	0–20	79
Southern China				
<i>Rural</i>				
Guangzhou	1999/2002	Vegetable soils	0–20	80
Guiyu(*)	2004	Reservoir/rice field	0–10	81
Shantou(*,+,-)	2002	Suburb	0–20	82
Shende	2002	vegetable/stacked soils	0–20	83

Dongguan (*,-)	2002	Agricultural soil	0–20	84
Pearl River Delta	2001	Agricultural soil/ natural soil	0-15	85
Shenzhen				86
Huizhou	2004/2005	urban area	0–20	87
Zhanjiang	2004	urban area	0–20	87
<i>Urban</i>				
Guangzhou	1999/2002	Urban area	0–20	80
Guiyu(*)	2004	E-waste open burning site	0–10	81
Shantou(*,+,-)	2002	Industrial and urban area	0–20	82
Dongguan (+)	2002	Agricultural soil ^b	0–20	84
Guangzhou(*,+)	2006	Industrial/traffic area	0–20	88
Shenzhen				86
Northeastern China				
<i>Rural</i>				
Dalian(*,+,-)	2005	Traffic/residential area	0–5	89
Liaoning (*,-)	2005	Urban/rural area ^a	0–5	90
<i>Urban</i>				
Dalian(*,+,-)	2005	Suburban/rural area	0–5	89
Liaoning (+)	2005	Urban/rural area ^a	0–5	90
Central China				
<i>Rural</i>				
Wuhan	2002	Vegetable soil	unknown	91
Jiangxi		Agricultural soil	0–20	92
<i>Urban</i>				

Jiaozuo		Unknown	Traffic area	0–10	93
Wuhan		2002	Traffic area	unknown	91
Zhuzhou		Unknown	Urban area	0–15	94
Global:					
<i>Country</i>	<i>Location</i>	<i>Sampling time</i>	<i>Sampling area</i>	<i>Depth</i>	<i>References</i>
Thailand	Chiang-Mai	1996	Traffic area	Unknown	95
Thailand	Bangkok	Unknown	Traffic/industrial/rural area	0–5	96
South Korea	South Korea	Unknown	Agriculture area	Unknown	97
South Korea	Gangwon	2000	Forest	0–5	98
India	Agra	Unknown	Industrial/traffic	0–6	99
India	Delhi	2006	Agriculture area	0–5	100
India	Delhi	2006	Traffic sites	0–5	101
Japan	Sapporo	1959/2002	Rural	0–15	102
Brazil	Uberlândia	Unknown	Urban/rural area	0–20	103
Brazil	Manaus/ Mata Atlântica	1998	Ecological zones	0–10	104
Brazil	Amazon region	Unknown	Forest	0–10	105
Germany	Stephanskirchen/Bayreuth	Unknown	Urban area	0–5	105
Germany	Bonn	1996	Rural	0–5	106
France	Luxembourg/Eastern France	2001	Traffic area	0–3	107
France	Seine River region	2000	Industrial/urban /rural area	Unknown	108
Spain	Tarragona County	2002	Industrial/urban/rural area	0–3	109
Spain	Louro	2006	Agriculture area	Unknown	110
Spain	Sevilla	Unknown	Traffic/garden/agriculture area	0–10	111
Spain	Ebro River Basin	2004/2006	Agriculture area	0–10	112
UK	South of the UK	1998	Rural area	0–5	113
Norway	North of Norway	1998	Rural area	0–5	113
Denmark	Esbjerg	unknown	Industrial areas/roadside	0–5	114
Switzerland	Swiss soil monitoring network	2002	Unknown	0–10	115

Poland	Holy Cross Mountain	2000	Mountain area	Unknown	116
Serbia	Belgrade	2003/2004	Urban/rural area	Unknown	117
Nigeria	Calabar	Unknown	Petroleum handling facilities	0–15	118
USA	New Orleans	Unknown	Industrial area	Unknown	119
Portugal	Sado Estuary	2006	Industrial/resident area	unknown	120
Italy	Palermo	unknow	natural reserve	0–5	121
Italy	Spluga Pass	2007	Rural area	0–1	122

Freshwater

China

<i>Location</i>	<i>Sampling time</i>	<i>Reference</i>
Qiangtang River (*,+,-)	2005	123
Hangzhou City, China	2002	124
Zhejiang Province (*,+,-)	2005/2006	63
Yellow River Delta (*,+,-)	2007	125
Yellow River (%)	2005/2006	126
Yellow River	2007	127
Yellow River	2005	128
Middle and lower reaches of the Yellow River	2004	129
Jiulong River Estuary and Western Xiamen Sea	1999	130
MingJiang River Estuary (*,+,-)	1999	64
Yangtze River	2010	131
Yangtze River	2010	132
Huaihe River	2010	132
Taihu Lake	2010	132
Daliao River watershed	2005	133
Drinking water resources, Henan	2001	134
Tianjin, China(*,+,-)	2002	135
Tonghui River (*,+,-)	2002	136

Zhujiang		Unknow	137
Zhujiang		2005/2006	138
Xijiang Guangdong		2003/2004	139
Taihu Lake		2010	140
Beijing-Hangzhou Grand Canal water		2009	141
Luan River		2009	142
Xuanwei		2007	143
Fuyuan		2008	
Global			
Australia	Brisbane River	2001/2002	144
USA	Gulf of Alaska	2001	145
USA	Mississippi River(*)	1999	146
USA	Anacostia River, USA(+/-)	2002	147
USA	Southern Chesapeake bay	1994	148
USA	York River, VA Estuary	1998	149
USA	Susquehanna River (*)	2000	150
Canada	Lake Ontario and Lake Erie(*)	1994	151
France	Seine River	1993	152
France	Rhône River	1994/1995	153
France	Le Bebec (*,+,-)	2002	154
France	Seine river	2002/2003	155
Germany	Trier () (*,+/-)	1999/2000	156
Germany	River Elbe(*,+/-)	1989/1993	157
Italy	Venice Lagoon(*)	2001/2003	158
Spain	Llobregat river (*)	1994/1995	159
Sweden	Northern	2005	160
Brazil	Tripuí River, Ouro Preto, MG,	Unknown	161
Kenya	Lake Victoria	2006	162
Pakistan	Chenab River	2007	163

Seawater

China

<i>Region</i>	<i>Location</i>	<i>Sampling time</i>	<i>Reference</i>
South China Sea	Daya Bay(*,+,-),	1999	164
South China Sea	Northern South China Sea	2002	137
South, China Sea	Lingding Yang,	unknown	137
South China Sea	Xiamen Harbor,	2001	165
East China Sea	Yangtze Estuary and coastal area,	2006	166

Global:

<i>Region</i>	<i>Location</i>	<i>Sampling time</i>	<i>Reference</i>
Red Sea, Indian Ocean	Gulf of Suez, Egypt	2003	167
Indian Ocean	Red Sea	2003	167
Pacific Ocean	Moreton Bay, Australia	2001/2002	144
North Pacific Ocean	San Francisco Bay(*)	1993-2001	168
Pacific Ocean	Gulf of Mexico(*)	1999	146
North Sea, Atlantic Ocean	Koster Fjord, Sweden	1999/2001	169
Atlantic Ocean	North–South Atlantic Transect	2005	170
Atlantic Ocean	New York–New Jersey Harbor Estuary, USA	1998	171
Atlantic Ocean	North Atlantic(*)		172, 173
Baltic Sea	Baltic Sea (*)	1992/1998	174
Baltic Sea	Baltic Sea (*)	1990/1998	175
Mediterranean Sea	Mediterranean Sea(*)	1986/1990	172

Sediment

China

<i>Location</i>	<i>Sampling time</i>	<i>Reference</i>
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<i>River:</i>		
Qiangtang River (*,+,-)	2005	123
Middle and lower reaches of the Yellow River	2004	129
Yellow River	2005/2006	126
Daliao River watershed	2005	133
Guiyu	2006	176
Zhujiang	1997	177
Wuhan, Yangtze River	2005	178
Tonghui River (*,+,-)	2002	136
Mingjiang (*,+,-)	1999	64
Yellow River Delta	2007	179
LanZhou (*,+,-)	2005	180
Zhujiang, Dongjiang, Xijiang (+,-)	2002	137
Yalujiang	1994/1996	181
Nanguang River	2007	182
Love River	2009	183
Canon River	2009	183
Jen-Gen River	2009	183
Salt River	2009	183
Yellow River	2004	184
Yellow River Delta	2007	185
Fuhe River	2008	186
Jialu River	2009	187
Danshui River	2008	188
National Nature Reserve in Yellow River Delta	2009	189
Rivers in Fuzhou	2007	190
Huaihe River	2008	191
Huaihe River	2008	192
Beijing-Hangzhou Grand Canal water	2009	141
Luan River	2009	142

<i>Lake:</i>			
Meiliang Bay, Taihu Lake(*,+)		2003	193
Taihu Lake		2000	194
Taihu Lake		2009	195
Taihu Lake		2009	140
Nansi Lake		2001	196
Qinghai Lake		2006	197
Bosten Lake		2006	197
Sugan Lake		2006	197
Erhai Lake		2006	197
Chenghai Lake		2006	197
Baiyang Dian		2007	186
<i>Others</i>			
freshwater fishponds in Pearl River Delta		2008-2009	198
<i>Other:</i>			
Jiulong River Estuary and Western Xiamen Sea		1999	130
Zhejiang Province (*,+,-)		2005/2006	63
Hangzhou City, China		2002	124
Reservoirs in Hong Kong Dongguan		2004/2005	199
Fishponds of the Pearl River delta, South China		2001/2002	200
Global:			
<i>Country</i>	<i>Location</i>	<i>Sampling time</i>	<i>Reference</i>
<i>River</i>			
USA	Susquehanna River, (*,+,-)	2000	201
USA	Ashtabula River	1998	202
Brazil	Iguaçu River (*,+,-)	2005	203
Brazil	Canguiri river sediment (*,+,-)	2005	203

India	River Yamuna,	2003	204
Korea	Hyeongsan River (*)	2001	205
France	Seine River	1994	206
<i>Lake</i>			
Germany	Laguna Lake,	Unknown	207
Mexico	Mecoacán Lake Estuarine (*,+,-)	1993/1996	208
Norwegian	Svalbard (*)	2005	209
<i>Estuary</i>			
UK	Mersey Estuary,	2000/2002	210
Nigeria	Niger Delta,	Unknown	211
USA	Boston Harbor	1999	212
USA	Unknown (*)	Unknown	213
Spain	Barcelona harbour (Inner)	Unknown	214
India	Hugli estuary	2003	215
Ireland	Cork Harbour (*)	Unknown	216
<i>Other</i>			
Jordan	Karak	1997	217

Marine sediment

China			
<i>Region</i>	<i>Location</i>	<i>Sampling time</i>	<i>Reference</i>
South China Sea	Daya Bay(*,+,-)	1999	164
South China Sea	Lingdingyang/northern South China Sea (+,-)	2002	137
South China Sea	Lingding Bay	1997	177
South China Sea	Shantou Bay	Unknown	218
South China Sea	Western Xiamen Sea	1999	130

South China Sea	Daya Bay (*,+,-)	1999	219
South China Sea	Zhelin Bay	2004	220
South China Sea	South China Sea	1993	221
South China Sea	Harbor Channel, Taiwan	2009	183
South China Sea	Hongkong	2008	222
South China Sea	Harbor Channel, Taiwan	2006	223
East China Sea	Yangtze Estuary	1998	224
East China Sea	Yangtze Estuary	Unknown	225
East China Sea	Yangtze Estuary	2004	184
Bohai sea	Daliao River Estuary	2007	226
Bohai Sea	Yalujiang Estuary	1994/1996	181
Bohai Sea	Bohai Sea	1999	227
Bohai Sea	Liaodong Bay	2007	228
Bohai Sea	Laizhou Bay	2007	229
Yellow Sea	Rizhao	2007	230
Yellow Sea	Qingdao	2007	231
Global			
Atlantic Ocean	Wadden Sea, Netherlands	1998	232
Atlantic Ocean	Dutch North Sea, Netherlands	2000	233
Atlantic Ocean	South Carolina, USA	1999	234
Atlantic Ocean	Río de la Plata Estuary, Argentina	2000/2002	235
Atlantic Ocean	Montevideo Harbour, Uruguay	1998	236
Atlantic Ocean	Sarasota Bay, Florida, USA(*)	Unknown	237
Adriatic Sea	Gulf of Trieste, Slovenia	1996	238
Atlantic Ocean	São Sebastião, SP, Brazil	1999	239
Atlantic Ocean	Patos Lagoon Estuary, Brazil	1997	240
Atlantic Ocean	Cotonou, Benin, Nigeria	Unknown	241
Atlantic Ocean	Aquitaine (France)	Unknown	241

Atlantic Ocean	Western Irish Sea	2000	242
Pacific Ocean	Gulf of Alaska	Unknown	145
Pacific Ocean	Ariake Sea(*)	1999/2001	243
Pacific Ocean	Western sea coast of South Korea (*,+,-)	2004	244
Pacific Ocean	Deep Sea	1992/1993	245
Pacific Ocean	Eastern Gulf of Alaska	1989/1993	246
Pacific Ocean	Todos Santos Bay, Mexico	Unknown	247
Pacific Ocean	Northeastern coastal region of Singapore	Unknown	248
Mediterranean Sea	Abu Qir Bay, Egypt	2004	249
Mediterranean Sea	Marmara Sea, Turkey	Unknown	250
Mediterranean Sea	Eastern Mediterranean	2001	251
Mediterranean sea	Gulf of Fos, France	Unknown	252
Red Sea	Suez port	1999	253
Gulf of Mexico	Pensacola Bay, USA (*)	Unknown	254
Adriatic Sea	Rovinj area, Croatia	Unknown	255

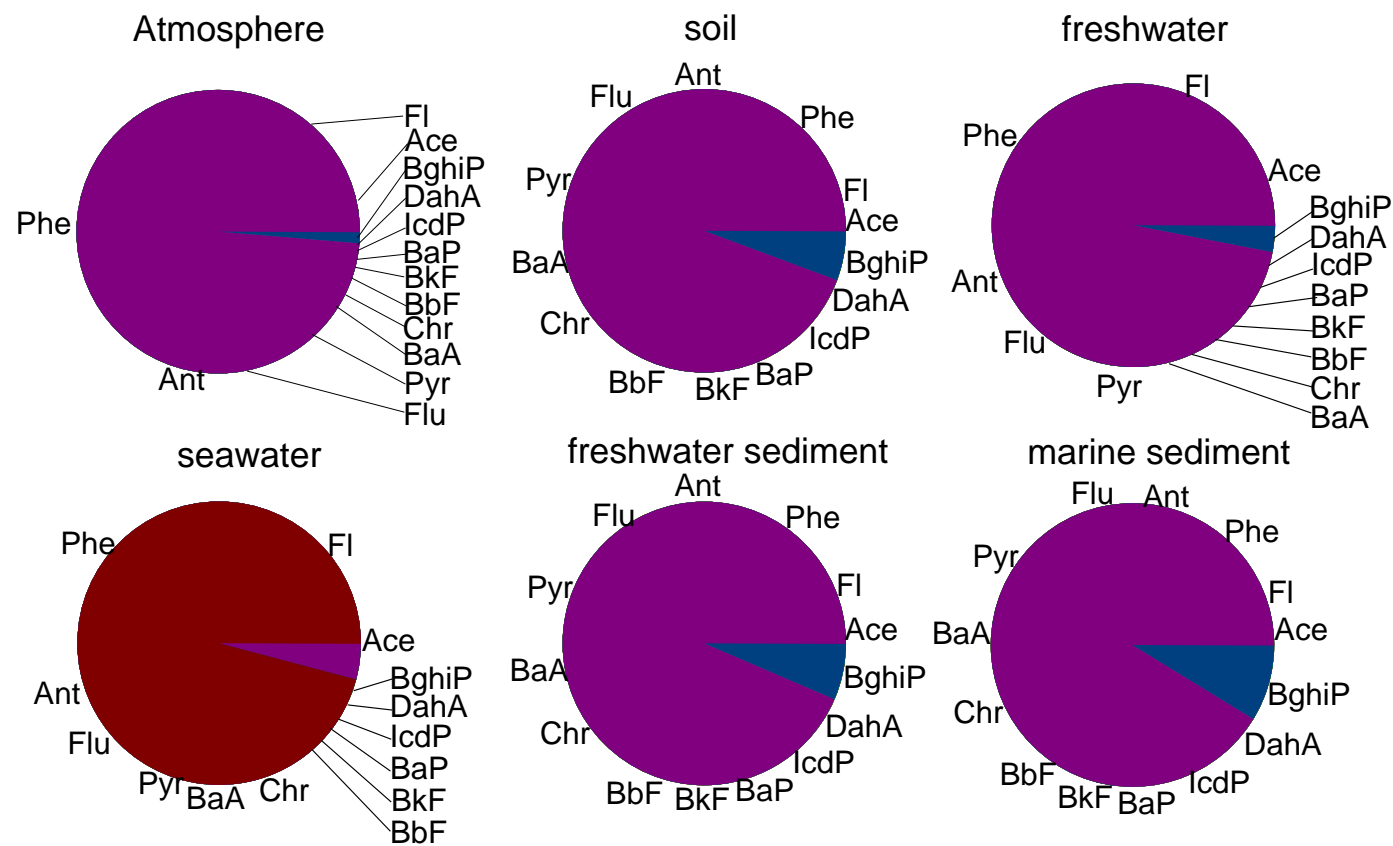


Fig. S1 Share of mass inventory of individual PAH compound in air, soil, freshwater, seawater, freshwater sediment and marine sediment of China, (abbreviation for each compound is listed in Table S1)

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