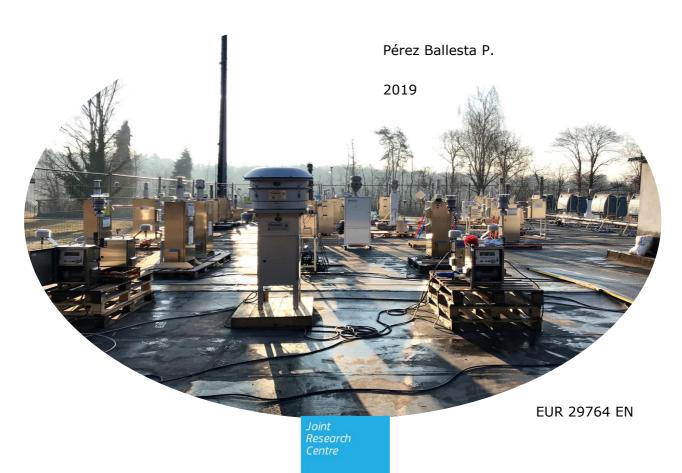


JRC TECHNICAL REPORTS

Second JRC Polycyclic Aromatic Hydrocarbons Inter-laboratory Comparison on Particulate Matter Quartz Filters

European Commission harmonisation programme for Air Quality Measurements



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Foreword

The knowledge of the composition and the chemical characterisation of particulate matter will become the cornerstone of the future regulatory policy, since the particles are in some way representing the final step of reduction of our substance and acts. Therefore, by comparing our measurements we are more than ever harmonising our points of view.

"Y mientras cree tocar enardecido	"And while he dreams of finding in the fire
el oro aquel que matará la muerte,	that true gold that will put an end to dying,
Dios, que sabe de alquimia, lo convierte	God, who knows His alchemy, transforms him
en polvo, en nadie, en nada y en olvido."	to no one, dust, oblivion."

("El alquimista", J.L. Borges, Translation by Alastair Reid)

"El análisis todo a polvo lo reduce"

"The analysis all to dust reduces it"

("El héroe delincuente", Emilio Bobadilla)

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Author

Pascual Pérez Ballesta

Abstract

This report provides the results of the second inter-laboratory comparison for analysis of polycyclic aromatic hydrocarbons (PAHs) in particulate matter (PM) quartz filters carried out in Ispra from the 1st to the 15th of February 2018. Fifteen laboratories from different member states of the European Union participated in this exercise. The main comparison was based on the analysis of sections of four filters from a high-volume sampler and two blanks representing the daily concentration range of PAHs collected in an equivalent low volume sampling filter, which would be operating during the period of comparison. The exercise allowed the comparison between high and low volume sampling, which was carried out by three of the participating laboratories.

The comparison was performed on the analysis of 15 PAHs from phenanthrene to benzo[g,h,i]perylene, including benzo[a]pyrene as regulatory compound. The median of the inter-compound robust repeatability uncertainty and reproducibility was 14%, while the robust overall expanded uncertainty was \pm 30% for the exercise. This value, being representative of a robust best method performance, can fulfil the method expectation for the analysis of PAHs and in line with the data quality objectives (DQO) defined in the Directive 2004/107/EC.

1. Introduction

The EU Directive 2004/107/EC provides Member States with a guide for the measurements of heavy metals and polycyclic aromatic hydrocarbons (PAHs) in ambient air particular matter. These compounds are of high importance in the characterisation of the toxicity of the particulate with negative impact on the health of the exposed population. PAHs are ubiquitous in the environment and result in measurable background levels. Their concentrations in ambient air also represent a direct means of exposure. Some of these PAHs have already been identified as carcinogenic to humans, in particular benzo[a]pyrene (B[a]P), benzo[a]anthracene (B[a]A), benzo[b,j,k]fluranthenes (B[bjk]F), and dibenzo[a,h]anthracene (DB[ah]A), are classified as 2A by the IARC¹.

The afore-mentioned Directive requests the measurement of B[a]P in particulate matter (PM) and recommends the monitoring of other relevant PAHs, including at least: B[a]A; B[bjk]F, indeno[1,2,3-c,d]pyrene (Ind[123cd]P) and DB[ah]A. Furthermore, Member States are obliged to use reference or equivalent methods for sampling and analysis with data quality objectives that consider maximum uncertainty values of 50% for their measurements.

The implementation of effective quality assurance at EU level involves the organisation of inter-laboratory comparisons between Member States that ensure the harmonisation of measurements, their traceability at international level and testing of their uncertainty estimations.

This report shows the results of the second inter-laboratory comparison of PAHs in particulate matter carried out at European level among the Air Quality Reference Laboratories in Europe (AQUILA).

¹ International Agency for Research on Cancer. WHO.

2. Inter-laboratory comparison strategy

This exercise is the second inter-laboratory comparison carried out by the Joint Research Centre (JRC) since the publication of the Directive 2004/107/EC. The study is part of a quality assurance and quality control (QAQC) programme lead by the European Commission to guarantee traceability and harmonisation of the measurements and to support the activity of the reference laboratories and air quality networks of the Member States.

The comparison aimed to evaluate the sampling and analytical performance of the participating laboratories. To this purpose, a two week PAHs sampling period, from the 1st to the 15th of February 2018, was organised in parallel with a PM10 inter-laboratory comparison exercise carried out in Ispra during the first two months of 2018. During these two weeks, laboratories were invited to perform their own PM sampling for the analysis of PAHs. In addition, the JRC took daily PM samples to select a representative set of samples for comparison.

2.1. Participating laboratories

Fifteen laboratories from AQUILA were involved in this inter-laboratory exercise. Whilst all participants received sections of the HVS filter, only three of them were sampling in parallel with their own devices. Names of the laboratories and personnel involved are listed in Table 1.

Table 1 - List of participating laboratories

Laboratory	Acronyms	Country	Contact/Responsible
Aarhus University Department of Environmental science	AU_ENVS	Denmark	Rossana Bossi
Czech Hydrometeorological Institute	СНМІ	Czech Republic	Stepan Rychlik, Helena Placha, Irina Nikolova
Finnish Meteorological Institute	FMI	Finland	Mika Vestenius
Hungarian Meteorological Service	HMS	Hungary	Viktor Dezsi, Attila Machon, Gegő Farkas
Institute for Medical Research and Occupational Health	IMROH	Croatia	Ivana Jakovljević, Ivan Bešlić,Zdravka Sever Štrukil
Institut National de l'Environnement industriel et des RISques	INERIS	France	Hugues Biaudet
Instituto de Salud Carlos III	ISCIII	Spain	Pilar Morillo Gómez, David Galán Madruga, Regina Muñoz Úbeda
IVL Swedish Environmental Institute	IVL	Sweden	Annika Potter, Erika Rehngren
Landesumweltamt für Natur, Umwelt und Verbraucherschutz NRW	LANUV	Germany	Dieter Gladtke, Anja Olschewski, Simone Muratyan
Norwegian Institute for Air Research	NILU	Norway	Stine Marie Bjørneby, Ellen Katrin Enge, Anne Karine Halse
Laboratory of Latvian Environment, Geology and Meteorology Centre	LEGMC	Latvia	Valentina Malecka, Olga Grīgele, Viktors Žilinskis
Amt der oberösterreichischen Landesregierung - Abteilung: Umweltschutz	OOE	Austria	Adolf Schinerl
Slovenian Environment Agency	SEA	Slovenia	Karla Hrovat, Irena Kranjc
Umweltbundesamt GmbH	UBA	Austria	Katharina Braun
Vlaamse Milieumaatschappij	VMM	Belgium	Leen Vandekerckhove, Jordy Vercauteren
European Commission, Joint Research Centre	JRC	Italy	Pascual Pérez Ballesta

2.2. Sampling Strategy

The sampling strategy was designed to produce a sufficient number PM high volume samples to cover a representative range of PAHs concentrations in filters. Two weeks daily sampling was considered sufficient to fulfil such a purpose.

An Andersen HVS with a PM2.5 head was used to provide daily PAH samples during the campaign. PM2.5 was collected on quartz filters (Whatman QM-A) previously heated at 400 °C for a minimum of six hours. Filters were wrapped in aluminium foil before being heated. After the heat treatment, they were left to cool down at room temperature in a controlled temperature balance room (20°C, 50% RH). These filters were only unwrapped at the start of the sampling.

Four low volume samplers (LVS) with PM10 heads were operated in pairs on alternate days at the same location to get duplicate samples. The LVS filters (Whatman QM-A) were treated in the same way that was previously described for the HVS filters.

After sampling HVS filters were subdivided and sealed in an envelope of heat-treated aluminium foil. They were kept at -20°C before being distributed between participants. Blanks filters followed the same procedure, but excluding the sampling step. The two blank filters included in the travelling envelope were prepared at the beginning and end of the sampling campaign.

From each PM2.5 HVS filter, 20 pieces of diameter circa 39.5 mm equivalent to a LVS filter area were obtained. In addition, two PM10 low volume filter samples were also available for JRC analysis. Participating laboratories received the corresponding filters together with a "Guide to operation" (included in annex I). Participants were requested to provide information concerning the analytical method and the uncertainty evaluation of the measurements. Laboratories should perform a minimum of 3 replicate injections for each sample and calculate the uncertainty associated with the average reported analytical value.

Fifteen different PAHs were indicated for analysis, from which seven of them are considered as of major interest in the Directive 2004/107/EC (see Table 2).

Ν.	Compounds	Acronym	N.	Compounds	Acronym	
1	Phenanthrene	Phe	9	Benzo(k)fluoranthene	B[k]F	
2	Anthracene	Anth	10	Benzo(e)pyrene	B[e]P	
3	Fluoranthene	Flu	11	Benzo(a)pyrene	B[a]P	
4	Pyrene	Pyr	12	Perylene	Per	
5	Benzo(a)anthracene	B[a]A	13	Indeno(1,2,3,-c,d)pyrene	Ind[123cd]P	
6	Chrysene	Chry	14	Dibenzo(a,h)anthracene	DB[ah]A	
7	Benzo(b)fluoranthene	B[b]F	15	Benzo(g,h,i)perylene	B[ghi]P	
8	Benzo(j)fluoranthene	B[j]F				
Ν.	Combination of isomers			Acronym		
A	*Chrysene+triphenylene			Chry+Tph		
в	*Benzo(b.j,k)fluoranthene			B[bjk]F		

Table 2 - List of compounds to be quantified on the filter

Highlighted in bold: priority compounds for the inter-laboratory comparison

2.2.1.Sampling programme

The PM sampling campaign started on the 15th of January 2018, two weeks before the PAHs comparison exercise. Participating laboratories were also invited to take their own PM samples for PAH analysis during the course of the campaign. However, this offer was only accepted by three laboratories: VMM, SEA and CHMI. Such a low number of laboratories participating with their own samplers limited the representativeness of this part of the comparison.

2.2.2. Measurement site and sampling position

A restricted area inside of the JRC was chosen for PM inter-laboratory comparison exercise. Figure 1 shows in detail the exact position of the PAH samplers (in red colour). Preference wind directions during the sampling period are shown in the upper right-hand side of the picture by the corresponding arrows. Homogeneity of the sampling area was demonstrated in a previous PM comparison campaign (EUR 28107, 2016).



Figure 1 - Location of the PAH samplers (in red)

2.2.3. Meteorological conditions

Meteorological conditions were measured at the EMEP station located a few hundred meters from the sampling site. Daily average values of meteorological parameters and main pollutants measured in the EMEP station are represented in Figure 2.

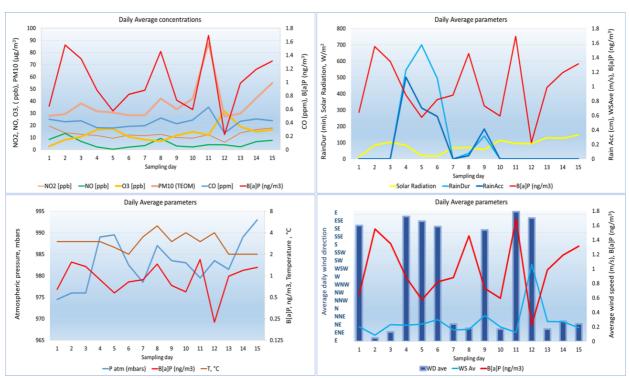


Figure 2 - Daily average values of temperature, atmospheric pressure, solar radiation, rainfall, wind velocity and direction. Daily average concentrations of NO2, NO, O3, PM10 and B[a]P

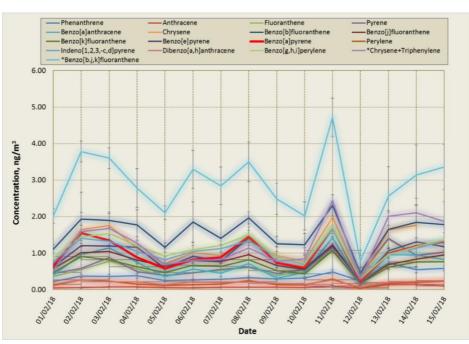
Meteorological conditions were typical of recent winters. Table 3 shows average, maximum, minimum and variability (coefficient of variation, CV) for the two weeks sampling period of the daily average meteorological parameters and concentration of pollutants measured.

Table 3 - Maximum, minimum and average daily values of pollutants and meteorological parameters

Period: 1 st to 15 th February 2018	Average	Coefficient of Variation, CV %	min	max
NO 2, ppb	12.64	27.18	6.16	19.54
NO, ppb	5.09	69.44	0.31	13.39
O3, ppb	13.41	50.09	2.73	31.70
³ РМ10, µgm	38.22	41.19	27.40	87.66
CO, ppm	0.41	21.32	0.25	0.63
B[a]P, ng/m	0.99	42.14	0.17	1.74
Solar Radiation, W/m	81.66	50.79	12.30	147.66
Rain duration, min	127.50	188.31	0.00	700.00
Wind Speed, m/s	0.52	42.13	0.32	1.22
Rain cm	0.19	183.44	0.00	1.13
P atm (mbars)	983.07	0.57	974.50	993.00
Temperature, °C	3.00	28.87	2.00	5.00

2.3. Concentrations and selection of filters for comparison

To understand the PAH concentration levels during the campaign, analyses of the daily filters were performed by JRC. Consequently, according to the PAHs concentration profile (see Figure 3), four filters were selected for the comparison. These filters represented the maximum, minimum, 25 and 75 percentiles of the B[a]P concentration in the samples.





The Ba[a]P concentration frequency distribution during the exercise is represented by the histogram in Figure 4, in which concentrations, assigned codes and dates for the selected filters are indicated.

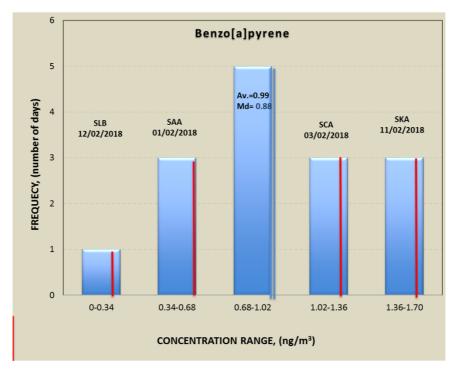


Figure 4 - Frequency distribution of B[a]P concentration in air for the selected filter samples

2.4. Filters management, homogeneity and blanks

Whatman QM-A Quartz microfiber filters (20.3 x 25.4 cm cat. No.1851 865) were used for sampling in an Andersen HVS fitted with a PM2.5 sampling head. The filters had an effective sampling area of 406 cm², from which 20 filters of 4 cm diameter can be sectioned.

After sampling the high-volume filters was cut by means of a mould specifically designed for this purpose (see Figure 5). The sections were individually packed in a heat-treated aluminium foil, plasticized and codified. These filters were kept in the freezer at -20 °C waiting for shipping to the participants.



Figure 5 - Mould and tools for the subdivision of the high volume filter

After the selection of the filters for comparison, the analysis of the filter was performed on several random 2.5 mm diameter sections by comparing analytical reproducibility. A homogeneity value was derived from the averaged analytical reproducibility of the considered PAHs. In general, such reproducibility values ranged between 4.8% and 6.5% among the filters under consideration. Reproducibility versus concentration of analytes for the considered filters is represented in Figure 6.

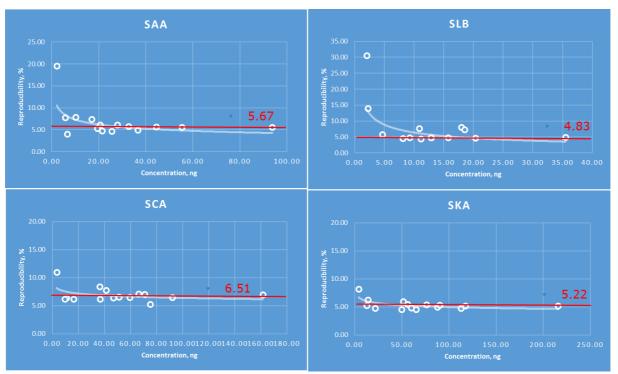


Figure 6 - Homogeneity of the high-volume filter: analytical reproducibility of randomly selected sections

Blank filters were carefully prepared in a similar way than the sampled filters. The only difference between sampled and blank filters was the absence of sampling time for the blanks. The blanks not only provided information of a potential contamination of the samplers during storage or transport, but they also acted as indicators of possible problems in the analytical blanks of the participants.

2.5. Guide to operation and data reporting sheet

Together with the filters, laboratories received a guide to operation & procedure (annex II) and a data reporting sheet (annex III) for laboratories' identification, instrument description, analytical procedure, data reporting: HVS and LVS, quantification, and uncertainty calculation. The deadline for reporting data was the 15th of June 2018, although a complete ratified dataset, which included all the participants, was only available in November 2018.

3. Analytical methods

No analytical method was suggested to, or imposed on, the participating laboratories. Therefore, the participants were free to use a range of separation techniques, analytical instrumentation, extraction systems, solvents, clean-up techniques and analytical parameters that resulting in the comparison. Table 4 summarises the different techniques and analytical conditions used by the participating laboratories.

There were no significant differences between specific techniques for extraction or analysis. The predominant techniques were those using gas chromatography and mass spectrometry detection; accelerate solvent extraction and the use of lightly polar solvent for extraction, i.e. combination of acetone and hexane. Extraction times of less than one hour, the use of clean up procedures, internal standards, and certified reference material (CRM) were of common practice. Figure 7 shows the percentages of the different techniques applied by participants.

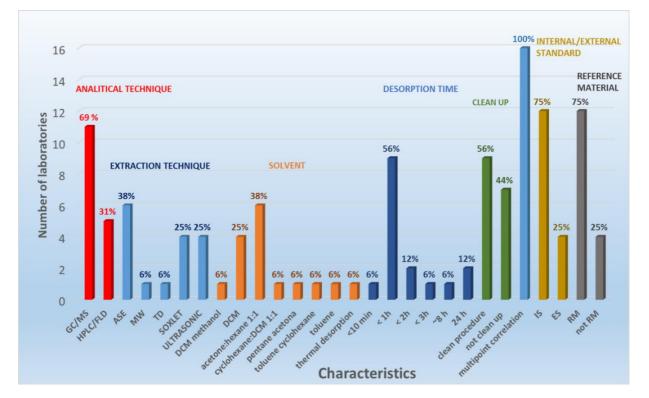


Figure 7 - Statistics of the analytical techniques used by participating laboratories

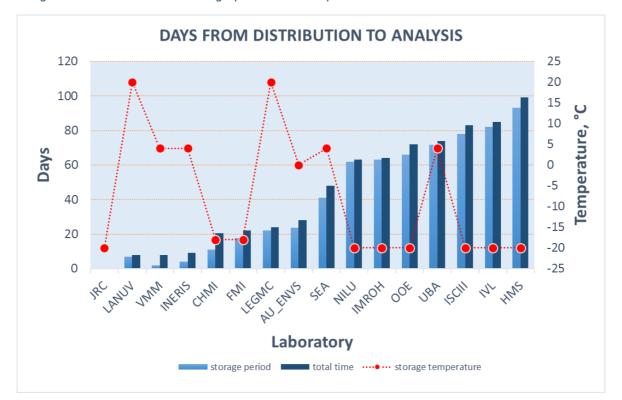
LABORAT.	ANALYTICAL METHOD	COLUMN	EXTRACTION METHOD	SOLVENT	TIME	CLEAN-UP	CORRELATION	INTERNAL STANDARD	CERTIFIED REFERENCE MATERIAL	STANDARD SOLVENTS
AU_ENVS	GC/MS, Agilent786A/ Agilent 5975C	HP5-MS 30m 0.25 mm i.d., 0.25 μm	ULTRASONIC	DCM	1:30 h:mm	SILICA_ (HEXANE, DCM-TOLUENE)	Linear, multipoint (5- 250 pg/µl, 100 pg/µl IS), SIM	Phe-D10, Flu-D10, Pyr-D10, B[a]A-D12, B[a]P-D12, Per-D12, DB[ah]A-D14, B[ghi]P-D12, Chr- D12, B[a]P-D12	Fine Dust (PM10 - Like) BCR (JRC)	chiron, supelco, CIL, Rathburn
СНМІ	GC/MS, Agilent 7890 B/ Agilent 5977A	Restek, 30m 0.25mm i.d., 0.1 μm	SOXHLET: Buchi extraction system concentration: biotage TurboVap II	7% Me:DCM	1:25 h:mm		Linear, multipoint force (0) (2-200 pg/µl, 100 pg/µl IS), SIM	Napth-D8, Acep-D4, Phe-D10, Pyr-D10, Chr-D12, Per-D12, B[ghi]P-D12	NIST-1649B, ERMCZ100-1VL	Dr. Ehrenstorfer Chromservis Honeywell
FMI	GC/MS, Agilent 6890N/ Agilent 5973	Agilent J&W DB- 5MS, 50 m, 0.25 mm i.d., 0.25 µm	SOXHLET: SOXTHERM concentration; Buchi Syncore Analyst	DCM	2:55 h:mm	Bond Elut. Florisil 12102109	using different response factors (50, 100 pg/µl IS), quadratic correlation, SIM	Acep-D4, Chry-D12, Napth-D8, Per-D12, Phe-D10, DB[ah]A-D14		
нмѕ	GC/MS, Thermo ST1310/ Thermo ISQ LT	TG-5MS, 30 m, 0.25 mm i.d., 0.25 μm	ASE	hexane, acetone	0:28 h:mm		Linear, multipoint force 0 (5-1000 pg/µl, 100 pg/µl IS), SIM	Acep-D4, Chry-D12, Napth-D8, Per-D12, Phe-D10		Dr. Ehrenstorfer Fisher Scientific, J.T. Baker
IMROH	HPLC/FLD, Agilent_1260 Infinity	Zorbax Eclispse PAH, 0.1 m, 1.6 mm i.d., 3.5 µm particle size	Ultrasonic: Elmasonic S 60H concentration: Organomation NEVAP	toluene, Cyclohexane	1:00 h:mm	Centrifugation, dryness brought to AcN	Linear, multipoint extenal standard, (5- 160 pg/µl)		NISTH-1649B	Supelco, Merck
INERIS	HPLC/DAD, Agilent_1200 Series	C18, 0.25 m, 3.5 mm i.d., 5 µm particle size	ASE : Diones ASE 200, concentration: turbobap 2	DCM			Linear, multipoint extenal standard, (10-1000 pg/µl)			Riedel de Haën, Merck
ISCIII	GC/MS, ThermotraceGC Ultra/ Thermo DQS	TG-5MS, 30 m, 0.25 mm i.d., 0.25 μm	ASE, DIONEX ASE200 concentration : HORIZON TECHNOLGOY XcelVap	DCM	0:29 h:mm	500mg Cyano (top)/1000mg SiOH SPE- Bakaerbond J.T. Baker	(60-18480 pg/µl, IS	B[a]A-D12, B[a]P-D12, Per-D12	NIST- SRM 1647F	Dr. Ehrenstofer, Merck, Sigma- Aldrich, LabScan
IVL	HPLC/FLD, Varian Postrar 240	Agilent C18, Pursuit 3PAH, 0.1 m, 3 mm i.d., 3 µm particle size	SOXLET	pentane, acetone	8 h - 24 h	SILICA: silicagel Merck Pentane> MeOH	linear, multipoint, (10-2500 pg/µl, IS 393 pg/µl)	2,2 binaphthyl		NIST, Ultra Scientifiy, Dr. Ehrenstorfer, Rahtburn

Table 4 - Analytical methods used by the participating laboratories

LANUV	HPLC/FLD , Agilent G1321A	Macherey&Nagel Nucelodur C18 PAH, 0.25 m, 4 mm i.d., 3 µm	ULTRASONIC: Bandelin Sonorex Super R 1050 concentration: Barkey Vapotherm mobil S	Toluene	24 h	SPE - Chromabond Florisil 200 mg Machery&Nagel- Vacuum chamber			SRM2060A NIST, ERM-CZ100 IRRM	Ultra Scientific, VWR
LEGMC	GC/MS Agilent 7890A, Agilent 5975C	Agilent J&W DB- 5MS, 50 m, 0.25 mm i.d., 0.25 μm	ASE, Dionex ASE 350 concentration: Caliper Life Science TurboVap II	1:1 acetone:hexane	0:25 h:mm	SILICA - glass chromatography columns 15 mm i.d. x 300 mm,> hexane	200 pg/µl, IS 500	Naph-D8, Acen-D10, Phe-D10 , Chr-D12, Per-D12, B[a]P-D12		Dr. Ehrenstorfer Merk
NILU	GC/MS, HP 6890, 5973 MSD	Agilent Select PAH, 30 m , 0.25 mm i.d., 0.15 µm	SOXLET, concentration: Zymark TurboVap500,	1:1 acetone:hexane	8 h	SILICA-COLUM> hexane	, IS , SIM	2MeNap-D10, Acen-d10, anthr- D10, Pyr-D10, B[a]A-D12, B[e]P- D12, B[ghi]P-D12	SRM2260A, SRM1944, SRM1649B (NIST)	Chiron, CIL, VRM
OOE	GC/MS, Agilent 7890A, Agilent 5973C	supelco SLB-5S, 60 m, 0.25 mm i.d., 0.25 μm	ASE, DIONEX ASE200 concentration: Zymark TurboVap II	1:1 Cyclohexane:D CM	0:30 h:mm		linear , multipoint force (0) (10-400 pg/µl, IS 50-100 pg/µl)	Nap-D8, Phe-D10, Ace-D9, Acen- D10, Flu-D10, Pyr-D10, BaA-D12, Chr-D12, B[a]P-D12,B[b]F-D12, B[k]F-D12, Ind[123cd]P-D12, DB[ah]A-D14, B[ghi]P-D12	ERM-CZ100 IRRM	Dr. Ehrenstorfer Merk
SEA	GC/MS, Agilent 7890B, Agilent 5977A	Agilent J&W, DB- 5MS UI, 30 m, 0.25 mm i.d., 0.25 μm	MICROWAVE: Milestone Ethos 1 concentration: LCTech Feestyle systems evaporation	1:1 acetone:hexane	1 h	SILICA (Grace Pure Silica) -LCTech Freestyle sytems SPE	100 pg/µl, IS 50	BaA-D12, BaP-D12, Ind[123cd]P- D12. B[b]F-D12	ERM-CZ100 IRRM	Dr. Ehrenstorfer Chiron Honeywell, Chem- Lab
UBA	HPLC/FLD, Agilent_1100 series, Agilent G1321	thermo Hypersil Green PAH, 0.25 m, 3 mm i.d., 5 µm particle size	ULTRASONIC, concentration: Zymark TurboVap II	1:1 acetone:hexane	1 h		quadratic force (0) (1-250 pg/µl)	B[a]A-d12, B[k]F-d12, B[a]P- d12, DB[ah]A-d14, Ind[123cd]P- d12	ERM-CZ100 IRRM	Dr. Ehrenstorfer Promochem, Merck, VWR
VMM	GC/MS, Agilent 7890B	DB5 30 m, 0.25 mm i.d., 0.25 μm	ASE, Thermo Scientific, Dionex ASE 350 concentration: Biotage TurboVap II		0:30 h:mm			Flu-D10, Pyr-D10, BaA-D12, BbF- D12, BkF-D12, ind123cdPyr-D12, DBahA-D14, BghiP-D12	SRM1647F NIST	Dr. Ehrenstorfer Chem Lab Merk
JRC		Rxi-17 Sil MS , 30 m, 0.25 mm i.d., 0.25 μm	Thermal desorption. Gerstel CIS-TD5		10 min		linear, multipoint (30-3400 pg/µl, 460 pg/µl IS), SIM	Nap-D8, Phe-D10, Ace-D9, Acen- D10, Flu-D10, Pyr-D10, B[a]A- D12, Chr-D12, B[a]P-D12,B[b]F- D12, B[k]F-D12, Ind[123cd]P- D12, DB[ah]A-D14, B[ghi]P-D12	Robust average value ISO-13528	Dr Ehrenstorfer Supelco, fluka analytica

4. Travelling time, storage and date of analysis

Filters were stored from two to four weeks at -20°C before distribution on the 21st of March 2019. Travelling time varied from one to eight days, being four days the average time. While the time that laboratories stored the samples before analysis varied from two to 93 days with an average period of 41 days. The storages temperatures varied between -20°C and 20°C. Figure 8 shows the total time from distribution to analysis, the period of storage after reception of the filters and the storage temperature.





5. Reference Values

The reference value was determined based on the robust average results of the best performing laboratories. The selection of these laboratories was based on the number of outliers reported by each laboratory with respect to a robust average calculated on the basis of the ISO-13528. Therefore, robust average, $\overline{C_{l}}^{*}$, and standard deviation, s^{*} , of the p input laboratories, are derived from a convergence process of the following equation:

$$\overline{C_i^*} = \frac{\sum C_i^*}{p}$$
Eq. 1
$$s^* = 1.134 \cdot \sqrt{\frac{\sum (C_i - \overline{C_i^*})^2}{(p-1)}}$$
Eq. 2

Where recurrent values are calculated from these equations:

$$C_{i}^{*} = \begin{cases} \overline{C_{i}^{*}} - 1.5 \cdot s^{*} & if \quad C_{i} < \overline{C_{i}^{*}} - 1.5 \cdot s^{*} \\ \overline{C_{i}^{*}} + 1.5 \cdot s^{*} & if \quad C_{i} > \overline{C_{i}^{*}} + 1.5 \cdot s^{*} \\ C_{i}^{*} & otherwise \end{cases}$$

Eq. 3

The initial values are calculated as:

$$\overline{C_{l}^{*}} = median \ of \ C_{i}(i = 1, 2, ..., p)$$

$$s^{*} = 1.483 \cdot median \ of \ |C_{i} - \overline{C_{i}^{*}}| \ (i = 1, 2, ..., p)$$
Eq. 4

By assuming normal distribution for the bias, $C_i - \overline{C_i^*}$, the associated standard uncertainty is estimated as:

$$u_{bias} = \sqrt{\frac{(1.25 \cdot s^*)^2}{p} + u_{C_i}^2}$$
Eq. 5

Where u_{c_i} is the uncertainty of the reported value from laboratory i.

The null hypothesis for a bias equal to zero can be evaluated using the two tails statistical test of normal distribution of the random variable, Z, defined as:

$$Z = \frac{C_i - \overline{C_i^*}}{u_{bias}}$$

Eq. 6

In light of this statistic, where Z values higher than 3 were considered as outliers, a first evaluation of results was carried out. The output of this first evaluation in terms of overall reported data and outliers are shown in Table 5.

Laboratories with an overall ratio outlier/reported higher than 15% were excluded from the estimation of the robust average value, i.e. the reference value of the inter-laboratory comparison (i.e. HMS, INERIS and ISCIII). Robust average values from the best performance laboratories and associated expanded uncertainties (k=2) are given in

Table 6. Those values were considered as reference values for the final evaluation purpose of the exercise.

	Compounds							
laboratories	reported	outliers	% reported values vs total	% outliers vs reported				
AU_ENVS	42	3	65.6	7.1				
CHMI	64	0	100.0	0.0				
FMI	44	1	68.8	2.3				
HMS	56	45	87.5	80.4				
IMROH	46	1	71.9	2.2				
INERIS	50	14	78.1	28.0				
ISCIII	27	20	42.2	74.1				
IVL	52	1	81.3	1.9				
LANUV	32	0	50.0	0.0				
LEGMC	44	4	68.8	9.1				
NILU	61	0	95.3	0.0				
OOE	60	1	93.8	1.7				
SEA	18	0	28.1	0.0				
UBA	57	2	89.1	3.5				
VMM	48	6	75.0	12.5				
JRC	64	2	100.0	3.1				

Table 5 - Total reported values and outliers from participating laboratories

Filter	SA	Α	SCA	4	SK	Α	SLB	
	(01/02/	(01/02/2018)		2018)	(11/02/2018)		(12/02/2018)	
Compound	Amount	EU,	Amount	EU,	Amount	EU, %	Amount	EU,
	ng	%	ng	%	ng		ng	%
Phenanthrene	8.72	29.5	15.50	19.1	21.65	25.4	11.31	32.5
Anthracene	1.74	41.6	3.14	43.2	3.64	38.0	1.51	88.2
Fluoranthene	16.29	10.8	33.19	7.6	47.00	10.6	16.38	14.7
Pyrene	18.76	14.3	36.95	10.1	50.77	9.2	17.88	12.2
Benzo[a]anthracene	18.11	11.9	53.07	12.8	62.13	10.4	7.92	14.3
Chrysene	29.69	16.8	83.90	23.9	100.00	22.9	13.96	22.4
Benzo[b]fluoranthene	50.91	19.2	86.55	11.9	105.52	10.4	16.78	9.1
Benzo[j]fluoranthene	27.70	15.0	48.50	8.8	59.11	4.0	9.33	5.0
Benzo[k]fluoranthene	20.21	7.4	36.23	7.9	44.95	8.9	6.96	14.0
Benzo[e]pyrene	34.36	20.4	59.46	27.9	73.07	32.8	11.75	17.9
Benzo[a]pyrene	30.53	7.5	69.96	14.4	84.50	12.3	10.59	8.0
Perylene	5.57	19.5	10.45	5.0	12.85	9.0	2.25	27.1
Indeno[1,2,3,-c,d]pyrene	36.45	7.1	61.45	8.2	77.21	5.5	12.57	3.2
Dibenzo[a,h]antracene	4.92	36.8	8.25	25.9	9.29	23.5	1.82	40.9
Benzo[g,h,i]perylene	39.96	11.7	68.14	13.3	82.50	12.1	14.92	16.6
*Chrysene+Triphenylene	24.96	30.4	82.46	13.3	108.50	9.0	12.92	2.0
*Benzo[b.j,k]fluoranthene	92.06	4.9	152.31	15.7	190.49	11.4	33.91	11.0

Table 6 - Reference values and corresponding expanded uncertainties

It is noted that for most of the compounds considered, the uncertainty of the reference value mainly depended on the concentration level, as uncertainties were larger when concentrations approached the detection limit of the method (see Figure 9). The median value of the expanded uncertainty for all compounds was 14%. In the case of B[a]P with concentrations in the filter between 10.6 ng and 84.5 ng, their expanded uncertainty values ranged between 7.5% and 12.3%.

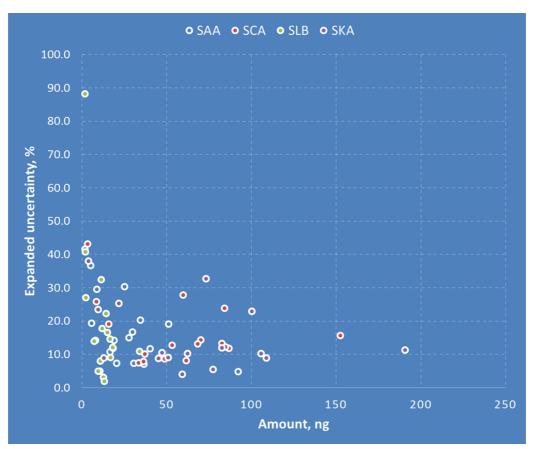


Figure 9 - Expanded uncertainty versus amount of analytes in the filter

6. Evaluation of the laboratory results

Robust repeatability and reproducibility for the exercise were estimated following procedures indicated in ISO 5725. These values were obtained after elimination of outliers identified by the Mandel's k and h statistic. Therefore, the uncertainty of the inter-laboratory average value, \bar{c} , is determined by the combination of the inter-laboratory variance, S_L^2 , and the intra-laboratory variance (repeatability variance of uncertainties), S_r^2 . The addition of both variances represents the reproducibility variance, S_R^2 , in this case being the variance associated with the uncertainty of the method:

 $u = \sqrt{S_L^2 + S_r^2} = S_R$

Eq. 7

Being

$$S_r^2 = \frac{1}{p} \sum_i^p S_i^2$$

Eq. 8

$$S_R^2 = \frac{1}{2} \sum_{i}^{p} \left(\overline{C}_i - \overline{C}\right)^2 + \left(1 - \frac{1}{n}\right) \cdot S_r^2$$

Eq. 9

where 'p' is the number of laboratories; 'n' is the number of replicated analyses done by each laboratory; S_i and C_i are the standard deviation and average value corresponding to the laboratory 'i'.

The standard deviation of the average inter-laboratory values, S_L , was used to calculate a robust standard deviation to characterise the analytical performance of each compound. By assuming a linear regression between concentration level and the corresponding interlaboratory standard deviation of the compared filters, correlation parameters between standard deviations and concentrations were calculated for each compound (see annex IV). The correlation parameters are given in Table 7. The analytical standard deviation for calculated through these correlations has been used as the standard deviation for proficiency assessment, σ_{PT} .

In this report, Proficiency testing was based on the following statistics: Z'-score for evaluating biases with respect to reference values and *Repeatability*-score for evaluating the uncertainty estimation of the laboratory. In addition, E_n -scores were calculated together with an estimation of an *overall standard uncertainty* that represented the contribution of the uncertainty of the measurement and bias with respect to the reference value.

Compound	slope	intercept	R ²
Phenanthrene	0.2246	-0.2946	0.9777
Anthracene	0.0391	0.5174	0.0626
Fluoranthene	0.0469	0.2957	0.9986
Pyrene	0.0346	0.3203	0.9006
Benzo[a]anthracene	0.0517	0.2006	0.9413
Chrysene	0.0967	0.6739	0.8102
Benzo[b]fluoranthene	0.0478	2.2448	0.7230
Benzo[j]fluoranthene	0.0296	1.277	0.1822
Benzo[k]fluoranthene	0.0338	0.2791	0.8879
Benzo[e]pyrene	0.1756	-1.0621	0.9583
Benzo[a]pyrene	0.0622	-0.0517	0.9826
Perylene	0.0743	-0.0493	0.9999
Indeno[1,2,3,-c,d]pyrene	0.0638	-0.4351	0.9018
Dibenzo[a,h]anthracene	0.1501	0.3979	0.9759
Benzo[g,h,i]perylene	0.0793	-0.0478	0.9313
*Chrysene+Triphenylene	0.0509	1.4436	0.6228
*Benzo[b.j,k]fluoranthene	0.0907	-1.3224	0.7023

Table 7 - Linear correlation between amount of compound and analytical standard deviation, $\hat{\sigma}_{\rm PT}$

 $\hat{\sigma}_{PT} = slope$. [amount of analytie in the filter (ng)] + intercept

6.1. E_n-score

E_n scores were calculated as:

$$E_n = \frac{C_{lab} - C_{ref}}{\sqrt{U_{lab}^2 + U_{ref}^2}}$$

Eq. 10

where *C*_{*lab}, <i>U*_{*lab*} and *C*_{*ref*}, *U*_{*ref*} are the concentrations and expanded uncertainties for the reported and reference value, respectively.</sub>

According to ISO 13528, En-scores with $E_n \ge 1$ or $E_n \le -1$ could indicate a need to review the uncertainty estimates, or to correct a measurement issue; similarly $-1 < E_n < 1$ should be taken as an indicator of successful performance, only if the uncertainties are valid and the deviation ($C_{lab}-C_{ref}$) is smaller than needed by the participant's customers.

6.2. Z'-score

This statistic is calculated according to ISO13528:2015 as:

$$Z' - score = \frac{C_{lab} - C_{ref}}{\sqrt{\hat{\sigma}_{PT}^2 + u_{ref}^2}}$$
Eq. 11

where u_{ref} is the uncertainty associated with the reference value and $\hat{\sigma}_{PT}$ the standard deviation assigned to the proficiency assessment.

6.3. Repeatability score

A repeatability score based on the ratio between the uncertainty of the laboratory, u_{lab} , and the standard deviation of the proficiency test, σ_{PT} , can be used to monitor the adequacy of the uncertainty estimated by the participating laboratory in the context of the exercise.

$$Repeatability - Score = \frac{u_{lab}}{\hat{\sigma}_{PT}}$$

Eq. 12

6.4. Overall expanded uncertainty

The overall expanded uncertainty, OEU, represents the sum of the expanded uncertainty of the reported result, U_{lab} , and the absolute value of its bias with respect to the reference value. The OEU is calculated according to the following expression:

$$OEU(\%) = \left(\frac{U_{lab}}{C_{lab}} + \frac{|C_{lab} - C_{ref}|}{C_{ref}}\right). 100$$

Eq. 13

6.5. Robust overall expanded uncertainty for the comparison

For the comparison exercise, a robust overall expanded uncertainty can be calculated as it follows:

$$OEU_R(\%) = \left(2 \cdot \frac{S_R}{C_{ref}} + \frac{\left|\bar{C} - C_{ref}\right|}{C_{ref}}\right) \cdot 100$$

Eq. 14

7. Results and discussion

7.1. Data reporting

Not all the laboratories reported the complete list of compounds of Table 2. Phe, Anth, Chry, B[j]F, B[e]P and Per, were reported by only half of the participants. On the other hand, a few laboratories reported other compounds not requested. This was the case of CHMI (reporting Retene, Picene and Coronene), NILU (reporting napthalene, dibenzofuran, 1,2&9-methylphenanthrenes, retene, benzo[b]fluorene, benzo[g,h,i]fluoranthene, ciclopentane[c,d]pyrene, triphenylene, benzo[a]fluoranthene, dibenzo[a,c]anthracene, coronene, dibenzo[a,e]pyrene).

Figure 10 shows the percentage of reporting PAHs by laboratories. The highest reported percentage corresponded to those compounds mentioned in EU directive 2004/107/EC.

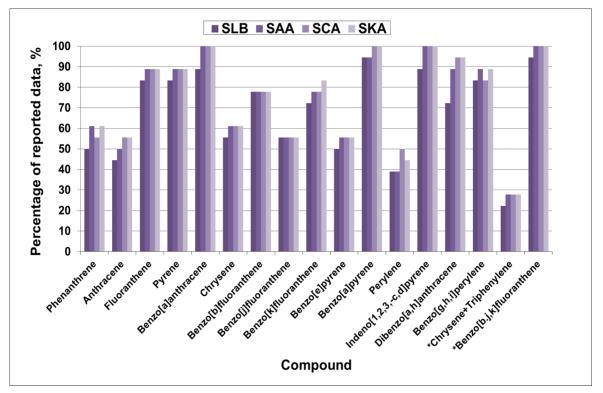


Figure 10 - Percentage of reported data by compounds from all participating laboratories

Laboratories carried out an estimation of their uncertainties, although, in general, the description of the calculation was quite cryptic. The way in which uncertainty was calculated and additional analytical comments from the laboratories are collected in the annex XIII.

Most of the laboratories reported individual values for the isomers of B[bjk]F and Chry+TPh. Nevertheless, some laboratories were not able to separate all isomers and consequently they were reported together or partially separated. Therefore, the statistical analysis of the results for these compounds was limited by a series of statistical assumptions regarding the combination of uncertainties and compounds. Laboratories should take into consideration these assumptions in order to evaluate and interpret their individual results. Details of the reported isomers and treatment are provided in annex V.

7.2. Blank filters

The blank filters (code BAB and BOA) were a good indication of the noise level associated with the analytical methodology. The reported concentrations for these blank filters are represented in Figure 11. It is noted that the highest blank levels were reported by those

laboratories, which were identified as outlier laboratories in the comparison (see Table 5). In fact, these average blanks decreased by a 70% when identified outliers were removed to estimate a robust blank value.

Phe was the compound with the highest amount detected in the blanks (3.6 ng), followed by B[a]A, Pyr and Flu for which their amounts ranged from 2 ng to 1.3 ng in the filters.

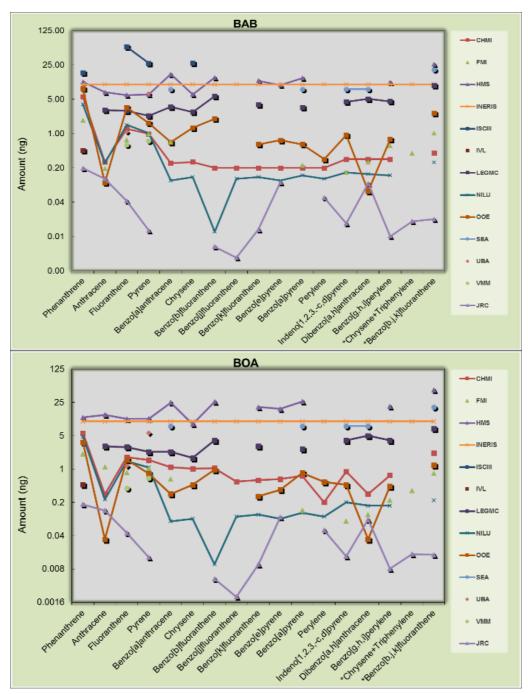
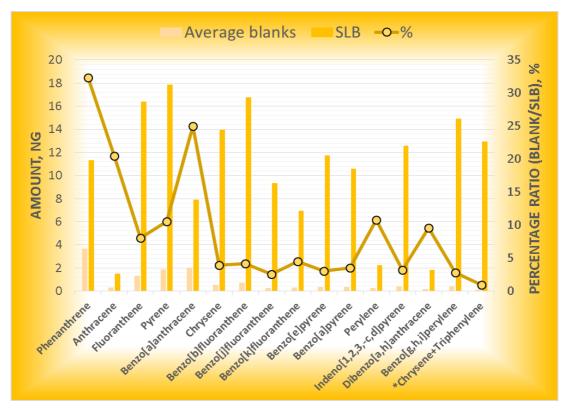


Figure 11 - Concentrations of the blank filters

It was noted that for some compounds, the amount detected in the blanks represented a significant amount compared to that analysed in the lower concentration filter (SLB). This was, for instance, the case of Phe (32%), B[a]A (25%), Anth (20%), Per (11%), Pyr (10%) and DB[ah]Anth (10%) (see Figure 12). On the other hand, the outlier blanks were at the same level or higher than the amounts of the lower concentration samples. This could explain the general overestimation of these laboratories during the exercise.





7.3. Scattering of laboratory results

The scattering of results of the inter-laboratory comparison were represented in terms of deviation with respect to the lower compared value. Deviations and bias are related according to the following expressions:

if Laboratory value > Reference value

Eq. 15

or

bias(%) =
$$-\frac{\frac{deviation(\%)}{100}}{1+\frac{deviation(\%)}{100}} \cdot 100$$
 if Laboratory value < Reference value

Eq. 16

Consequently, the signs +' and -' indicate the 'over' and 'under' estimation of the reference value.

Showing the laboratories' scattering in terms of deviations has the advantage of a symmetrical representation of the over and under estimations with respect to reference values.

Figure 13 to Figure 16. shows the results of the inter-laboratory comparison for the different filters and analysed compounds. The figures include outliers and are expressed in terms of deviation. These figures show how some laboratories are systematically over- or under-estimating the reference concentration. On the other hand, it was evident that the scattering of the results increased with the decrease concentrations on the filter.

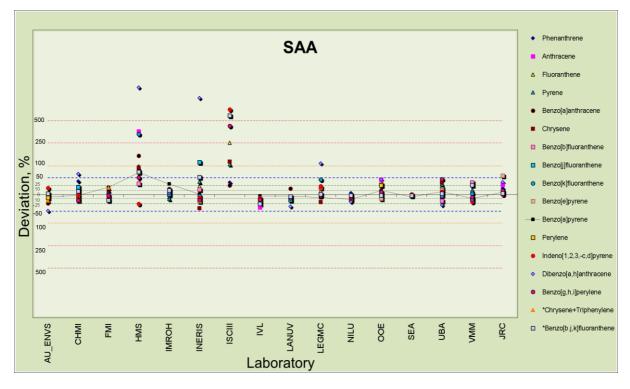
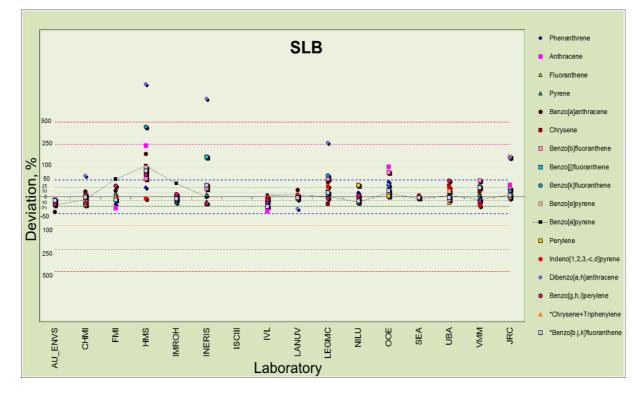


Figure 13 - Inter-laboratory result – Filter SAA from 01/02/2018 (75 percentile BaP concentration)

Figure 14 - Inter-laboratory result - Filter SLB from 12/02/2018 (lowest BaP concentration)



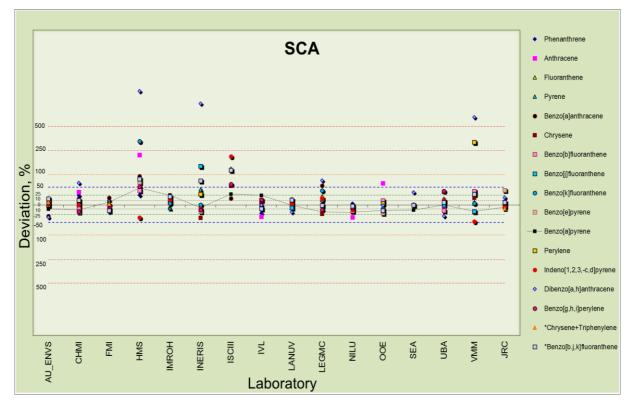
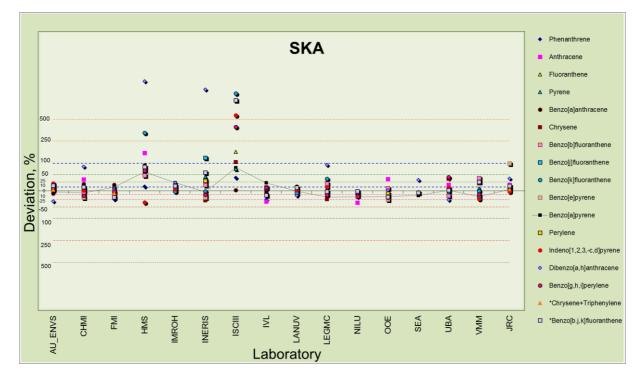


Figure 15 - Inter-laboratory result – Filter SCA from 03/02/2018 (25 percentile BaP concentration)

Figure 16 - Inter-laboratory result – Filter SKA from 11/02/2018 (highest BaP concentration)

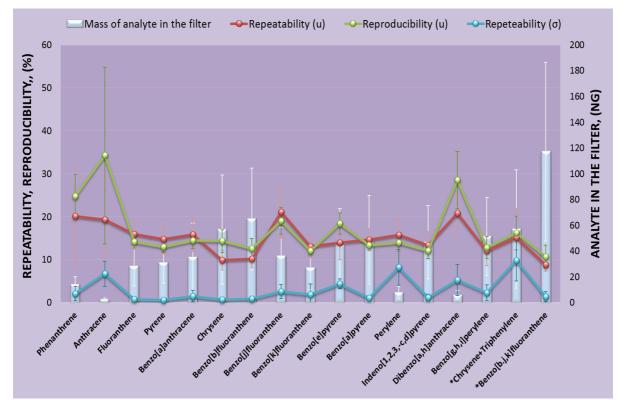


7.4. Repeatability, reproducibility and overall expanded uncertainty of the comparison exercise

Repeatability and reproducibility values were calculated according to ISO 5725 by considering the laboratory reported uncertainty as the input standard deviation of the reported average value. The convergence of ISO 5725 outlier statistic detection provided robust values for the repeatability uncertainty, the reproducibility and the overall expanded uncertainty (section 6.5) of the comparison.

Average values of the repeatability uncertainty and reproducibility for the four compared filters, as well as the average repeatability standard deviation from replicated analysis are represented in Figure 17. Figure 18 shows the robust overall expanded uncertainty estimated for each filter comparison.





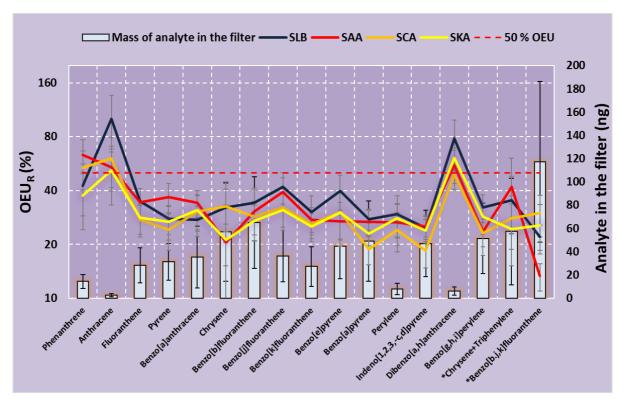


Figure 18 - Robust overall expanded uncertainty for the filters comparison

The median analytical repeatability standard deviation (σ), considering all compared filters and compounds, was circa 1.9%, while repeatability uncertainty and reproducibility median values were around 14.5%, which confirmed the robustness of the method. The median value for the robust overall expanded uncertainty was of circa 30%. These values were similar to the B[a]P, which showed repeatability and reproducibility values around 14%, an overall expanded uncertainty of 24% and a repeatability standard deviation of around 1%. These results and in particular B[a]P were under the levels of uncertainties requested by the Directive 2004/107/EC for the annual limit value of B[a]P of 50% (Table 8).

Table 8 - Robust overall expanded uncertainty of the compared filters

	Robust ove	rall expanded u	ncertainty, OEU _R (%)
Compound	SLB	SAA	SCA	SKA
Phenanthrene	42.6	63.2	53.4	37.4
Anthracene	100.9	54.0	60.4	52.0
Fluoranthene	34.7	34.4	27.5	28.2
Pyrene	27.7	36.7	24.19	26.8
Benzo[a]anthracene	27.3	34.1	30.4	31.0
Chrysene	32.1	20.5	32.6	21.1
Benzo[b]fluoranthene	34.1	30.5	28.6	27.0
Benzo[j]fluoranthene	41.9	39.4	32.1	31.1
Benzo[k]fluoranthene	30.3	27.4	26.0	25.2
Benzo[e]pyrene	39.9	26.9	30.3	30.1
Benzo[a]pyrene	27.6	26.7	18.7	22.9
Perylene	29.5	26.6	24.1	27.9
Indeno[1,2,3,-c,d]pyrene	24.6	25.1	18.4	23.8
Dibenzo[a,h]anthracene	78.4	55.3	49.2	60.6
Benzo[g,h,i]perylene	32.2	23.5	23.0	28.5
*Chrysene+Triphenylene	35.4	41.9	28.0	24.4
*Benzo[b.j,k]fluoranthene	22.0	13.3	29.8	25.5

7.5. Z'-scores

Z'-scores are reported by compounds in annex VI. Between laboratories, the median of the percentage of Z'-scores from reported values ≥ 2 was 11%, while for values ≥ 3 , it was 5%. When the same statistic was considered between compounds, 27% of the values were ≥ 2 , while 19% were ≥ 3 . These results are shown in more detail in Figure 19 and Figure 20.

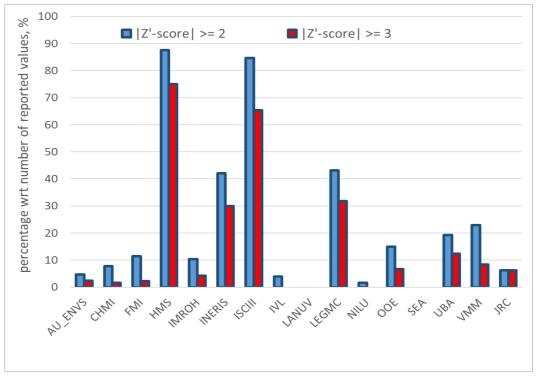
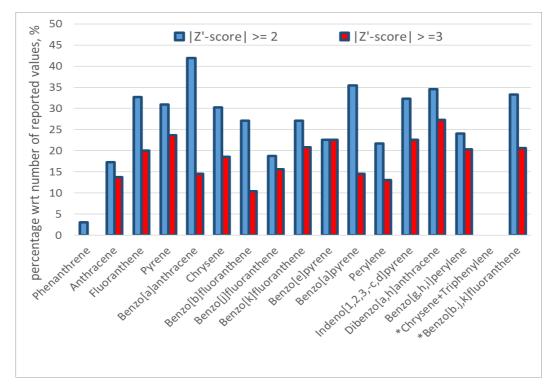




Figure 20 - Z'-score of reported data by analysed compounds



7.6. Repeatability-scores

Repeatability score are reported by compounds in annex VII. Between laboratories, the median percentage of repeatability-scores with reported values ≥ 2 was 18%, while for values ≥ 3 , the percentage was 7%. When the same statistic was considered between compounds, 12% of the values were ≥ 2 , while 7% were ≥ 3 . These results are illustrated in Figure 21 and Figure 22.

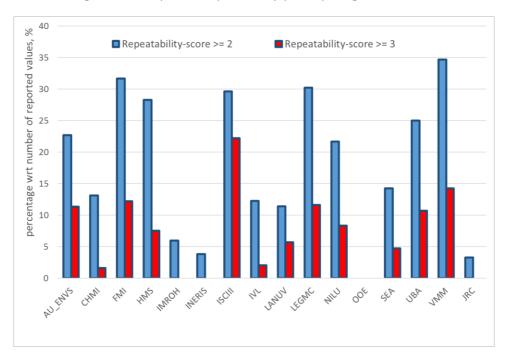
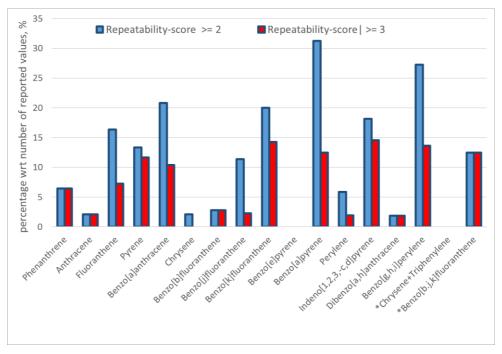




Figure 22 - Repeatability-score by analysed compounds



Those laboratories or compounds with repeatability scores higher than 2 could suffer from an overestimation of the reported uncertainties, which was consistent with the differences between E_n -scores and Z'-scores laboratory ranking.

7.7. En-scores

 E_n -scores are provided by laboratories in annex VIII. Between laboratories, the median of the percentage of E_n -scores from reported values ≥ 1 was 4%. When the same statistic was considered between compounds, 13% of the values were ≥ 1 . These results are shown in more detail in Figure 23 and Figure 24.

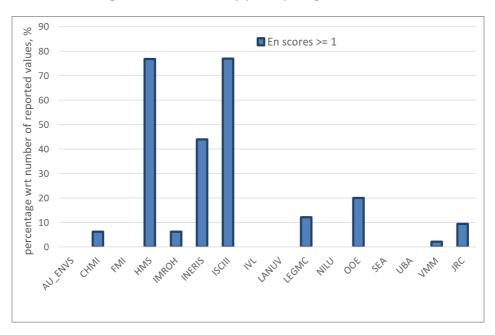
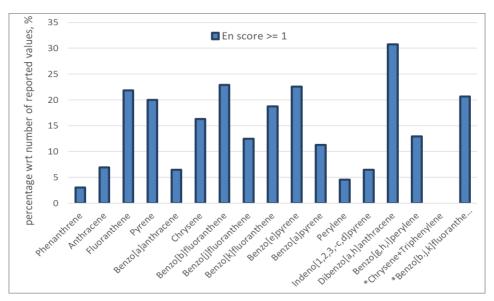


Figure 23 - En-score by participating laboratories

Figure 24 - En-score by analysed compounds



7.8. Overall expanded uncertainties

The overall expanded uncertainties by compounds are given in annex IX. Between laboratories, the median of the percentage of OEU from reported values >= 50 % was 32 %. When the same statistic is considered between compounds, 33 % of the values were >=50%. These results are illustrated in Figure 25 and Figure 26.

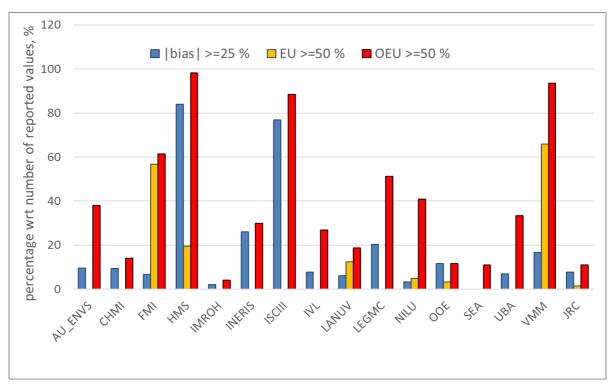
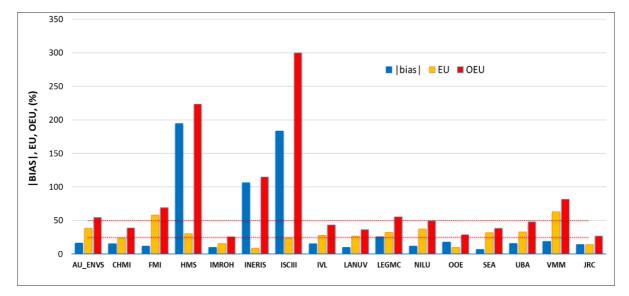




Figure 26 - inter-compound median of the |bias|, EU and OEU by participating laboratories



By observing the overall percentages of bias, EU and OEU in Figure 25 and Figure 27, an over-estimation of the uncertainties for an significant number of reported data from FMI and VMM, was noted. On the other hand, laboratories as HMS, Carlos III or INERIS were characterised by high biases. These observations are consistent with the high values of repeatability-score and the possible divergences between Z'-score and En-score.

It was also noted that when these results were averaged by compounds, the higher biases and OEU corresponded to those analytes present variously at lower concentrations, or with high blank levels, i.e, Phe, Anth or DB[ah]A.

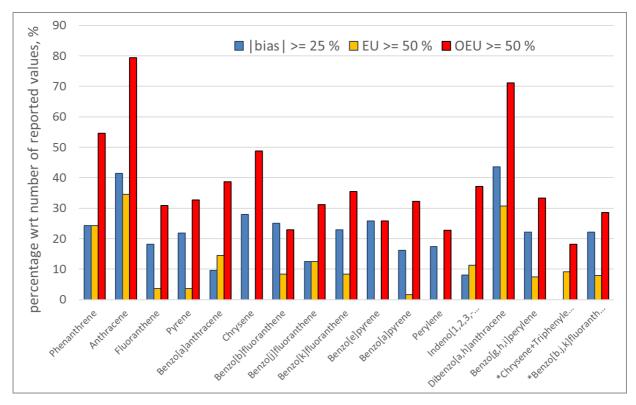


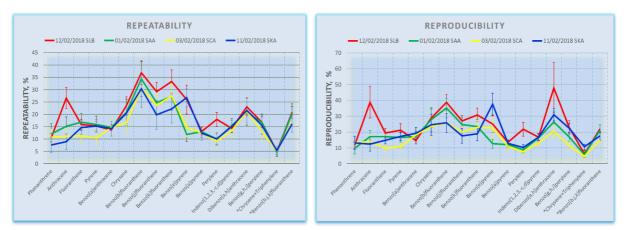
Figure 27 - Bias, reported and overall expanded uncertainty by compounds

7.9. Low volume sampling comparison

Only three laboratories reported results for the low-volume samplers comparison. This limited participation prevented representative statistics for this sort of sampling. Despite this, their results were also represented in terms of deviation with respect to the robust mean value (annex X). In the case of the sampling days in concomitance with the days of the filters of high-volume sampling, the reference concentrations determined by the robust average value of the HVS filter comparison were used.

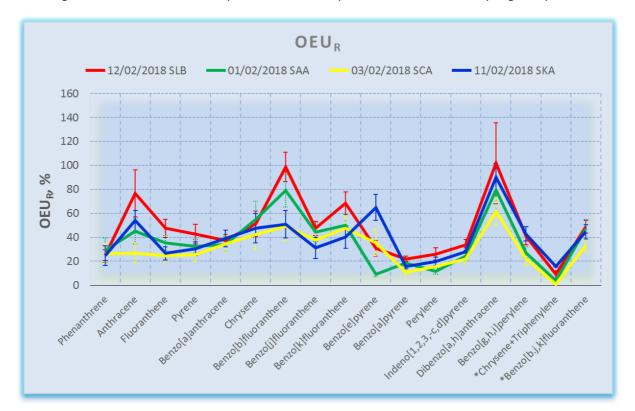
To this respect, filters SAA, SCA, SKA and SLB corresponded to sampling days of 01/02/2018, 03/02/2019, 11/02/2018 and 12/02/2018, respectively. Consequently, the data comparison in terms of concentration in air (ng/m³) allowed the estimation of convergent values of repeatability uncertainty and reproducibility for the samples compared. The results of these analyses are shown in Figure 28, while the robust overall expanded uncertainty is illustrated in Figure 29. The median values of robust repeatability uncertainty and reproducibility were of 15% and 18%. In case of BaP, robust repeatability uncertainty and reproducibility values were of 12.5%, while the robust overall expanded uncertainty was of 39%.

Figure 28 - Repeatability and reproducibility values of the low volume sampling comparison



The values of repeatability, uncertainty and reproducibility were comparable to those calculated from the filter comparison. Consequently, the sampling uncertainty did not contribute significantly to the final overall uncertainty.

When comparing low and high-volume sampling average results (see Figure 30), the bias of the median inter-compound value of the LVS with respect to the HVS value was of -5.6%. This could explain the increase of the median OEU_R to circa 36% instead of the 30% of the HVS filters exercise. This bias, however, did not represent a significant difference between low and high-volume sampling, as this could be overlapped by the sampling and analytical uncertainties.





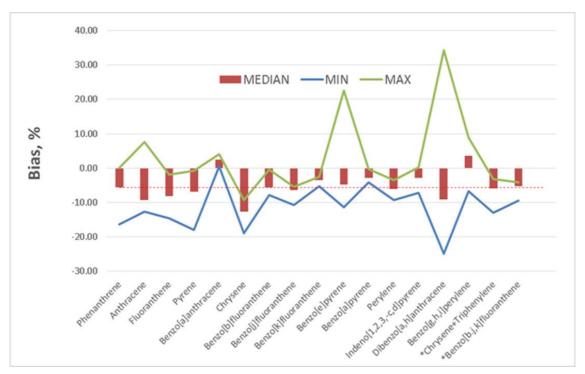


Figure 30 - Bias of the average LVS value with respect to the HVS

The E_n -scores for the low volume sampling data was calculated according to Eq. 12 (see annex XI). For this statistic, only 6.3% of reported values for CHMI and JRC showed En scores ≥ 1 . Looking by compounds the highest percentages of En-scores ≥ 1 were reported by those compounds found at lower concentration or characterised by poor stability, i.e., DB[ah]A or B[e]P (See Figure 31).

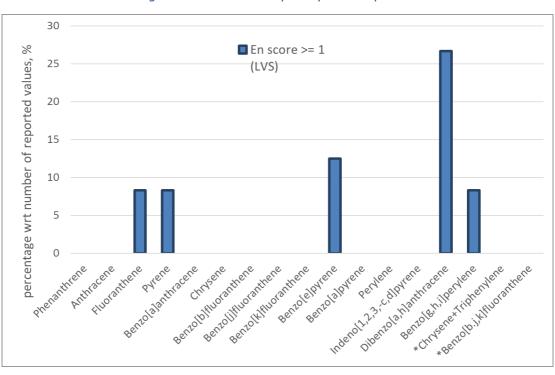


Figure 31 - En-scores by analysed compounds

The overall expanded uncertainties calculated by Eq. 13 are shown in annex XII. These results showed an inter-laboratory behaviour similar to the one observed for the LVS filter comparison, the inter-laboratories median of the OEU \geq 50% was approximately 16%, while the same statistic considered between compounds showed that 33% of the values were \geq 50% (see Figure 32 and Figure 33).

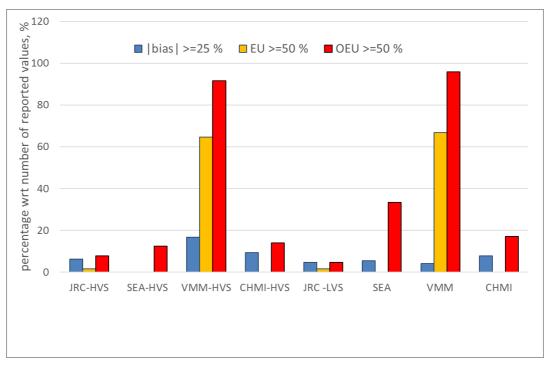
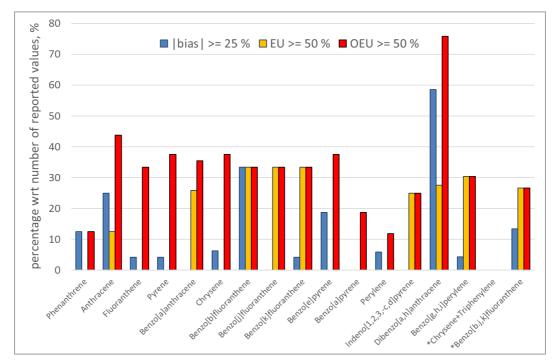


Figure 32 - Bias, reported and overall expanded uncertainty by participating laboratory

Figure 33 - Bias, reported and overall expanded uncertainty by compounds



7.10. Tabulated results for proficiency test considerations

Results of reported concentrations and expanded uncertainties, biases with respect to the reference value, Z'-scores, repeatability scores, E_n -scores and overall expanded uncertainties are provided from Table 9 to Table 17.

Table 9 - Reported	l values of anal	ysed compounds	in the filter, ng
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Reported amount in filters		AU	ENVS			IMF	OH			LAN	JUV			SE	EA	
ng	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene																
Anthracene																
Fluoranthene	13.0	13.5	33.2	48.1	14.4	15.5	31.6	54.3								
Pyrene	12.9	15.5	36.2	51.5	15.1	16.4	33.7	54.5								
Benzo[a]anthracene	1.9	12.4	31.1	57.6	7.6	17.8	55.5	63.3	9.4	20.7	60.4	69.4	8.2	17.8	52.4	58.7
Chrysene					13.2	32.9	91.7	103.9	47.2	45.4	07.0	101.0				
Benzo[b]fluoranthene					17.1	52.5	95.4	111.9	17.3 9.4	45.1 22.4	87.0	104.9				
Benzo[j]fluoranthene Benzo[k]fluoranthene					8.8 6.4	27.0 20.6	51.4 37.5	59.6 44.2	9.4 6.6	22.4 18.4	44.8 38.1	56.3 46.0				
Benzo[e]pyrene	10.1	34.0	63.6	80.1	0.4	20.0	57.5	44.2	0.0	10.4	50.1	40.0				
Benzo[a]pyrene	7.6	29.1	62.3	82.8	14.6	40.1	87.5	103.7	11.1	29.7	69.2	84.0	10.0	29.1	59.9	72.6
Perylene	2.1	5.1	10.5	13.5								••				
Indeno[1,2,3,-c,d]pyrene	11.5	42.8	62.7	93.5	13.2	40.3	69.2	80.8	12.7	33.8	63.5	78.1	12.7	36.9	62.2	74.5
Dibenzo[a,h]anthracene		0.2	4.2	5.3	1.7	5.0	9.8	11.4	0.9	2.4	6.4	8.0			11.0	12.2
Benzo[g,h,i]perylene	11.4	41.3	71.2	88.6	16.0	46.3	81.5	94.9								
*Chrysene+Triphenylene		20.1	87.9	111.4												
*Benzo[b.j,k]fluoranthene	30.5	92.8	175.9	216.8	32.2	100.1	184.4	215.6	33.3	85.9	170.0	207.1	33.2	88.2	151.5	180.4
Reported amount in filters		CH	IMI			INE	RIS			LEG	SMC			U	BA	
ng	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	12.5	12.0	19.3	24.5										6.4	17.5	29.4
Anthracene	1.1	2.0	4.2	4.9										1.6	2.9	4.2
Fluoranthene	18.0	18.5	35.2	48.9	14.0	20.4	44.9	63.6	20.1	18.0	40.3	49.5	13.5	15.6	29.8	39.7
Pyrene	16.7	19.5	35.0	49.0	18.9	25.6	52.6	72.4	18.5	18.5	41.0	51.3	22.4	24.2	42.5	52.2
Benzo[a]anthracene	9.0	21.6 27.4	61.3 71.5	74.1	10.7	16.0 10.7	44.7 39.5	54.6	11.3 10.9	21.9 22.4	82.2	76.8 69.4	7.8 18.2	18.4 40.2	57.4 112.3	65.4 135.8
Chrysene Benzo[b]fluoranthene	11.3 17.4	27.4 44.0	71.5 80.9	88.3 101.7	20.5	10.7 58.9	39.5 110.6	63.7 122.3	25.9	22.4 61.6	58.2 99.7	69.4 126.4	18.2	40.2 41.7	72.8	135.8 89.2
Benzo[j]fluoranthene	9.2	44.0 32.2	80.9 50.5	60.6	20.5	58.9 59.2	110.6	122.3	23.3	01.0	23.1	120.4	10.6	41.7 31.1	72.8 53.1	61.3
Benzo[k]fluoranthene	7.1	22.0	38.2	47.9	21.5	19.8	36.2	44.3	11.6	29.6	50.3	60.7	7.1	19.9	35.5	43.8
Benzo[e]pyrene	10.0	28.0	46.8	56.8		26.9	47.8	56.8					13.5	38.2	64.7	76.8
Benzo[a]pyrene	9.8	30.3	60.4	80.1	10.5	31.4	64.8	82.2	10.6	28.5	55.4	67.3	11.0	33.3	69.9	85.8
Perylene	1.7	5.3	10.5	13.2			13.3	16.5								
Indeno[1,2,3,-c,d]pyrene	12.1	35.9	61.6	77.8		33.2	55.1	69.8	16.1	44.0	70.7	85.2	15.8	39.1	67.7	83.6
Dibenzo[a,h]anthracene	3.0	8.0	13.7	17.0	19.1	50.6	84.0	118.1	6.6	10.3	14.4	17.8		2.9	4.8	6.2
Benzo[g,h,i]perylene	12.1	33.2	55.0	69.5	12.1	33.5	58.8	73.4	14.5	38.8	59.0	72.5	22.0	58.5	93.1	116.1
									-							
*Chrysene+Triphenylene																
*Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene	33.7	98.2	169.5	210.3	44.8	137.9	264.6	301.6	37.5	91.3	150.1	187.0	33.3	92.7	161.5	194.3
*Chrysene+Triphenylene		FI	169.5 VII	210.3	44.8	ISC			37.5	NI	LU			VN	ИM	
*Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene Reported amount in filters ng	SLB	FI SAA	169.5 VII SCA	210.3 SKA		ISC SAA		SKA	37.5 SLB	NI SAA	LU SCA	SKA	33.3 SLB			194.3 SKA
*Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene Reported amount in filters ng Phenanthrene	SLB 8.5	FI SAA 7.3	169.5 MI SCA 12.3	210.3 SKA 15.0	44.8	ISC			37.5	NI	LU SCA 15.9	SKA 17.3		VN	ИM	
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene	SLB 8.5 0.8	FI SAA 7.3 1.5	169.5 MI SCA 12.3 3.0	210.3 SKA 15.0 3.5	44.8	ISC SAA 11.6	SCA	SKA 30.1	37.5 SLB 12.5	NI SAA 9.1	LU SCA 15.9 1.6	SKA 17.3 1.7	SLB	VN SAA	MM SCA	SKA
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene	SLB 8.5 0.8 17.7	FI SAA 7.3 1.5 17.7	169.5 VI SCA 12.3 3.0 36.9	210.3 SKA 15.0 3.5 51.0	44.8	ISC SAA 11.6 58.2	SCA 75.9	SKA 30.1 124.7	37.5 SLB 12.5 17.1	NI SAA 9.1 16.5	LU SCA 15.9 1.6 32.3	SKA 17.3 1.7 43.6	SLB 17.9	VN SAA 18.4	MMSCA34.1	SKA 46.8
*Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene	SLB 8.5 0.8 17.7 19.2	FI SAA 7.3 1.5 17.7 20.9	169.5 VI SCA 12.3 3.0 36.9 41.8	210.3 SKA 15.0 3.5 51.0 56.9	44.8	ISC SAA 11.6 58.2 39.5	SCA 75.9 59.6	SKA 30.1 124.7 87.9	37.5 SLB 12.5 17.1 16.1	NI SAA 9.1 16.5 16.6	LU SCA 15.9 1.6 32.3 32.8	SKA 17.3 1.7 43.6 44.5	SLB 17.9 18.7	VN SAA 18.4 20.8	MM SCA 34.1 39.4	SKA 46.8 53.9
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene	SLB 8.5 0.8 17.7	FI SAA 7.3 1.5 17.7	169.5 VI SCA 12.3 3.0 36.9	210.3 SKA 15.0 3.5 51.0	44.8	ISC SAA 11.6 58.2	SCA 75.9	SKA 30.1 124.7	37.5 SLB 12.5 17.1	NI SAA 9.1 16.5	LU SCA 15.9 1.6 32.3	SKA 17.3 1.7 43.6	SLB 17.9	VN SAA 18.4	MMSCA34.1	SKA 46.8
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	SLB 8.5 0.8 17.7 19.2	FI SAA 7.3 1.5 17.7 20.9	169.5 VI SCA 12.3 3.0 36.9 41.8	210.3 SKA 15.0 3.5 51.0 56.9	44.8	ISC SAA 11.6 58.2 39.5 22.4	500 SCA 75.9 59.6 61.5	SKA 30.1 124.7 87.9 63.2	37.5 SLB 12.5 17.1 16.1 6.4	NI SAA 9.1 16.5 16.6 14.6	LU SCA 15.9 1.6 32.3 32.8 43.5	SKA 17.3 1.7 43.6 44.5 51.9	SLB 17.9 18.7 5.9	VN SAA 18.4 20.8 14.9	MM SCA 34.1 39.4 41.0	SKA 46.8 53.9 49.3
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	SLB 8.5 0.8 17.7 19.2	FI SAA 7.3 1.5 17.7 20.9	169.5 VI SCA 12.3 3.0 36.9 41.8	210.3 SKA 15.0 3.5 51.0 56.9	44.8	ISC SAA 11.6 58.2 39.5 22.4	500 SCA 75.9 59.6 61.5	SKA 30.1 124.7 87.9 63.2	37.5 SLB 12.5 17.1 16.1 6.4 13.0	NI SAA 9.1 16.5 16.6 14.6 26.9	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6	SKA 17.3 1.7 43.6 44.5 51.9 93.7	SLB 17.9 18.7 5.9 16.0	VN SAA 18.4 20.8 14.9 37.7	MM SCA 34.1 39.4 41.0 98.4	SKA 46.8 53.9 49.3 121.2
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	SLB 8.5 0.8 17.7 19.2	FI SAA 7.3 1.5 17.7 20.9	169.5 VI SCA 12.3 3.0 36.9 41.8	210.3 SKA 15.0 3.5 51.0 56.9	44.8	ISC SAA 11.6 58.2 39.5 22.4	500 SCA 75.9 59.6 61.5	SKA 30.1 124.7 87.9 63.2	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0	NI SAA 9.1 16.5 16.6 14.6 26.9 44.0	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6	SLB 17.9 18.7 5.9 16.0 25.0	VN SAA 18.4 20.8 14.9 37.7 70.2	AM SCA 34.1 39.4 41.0 98.4 118.3	SKA 46.8 53.9 49.3 121.2 145.9
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene	SLB 8.5 0.8 17.7 19.2 9.2	FI SAA 7.3 1.5 17.7 20.9 20.2	169.5 VII SCA 12.3 3.0 36.9 41.8 62.3	210.3 SKA 15.0 3.5 51.0 56.9 72.5	44.8	ISC SAA 11.6 58.2 39.5 22.4	75.9 59.6 61.5 129.5	SKA 30.1 124.7 87.9 63.2 205.5 519.2	37.5 SLB 12.5 17.1 16.1 16.4 13.0 15.0 9.3 5.8 12.0	NI SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene	SLB 8.5 0.8 17.7 19.2	FI SAA 7.3 1.5 17.7 20.9	169.5 VI SCA 12.3 3.0 36.9 41.8	210.3 SKA 15.0 3.5 51.0 56.9	44.8	ISC SAA 11.6 58.2 39.5 22.4	500 SCA 75.9 59.6 61.5	SKA 30.1 124.7 87.9 63.2 205.5	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.3 5.8 12.0 9.0	NI SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0	SLB 17.9 18.7 5.9 16.0 25.0 8.5	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9	SKA 46.8 53.9 49.3 121.2 145.9 47.7
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene	SLB 8.5 0.8 17.7 19.2 9.2 16.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9	169.5 VII SCA 12.3 3.0 36.9 41.8 62.3 74.9	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6	44.8	ISC SAA 11.6 58.2 39.5 22.4 67.0	SCA 59.6 61.5 129.5 89.6	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.3 5.8 12.0 9.0 3.0	NI SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6	MM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0	5KA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2	169.5 VII SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8	44.8	ISC SAA 11.6 58.2 39.5 22.4	75.9 59.6 61.5 129.5	SKA 30.1 124.7 87.9 63.2 205.5 519.2	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.3 5.8 12.0 9.0	NI SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.7	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5	MM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2	5KA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]ipfluoranthene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9	169.5 VI 2 SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7	44.8	150 SAA 11.6 58.2 39.5 22.4 67.0 290.2	SCA 75.9 59.6 61.5 129.5 89.6 186.3	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5	37.5 SLB 12.5 17.1 16.1 6.4 13.0 9.3 5.8 12.0 9.0 3.0 12.1	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 7.8	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1	MM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0	5KA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4	169.5 VII 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6	44.8	ISC SAA 11.6 58.2 39.5 22.4 67.0	SCA 59.6 61.5 129.5 89.6	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.3 5.8 12.0 9.0 3.0	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1	LU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.7	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5	MM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2	5KA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]anthracene Benzo[a,h,i]arthracene Benzo[a,h,i]arthracene *Chrysene+Triphenylene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3	169.5 VII 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7	44.8	150 SAA 11.6 58.2 39.5 22.4 67.0 290.2 290.2 214.4	TTS.9 59.6 61.5 129.5 89.6 186.3 109.8	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6	37.5 SLB 12.5 17.1 16.1 13.0 15.0 9.3 5.8 12.0 9.0 3.0 12.1 15.5	NII SAA 9.1 16.5 16.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5	LU SCA 15.9 1.6 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 7.8 63.1	SKA 17.3 1.7 43.6 51.9 93.7 90.6 56.8 40.5 57.3 68.0 11.9 68.7 8.3 78.2	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7	MM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4	5KA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a],n]anthracene Benzo[a,h,a]nthracene Benzo[a,b,i]perylene *Chrysene+Triphenylene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6	44.8	150 5AA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5	37.5 SLB 12.5 17.1 16.1 6.4 13.0 9.3 5.8 12.0 9.0 3.0 12.1	NI SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 74.6 74.9 44.3 31.7 54.4 53.4 7.8 63.1 147.9	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3	5KA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a],n]anthracene Benzo[a,h,a]nthracene Benzo[b,h,i]perylene *Chrysene+Triphenylene *Benzo[b,k]fluoranthene Reported amount in filters	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 127.8 VIS	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0	44.8 SLB	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 <u>337.1</u> 'L	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5	37.5 SLB 12.5 17.1 16.1 16.4 13.0 15.0 9.3 5.8 12.0 9.0 3.0 12.1 15.5 30.1	NI SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00	LU SCA 15.9 16 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.4 7.8 63.1 147.9 DE	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.7 8.3 78.2 188.0	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 RC	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h.]anthracene Benzo[a,h.]anthracene Benzo[a,b.j.k]fluoranthene Reported amount in filters ng	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA	169.5 VI 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VI SCA	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA	44.8 SLB	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV SAA	500 SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA	37.5 SLB 12.5 17.1 16.1 13.0 15.0 9.0 3.0 12.1 15.5 30.1 SLB	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 53.8 9.6 53.4 73.8 63.1 147.9 DE SCA	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.3 78.2 188.0 SKA	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA	MM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 32 SCA	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,j.k]fluoranthene *Chrysene+Triphenylene *Benzo[b,j.k]fluoranthene Reported amount in filters ng Phenanthrene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VIS SCA 19.4	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0	44.8 SLB SLB 7.3	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IN SAA 5.4	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.3 5.8 12.0 9.0 3.0 12.1 15.5 30.1 SLB 16.2	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 75.8 9.6 53.4 7.8 63.1 147.9 DE SCA 147.9 SCA	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 SKA	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 RC SCA 16.3	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h.]anthracene Benzo[a,h.]anthracene Benzo[a,b.j.k]fluoranthene Reported amount in filters ng	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA	169.5 VI 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VI SCA	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2	44.8 SLB	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV SAA	500 SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA	37.5 SLB 12.5 17.1 16.1 13.0 15.0 9.0 3.0 12.1 15.5 30.1 SLB	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 53.8 9.6 53.4 73.8 63.1 147.9 DE SCA	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.3 78.2 188.0 SKA	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA	MM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 32 SCA	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9 8.1	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VS SCA 19.4 9.9	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4	44.8 SLB SLB 7.3 0.5	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV SAA 5.4 0.7	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.3 5.8 12.0 9.0 3.0 12.1 15.5 30.1 SLB 16.2 3.1	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 0.7 2.5	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 7.8 63.1 147.9 OE SCA 15.8 5.1	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 SKA 18.0 4.9	SLB 17.9 18.7 5.9 25.0 8.5 9.0 9.8 1.5 13.0 42.4 SLB 10.8 2.0	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 RC SCA 16.3 3.3	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2
*Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]horenthene Benzo	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 SLB 14.2 32.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9 8.1 33.1	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 127.8 VI SCA 127.8 VI SCA 19.4 9.9 63.9	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8	44.8 SLB SLB 7.3 0.5 15.1	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV 5AA 5.4 0.7 13.8	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.9	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8	37.5 SLB 12.5 17.1 16.1 16.4 13.0 15.0 9.3 5.8 12.0 9.0 3.0 12.1 15.5 30.1 SLB 16.2 3.1 22.2	NII SAA 9.1 16.5 16.6 14.6 26.9 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 O O SAA 10.7 2.5 18.5	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 7.8 63.1 147.9 DE SCA 15.9 5.1 29.5	SKA 17.3 1.7 43.6 44.5 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 SKA 18.0 99.1	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.0	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 17.1	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 RC SCA 16.3 3.3 36.3	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 51.5
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b],b]anthracene Benzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,]anthracene Benzo[a,h,]anthracene Benzo[a,b],b]kfluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.2 32.1	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9 8.1 33.1 36.0	169.5 VI 2.2.3 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 127.8 VI SCA 19.4 9.9 63.9 67.9	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4	44.8 SLB SLB 7.3 0.5 15.1 15.5	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 V SAA 5.4 0.7 13.8 15.7	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.9 37.0	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0	37.5 SLB 12.5 17.1 16.1 16.4 13.0 15.0 9.3 9.0 3.0 12.1 15.5 30.1 SLB 16.2 3.1 22.2 21.7	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7 2.5 18.5 20.1	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 75.4 53.8 9.6 53.1 147.9 DE SCA 15.9 52.3 32.8 53.1 147.9 DE SCA	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.3 78.2 188.0 SKA 18.0 49.1 41.4	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.0 18.5	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 17.1 20.6	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.6.3 41.2	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 51.5 55.9
*Chrysene+Triphenylene *Benzo[b_j,k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Bienzo[a,h,]anthracene Benzo[b,k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Reported amount in filters ng Phenanthrene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Reported amount in filters Rg Phenanthrene Fluoranthene Benzo[b]fluoranthene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.2 32.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI 5AA 12.9 8.1 33.0 46.0	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VI SCA 19.4 9.9 63.9 102.6	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 118.0	44.8 SLB SLB 7.3 0.5 15.1 15.5 6.3	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 V SAA 5.4 0.7 13.8 15.7 14.7	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.7.0 55.4	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 5KA 14.7 2.0 46.8 50.0 61.6	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.0 9.0 9.0 12.1 15.5 30.1 16.2 3.1 22.2 21.7 9.4	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 5AA 10.7 2.5 18.5 20.1 18.3	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 31.7 54.4 53.8 9.6 53.4 74.9 63.1 147.9 DE SCA 15.8 5.1 29.5 32.3 43.5	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 SKA 18.0 4.9 39.1 41.4 48.5	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.0 18.5 8.1 20.3	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 5A 10.1 2.5 4.1 37.7 55.4	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 36.3 41.2 51.1 91.9	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.5 55.9 65.1 117.2
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Reported amount in filters ng Phenanthrene Fluoranthene Fluoranthene Benzo[a]anthracene Benzo[a]anthracene Fluoranthene Pryrene Benzo[a]anthracene Fluoranthene Pryrene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.2 25.4 26.0	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 8.1 33.1 36.0 46.0 58.0 67.8	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VIS SCA 19.4 9.9 63.9 102.6 144.0 119.9	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 118.0 170.5 155.4	44.8 SLB SLB 7.3 0.5 15.1 15.5 6.3 11.8 15.8	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV SAA 5.4 0.7 13.8 15.7 14.7 25.6 41.3	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 17.7 33.9 55.4 88.5 97.1	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0 61.6 104.9 115.3	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.0 9.0 3.0 12.1 15.5 30.1 SLB 16.2 3.1 22.2 21.7 9.4 16.2 30.3	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 0 0 SAA 10.7 2.5 18.3 28.6 66.5	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 75.4 53.8 9.6 53.4 76.5 53.3 147.9 DE SCA 15.9 52.3 32.8 53.1 147.9 DE SCA 53.1 147.9 DE SCA 53.1 145.9 54.4 55.8 51.1 29.5 52.3 43.5 54.6 55.1 29.5 52.3 43.5 54.6 55.1 29.5 52.3 52.8 53.1 147.9 DE SCA 53.8 54.5 54.4 55.7 29.5 54.4 55.8 51.1 29.5 54.4 55.8 51.1 29.5 52.3 53.2 53.8 53.1 29.5 53.8 53.1 29.5 54.5 53.8 53.1 29.5 54.5 53.8 54.6 55.8 54.8 55.8 5	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 39.1 41.4 48.5 75.4 113.3	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.5 8.1 2.0 18.0 18.5 8.1 20.3 9.2	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 55.4 10.1 2.2 17.1 20.6 19.3 55.4 27.9	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 36.3 36.3 36.3 31.2 51.1 91.9 46.8	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 55.9 65.1 117.2 60.0
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]hjduranthene Benzo[c]hjduranthene Benzo[c]hjanthracene Benzo[c]h,i]anthracene Benzo[b,j.k]fluoranthene *Benzo[b,j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.2 25.4 26.0 37.3	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI 5AA 12.9 8.1 33.0 46.0 58.0 67.8 89.5	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VI SCA 9.9 63.9 67.9 19.4 9.9 63.9 67.9 19.4 19.5 10.2 10.4 19.4 19.4 10.5 10.4 10	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 24.2 9.4 86.8 90.4 118.0 170.5 155.4 193.1	44.8 SLB 7.3 0.5 15.1 15.5 6.3 11.8	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV 5AA 0.7 13.8 5.4 0.7 13.8 15.7 14.7 25.6	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.9 37.4 88.5	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0 61.6 104.9	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.0 9.0 12.1 15.5 30.1 5LB 16.2 3.1 22.2 21.7 9.4 16.2 30.3 9.2	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7 2.5 18.3 20.1 18.3 28.6 66.5 22.0	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 9.6 53.4 75.3 9.6 53.4 7.8 63.1 147.9 DE SCA 15.8 5.1 29.5 32.3 43.5 64.6 95.4 32.4	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 5KA 18.0 4.9 39.1 41.4 48.5 75.4 113.3 38.5	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 5LB 10.8 2.0 18.5 8.1 20.3 9.2 8.1	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 17.1 20.6 19.3 55.4 27.9 21.4	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 36.3 3.3 34.2 51.1 91.9 46.8 36.7	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 51.5 55.9 65.1 117.2 60.0 49.7
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c],h]anthracene Dibenzo[a,h]anthracene Benzo[b,h]lperylene *Benzo[b,h]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 SLB 14.2 5.2 32.2 32.1 25.4 26.0 37.3 23.7	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9 8.1 33.1 36.0 46.0 46.0 67.8 89.5 59.2	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VS SCA 19.9 63.9 63.9 63.9 63.9 63.9 63.9 102.6 144.0 119.9 102.6 144.0 119.9 155.2 99.8	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 115.0 SKA 105.0 10.	44.8 SLB 7.3 0.5 15.1 15.5 6.3 11.8 15.8 6.1	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV 5.4 0.7 13.8 15.7 14.7 12.5.6 41.3 18.6	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.9 37.0 55.4 97.1 39.7	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0 61.04.9 115.3 49.0	37.5 SLB 12.5 17.1 16.1 16.4 13.0 15.0 9.3 5.8 12.0 9.0 3.0 12.1 15.5 30.1 SLB 16.2 3.1 22.2 21.7 9.4 16.2 30.3 9.2 13.2	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 O SAA 10.7 2.5 18.5 20.1 18.5 20.1 18.5 22.0 30.5	UU SCA 15.9 16 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 7.8 63.1 147.9 DE SCA 15.8 5.1 29.5 32.3 43.5 129.5 32.3 43.5 5.1 29.5 32.3 43.5 5.1 29.5 32.3 43.5 5.1 29.5 32.3 43.5 5.1 29.5 32.3 43.5 5.1 29.5 32.3 43.5 5.4 43.5 5.1 29.5 32.3 5.1 29.5 32.3 5.2 5.4 4.3 5.1 29.5 32.3 5.4 5.4 5.1 29.5 32.3 5.4 5.4 5.4 5.1 29.5 32.3 5.4 5.4 5.4 5.4 5.4 5.1 29.5 32.3 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 57.3 68.0 11.9 68.7 8.3 78.2 188.0 SKA 18.0 SKA 11.3 38.5 49.4	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.0 18.5 8.1 20.3 9.2 30.6	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 17.1 20.6 19.3 55.4 27.9 21.4 54.1	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 36.3 41.2 51.1 91.9 46.8 36.7 83.1	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.5 55.9 65.1 117.2 60.7 49.7 144.9
*Chrysene+Triphenylene *Benzo[b_j,k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a,h]anthracene Dibenzo[a,h]anthracene Benzo[b,k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluorantheneB	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.2 25.4 26.0 37.3	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI 5AA 12.9 8.1 33.0 46.0 58.0 67.8 89.5	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VI SCA 9.9 63.9 67.9 19.4 9.9 63.9 67.9 19.4 19.5 10.2 10.4 19.4 19.4 10.5 10.4 10	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 24.2 9.4 86.8 90.4 118.0 170.5 155.4 193.1	44.8 SLB SLB 7.3 0.5 15.1 15.5 6.3 11.8 15.8	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV SAA 5.4 0.7 13.8 15.7 14.7 25.6 41.3	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 17.7 33.9 55.4 88.5 97.1	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0 61.6 104.9 115.3	37.5 SLB 12.5 17.1 16.1 16.4 13.0 15.0 9.0 3.0 12.1 15.5 30.1 SLB 16.2 30.3 9.2 13.2 11.6	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7 2.5 88.5 00 SAA 10.7 2.5 18.3 20.1 18.3 28.6 66.5 22.0 30.5 34.2	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 53.4 53.8 9.6 53.4 147.9 OE SCA 15.8 5.1 147.9 OE SCA 15.8 5.1 29.5 32.3 43.5 64.6 95.4 32.4 44.1 58.7	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 67.3 68.0 11.9 68.7 188.0 188.0 39.1 41.4 48.5 75.4 113.3 38.5 49.4 69.2	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.5 8.1 20.3 9.2 8.1 30.6 11.1	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 5.4 19.3 55.4 27.9 21.4 27.9 21.4 55.4 27.9	AM SCA 34.1 39.4 41.0 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 36.3 41.2 51.1 91.9 46.8 36.7 83.1 66.2	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 51.5 55.9 65.1 117.2 60.0 49.7 144.9 87.4
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k,fluoranthene Benzo[a,h]aperylene *Chrysene+Triphenylene *Chrysene+Triphenylene *Dribenzo[a,h]anthracene Benzo[b,j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[b]fluoranthene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.2 25.4 26.0 37.3 23.7 22.2	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9 8.1 33.1 36.0 46.0 58.0 67.8 89.5 59.2 52.7	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VI SCA 19.4 9.9 63.9 102.6 144.0 119.9 155.2 99.8 102.9	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 24.2 9.4 86.8 90.4 118.0 170.5 155.4 193.1 124.9 135.7	44.8 SLB SLB 7.3 0.5 15.1 6.3 11.8 15.8 6.1 11.0	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 IV 5.4 0.7 13.8 5.4 0.7 13.8 15.7 14.7 25.6 41.3 18.6 29.9	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.7 'L SCA 11.4 1.7 33.7 'L SCA 11.4 1.7 3.9 39.7 86.9	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0 61.6 104.9 115.3 49.0 103.4	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.0 9.0 3.0 12.1 15.5 30.1 15.5 30.1 16.2 3.1 22.2 21.7 9.4 16.2 3.0 16.2 3.1 22.2 21.7 9.4 16.2 3.0 16.2 3.1 22.2 21.7 9.4 16.2 3.0 15.2 3.1 22.2 21.7 9.4 16.2 3.0 15.2 3.1 22.2 21.7 9.4 16.2 3.0 15.2 3.1 22.2 11.7 1.1 1.5 1.5 1.5 1.5 1.5 1.5 1.5	NII SAA 9.1 16.5 16.6 14.6 26.9 44.0 25.5 18.9 31.1 26.6 4.7 32.1 88.5 00 SAA 10.7 2.5 18.5 20.1 18.3 28.6 66.5 34.2 6.9	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 75.7 54.4 53.8 9.6 53.1 147.9 DE SCA 15.8 5.1 29.5 32.3 43.5 64.6 95.4 32.4 44.1 58.7 10.8	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 93.1 41.4 48.5 75.4 113.3 38.5 49.4 69.2 11.9	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 10.8 2.0 18.5 8.1 2.0 18.0 18.5 8.1 20.3 9.2 8.1 30.6 11.1 2.2	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 55.4 10.1 2.2 17.1 20.6 19.3 55.4 27.9 21.4 5.8	M SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 36.3 34.2 51.1 91.9 46.8 36.7 83.6 78.3 10.9 10.8 10.9 10.9 10.9 10.9 10.9 10.8 10.9 10.9 10.9 10.8 10.9 10.9 10.8 10.8 10.8 10.9 10.9 10.8 10.8 10.8 10.9 10.9 10.8 10.8 10.8 10.8 10.8 10.9 10.8 10.9 10.8 1	SKA 46.8 53.9 49.3 1212 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 51.5 55.9 65.1 117.2 60.0 49.7 143.8
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c],b,i]perylene *Chrysene+Triphenylene *Benzo[b,j.k]fluoranthene Benzo[b,j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[c]a]anthracene Chrysene Benzo[c]a]anthracene Chrysene Benzo[c]a]anthracene Chrysene Benzo[c]a]anthracene Chrysene Benzo[c]a]anthracene Benzo[c]a]anthracene Benzo[c]a]anthracene Benzo[c]a]pyrene Benzo[c]a]pyrene Benzo[c]a]pyrene Benzo[c]a]pyrene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.2 25.4 26.0 37.3 23.7 22.2 12.1	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI 33.1 36.0 46.0 58.0 67.8 89.5 59.2 59.2 52.7 24.1	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VS 19.4 9.9 63.9 70.2.6 144.0 119.9 155.2 99.8 102.9 29.4	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 24.2 9.4 86.8 90.4 118.0 170.5 155.4 193.1 124.9 135.7 38.0	44.8 SLB SLB 7.3 0.5 15.1 15.5 6.3 11.8 15.8 6.1 11.0 12.6	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 V SAA 0.7 13.8 15.7 14.7 25.6 41.3 18.6 29.9 33.1	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.9 55.4 88.5 97.1 39.7 86.9 68.5	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 5KA 14.7 2.0 61.6 104.9 115.3 49.0 103.4 81.7	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.0 9.0 12.1 15.5 30.1 21.2 30.1 22.2 21.7 9.4 16.2 30.3 9.2 13.2 11.6 2.3 15.0	NII SAA 9.1 16.5 16.6 14.6 26.9 31.1 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7 2.5 18.3 20.1 18.3 28.6 66.5 22.0 30.5 34.2 6.9 37.2	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 32.3 32.8 43.5 71.9 44.3 31.7 54.4 53.8 9.6 53.4 75.3 43.5 63.1 147.9 DE SCA 15.8 5.1 29.5 32.3 43.5 64.6 95.4 32.4 44.1 58.4 32.4 44.1 58.4 9.6	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 5KA 18.0 4.9 39.1 41.4 48.5 75.4 113.3 38.5 49.4 11.9 58.6	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 10.8 2.0 18.5 8.1 20.3 9.2 8.1 30.6 11.1 2.2 12.9	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 17.1 20.6 19.3 55.4 27.9 21.4 54.1 32.7 55.8 36.6	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 36.3 41.2 51.1 91.9 46.8 36.7 83.1 66.2 10.2 59.3	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 51.5 55.9 65.1 117.2 60.0 49.7 144.9 87.4 13.8 75.9
*Chrysene+Triphenylene *Benzolb.j.klfluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c],n,j]perylene *Chrysene+Triphenylene *Benzo[b,j,klfluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluor	SLB 8.5 0.8 17.7 19.2 9.2 19.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.5.4 26.0 37.3 23.7 22.2 12.1 27.1 27.1	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9 8.1 33.1 36.0 46.0 58.0 67.8 89.5 59.2 59.2 52.7 24.1 65.4	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 19.4 56.4 8.1 68.7 127.8 VS SCA 19.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 12.3 1	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 115.0 SKA 10.7 155.4 193.1 124.9 135.7 38.0 145.8	44.8 SLB 7.3 0.5 15.1 15.5 6.3 11.8 15.8 6.1 11.0 12.6 1.5	150 5AA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 1V 5AA 5.4 0.7 13.8 15.7 14.7 25.6 41.3 18.6 29.9 33.1 4.1	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 17.4 SCA 11.4 1.7 33.9 37.0 55.4 88.5 97.1 39.7 86.9 68.5 8.2	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0 61.6 102.4 49.0 103.4 81.7 9.7	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.3 3.0 12.1 15.5 30.1 22.2 21.7 9.4 16.2 30.3 9.2 13.2 11.6 2.5 2.5	NII SAA 9.1 16.5 16.6 14.6 26.9 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7 2.5 88.5 00 SAA 10.7 2.5 18.5 20.1 18.3 28.6 66.5 22.0 30.5 34.2 6.9 37.2 7.0	UU SCA 15.9 16 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 7.8 63.1 147.9 OE SCA 15.8 5.1 29.5 32.3 43.5 64.6 95.4 32.4 44.1 58.7 10.8 49.9 8.1	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 51.9 93.7 90.6 56.8 40.5 57.3 68.0 11.9 68.7 8.3 78.2 188.0 SKA 18.0 SKA 18.0 SKA 18.0 41.4 48.5 75.4 113.3 38.5 49.4 69.2 11.9 58.6 9.4	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.0 18.5 8.1 20.3 9.2 8.1 30.6 11.1 2.2 12.9 4.6	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 17.1 20.6 19.3 55.4 27.9 21.4 27.9 21.4 55.4 27.9 21.4 32.7 5.8 36.6 6.5	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.5 55.9 65.1 117.2 60.0 49.7 87.4 13.8 75.9 12.7
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,i,k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Benzo[b]pyrene Benzo[b]pyrene Benzo[b]pyrene Benzo[b]pyrene Benzo[b]nathracene Benzo[b]nathracene Benzo[b]nathracene Benzo[b]nathracene Benzo[b]nathracene Benzo[b]nathracene Benzo[b]nathracene	SLB 8.5 0.8 17.7 19.2 9.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.2 25.4 26.0 37.3 23.7 22.2 12.1	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI 33.4 29.3 74.0 HI 33.4 29.3 74.0 HI 33.4 29.3 74.0 67.8 8.1 33.0 46.0 58.0 67.8 89.5 59.2 59.2 52.7 24.1	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 84.5 127.8 VS 19.4 9.9 63.9 70.2.6 144.0 119.9 155.2 99.8 102.9 29.4	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 24.2 9.4 86.8 90.4 118.0 170.5 155.4 193.1 124.9 135.7 38.0	44.8 SLB SLB 7.3 0.5 15.1 15.5 6.3 11.8 15.8 6.1 11.0 12.6	ISC SAA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 V SAA 0.7 13.8 15.7 14.7 25.6 41.3 18.6 29.9 33.1	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 1.7 33.9 55.4 88.5 97.1 39.7 86.9 68.5	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 5KA 14.7 2.0 61.6 104.9 115.3 49.0 103.4 81.7	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.0 9.0 12.1 15.5 30.1 21.2 30.1 22.2 21.7 9.4 16.2 30.3 9.2 13.2 11.6 2.3 15.0	NII SAA 9.1 16.5 16.6 14.6 26.9 31.1 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7 2.5 18.3 20.1 18.3 28.6 66.5 22.0 30.5 34.2 6.9 37.2	UU SCA 15.9 1.6 32.3 32.8 43.5 74.6 32.3 32.8 43.5 71.9 44.3 31.7 54.4 53.8 9.6 53.4 75.3 43.5 63.1 147.9 DE SCA 15.8 5.1 29.5 32.3 43.5 64.6 95.4 32.4 44.1 58.4 32.4 44.1 58.4 9.6	SKA 17.3 1.7 43.6 44.5 51.9 90.6 56.8 40.5 67.3 68.0 11.9 68.7 8.3 78.2 188.0 5KA 18.0 4.9 39.1 41.4 48.5 75.4 113.3 38.5 49.4 11.9 58.6	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.5 8.1 20.3 9.2 8.1 30.6 11.1 2.2 12.9 4.6 15.7	VM SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 5.4 19.3 55.4 27.9 21.4 55.4 27.9 21.4 55.4 27.9 21.4 58 35.6 6.5 44.4	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 3.6.3 41.2 51.1 91.9 46.8 36.7 83.7 91.9 46.8 36.7 83.7 91.9 46.8 36.7 83.7 91.9 46.8 36.7 83.7 91.9 46.8 36.7 83.7 91.9 46.8 36.7 83.7 91.9 46.8 36.7 83.7 91.9 46.8 36.7 83.7 91.9 92.9 10.8 59.7 70.9 10.8 59.7 70.9 10.8	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.6 4.2 51.5 55.9 65.1 117.2 60.0 49.7 14.9 87.4 13.8 75.2 9.9
*Chrysene+Triphenylene *Benzo[b.j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a,h,]anthracene Benzo[a,b,i]perylene *Chrysene+Triphenylene *Benzo[b,j.k]fluoranthene Reported amount in filters ng Phenanthrene Anthracene Fluoranthene Benzo[b]fluor	SLB 8.5 0.8 17.7 19.2 9.2 19.2 16.2 12.2 1.7 19.4 13.0 31.2 SLB 14.2 5.2 32.1 22.5.4 26.0 37.3 23.7 22.2 12.1 27.1 27.1	FI SAA 7.3 1.5 17.7 20.9 20.2 36.9 34.2 4.9 39.4 29.3 74.0 HI SAA 12.9 8.1 33.1 36.0 46.0 58.0 67.8 89.5 59.2 59.2 52.7 24.1 65.4	169.5 VI SCA 12.3 3.0 36.9 41.8 62.3 74.9 56.4 8.1 68.7 19.4 56.4 8.1 68.7 127.8 VS SCA 19.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 63.9 126.4 127.8 VS SCA 19.4 19.9 10.6 10.5 10	210.3 SKA 15.0 3.5 51.0 56.9 72.5 92.6 72.8 9.7 81.6 101.7 151.0 SKA 24.2 9.4 86.8 90.4 115.0 SKA 10.7 155.4 193.1 124.9 135.7 38.0 145.8	44.8 SLB 7.3 0.5 15.1 15.5 6.3 11.8 15.8 6.1 11.0 12.6 1.5	150 5AA 11.6 58.2 39.5 22.4 67.0 290.2 214.4 616.3 1V 5AA 5.4 0.7 13.8 15.7 14.7 25.6 41.3 18.6 29.9 33.1 4.1	SCA 75.9 59.6 61.5 129.5 89.6 186.3 109.8 337.1 'L SCA 11.4 17.4 SCA 11.4 1.7 33.9 37.0 55.4 88.5 97.1 39.7 86.9 68.5 8.2	SKA 30.1 124.7 87.9 63.2 205.5 519.2 151.0 515.5 410.6 1855.5 SKA 14.7 2.0 46.8 50.0 61.6 102.4 49.0 103.4 81.7 9.7	37.5 SLB 12.5 17.1 16.1 6.4 13.0 15.0 9.0 3.0 12.1 15.5 30.1 22.2 21.7 9.4 16.2 30.3 9.2 13.2 11.6 2.5 15.0 2.5	NII SAA 9.1 16.5 16.6 14.6 26.9 25.5 18.9 31.1 26.6 4.7 32.1 3.7 37.5 88.5 00 SAA 10.7 2.5 88.5 00 SAA 10.7 2.5 18.5 20.1 18.3 28.6 66.5 22.0 30.5 34.2 6.9 37.2 7.0	UU SCA 15.9 16 32.3 32.8 43.5 74.6 71.9 44.3 31.7 54.4 53.8 9.6 53.4 7.8 63.1 147.9 OE SCA 15.8 5.1 29.5 32.3 43.5 64.6 95.4 32.4 44.1 58.7 10.8 49.9 8.1	SKA 17.3 1.7 43.6 44.5 51.9 93.7 90.6 56.8 40.5 51.9 93.7 90.6 56.8 40.5 57.3 68.0 11.9 68.7 8.3 78.2 188.0 SKA 18.0 SKA 18.0 SKA 18.0 41.4 48.5 75.4 113.3 38.5 49.4 69.2 11.9 58.6 9.4	SLB 17.9 18.7 5.9 16.0 25.0 8.5 9.0 9.8 8.8 1.5 13.0 42.4 SLB 10.8 2.0 18.0 18.5 8.1 20.3 9.2 8.1 30.6 11.1 2.2 12.9 4.6	VN SAA 18.4 20.8 14.9 37.7 70.2 22.8 21.1 27.6 27.5 4.1 37.7 114.0 JF SAA 10.1 2.2 17.1 20.6 19.3 55.4 27.9 21.4 27.9 21.4 55.4 27.9 21.4 32.7 5.8 36.6 6.5	AM SCA 34.1 39.4 41.0 98.4 118.3 39.0 37.7 56.9 44.0 7.2 61.4 194.3 3C SCA 16.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3	SKA 46.8 53.9 49.3 121.2 145.9 47.7 44.8 69.7 54.3 8.3 74.3 238.3 SKA 21.5 55.9 65.1 117.2 60.0 49.7 87.4 13.8 75.9 12.7

reported EU in filters		AU I	ENVS		1	IM	ROH			LAN	NUV			S	EA	
EU, %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene		5, 5, 1	56,1	5101	510	5, 5, 1	567	5101	5.0	5/01	567	5101	525	5, 6, 1	007	5101
Anthracene																
Fluoranthene	40.0	39.9	39.8	40.0	16.0	16.0	16.0	16.0								
Pyrene	40.0	40.0	39.8	40.0	17.2	17.2	17.2	17.2								
Benzo[a]anthracene	40.0	40.0	39.8	40.0	16.2	16.2	16.2	16.2	20.0	20.0	20.0	20.0	40.2	40.2	40.2	40.2
Chrysene					15.0	15.0	15.0	15.0								
Benzo[b]fluoranthene					15.6	15.6	15.6	15.6	8.4	8.4	8.4	8.4				
Benzo[j]fluoranthene					14.2	14.2	14.2	14.2	44.0	44.0	44.0	44.0				
Benzo[k]fluoranthene					16.4	16.4	16.4	16.4	24.0	24.0	24.0	24.0				
Benzo[e]pyrene	32.0	32.0	32.1	32.0		22.0	22.0	22.0	20.0	20.0	20.0	20.0	24.6	24.6	24.6	24.6
Benzo[a]pyrene Perylene	31.9 39.6	32.0 40.1	32.4 39.9	32.0 39.9	22.0	22.0	22.0	22.0	28.0	28.0	28.0	28.0	24.6	24.6	24.6	24.6
Indeno[1,2,3,-c,d]pyrene	48.0	40.1	47.8	48.0	16.6	16.6	16.6	16.6	15.4	15.4	15.4	15.4	30.6	30.6	30.6	30.6
Dibenzo[a,h]anthracene	10.0	43.5	43.9	44.2	15.6	15.6	15.6	15.6	60.0	60.0	60.0	60.0	50.0	50.0	45.6	45.6
Benzo[g,h,i]perylene	39.9	40.0	39.9	40.0	15.6	15.6	15.6	15.6								
*Chrysene+Triphenylene		40.0	40.0	40.0												
*Benzo[b.j,k]fluoranthene	23.7	24.0	24.0	24.0	9.7	9.6	9.6	9.6	14.0	13.3	13.5	13.8	24.8	24.8	24.8	24.8
reported EU in filters		CH	IMI			IN	RIS			LEG	GMC			U	BA	
EU, %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	24.3	24.4	24.3	24.3										33.6	33.6	33.6
Anthracene	34.5	17.2	17.5	17.7										33.6	33.6	33.6
Fluoranthene	28.2	28.2	28.2	28.2	20.8	7.2	12.5	18.4	27.9	27.8	27.8	27.9	33.6	33.6	33.6	33.6
Pyrene	23.8	23.8	23.8	23.8	8.5	1.2	7.4	5.6	33.5	32.5	33.1	33.2	33.6	33.6	33.6	33.6
Benzo[a]anthracene	20.2	20.3	20.3	20.3		1.8	6.9	10.9	40.7	41.0	41.1	40.9	33.6	33.6	33.6	33.6
Chrysene	21.5	21.5	21.5	21.5	10.4	7.8	3.4	2.9	31.1	32.1	32.0	32.0	33.6	33.6	33.6	33.6
Benzo[b]fluoranthene	27.7	27.7	27.7	27.7	11.6	5.6	14.2	7.4	24.7	25.0	25.1	25.3	33.6	33.6	33.6	33.6
Benzo[j]fluoranthene Benzo[k]fluoranthene	26.9 25.2	26.8 25.2	26.8 25.2	26.8	25.1	2.2 8.2	4.7 13.9	5.6 13.3	25.8	26.3	25.8	26.0	33.6 33.6	33.6	33.6	33.6
Benzo[e]pyrene	25.2	25.2 24.0	25.2 24.0	25.2 24.0		8.2 9.7	7.4	7.0	25.8	26.3	25.8	26.0	33.6	33.6 33.6	33.6 33.6	33.6 33.6
Benzo[a]pyrene	24.0	24.0 22.8	24.0	24.0 22.8	9.7	5.7 7.4	7.4	9.7	47.2	47.1	46.9	47.0	33.0 33.6	33.6 33.6	33.6 33.6	33.6 33.6
Pervlene	48.4	24.0	24.0	23.9	5.7		20.1	23.6			-1015	-1710	55.0	5510	55.0	55.0
Indeno[1,2,3,-c,d]pyrene	27.0	27.0	27.0	27.0		9.3	9.0	4.4	37.2	36.8	37.1	37.1	33.6	33.6	33.6	33.6
Dibenzo[a,h]anthracene	27.2	27.3	27.2	27.1	16.3	5.3	3.6	2.8				40.4		33.6	33.6	33.6
Benzo[g,h,i]perylene	19.8	19.7	19.7	19.7	11.6	10.2	10.8	1.9	35.9	36.1	35.9	36.1	33.6	33.6	33.6	33.6
*Chrysene+Triphenylene																
*Benzo[b.j,k]fluoranthene	16.9	16.2	16.4	16.5	14.6	2.8	6.6	4.4	18.8	18.9	18.8	19.1	20.3	20.2	20.2	20.2
reported EU in filters		FI	MI			IS	CIII			NI	LU			V	ИМ	
EU, %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	180.0	170.0	170.0	170.0		15.4		24.5	44.1	44.0	39.9	44.0				
Anthracene																
	60.0	50.0	50.0	50.0							37.8	37.9				
Fluoranthene	80.0	60.0	30.0	30.0		15.2	21.4	23.2	37.9	38.1	38.0	38.0	48.0	48.0	48.0	48.0
Pyrene	80.0 160.0	60.0 90.0	30.0 30.0	30.0 30.0		8.5	21.3	22.9	38.0	38.0	38.0 37.9	38.0 38.0	48.0	48.0	48.0	48.0
Pyrene Benzo[a]anthracene	80.0	60.0	30.0	30.0		8.5 26.6	21.3 30.2	22.9 24.1	38.0 33.9	38.0 34.0	38.0 37.9 34.0	38.0 38.0 11.1	48.0 53.0	48.0 53.0	48.0 53.0	48.0 53.0
Pyrene Benzo[a]anthracene Chrysene	80.0 160.0	60.0 90.0	30.0 30.0	30.0 30.0		8.5	21.3	22.9	38.0 33.9 27.9	38.0 34.0 23.9	38.0 37.9 34.0 27.9	38.0 38.0 11.1 29.2	48.0 53.0 48.0	48.0 53.0 48.0	48.0 53.0 48.0	48.0 53.0 48.0
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	80.0 160.0	60.0 90.0	30.0 30.0	30.0 30.0		8.5 26.6	21.3 30.2	22.9 24.1	38.0 33.9 27.9 34.0	38.0 34.0 23.9 34.0	38.0 37.9 34.0 27.9 33.9	38.0 38.0 11.1 29.2 34.0	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1	48.0 53.0 48.0 92.6	48.0 53.0 48.0 92.4
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene	80.0 160.0	60.0 90.0	30.0 30.0	30.0 30.0		8.5 26.6	21.3 30.2	22.9 24.1 4.2	38.0 33.9 27.9 34.0 39.9	38.0 34.0 23.9 34.0 39.9	38.0 37.9 34.0 27.9 33.9 40.0	38.0 38.0 11.1 29.2 34.0 40.1	48.0 53.0 48.0 94.5 94.5	48.0 53.0 48.0 92.1 92.1	48.0 53.0 48.0 92.6 92.6	48.0 53.0 48.0 92.4 92.4
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	80.0 160.0	60.0 90.0	30.0 30.0	30.0 30.0		8.5 26.6	21.3 30.2	22.9 24.1	38.0 33.9 27.9 34.0	38.0 34.0 23.9 34.0	38.0 37.9 34.0 27.9 33.9	38.0 38.0 11.1 29.2 34.0	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1	48.0 53.0 48.0 92.6	48.0 53.0 48.0 92.4
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[k]fluoranthene	80.0 160.0	60.0 90.0	30.0 30.0	30.0 30.0		8.5 26.6	21.3 30.2	22.9 24.1 4.2	38.0 33.9 27.9 34.0 39.9 46.0	38.0 34.0 23.9 34.0 39.9 46.0	38.0 37.9 34.0 27.9 33.9 40.0 46.0	38.0 38.0 11.1 29.2 34.0 40.1 46.0	48.0 53.0 48.0 94.5 94.5	48.0 53.0 48.0 92.1 92.1	48.0 53.0 48.0 92.6 92.6	48.0 53.0 48.0 92.4 92.4
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene	80.0 160.0 80.0	60.0 90.0 80.0	30.0 30.0 60.0	30.0 30.0 60.0		8.5 26.6	21.3 30.2 6.8	22.9 24.1 4.2 22.7	38.0 33.9 27.9 34.0 39.9 46.0 31.9	38.0 34.0 23.9 34.0 39.9 46.0 32.1	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1	48.0 53.0 48.0 94.5 94.5 94.5	48.0 53.0 48.0 92.1 92.1 92.1	48.0 53.0 48.0 92.6 92.6 92.6	48.0 53.0 48.0 92.4 92.4 92.4
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene	80.0 160.0 80.0 60.0 120.0	60.0 90.0 80.0 40.0 60.0	30.0 30.0 60.0 40.0	30.0 30.0 60.0 40.0		8.5 26.6	21.3 30.2 6.8	22.9 24.1 4.2 22.7	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9	48.0 53.0 48.0 94.5 94.5 94.5 40.0	48.0 53.0 48.0 92.1 92.1 92.1 40.0	48.0 53.0 48.0 92.6 92.6 92.6 92.6 40.0	48.0 53.0 48.0 92.4 92.4 92.4 40.0
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[[j]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	80.0 160.0 80.0 60.0 120.0 80.0	60.0 90.0 80.0 40.0 60.0 70.0	30.0 30.0 60.0 40.0 40.0 40.0	30.0 30.0 60.0 40.0 40.0 70.0		8.5 26.6 5.5 28.3	21.3 30.2 6.8 37.0 42.2	22.9 24.1 4.2 22.7 30.9 26.4	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 65.8	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0 66.0	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9	48.0 53.0 48.0 94.5 94.5 94.5 40.0 50.0 76.0	48.0 53.0 48.0 92.1 92.1 92.1 40.0 50.0 76.0	48.0 53.0 48.0 92.6 92.6 92.6 40.0	48.0 53.0 48.0 92.4 92.4 92.4 40.0 50.0 76.0
Pyrene Benzo[a]anthracene Chrysene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene	80.0 160.0 80.0 60.0 120.0 80.0 100.0	60.0 90.0 80.0 40.0 60.0 70.0 30.0	30.0 30.0 60.0 40.0 40.0 40.0 30.0	30.0 30.0 60.0 40.0 40.0 70.0 30.0		8.5 26.6 5.5	21.3 30.2 6.8 37.0	22.9 24.1 4.2 22.7 30.9	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9	48.0 53.0 48.0 94.5 94.5 94.5 40.0	48.0 53.0 48.0 92.1 92.1 92.1 40.0	48.0 53.0 48.0 92.6 92.6 92.6 92.6 40.0	48.0 53.0 48.0 92.4 92.4 92.4 40.0
Pyrene Benzo[a]anthracene Chrysene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[a]yloranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene *Chrysene+Triphenylene	80.0 160.0 80.0 60.0 120.0 80.0 100.0 60.0	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0	30.0 30.0 60.0 40.0 70.0 30.0 20.0		8.5 26.6 5.5 28.3 37.9	 21.3 30.2 6.8 37.0 42.2 36.3 	 22.9 24.1 4.2 22.7 30.9 26.4 35.6 	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9	 38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 65.8 26.0 	 38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0 40.0 66.0 26.0 	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1	48.0 53.0 48.0 94.5 94.5 94.5 40.0 50.0 76.0 52.0	 48.0 53.0 48.0 92.1 92.1 92.1 50.0 50.0 50.0 52.0 	48.0 53.0 48.0 92.6 92.6 92.6 40.0 50.0 76.0	48.0 53.0 48.0 92.4 92.4 92.4 92.4 50.0 76.0 52.0
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,i]arthracene Benzo[a,h,i]perylene *Benzo[b.j,k]fluoranthene	80.0 160.0 80.0 60.0 120.0 80.0 100.0	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0	30.0 30.0 60.0 40.0 40.0 70.0 30.0		8.5 26.6 5.5 28.3 37.9 10.1	21.3 30.2 6.8 37.0 42.2 36.3 25.1	22.9 24.1 4.2 22.7 30.9 26.4	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 40.0 65.8 26.0 22.7	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0 40.0 66.0 26.0 22.6	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9	48.0 53.0 48.0 94.5 94.5 94.5 40.0 50.0 76.0	48.0 53.0 48.0 92.1 92.1 92.1 92.1 50.0 76.0 52.0 62.0	48.0 53.0 48.0 92.6 92.6 92.6 92.6 92.6 50.0 76.0 62.0	48.0 53.0 48.0 92.4 92.4 92.4 40.0 50.0 76.0
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,k]fluoranthene reported EU in filters	80.0 160.0 80.0 60.0 120.0 80.0 100.0 60.0 60.0	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 HI	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0 YIS	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0		8.5 26.6 5.5 28.3 37.9 10.1	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9 22.8	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 65.8 26.0 22.7 00	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0 66.0 26.0 22.6 DE	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1 22.7	48.0 53.0 48.0 94.5 94.5 94.5 94.5 50.0 76.0 52.0 62.0	48.0 53.0 48.0 92.1 92.1 92.1 92.1 50.0 76.0 52.0 62.0	48.0 53.0 48.0 92.6 92.6 92.6 92.6 50.0 76.0 76.0 76.0 76.0	48.0 53.0 48.0 92.4 92.4 92.4 92.4 40.0 50.0 76.0 52.0 62.0
Pyrene Benzo[a]anthracene Chrysene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene reported EU in filters EU, %	80.0 160.0 80.0 60.0 120.0 80.0 100.0 60.0 60.0 5LB	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 30.0 HIT SAA	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0 <u>30.0</u> <u>5CA</u>	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0 5KA	SLB	8.5 26.6 5.5 28.3 37.9 10.1 KAA	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L SCA	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 SKA	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9 25.9 22.8 SLB	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 65.8 26.0 22.7 00 SAA	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 66.0 26.0 22.6 DE SCA	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1 22.7	48.0 53.0 48.0 94.5 94.5 94.5 40.0 50.0 76.0 52.0 62.0 SLB	48.0 53.0 48.0 92.1 92.1 92.1 92.1 50.0 76.0 52.0 62.0 JI	48.0 53.0 48.0 92.6 92.6 92.6 92.6 50.0 76.0 76.0 76.0 76.0	48.0 53.0 48.0 92.4 92.4 92.4 40.0 50.0 76.0 52.0 62.0 SKA
Pyrene Benzo[a]anthracene Chrysene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Dienzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,j,k]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene reported EU in filters EU, %	80.0 160.0 80.0 60.0 120.0 80.0 100.0 60.0 60.0 60.0 5LB 110.1	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 30.0 HIT SAA 121.2	30.0 30.0 60.0 40.0 40.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 40.0	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0 20.0 5KA 64.6	30.0	8.5 26.6 5.5 28.3 37.9 10.1 KAA 30.0	21.3 30.2 6.8 37.0 42.2 36.3 <u>25.1</u> /L <u>SCA</u> 30.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>5KA</u> 30.0	38.0 33.9 27.9 34.0 31.9 46.0 31.9 46.0 40.3 3.9 25.9 22.8 5LB 4.9	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 65.8 26.0 22.7 00	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 66.0 26.0 22.6 DE SCA 20.8	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 46.0 32.1 40.1 39.9 65.9 26.1 22.7 SKA 5.9	48.0 53.0 48.0 94.5 94.5 94.5 50.0 76.0 52.0 62.0 51.B 15.5	48.0 53.0 48.0 92.1 92.1 92.1 92.1 40.0 50.0 76.0 52.0 62.0 JI SAA 15.7	48.0 53.0 48.0 92.6 92.6 92.6 92.6 50.0 76.0 76.0 76.0 3C 50.0 76.0 3C 50.0 76.0	48.0 53.0 48.0 92.4 92.4 92.4 40.0 50.0 76.0 52.0 62.0 58.0 58.0
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,b,i]perylene *Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene reported EU in filters EU, % Phenanthrene Anthracene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 5LB 110.1 179.2	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 HI SAA 121.2 115.1	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0 20.0 30.0 VIS SCA 80.9 94.4	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0 5KA 64.6 98.8	30.0 40.0	8.5 26.6 5.5 28.3 37.9 10.1 <u>N</u> SAA 30.0 40.0	21.3 30.2 6.8 37.0 42.2 36.3 <u>25.1</u> /L <u>SCA</u> 30.0 40.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>SKA</u> 30.0 40.0	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9 22.8 5LB 4.9 22.6	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 55.8 26.0 22.7 00 55.2	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 46.1 40.0 26.0 22.6 DE SCA 20.8 15.6	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1 22.7 5.4 5.9 14.3	48.0 53.0 48.0 94.5 94.5 94.5 40.0 50.0 76.0 52.0 62.0 51.B 15.5 61.1	48.0 53.0 48.0 92.1 92.1 92.1 50.0 76.0 52.0 62.0 JI SAA 15.7 39.2	48.0 53.0 48.0 92.6 92.6 92.6 50.0 76.0 76.0 76.0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	48.0 53.0 48.0 92.4 92.4 92.4 40.0 50.0 76.0 52.0 62.0 5XA 9.6 16.4
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,k]fluoranthene reported EU in filters EU, % Phenanthrene Anthracene Fluoranthene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 HI SAA 121.2 115.1 21.8	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0 VIS SCA 80.9 94.4 15.3	30.0 30.0 60.0 40.0 70.0 30.0 20.0 30.0 5KA 64.6 98.8 13.9	30.0 40.0 20.0	8.5 26.6 5.5 28.3 37.9 10.1 N SAA 30.0 40.0 20.0	21.3 30.2 6.8 37.0 42.2 36.3 <u>25.1</u> <u>/L</u> <u>5CA</u> 30.0 40.0 20.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>SKA</u> 30.0 40.0 20.0	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9 22.8 5LB 4.9 22.6 4.3	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 65.8 26.0 22.7 00 SAA 2.4 55.2 1.4	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0 66.0 26.0 22.6 <u>DE</u> SCA 20.8 15.6 5.8	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1 22.7 SKA 5.9 14.3 1.0	48.0 53.0 48.0 94.5 94.5 94.5 40.0 50.0 76.0 52.0 62.0 5LB 15.5 61.1 16.1	48.0 53.0 48.0 92.1 92.1 92.1 92.1 50.0 76.0 52.0 10 52.0 11 5AA 15.7 39.2 14.7	48.0 53.0 48.0 92.6 92.6 92.6 92.6 92.6 92.6 92.6 92.6	48.0 53.0 48.0 92.4 92.4 92.4 92.4 50.0 76.0 52.0 62.0 5KA 9.6 16.4 12.0
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[b,i,J]anthracene Benzo[b,i,Jk]fluoranthene *Benzo[b,j,k]fluoranthene reported EU in filters EU, % Phenanthrene Anthracene Fluoranthene Pyrene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 21.2 115.1 21.8 23.2	30.0 30.0 60.0 40.0 40.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 80.9 94.4 15.3 16.3	30.0 30.0 60.0 40.0 70.0 30.0 20.0 30.0 20.0 30.0 20.0 35KA 64.6 98.8 13.9 14.8	30.0 40.0 20.0 20.0	8.5 26.6 5.5 28.3 37.9 10.1 <i>N</i> SAA 30.0 40.0 20.0 20.0	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L SCA 30.0 40.0 20.0 20.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>SKA</u> 30.0 40.0 20.0 20.0	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9 22.8 5LB 4.9 22.6 4.9 22.6 4.3 1.8	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.0 32.1 40.0 40.0 65.8 26.0 22.7 00 5AA 2.4 55.2 1.4 3.3	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0 40.0 40.0 22.6 22.6 22.6 DE SCA 20.8 15.6 5.8 0.8	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 26.1 22.7 26.1 22.7 5.9 26.1 5.9 26.1 22.7	48.0 53.0 94.5 94.5 94.5 40.0 50.0 76.0 52.0 62.0 51.8 15.5 61.1 16.1 14.5	48.0 53.0 48.0 92.1 92.1 92.1 92.1 50.0 76.0 52.0 62.0 JI SAA 15.7 39.2 14.7 12.2	48.0 53.0 48.0 92.6 92.6 92.6 92.6 50.0 76.0 76.0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	48.0 53.0 48.0 92.4 92.6
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,]fluoranthene *Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene EU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	80.0 160.0 80.0 120.0 80.0 120.0 80.0 100.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0 25.0 25.0 25.1	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 HI 5AA 121.2 115.1 21.8 23.2 35.7	30.0 30.0 60.0 40.0 40.0 30.0 20.0 30.0 VIS SCA 80.9 94.4 15.3 16.3 18.2	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0 5KA 64.6 98.8 13.9 14.8 16.6	30.0 40.0 20.0 20.0 40.0	8.5 26.6 5.5 28.3 37.9 10.1 <u>IN</u> SAA 30.0 40.0 20.0 20.0 20.0 40.0	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L <u>5CA</u> 30.0 40.0 20.0 40.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>5KA</u> 30.0 40.0 20.0 40.0	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9 22.8 5LB 4.9 22.6 4.3 1.8 7.0	38.0 34.0 33.9 34.0 39.9 46.0 32.1 46.1 40.0 40.0 65.8 26.0 22.7 00 55.2 1.4 55.2 1.4 3.3 13.5	38.0 37.9 34.0 27.9 33.9 40.0 32.0 46.1 46.0 26.0 26.0 22.6 <u>526</u> <u>526</u> <u>526</u> <u>526</u> <u>528</u> 15.6 5.8 0.8 2.5	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1 22.7 5.9 14.3 1.0 1.5 1.9	48.0 53.0 48.0 94.5 94.5 94.5 40.0 50.0 76.0 52.0 62.0 5LB 15.5 61.1 16.1	48.0 53.0 48.0 92.1 92.1 92.1 92.1 50.0 76.0 52.0 10 52.0 11 5AA 15.7 39.2 14.7	48.0 53.0 48.0 92.6 92.6 92.6 92.6 92.6 92.6 92.6 92.6	48.0 53.0 48.0 92.4 92.4 92.4 92.4 50.0 76.0 52.0 62.0 5KA 9.6 16.4 12.0
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,k]fluoranthene reported EU in filters EU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 21.2 115.1 21.8 23.2	30.0 30.0 60.0 40.0 40.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 80.9 94.4 15.3 16.3	30.0 30.0 60.0 40.0 70.0 30.0 20.0 30.0 20.0 30.0 20.0 35KA 64.6 98.8 13.9 14.8	30.0 40.0 20.0 20.0	8.5 26.6 5.5 28.3 37.9 10.1 <i>N</i> SAA 30.0 40.0 20.0 20.0	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L SCA 30.0 40.0 20.0 20.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>SKA</u> 30.0 40.0 20.0 20.0	38.0 33.9 27.9 34.0 39.9 46.0 31.9 46.0 40.3 39.9 25.9 22.8 5LB 4.9 22.6 4.9 22.6 4.3 1.8	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.0 32.1 40.0 40.0 65.8 26.0 22.7 00 5AA 2.4 55.2 1.4 3.3	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 40.0 40.0 40.0 22.6 22.6 22.6 DE SCA 20.8 15.6 5.8 0.8	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 26.1 22.7 26.1 22.7 5.9 26.1 5.9 26.1 22.7	48.0 53.0 94.5 94.5 94.5 40.0 50.0 76.0 52.0 62.0 51.8 15.5 61.1 16.1 14.5	48.0 53.0 48.0 92.1 92.1 92.1 92.1 50.0 76.0 52.0 62.0 JI SAA 15.7 39.2 14.7 12.2	48.0 53.0 48.0 92.6 92.6 92.6 92.6 50.0 76.0 76.0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	48.0 53.0 48.0 92.4 92.6
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,]fluoranthene *Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene EU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0 72.1 34.7	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 20.0 HI 5AA 121.2 115.1 21.8 23.2 35.7 20.0	30.0 30.0 60.0 40.0 40.0 40.0 30.0 30.0 30.0 5CA 80.9 94.4 15.3 16.3 18.3 18.3 18.3	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0 30.0 5KA 64.6 98.8 13.9 14.8 16.6 15.2	30.0 40.0 20.0 20.0 40.0 30.0	8.5 26.6 5.5 28.3 37.9 10.1 N SAA 30.0 40.0 20.0 20.0 20.0 30.0	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L <u>5CA</u> 30.0 40.0 20.0 20.0 20.0 40.0 30.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>SKA</u> 30.0 40.0 20.0 20.0 20.0 20.0 20.0 30.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 55.8 26.0 22.7 00 55.8 2.1 4 3.3 1.3 55.2 1.4 3.3 1.3,5 8.7	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 66.0 26.0 22.6 DE SCA 20.8 SCA 20.8 15.6 5.8 0.8 2.5 1.4	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1 22.7 SKA 5.9 14.3 1.0 1.5 1.9 1.3	48.0 53.0 48.0 94.5 94.5 94.5 94.5 50.0 76.0 52.0 62.0 52.0 62.0 51.1 16.1 14.5 9.1	48.0 53.0 48.0 92.1 14.7 12.2 10.7	48.0 53.0 48.0 92.6 92.6 92.6 92.6 92.6 92.6 92.6 92.6	48.0 53.0 48.0 92.4 92.4 92.4 92.4 92.4 92.4 92.6 50.0 76.0 52.0 62.0 52.0
Pyrene Benzo[a]anthracene Chrysene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[a]yrene Benzo[a]yrene Benzo[a]yrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Enzo[b,j,k]fluoranthene reported EU in filters EU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0 72.1 34.7	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 20.0 HI 5AA 121.2 115.1 21.8 23.2 35.7 20.0	30.0 30.0 60.0 40.0 40.0 40.0 30.0 30.0 30.0 5CA 80.9 94.4 15.3 16.3 18.3 18.3 18.3	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0 30.0 5KA 64.6 98.8 13.9 14.8 16.6 15.2	30.0 40.0 20.0 20.0 40.0 30.0	8.5 26.6 5.5 28.3 37.9 10.1 N SAA 30.0 40.0 20.0 20.0 20.0 30.0	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L <u>5CA</u> 30.0 40.0 20.0 20.0 20.0 40.0 30.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>SKA</u> 30.0 40.0 20.0 20.0 20.0 20.0 20.0 30.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 55.8 26.0 22.7 00 55.8 2.1 4 3.3 1.3 55.2 1.4 3.3 1.3,5 8.7	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.1 40.0 66.0 26.0 22.6 DE SCA 20.8 SCA 20.8 15.6 5.8 0.8 2.5 1.4	38.0 38.0 11.1 29.2 34.0 40.1 46.0 32.1 45.9 40.1 39.9 65.9 26.1 22.7 SKA 5.9 14.3 1.0 1.5 1.9 1.3	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1	48.0 53.0 92.6 92.6 92.6 92.6 92.6 92.6 92.6 92.6	48.0 53.0 48.0 92.4 92.4 92.4 92.4 92.4 92.4 92.4 92.6 16.0 50.0 50.0 52.0 52.0 52.0 52.0 52.0 11.0 9.2 10.4
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a],h]anthracene Benzo[a],h]fluoranthene *Benzo[b.j,k]fluoranthene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0 72.1 34.7 33.9	60.0 90.0 80.0 40.0 60.0 70.0 30.0 20.0 30.0 HI 5AA 121.2 115.1 21.8 23.2 35.7 20.0 16.4	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0 WS SCA 80.9 94.4 15.3 16.3 18.2 15.5 13.0	30.0 30.0 60.0 40.0 70.0 30.0 20.0 30.0 5KA 64.6 98.8 13.9 14.8 16.6 15.2 12.2	30.0 40.0 20.0 20.0 40.0 30.0 30.0	8.5 26.6 5.5 28.3 37.9 10.1 (N SAA 30.0 40.0 20.0 20.0 20.0 20.0 20.0 20.0 2	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L <u>5CA</u> 30.0 40.0 20.0 20.0 20.0 30.0 30.0 20.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>5KA</u> 30.0 40.0 20.0 20.0 20.0 20.0 30.0 30.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4 6.6	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 5AA 2.4 55.2 1.4 55.2 1.4 3.3 13.5 8.7 2.1	38.0 37.9 34.0 27.9 33.9 40.0 32.0 46.0 32.0 46.1 40.0 66.0 26.0 22.6 DE SCA 20.8 15.6 5.8 0.8 2.5 1.4 1.9	38.0 38.0 11.1 29.2 34.0 40.1 32.1 46.0 32.1 40.1 39.9 65.9 26.1 5.9 14.3 1.0 1.5 1.9 1.3 1.3 1.3	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1	48.0 53.0 48.0 92.6	48.0 53.0 48.0 92.4 92.6 92.7
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]nathracene Benzo[a,h]iperylene *Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene Fluoranthene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]pyrene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0 25.0 25.0 72.1 34.7 33.9 13.8	60.0 90.0 80.0 60.0 70.0 30.0 20.0 30.0 HI 5AA 121.2 115.1 21.8 23.2 35.7 20.0 16.4 11.0	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0 20.0 30.0 5CA 80.9 94.4 15.3 16.3 18.2 15.5 13.0 10.5	30.0 30.0 60.0 40.0 40.0 70.0 30.0 20.0 30.0 30.0 5KA 64.6 98.8 13.9 14.8 13.9 14.8 15.2 12.2 10.5	30.0 40.0 20.0 20.0 40.0 30.0 30.0	8.5 26.6 5.5 28.3 37.9 10.1 (N SAA 30.0 40.0 20.0 20.0 20.0 20.0 20.0 20.0 2	21.3 30.2 6.8 37.0 42.2 36.3 25.1 7L 5CA 30.0 20.0 20.0 20.0 20.0 20.0 20.0 30.0 3	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 <u>5KA</u> 30.0 40.0 20.0 20.0 20.0 20.0 30.0 30.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4 6.6 10.9 16.7 18.1	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 5AA 2.4 55.2 1.4 3.3 13.5 8.7 2.1 9.3 13.8 25.2	38.0 37.9 34.0 27.9 33.9 40.0 32.0 46.0 32.0 46.1 40.0 66.0 22.6 DE 22.6 DE 22.8 15.6 5.8 2.5 1.4 1.9 2.8 10.7 8.6	38.0 38.0 11.1 29.2 34.0 40.1 32.1 46.0 32.1 46.0 32.1 22.7 5.9 14.3 1.0 5.9 14.3 1.0 1.5 1.9 1.3 3.8 12.8 8.4	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1 93.2 14.7 12.2 9.6 24.6 2	48.0 53.0 48.0 92.6 92.0 12.4 22.4 22.4 12.4 23.4 14.3 14.3	48.0 53.0 48.0 92.4 92.6 9.6 16.4 12.0 9.2 10.0 9.2 10.4 9.7 9.1 10.4 9.7 9.1 10.4 9.7 9.1 10.5 10.
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,b,1]anthracene Benzo[a,b,1]perylene *Chrysene+Triphenylene *Benzo[a,b,1]duoranthene *Benzo[b,j,k]fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[b]fluoranthene Benzo[a]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene	80.0 160.0 80.0 120.0 80.0 100.0 60.0 5LB 110.1 179.2 22.0 25.0 25.0 72.1 34.7 33.9 13.8 16.8 22.6	60.0 90.0 80.0 60.0 70.0 30.0 20.0 30.0 HI 5AA 121.2 115.1 21.8 23.7 20.0 16.4 11.0 11.7 14.4	30.0 30.0 60.0 40.0 40.0 40.0 30.0 20.0 30.0 5CA 80.9 94.4 15.3 16.3 18.2 15.5 13.0 10.5 10.9 12.6	30.0 30.0 60.0 40.0 70.0 30.0 20.0 30.0 30.0 5KA 64.6 98.8 13.9 14.8 15.2 12.2 10.5 10.7 12.4	30.0 40.0 20.0 20.0 40.0 30.0 30.0 20.0 20.0	8.5 26.6 5.5 28.3 37.9 10.1 N 30.0 20.0 20.0 30.0 30.0 30.0 30.0 20.0 2	21.3 30.2 6.8 37.0 42.2 36.3 25.1 7 <u>/</u> 5 <u>CA</u> 30.0 20.0 20.0 30.0 30.0 30.0 20.0 20.0	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 5KA 30.0 20.0 20.0 30.0 30.0 30.0 30.0 20.0 20.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4 6.6 10.9 16.7 18.1 3	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 55.2 1.4 3.3 13.5 8.7 2.1 9.3 13.8 8.7 2.1 9.3 13.8 25.2 33.5	38.0 37.9 34.0 27.9 33.9 40.0 32.0 46.1 40.0 66.0 26.0 22.6 DE SCA 20.8 15.6 5.8 0.8 2.5 1.4 1.9 2.8 10.7 8.6 13.6	38.0 38.0 11.1 29.2 34.0 40.1 45.9 40.1 39.9 65.9 26.1 22.7 5.9 14.3 1.0 1.5 1.9 1.3 1.3 3.8 12.8 8.4 21.2	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1 11.1 12.2 9.6 24.4 11.5 15.7 15.7 11.1 12.2 9.6 24.4 15.5 15.6	48.0 53.0 48.0 92.6 92.0 12.4 28.4 12.4 28.4 12.4 28.4 12.4 28.8	48.0 53.0 48.0 92.4 92.6 9.6 16.4 12.0 9.0 9.2 10.4 9.7 9.1 45.7 10.4 9.7 9.1 45.7 10.4 9.5 12
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,k]fluoranthene *Benzo[b,k]fluoranthene Fluoranthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Gluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene	80.0 160.0 80.0 120.0 80.0 120.0 80.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0 72.1 33.9 13.8 16.8 22.6 94.4	60.0 90.0 80.0 80.0 60.0 70.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 10.1 5AA 121.2 15.1 21.8 23.2 35.7 20.0 16.4 11.0 11.7 14.4 47.6	30.0 30.0 60.0 40.0 40.0 40.0 20.0 30.0 20.0 30.0 5CA 80.9 94.4 80.9 94.4 15.3 16.3 18.5 13.0 10.5 10.9 12.6 40.2	30.0 30.0 60.0 40.0 70.0 30.0 20.0 30.0 30.0 30.0 30.0 30.0 3	30.0 40.0 20.0 20.0 40.0 30.0 30.0 20.0 20.0 20.0	8.5 26.6 5.5 28.3 37.9 10.1 10.1 10.1 10.1 10.0 20.0 20.0 20.0	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L 5CA 30.0 40.0 20.0 20.0 30.0 30.0 30.0 20.0 20.0 2	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 5 KA 30.0 40.0 20.0 20.0 30.0 30.0 30.0 20.0 20.0 20.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4 6.6 10.9 16.7 18.1 11.3 2.7	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 55.2 1.4 3.3 13.5 8.7 2.1 9.3 13.8 25.2 3.3.5 4.4	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.0 22.0 66.0 22.6 DE 52.6 DE 52.6 5.8 0.8 2.5 1.4 1.9 2.8 10.7 8.6 13.6 5.3	38.0 38.0 11.1 29.2 34.0 40.1 39.9 65.9 26.1 22.7 5.9 14.3 1.0 1.5 1.9 1.3 1.3 3.8 12.8 8.4 21.2 6.2	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1 92.0	48.0 53.0 48.0 92.6 92.6 92.6 92.6 92.6 92.6 92.6 92.6	48.0 53.0 48.0 92.4 92.4 92.4 92.4 92.4 92.4 92.6 50.0 76.0 52.0 62.0 62.0 8 8 8 8 4 9.6 16.4 12.0 11.0 9.2 10.4 9.7 10.4 9.7 10.5 10.9
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Iideno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a]h,i]perylene *Benzo[a,h]anthracene *Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene Fluoranthene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Denzo[a,h]anthracene	80.0 160.0 80.0 120.0 80.0 120.0 80.0 100.0 60.0 60.0 5LB 110.1 179.2 22.0 72.1 34.7 3.3.9 13.8 16.8 22.6 94.4 55.8	60.0 90.0 80.0 40.0 60.0 70.0 20.0 30.0 121.2 115.1 21.8 23.2 35.7 20.0 16.4 11.0 11.7 14.4 47.6 26.1	30.0 30.0 60.0 40.0 40.0 40.0 20.0 30.0 30.0 30.0 30.0 30.0 30.0 3	30.0 30.0 60.0 40.0 70.0 30.0 30.0 30.0 30.0 30.0 30.0 3	30.0 40.0 20.0 20.0 30.0 30.0 20.0 20.0 20.0 20.0 30.0	8.5 26.6 5.5 28.3 37.9 10.1 N 5AA 40.0 20.0 20.0 20.0 30.0 30.0 20.0 20.0 2	21.3 30.2 6.8 37.0 42.2 36.3 25.1 7 7 5 CA 40.0 20.0 20.0 30.0 30.0 20.0 20.0 20.0 2	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 5 KA 30.0 40.0 20.0 40.0 30.0 30.0 20.0 20.0 20.0 20.0 20.0 30.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 22.8 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4 6.6 10.9 16.7 18.1 11.3 2.7 90.5	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 5AA 2.4 55.2 1.4 3.3 13.5 8.7 2.1 9.3 13.8 25.2 33.5 4.4 55.4	38.0 37.9 34.0 27.9 33.9 40.0 32.0 46.0 20.0 46.1 40.0 66.0 22.6 DE 52.6 DE 52.6 5.8 2.5 1.4 1.9 2.8 10.7 8.6 13.6 5.3 27.3	38.0 38.0 11.1 29.2 34.0 40.1 39.9 65.9 26.1 22.7 5KA 5.9 14.3 1.0 1.5 1.9 1.3 3.8 12.8 8.4 21.2 25.9	48.0 53.0 48.0 94.5 94.7 94.7 94.7 94.5 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.7 94.5 94.7 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5	48.0 53.0 48.0 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 10.7 11.1 12.2 9.6 9.4.4 11.5 15.6 9.8 8.1	48.0 53.0 48.0 92.6 92.7 12.4 22.0 12.4 28.4 12.8 1	48.0 53.0 48.0 92.4 92.6 16.4 12.0 9.2 10.4 9.7 9.1 45.7 10.0 12.5 10.0 12.5 10.0 10.6 12.5 10.0 10.6 12.5 10.0 10.6 12.5 10.6 10.6 10.6 10.6 12.5 10.0 10.6 10.6 10.6 12.5 10.0 10.6 10.6 10.6 10.6 12.5 10.6 10.
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,b]anthracene Benzo[a,b,i]perylene *Benzo[a,b,i]horanthene *Benzo[a,b,i]horanthene Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Hanzon Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,i]perylene	80.0 160.0 80.0 120.0 80.0 120.0 80.0 60.0 60.0 60.0 5LB 110.1 179.2 22.0 25.0 72.1 33.9 13.8 16.8 22.6 94.4	60.0 90.0 80.0 80.0 60.0 70.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 20.0 30.0 10.1 5AA 121.2 15.1 21.8 23.2 35.7 20.0 16.4 11.0 11.7 14.4 47.6	30.0 30.0 60.0 40.0 40.0 40.0 20.0 30.0 20.0 30.0 5CA 80.9 94.4 80.9 94.4 15.3 16.3 18.5 13.0 10.5 10.9 12.6 40.2	30.0 30.0 60.0 40.0 70.0 30.0 20.0 30.0 30.0 30.0 30.0 30.0 3	30.0 40.0 20.0 20.0 40.0 30.0 30.0 20.0 20.0 20.0	8.5 26.6 5.5 28.3 37.9 10.1 10.1 10.1 10.1 10.0 20.0 20.0 20.0	21.3 30.2 6.8 37.0 42.2 36.3 25.1 /L 5CA 30.0 40.0 20.0 20.0 30.0 30.0 30.0 20.0 20.0 2	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 5 KA 30.0 40.0 20.0 20.0 30.0 30.0 30.0 20.0 20.0 20.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4 6.6 10.9 16.7 18.1 11.3 2.7	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 55.2 1.4 3.3 13.5 8.7 2.1 9.3 13.8 25.2 3.3.5 4.4	38.0 37.9 34.0 27.9 33.9 40.0 46.0 32.0 46.0 22.0 66.0 22.6 DE 52.6 DE 52.6 5.8 0.8 2.5 1.4 1.9 2.8 10.7 8.6 13.6 5.3	38.0 38.0 11.1 29.2 34.0 40.1 39.9 65.9 26.1 22.7 5.9 14.3 1.0 1.5 1.9 1.3 1.3 3.8 12.8 8.4 21.2 6.2	48.0 53.0 48.0 94.5	48.0 53.0 48.0 92.1 93.2 11.1 12.2 9.6 9.8 8.1 11.3 11.3	48.0 53.0 48.0 92.6 92.0 12.4 22.4 24.4 31.2 12.4	48.0 53.0 48.0 92.4 92.6 9.6 16.4 12.0 9.2 10.4 9.7 9.1 45.7 10.5 10.9 10.4 9.7 9.1 12.5 10.0 12.5 10.0 12.5 10.0 12.5 10.6 10.7 10.5 10.7 10.5
Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Iideno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a]h,i]perylene *Benzo[a,h]anthracene *Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene Fluoranthene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Denzo[a,h]anthracene	80.0 160.0 80.0 120.0 80.0 120.0 80.0 100.0 60.0 60.0 5LB 110.1 179.2 22.0 72.1 34.7 3.3.9 13.8 16.8 22.6 94.4 55.8	60.0 90.0 80.0 40.0 60.0 70.0 20.0 30.0 121.2 115.1 21.8 23.2 35.7 20.0 16.4 11.0 11.7 14.4 47.6 26.1	30.0 30.0 60.0 40.0 40.0 40.0 20.0 30.0 30.0 30.0 30.0 30.0 30.0 3	30.0 30.0 60.0 40.0 70.0 30.0 30.0 30.0 30.0 30.0 30.0 3	30.0 40.0 20.0 20.0 30.0 30.0 20.0 20.0 20.0 20.0 30.0	8.5 26.6 5.5 28.3 37.9 10.1 (N SAA 30.0 40.0 20.0 20.0 20.0 30.0 30.0 20.0 20.0 2	21.3 30.2 6.8 37.0 42.2 36.3 25.1 7 7 SCA 30.0 40.0 20.0 20.0 30.0 30.0 30.0 20.0 20.0 2	22.9 24.1 4.2 22.7 30.9 26.4 35.6 24.7 5 KA 30.0 40.0 20.0 40.0 30.0 30.0 20.0 20.0 20.0 20.0 20.0 30.0	38.0 33.9 27.9 34.0 39.9 46.0 40.3 39.9 25.9 22.8 22.8 22.8 5LB 4.9 22.6 4.3 1.8 7.0 11.4 6.6 10.9 16.7 18.1 11.3 2.7 90.5	38.0 34.0 23.9 34.0 39.9 46.0 32.1 46.1 40.0 65.8 26.0 22.7 00 5AA 2.4 55.2 1.4 3.3 13.5 8.7 2.1 9.3 13.8 25.2 33.5 4.4 55.4	38.0 37.9 34.0 27.9 33.9 40.0 32.0 46.0 20.0 46.1 40.0 66.0 22.6 DE 52.6 DE 52.6 5.8 2.5 1.4 1.9 2.8 10.7 8.6 13.6 5.3 27.3	38.0 38.0 11.1 29.2 34.0 40.1 39.9 65.9 26.1 22.7 5KA 5.9 14.3 1.0 1.5 1.9 1.3 3.8 12.8 8.4 21.2 25.9	48.0 53.0 48.0 94.5 94.7 94.7 94.7 94.5 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5 94.7 94.5	48.0 53.0 48.0 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 92.1 10.7 11.1 12.2 9.6 9.4.4 11.5 15.6 9.8 8.1	48.0 53.0 48.0 92.6 92.7 12.4 22.0 12.4 28.4 12.8 1	48.0 53.0 48.0 92.4 92.6 16.4 12.0 9.2 10.4 9.7 9.1 45.7 10.0 12.5 10.0 12.5 10.0 10.6 12.5 10.0 10.6 12.5 10.0 10.6 12.5 10.6 10.6 10.6 10.6 12.5 10.0 10.6 10.6 10.6 12.5 10.0 10.6 10.6 10.6 10.6 12.5 10.6 10.

EU \geq 50 % are highlighted in red

Table 11 - B	8ias (%) v	with respect	to reference	value
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Bias in filters	1	AU I	ENVS			IMF	ЮН			LAN	UV			SE	Ā	
bias %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene		-						-								-
Anthracene																
Fluoranthene	-20.9	-17.3	-0.1	2.3	-11.9	-5.0	-4.7	15.5								
Pyrene	-27.6	-17.6	-2.0	1.4	-15.6	-12.5	-8.7	7.4								
Benzo[a]anthracene	-76.0	-31.5	-41.3	-7.3	-3.8	-1.7	4.6	1.9	18.4	14.2	13.8	11.8	4.0	-1.9	-1.3	-5.6
Chrysene					-5.4	10.9	9.4	3.9								
Benzo[b]fluoranthene					1.8	3.2	10.3	6.1	3.3	-11.3	0.6	-0.6				
Benzo[j]fluoranthene					-5.5	-2.5	6.0	0.8	0.3	-19.0	-7.6	-4.8				
Benzo[k]fluoranthene					-8.7	1.7	3.6	-1.8	-5.3	-9.2	5.2	2.3				
Benzo[e]pyrene	-14.4	-1.0	6.9	9.6												
Benzo[a]pyrene	-27.9	-4.8	-11.0	-2.1	38.2	31.3	25.1	22.8	5.0	-2.8	-1.0	-0.6	-5.5	-4.7	-14.4	-14.1
Perylene	-7.8	-8.6	0.2	4.8												
Indeno[1,2,3,-c,d]pyrene	-8.8	17.5	2.0	21.2	5.1	10.5	12.6	4.7	1.4	-7.2	3.3	1.2	1.2	1.3	1.2	-3.5
Dibenzo[a,h]anthracene		-95.3	-49.2	-43.0	-8.9	1.6	19.4	22.3	-50.9	-51.8	-22.4	-14.0			33.6	31.7
Benzo[g,h,i]perylene	-23.5	3.4	4.5	7.4	6.9	15.8	19.6	15.0								
*Chrysene+Triphenylene		-19.5	6.6	2.7												
*Benzo[b.j,k]fluoranthene	-10.0	0.8	15.5	13.8	-4.9	8.7	21.1	13.2	-1.9	-6.7	11.6	8.7	-2.2	-4.2	-0.6	-5.3
Bias in filters		CH	IMI			INE	RIS			LEG	MC			U	BA	
bias %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	10.5	37.5	24.2	13.0										-26.3	12.9	36.0
Anthracene	-27.2	13.7	34.5	33.7										-10.7	-7.3	16.5
Fluoranthene	9.9	13.4	6.0	4.0	-14.4	25.0	35.2	35.3	22.5	10.3	21.3	5.3	-17.8	-4.2	-10.2	-15.6
Pyrene	-6.9	3.9	-5.4	-3.4	5.7	36.6	42.5	42.5	3.5	-1.6	11.1	1.0	25.4	29.1	15.0	2.8
Benzo[a]anthracene	13.8	19.2	15.5	19.2		-11.7	-15.8	-12.2	42.7	21.1	54.9	23.6	-2.0	1.3	8.2	5.3
Chrysene	-18.9	-7.8	-14.7	-11.7	-23.3	-64.1	-52.9	-36.3	-21.7	-24.5	-30.6	-30.6	30.6	35.3	33.9	35.8
Benzo[b]fluoranthene	3.5	-13.6	-6.6	-3.6	22.2	15.7	27.8	15.9	54.4	21.1	15.2	19.8	-7.0	-18.1	-15.9	-15.5
Benzo[j]fluoranthene	-1.1	16.3	4.1	2.6	160.5	113.6	142.8	128.3				-	14.1	12.2	9.6	3.7
Benzo[k]fluoranthene	1.7	8.6	5.4	6.6		-1.9	-0.1	-1.4	67.2	46.6	38.9	35.0	1.4	-1.6	-1.9	-2.6
Benzo[e]pyrene	-14.8	-18.5	-21.3	-22.3		-21.8	-19.6	-22.2					14.7	11.1	8.9	5.1
Benzo[a]pyrene	-7.9	-0.7	-13.7	-5.2	-0.5	2.8	-7.4	-2.8	0.1	-6.7	-20.8	-20.4	3.4	9.0	0.0	1.5
Perylene	-26.4	-4.1	0.3	2.8			27.6	28.4								
Indeno[1,2,3,-c,d]pyrene	-4.1	-1.6	0.3	0.8		-8.8	-10.3	-9.6	28.3	20.6	15.0	10.3	26.0	7.4	10.1	8.3
Dibenzo[a,h]anthracene	65.5	62.5	65.6	83.1	947.6	927.7	918.5	1171.1	264.8	109.2	75.0	91.9		-41.9	-41.5	-33.6
Benzo[g,h,i]perylene	-19.2	-17.0	-19.3	-15.8	-19.1	-16.3	-13.8	-11.0	-2.8	-3.0	-13.4	-12.1	47.6	46.4	36.6	40.7
*Chrysene+Triphenylene																
*Benzo[b.j,k]fluoranthene	-0.7	6.6	11.3	10.4	32.1	49.8	73.7	58.3	10.7	-0.9	-1.5	-1.8	-1.8	0.7	6.0	2.0
Bias in filters		FI	MI			ISC				NI	U			VN	ИM	
bias %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	-24.6	-15.9	-20.4	-30.7		33.5		38.9	10.2	3.8	2.8	-19.9				
Anthracene	-44.6	-16.2	-3.5	-4.7							-49.4	-52.1				
Fluoranthene	7.9	8.9	11.2	8.6		257.1	128.7	165.3	4.6	1.3	-2.6	-7.2	9.3	12.7	2.7	-0.5
Pyrene			13.3	12.1		110.6	61.3	73.1	-9.9	-11.5	-11.1	-12.4	4.5	11.1	6.6	6.1
	/.5	11.5				23.8	15.9	1.7	-19.6		-18.0	-16.5	-25.8		-22.8	-20.6
penzojajanunracene	7.5 16.2	11.5 11.6	17.4	10.7						-19.4			-25.8	-17.5		
Benzo[a]anthracene Chrysene	7.5 16.2	11.5	17.4	16.7		125.6		105.5		-19.4 -9.5	-11.0			-17.5 27.1	17.2	21.2
Chrysene			17.4	10.7			54.4		-6.6 -10.6	-19.4 -9.5 -13.5	-11.0 -16.9	-6.3 -14.1	-25.8 14.8 48.8		17.2 36.6	21.2 38.3
Chrysene Benzo[b]fluoranthene			17.4	10.7					-6.6 -10.6	-9.5 -13.5	-16.9	-6.3 -14.1	14.8 48.8	27.1	36.6	38.3
Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene			17.4	10.7				105.5	-6.6 -10.6 -0.7	-9.5 -13.5 -7.8	-16.9 -8.6	-6.3 -14.1 -3.8	14.8	27.1 37.8 -17.7	36.6 -19.6	38.3 -19.3
Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene			17.4	16.7					-6.6 -10.6	-9.5 -13.5	-16.9	-6.3 -14.1	14.8 48.8 -9.0	27.1 37.8	36.6	38.3
Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene			17.4 7.1	9.5				105.5	-6.6 -10.6 -0.7 -16.2	-9.5 -13.5 -7.8 -6.5	-16.9 -8.6 -12.5	-6.3 -14.1 -3.8 -9.8	14.8 48.8 -9.0	27.1 37.8 -17.7	36.6 -19.6	38.3 -19.3
Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene	16.2	11.6					54.4	105.5 1055.0	-6.6 -10.6 -0.7 -16.2 2.4	-9.5 -13.5 -7.8 -6.5 -9.6	-16.9 -8.6 -12.5 -8.5	-6.3 -14.1 -3.8 -9.8 -7.9	14.8 48.8 -9.0 29.2	27.1 37.8 -17.7 4.2	36.6 -19.6 4.0	38.3 -19.3 -0.4
Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[e]pyrene Benzo[a]pyrene	16.2	11.6					54.4	105.5 1055.0	-6.6 -10.6 -0.7 -16.2 2.4 -15.4	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0	-16.9 -8.6 -12.5 -8.5 -23.1	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5	14.8 48.8 -9.0 29.2	27.1 37.8 -17.7 4.2	36.6 -19.6 4.0 -18.7	38.3 -19.3 -0.4
Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene	16.2 52.8	11.6 21.0	7.1	9.5		125.6	54.4 28.1	105.5 1055.0 78.7	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6	14.8 48.8 -9.0 29.2 -7.9	27.1 37.8 -17.7 4.2 -9.7	36.6 -19.6 4.0 -18.7 321.1	38.3 -19.3 -0.4 -17.5
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	16.2 52.8 -2.9	11.6 21.0 -6.1 -0.8	7.1 -8.1	9.5 -5.7		125.6	54.4 28.1	105.5 1055.0 78.7	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0	14.8 48.8 -9.0 29.2 -7.9 -30.4	27.1 37.8 -17.7 4.2 -9.7 -24.6	36.6 -19.6 4.0 -18.7 321.1 -88.2	38.3 -19.3 -0.4 -17.5 -29.6
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene	16.2 52.8 -2.9 -9.3	11.6 21.0 -6.1	7.1 -8.1 -1.8	9.5 -5.7 4.0		125.6 696.1	54.4 28.1 203.2	105.5 1055.0 78.7 567.7	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2	36.6 -19.6 4.0 -18.7 321.1 -88.2	38.3 -19.3 -0.4 -17.5 -29.6 -10.8
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene	16.2 52.8 -2.9 -9.3 30.3	11.6 21.0 -6.1 -0.8 -1.3	7.1 -8.1 -1.8 0.9	9.5 -5.7 4.0 -1.1		125.6 696.1	54.4 28.1 203.2	105.5 1055.0 78.7 567.7	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2	36.6 -19.6 4.0 -18.7 321.1 -88.2	38.3 -19.3 -0.4 -17.5 -29.6 -10.8
Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[e]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene	16.2 52.8 -2.9 -9.3 30.3 0.7	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6	7.1 -8.1 -1.8 0.9 2.5	9.5 -5.7 4.0 -1.1 -6.3		125.6 696.1 436.4 569.5	54.4 28.1 203.2 61.2	105.5 1055.0 78.7 567.7 397.7	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5 -5.2	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5	 38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b_j,k]fluoranthene Bias in filters	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 Hft	7.1 -8.1 -1.8 0.9 2.5 -16.1 WS	9.5 -5.7 4.0 -1.1 -6.3 -20.7	SLB	125.6 696.1 436.4 569.5	54.4 28.1 203.2 61.2 121.4	105.5 1055.0 78.7 567.7 397.7 874.1	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE	-6.3 -14.1 -3.8 -9.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5	 38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Bias in filters bias %	16.2 52.8 -2.9 -9.3 30.3 0.7	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA	7.1 -8.1 -1.8 0.9 2.5 -16.1 WS SCA	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA	SLB -35.1	125.6 696.1 436.4 569.5 IV SAA	54.4 28.1 203.2 61.2 121.4 /L SCA	105.5 1055.0 78.7 567.7 397.7 874.1 SKA	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5 -5.2 -1.3	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 SLB	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1
Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[e]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 SLB 25.1	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5	7.1 -8.1 -1.8 0.9 2.5 -16.1 WS SCA 25.4	9.5 -5.7 4.0 -1.1 -6.3 -20.7 <u>SKA</u> 12.0	-35.1	125.6 696.1 436.4 569.5 KAA -37.7	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6	105.5 1055.0 78.7 567.7 397.7 874.1 SKA -31.9	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 OC SAA 22.7	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5 -5.2 -1.3 - SKA -17.0	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 SLB -4.3	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 4.9	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 SKA -0.4
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 SLB 25.1 242.3	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3	7.1 -8.1 -1.8 0.9 2.5 -16.1 VIS SCA 25.4 214.5	9.5 -5.7 4.0 -1.1 -6.3 -207 SKA 12.0 158.1	-35.1 -66.8	125.6 696.1 436.4 569.5 10 SAA -37.7 -57.1	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6 -44.4	105.5 1055.0 78.7 567.7 397.7 874.1 5KA -31.9 -44.2	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 OC SAA 22.7 44.1	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 63.7	-6.3 -14.1 -3.8 -9.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 SKA -17.0 34.6	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 SLB -4.3 33.3	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 4.9 6.4	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 SKA -0.4 16.2
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[c],h,1]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 SLB 25.1 25.1 242.3 96.4	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3	7.1 8.1 -1.8 0.9 2.5 -16.1 V/S 25.4 214.5 92.5	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7	- 35.1 -66.8 -8.1	125.6 696.1 436.4 569.5 KAA -37.7 -57.1 -15.4	54.4 28.1 203.2 61.2 121.4 /L 5CA -26.6 -44.4 2.1	105.5 1055.0 78.7 567.7 397.7 874.1 - 31.9 -44.2 -0.3	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3 35.5	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA 22.7 44.1 13.5	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.1 -3.7 -11.2	-6.3 -14.1 -3.8 -7.9 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 SKA -17.0 34.6 -16.9	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 -25.2 -4.3 33.3 9.7	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 4.9 6.4 9.5	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 <u>SLB</u> 25.1 242.3 96.4 79.5	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3 91.7	7.1 -8.1 -1.8 0.9 2.5 -16.1 VIS SCA 25.4 214.5 92.5 83.7	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7 78.1	-35.1 -66.8 -8.1 -13.5	125.6 696.1 436.4 569.5 IV SAA -377.1 -15.4 -16.5	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6 -44.4 2.1 0.1	105.5 1055.0 78.7 567.7 397.7 874.1 5KA -31.9 -44.2 -0.3 -1.6	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3 35.5 21.2	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA 22.7 44.1 13.5 7.3	-16.9 -8.6 -12.5 -8.5 -2.31 -7.7 -13.0 -5.5 -7.3 -2.9 -2.9 -2.9 -2.9 -2.1 -63.7 -11.2 -12.6	-6.3 -14.1 -3.8 -9.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 SKA -17.0 34.6 -16.9 -18.4	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 5LB -4.3 33.3 9.7 3.5	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7 9.7	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C 27.5 3C 5CA 4.9 6.4 9.5 11.4	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[e]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI 5AA 48.5 364.3 103.3 91.7 154.2	7.1 -8.1 -1.8 0.9 2.5 - 5.6 - - 5.7 - 25.4 214.5 92.5 92.5 92.5 92.5 93.4	9.5 -5.7 4.0 -1.1 -6.3 -20 SKA 12.0 158.1 84.7 78.1 90.0	-35.1 -66.8 -8.1 -13.5 -19.9	125.6 696.1 436.4 569.5 IX SAA -37.7 -57.1 -15.4 -16.5 -18.8	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6 -44.4 2.1 0.1 4.4	1055.0 78.7 567.7 397.7 874.1 SKA -31.9 -44.2 -0.3 1.6 -0.9	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3 35.5 21.2 19.1	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 OC SAA 22.7 44.1 13.5 -7.3 0.8	-16.9 -8.6 -12.5 -8.5 - 23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 63.7 -11.2 -12.6 -18.1	-6.3 -14.1 -3.8 -7.9 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 SKA -17.0 34.6 -16.9 -18.4 -22.0	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 -25.2 -4.3 33.3 9.7	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 4.9 6.4 9.5	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	16.2 52.8 -2.9 -9.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3 91.7 154.2 95.5	7.1 -8.1 -1.8 0.9 2.5 -16.1 WS SCA 25.4 214.5 92.5 83.7 93.4 71.6	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7 78.1 90.0 70.5	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7	125.6 696.1 436.4 569.5 10 569.5 10 57.1 -57.1 -57.1 -15.4 -16.5 -18.8 8 -13.9	54.4 28.1 203.2 61.2 121.4 /L 5CA -26.6 -44.4 2.1 0.1 4.4 5.5	105.5 1055.0 78.7 567.7 397.7 874.1 -31.9 -44.2 -0.3 -1.6 -0.9 4.9	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 5LB 43.2 105.3 35.5 21.2 19.1 16.1	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -25.9 -6.1 -3.9 OC SAA 22.7 44.1 13.5 7.3 0.8 -3.6	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 63.7 -11.2 SCA 2.1 63.7 -11.2 -12.6 -18.1 -23.0	-6.3 -14.1 -3.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 -17.0 34.6 -16.9 -18.9 -18.9 -22.0 -24.6	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 5LB -4.3 33.3 9.7 3.5 2.3	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7 9.7 6.7	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 4.9 6.4 9.5 11.4 -3.7	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 -0.4 16.2 9.5 10.2 4.8
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene *Chrysene+Triphenylene *Benzo[b,jk]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI 5AA 48.5 364.3 103.3 91.7 154.2	7.1 -8.1 -1.8 0.9 2.5 - 5.6 - - 5.7 - 25.4 214.5 92.5 92.5 92.5 92.5 93.4	9.5 -5.7 4.0 -1.1 -6.3 -20 SKA 12.0 158.1 84.7 78.1 90.0	-35.1 -66.8 -8.1 -13.5 -19.9	125.6 696.1 436.4 569.5 IX SAA -37.7 -57.1 -15.4 -16.5 -18.8	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6 -44.4 2.1 0.1 4.4	1055.0 78.7 567.7 397.7 874.1 SKA -31.9 -44.2 -0.3 1.6 -0.9	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3 35.5 21.2 19.1	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 OC SAA 22.7 44.1 13.5 -7.3 0.8	-16.9 -8.6 -12.5 -8.5 - 23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 63.7 -11.2 -12.6 -18.1	-6.3 -14.1 -3.8 -7.9 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 SKA -17.0 34.6 -16.9 -18.4 -22.0	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 SLB -4.3 33.3 9.7 3.5 2.3 21.2	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7 9.7 6.7 8.8	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 4.9 5.2 11.4 -3.7 6.1	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,a]nthracene Benzo[g,h,i]perylene *benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 Hf 5AA 48.5 364.3 103.3 91.7 154.2 95.5 33.2	7.1 -8.1 -1.8 0.9 2.5 -16.1 VIS 25.4 214.5 92.5 83.7 93.4 71.6 38.5	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7 78.1 90.0 70.5 47.2	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7	125.6 696.1 436.4 569.5 V SAA -37.7 -57.1 -15.4 -16.5 -18.8 -13.9 -18.9	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6 -44.4 2.1 0.1 4.4 5.5 12.2	105.5 1055.0 78.7 567.7 397.7 874.1 -31.9 -44.2 -0.3 -1.6 -0.9 4.9 9.3	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 5LB 43.2 105.3 35.5 21.2 19.1 16.1 80.6	-9.5 -13.5 -7.8 -6.5 -9.6 -13.6 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 63.7 -11.2 -12.6 -18.1 -23.0 10.2	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5 -5.2 -1.3 -17.0 34.6 -16.9 -16.9 -18.4 -22.0 -24.6 7.3	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 5LB -4.3 33.3 9.7 3.5 2.3 21.2 -0.9	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF 5AA 16.0 26.2 4.7 9.7 6.7 8.8 0.9	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C 27.5 3C 5CA 4.9 6.4 9.5 11.4 -3.7 6.1 -3.5	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,i,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8	7.1 -8.1 -1.8 0.9 2.5 -16.1 VS SCA 25.4 214.5 92.5 83.7 93.4 71.6 38.5 328.4	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7 78.1 90.0 70.5 47.2 329.6	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7	125.6 696.1 436.4 569.5 10 569.5 10 57.1 -57.1 -57.1 -15.4 -16.5 -18.8 8 -13.9	54.4 28.1 203.2 61.2 121.4 /L 5CA -26.6 -44.4 2.1 0.1 4.4 5.5	105.5 1055.0 78.7 567.7 397.7 874.1 -31.9 -44.2 -0.3 -1.6 -0.9 4.9	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.5 -1	-9.5 -13.5 -7.8 -6.5 -9.6 -13.6 -12.0 -25.9 -6.1 -25.9 -6.1 -3.9 CC SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0	-16.9 -8.6 -12.5 -8.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.1 63.7 -11.6 -18.1 -23.0 10.2 -10.6	-6.3 -14.1 -3.8 -9.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 -1.3 -17.0 34.6 -16.9 -18.9 -18.4 -22.0 -24.6 7.3 -14.4	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 25.2 5LB -4.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF 5.8A 16.0 26.2 4.7 9.7 6.7 8.8 0.9 5.9	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 C C C 4.9 5.5 11.4 9.5 11.4 -3.7 6.1 -3.5 1.3	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h,]anthracene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene	16.2 52.8 -2.9 -9.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5 101.9	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8 72.2	7.1 -8.1 -1.8 0.9 2.5 -16.1 VIS SCA 25.4 25.4 25.4 25.4 25.5 83.7 92.5 83.7 93.4 21.6 38.5 328.4 67.8	9.5 -5.7 4.0 -1.1 -6.3 -20.7 5KA 12.0 158.1 84.7 78.1 90.0 158.1 84.7 78.1 90.5 47.2 329.6 70.9	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7 -12.9	125.6 696.1 436.4 569.5 IX 5AA -37.7 -57.1 -15.4 -16.5 -18.8 -13.9 -18.9 -8.0	54.4 28.1 203.2 61.2 121.4 /L 2.1 0.1 4.4 2.1 0.1 4.4 5.5 12.2 9.5	105.5 1055.0 78.7 567.7 397.7 874.1 5KA -31.9 -44.2 -0.3 -1.6 -0.9 9.3 9.1	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3 35.5 21.2 19.1 16.1 80.6 31.8 12.1	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0 -11.3	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 -11.2 -12.6 -18.1 -12.6 -18.1 -23.0 10.2 -10.6 -25.8	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5 -5.2 -1.3 -1.3 -17.0 -17.0 34.6 -16.9 -18.4 -22.0 -24.6 7.3 -14.4 -32.3	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 5LB -4.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1 160.2	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7 9.7 6.7 8.8 0.9 5.9 5.9 57.4	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 9.5 11.4 -3.7 6.1 -3.3 39.8	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5 98.3
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene *Chrysene+Triphenylene *Benzo[b,jk]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]rene Benzo[b]pyrene Benzo[a]pyrene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8	7.1 -8.1 -1.8 0.9 2.5 -16.1 VS SCA 25.4 214.5 92.5 83.7 93.4 71.6 38.5 328.4	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7 78.1 90.0 70.5 47.2 329.6	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7	125.6 696.1 436.4 569.5 KAA -37.7 -37.1 -15.4 -16.5 -18.8 -18.9 -18.9	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6 -44.4 2.1 0.1 4.4 5.5 12.2	105.5 1055.0 78.7 567.7 397.7 874.1 -31.9 -44.2 -0.3 -1.6 -0.9 4.9 9.3	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 5LB 43.2 105.3 35.5 21.2 19.1 16.1 80.6 31.8 12.1 9.5	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0 -11.3 11.9	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9	-6.3 -14.1 -3.8 -9.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 -17.0 34.6 -16.9 -18.4 -22.0 -24.6 7.3 -14.4 -22.0 -7.3 -14.4	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 5LB -4.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1 160.2 5.1	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7 9.7 6.7 8.8 0.9 5.9 5.7.4 7.2	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 32 52 32 52 4.9 6.4 -3.7 6.1 -3.5 1.3 39.8 -5.4	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5 98.3 3.4
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,i]perylene *tChrysene+Triphenylene *Benzo[b,j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Perylene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5 101.9 109.8	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 Hf SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8 72.2 72.8	7.1 -8.1 -1.8 0.9 2.5 -16.1 VS SCA 25.4 214.5 92.5 92.5 93.4 71.6 38.5 328.4 67.8 47.0	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7 90.0 70.5 47.2 329.6 70.9 60.6	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7 -12.9 4.0	125.6 696.1 436.4 569.5 SAA -37.7 -57.1 -15.4 -16.5 -18.8 -13.9 -18.9 -8.0 -2.1	54.4 28.1 203.2 61.2 121.4 /L SCA -26.6 -44.4 2.1 0.1 4.4 5.5 12.2 9.5 24.3	105.5 1055.0 78.7 567.7 397.7 874.1 5KA -31.9 -44.2 -0.3 -1.6 -0.9 4.9 9.3 9.1 22.4	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 3.9 -11.3 -3.5 3.9 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.3 -11.5 -11	-9.5 -13.5 -7.8 -6.5 -9.6 -13.6 -15.6 -12.0 -25.9 -6.1 -3.9 <u>OC</u> SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0 -11.3 11.9 24.5	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9	-6.3 -14.1 -3.8 -9.8 -7.9 -10.5 -7.6 -11.0 -10.5 -5.2 -1.3 -13 -13 -14.4 -22.0 -24.6 7.3 -14.4 -32.3 -14.4 -32.3 -14.4 -7.4	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 25.2 5LB -4.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1 160.2 5.1 -0.9	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF 23.9 JF 6.7 8.8 0.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 332 SCA 4.9 6.4 9.5 11.4 -3.7 6.1 -3.5 1.3 39.8 -5.4 3.1	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5 98.3 3.4 7.4
Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Perylene Iideno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,i,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Iideno[1,2,3,-c,d]pyrene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5 101.9 109.8 -3.5	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8 72.2 72.8 -33.9	7.1 -8.1 -1.8 0.9 2.5 -16.1 VS SCA 25.4 214.5 92.5 83.7 93.4 71.6 38.5 328.4 67.8 47.0 -52.1	9.5 -5.7 4.0 -1.1 -6.3 -20.7 	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7 -12.9 4.0 0.3	125.6 696.1 436.4 569.5 N 569.5 N 57.1 -15.4 -16.5 -18.8 -13.9 -18.9 -18.9 -8.0 -2.1 -9.1	54.4 28.1 203.2 61.2 121.4 7 5.5 12.2 9.5 24.3 11.4	105.5 1055.0 78.7 567.7 397.7 874.1 -31.9 -44.2 -0.3 -1.6 -0.9 4.9 9.3 9.1 22.4 5.9	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 3.9 -11.3 	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -25.9 -6.1 -3.9 <u>OC</u> SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0 -11.3 11.9 24.5 2.2	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9	-6.3 -14.1 -3.8 -9.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 -1.3 -1.3 -17.0 34.6 -16.9 -18.4 -22.0 -24.6 7.3 -14.4 -32.3 -14.4 -7.4 -7.4 -7.4 -24.1	14.8 48.8 -9.0 29.2 -7.9 -30.4 -15.9 -13.0 25.2 - 3.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1 160.2 5.1 160.2 5.1	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF 23.9 JF 23.9 JF 23.9 5.2 4.7 9.7 6.7 8.8 8.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 3C SCA 9.5 11.4 -3.7 6.1 -3.5 1.3 39.8 -5.4 3.1 -3.5	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5 98.3 3.4 7.4 -1.7
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,]anthracene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[b]fluoranthene Benzo[b]fl	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5 101.9 109.8 -3.5 1387.5	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HT SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8 72.2 72.8 -33.9 1228.6	7.1 -8.1 -1.8 0.9 2.5 -16.1 VIS SCA 25.4 25.4 25.4 25.4 25.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 93.4 71.6 85.5 83.7 92.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 92.5 83.7 93.4 71.6 83.5 83.7 92.5 83.7 93.4 71.6 83.5 83.7 92.6 83.7 92.5 83.7 92.6 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5	9.5 -5.7 4.0 -1.1 -6.3 -20.7 5KA 12.0 158.1 84.7 78.1 90.0 158.1 84.7 78.1 90.0 158.1 329.6 70.9 60.6 -50.8 1468.3	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7 -12.9 4.0 0.3 -15.6	125.6 696.1 436.4 569.5 IN 547.1 -15.4 -16.5 -18.9 -18.9 -8.0 -2.1 -9.1 -17.6	54.4 28.1 203.2 61.2 121.4 /L 5.5 12.2 9.5 24.3 11.4 -0.7	105.5 1055.0 78.7 567.7 397.7 874.1 5KA -31.9 -44.2 -0.3 -1.6 -0.9 9.3 9.1 22.4 5.9 4.8	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3 35.5 21.2 19.1 16.1 80.6 31.8 12.1 9.5 2.4 19.0 35.6	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0 -11.3 11.9 24.5	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 -11.2 -12.6 -18.7 -11.2 -12.6 -18.7 -10.6 -25.8 -16.1 3.0 0-18.7 -1.4	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5 -5.2 -1.3 -13 -14.0 -16.9 -18.4 -22.0 -24.6 7.3 -14.4 -22.0 -24.6 7.3 -14.4 -22.0 -24.6 7.3	14.8 48.8 -9.0 29.2 -7.9 -13.0 25.2 5LB -4.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1 160.2 5.1 -0.9 2.5 153.6	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7 9.7 6.7 8.8 0.9 5.9 57.4 7.2 3.7 0.4 32.5	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 332 34.6 9.5 11.4 -3.7 6.1 -3.5 1.3 39.8 -5.4 3.5 18.1	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5 98.3 3.4 7.4 -1.7 36.7
Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,]anthracene Benzo[g,h,i]perylene *tChrysene+Triphenylene *Benzo[b_j,k]fluoranthene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5 101.9 109.8 -3.5	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HI SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8 72.2 72.8 -33.9	7.1 -8.1 -1.8 0.9 2.5 -16.1 VS SCA 25.4 214.5 92.5 83.7 93.4 71.6 38.5 328.4 67.8 47.0 -52.1	9.5 -5.7 4.0 -1.1 -6.3 -20.7 	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7 -12.9 4.0 0.3	125.6 696.1 436.4 569.5 N 569.5 N 57.1 -15.4 -16.5 -18.8 -13.9 -18.9 -18.9 -8.0 -2.1 -9.1	54.4 28.1 203.2 61.2 121.4 7 5.5 12.2 9.5 24.3 11.4	105.5 1055.0 78.7 567.7 397.7 874.1 -31.9 -44.2 -0.3 -1.6 -0.9 4.9 9.3 9.1 22.4 5.9	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 3.9 -11.3 	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -25.9 -6.1 -3.9 <u>OC</u> SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0 -11.3 11.9 24.5 2.2	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9 -2.9	-6.3 -14.1 -3.8 -9.8 -7.9 -7.6 -11.0 -10.5 -5.2 -1.3 -1.3 -1.3 -17.0 34.6 -16.9 -18.4 -22.0 -24.6 7.3 -14.4 -32.3 -14.4 -7.4 -7.4 -7.4 -24.1	14.8 48.8 -9.0 29.2 -7.9 -13.0 25.2 5.1 -4.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1 160.2 5.1 -0.9 2.5 5.1 5.3	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF 5.4 16.0 26.2 4.7 9.7 6.7 8.8 0.9 5.9 5.7 4 7.2 3.7 0.4 3.7 0.4 3.2,5 11.2	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 33 SCA 4.9 6.4 9.5 11.4 -3.7 6.1 -3.5 1.3 39.8 -5.4 3.1 -3.5 1.8.1 4.0	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5 98.3 3.4 7.4 -1.7 9.0
Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,]anthracene Bias in filters bias % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[b]fluoranthene Benzo[b]fl	16.2 52.8 -2.9 -9.3 30.3 0.7 -7.9 5LB 25.1 242.3 96.4 79.5 180.1 81.8 54.9 435.5 101.9 109.8 -3.5 1387.5	11.6 21.0 -6.1 -0.8 -1.3 17.5 -19.6 HT SAA 48.5 364.3 103.3 91.7 154.2 95.5 33.2 342.8 72.2 72.8 -33.9 1228.6	7.1 -8.1 -1.8 0.9 2.5 -16.1 VIS SCA 25.4 25.4 25.4 25.4 25.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 93.4 71.6 85.5 83.7 92.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 93.4 71.6 85.5 83.7 92.5 83.7 93.4 71.6 83.5 83.7 92.5 83.7 93.4 71.6 83.5 83.7 92.6 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5 83.7 92.5	9.5 -5.7 4.0 -1.1 -6.3 -20.7 SKA 12.0 158.1 84.7 78.1 90.0 158.1 84.7 78.1 90.0 158.1 329.6 70.9 60.6 -50.8 1468.3	-35.1 -66.8 -8.1 -13.5 -19.9 -15.7 -5.7 -12.9 4.0 0.3 -15.6	125.6 696.1 436.4 569.5 IN 547.1 -15.4 -16.5 -18.9 -18.9 -8.0 -2.1 -9.1 -17.6	54.4 28.1 203.2 61.2 121.4 /L 5.5 12.2 9.5 24.3 11.4 -0.7	105.5 1055.0 78.7 567.7 397.7 874.1 5KA -31.9 -44.2 -0.3 -1.6 -0.9 9.3 9.1 22.4 5.9 4.8	-6.6 -10.6 -0.7 -16.2 2.4 -15.4 32.7 -3.5 3.9 -11.3 SLB 43.2 105.3 35.5 21.2 19.1 16.1 80.6 31.8 12.1 9.5 2.4 19.0 35.6	-9.5 -13.5 -7.8 -6.5 -9.6 -13.0 -15.6 -12.0 -25.9 -6.1 -3.9 -00 SAA 22.7 44.1 13.5 7.3 0.8 -3.6 30.6 9.0 -11.3 11.9 24.5	-16.9 -8.6 -12.5 -8.5 -23.1 -7.7 -13.0 -5.5 -7.3 -2.9 DE SCA 2.1 -11.2 -12.6 -18.7 -11.2 -12.6 -18.7 -10.6 -25.8 -16.1 3.0 0-18.7 -1.4	-6.3 -14.1 -3.8 -9.8 -7.9 -19.5 -7.6 -11.0 -10.5 -5.2 -1.3 -13 -14.0 -16.9 -18.4 -22.0 -24.6 7.3 -14.4 -22.0 -24.6 7.3 -14.4 -22.0 -24.6 7.3	14.8 48.8 -9.0 29.2 -7.9 -13.0 25.2 5LB -4.3 33.3 9.7 3.5 2.3 21.2 -0.9 16.1 160.2 5.1 -0.9 2.5 153.6	27.1 37.8 -17.7 4.2 -9.7 -24.6 -17.2 -5.7 23.9 JF SAA 16.0 26.2 4.7 9.7 6.7 8.8 0.9 5.9 5.9 5.7.4 7.2 3.7 0.4 32.5	36.6 -19.6 4.0 -18.7 321.1 -88.2 644.6 27.5 332 34.6 9.5 11.4 -3.7 6.1 -3.5 1.3 39.8 -5.4 3.5 18.1	38.3 -19.3 -0.4 -17.5 -29.6 -10.8 -9.9 25.1 5KA -0.4 16.2 9.5 10.2 4.8 11.1 1.5 10.5 98.3 3.4 7.4 -1.7 36.7

 $|bias| \ge 25\%$ are highlighted in red

Table 12 - Repeatability score

Repeatability scores in filters		AU	ENVS			IMF	ROH			LAN	NUV			S	EA	
Repeatability scores	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene																
Anthracene																
Fluoranthene	2.4	2.5	3.6	3.8	1.1	1.2	1.4	1.7								
Pyrene	2.8	3.2	4.5	5.0	1.4	1.5	1.8	2.3								
Benzo[a]anthracene	0.6	2.2	2.1	3.4	1.0	1.3	1.5	1.5	1.5	1.8	2.1	2.0	2.7	3.1	3.6	3.5
Chrysene					0.5	0.7	0.8	0.8	-							
Benzo[b]fluoranthene					0.4	0.9	1.2	1.2	0.2	0.4	0.6	0.6				
Benzo[j]fluoranthene					0.4	0.9	1.3	1.4	1.3	2.4	3.6	4.1				
Benzo[k]fluoranthene					1.0	1.8	2.0	2.0	1.5	2.3	3.0	3.1				
Benzo[e]pyrene	1.6	1.1	1.1	1.1												
Benzo[a]pyrene	2.0	2.5	2.3	2.5	2.7	2.4	2.2	2.2	2.6	2.2	2.3	2.3	2.0	1.9	1.7	1.7
Perylene	3.5	2.8	2.9	3.0												
Indeno[1,2,3,-c,d]pyrene	7.5	5.4	4.3	5.0	3.0	1.8	1.6	1.5	2.7	1.4	1.4	1.3	5.3	3.0	2.7	2.5
Dibenzo[a,h]anthracene		0.0	0.6	0.7	0.2	0.3	0.5	0.5	0.4	0.6	1.2	1.3			1.5	1.6
Benzo[g,h,i]perylene	2.0	2.6	2.7	2.7	1.1	1.2	1.2	1.1								
*Chrysene+Triphenylene		1.5	3.1	3.2												
*Benzo[b.j,k]fluoranthene	2.1	1.6	1.7	1.6	0.9	0.7	0.7	0.6	1.3	0.8	0.9	0.9	2.3	1.6	1.5	1.4
Repeatability scores in filters		CF	IMI			INE	RIS			LEG	SMC			U	BA	
Repeatability scores	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	0.7	0.9	0.7	0.7				-				-		0.6	0.9	1.1
Anthracene	0.3	0.3	0.6	0.7										0.4	0.8	1.1
Fluoranthene	2.4	2.5	2.7	2.8	1.4	0.7	1.5	2.3	2.6	2.4	3.0	2.8	2.1	2.5	2.7	2.7
Pyrene	2.1	2.4	2.6	2.8	0.9	0.2	1.2	1.0	3.3	3.1	4.3	4.1	4.0	4.2	4.5	4.2
Benzo[a]anthracene	1.5	1.9	2.1	2.2		0.1	0.5	0.9	3.8	4.0	5.7	4.6	2.1	2.7	3.3	3.2
Chrysene	0.6	0.8	0.9	0.9	0.3	0.1	0.1	0.1	0.8	1.0	1.1	1.1	1.5	1.9	2.1	2.2
Benzo[b]fluoranthene	0.8	1.3	1.8	1.9	0.4	0.4	1.2	0.6	1.1	1.6	2.0	2.2	0.9	1.5	1.9	2.1
Benzo[j]fluoranthene	0.8	2.1	2.5	2.7	2.0	0.3	1.0	1.3	I				1.2	2.5	3.3	3.4
Benzo[k]fluoranthene	1.7	2.9	3.2	3.4		0.8	1.7	1.6	2.9	4.1	4.3	4.4	2.3	3.5	4.0	4.1
Benzo[e]pyrene	1.2	0.7	0.6	0.6		0.3	0.2	0.2					2.3	1.3	1.2	1.1
Benzo[a]pyrene	1.8	1.9	1.6	1.8	0.8	0.6	0.6	0.8	4.1	3.6	3.0	3.0	3.0	3.0	2.7	2.8
Perylene	3.4	1.8	1.7	1.7			1.8	2.2								
Indeno[1,2,3,-c,d]pyrene	4.4	2.6	2.4	2.3		0.8	0.7	0.3	8.2	4.3	3.8	3.5	7.2	3.5	3.3	3.1
Dibenzo[a,h]anthracene	0.6	1.0	1.1	1.3	2.3	1.2	0.9	0.9				2.0		0.4	0.5	0.6
Benzo[g,h,i]perylene	1.0	1.0	1.0	1.1	0.6	0.5	0.6	0.1	2.3	2.2	2.0	2.0	3.3	3.1	2.9	3.0
*Chrysene+Triphenylene																
*Benzo[b.j,k]fluoranthene	1.6	1.1	1.1	1.1	1.9	0.3	0.7	0.4	2.0	1.2	1.1	1.1	1.9	1.3	1.3	1.2
Repeatability scores in filters		FI	MI			ISC				NI	LU				MM	
	SLB				SLB	ISC			SLB		LU		SLB	V	MM	SKA
Repeatability scores in filters Repeatability scores Phenanthrene	SLB 3.4	FI SAA 3.7	MI SCA 3.3	SKA 2.8	SLB		SCA	SKA 0.8		NI SAA 1.2		SKA 0.8	SLB			SKA
Repeatability scores		SAA	SCA 3.3	SKA	SLB	ISC SAA		SKA	SLB	SAA	LU SCA	SKA	SLB	V	MM	SKA
Repeatability scores Phenanthrene	3.4 0.4	SAA 3.7	SCA	SKA 2.8	SLB	ISC SAA		SKA	SLB	SAA	LU SCA 1.0	SKA 0.8	SLB 4.0	VI SAA	MM SCA	
Repeatability scores Phenanthrene Anthracene Fluoranthene	3.4	SAA 3.7 0.6	SCA 3.3 1.2 3.0	SKA 2.8 1.3 3.1	SLB	ISC SAA 0.5	SCA 4.4	SKA 0.8 5.8	SLB 1.2	SAA 1.2	LU SCA 1.0 0.5	SKA 0.8 0.5 3.3		V	MM SCA 4.4	SKA 4.5 6.2
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene	3.4 0.4 6.6	SAA 3.7 0.6 5.0	SCA 3.3 1.2	SKA 2.8 1.3	SLB	ISC SAA 0.5 4.2 1.7	SCA 4.4 4.0	SKA 0.8	SLB 1.2 3.1 3.3	SAA 1.2 3.0	LU SCA 1.0 0.5 3.3	SKA 0.8 0.5	4.0	VI SAA 4.2	MM SCA	4.5
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	3.4 0.4 6.6 16.4	SAA 3.7 0.6 5.0 9.7	SCA 3.3 1.2 3.0 3.9	SKA 2.8 1.3 3.1 4.1	SLB	ISC SAA 0.5 4.2 1.7 2.6	SCA 4.4 4.0 3.2	SKA 0.8 5.8 4.9	SLB 1.2 3.1	SAA 1.2 3.0 3.2	LU SCA 1.0 0.5 3.3 3.9 2.5	SKA 0.8 0.5 3.3 4.1	4.0 4.8	VI SAA 4.2 5.2	MM SCA 4.4 5.9	4.5 6.2
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	3.4 0.4 6.6 16.4	SAA 3.7 0.6 5.0 9.7	SCA 3.3 1.2 3.0 3.9	SKA 2.8 1.3 3.1 4.1	SLB	ISC SAA 0.5 4.2 1.7	SCA 4.4 4.0	SKA 0.8 5.8 4.9 2.2	SLB 1.2 3.1 3.3 1.8	SAA 1.2 3.0 3.2 2.2 0.9	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2	SKA 0.8 0.5 3.3 4.1 0.8	4.0 4.8 2.6	4.2 5.2 3.5 2.6	4.4 5.9 3.7 2.7	4.5 6.2 3.8
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	3.4 0.4 6.6 16.4	SAA 3.7 0.6 5.0 9.7	SCA 3.3 1.2 3.0 3.9	SKA 2.8 1.3 3.1 4.1	SLB	ISC SAA 0.5 4.2 1.7 2.6	SCA 4.4 4.0 3.2	SKA 0.8 5.8 4.9 2.2	SLB 1.2 3.1 3.3 1.8 0.9	SAA 1.2 3.0 3.2 2.2	LU SCA 1.0 0.5 3.3 3.9 2.5	SKA 0.8 0.5 3.3 4.1 0.8 1.3	4.0 4.8 2.6 1.9	4.2 5.2 3.5	4.4 5.9 3.7	4.5 6.2 3.8 2.8
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene	3.4 0.4 6.6 16.4	SAA 3.7 0.6 5.0 9.7	SCA 3.3 1.2 3.0 3.9	SKA 2.8 1.3 3.1 4.1	SLB	ISC SAA 0.5 4.2 1.7 2.6	SCA 4.4 4.0 3.2	SKA 0.8 5.8 4.9 2.2	SLB 1.2 3.1 3.3 1.8 0.9 0.8	SAA 1.2 3.0 3.2 2.2 0.9 1.6	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1	4.0 4.8 2.6 1.9 3.9	4.2 5.2 3.5 2.6 6.9	4.4 5.9 3.7 2.7 8.6	4.5 6.2 3.8 2.8 9.3
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	3.4 0.4 6.6 16.4	SAA 3.7 0.6 5.0 9.7	SCA 3.3 1.2 3.0 3.9	SKA 2.8 1.3 3.1 4.1	SLB	ISC SAA 0.5 4.2 1.7 2.6	SCA 4.4 4.0 3.2	SKA 0.8 5.8 4.9 2.2 0.4	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8	4.0 4.8 2.6 1.9 3.9 2.6	4.2 5.2 3.5 2.6 6.9 5.0	4.4 5.9 3.7 2.7 8.6 6.7	4.5 6.2 3.8 2.8 9.3 7.3
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene	3.4 0.4 6.6 16.4	SAA 3.7 0.6 5.0 9.7	SCA 3.3 1.2 3.0 3.9	SKA 2.8 1.3 3.1 4.1	SLB	ISC SAA 0.5 4.2 1.7 2.6	SCA 4.4 4.0 3.2	SKA 0.8 5.8 4.9 2.2 0.4	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2	4.0 4.8 2.6 1.9 3.9 2.6	4.2 5.2 3.5 2.6 6.9 5.0	4.4 5.9 3.7 2.7 8.6 6.7	4.5 6.2 3.8 2.8 9.3 7.3
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene	3.4 0.4 6.6 16.4 6.0	SAA 3.7 0.6 5.0 9.7 7.1	SCA 3.3 1.2 3.0 3.9 6.3	SKA 2.8 1.3 3.1 4.1 6.4	SLB	ISC SAA 0.5 4.2 1.7 2.6	4.4 4.0 3.2 0.5	SKA 0.8 5.8 4.9 2.2 0.4 32.8	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9	4.0 4.8 2.6 1.9 3.9 2.6 8.3	4.2 5.2 3.5 2.6 6.9 5.0 10.1	4.4 5.9 3.7 2.7 8.6 6.7 11.6	4.5 6.2 3.8 9.3 7.3 11.5
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[a]pyrene	3.4 0.4 6.6 16.4 6.0	SAA 3.7 0.6 5.0 9.7 7.1	SCA 3.3 1.2 3.0 3.9 6.3	SKA 2.8 1.3 3.1 4.1 6.4	SLB	ISC SAA 0.5 4.2 1.7 2.6	4.4 4.0 3.2 0.5	SKA 0.8 5.8 4.9 2.2 0.4 32.8	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0	4.0 4.8 2.6 1.9 3.9 2.6 8.3	4.2 5.2 3.5 2.6 6.9 5.0 10.1	4.4 5.9 3.7 2.7 8.6 6.7 11.6	4.5 6.2 3.8 9.3 7.3 11.5
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a] pyrene Perylene	3.4 0.4 6.6 16.4 6.0	SAA 3.7 0.6 5.0 9.7 7.1	SCA 3.3 1.2 3.0 3.9 6.3 3.5	SKA 2.8 1.3 3.1 4.1 6.4 3.6	SLB	150 SAA 0.5 4.2 1.7 2.6 0.5	SCA 4.4 4.0 3.2 0.5 3.9	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6	4.5 6.2 3.8 9.3 7.3 11.5 2.7
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[e]pyrene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene	3.4 0.4 6.6 16.4 6.0 8.0 20.0	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4	SCA 3.3 1.2 3.0 3.9 6.3 3.5 3.5	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2	SLB	150 SAA 0.5 4.2 1.7 2.6 0.5	SCA 4.4 4.0 3.2 0.5 3.9	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5	SCA 3.3 1.2 3.0 3.9 6.3 3.5 3.2 1.0	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9	SLB	150 SAA 0.5 4.2 1.7 2.6 0.5 0.5	SCA 4.4 4.0 3.2 0.5 3.9 11.3	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1 6.6	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,]anthracene Benzo[a,h,]perylene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9	SCA 3.3 1.2 3.0 3.9 6.3 3.5 3.2 1.0 1.9	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9	SLB	150 SAA 0.5 4.2 1.7 2.6 0.5 0.5	SCA 4.4 4.0 3.2 0.5 3.9 11.3	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1 6.6	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene *Chrysene+Triphenylene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6	SCA 3.3 1.2 3.0 3.9 6.3 3.5 3.5 3.2 1.0 1.9 1.5	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9	SLB	150 SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1 6.6 1.8	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c],h]anthracene Benzo[c],h]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Repeatability scores in filters	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.9 1.5 MS	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4		ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1 6.6 1.8 2.0	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 00	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE	SKA 0.8 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 J	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Repeatability scores in filters Repeatability scores	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 SLB	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA	SCA 3.3 1.2 3.0 3.9 6.3 3.5 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9 1.5 1.4 SKA	SLB	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 [V] SAA	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA	SLB 1.2 3.1 3.3 1.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1 6.6 1.8 2.0	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 00 SAA	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 SLB	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA	4.5 6.2 3.8 2.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 SKA
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(j)fluoranthene Benzo(j)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Benzo(a)pyrene Perylene Dibenzo(a,h,i)perylene *Chrysene+Triphenylene *Benzo(b,i,k)fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5 SLB 3.5	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 H SAA 4.7	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA 2.5	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 1.9 1.9 1.5 1.4 5 KA 1.7	SLB 0.5	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IV SAA 0.5	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA 0.5	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5	SLB 1.2 3.1 3.3 1.8 0.9 3.4 5.1 6.6 1.8 2.0	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 0.0 SAA 0.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5LB 0.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA 0.5	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 RC 8.7 4.8 RC 5.7 0.3	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5KA 0.2
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[b,j,k]fluoranthene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Repeatability scores in filters Repeatability scores	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.3 5.18 3.5 8.0	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI 5.6 4.7 7.9	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA 2.5 7.3	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.5 1.4 5 KA 1.7 7.0	SLB 0.5 0.2	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 XAA 0.5 0.3	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA 0.5 0.5	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6	SLB 1.2 3.1 3.3 1.8 0.9 1.2 2.6 1.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.6	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 2.4 5.4 1.1 1.6 3.3 2.6 3.4 1.1 1.6 0.1 1.2	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.5	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 SLB 0.4 1.1	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA 0.5 0.7	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 SKA 0.2 0.5
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene Repeatability scores Phenanthrene Fluoranthene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 SLB 3.5 8.0 3.3	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA 2.5 7.3 2.6	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9 1.9 1.9 1.9 1.4 SKA 1.7 7.0 2.4	SLB 0.5 0.2 1.4	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IN SAA 0.5 0.3 1.3	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA 0.5 1.8	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.6 0.6 1.9	SLB 1.2 3.1 3.3 1.8 2.0	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 0.1	LU SCA 1.0 0.5 3.3 9.2 5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 SLB 0.4 1.1 1.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JI SAA 0.5 0.7 1.2	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5KA 0.2 0.5 1.2
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.1B 3.5 8.0 3.3 4.3	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3	SCA 3.3 1.2 3.0 6.3 3.5 3.5 3.2 1.0 1.9 1.5 1.5 1.5 MS SCA 2.5 7.3 2.5 7.3 2.5 3.5	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9 1.5 1.4 SKA 1.7 7.0 2.4 3.2	SLB 0.5 0.2 1.4 1.6	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 V SAA 0.5 0.3 1.3 1.6	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7/L SCA 0.5 0.5 1.8 2.3	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4	SLB 1.2 3.1 3.3 1.8 0.9 3.4 5.1 6.6 1.8 2.0	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 0.1 0.3 0.1 0.3	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.5 0.5 0.1	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5LB 0.4 1.1 1.4 1.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA 0.5 0.5 0.7 1.2 1.3	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0	4.5 6.2 3.8 2.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5 5KA 0.2 0.5 1.2 1.5
Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[k]fluoranthene Benzo[a] pyrene Perylene Benzo[a,h]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthrene Benzo[a]anthrene Anthracene Bluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Benzo[a]anthrene Anthracene Bluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Bluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Benzo[a]anthracene Bluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Benzo[a]anthracene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.3 5.3 5.3 5.3 8.0 3.3 3.5 8.0 3.3 13.1	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA 2.5 7.3 2.6 3.2	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 5 KA 1.7 7.0 2.4 3.2 2.9	SLB 0.5 0.2 1.4 1.6 2.1	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IV SAA 0.5 0.3 1.3 1.6 2.6	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA 0.5 0.5 1.8 2.3 3.8	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6	SLB 1.2 3.1 3.3 1.8 0.9 1.2 2.6 1.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.6 0.5	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 0.1 1.2 0.1 1.2 0.1 1.2 0.1 1.2 0.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.6 0.5 0.1 0.2	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 SLB 0.4 1.1 1.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JI SAA 0.5 0.7 1.2	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5KA 0.2 0.5 1.2
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[b,j,k]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.3 5.18 3.5 8.0 3.3 4.3 3.1 13.1 2.2	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2 1.6	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.5 1.5 MS SCA 2.6 3.5 3.2 1.3	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.5 1.4 5 5 KA 1.7 7.0 2.4 3.2 2.9 1.3	SLB 0.5 0.2 1.4 1.6 2.1 0.9	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IV SAA 0.5 0.3 1.3 1.6 2.6 1.1	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 <i>(L)</i> SCA 0.5 1.8 2.3 3.8 1.5	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5	SLB 1.2 3.1 3.8 0.9 0.8 1.2 2.6 1.9 3.4 5.1 6.6 0.5 0.2 0.6 0.5 0.2 0.5	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 00 SAA 0.1 0.2 0.1 0.2 1.1 0.3 1.1 0.4	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 0E 5 0.6 0.5 0.6 0.5 0.6 0.5 0.1	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1 0.1 0.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 SLB 0.4 1.1 1.4 1.4 0.6	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JI SAA 0.5 0.7 1.2 1.3 0.9	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.6 1.7 2.0 1.1	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 SKA 0.2 0.5 1.2 1.5 0.9
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Chrysene in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.3 5.3 5.3 5.3 8.0 3.3 3.5 8.0 3.3 13.1	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA 2.5 7.3 2.6 3.2	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 5 KA 1.7 7.0 2.4 3.2 2.9	SLB 0.5 0.2 1.4 1.6 2.1	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IV SAA 0.5 0.3 1.3 1.6 2.6	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA 0.5 0.5 1.8 2.3 3.8	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6	SLB 1.2 3.1 3.3 1.8 0.9 1.2 2.6 1.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.6 0.5	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 0.1 1.2 0.1 1.2 0.1 1.2 0.1 1.2 0.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.6 0.5 0.1 0.2	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 SLB 0.4 1.1 1.4 1.4 1.4 0.6 0.3	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 U SAA 0.5 0.7 1.2 1.3 0.9 0.7	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 0.9	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 1.8 3.0 4.6 SKA 0.5 1.2 1.5 0.9 0.8
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a,h]perylene 'Chrysene-Triphenylene *Benzo[b,h]fluoranthene Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[a]anthracene Chrysene Benzo[a]anthracene Benzo[a]anthracene Benzo[a]anthracene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.3	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2 1.6 1.2	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.5 1.5 1.5 1.5 5.5 7.3 2.6 3.5 3.2 1.3 1.2 1.2 3.9 5.3 1.2 5.3 2.5 3.2 1.3 1.2 1.2 3.9 5.3 3.9 5.3 5.5 5.5 5.5 5.5 5.5 5.5 5.5	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 SKA 1.7 7.0 2.4 3.2 2.9 1.3 1.3	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 VI SAA 0.5 0.3 1.3 1.6 2.6 1.1 1.3	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 7 4 7 7 7 7 8 4 7 7 7 7 8 7 8 8 1.5 2.3 8 8 1.5 2.3	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5 2.4	SLB 1.2 3.1 3.3 1.8 0.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.5 0.5 0.5 0.3	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 0.1 0.2 0.1 0.3 1.1 0.4 0.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.5 0.1 0.2 0.1 0.1	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1 0.1 0.1 0.1	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5LB 0.4 1.1 1.4 0.6 0.3 0.3	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA 0.5 0.7 1.2 1.3 0.9 0.7 0.8	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 0.9 1.1	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5 5KA 0.2 0.5 1.2 1.5 0.9 0.8 1.0
Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[k]fluoranthene Benzo[a] pyrene Perylene Benzo[a,h]perylene *Chrysene+Triphenylene *Benzo[b,jk]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[b]anthracene Chrysene Benzo[b]fluoranthene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.8 8.0 3.3 4.3 3.5 8.0 3.3 4.3 13.1 2.2 1.4 5.0	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2 1.6 1.2 5.1	SCA 3.3 1.2 3.0 6.3 3.9 6.3 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA 2.5 7.3 2.6 3.2 1.3 1.2 5.4	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 1.7 7.0 2.4 3.2 2.9 1.3 1.3 5.6	SLB 0.5 0.2 1.4 1.6 2.1 0.9	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IV SAA 0.5 0.3 1.3 1.6 2.6 1.1	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 <i>(L)</i> SCA 0.5 1.8 2.3 3.8 1.5	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5	SLB 1.2 3.1 3.3 1.8 0.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.6 0.5 0.2 0.5 0.3 1.0	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 0.1 1.2 0.1 1.2 0.1 1.2 0.1 1.1 0.4 0.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.6 0.5 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.3	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.4	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 SLB 0.4 1.1 1.4 1.4 1.4 0.6 0.3 0.7	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 U SAA 0.5 0.7 1.2 1.3 0.9 0.7 0.8 1.1	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 1.5	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5 5 KA 0.2 0.5 1.2 1.5 0.9 0.8 1.0 1.3
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[c]pyrene Benzo[a]apyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[b,rk]fluoranthene Benzo[b,j,k]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene	3.4 0.4 6.6 16.4 6.0 20.0 1.0 8.6 1.9 5.3 3.5 8.0 3.3 4.3 13.1 2.2 1.4 5.0 2.0	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.9 3.4 4.3 7.2 1.6 1.2 5.1 0.7	SCA 3.3 1.2 3.0 6.3 3.5 3.2 1.0 1.5 1.5 MS SCA 2.6 3.5 3.2 1.3 1.2 5.4 0.6	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.4 SKA 1.7 7.0 2.4 3.2 2.9 1.3 1.3 1.3 5.6 0.6	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8 1.2	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IV SAA 0.5 0.3 1.3 1.6 2.6 0.3 1.3 1.6 2.1 1.1 1.3 1.9	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 <u>3.4</u> 7 <u>5CA</u> 0.5 1.8 2.3 3.8 1.5 2.3 2.6	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.6 1.9 2.4 3.6 1.5 2.4 2.7	SLB 1.2 3.1 3.8 1.8 2.0 SLB 0.2 0.5 0.5 0.5 1.10 1.11	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 0.4 0.1 1.1 0.4 0.1 1.1 0.4	LU SCA 1.0 0.5 3.3 9.2 5.1 2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.1 0.2 0.1 0.1 0.3 0.3	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.5 0.1 0.1 0.1 0.4 0.3	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5 8 8 8 8 9 4 1.1 1.4 1.4 1.4 0.6 0.3 0.7 3.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JI SAA 0.5 0.7 1.2 1.3 0.9 0.7 0.8 8.1 1.1 1.3	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.6 1.7 2.0 1.1 0.9 1.1 1.5 1.3	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 1.8 3.0 4.6 0.2 0.5 1.2 1.5 0.9 0.8 1.0 0.2 0.8 1.0 1.3 2.8
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[l]pyrene Benzo[l]pyrene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,i,k]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[a]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]jeyrene Benzo[k]pyrene Benzo[k]pyrene Benzo[k]pyrene Benzo[k]pyrene	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.8 8.0 3.3 4.3 3.5 8.0 3.3 4.3 13.1 2.2 1.4 5.0	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2 1.6 1.2 5.1	SCA 3.3 1.2 3.0 6.3 3.9 6.3 3.5 3.2 1.0 1.9 1.5 1.5 MS SCA 2.5 7.3 2.6 3.2 1.3 1.2 5.4	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 1.7 7.0 2.4 3.2 2.9 1.3 1.3 5.6	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 VI SAA 0.5 0.3 1.3 1.6 2.6 1.1 1.3	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 7 4 7 7 7 7 8 4 7 7 7 7 8 7 8 8 1.5 2.3 8 8 1.5 2.3	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5 2.4	SLB 1.2 3.1 3.3 1.8 2.0 SLB 0.2 0.5 0.5 0.3 1.0 1.1	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.1 1.6 0.1 0.3 1.1 0.3 1.1 0.3 1.1 0.4 0.1 0.4 0.1 0.4 0.1	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.1 0.2 0.1 0.1 0.1 0.3 0.3 0.6	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 1.3 2.1 3.8 1.3 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.4 0.3 0.6	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5LB 0.4 1.1 1.4 1.4 1.4 0.6 0.3 0.3 0.7 3.4 0.8	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA 0.5 0.7 1.2 1.3 0.9 0.7 0.8 1.1 1.3 1.0	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 1.7 2.0 1.1 1.5 1.3 1.1	4.5 6.2 3.8 2.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5 KA 0.2 0.5 1.2 1.5 0.9 0.8 1.0 1.3 2.8 0.8
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[a]apyrene Benzo[a]apyrene Benzo[a,h,j]perylene Ychrysene-Triphenylene *Chrysene-Triphenylene *Benzo[b,h,j]berylene *Chrysene-Triphenylene *Benzo[b,h]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Pyrene Benzo[a]anthracene Fluoranthene Benzo[a]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]jfluoranthene Benzo[k]pyrene Benz	3.4 0.4 6.6 16.4 6.0 8.0 20.0 1.0 8.6 1.9 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.3	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2 1.6 1.2 5.1 0.7 2.1	SCA 3.3 1.2 3.0 3.9 6.3 3.5 3.2 1.0 1.9 1.5 1.5 SCA 2.5 7.3 2.6 3.5 3.2 1.3 1.2 5.4 0.6 1.5	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 5.1.4 5.6 0.6 1.6	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8 1.2 1.8	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 IV SAA 0.5 0.3 1.3 1.6 2.6 1.1 1.3 1.9 1.6	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 7 4 7 7 7 8 4 7 7 7 8 4 7 7 8 7 8 8 1.5 2.3 3.8 1.5 2.3 2.6 2.0	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5 2.4 2.7 2.0	SLB 1.2 3.1 3.3 1.8 0.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.6 0.5 0.5 0.3 1.0 1.7 1.1	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 0.1 1.2 0.1 0.2 0.3 1.1 0.4 2.3 3.2	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 0E SCA 0.5 0.1 0.2 0.1 0.1 0.3 0.3 0.3 0.3 0.3 0.5 1.0	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1 0.1 0.1 0.1 0.4 0.3 0.6 1.4	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5LB 0.4 1.1 1.4 0.6 0.3 0.7 3.0 7.3 4 8.2 6 0.3 0.7 3.2 5.2 5.2 8.3 9 3.0 3.0 9 3.0 3.0 9 3.0 9 3.0 9 3.0 9 3.0 9 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA 0.5 0.7 1.2 1.3 0.9 0.7 0.8 1.1 1.3 1.0 1.2	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 1.5 1.3 1.1 0.9	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5KA 0.2 0.5 1.2 0.5 1.5 0.9 0.8 1.0 1.3 2.8 0.8 1.0
Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[i]fluoranthene Benzo[e]pyrene Benzo[e]pyrene Benzo[a]anthracene Benzo[e]pyrene Benzo[a]pyrene Perylene Portylene *Chrysene+Triphenylene *Chrysene+Triphenylene *Benzo[b_j,k]fluoranthene Repeatability scores in filters Repeatability scores in filters Repeatability scores Phenanthrene Pyrene Benzo[b]fluoranthene Fluoranthrene Pyrene Benzo[b]fluoranthene	3.4 0.4 6.6 16.4 6.0 20.0 1.0 8.6 1.9 5.3 5.18 3.5 8.0 3.3 4.3 3.3 4.3 3.5 8.0 3.3 4.3 13.1 2.2 1.4 5.0 2.0 4.1 15.6	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2 1.6 1.2 5.1 0.7 2.1 3.0	SCA 3.3 1.2 3.0 6.3 3.9 6.3 3.5 3.2 1.0 1.9 1.5 1.5 SCA 2.5 7.3 2.6 3.2 1.3 1.2 5.4 0.6 1.5 1.7	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 1.7 7.0 2.4 3.2 2.9 1.3 1.3 5.6 0.6 1.6 1.3	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8 1.2 1.8 3.4	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 10 SAA 0.5 0.3 1.3 1.6 2.6 1.1 1.3 1.9 1.6 1.8	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA 0.5 0.5 1.8 2.3 2.6 2.0 2.0	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.8	SLB 1.2 3.1 3.3 1.8 0.9 1.2 2.6 1.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.6 0.5 0.2 0.5 0.3 1.0 1.1 0.5	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 0.1 1.2 0.1 1.2 0.1 1.2 0.1 1.2 0.3 1.1 0.4 2.3 3.2 0.4	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.6 0.5 0.1 0.2 0.1 0.1 0.2 0.1 0.1 0.2 0.1 0.2 0.1 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1 0.1 0.1 0.1 0.4 0.3 0.6 1.4 0.4	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5 UB 0.4 1.1 1.4 1.4 1.4 0.6 0.3 0.7 3.4 0.3 0.7 3.4 0.3 0.7 3.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JI SAA 0.5 0.7 1.2 1.3 0.9 0.7 0.8 1.1 1.3 1.0 0.9	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 1.5 1.3 1.1 0.9 1.1	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 0.5 1.2 0.5 1.2 0.5 1.2 0.5 1.2 0.5 1.2 0.5 1.2 0.5 1.2 0.5 1.2 0.9 0.8 1.0 0.9 9
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[c]pyrene Benzo[a]apyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Phenzo[a,h]anthracene *Benzo[b,jk]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyren	3.4 0.4 6.6 16.4 6.0 20.0 1.0 8.6 1.9 5.3 3.5 8.0 3.3 4.3 13.1 2.2 1.4 5.0 2.0 4.1 15.6 11.4	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.9 3.4 4.3 7.2 1.6 1.2 5.1 0.7 2.1 3.0 7.5	SCA 3.3 1.2 3.0 6.3 3.9 6.3 3.5 3.2 1.0 1.5 1.5 MS SCA 2.6 3.5 7.3 2.6 3.5 3.2 1.3 1.2 5.4 0.6 1.5 1.7 6.2	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.4 3.2 2.9 1.3 1.3 1.3 5.6 0.6 1.6 1.3 6.6	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8 1.2 1.8 3.4 0.3	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 10 SAA 0.5 0.3 1.3 1.6 2.6 0.5 1.3 1.6 1.1 1.3 1.9 1.6 1.8 0.5	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 5CA 0.5 1.8 2.3 3.8 1.5 2.3 2.6 2.0 0.8	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5 2.4 2.7 2.0 1.8 0.8	SLB 1.2 3.1 3.8 1.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.5 0.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.7	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 0.1 1.2 0.1 0.3 1.1 0.4 0.1 1.1 0.4 0.4 1.7	LU SCA 1.0 0.5 3.3 9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.1 0.2 0.1 0.1 0.1 0.3 0.3 0.4 0.7	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.5 0.1 0.5 0.1 0.5 0.1 0.4 0.3 0.4 0.4 0.7	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5 UB 0.4 1.1 1.4 1.4 1.4 0.6 0.3 0.7 3.4 0.8 2.6 1.7 0.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 5.0 5.0 7 1.2 1.3 0.9 0.7 0.8 1.1 1.3 1.0 1.2 1.3 0.9 0.2	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 1.7 2.0 1.1 1.5 1.3 1.1 0.9 1.1 1.0 4	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 1.8 3.0 4.6 5 5 KA 0.2 0.5 1.2 1.5 0.9 0.8 1.0 1.3 2.8 0.9 0.4
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,k]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[a]anthracene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]tyRinea Anthracene Fluoranthene Benzo[a]anthracene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]h]perene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo(a,h]anthracene Benzo[k,h]perylene	3.4 0.4 6.6 16.4 6.0 20.0 1.0 8.6 1.9 5.3 5.18 3.5 8.0 3.3 4.3 3.3 4.3 3.5 8.0 3.3 4.3 13.1 2.2 1.4 5.0 2.0 4.1 15.6	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.2 1.6 1.2 5.1 0.7 2.1 3.0	SCA 3.3 1.2 3.0 6.3 3.9 6.3 3.5 3.2 1.0 1.9 1.5 1.5 SCA 2.5 7.3 2.6 3.2 1.3 1.2 5.4 0.6 1.5 1.7	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.2 1.9 1.9 1.5 1.4 1.7 7.0 2.4 3.2 2.9 1.3 1.3 5.6 0.6 1.6 1.3	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8 1.2 1.8 3.4	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 10 SAA 0.5 0.3 1.3 1.6 2.6 1.1 1.3 1.9 1.6 1.8	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 /L SCA 0.5 0.5 1.8 2.3 2.6 2.0 2.0	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.5 2.4 3.6 1.8	SLB 1.2 3.1 3.3 1.8 0.9 1.2 2.6 1.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.6 0.5 0.2 0.5 0.3 1.0 1.1 0.5	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 0.1 1.2 0.1 1.2 0.1 1.2 0.1 1.2 0.3 1.1 0.4 2.3 3.2 0.4	LU SCA 1.0 0.5 3.3 3.9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.6 0.5 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.1 0.1 0.1 0.1 0.1 0.4 0.3 0.6 1.4 0.4	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5LB 0.4 1.1 1.4 0.6 0.3 0.3 0.7 3.0 7.5 5LB 0.4 0.7 7 3.4 0.7	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 JJ SAA 0.5 0.7 1.2 1.3 0.9 0.7 0.8 1.1 1.3 1.0 1.2 0.8	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 0.9 1.1 0.9 1.1 0.9 1.1 0.9 1.1 0.9 1.1 0.9	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 4.6 5 KA 0.2 0.5 1.2 1.5 0.9 0.8 1.0 1.3 2.8 0.8 1.0 0.3 9.0 4.0 7
Repeatability scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene e*Benzo[b,jk]fluoranthene Repeatability scores in filters Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Repeatability scores Phenanthrene Anthracene Fluoranthene Benzo[b]fluoranthene Benzo[b]fluo	3.4 0.4 6.6 16.4 6.0 20.0 1.0 8.6 1.9 5.3 3.5 8.0 3.3 4.3 13.1 2.2 1.4 5.0 2.0 4.1 15.6 11.4	SAA 3.7 0.6 5.0 9.7 7.1 4.0 5.4 1.5 1.9 1.1 1.6 HI SAA 4.7 7.9 3.4 4.3 7.9 3.4 4.3 7.2 1.6 1.2 5.1 0.7 2.1 3.0 7.5	SCA 3.3 1.2 3.0 6.3 3.9 6.3 3.5 3.2 1.0 1.5 1.5 MS SCA 2.6 3.5 7.3 2.6 3.5 3.2 1.3 1.2 5.4 0.6 1.5 1.7 6.2	SKA 2.8 1.3 3.1 4.1 6.4 3.6 3.6 3.2 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.4 3.2 2.9 1.3 1.3 1.3 5.6 0.6 1.6 1.3 6.6	SLB 0.5 0.2 1.4 1.6 2.1 0.9 0.8 1.2 1.8 3.4 0.3	ISC SAA 0.5 4.2 1.7 2.6 0.5 21.7 13.0 4.4 10 SAA 0.5 0.3 1.3 1.6 2.6 0.5 1.3 1.6 1.1 1.3 1.9 1.6 1.8 0.5	SCA 4.4 4.0 3.2 0.5 3.9 11.3 3.7 3.4 7 5CA 0.5 1.8 2.3 3.8 1.5 2.3 2.6 2.0 0.8	SKA 0.8 5.8 4.9 2.2 0.4 32.8 4.5 15.1 11.2 14.4 SKA 0.5 0.6 1.9 2.4 3.6 1.5 2.4 2.7 2.0 1.8 0.8	SLB 1.2 3.1 3.8 1.9 3.4 5.1 6.6 1.8 2.0 SLB 0.2 0.5 0.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.7	SAA 1.2 3.0 3.2 2.2 0.9 1.6 2.4 4.5 1.0 3.3 2.6 3.4 1.1 1.6 1.4 0.1 1.2 0.1 0.3 1.1 0.4 0.1 1.1 0.4 0.4 1.7	LU SCA 1.0 0.5 3.3 9 2.5 1.2 1.9 3.3 4.8 0.9 2.9 2.7 3.1 1.6 1.5 1.3 OE SCA 0.5 0.6 0.5 0.1 0.2 0.1 0.1 0.1 0.3 0.3 0.4 0.7	SKA 0.8 0.5 3.3 4.1 0.8 1.3 2.1 3.8 1.3 2.1 3.8 5.2 0.9 3.0 2.6 3.1 1.5 1.6 1.3 SKA 0.1 0.5 0.1 0.5 0.1 0.5 0.1 0.4 0.3 0.4 0.4 0.7	4.0 4.8 2.6 1.9 3.9 2.6 8.3 3.2 6.0 0.9 3.0 7.5 5 UB 0.4 1.1 1.4 1.4 1.4 0.6 0.3 0.7 3.4 0.8 2.6 1.7 0.4	VI SAA 4.2 5.2 3.5 2.6 6.9 5.0 10.1 3.0 3.6 1.4 3.1 5.0 5.0 5.0 7 1.2 1.3 0.9 0.7 0.8 1.1 1.3 1.0 1.2 1.3 0.9 0.2	VIM SCA 4.4 5.9 3.7 2.7 8.6 6.7 11.6 2.6 0.5 14.3 4.8 RC SCA 0.3 0.6 1.7 2.0 1.1 1.7 2.0 1.1 1.5 1.3 1.1 0.9 1.1 1.0 4	4.5 6.2 3.8 9.3 7.3 11.5 2.7 3.0 1.8 3.0 1.8 3.0 4.6 5 5 KA 0.2 0.5 1.2 1.5 0.9 0.8 1.0 1.3 2.8 0.9 0.4

Repeatability-scores ≥ 2 are highlighted in blue

Repeatability-scores \geq 3 are highlighted in red

Table 13 - Z'-score

Z'-scores in filters	1	A11	ENVS			IMF	OH			LAN	11 11/			s	EA	
Z' scores	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	310	JAA	JCA	JKA	JLD	JAA	JCA	JKA	JLD	JAA	JCA	JKA	JLD	JAA	JCA	ЭКА
Anthracene																
Fluoranthene	2.4	2.5	3.6	3.8	1.1	1.2	1.4	1.7								
Pyrene	2.8	3.2	4.5	5.0	1.4	1.5	1.8	2.3								
Benzo[a]anthracene	0.6	2.2	2.1	3.4	1.0	1.3	1.5	1.5	1.5	1.8	2.1	2.0	2.7	3.1	3.6	3.5
Chrysene					0.5	0.7	0.8	0.8								
Benzo[b]fluoranthene					0.4	0.9	1.2	1.2	0.2	0.4	0.6	0.6				
Benzo[j]fluoranthene					0.4	0.9	1.3	1.4	1.3	2.4	3.6	4.1				
Benzo[k]fluoranthene					1.0	1.8	2.0	2.0	1.5	2.3	3.0	3.1				
Benzo[e]pyrene	1.6	1.1	1.1	1.1												
Benzo[a]pyrene	2.0	2.5	2.3	2.5	2.7	2.4	2.2	2.2	2.6	2.2	2.3	2.3	2.0	1.9	1.7	1.7
Perylene	3.5	2.8	2.9	3.0								-				
Indeno[1,2,3,-c,d]pyrene	7.5	5.4	4.3	5.0	3.0	1.8	1.6	1.5	2.7	1.4	1.4	1.3	5.3	3.0	2.7	2.5
Dibenzo[a,h]anthracene		0.0	0.6	0.7	0.2	0.3	0.5	0.5	0.4	0.6	1.2	1.3			1.5	1.6
Benzo[g,h,i]perylene	2.0	2.6	2.7	2.7	1.1	1.2	1.2	1.1								
*Chrysene+Triphenylene		1.5	3.1	3.2												
*Benzo[b.j,k]fluoranthene	2.1	1.6	1.7	1.6	0.9	0.7	0.7	0.6	1.3	0.8	0.9	0.9	2.3	1.6	1.5	1.4
Z'-scores in filters			IMI			INE					iMC				BA	
Z' scores	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	-0.5	1.6	0.9	-0.6	510	JAA	5.2	6.9	510	JAA	3.2	0.2	510	-1.1	-1.5	0.5
Anthracene	1.0	0.3	-0.8	2.5	-1.5		6.4	-1.6	2.3		1.7	3.1	-1.8	-0.3	2.2	0.7
Fluoranthene	-0.9	1.6	1.8	-0.8	0.7	3.0	-1.9	-2.4	0.4	1.2	6.5	-2.0	3.2	-0.5	1.0	2.3
	1.3	0.4	-0.9	-0.8 -0.4	0.7	4.1	-1.9 - 3.3	1.8	0.4 4.1	-0.2	-1.9	-2.0 2.3	-0.2	-0.5 3.3	1.0 2.1	-1.8
Pyrene Benzo[a]anthracene	-1.0	0.4 2.2	-0.9 -0.7	-0.4 0.5	-1.3	4.1 -1.3	-3.3 2.9	1.8 23.3	4.1 -1.2	-0.2 2.4	-1.9 1.6	2.3	-0.2 1.7	3.3 0.2	-1.7	-1.8 0.7
Benzolajanthracene Chrysene	-1.0	-0.5	-0.7	0.5 1.1	-1.3 1.2	-1.3 - 4.4	2.9	-0.2	-1.2 2.9	-1.7	1.0	5.8	-0.4	0.2 2.4	-1.7	-0.4
Cnrysene Benzo[b]fluoranthene	-0.1	-0.5 -1.0	0.6	-1.0	1.2 9.5	- 4.4 1.2	20.1 0.0	-0.2 -1.0	2.9	-1.7 1.6	6.8	5.8	-0.4 0.8	-1.4	-0.3	-0.4
	0.1	1.5	-1.0	-1.0	5.5	1.2	-0.9	-1.0	6.6	1.0	0.0	-2.3	0.8	-1.4	-0.3	0.2
Benzo[j]fluoranthene Benzo[k]fluoranthene	-1.2	1.5	-1.4	0.3		-0.3	-0.9	-0.5 3.4	0.0	7.7	-2.2	-2.5	1.2	-0.3	0.4	0.2
Benzo[e]pyrene	-1.2	-1.0	0.0	0.5	-0.1	-0.3	-0.8 3.7	-1.5	0.0	1.1	-2.2	1.6	0.5	-0.5	0.0	1.3
Benzo[a]pyrene	-1.1	-1.0 -0.1	0.0 0.0	3.7	-0.1	-1.2 0.4	-1.5	-1.5 51.9	0.0	-0.9	2.1	4.1	0.5	1.3	1.4	-1.5
Perylene	-1.8	-0.1	2.8	-1.6		0.4	38.8	-1.1	8.5	-0.9	3.2	-1.2	7.8	1.5	-1.8	-1.5 4.1
Indeno[1,2,3,-c,d]pyrene	1.6	-0.2	-1.9	-1.0	22.5	-1.4	-1.3	-1.1	6.3	3.3	-1.3	-1.2	7.0	1.2	3.6	4.1
Dibenzo[a,h]anthracene	-1.7	-0.2 2.1	-1.5	1.0	-1.7	31.4	-1.5	5.8	-0.3	3.7	-1.5	-0.2	4.2	-1.4	3.0	0.2
Benzo[g,h,i]perylene	-1.7	-1.7	1.0	0.0	-1.7	-1.7	6.5	5.8	-0.5	-0.3	-0.1	0.0	4.2	4.7	0.5	0.2
*Chrysene+Triphenylene	-0.1	-1.7	0.0	2.0	4.3	-1.7	0.0	6.0	1.4	-0.5	0.0	4.0	-0.2	4.7	0.0	2.0
*Benzo[b.j,k]fluoranthene	0.0	0.8	1.0	0.0	0.0	6.2	7.0	0.0	0.0	-0.1	5.0	0.0	0.0	0.1	3.0	0.0
Z'-scores in filters	0.0		VII III	0.0	0.0	ISC		0.0	0.0		LU	0.0	0.0		MM	0.0
Z' scores	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	-0.8	-0.7	1.7	2.0	JLD	1.4	19.1	11.9	JLD	0.2	-0.4	-2.0	JLD	JAA	0.4	1.0
Anthracene	0.8	-0.4	2.0	2.0		1.4	9.2	0.2	0.5	0.2	-0.4	-2.0	0.9		1.0	-2.7
Fluoranthene		-0.4		2.2				0.2	0.5		-1.7 -2.1		0.9			
Fluorantinene	1 00	1 1				20.4		6 9	1 2				0.6	1 5		
Durono	0.9	1.1	2.1			30.4	1.9	6.8	-1.2	0.1		-0.4	0.6	1.5	-2.7	1.4
Pyrene Renzo[a]anthracene	0.9 1.5	1.3	2.1			12.5	1.9 3.4	6.8	-1.9	-1.3	-0.7	-1.6	-2.5	1.3	1.1	4.4
Benzo[a]anthracene			2.1			12.5 2.8			-1.9 -0.4	-1.3 - 2.2	-0.7 -1.8	-1.6 -0.7	- 2.5 0.8	1.3 - <mark>2.0</mark>	1.1 3.9	4.4 -3.5
Benzo[a]anthracene Chrysene		1.3	2.1			12.5		6.8 176.1	-1.9 -0.4 -0.6	-1.3 - 2.2 -0.7	-0.7 -1.8 -1.2	-1.6 -0.7 -1.6	-2.5 0.8 2.6	1.3 - 2.0 1.9	1.1 <mark>3.9</mark> -2.8	4.4
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene		1.3	2.1	11		12.5 2.8		176.1	-1.9 -0.4 -0.6 0.0	-1.3 - 2.2 -0.7 -1.0	-0.7 -1.8 -1.2 -2.2	-1.6 -0.7 -1.6 -0.3	- 2.5 0.8 2.6 -0.5	1.3 - 2.0 1.9 2.8	1.1 3.9	4.4 - 3.5 -0.1
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene		1.3		1.1		12.5 2.8	3.4		-1.9 -0.4 -0.6 0.0 -1.6	-1.3 -2.2 -0.7 -1.0 -0.7	-0.7 -1.8 -1.2 -2.2 -0.4	-1.6 -0.7 -1.6 -0.3 -2.2	-2.5 0.8 2.6	1.3 -2.0 1.9 2.8 -1.7	1.1 3.9 -2.8 0.7	4.4 -3.5
enzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene	1.5	1.3	2.1 0.7			12.5 2.8		176.1 9.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2	-1.3 - 2.2 -0.7 -1.0 -0.7 -1.1	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9	-2.5 0.8 2.6 -0.5 2.9	1.3 - 2.0 1.9 2.8	1.1 3.9 - 2.8 0.7 -2.0	4.4 -3.5 -0.1 -2.0
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene		1.3 1.3	0.7	-0.9		12.5 2.8	3.4 3.0	176.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2	-1.3 - 2.2 -0.7 -1.0 -0.7 -1.1 -0.5	-0.7 -1.8 -1.2 - 2.2 -0.4 - 2.4 -1.0	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7	- 2.5 0.8 2.6 -0.5	1.3 - 2.0 1.9 2.8 -1.7 0.7	1.1 3.9 -2.8 0.7 -2.0 43.4	4.4 -3.5 -0.1 -2.0 -4.6
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene	1.5 7.6	1.3	0.7 - 1.2	-0.9 0.2		12.5 2.8	3.4	176.1 9.1 88.2	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8	-0.7 -1.8 -1.2 - 2.2 -0.4 - 2.4 -1.0 -1.9	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5	-2.5 0.8 2.6 -0.5 2.9 -1.1	1.3 -2.0 1.9 2.8 -1.7	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6	4.4 -3.5 -0.1 -2.0 -4.6 -0.5
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene	1.5 7.6 -0.9	1.3 1.3 3.0	0.7 - 1.2 -0.1	-0.9 0.2 -0.1		12.5 2.8 8.6	3.4 3.0 29.0	176.1 9.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3	-0.7 -1.8 -1.2 - 2.2 -0.4 - 2.4 -1.0 -1.9 -0.2	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4	1.1 3.9 -2.8 0.7 -2.0 43.4	4.4 -3.5 -0.1 -2.0 -4.6
Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene	1.5 7.6 -0.9 -0.2	1.3 1.3 3.0 -1.0	0.7 -1.2 -0.1 0.1	-0.9 0.2 -0.1 -0.8		12.5 2.8	3.4 3.0	176.1 9.1 88.2 40.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0	-1.3 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9	-0.7 -1.8 -1.2 - 2.2 -0.4 -2.4 -1.0 -1.9	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1 -0.4	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[c]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	1.5 7.6 -0.9 -0.2 2.7	1.3 1.3 3.0 -1.0 0.0	0.7 -1.2 -0.1 0.1 0.3	-0.9 0.2 -0.1 -0.8 -2.0		12.5 2.8 8.6 110.7	3.4 3.0 29.0 5.9	176.1 9.1 88.2 40.1 86.2	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2	-1.3 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9	-0.7 -1.8 -1.2 - 2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene	1.5 7.6 -0.9 -0.2 2.7 0.0	1.3 1.3 3.0 -1.0 0.0 -0.1	0.7 - 1.2 -0.1 0.1 0.3 -1.4	-0.9 0.2 -0.1 -0.8 -2.0 0.0		12.5 2.8 8.6	3.4 3.0 29.0 5.9 10.7	176.1 9.1 88.2 40.1 86.2 0.0	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0 0.3	-1.3 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9	-0.7 -1.8 -1.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0	0.0	12.5 2.8 8.6 110.7 44.7	3.4 3.0 29.0 5.9 10.7 0.0	176.1 9.1 88.2 40.1 86.2 0.0 8.0	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0 0.3 -1.5	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.1 0.0 0.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1 -0.4 -1.2 3.3	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene-Triphenylene *Benzo[b,j,k]fluoranthene	1.5 7.6 -0.9 -0.2 2.7 0.0	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0	-0.9 0.2 -0.1 -0.8 -2.0 0.0	0.0	12.5 2.8 8.6 110.7 44.7 71.0	3.4 3.0 29.0 5.9 10.7 0.0 7.0	176.1 9.1 88.2 40.1 86.2 0.0	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0 0.3	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 3.0	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene-Triphenylene *Benzo[b,j,k]fluoranthene Z'-scores in filters	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0 VIS	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0		12.5 2.8 8.6 110.7 44.7 71.0	3.4 3.0 29.0 5.9 10.7 0.0 7.0 L	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.1 0.0 0.0 0.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1 -0.4 -1.2 3.3 0.0	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA	0.7 -1.2 -0.1 0.3 -1.4 0.0 1.0 WS SCA	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA	SLB	12.5 2.8 8.6 110.7 44.7 71.0 IV SAA	3.4 3.0 29.0 5.9 10.7 0.0 7.0 L SCA	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 SKA	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0 0.3 -1.5 0.0	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5	-0.7 -1.8 -1.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 0.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1 -0.4 -1.2 3.3 0.0	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC SCA	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 SKA
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene *Chrysene+Triphenylene *Benzo[b,i,k]fluoranthene Z'-scores in filters Z'scores Phenanthrene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 SLB 4.2	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7	SLB -1.1	12.5 2.8 8.6 110.7 44.7 71.0 V SAA -1.6	3.4 3.0 29.0 5.9 10.7 0.0 7.0 'L SCA 0.3	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 8.0 0.0 5KA -0.3	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.9	-0.7 -1.8 -1.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.1 -0.1 0.0 0.0 0.0 -0.0 SKA -3.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 SLB 0.6	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC SCA 1.4	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 SKA 1.7
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 8 5LB 4.2 9.8	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 10 0 VIS SCA 13.7 12.6	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 1.0 0.0 SKA 12.7 11.9	SLB -1.1 -0.8	12.5 2.8 8.6 110.7 44.7 71.0 IV SAA -1.6 -1.4	3.4 3.0 29.0 5.9 10.7 0.0 7.0 7.0 5.2 10.7 0.0 7.0 5.0 10.7 0.0 0.0 10.7 0.0 10.7 0.0 10.7 0.0 10.7 0.0 10.7 0.0 10.7 0.0 10.7 10.0 10.0	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 8.0 0.0 5KA -0.3 -0.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0 0.3 -1.5 0.0 SLB 1.8 3.6	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.9 -1.1	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 SKA -3.0 -2.9	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1 -0.4 -1.2 3.3 0.0 SLB 0.6 1.0	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 3.0 JI SAA 0.7 0.7	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 4.0 RC RC SCA 1.4 1.7	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 SKA
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[b,h]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 9.8 9.9	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7 12.6 11.0	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6	SLB -1.1 -0.8 -1.7	12.5 2.8 8.6 110.7 44.7 71.0 K SAA -1.6 -1.4 -1.8	3.4 3.0 29.0 5.9 10.7 0.0 7.0 ¹ SCA 0.0 0.5	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.1 -0.7 -1.1 -0.7 -1.0 -0.7 -1.1 -0.7 -1.0 -0.7 -1.1 -0.5 -0.6 -0.7 -1.1 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 -0.1 0.0 0.0 0.0 -0.0 SKA -3.0 -2.9 -1.6	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 SLB 0.6 1.0 0.4	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.7	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC SCA 1.4	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 SKA 1.7 0.6
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Chrysene+Triphenylene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene Pyrene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 5LB 4.2 9.8 9.9 17.1	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2 10.4	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0 MS SCA 13.7 12.6 11.0 4.5	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 1.0 0.0 SKA 12.7 11.9	SLB -1.1 -0.8 -1.7 -1.9	12.5 2.8 8.6 110.7 44.7 71.0 IV SAA -1.6 -1.4 -1.8 -1.9	3.4 3.0 29.0 5.9 10.7 0.0 7.0 2 5.2 0.0 5.5 0.3	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 8.0 0.0 5KA -0.3 -0.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 SLB 1.8 3.6 2.6 1.8	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 SKA -3.0 -2.9	-2.5 0.8 2.6 -0.5 2.9 -1.1 -9.1 -0.4 -1.2 3.3 0.0 SLB 0.6 1.0	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.7 0.6 1.1	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 8 C 8 C 8 CA 1.4 1.7 -0.4	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 0.0 SKA 1.7 0.6 1.3
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 8 5LB 4.2 9.8 9.9 9 17.1 4.5	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2 10.4 17.8	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7 12.6 11.0	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5	SLB -1.1 -0.8 -1.7 -1.9 -0.9	12.5 2.8 8.6 110.7 44.7 71.0 V SAA -1.6 -1.4 -1.4 -1.9 -2.2	3.4 3.0 29.0 5.9 10.7 0.0 7.0 ¹ SCA 0.0 0.5	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 0.2 -2.2 -2.2 -1.0 -1.6 0.3 -1.5 0.0 -1.6 0.0 -1.0 0 -1.5 0.0 -1.5 0.0 -1.0 0 -1.5 0.0 -1.5 0 -1.5 0.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0 -1.5 0.0 -1.5 0 -1.5 0 0 -1.5	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.3 -1.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.7 -0.7 -1.1 -0.7 -1.0 -0.7 -0.5 -1.0 -0.7 -0.5 -1.0 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 0.0 0.0 -3.0 -2.9 -1.6 0.8	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 SLB 0.6 1.0 0.4 0.2	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.7	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 4.0 8 C SCA 1.4 1.7 -0.4 0.6	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 SKA 1.7 0.6 1.3 0.3
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z'-scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 5LB 4.2 9.8 9.9 17.1	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2 10.4 17.8 6.5	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7 12.6 11.0 4.5 4.1	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5	SLB -1.1 -0.8 -1.7 -1.9	12.5 2.8 8.6 110.7 44.7 71.0 N SAA -1.6 -1.4 -1.4 -1.8 -1.9 -2.2 -1.0	3.4 3.0 29.0 5.9 10.7 0.0 7.0 7.0 7.0 7.0 7.0 0.3 0.3 0.3 1.3	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 SLB 1.8 3.6 2.6 1.8	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.6 -0.5 -0.6 -0.5 -0.6 -0.5 -0.6 -0.5 -0.6 -0.5 -0.6 -0.5 -0.6 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -0.2 -0.7 -0.3 -0.0 -0.0 -0.7 -0.3 -0.0 -0.0 -0.0 -0.7 -0.3 -0.0 -0.7 -0.2 -0.7 -0.4 -1.9 -0.2 -0.4 -1.9 -0.2 -0.4 -1.9 -0.2 -0.7 -0.4 -1.9 -0.2 -0.7 -0.7 -0.4 -1.9 -0.2 -0.7 -0.7 -0.7 -0.2 -0.7 -0.4 -0.2 -0.7 -0.2 -0.7 -0.2 -0.7 -0.2 -0.7 -0.7 -0.2 -0.7 -0.7 -0.2 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 0.0 0.0 SKA -3.0 -2.9 -1.6 0.8 -3.0 -2.4	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 SLB 0.6 1.0 0.4 0.2 1.1	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.6 1.1 0.8	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC SCA 1.4 1.7 -0.4 0.6 -0.5	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 SKA 1.7 0.6 1.3 0.3 1.7
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z'-scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 5LB 4.2 9.9 17.1 4.5 2.9	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2 10.4 17.8	0.7 -1.2 -0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7 12.6 11.0 4.5 4.1 57.4	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 1.0 0.0 555.0 3.1	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3	12.5 2.8 8.6 110.7 44.7 71.0 V SAA -1.6 -1.4 -1.4 -1.9 -2.2	3.4 3.0 29.0 5.9 10.7 0.0 7.0 2 5.2 0.0 5.5 0.3	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1 1.5	-1.9 -0.4 -0.6 -0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 8 .0 9 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.3 -1.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.7 -0.7 -1.1 -0.7 -1.0 -0.7 -0.5 -1.0 -0.7 -0.5 -1.0 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 SKA -3.0 -2.9 -1.6 0.8 -2.4 -1.4	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 0.0 SLB 0.6 1.0 0.4 0.2 1.1 -0.1	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.6 1.1 0.8 0.7	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC SCA 1.4 1.7 -0.4 0.6 -0.5 0.2	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 2.0 5KA 1.7 0.6 1.3 0.3 1.7 4.3
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene * Chrysene+Triphenylene * Benzo[b,h,i]perylene * Chrysenes in filters Z'-scores in filters Z'-scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 9.9 9.7 17.1 4.5 2.9 42.8	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2 10.4 17.8 6.5 2.5	0.7 -1.2 -0.1 0.3 -1.4 0.0 10.0 11.0 11.0 11.0 11.0 14.5 4.1 57.4 3.2	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5	SLB -1.1 -0.8 -1.7 -1.9 -0.9	12.5 2.8 8.6 110.7 44.7 71.0 IV SAA -1.6 -1.4 -1.8 -1.9 -2.2 -1.0 -1.4	3.4 3.0 29.0 5.9 10.7 0.0 7.0 10.7 0.0 0.0 0.5 0.3 1.3 1.7	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 0.3 -1.5 0.0 SLB 1.8 3.6 2.6 1.8 0.9 4.3 3.1	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.7 -0.9 -0.6 -0.7 -0.7 -1.0 -0.7 -0.7 -1.0 -0.7 -0.7 -1.0 -0.7 -0.7 -0.9 -0.9 -0.6 -0.5 -0.9 -0.6 -0.7 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.7 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8 -1.2	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 0.0 -2.9 -1.6 0.8 -2.4 -1.4 -2.1	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 5 LB 0.6 1.0 0.4 0.2 1.1 -0.1 1.6	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 5AA 0.7 0.7 0.7 0.7 0.1	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 0.0 SKA 1.7 0.6 1.3 0.3 1.7 4.3 0.4
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 8 9.9 9.9 9.9 17.1 4.5 2.9 42.8 8.3	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 9.2 10.4 17.8 6.5 2.5 56.7	0.7 -1.2 -0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7 12.6 11.0 4.5 4.1 57.4	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5 55.0 3.1 7.0	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3 -1.3	12.5 2.8 8.6 110.7 44.7 71.0 N SAA -1.6 -1.4 -1.4 -1.8 -1.9 -2.2 -1.0	3.4 3.0 29.0 5.9 10.7 0.0 7.0 7.0 7.0 7.0 7.0 0.3 0.3 0.3 1.3	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1 1.5 2.6	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 0.2 -2.2 -2.2 -1.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.0 -1.6 0.2 -2.2 -2.2 -1.0 -1.5 0.0 -1.5 0.0 -1.6 0.0 -1.6 0.0 -1.6 0.0 -1.6 0.2 -2.2 -2.2 -2.2 -1.0 -1.5 0 -1.5 0.0 -1.5 0 -1.5 0.0 -1.5 0 -1	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.3 -1.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 0.0 0.0 0.0 -3.0 -2.9 -1.6 0.8 -3.0 -2.4 -1.4 -2.1 -0.9	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 SLB 0.6 1.0 0.4 0.2 1.1 -0.1 1.6 13.0	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.7 0.6 1.1 0.8 0.7 0.1 1.0	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 8 C SCA 1.4 1.7 -0.4 0.6 -0.5 0.2 1.9 -0.6	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 SKA 1.7 0.6 1.3 0.3 1.7 4.3 0.4 0.9
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 9.9 9.7 17.1 4.5 2.9 42.8	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI 58AA 2.0 9.2 12.2 10.4 17.8 6.5 2.5 56.7 4.1	0.7 -1.2 -0.1 0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7 12.6 11.0 4.5 4.1 57.4 3.2 5.0	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5 55.0 3.1 7.0 -7.9	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3	12.5 2.8 8.6 110.7 44.7 71.0 N SAA -1.6 -1.4 -1.8 -1.9 -2.2 -1.0 -1.4 -1.3	3.4 3.0 29.0 5.9 10.7 0.0 7.0 7.0 7.0 7.0 7.0 0.3 0.3 1.3 1.7 2.6	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1 1.5 2.6 0.9	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 -1.5 0.0 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.6 -0.5 -0.6 -0.2 2.3 -0.5 -0.6	-0.7 -1.8 -1.2 -2.2 -0.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8 -1.2 -1.7 0.4	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 -0.0 0.0 0.0 0.0 0.0 -2.9 -1.6 0.8 -2.4 -1.4 -2.1 -0.9 -3.7	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 -1.1 -0.4 -1.2 3.3 0.0 -1.1 -0.4 -1.2 -1.1 -0.4 -1.2 -1.1 -0.4 -1.2 -1.1 -0.4 -1.1 -0.4 -1.1 -0.5 -1.1 -0.4 -1.1 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.6 1.1 0.8 0.7 0.7 0.6 1.1 0.8 0.7 0.7 0.6 1.1 0.8	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC SCA 1.4 1.7 -0.4 0.6 -0.5 0.2 1.9 -0.6 0.4	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 3.0 5.5 4.3 0.3 1.7 4.3 0.3 1.7 4.3 0.3 1.7 4.3 0.3
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene Z'-scores in filters Z'-scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Benzo[a]pyrene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 8.8 9.9 17.1 4.5 2.9 42.8 8.3 15.7	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 9.2 10.4 17.8 6.5 2.5 56.7	0.7 -1.2 -0.1 0.3 -1.4 0.0 1.0 1.0 13.7 12.6 4.1 57.4 3.2 5.0 -7.4	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5 55.0 3.1 7.0 -7.9 65.0	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3 -1.3 0.6	12.5 2.8 8.6 110.7 44.7 71.0 IV SAA -1.6 -1.4 -1.8 -1.9 -2.2 -1.0 -1.4	3.4 3.0 29.0 5.9 10.7 0.0 7.0 1. SCA 0.3 0.5 0.3 1.3 1.7 2.6 1.6	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1 1.5 2.6 0.9 0.2	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 -1.5 0.0 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6 -1.6	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.6 -0.5 -0.2 2.3 -0.6 1.7	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8 -1.2 -2.7	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 -0.0 0.0 0.0 -2.9 -1.6 0.8 -2.4 -1.4 -2.1 -0.9 -3.7 0.1	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 0.0 SLB 0.6 1.0 0.4 0.2 1.1 -0.1 1.6 13.0 0.7 -0.1	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 U SAA 0.7 0.7 0.6 1.1 0.8 0.7 0.1 1.0 3.2 1.0	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 4.0 8 C SCA 1.4 1.7 -0.4 0.6 -0.5 0.2 1.9 -0.6 0.4 -0.5	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 SKA 1.7 0.6 1.3 0.3 1.7 4.3 0.4 0.9 -0.3 1.6
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene * Chrysene+Triphenylene * Benzo[b,h,i]perylene * Chrysene+Triphenylene * Benzo[b,h;]perylene * Benzo[b,h;]fluoranthene Benzo[a]anthracene Fluoranthene Benzo[a]anthracene Benzo[a]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Perylene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 9.9 917.1 4.5 2.9 42.8 8.3 15.7 -1.0	1.3 1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2 10.4 17.8 6.5 2.5 56.7 4.1 10.2	0.7 -1.2 -0.1 0.3 -1.4 0.0 1 5 5 5 4.1 5 7.4 3.2 5.0 -7.4 5 3.1	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5 55.0 3.1 7.0 -7.9	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3 -1.3 0.6 0.1	12.5 2.8 8.6 110.7 44.7 71.0 10 5AA -1.6 -1.4 -1.8 -1.9 -2.2 -1.0 -1.4 -1.3 -0.3	3.4 3.0 29.0 5.9 10.7 0.0 7.0 10.7 0.0 0.5 0.3 1.3 1.7 2.6 1.6 0.0	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1 1.5 2.6 0.9	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.5 0.5 0.5 -1.5 0.5 0.5 -1.5 0.5 0.5 -1.5 0.5 -1.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.7 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -0.7 -1.0 -0.7 -0.5 -0.9 -0.9 -0.6 -0.5 -0.9 -0.9 -0.6 -0.5 -0.7 -0.9 -0.9 -0.6 -0.5 -0.7 -0.5 -0.9 -0.6 -0.5 -0.7 -0.5 -0.7 -0.5 -0.9 -0.6 -0.5 -0.5 -0.5 -0.7 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8 -1.2 -1.7 -1.4 1.1 -1.8 -1.2 -0.4 -2.7 -0.4 -0.4 -2.7 -0.4 -0.4 -2.4 -0.4 -0.2 -0.7 -0.7 -0.2 -0.7 -0.7 -0.7 -0.2 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 -0.0 0.0 0.0 0.0 0.0 -2.9 -1.6 0.8 -2.4 -1.4 -2.1 -0.9 -3.7	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 5 LB 0.6 1.0 0.4 0.2 1.1 -0.1 1.6 13.0 0.7 -0.1 0.8	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 4.0 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 0.0 0.0 0.0 0.0 0.0 5KA 1.7 0.6 1.3 0.3 1.7 4.3 0.4 0.9 -0.3 1.6 0.9
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene * Chrysene+Triphenylene * Chrysene+Triphenylene * Denzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[b]fluoranthene Benzo	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 8.8 9.9 17.1 4.5 2.9 42.8 8.3 15.7	1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI 58A 2.0 9.2 12.2 10.4 17.8 6.5 2.5 56.7 4.1	0.7 -1.2 -0.1 0.3 -1.4 0.0 1.0 1.0 13.7 12.6 4.1 57.4 3.2 5.0 -7.4	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 SKA 12.7 11.9 4.6 5.5 55.0 3.1 7.0 -7.9 65.0	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3 -1.3 0.6 0.1 -0.4	12.5 2.8 8.6 110.7 44.7 71.0 1.4 -1.4 -1.4 -1.3 -0.3 -1.4	3.4 3.0 29.0 5.9 10.7 0.0 7.0 1. SCA 0.3 0.5 0.3 1.3 1.7 2.6 1.6	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1 1.5 2.6 0.9 0.2	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.4 -1.5 0.0 -1.4 -1.5 -1.5 -1.4 -1.5 -1.5 -1.5 -1.5 -1.5 -1.5 -1.5 -1.5	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.6 -0.5 -0.2 2.3 -0.6 1.7	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8 -1.2 -2.7	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 -1.1 -0.4 -1.2 3.3 0.0 -1.1 -0.4 -0.2 -1.1 -0.4 -1.2 -0.4 -1.2 -0.5 -1.1 -0.4 -1.2 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 U SAA 0.7 0.7 0.6 1.1 0.8 0.7 0.1 1.0 3.2 1.0	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 4.0 8 C SCA 1.4 1.7 -0.4 0.6 -0.5 0.2 1.9 -0.6 0.4 -0.5	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 5 KA 1.7 0.6 1.3 0.3 1.7 4.3 0.3 1.7 4.3 0.4 0.9 -0.3 1.6 0.9 0.5
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a,h]anthracene Dibenzo[a,h]anthracene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 9.8 9.9 917.1 4.5 2.9 42.8 8.3 15.7 -1.0	1.3 1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 2.0 9.2 12.2 10.4 17.8 6.5 2.5 56.7 4.1 10.2	0.7 -1.2 -0.1 0.3 -1.4 0.0 1 5 5 5 4.1 5 7.4 3.2 5.0 -7.4 5 3.1	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 -1.0 0.0 -1.0 4.6 5.5 55.0 3.1 7.0 -7.9 65.0 6.6 8.2	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3 -1.3 0.6 0.1	12.5 2.8 8.6 110.7 44.7 71.0 N SAA -1.6 -1.4 -1.8 -1.9 -2.2 -1.0 -1.4 -1.3 -0.3 -1.4 -0.6	3.4 3.0 29.0 5.9 10.7 0.0 7.0 7.0 1.2 SCA 0.3 0.5 0.3 1.3 1.7 2.6 1.6 0.0 1.2	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 5KA -0.3 -0.1 0.3 1.1 1.5 2.6 0.9 0.2	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.5 0.5 0.5 -1.5 0.5 0.5 -1.5 0.5 0.5 -1.5 0.5 -1.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.7 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -1.0 -0.7 -0.7 -1.0 -0.7 -0.5 -0.9 -0.9 -0.6 -0.5 -0.9 -0.9 -0.6 -0.5 -0.7 -0.9 -0.9 -0.6 -0.5 -0.7 -0.5 -0.9 -0.6 -0.5 -0.7 -0.5 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8 -1.2 -1.7 -1.4 1.1 -1.8 -1.2 -0.4 -2.7 -0.4 -0.4 -2.7 -0.4 -0.4 -2.4 -0.4 -0.2 -0.7 -0.7 -0.2 -0.7 -0.7 -0.7 -0.2 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 -2.9 -1.6 0.8 -2.4 -1.4 -2.1 -0.9 -3.7 0.1 -1.8 -2.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 0 5LB 0.6 1.0 0.4 0.2 1.1 -0.1 1.6 13.0 0.7 -0.1 0.6 3.6 0.5	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.6 1.1 0.8 0.7 0.6 1.1 0.8 0.7 0.1 1.0 0.3 2 1.0 0.3 1.1	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 4.0 8C SCA 1.4 1.7 -0.4 0.6 c.0.5 0.2 1.9 -0.6 0.4 -0.5 0.4 -0.5 0.4 -0.5 0.4 -1.0	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 2.0 0.0 2.0 0.0 2.0 3.0 3.0 1.7 4.3 0.3 1.7 4.3 0.4 0.9 -0.3 1.6 0.9 0.5 5.1.3
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[l]fluoranthene Benzo[l]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,i]perylene * Chrysene+Triphenylene * Benzo[b,h,i]perylene * Chrysenes Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 9.8 9.9 17.1 4.5 2.9 42.8 8.3 15.7 -1.0 32.9 6.2	1.3 1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 -2.4 HI SAA 9.2 10.4 17.8 6.5 2.5 56.7 4.1 10.2 -5.4	0.7 -1.2 -0.1 0.3 -1.4 0.0 10.0 VS SCA 13.7 12.6 11.0 13.7 12.6 11.0 14.5 4.1 57.4 3.2 5.0 -7.4 53.1 5.1 7.1	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 -	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3 -1.3 0.6 0.1 -0.4 -0.8	12.5 2.8 8.6 110.7 44.7 71.0 1.4 -1.4 -1.4 -1.3 -0.3 -1.4	3.4 3.0 29.0 5.9 10.7 0.0 7.0 10.7 0.0 0.7 0.3 0.3 1.3 1.7 2.6 1.6 0.0 1.2 -0.9	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 8.0 0.0 8.0 0.3 1.1 1.5 2.6 0.9 0.2 0.8 -1.4 0.0	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.0 -1.5 0.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0 -1.5	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.7 -1.8 -1.2 -2.2 -0.4 -2.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.9 -2.1 -1.4 1.1 -1.8 -1.2 -1.7 -0.4 -2.7 -0.1 -1.4	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 -2.9 -1.6 0.8 -2.4 -1.4 -2.1 -0.9 -3.7 0.1 -1.8 -2.0 0.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 0.4 0.2 1.1 -0.1 1.6 13.0 0.7 -0.1 0.8 3.6 0.5 0.0	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 5AA 0.7 0.7 0.7 0.6 1.1 0.8 0.7 0.1 1.0 3.2 1.0 0.3 0.1 1.1 1.1	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 RC SCA 1.4 1.7 -0.4 0.6 -0.5 0.2 1.9 -0.6 0.4 -0.5 0.8 0.4 -0.5 0.5	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 3KA 1.7 0.6 1.3 0.3 1.7 4.3 0.4 0.9 -0.3 1.6 0.9 0.5 1.3 0.0
Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,j,k]fluoranthene Z'-scores in filters Z' scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a,h]anthracene Dibenzo[a,h]anthracene	1.5 7.6 -0.9 -0.2 2.7 0.0 -1.0 0.0 -1.0 0.0 -1.0 0.0 -1.0 3.9 9.9 9.9 17.1 4.5 2.9 42.8 8.3 15.7 -1.0 32.9	1.3 1.3 1.3 3.0 -1.0 0.0 -0.1 0.9 2.2 HI SAA 2.0 9.2 12.2 10.4 17.8 2.5 56.7 4.1 10.2 -5.4 41.6	0.7 -1.2 -0.1 0.3 -1.4 0.0 1.0 VIS SCA 13.7 12.6 11.0 4.5 4.1 57.4 3.2 5.0 -7.4 53.1 5.1	-0.9 0.2 -0.1 -0.8 -2.0 0.0 1.0 0.0 -1.0 0.0 -1.0 4.6 5.5 55.0 3.1 7.0 -7.9 65.0 6.6 8.2	SLB -1.1 -0.8 -1.7 -1.9 -0.9 -0.3 -1.3 0.6 0.1 -0.4	12.5 2.8 8.6 110.7 44.7 71.0 N SAA -1.6 -1.4 -1.8 -1.9 -2.2 -1.0 -1.4 -1.3 -0.3 -1.4 -0.6	3.4 3.0 29.0 5.9 10.7 0.0 7.0 7.0 1.2 SCA 0.3 0.5 0.3 1.3 1.7 2.6 1.6 0.0 1.2	176.1 9.1 88.2 40.1 86.2 0.0 8.0 0.0 8.0 0.0 8.0 0.0 8.0 0.0 3.1.1 1.5 2.6 0.9 0.2 0.8 -1.4	-1.9 -0.4 -0.6 0.0 -1.6 0.2 -2.2 -1.0 0.3 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.5 0.0 -1.6 0.2 -2.2 -2.2 -1.0 -1.0 -1.6 0.3 -1.5 0.0 -1.6 0.2 -2.2 -2.2 -1.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.5 0.0 -1.6 0.3 -1.5 0.0 -1.5 0	-1.3 -2.2 -0.7 -1.0 -0.7 -1.1 -0.5 -1.8 -1.3 -1.9 -0.9 -0.6 -0.5 -0.5 -0.6 -0.5 -0.6 1.7 -0.2 2.3 1.5 -0.6 1.7 -0.3 1.4	-0.7 -1.8 -1.2 -2.2 -0.4 -1.0 -1.9 -0.2 -0.7 -0.3 0.0 0.0 DE SCA -1.7 -1.4 1.1 -1.8 -1.2 -0.7 -0.4 -2.4 -2.4 -2.4 -0.4 -2.4 -0.4 -1.9 -0.2 -0.7 -0.1 -1.4 -1.4 -1.4 -1.4 -1.7 -0.1 -1.4	-1.6 -0.7 -1.6 -0.3 -2.2 -0.9 -1.7 -0.5 -0.5 -0.1 0.0 0.0 0.0 -2.9 -1.6 0.8 -2.4 -1.4 -2.1 -0.9 -3.7 0.1 -1.8 -2.0	-2.5 0.8 2.6 -0.5 2.9 -1.1 -0.4 -1.2 3.3 0.0 0 5LB 0.6 1.0 0.4 0.2 1.1 -0.1 1.6 13.0 0.7 -0.1 0.6 3.6 0.5	1.3 -2.0 1.9 2.8 -1.7 0.7 -1.4 -3.9 -0.6 -0.6 -0.6 3.0 JI SAA 0.7 0.7 0.6 1.1 0.8 0.7 0.6 1.1 0.8 0.7 0.1 1.0 0.3 2 1.0 0.3 1.1	1.1 3.9 -2.8 0.7 -2.0 43.4 -12.6 27.2 2.4 0.0 4.0 4.0 8C SCA 1.4 1.7 -0.4 0.6 c.0.5 0.2 1.9 -0.6 0.4 -0.5 0.4 -0.5 0.4 -0.5 0.4 -1.0	4.4 -3.5 -0.1 -2.0 -4.6 -0.5 -1.0 2.5 0.0 2.0 0.0 2.0 0.0 2.0 0.0 2.0 0.0 2.0 3.0 3.0 1.7 4.3 0.3 1.7 4.3 0.4 0.9 -0.3 1.6 0.9 0.5 5.1.3

|Z'-scores $| \ge 2$ are highlighted in blue

|Z'-scores $| \ge 3$ are highlighted in red

Table 14 - En-score

En - scores in filters	T	AU	INVS			IM	ROH		1	LAN	IUV			S	EA	
En - scores	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	525	5/01	567	5101	510	5/41	bert	5101	525	5, 11	567	5101	525	5/11	567	5101
Anthracene																
Fluoranthene	-0.6	-0.5	0.0	0.1	-0.6	-0.3	-0.3	0.7								
Pyrene	-0.9	-0.5	0.0	0.0	-0.8	-0.6	-0.5	0.4								
Benzo[a]anthracene	-4.4	-1.1	- 1.6	-0.2	-0.2	-0.1	0.2	0.1	0.7	0.6	0.5	0.5	0.1	0.0	0.0	-0.1
Chrysene		-1.1	-1.0	0.2	-0.2	0.5	0.2	0.1	0.7	0.0	0.5	0.5	0.1	0.0	0.0	0.1
Benzo[b]fluoranthene					0.1	0.1	0.5	0.3	0.3	-0.6	0.0	0.0				
Benzo[j]fluoranthene					-0.4	-0.1	0.3	0.1	0.0	-0.5	-0.2	-0.1				
Benzo[k]fluoranthene					-0.4	0.1	0.2	-0.1	-0.2	-0.4	0.2	0.1				
Benzo[e]pyrene	-0.4	0.0	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1				
Benzo[a]pyrene	-1.1	-0.2	-0.3	-0.1	1.2	1.0	0.8	0.8	0.2	-0.1	0.0	0.0	-0.2	-0.2	-0.6	-0.6
Perylene	-0.2	-0.2	0.0	0.1		1.0	0.0	0.0	0.2	-0.1	0.0	0.0	-0.2	-0.2	-0.0	-0.0
Indeno[1,2,3,-c,d]pyrene	-0.2	0.3	0.0	0.4	0.3	0.5	0.6	0.3	0.1	-0.4	0.2	0.1	0.0	0.0	0.0	-0.1
Dibenzo[a,h]anthracene	0.2	- 2 .6	-1.4	-1.2	-0.2	0.0	0.6	0.7	-1.0	-1.1	-0.4	-0.2	0.0	0.0	0.5	0.5
Benzo[g,h,i]perylene	-0.7	0.1	0.1	0.2	0.3	0.7	0.9	0.7			0.1	0.2			0.5	0.5
*Chrysene+Triphenylene	0.7	-0.4	0.1	0.1	0.5	0.7	0.5	0.7								
*Benzo[b.j,k]fluoranthene	-0.4	0.0	0.5	0.5	-0.3	0.8	1.1	0.8	-0.1	-0.5	0.5	0.5	-0.1	-0.2	0.0	-0.2
En - scores in filters	0.1	CH		0.5	0.5		ERIS	0.0	0.1		MC	0.5	0.1		BA	0.2
En - scores	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	0.2	0.8	0.7	0.3	510	JAA	JCA	JKA	510	344	JCA	JICA	565	-0.7	0.3	0.7
Anthracene	-0.3	0.8	0.7	0.3									1	-0.7	-0.1	0.7
Fluoranthene	-0.3	0.5	0.7	0.8	-0.6	1.8	1.9	1.3	0.6	0.3	0.6	0.2	-0.6	-0.2	-0.1	-0.5
Pyrene	-0.3	0.4	-0.2	-0.1	-0.8	2.5	2.9	3.5	0.8	0.0	0.8	0.2	-0.6	-0.1	-0.5	-0.5
Benzo[a]anthracene	-0.3	0.1	-0.2	-0.1	0.4	-1.0	-1.1	-0.9	0.1	0.0	0.3	0.0	-0.1	0.6	0.4	0.1
Chrysene	-0.7	-0.3	-0.5	-0.4	-1.0	-1.0 - 3.8	-1.1	-0.9 -1.6	-0.7	-0.8	-0.9	-1.0	-0.1	0.0	0.2	0.1
Benzo[b]fluoranthene	-0.7	-0.3	-0.5	-0.4	-1.0 1.3	- 3.8 0.8	-2.2	-1.6	-0.7	-0.8	-0.9	-1.0	-0.2	-0.5	-0.5	-0.5
Benzo[j]fluoranthene	0.1				2.4	7.2	9.9	9.5	1.4	0.0	0.5	0.0	-0.2	-0.5	-0.5	-0.5
Benzo[k]fluoranthene	0.0	0.5	0.1	0.1	2.4				1.5	1.2		1.0				-0.1
	-0.5	0.3 -0.7	0.2 -0.6	0.2		-0.2 - 1.0	0.0 -0.7	-0.1 -0.7	1.5	1.2	1.1	1.0	0.0	0.0 0.3	-0.1 0.2	-0.1
Benzo[e]pyrene Benzo[a]pyrene	-0.5 -0.4	-0.7 0.0	-0.6 - 0.6	-0.6 -0.2	0.0	-1.0	-0.7 -0.5	-0.7 -0.2	0.0	-0.2	-0.5	-0.5	0.3 0.1	0.3 0.2	0.2 0.0	0.1 0.0
Pervlene	-0.4	-0.1	0.0	0.1	0.0	0.5	-0.5 1.1	0.9	0.0	-0.2	-0.5	-0.5	0.1	0.2	0.0	0.0
	-0.8	-0.1	0.0	0.1		-0.8	-0.9	- 1.4	0.6	0.5	0.3	0.2	0.6	0.2	0.3	0.2
Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	-0.2 1.1	-0.1 1.1	1.3	1.5	5.4	-0.8 14.1	-0.9 20.5	27.3	0.6	0.5	0.5	0.2 1.1	0.0	-1.0	-1.3	-1.0
Benzo[g,h,i]perylene	-0.8	-0.8	-0.9	-0.8	-1.0	-1.1	-0.8	-0.9	-0.1	-0.1	-0.4	-0.4	0.9	0.9	0.8	0.8
	-0.8	-0.8	-0.9	-0.8	-1.0	-1.1	-0.8	-0.9	-0.1	-0.1	-0.4	-0.4	0.9	0.9	0.8	0.8
*Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene	0.0	0.4	0.5	0.5	1.4	7.7	3.8	4.4	0.5	0.0	-0.1	-0.1	-0.1	0.0	0.2	0.1
	0.0			0.5	1.4		CIII	4.4	0.5			-0.1	-0.1		MM	0.1
En - scores in filters	SLB	FI SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA NI	SCA	SKA	SLB	SAA	SCA	SKA
En - scores	-0.2	-0.1	-0.1	-0.3	JLD	0.9	SCA	0.9	0.2	0.1	0.1	-0.5	SLD	SAA	SCA	SKA
Phenanthrene						0.9		0.9	0.2	0.1						
Anthracene	-0.5	-0.3	-0.1	-0.1			26	26	0.1		-1.0	-1.2	0.2	0.2	0.1	
Fluoranthene	0.1	0.1 0.1	0.3	0.3		4.6	2.6	2.6	0.1	0.0	-0.1	-0.2	0.2	0.2	0.1	0.0
Pyrene	0.0		0.4	0.3		4.8	1.7	1.8	-0.3	-0.3	-0.3	-0.4	0.1	0.2	0.1	0.1 -0.5
Benzo[a]anthracene														~ *		
loi.	0.2	0.1	0.2	0.2		0.7	0.4	0.1	-0.6	-0.6	-0.6	-1.2	-0.6	-0.4	-0.5	
Chrysene	0.2		0.2	0.2		0.7 6.0	0.4 2.1	0.1 4.3	-0.2	-0.3	-0.3	-0.2	0.2	0.4	0.3	0.3
Benzo[b]fluoranthene	0.2		0.2	0.2					-0.2 -0.3	-0.3 -0.4	-0.3 -0.6	-0.2 -0.5	0.2 0.3	0.4 0.3	0.3 0.3	0.3 0.3
Benzo[b]fluoranthene Benzo[j]fluoranthene	0.2		0.2	0.2				4.3	-0.2 -0.3 0.0	-0.3 -0.4 -0.2	-0.3 -0.6 -0.2	-0.2 -0.5 -0.1	0.2 0.3 -0.1	0.4 0.3 -0.2	0.3 0.3 -0.3	0.3 0.3 -0.3
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene	0.2		0.2	0.2					-0.2 -0.3 0.0 -0.4	-0.3 -0.4 -0.2 -0.1	-0.3 -0.6 -0.2 -0.3	-0.2 -0.5 -0.1 -0.2	0.2 0.3	0.4 0.3	0.3 0.3	0.3 0.3
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene		0.1					2.1	4.3 4.0	-0.2 -0.3 0.0 -0.4 0.1	-0.3 -0.4 -0.2 -0.1 -0.3	-0.3 -0.6 -0.2 -0.3 -0.2	-0.2 -0.5 -0.1 -0.2 -0.2	0.2 0.3 -0.1 0.2	0.4 0.3 -0.2 0.0	0.3 0.3 -0.3 0.0	0.3 0.3 -0.3 0.0
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene	0.2 0.6		0.2 0.2	0.2 0.2				4.3	-0.2 -0.3 0.0 -0.4 0.1 -0.4	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6	-0.2 -0.5 -0.1 -0.2 -0.2 -0.5	0.2 0.3 -0.1	0.4 0.3 -0.2	0.3 0.3 -0.3	0.3 0.3 -0.3
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene	0.6	0.1 0.4	0.2	0.2		6.0	2.1 0.6	4.3 4.0 1.4	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2	-0.2 -0.5 -0.1 -0.2 -0.2 -0.5 -0.2	0.2 0.3 -0.1 0.2 -0.2	0.4 0.3 -0.2 0.0 -0.3	0.3 0.3 -0.3 0.0 - 0.5	0.3 0.3 -0.3 0.0 -0.5
Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene	0.6 0.0	0.1 0.4 -0.1	0.2 -0.2	0.2 -0.1			2.1	4.3 4.0	-0.2 -0.3 0.0 -0.4 0.1 -0.4	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4	-0.2 -0.5 -0.1 -0.2 -0.2 -0.5 -0.2 -0.3	0.2 0.3 -0.1 0.2 - 0.2 -0.9	0.4 0.3 -0.2 0.0 - 0.3	0.3 0.3 -0.3 0.0 -0.5 -8.7	0.3 0.3 -0.3 0.0 - 0.5
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	0.6 0.0 -0.1	0.1 0.4 -0.1 0.0	0.2 -0.2 0.0	0.2 -0.1 0.1		6.0	2.1 0.6 1.6	4.3 4.0 1.4 3.2	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3 -0.4	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.5 -0.2 -0.3 -0.2	0.2 0.3 -0.1 0.2 - 0.2 -0.9 -0.2	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2	0.3 0.3 -0.3 0.0 - 0.5	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2
Benzo[b]fluoranthene Benzo[]jfluoranthene Benzo[e]pyrene Benzo[e]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene	0.6 0.0 -0.1 0.2	0.1 0.4 -0.1 0.0 0.0	0.2 -0.2 0.0 0.0	0.2 -0.1 0.1 0.0		6.0	2.1 0.6	4.3 4.0 1.4	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4	-0.2 -0.5 -0.1 -0.2 -0.2 -0.5 -0.2 -0.3	0.2 0.3 -0.1 0.2 - 0.2 -0.9	0.4 0.3 -0.2 0.0 - 0.3	0.3 0.3 -0.3 0.0 -0.5 -8.7	0.3 0.3 -0.3 0.0 - 0.5
Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene	0.6 0.0 -0.1 0.2 0.0	0.1 -0.1 0.0 0.0 0.5	0.2 -0.2 0.0 0.0 0.1	0.2 -0.1 0.1 0.0 -0.3		6.0 3.1 2.1	2.1 0.6 1.6 1.0	4.3 4.0 1.4 3.2 2.2	-0.2 -0.3 0.0 -0.4 0.1 - 0.4 0.5 -0.1 0.1	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3 -0.4 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3	-0.2 -0.5 -0.1 -0.2 -0.2 -0.5 -0.2 -0.3 -0.2 -0.2 -0.2	0.2 0.3 -0.1 0.2 -0.2 -0.9 -0.2 -0.3	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1	0.3 -0.3 0.0 -0.5 -8.7 1.1	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2
Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,1]perylene *Chrysene-trīphenylene *Benzo[b,j,k]fluoranthene	0.6 0.0 -0.1 0.2	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8	0.2 -0.2 0.0 0.0 0.1 -0.5	0.2 -0.1 0.1 0.0		6.0 3.1 2.1 8.4	2.1 0.6 1.6 1.0 2.1	4.3 4.0 1.4 3.2	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.5 -0.2 -0.3 -0.2	0.2 0.3 -0.1 0.2 - 0.2 -0.9 -0.2	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[e]pyrene Benzo[e]pyrene Benzo[a]pyrene Jindeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene En - scores in filters	0.6 0.0 -0.1 0.2 0.0 -0.1	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8	0.2 -0.2 0.0 0.0 0.1 -0.5 VIS	0.2 -0.1 0.1 0.0 -0.3 -0.8		6.0 3.1 2.1 8.4	2.1 0.6 1.6 1.0 2.1 VL	4.3 4.0 1.4 3.2 2.2 3.6	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE	-0.2 -0.5 -0.1 -0.2 -0.2 -0.3 -0.2 -0.3 -0.2 -0.2 -0.2 -0.1	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 -0.2 0.3
Benzo[b]fluoranthene Benzo[k]tuoranthene Benzo[k]tuoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene En - scores in filters En - scores	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA	0.2 -0.2 0.0 0.1 -0.5 VIS SCA	0.2 -0.1 0.1 0.0 -0.3 -0.8 SKA	SLB	6.0 3.1 2.1 8.4 SAA	2.1 0.6 1.6 1.0 2.1 VL SCA	4.3 4.0 1.4 3.2 2.2 3.6 SKA	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA	-0.2 -0.5 -0.1 -0.2 -0.2 -0.3 -0.2 -0.3 -0.2 -0.2 -0.1	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 SLB	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 JI SAA	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC SCA	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 0.3 SKA
Benzo[b]fluoranthene Benzo[k]luoranthene Benzo[k]luoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Benzo[b,j,k]fluoranthene En - scores in filters En - scores Phenanthrene	0.6 0.0 -0.1 0.2 0.0 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA 0.3	0.2 -0.2 0.0 0.0 0.1 -0.5 VIS SCA 0.2	0.2 -0.1 0.1 0.0 -0.3 -0.8 -0.8 -0.8	-0.9	6.0 3.1 2.1 8.4 SAA -1.1	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9	4.3 4.0 1.4 3.2 2.2 3.6 SKA -1.0	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB 1.3	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.1 -0.2 -0.1	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 SLB -0.1	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 JI SAA 0.5	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC SCA 0.2	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 0.3 SKA 0.0
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,]anthracene En-scores in filters En - scores in filters En - scores Phenanthrene Anthracene	0.6 0.0 -0.1 0.2 0.0 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8 HI SAA 0.3 0.7	0.2 -0.2 0.0 0.1 -0.5 MS SCA 0.2 0.7	0.2 -0.1 0.1 0.0 -0.3 -0.3 -0.3 -0.5 SKA 0.2 0.6	-0.9 -0.7	6.0 3.1 2.1 8.4 -1.1 -1.3	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9	4.3 4.0 1.4 3.2 2.2 3.6 SKA -1.0 -1.0	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB 1.3 1.1	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.5	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1 1.3	-0.2 -0.5 -0.1 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.1 -0.1 -0.1 -0.7 0.8	0.2 0.3 -0.1 0.2 -0.2 -0.3 0.3 SLB -0.1 0.3	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 JH SAA 0.5 0.4	0.3 0.3 -0.3 0.0 -0.5 -0.5 -0.5 -0.5 -8.7 1.1 0.3 RC SCA 0.2 0.1	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 -0.2 0.3 SKA 0.0 0.4
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b_j,k]fluoranthene En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.4 2.1	0.1 0.4 -0.1 0.0 0.5 -0.8 HI 0.3 0.7 2.3	0.2 -0.2 0.0 0.0 0.1 -0.5 VIS SCA 0.2 0.7 3.0	0.2 -0.1 0.1 0.0 -0.3 -0.8 SKA 0.2 0.6 3.0	-0.9 -0.7 -0.3	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 0.0	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 -0.5 -0.1 0.1 2.2	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1 1.3 -1.2	-0.2 -0.5 -0.1 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.1 SKA -0.7 0.8 -1.6	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 -0.1 0.3 0.4	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 <u>JI</u> SAA 0.5 0.4 0.2	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC 0.3 SCA 0.2 0.1 0.5	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 0.3 SKA 0.0 0.4 0.6
Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h,a]perylene *Benzo[b,j,k]fluoranthene En-scores in filters En-scores Phenanthrene Anthracene Fluoranthene Pyrene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.4 2.1 1.7	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0	0.2 -0.2 0.0 0.1 -0.5 VIS SCA 0.2 0.7 3.0 2.7	0.2 -0.1 0.0 -0.3 -0.8 SKA 0.2 0.6 3.0 2.8	-0.9 -0.7 -0.3 -0.6	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0	4.3 4.0 1.4 3.2 2.2 3.6 SKA -1.0 -1.0 0.0 0.0 -0.1	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB 1.3 1.1 1.2 2.2 1.7	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.5 5AA 0.5 1.2 0.5	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1 1.3 -1.2 -1.2	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 <u>SLB</u> -0.1 0.3 0.4 0.2	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 JH SAA 0.5 0.4 0.5 0.4 0.5 0.5	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC SCA 0.2 0.1 0.5 0.6	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 -0.2 -0.2 -0.3 -0.3 -0.4 0.0 0.4 0.6 0.7
Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	0.6 0.0 -0.1 0.2 0.0 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.4 2.1 1.7 0.9	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7	0.2 -0.2 0.0 0.0 0.1 -0.5 VIS SCA 0.2 0.7 3.0 2.7 2.5	0.2 -0.1 0.1 0.0 -0.3 -0.3 -0.8 	-0.9 -0.7 -0.3 -0.6 -0.6	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.5	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 -1.0 0.0 -0.1 0.0	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.1 -0.5 -0.1 0.1 -0.5 -0.5 -0.1 -0.5 -0.1 -1.2	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1 1.3 -1.2 -1.4	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.7 0.8 -1.6 -2.0 -2.1	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 -0.1 0.3 0.4	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 <u>JI</u> SAA 0.5 0.4 0.2	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC 0.3 SCA 0.2 0.1 0.5	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 0.3 SKA 0.0 0.4 0.6
Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[k]fluoranthene Benzo[e]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h,l]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene En - scores In filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.4 2.1 1.7 .9 1.2	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7 2.2	0.2 -0.2 0.0 0.1 -0.2 0.1 -0.7 3.0 2.7 2.5 2.0	0.2 -0.1 0.1 0.0 -0.3 -0.8 SKA 0.2 0.6 3.0 2.8 2.7 2.0	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.8 -0.5	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1	4.3 4.0 1.4 3.2 2.2 3.6 SKA -1.0 0.0 -0.1 0.0 0.1	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.1 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.6	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.1 -0.1 DE SCA 0.1 1.3 -1.2 -1.4 -1.0	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.7 -0.8 -1.6 -2.0 -2.1 -1.1	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 -0.1 0.3 0.4 0.2 0.1	0.4 0.3 -0.2 0.0 -0.6 -0.2 -0.1 0.3 <u>JI</u> SAA 0.5 0.4 0.2 0.5 0.4	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC 0.3 RC 0.3 0.2 0.1 0.5 0.6 -0.2	0.3 0.3 -0.3 -0.5 -0.8 -0.2 -0.2 -0.2 0.3 SKA 0.0 0.4 0.4 0.6 0.7 0.3
Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h,i]perylene **Benzo[b,j,k]fluoranthene En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	0.6 0.0 -0.1 0.2 0.0 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.4 2.1 1.7 0.9	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7	0.2 -0.2 0.0 0.0 0.1 -0.5 VIS SCA 0.2 0.7 3.0 2.7 2.5	0.2 -0.1 0.1 0.0 -0.3 -0.3 -0.8 	-0.9 -0.7 -0.3 -0.6 -0.6	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.5	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 -1.0 0.0 -0.1 0.0	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.1 -0.5 -0.1 0.1 -0.5 -0.5 -0.1 -0.5 -0.1 -1.2	-0.3 -0.4 -0.2 -0.1 -0.3 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1 1.3 -1.2 -1.4	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.7 0.8 -1.6 -2.0 -2.1	0.2 0.3 -0.1 0.2 -0.2 -0.3 0.3 <u>SLB</u> -0.1 0.3 0.4 0.2 0.1 1.5	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 UI SAA 0.5 0.4 0.2 0.5 0.4 0.4	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC 0.2 0.1 0.5 0.6 -0.2 0.3	0.3 0.3 -0.3 -0.5 -0.8 -0.2 -0.2 -0.2 0.3 SKA 0.0 0.4 0.6 0.7 0.3 0.7
Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,j,k]fluoranthene En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.4 2.1 1.7 0.9 1.2 1.0	0.1 0.4 -0.1 0.0 0.5 -0.8 MI SAA 0.3 0.7 2.3 2.0 1.7 2.2 1.1	0.2 -0.2 0.0 0.1 -0.5 VIS 0.2 0.7 3.0 0.2 0.7 2.5 2.0 1.8	0.2 -0.1 0.0 -0.3 -0.8 -0.8 -0.8 -0.8 -0.6 -0.6 -0.2 0.6 -0.2 -0.6 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.3 -0.3 -0.3 -0.8 -0.1 -0.3 -0.8 -0.3 -0.8 -0.3 -0.8 -0.8 -0.8 -0.8 -0.8 -0.8 -0.8 -0.8	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.5 -0.5 -0.5 -0.6	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 -0.1 0.0 0.1 0.3	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB 1.3 1.1 2.2 1.7 1.2 0.6 5.4	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.5 -0.5 -0.5 -0.2 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1 1.3 -1.2 -1.2 -1.4 -1.0 0.8	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.1 -0.7 0.8 -1.6 -2.0 -2.1 -1.1 0.7	0.2 0.3 -0.1 -0.2 -0.9 -0.2 -0.3 0.3 -0.1 0.3 0.4 0.2 0.1 1.5 -0.1	0.4 0.3 -0.2 -0.6 -0.2 -0.1 0.3 5AA 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.0	0.3 0.3 -0.3 -0.5 -0.5 -8.7 1.1 0.3 RC 0.2 0.1 0.5 0.6 -0.2 0.3 -0.2	0.3 0.3 -0.3 -0.5 -0.5 -0.8 -0.2 -0.2 -0.2 -0.2 -0.2 -0.3 -0.3 -0.4 0.0 0.4 0.6 0.7 0.3 0.7 0.1
Benzo[b]fluoranthene Benzo[]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h,1]perylene *Chrysene 4-Triphenylene *Benzo[b,i,k]fluoranthene En - scores In filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.2 0.2 0.2 1.7 0.9 1.2 1.0 5.8	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7 2.2 1.1 7.0	0.2 -0.2 0.0 0.1 -0.5 VIS 0.2 0.7 3.0 0.2 7 2.5 2.0 1.8 7.2	0.2 -0.1 0.1 0.0 -0.3 -0.8 -0.8 -0.8 -0.2 0.6 3.0 2.8 2.7 2.0 2.3 7.2	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.8 -0.5	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1	4.3 4.0 1.4 3.2 2.2 3.6 SKA -1.0 0.0 -0.1 0.0 0.1	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.1 -0.5 -0.1 0.1 -0.5 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.4 0.1 -0.4 0.1 -0.4 0.1 -0.4 0.1 -0.4 0.1 -0.4 0.5 -0.4 0.1 -0.4 0.5 -0.4 0.1 -0.4 0.5 -0.4 0.1 -0.4 0.5 -0.5 -0.1 -0.5 -0.5 -0.1 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.3 -0.2 -0.2 -0.1 -0.1 -0.1 -0.7 -0.8 -1.6 -2.0 -2.1 -1.1 0.7 -1.5	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 <u>SLB</u> -0.1 0.3 0.4 0.2 0.1 1.5 -0.1 0.9	0.4 0.3 -0.2 -0.6 -0.2 -0.1 0.3 0.5 0.4 0.2 0.5 0.4 0.4 0.4 0.0 0.5	0.3 0.3 -0.3 0.0 -0.5 -8.7 1.1 0.3 RC 0.3 0.2 0.1 0.5 0.6 -0.2 0.3 -0.2 0.1	0.3 0.3 -0.3 -0.5 -0.5 -0.2 -0.2 -0.2 -0.2 -0.2 -0.3 -0.3 -0.4 0.4 0.6 0.7 0.3 0.7 0.1 0.8
Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,a]nthracene Benzo[a,h,a]perylene **Benzo[b,j,k]fluoranthene En-scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.4 2.1 1.7 0.9 1.2 1.0 5.8 2.7	0.1 0.4 -0.1 0.0 0.0 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7 2.2 1.1 7.0 2.5	0.2 -0.2 0.0 0.1 -0.1 -0.2 0.7 2.5 2.0 1.8 7.2 2.0	0.2 -0.1 0.0 -0.3 -0.3 -0.3 -0.8 -0.2 0.6 3.0 2.8 2.7 2.0 2.3 7.2 1.9	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2 -0.6	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.8 -0.5 -0.5 -0.5 -0.6 -0.4	2.1 0.6 1.6 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3 0.4	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 -0.1 0.0 0.1 0.3 0.4	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.1 -0.5 -0.4 -0.4 -0.4 -0.4 -0.4 -0.4 -0.4 -0.4	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.5 -0.5	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 DE SCA 0.1 1.3 -1.2 -1.2 -1.4 -1.0 0.8 -0.9	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.7 -0.7 -2.0 -2.1 -1.1 -0.7 -1.5 -1.0	0.2 0.3 -0.1 0.2 -0.2 -0.3 0.3 -0.1 0.3 -0.1 0.3 0.4 0.2 0.1 1.5 -0.1 0.9 2.6	0.4 0.3 -0.2 -0.3 -0.6 -0.2 -0.1 0.3 0.5 0.4 0.5 0.4 0.2 0.5 0.4 0.5 1.3	0.3 0.3 -0.5 -0.5 -0.5 -0.5 0.3 RC 0.2 0.1 0.5 0.6 -0.2 0.3 -0.2 0.3 -0.2 0.3 -0.2 0.3	0.3 0.3 -0.3 -0.5 -0.5 -0.5 -0.2 -0.2 -0.2 -0.2 -0.2 -0.3 -0.3 -0.3 -0.6 0.7 0.3 -0.7 0.3 -0.7 0.1 0.8 1.0
Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a] pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h,i]perylene *Benzo[a,h,i]perylene *Benzo[b,j,k]fluoranthene En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene Benzo[a]anthracene Chrysene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.2 0.2 0.2 1.7 0.9 1.2 1.0 5.8	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7 2.2 1.1 7.0	0.2 -0.2 0.0 0.1 -0.5 VIS 0.2 0.7 3.0 0.2 7 2.5 2.0 1.8 7.2	0.2 -0.1 0.1 0.0 -0.3 -0.8 -0.8 -0.8 -0.2 0.6 3.0 2.8 2.7 2.0 2.3 7.2	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.5 -0.5 -0.5 -0.6	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 -0.1 0.0 0.1 0.3	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB 1.3 1.1 2.2 0.6 5.4 1.6 0.5 0.4	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.6 -0.2 -0.4 -0.1 -0.3 -0.1 -0.1 DE SCA 0.1 1.3 -1.2 -1.2 -1.4 -1.0 8 -1.3 -0.9 -1.0	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.3 -0.2 -0.2 -0.1 -0.1 -0.1 -0.7 -0.8 -1.6 -2.0 -2.1 -1.1 0.7 -1.5	0.2 0.3 -0.1 -0.2 -0.9 -0.2 -0.3 0.3 0.3 -0.1 0.3 0.4 -0.1 0.3 0.4 -0.1 0.2 0.1 1.5 -0.1 0.9 2.6 0.4	0.4 0.3 -0.2 -0.6 -0.2 -0.1 0.3 0.5 0.4 0.2 0.5 0.4 0.4 0.4 0.0 0.5	0.3 0.3 -0.5 -0.5 -0.5 -8.7 1.1 0.3 RC 0.2 0.1 0.5 0.6 -0.2 0.3 -0.2 0.3 -0.2 0.1 0.8 -0.3	0.3 0.3 -0.3 0.0 -0.5 -0.8 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.3 0.3 0.0 0.4 0.6 0.7 0.3 0.7 0.1 0.8 1.0 0.2
Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h,]anthracene Benzo[a,h,]anthracene *Benzo[b,j,k]fluoranthene *Benzo[b,j,k]fluoranthene Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.4 2.1 1.7 0.9 1.2 1.0 5.8 2.7 2.3	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7 2.2 1.1 7.0 2.5 2.8	0.2 -0.2 0.0 0.0 0.1 -0.5 SCA 0.2 0.2 0.2 3.0 2.7 2.5 2.0 1.8 7.2 2.0 2.0	0.2 -0.1 0.0 -0.3 -0.3 -0.3 -0.2 0.2 3.0 2.8 2.7 2.0 2.3 7.2 1.9 2.6	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2 -0.2 -0.6 0.2	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.5 -0.5 -0.6 -0.4 -0.1	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3 0.4 0.8	4.3 4.0 1.4 3.2 2.2 3.6 5KA -1.0 -0.0 0.0 -0.1 0.3 0.4 0.8	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 -0.5 -0.1 0.1 2.2 1.7 1.2 0.6 5.4 1.6 0.5 0.4 0.1	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.1 -0.3 -0.1 -0.1 -0.1 -0.3 -0.1 -0.1 -0.3 -0.1 -0.3 -0.1 -0.3 -0.1 -0.3 -0.1 -0.3 -0.1 -0.3 -0.3 -0.2 -0.4 -0.3 -0.2 -0.4 -0.2 -0.4 -0.2 -0.4 -0.2 -0.5 -0.2 -0.4 -0.2 -0.4 -0.2 -0.4 -0.2 -0.4 -0.2 -0.4 -0.2 -0.5 -0.2 -0.4 -0.1 -0.3 -0.1 -0.3 -0.2 -0.4 -0.1 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 -0.1 -0.3 -0.1 -0.1 -0.3 -0.1 -0.1 -0.3 -0.1 -0.1 -0.1 -0.3 -0.1 -0.1 -0.1 -0.1 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	0.2 0.3 -0.1 0.2 -0.2 -0.3 0.3 -0.3 0.3 -0.1 0.3 0.4 0.2 0.1 0.5 -0.1 0.9 2.6 0.4 0.0	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.0 0.5 0.4 0.2 0.0 0.5 0.1 0.5 0.0 0.5 0.0 0.5 0.0 0.5 0.0 0.0 0.0	0.3 0.3 -0.5 -0.5 -0.5 -0.5 -0.5 0.3 -0.2 0.3 -0.2 0.1 0.8 -0.2 0.1 0.8 -0.2 0.1 0.8 -0.3 -0.5	0.3 0.3 -0.5 -0.5 -0.8 -0.2 -0.2 0.3 SKA 0.0 0.4 0.6 0.7 0.3 0.7 0.1 0.8 1.0 0.2 0.5 SKA 0.0 0.4 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
Benzo[b]fluoranthene Benzo[i]fluoranthene Benzo[i]fluoranthene Benzo[i]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h,a]nthracene Benzo[a,h,i]perylene *Benzo[b,j,k]fluoranthene En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[a]ifluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.4 2.1 1.7 0.9 1.2 1.0 5.8 2.7 2.3 0.0	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7 2.2 1.1 7.0 2.5 2.8 -1.0	0.2 -0.2 0.0 0.1 -0.2 0.7 2.5 2.0 1.8 7.2 2.0 2.0 -2.5	0.2 -0.1 0.0 -0.3 -0.8 -0.2 0.6 3.0 2.8 2.7 2.0 2.3 7.2 1.9 2.6 -3.2	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2 -0.6 0.2 0.0	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.8 -0.8 -0.5 -0.6 -0.4 -0.4 -0.1 -0.5	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3 0.4 0.8 0.5	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -0.0 -0.1 0.0 0.1 0.3 0.4 0.8 0.3	-0.2 -0.3 0.0 -0.4 0.1 -0.5 -0.1 0.1 -0.5 SLB 1.3 1.1 2.2 1.7 1.2 2.0.6 5.4 1.6 0.5 0.4 0.1 4.2	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.1 -0.7 -0.7 0.8 -1.6 -2.0 -2.1 -1.1 0.7 -1.5 -1.0 -1.3 -0.3 -3.3	0.2 0.3 -0.1 0.2 -0.2 -0.3 0.3 -0.1 0.3 -0.1 0.3 -0.1 0.3 0.4 0.2 0.1 1.5 -0.1 0.9 2.6 0.4 0.9 2.6 0.4 0.9	0.4 0.3 -0.2 0.0 -0.3 -0.6 -0.2 -0.1 0.3 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.5 1.3 0.5 0.5 0.4 0.5 1.3 0.5 0.5 0.0	0.3 0.3 -0.5 -0.5 -0.5 -0.5 -0.5 0.6 -0.2 0.3 -0.2 0.3 -0.2 0.3 -0.2 0.3 -0.2	0.3 0.3 -0.3 -0.5 -0.5 -0.2 -0.2 0.3 5KA 0.0 0.4 0.6 0.7 0.3 0.7 0.3 0.7 0.3 0.7 0.1 0.8 1.0 0.2 0.5 -0.2 0.2 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene *Benzo[b,j,k]fluoranthene En - scores in filters En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]anthracene Chrysene Benzo[a]ifluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]rene Benzo[b]rene Benzo[b]pyrene Benzo[b]pyrene Dibenzo[a,h]anthracene	0.6 0.0 -0.1 0.2 0.0 -0.1 5LB 0.2 0.4 2.1 1.7 0.9 1.2 1.0 5.8 2.7 2.3 0.0 1.6	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA 0.7 2.3 0.7 2.3 1.7 2.2 1.1 7.0 2.5 2.8 -1.0 3.5	0.2 -0.2 0.0 0.1 -0.5 SCA 0.2 0.7 3.0 2.7 2.5 2.0 1.8 7.2 2.0 1.8 7.2 2.0 2.0 1.8	0.2 -0.1 0.0 -0.3 -0.8 SKA 0.2 0.6 3.0 2.8 2.7 2.0 2.3 7.2 1.9 2.6 -3.2 5.8	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2 -0.6 0.2 0.0 -0.3	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.5 -0.6 -0.4 -0.1 -0.5 -0.5 -0.4	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3 0.4 0.8 0.5 0.0	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 -0.1 0.0 0.0 0.1 0.3 0.4 0.8 0.3 0.1	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB 1.3 1.1 2.2 0.6 5.4 1.6 0.5 0.4 0.1 4.2 0.5	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.2 -0.1 -0.7 0.8 -1.6 -2.0 -2.1 -1.1 0.7 -1.5 -1.0 -1.3 -0.3 -0.3 -0.3 -0.3 -0.3 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 -0.1 0.3 0.4 0.2 0.1 -0.1 0.4 0.2 0.1 1.5 -0.1 0.9 -0.2 -0.3 -0.2 -0.3 -0.2 -0.3 -0.2 -0.3 -0.2 -0.3 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.3 -0.1 -0.2 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.2 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	0.4 0.3 -0.2 -0.3 -0.6 -0.2 -0.1 0.3 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.3 0.3 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.2 0.1 0.5 -0.2 0.1 0.6 -0.2 0.3 -0.2 0.3 -0.2 0.3 -0.2 0.3 -0.2 0.6	0.3 0.3 -0.3 -0.5 -0.8 -0.2 -0.2 -0.2 -0.2 -0.2 -0.3 -0.3 0.7 0.3 0.7 0.1 0.8 -0.2 -0.2 -0.3 -0.4 0.0 0.4 0.6 0.7 0.3 0.7 0.1 1.3
Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]apyrene *Benzo[b,j,k]fluoranthene En - scores in filters En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	0.6 0.0 -0.1 0.2 0.0 -0.1 SLB 0.2 0.4 2.1 1.7 0.9 1.2 1.0 5.8 2.7 2.3 0.0	0.1 0.4 -0.1 0.0 0.0 0.5 -0.8 HI SAA 0.3 0.7 2.3 2.0 1.7 2.2 1.1 7.0 2.5 2.8 -1.0	0.2 -0.2 0.0 0.1 -0.2 0.7 2.5 2.0 1.8 7.2 2.0 2.0 -2.5	0.2 -0.1 0.0 -0.3 -0.8 -0.2 0.6 3.0 2.8 2.7 2.0 2.3 7.2 1.9 2.6 -3.2	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2 -0.6 0.2 0.0	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.8 -0.8 -0.8 -0.5 -0.6 -0.4 -0.4 -0.1 -0.5	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3 0.4 0.8 0.5	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -0.0 -0.1 0.0 0.1 0.3 0.4 0.8 0.3	-0.2 -0.3 0.0 -0.4 0.1 -0.5 -0.1 0.1 -0.5 SLB 1.3 1.1 2.2 1.7 1.2 2.0.6 5.4 1.6 0.5 0.4 0.1 4.2	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.1 -0.1 -0.1 -0.7 -0.7 0.8 -1.6 -2.0 -2.1 -1.1 0.7 -1.5 -1.0 -1.3 -0.3 -3.3	0.2 0.3 -0.1 0.2 -0.2 -0.3 0.3 -0.3 0.3 -0.1 0.3 0.4 0.2 0.1 0.5 -0.1 0.9 2.6 0.4 0.0 0.2 3.0 0.3	0.4 0.3 -0.2 0.0 -0.3 -0.4 0.2 -0.1 0.3 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.5 0.4 0.2 0.0 0.5 0.4 0.2 0.0 0.5 0.4 0.2 0.0 0.5 0.2 0.0 0.5 0.2 0.0 0.5 0.2 0.0 0.5 0.2 0.0 0.5 0.2 0.0 0.5 0.2 0.0 0.5 0.2 0.0 0.5 0.2 0.0 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	0.3 0.3 -0.5 -0.5 -0.5 -0.5 -0.5 0.3 RC 0.2 0.3 -0.2 0.1 0.8 -0.2 0.1 0.8 -0.2 0.1 0.8 -0.2 0.1 0.8 -0.2 0.1 0.8 -0.2 0.1 0.2 -0.2 0.2 -0.5 -0	0.3 0.3 -0.5 -0.5 -0.2 -0.2 0.3 5KA 0.0 0.4 0.6 0.7 0.3 0.7 0.1 0.8 1.0 0.2 0.3 0.7 0.1 0.8 1.0 0.5 -0.1 1.3 0.5
Benzo[b]fluoranthene Benzo[J]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene *Benzo[b,j,k]fluoranthene En - scores in filters En - scores in filters En - scores Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[a]anthracene Chrysene Benzo[a]ifluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]rene Benzo[b]rene Benzo[b]pyrene Benzo[b]pyrene Dibenzo[a,h]anthracene	0.6 0.0 -0.1 0.2 0.0 -0.1 5LB 0.2 0.4 2.1 1.7 0.9 1.2 1.0 5.8 2.7 2.3 0.0 1.6	0.1 0.4 -0.1 0.0 0.5 -0.8 HI SAA 0.7 2.3 0.7 2.3 1.7 2.2 1.1 7.0 2.5 2.8 -1.0 3.5	0.2 -0.2 0.0 0.1 -0.5 SCA 0.2 0.7 3.0 2.7 2.5 2.0 1.8 7.2 2.0 1.8 7.2 2.0 2.0 1.8	0.2 -0.1 0.0 -0.3 -0.8 SKA 0.2 0.6 3.0 2.8 2.7 2.0 2.3 7.2 1.9 2.6 -3.2 5.8	-0.9 -0.7 -0.3 -0.6 -0.6 -0.5 -0.2 -0.6 0.2 0.0 -0.3	6.0 3.1 2.1 8.4 -1.1 -1.3 -0.8 -0.5 -0.6 -0.4 -0.1 -0.5 -0.5 -0.4	2.1 0.6 1.6 1.0 2.1 VL SCA -0.9 -0.9 0.1 0.0 0.1 0.1 0.3 0.4 0.8 0.5 0.0	4.3 4.0 1.4 3.2 2.2 3.6 -1.0 -1.0 -0.1 0.0 0.0 0.1 0.3 0.4 0.8 0.3 0.1	-0.2 -0.3 0.0 -0.4 0.1 -0.4 0.5 -0.1 0.1 -0.5 SLB 1.3 1.1 2.2 0.6 5.4 1.6 0.5 0.4 0.1 4.2 0.5	-0.3 -0.4 -0.2 -0.1 -0.3 -0.4 -0.3 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	-0.3 -0.6 -0.2 -0.3 -0.2 -0.4 -0.1 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	-0.2 -0.5 -0.1 -0.2 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.2 -0.1 -0.7 0.8 -1.6 -2.0 -2.1 -1.1 0.7 -1.5 -1.0 -1.3 -0.3 -0.3 -0.3 -0.3 -0.3 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	0.2 0.3 -0.1 0.2 -0.9 -0.2 -0.3 0.3 -0.1 0.3 0.4 0.2 0.1 -0.1 0.4 0.2 0.1 1.5 -0.1 0.9 -0.2 -0.3 -0.2 -0.3 -0.2 -0.3 -0.2 -0.3 -0.2 -0.3 -0.2 -0.2 -0.3 -0.2 -0.2 -0.2 -0.3 -0.1 -0.2 -0.2 -0.3 -0.2 -0.2 -0.3 -0.1 -0.2 -0.2 -0.3 -0.1 -0.2 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.2 -0.3 -0.1 -0.1 -0.1 -0.2 -0.3 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	0.4 0.3 -0.2 -0.3 -0.6 -0.2 -0.1 0.3 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.4 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.3 0.3 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.2 0.1 0.5 -0.2 0.1 0.6 -0.2 0.3 -0.2 0.3 -0.2 0.3 -0.2 0.3 -0.2 0.6	0.3 0.3 -0.3 -0.5 -0.8 -0.2 -0.2 -0.2 -0.2 -0.2 -0.3 -0.3 0.7 0.3 0.7 0.1 0.8 -0.2 -0.2 -0.2 -0.2 -0.3 -0.4 -0.5 -0.4 -0.5 -0.4 -0.5 -0.4 -0.5 -0.4 -0.5 -

En-scores ≥ 1 are highlighted in red

Table 15 - Overall expanded uncertainty

OEU in Filters		ALL	ENVS			IMF	ROH			LAN	IIIV			SE	FΔ	
OEU, %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene																
Anthracene																
Fluoranthene	60.9	57.3	39.9	42.3	27.9	21.0	20.7	31.5								
Pyrene	67.7	57.6	41.7	41.4	32.8	29.7	25.9	24.6								
Benzo[a]anthracene	116.0	71.5	81.2	47.2	20.0	17.9	20.8	18.1	38.4	34.2	33.8	31.8	44.2	42.1	41.5	45.8
Chrysene					20.4	25.9	24.4	18.9								
Benzo[b]fluoranthene					17.4	18.8	25.9	21.7	11.7	19.7	9.0	9.0				
Benzo[j]fluoranthene					19.7	16.7	20.2	15.0	44.3	63.0	51.6	48.8				
Benzo[k]fluoranthene	46.4	33.0	39.0	41.6	25.1	18.1	20.0	18.2	29.3	33.2	29.2	26.3				
Benzo[e]pyrene Benzo[a]pyrene	40.4 59.8	36.8	43.4	34.0	60.2	53.3	47.1	44.8	33.0	30.8	29.0	28.6	30.1	29.3	39.0	38.7
Perylene	47.4	48.7	40.1	44.8	00.2	33.3	47.1	44.0	33.0	30.8	23.0	20.0	30.1	29.3	39.0	30.7
Indeno[1,2,3,-c,d]pyrene	56.7	65.5	49.9	69.2	21.7	27.1	29.2	21.3	16.8	22.6	18.7	16.6	31.8	31.9	31.8	34.1
Dibenzo[a,h]anthracene		138.8	93.1	87.1	24.5	17.2	35.0	37.9	110.9	111.8	82.4	74.0			79.2	77.3
Benzo[g,h,i]perylene	63.4	43.4	44.4	47.4	22.5	31.4	35.2	30.6								
*Chrysene+Triphenylene		59.5	46.6	42.7												
*Benzo[b.j,k]fluoranthene	33.8	24.8	39.5	37.8	14.6	18.4	30.6	22.8	15.8	20.0	25.1	22.5	27.0	29.0	25.4	30.1
OEU in Filters		CH	IMI			INE	RIS			LEG	IMC			U	BA	
OEU, %	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	34.8	61.9	48.5	37.3										59.9	46.5	69.6
Anthracene	61.7	31.0	52.0	51.4		ar -								44.3	40.9	50.1
Fluoranthene	38.1	41.7	34.2	32.2	35.1	32.2	47.7	53.7	50.4	38.1	49.1	33.2	51.4	37.8	43.8	49.2
Pyrene	30.7	27.7	29.1	27.2	14.2	37.8	49.9	48.1	37.0	34.1	44.2	34.1	59.0	62.7	48.6	36.4
Benzo[a]anthracene Chrysene	34.0 40.4	39.4 29.3	35.8 36.2	39.5 33.2	33.7	13.4 71.9	22.7 56.2	23.1 39.2	83.4 52.8	62.1 56.7	96.0 62.6	64.5 62.6	35.6 64.2	34.9 68.9	41.8 67.5	38.9 69.4
Benzo[b]fluoranthene	40.4 31.3	29.3 41.4	36.2	33.2 31.3	33.7	21.3	42.1	23.3	52.8 79.1	46.0	40.3	45.1	40.6	51.7	49.5	49.1
Benzo[j]fluoranthene	27.9	41.4	34.3 30.9	29.4	33.8 185.6	21.3 115.8	42.1 147.5	23.3 133.9	73.1	40.0	40.5	40.I	40.6	45.8	49.5	49.1 37.3
Benzo[k]fluoranthene	26.9	33.9	30.6	31.8		10.0	14.0	14.8	93.0	72.9	64.8	61.0	35.0	35.2	35.5	36.2
Benzo[e]pyrene	38.8	42.5	45.3	46.3		31.5	27.0	29.2					48.3	44.7	42.5	38.7
Benzo[a]pyrene	30.6	23.5	36.5	28.0	10.3	10.1	14.8	12.5	47.3	53.8	67.7	67.3	37.0	42.6	33.6	35.1
Perylene	74.8	28.0	24.4	26.7			47.7	52.0								
Indeno[1,2,3,-c,d]pyrene	31.1	28.5	27.3	27.8		18.1	19.3	14.0	65.5	57.5	52.1	47.4	59.6	41.0	43.7	41.9
Dibenzo[a,h]anthracene	92.8	89.7	92.9	110.3	963.9	933.0	922.1	1173.9				132.3		75.5	75.1	67.2
Benzo[g,h,i]perylene	39.0	36.7	39.0	35.5	30.8	26.4	24.6	13.0	38.7	39.1	49.3	48.3	81.2	80.0	70.2	74.3
*Chrysene+Triphenylene																
*Benzo[b.j,k]fluoranthene	17.6	22.9	27.8	26.9	46.7	52.6	80.3	62.7	29.5	19.8	20.2	20.9	22.1	20.9	26.2	22.2
OEU in Filters		FI	MI			ISC	CIII			NI	LU			VN	лм	
OEU in Filters OEU, %	SLB	FI SAA	VII SCA	SKA	46.7 SLB	IS(SAA		SKA	SLB	NI SAA	LU SCA	SKA	22.1 SLB			22.2 SKA
OEU in Filters OEU, % Phenanthrene	SLB 204.6	FI SAA 185.9	VII SCA 190.4	SKA 200.7		ISC	CIII			NI	LU SCA 42.7	SKA 63.9		VN	лм	
OEU in Filters OEU, % Phenanthrene Anthracene	SLB 204.6 104.6	Fl SAA 185.9 66.2	MI SCA 190.4 53.5	SKA 200.7 54.7		ISC SAA 48.9	SCA	SKA 63.4	SLB 54.3	NI SAA 47.8	LU SCA 42.7 87.2	SKA 63.9 90.0	SLB	VN SAA	MM SCA	SKA
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene	SLB 204.6 104.6 87.9	FI SAA 185.9 66.2 68.9	MI SCA 190.4 53.5 41.2	SKA 200.7 54.7 38.6		ISC SAA 48.9 272.3	SCA 150.1	SKA 63.4 188.5	SLB 54.3 42.5	NI SAA 47.8 39.3	LU SCA 42.7 87.2 40.6	SKA 63.9 90.0 45.2	SLB 57.3	VN SAA 60.7	MM SCA 50.7	SKA 48.5
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene	SLB 204.6 104.6	Fl SAA 185.9 66.2	MI SCA 190.4 53.5	SKA 200.7 54.7		ISC SAA 48.9	SCA	SKA 63.4 188.5 96.0	SLB 54.3	NI SAA 47.8	LU SCA 42.7 87.2	SKA 63.9 90.0	SLB	VN SAA	MM SCA	SKA
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene	SLB 204.6 104.6 87.9 167.5	Fl SAA 185.9 66.2 68.9 101.5	MI SCA 190.4 53.5 41.2 43.3	SKA 200.7 54.7 38.6 42.1		ISC SAA 48.9 272.3 119.1	SCA 150.1 82.6	SKA 63.4 188.5	SLB 54.3 42.5 48.0	NI SAA 47.8 39.3 49.5	LU SCA 42.7 87.2 40.6 49.1	SKA 63.9 90.0 45.2 50.4	SLB 57.3 52.5	VN SAA 60.7 59.1	MM SCA 50.7 54.6	SKA 48.5 54.1
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene	SLB 204.6 104.6 87.9 167.5	FI SAA 185.9 66.2 68.9 101.5	MI SCA 190.4 53.5 41.2 43.3	SKA 200.7 54.7 38.6 42.1		ISC SAA 48.9 272.3 119.1 50.5	CIII SCA 150.1 82.6 46.1	SKA 63.4 188.5 96.0 25.8	SLB 54.3 42.5 48.0 53.6	NI SAA 47.8 39.3 49.5 53.4	LU SCA 42.7 87.2 40.6 49.1 52.0	SKA 63.9 90.0 45.2 50.4 27.7	SLB 57.3 52.5 78.8	VN SAA 60.7 59.1 70.5	MM SCA 50.7 54.6 75.8	SKA 48.5 54.1 73.6
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene	SLB 204.6 104.6 87.9 167.5	FI SAA 185.9 66.2 68.9 101.5	MI SCA 190.4 53.5 41.2 43.3	SKA 200.7 54.7 38.6 42.1		ISC SAA 48.9 272.3 119.1 50.5	CIII SCA 150.1 82.6 46.1	SKA 63.4 188.5 96.0 25.8	SLB 54.3 42.5 48.0 53.6 34.6	NI SAA 47.8 39.3 49.5 53.4 33.4	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9	SKA 63.9 90.0 45.2 50.4 27.7 35.5	SLB 57.3 52.5 78.8 62.8	VN SAA 60.7 59.1 70.5 75.1	VIM SCA 50.7 54.6 75.8 65.2	SKA 48.5 54.1 73.6 69.2
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene	SLB 204.6 104.6 87.9 167.5	FI SAA 185.9 66.2 68.9 101.5	MI SCA 190.4 53.5 41.2 43.3	SKA 200.7 54.7 38.6 42.1		ISC SAA 48.9 272.3 119.1 50.5	CIII SCA 150.1 82.6 46.1	SKA 63.4 188.5 96.0 25.8	SLB 54.3 42.5 48.0 53.6 34.6 44.6	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1	SLB 57.3 52.5 78.8 62.8 143.2	60.7 59.1 70.5 75.1 129.9	MM SCA 50.7 54.6 75.8 65.2 129.2	5KA 48.5 54.1 73.6 69.2 130.7
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene	SLB 204.6 104.6 87.9 167.5 96.2	FI SAA 185.9 66.2 68.9 101.5 91.6	VI SCA 190.4 53.5 41.2 43.3 77.4	SKA 200.7 54.7 38.6 42.1 76.7		ISC SAA 48.9 272.3 119.1 50.5	SCA SCA 150.1 82.6 46.1 61.2	SKA 63.4 188.5 96.0 25.8 109.6 1077.8	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 52.5 41.6	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1	57.3 52.5 78.8 62.8 143.2 103.4 123.6	00.7 59.1 70.5 75.1 129.9 109.8 96.3	VIM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6	5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene	SLB 204.6 104.6 87.9 167.5	FI SAA 185.9 66.2 68.9 101.5	MI SCA 190.4 53.5 41.2 43.3	SKA 200.7 54.7 38.6 42.1		ISC SAA 48.9 272.3 119.1 50.5	CIII SCA 150.1 82.6 46.1	SKA 63.4 188.5 96.0 25.8 109.6	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 52.5 41.6 59.0	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1 65.4 40.1	SLB 57.3 52.5 78.8 62.8 143.2 103.4	60.7 59.1 70.5 75.1 129.9 109.8	AIM SCA 50.7 54.6 75.8 65.2 129.2 112.2	SKA 48.5 54.1 73.6 69.2 130.7 111.8
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Penylene	SLB 204.6 104.6 87.9 167.5 96.2 112.8	FI SAA 185.9 66.2 68.9 101.5 91.6	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1	SKA 200.7 54.7 38.6 42.1 76.7 49.5		IS(SAA 48.9 272.3 119.1 50.5 131.1	SCA SCA 150.1 82.6 46.1 61.2 65.1	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 52.5 41.6 59.0 55.5	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8	57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9	00.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7	MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1	VII SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7		ISC SAA 48.9 272.3 119.1 50.5	SCA SCA 150.1 82.6 46.1 61.2	SKA 63.4 188.5 96.0 25.8 109.6 1077.8	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 52.5 47.8 52.5 41.6 59.0 55.5 52.1	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 48.6 58.5 40.4 69.2 47.7 53.1	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 <th< td=""><td>57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4</td><td>VM SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6</td><td>MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2</td><td>48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6</td></th<>	57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4	VM SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6	MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2	48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0		IS(SAA 48.9 272.3 119.1 50.5 131.1	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 73.0 43.4	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 52.5 41.6 59.0 55.5 52.1 91.6	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 50.8 76.5 50.8 76.5 50.8 76.5 50.8 76.5 76.5 <th< td=""><td>SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9</td><td>VM SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2</td><td>MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7</td><td>5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8</td></th<>	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9	VM SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2	MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7	5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[j]fluoranthene Benzo[j]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a,h]anthracene Benzo[a,h]aprene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1		IS(SAA 48.9 272.3 119.1 50.5 131.1	SCA SCA 150.1 82.6 46.1 61.2 65.1	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 52.5 47.8 52.5 41.6 59.0 55.5 52.1	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 48.6 58.5 40.4 69.2 47.7 53.1	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 <th< td=""><td>57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4</td><td>VM SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6</td><td>MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2</td><td>48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6</td></th<>	57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4	VM SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6	MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2	48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene *Chrysene+Triphenylene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5	VII SCA 190.4 53.5 41.2 43.3 77.4 43.3 77.4 43.1 41.8 30.9 22.5	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3		150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3	SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 52.5 41.6 59.0 55.5 52.1 91.6 32.1	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7	AM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6	5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]flooranthene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1		IS(SAA 48.9 272.3 119.1 50.5 131.1	SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 73.0 43.4	NI SAA 47.8 39.3 49.5 53.4 47.5 47.8 52.5 41.6 59.0 55.5 52.1 91.6 32.1 26.6	U SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 50.8 76.5 50.8 76.5 50.8 76.5 50.8 76.5 76.5 76.5 <th< td=""><td>SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9</td><td>VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9</td><td>MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2</td><td>SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8</td></th<>	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9	MM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h],k]fluoranthene OEU in Filters	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 MS	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3		ISC SAA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5	SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 /L	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0	NI SAA 47.8 39.3 49.5 53.4 47.5 53.4 47.5 52.5 41.6 59.0 55.5 52.1 91.6 32.1 26.6 000	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 20.1 <th2< td=""><td>SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0</td><td>VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF</td><td>AM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 30</td><td>5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9</td></th2<>	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF	AM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 30	5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Benzo[b,j,k]fluoranthene OEU in Filters OEU, %	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 48.1 41.8 30.9 22.5 46.1 WS SCA	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 SKA	SLB	ISC SAA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 1 1 579.5	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 /L SCA	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA	SLB 54.3 42.5 48.0 53.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB	NI SAA 47.8 39.3 49.5 53.4 47.5 47.8 52.5 41.6 59.0 55.5 52.1 91.6 32.1 26.6 00 SAA	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 40.1 65.4 47.8 50.8 31.2 24.0 SKA	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA	M SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 RC SCA	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 SKA
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h],k]fluoranthene OEU in Filters	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 60.7	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 MS	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7	SLB	ISC SAA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5	SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 /L	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0	NI SAA 47.8 39.3 49.5 53.4 47.5 53.4 47.5 52.5 41.6 59.0 55.5 52.1 91.6 32.1 26.6 000	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0 20.1 <th2< td=""><td>SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2</td><td>VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF</td><td>AM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 30</td><td>5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1</td></th2<>	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF	AM SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 30	5KA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h,i]perylene *Benzo[b,j,k]fluoranthene OEU in Filters OEU, %	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI 50.6	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 MS SCA 106.4	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 SKA 76.7	SLB SLB SLB 65.1	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 1 1 1 725.5 1 1 1 1 725.5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 /L SCA 56.6	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9	SLB 54.3 42.5 48.0 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2	NI SAA 47.8 39.3 49.5 53.4 47.5 47.8 52.5 47.8 52.5 47.8 59.0 55.5 52.1 91.6 32.1 26.6 00 55.4	LU SCA 42.7 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 54.0 55.8 35.2 36.2	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6	AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 89.5 80.5 SCA 17.3	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 SKA 10.0
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Perylene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h,]arthracene Benzo[a,h,]arthracene Benzo[a,h,]arthracene Benzo[b,j,k]fluoranthene OEU in Filters OEU, %	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4	MI SCA 1904 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 VIS SCA 308.9	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 SKA 76.7 256.8	SLB SLB SLB 65.1 106.8	150 SAA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 IX SAA 67.7 97.1	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 /L SCA 56.6 84.4	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 5KA 61.9 84.2 2	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9	NI SAA 47.8 39.3 49.5 53.4 47.8 33.4 47.5 47.8 52.5 41.6 59.0 55.2 1 91.6 32.1 91.6 32.1 26.6 00 SAA 25.1 99.3	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 50.8 50.8 50.8 51.2 24.0 5KA 22.9 48.9 24.9 2	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3	AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 3C SCA 17.3 28.4	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 SKA 10.0 32.5
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]arthracene Benzo[a,h]arthracene Benzo[a,h]aptriene *Chrysene+Triphenylene *Benzo[a,k]fluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4 118.4 104.5 S252.2	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 189.9	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 VIS SCA 106.4 308.9 107.8 100.0 111.6	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 5KA 76.7 256.8 98.6 92.9 9106.6	SLB SLB 65.1 106.8 28.1 33.5 59.9	150 SAA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 IV SAA 67.7 97.1 35.4	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 7/ SCA SCA 84.4 22.1 20.1 20.1 44.4	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 23.0 26.1	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 53.5 41.6 59.0 55.5 52.1 91.6 32.1 26.6 00 55.5 52.1 91.6 32.1 26.6 00 54.4 25.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6	SKA G3.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 5KA 22.9 48.9 17.9 19.9 23.9 2	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4	AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 3C SCA 17.3 28.4 26.3	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 SKA 10.0 32.5 21.5
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[c]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Dibenzo[a,h]anthracene Benzo[c],h.j]perylene *Chrysene+Triphenylene *Benzo[c],k,lfluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Eluoranthene Pyrene Benzo[a]anthracene Chrysene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4 118.4 104.5 252.2 116.5	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 189.9 115.5	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 MS SCA 106.4 308.9 107.8 100.6 87.1	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 SKA 76.7 55.8 98.6 92.9 106.6 85.7	SLB SLB 55.1 106.8 28.1 33.5 59.9 45.7	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 IV SAA 67.7 97.1 35.4 36.5 58.8 43.9	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 /L SCA 56.6 84.4 22.1 20.1 44.4 35.5	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9 34.9	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 23.0 26.1 27.4	NI SAA 47.8 39.3 49.5 53.4 47.5 47.8 53.4 47.5 47.8 53.4 47.5 47.8 53.4 47.5 53.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1	LU SCA 42.7 40.6 49.1 52.0 38.9 50.9 48.6 58.5 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 40.1 65.4 47.8 50.8 76.5 31.2 24.0 50.8 76.5 31.2 24.0 50.8 76.5 31.2 24.0 50.8 76.5 31.2 24.0 23.9 23.9 23.9 23.9 23.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9 26.9 27.9 <th2< td=""><td>SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.4 19.8 52.5 11.4 11.4</td><td>VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4</td><td>AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 RC 89.5 RC 17.3 28.4 26.3 26.9 16.9</td><td>SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 5KA 10.0 32.5 21.5 21.5 21.2 14.0</td></th2<>	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.4 19.8 52.5 11.4 11.4	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4	AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 RC 89.5 RC 17.3 28.4 26.3 26.9 16.9	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 5KA 10.0 32.5 21.5 21.5 21.2 14.0
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene *Chrysene+Triphenylene *Chrysene+Triphenylene *Enzo[b,j,k]fluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Guoranthene Pyrene Benzo[a]anthracene Benzo[b]fluoranthene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4 118.4 104.5 S252.2	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 189.9	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 VIS SCA 106.4 308.9 107.8 100.0 111.6	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 5KA 76.7 256.8 98.6 92.9 9106.6	SLB SLB 65.1 106.8 28.1 33.5 59.9	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 1 5.4 36.5 58.8	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 7/ SCA SCA 84.4 22.1 20.1 20.1 44.4	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 23.0 26.1	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 53.5 41.6 59.0 55.5 52.1 91.6 32.1 26.6 00 55.5 52.1 91.6 32.1 26.6 00 54.4 25.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1 91.6 32.1	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6	SKA G3.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 5KA 22.9 48.9 17.9 19.9 23.9 2	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8 18.0 11.4 30.4 30.4	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9	AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 RC SCA 17.3 28.4 26.3 26.9 16.9 19.1	SKA 48.5 54.1 73.6 669.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 SKA 10.0 32.5 21.5 21.5 21.5 21.5
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h,i]perylene *Benzo[a,h,i]hanthracene Benzo[a,h,i]hanthracene Benzo[a,h,i]hanthracene Benzo[a,h,i]hanthracene *Benzo[b,j,k]fluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4 118.4 5 252.2 116.5 88.8	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 1059.6 479.4 125.0 479.4 125.5 49.6	MI SCA 190.4 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 MS SCA 106.4 308.9 107.6 87.1 51.4	SKA 200.7 54.7 38.6 42.1 76.7 31.1 49.5 45.7 45.7 74.0 31.1 26.3 50.7 26.8 98.6 92.9 106.6 85.7 59.4 39.4	SLB SLB SLB 65.1 106.8 28.1 106.8 28.1 133.5 59.9 45.7 35.7	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 1 724.4 474.3 579.5 1 1 1 1 1 1 1 1 1 1 1 1 1	SCA SCA SCA SCA SCA SCA SCA SCA SCA SCA	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 5KA 61.9 84.2 20.3 21.6 40.9 34.9 39.3 39.3	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 22.0 26.1 27.4 87.2	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 53.4 47.5 47.8 52.5 41.6 59.0 55.5 52.1 91.6 32.1 26.6 00 55.1 99.3 14.9 0.6 14.3 12.3 32.7	LU SCA 42.7 47.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4 12.2	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 77.5 31.2 20.6 76.5 31.2 24.0 24.0 22.9 48.9 17.9 23.9 25.9 8.6 66	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8 18.0 11.4 30.4 10.5	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9 13.1	AM SCA SCA SCA SCA SCA SCA SCA SCA	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 SKA 10.0 32.5 21.5 11.2
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]fluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4 118.4 104.5 88.8 449.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 179.4 125.0 114.9 189.9 115.5 49.6 353.8	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 WS SCA 106.4 308.9 107.8 100.7 87.1 51.4 339.0	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 256.8 98.6 92.9 106.6 85.7 59.4 340.0	SLB SLB 55.1 106.8 28.1 33.5 59.9 45.7	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 IV SAA 67.7 97.1 35.4 36.5 58.8 43.9	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 /L SCA 56.6 84.4 22.1 20.1 44.4 35.5	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9 34.9	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 23.0 26.1 27.4 87.2 42.7	NI SAA 47.8 39.3 49.5 53.4 47.8 53.4 47.5 53.4 47.5 52.5 41.6 59.0 55.5 41.6 59.0 52.1 91.6 32.1 26.6 00 54.4 25.1 26.6 00 54.4 25.1 14.9 10.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.4 31.6 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.6 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31.1 31	LU SCA 42.7 87.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 50.9 48.6 58.5 50.9 48.6 58.5 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4 12.2	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 24.0 24.0 22.9 48.9 17.9 19.9 23.9 25.9 8.6 18.2	SLB 57.3 52.5 78.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8 11.4 30.4 10.5 25.2	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9 17.4	AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 32 C SCA 17.3 28.4 26.3 26.9 16.9 19.1 16.4 13.7	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 5KA 10.0 32.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 2
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h,k]fluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]prene	SLB 204.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 5LB 135.3 421.4 118.4 104.5 252.2 116.5 88.8 449.3 118.7	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 189.9 115.5 49.6 353.8 83.8	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 MS SCA 106.4 308.9 107.8 100.0 111.6 87.1 51.4 339.0 78.7	SKA 200.7 54.7 54.7 38.6 42.1 76.7 49.5 45.7 45.7 74.0 31.1 26.3 50.7 256.8 98.6 92.9 106.6 85.7 59.4 340.0 81.6	SLB SLB SLB 55.1 33.5 59.9 45.7 35.7 32.9	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 IN 579.5 IN 57.4 35.4 35.4 35.5 58.8 43.9 48.9 28.0	SCA SCA SCA SCA SCA SCA SCA SCA SCA SCA	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9 34.9 39.3 29.1	SLB 54.3 42.5 48.0 53.6 34.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 39.8 23.0 26.1 27.9 39.8 23.0 26.1 27.4 87.2 42.7 28.8	NI SAA 47.8 39.3 49.5 53.4 47.5 47.8 52.5 41.6 59.0 55.7 41.6 59.0 55.7 11.6 32.1 26.6 00 55.7 14.9 10.6 14.9 10.6 14.9 10.6 14.9 10.6 14.9 10.6 14.9 10.6 14.9 10.6 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11.911.9	LU SCA 42.7 47.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4 12.2 13.4 36.5	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 40.1 65.4 47.8 50.8 76.5 31.2 24.0 55.4 99.9 99.9 99.9 99.9 23.9 8.6 17.9 19.9 22.5.9 8.6 18.2 45.2 45.2 45.2	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8 18.0 11.4 30.4 10.5 25.2 182.7	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9 13.1 15.5 81.8	AM SCA SCA SCA SCA SCA SCA 17.3 SCA 17.3 SCA 17.3 SCA 17.3 28.4 26.3 26.9 16.9 19.1 16.4 13.7 68.2	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 5XA 10.0 32.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 2
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OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]antracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]intprisene *Benzo[a,h,i]tuoranthene *Benzo[a,b,i]tuoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Benzo[b]pyrene Benzo[b]pyrene Perylene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4 118.4 104.5 88.8 449.3 118.7 132.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 189.9 115.5 49.6 353.8 83.8 87.2	VII SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 VIS SCA 106.4 308.9 107.8 100.0 111.6 87.1 51.4 339.0 78.7 59.7	SKA 200.7 54.7 54.7 38.6 42.1 76.7 49.5 45.7 45.7 74.0 31.1 26.3 50.7 256.8 98.6 92.9 106.6 85.7 59.4 340.0 81.6 73.0	SLB SLB 65.1 106.8 28.1 33.5 59.9 45.7 35.7 32.9 24.0	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 1 724.4 474.3 579.5 1 1 5.4 36.4 36.5 58.8 43.9 48.9 28.0 22.1	SCA SCA 150.1 82.6 46.1 61.2 65.1 245.4 97.5 146.5 7 146.5 7 146.5 7 146.5 55.6 84.4 22.1 20.1 20.1 44.4 35.5 42.2 29.5 44.3	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9 34.9 39.3 29.1 42.4	SLB 54.3 42.5 48.0 53.6 44.6 40.6 42.5 34.6 44.6 40.6 42.7 28.8 27.4 87.2 42.7 28.8 27.4 87.2 42.7 28.8 27.4 37.0	NI SAA 47.8 39.3 49.5 53.4 33.4 47.5 47.8 53.5 41.6 59.0 55.5 52.1 91.6 32.1 91.6 32.1 26.6 00 55.5 52.1 91.6 32.1 26.6 00 55.5 52.1 91.6 32.1 26.6 00 55.5 52.1 91.6 32.1 26.6 00 55.5 53.4 31.4 31.4 31.4 31.4 31.4 31.4 31.7 31.7 31.7 31.6 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.6 32.1 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.731.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.7 31.731.7 31.7 31.7 31.7 3	LU SCA 42.7 47.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4 12.2 13.4 36.5 24.6	SKA G3.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 24.0 22.9 48.9 17.9 19.9 23.9 25.9 8.6 18.2 25.9 8.6 18.2 25.2 26.6 28	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8 18.0 11.4 30.4 25.2 182.7 14.0 28.8	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9 13.1 15.5 81.8 18.7 19.3	AM SCA SCA 50.7 54.6 75.8 65.2 129.2 112.2 96.6 58.7 138.2 720.6 89.5 32 89.5 32 SCA 17.3 28.4 26.3 26.9 19.1 16.4 13.7 66.2 19.1 16.4 13.7 66.2 19.5 15.8 15.9 15.8	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 5KA 10.0 32.5 21.2 14.0 21.5 21.2 14.0 21.5 11.2 19.6 144.0 21.5
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OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[c]pyrene Benzo[c]pyrene Benzo[c]pyrene Benzo[c],b]perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[c],b]perylene *Chrysene+Triphenylene *Benzo[b],k]fluoranthene OEU in Filters OEU in Filters OEU in Filters OEU in Filters Dibenzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene	SLB 204.6 104.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 5LB 135.3 421.4 118.4 104.5 252.2 1167.5 88.8 449.3 118.7 132.3 97.9 1444.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 189.9 115.5 49.6 353.8 83.8 87.2 81.5 1254.7	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 47.1 48.1 41.8 30.9 22.5 46.1 MS SCA 106.4 30.8 9 107.8 SCA 106.4 339.0 78.7 59.7 92.3 1276.4	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 5KA 76.7 256.8 98.6 92.9 106.6 85.7 59.4 340.0 81.6 73.0 81.5 1484.4	SLB SLB SLB SSLB SS.1 33.5 SS.9 45.7 35.7 32.9 24.0 20.3 45.6	150 SAA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 IV SAA 67.7 97.1 35.4 36.5 58.8 43.9 48.9 28.0 22.1 29.1 47.6	SCA SCA SCA SCA SCA SCA SCA SCA SCA SCA	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9 39.3 29.1 42.4 25.9 34.8	SLB SLB 54.3 42.5 48.0 34.6 44.6 40.6 42.5 34.6 34.6 44.6 40.6 42.5 34.6 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 23.0 26.1 27.6 13.7 28.8 27.6 13.7 21.7 76.2	NI SAA 47.8 39.3 49.5 53.4 47.5 47.8 52.5 41.6 59.0 55.2 14.6 59.0 55.1 91.6 32.1 26.6 00 55.1 91.6 32.1 26.6 00 55.3 41.9 10.6 14.9 10.6 14.9 10.6 14.9 10.6 14.9 12.3 32.7 18.3 25.1 37.1 57.9 5.5 96.9	LU SCA 42.7 47.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4 12.2 13.4 36.5 24.6 16.6 24.0 28.7	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 50.8 51.2 24.0 50.8 76.5 31.2 24.0 55.8 48.9 17.9 19.9 23.9 48.6 18.2 25.9 8.6 18.2 25.9 8.6 30.3 27.4	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8 18.0 11.4 30.4 10.5 25.2 182.7 14.0 28.8 12.0 165.3	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9 13.1 15.5 81.8 18.7 19.3 40.6	AM SCA SCA SCA SCA SCA SCA SCA 138.2 720.6 89.5 SCA 17.3 28.4 26.9 16.9 19.1 16.4 13.7 26.4 26.9 16.9 19.1 16.4 13.5 SCA	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 57.5 79.6 86.8 61.9 87.1 57.5 79.6 86.8 61.9 87.1 10.0 32.5 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 11.2 14.0 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]anthracene Benzo[a,h]iperylene *Benzo[b,j,k]fluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[b]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]aprylene	SLB 204.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 67.9 SLB 135.3 421.4 118.4 104.5 252.2 116.5 88.8 449.3 118.7 132.3 97.9	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 115.5 49.6 353.8 83.8 83.8 83.2 81.5	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 30.9 22.5 46.1 WS SCA 106.4 308.9 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 100.4 309.7 107.8 107.8 107.8 107.7 107.7 107.8 107.7 107.7 107.7 107.8 107.7 107.7 107.7 107.8 107.7 107.7 107.7 107.8 107.7 107.7 107.7 107.8 107.7 107.7 107.7 107.8 107.7 107.7 107.8 107.7 107.7 107.8 107.7 107.7 107.8 107.7 107.7 107.8 107.7 107.8 107.7 107.7 107.8 107.7 107.7 107.8 107.7 107.7 107.8 107.7 107.7 107.8 107.7 1	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 56.8 98.6 92.9 106.6 85.7 59.4 340.0 81.6 73.0 81.5	SLB SLB 55.1 106.8 28.1 33.5 59.9 45.7 35.7 32.9 24.0 20.3	150 5AA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 10 10 579.5 10 10 58.8 43.9 48.9 28.0 28.0 22.1 29.1	SCA SCA SCA SCA SCA SCA SCA SCA SCA SCA	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9 39.3 29.1 42.4 25.9 25.9	SLB 54.3 42.5 48.0 53.6 44.6 40.6 62.2 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 23.0 26.1 27.4 87.2 42.7 28.8 27.7 8.8 21.7	NI SAA 47.8 39.3 49.5 53.4 47.8 33.4 47.5 47.8 53.4 47.5 47.8 53.4 47.5 47.8 53.4 47.5 47.6 59.0 55.2 14.6 59.0 55.2 14.6 59.0 55.2 1 91.6 32.1 26.6 00 54.4 25.1 31.4 14.9 10.6 32.7 18.3 32.7 18.3 25.1 37.9 6.5	LU SCA 42.7 47.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4 12.2 13.4 36.5 24.6 16.5 24.0 17.2 13.4 36.5 24.6 24.0 17.2	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 76.5 31.2 24.0 24.0 24.0 24.9 17.9 19.9 23.9 25.9 8.6 18.2 45.2 26.6 28.6 30.3 31.2	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 5LB 19.8 94.3 25.8 18.0 11.4 30.4 10.5 25.2 182.7 14.0 28.8 12.0 14.9	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9 13.1 15.5 81.8 18.7 19.3 10.2 40.6	AM SCA SCA SCA SCA SCA SCA SCA SCA	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 SKA 10.0 32.5 21.5 11.2 19.6 13.4 20.0 12.4 13.4 20.0 12.6 13.4 19.6
OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Chrysene Benzo[b]fluoranthene Benzo[b]fluoranthene Benzo[a]fluoranthene Benzo[a]pyrene Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene Benzo[a,h]anthracene Benzo[b,jk,lfluoranthene OEU in Filters OEU, % Phenanthrene Anthracene Fluoranthene Pyrene Benzo[a]anthracene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[a]fluoranthene Benzo[b]fluoranthene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene Benzo[a]pyrene	SLB 204.6 104.6 104.6 87.9 167.5 96.2 112.8 122.9 89.3 130.3 60.7 5LB 135.3 421.4 118.4 104.5 252.2 1167.5 88.8 449.3 118.7 132.3 97.9 1444.3	FI SAA 185.9 66.2 68.9 101.5 91.6 61.0 66.1 70.8 31.3 37.5 49.6 HI SAA 169.6 479.4 125.0 114.9 189.9 115.5 49.6 353.8 83.8 87.2 81.5 1254.7	MI SCA 190.4 53.5 41.2 43.3 77.4 47.1 48.1 41.8 47.1 48.1 41.8 30.9 22.5 46.1 MS SCA 106.4 30.8 9 107.8 SCA 106.4 339.0 78.7 59.7 92.3 1276.4	SKA 200.7 54.7 38.6 42.1 76.7 49.5 45.7 74.0 31.1 26.3 50.7 5KA 76.7 256.8 98.6 92.9 106.6 85.7 59.4 340.0 81.6 73.0 81.5 1484.4	SLB SLB SLB SSLB SS.1 33.5 SS.9 45.7 35.7 32.9 24.0 20.3 45.6	150 SAA 48.9 272.3 119.1 50.5 131.1 724.4 474.3 579.5 IV SAA 67.7 97.1 35.4 36.5 58.8 43.9 48.9 28.0 22.1 29.1 47.6	SCA SCA SCA SCA SCA SCA SCA SCA SCA SCA	SKA 63.4 188.5 96.0 25.8 109.6 1077.8 109.6 594.1 433.2 898.8 SKA 61.9 84.2 20.3 21.6 40.9 39.3 29.1 42.4 25.9 34.8	SLB SLB 54.3 42.5 48.0 34.6 44.6 40.6 42.5 34.6 34.6 44.6 40.6 42.5 34.6 34.3 61.3 73.0 43.4 29.8 34.0 SLB 48.2 127.9 39.8 23.0 26.1 27.6 13.7 28.8 27.6 13.7 21.7 76.2	NI SAA 47.8 39.3 49.5 53.4 47.5 47.8 52.5 41.6 59.0 55.2 14.6 59.0 55.1 91.6 32.1 26.6 00 55.1 91.6 32.1 26.6 00 55.3 91.6 32.1 26.6 00 59.3 99.3 99.3 99.3 91.6 32.1 26.6 14.9 10.6 14.9 10.6 14.9 12.3 32.7 18.3 25.1 37.1 57.9 5.5 96.9	LU SCA 42.7 47.2 40.6 49.1 52.0 38.9 50.9 48.6 58.5 40.4 69.2 47.7 53.1 71.5 33.3 25.5 DE SCA 23.0 79.3 17.1 13.4 20.6 24.4 12.2 13.4 36.5 24.6 16.6 24.0 28.7	SKA 63.9 90.0 45.2 50.4 27.7 35.5 48.1 44.0 55.8 40.1 65.4 47.8 50.8 50.8 51.2 24.0 50.8 76.5 31.2 24.0 55.8 48.9 17.9 19.9 23.9 48.6 18.2 25.9 8.6 18.2 25.9 8.6 30.3 27.4	SLB 57.3 52.5 78.8 62.8 143.2 103.4 123.6 47.9 80.4 91.9 65.0 87.2 SLB 19.8 94.3 25.8 18.0 11.4 30.4 10.5 25.2 182.7 14.0 28.8 12.0 165.3	VN SAA 60.7 59.1 70.5 75.1 129.9 109.8 96.3 49.7 74.6 93.2 57.7 85.9 JF SAA 31.6 65.3 19.4 21.9 17.4 19.9 13.1 15.5 81.8 18.7 19.3 40.6	AM SCA SCA SCA SCA SCA SCA SCA 138.2 720.6 89.5 SCA 17.3 28.4 26.9 16.9 19.1 16.4 13.7 26.4 26.9 16.9 19.1 16.4 13.5 SCA	SKA 48.5 54.1 73.6 69.2 130.7 111.8 92.8 57.5 79.6 86.8 61.9 87.1 57.5 79.6 86.8 61.9 87.1 57.5 79.6 86.8 61.9 87.1 57.5 21.5 21.5 21.2 14.0 21.5 11.2 19.6 6 144.0 13.4 20.0 12.6 47.3

OEU \geq 50% are highlighted in red

Table 16 - Reported concentrations in ng/m3 and expanded uncertainties of the LVS comparison

Low volume samplers	R	eported Co		n	Repo	orted Expar	nded Uncer	rtainty
		_	/m³				%	
Laboratory ===> Compound / sample	SLB	SAA	EA SCA	SKA	SLB	SAA	EA SCA	SKA
Phenanthrene								•
Anthracene								
Fluoranthene Pyrene								
Benzo[a]anthracene		0.3	0.7	0.8		40.2	40.2	40.2
Chrysene			•					
Benzo[b]fluoranthene								
Benzo[j]fluoranthene Benzo[k]fluoranthene								
Benzo[e]pyrene								
Benzo[a]pyrene	0.2	0.6	1.2	1.5	24.6	24.6	24.6	24.6
Perylene								
Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene	0.3	0.8 0.2	1.3 0.2	1.6 0.3	30.6	30.6 45.6	30.6 45.6	30.6 45.6
Benzo[g,h,i]perylene		0.2	0.2	0.0		1510	15.10	1510
*Chrysene+Triphenylene								
*Benzo[b.j,k]fluoranthene	0.8	1.8	3.2	3.8	24.8	24.8	24.8	24.8
Laboratory ===> Compound / sample	SLB	SAA	/M SCA	SKA	SLB	SAA	MM SCA	SKA
Phenanthrene	510	300	505	31/4	525	5/14	304	314
Anthracene								
Fluoranthene	0.3	0.3	0.5	0.7	48.0	48.0	48.0	48.0
Pyrene Benzo[a]anthracene	0.3 0.1	0.4 0.3	0.6 0.9	0.7 1.0	48.0 53.0	48.0 53.0	48.0 53.0	48.0 53.0
Benzolajanthracene Chrysene	0.1	0.3	0.9 1.9	1.0 2.3	48.0	53.0 48.0	53.0 48.0	53.0 48.0
Benzo[b]fluoranthene	0.6	1.5	2.7	3.3	91.8	91.3	91.6	91.7
Benzo[j]fluoranthene	0.2	0.5	0.9	1.1	91.8	91.3	91.6	91.7
Benzo[k]fluoranthene	0.2	0.4	0.8	0.9	91.8	91.3	91.6	91.7
Benzo[e]pyrene Benzo[a]pyrene	0.2	0.6	1.2	1.3	40.0	40.0	40.0	40.0
Perylene		0.0		1.0		1010	1010	
Indeno[1,2,3,-c,d]pyrene	0.2	0.6	1.1	1.4	50.0	50.0	50.0	50.0
Dibenzo[a,h]anthracene	0.0	0.1	0.2	0.2	76.0	76.0	76.0	76.0
Benzo[g,h,i]perylene *Chrysene+Triphenylene	0.3	0.9	1.5	1.8	52.0	52.0	52.0	52.0
*Benzo[b.j,k]fluoranthene	0.9	2.5	4.4	5.3	62.0	62.0	62.0	62.0
Laboratory ===>			MI				IMI	
Compound / sample	SLB	SAA	SCA	SKA	SLB	SAA 24.4	SCA 24.2	SKA
Phenanthrene Anthracene	0.3	0.3 0.0	0.3 0.1	0.4 0.1	24.3 17.1	24.4 17.4	24.3 17.4	24.3 17.6
Fluoranthene	0.4	0.3	0.6	0.9	28.2	28.2	28.2	28.2
Pyrene	0.4	0.4	0.6	0.9	23.8	23.8	23.8	23.8
Benzo[a]anthracene	0.2	0.4	1.3	1.6	20.3	20.3	20.3	20.3
Chrysene Benzo[b]fluoranthene	0.2	0.5 1.0	1.4 1.7	1.8 2.2	21.6 27.7	21.5 27.7	21.5 27.7	21.5 27.7
Benzo[j]fluoranthene	0.2	0.6	1.1	1.2	26.9	26.8	26.8	26.8
Benzo[k]fluoranthene	0.2	0.5	0.9	1.1	25.2	25.2	25.2	25.2
Benzo[e]pyrene	0.2	0.6	1.0	1.1	24.1	24.0	24.0	24.0
Benzo[a]pyrene Perylene	0.2 0.0	0.7 0.1	1.4 0.2	1.8 0.3	22.8 24.3	22.8 24.0	22.8 24.1	22.8 24.0
Indeno[1,2,3,-c,d]pyrene	0.3	0.1	1.4	1.9	24.5	27.0	27.0	27.0
Dibenzo[a,h]anthracene	0.1	0.2	0.3	0.5	27.1	27.2	27.2	27.2
Benzo[g,h,i]perylene *Chrysene+Triphenylene	0.3	0.7	1.2	1.5	19.7	19.7	19.7	19.7
*Benzo[b.j,k]fluoranthene	0.7	2.2	3.7	4.5	16.7	16.3	16.4	16.5
Laboratory ===>			-LVS				-HVS	
Compound / sample	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene	0.2	0.2	0.4	0.4	15.9	16.0	12.8	10.2
Anthracene Fluoranthene	0.0 0.5	0.0 0.4	0.1 0.7	0.1 0.9	61.2 16.4	39.3 15.1	22.2 17.2	16.7 12.5
Pyrene	0.5	0.4	0.7	1.0	10.4	12.6	17.2	12.5
Benzo[a]anthracene	0.2	0.4	1.1	1.2	9.7	11.2	13.6	9.8
Chrysene								45 -
Benzo[b]fluoranthene Benzo[j]fluoranthene	0.4 0.2	1.1 0.6	1.9 1.0	2.3 1.2	9.8 10.3	11.6 12.7	13.4 13.3	10.9 10.3
Benzo[k]fluoranthene	0.2	0.4	0.8	1.2	9.7	10.1	12.9	9.7
Benzo[e]pyrene	0.4	0.6	1.4	2.0	22.8	24.6	28.6	45.8
Benzo[a]pyrene	0.2	0.6	1.4	1.7	9.5	12.0	14.7	10.6
Perylene Indeno[1,2,3,-c,d]pyrene	0.0 0.3	0.1 0.7	0.2 1.2	0.3 1.9	28.1 10.1	16.0 10.4	13.2 13.4	13.0 11.4
Dibenzo[a,h]anthracene	0.3	0.1	0.2	0.2	10.1	8.8	13.4	11.4
Benzo[g,h,i]perylene	0.4	0.9	1.5	2.4	10.2	11.8	14.6	11.2
*Chrucopo I Triphopulopo	0.3	0.5	1.6	2.1	10.2	9.9	11.1	10.1
*Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene	0.3	1.9	3.4	4.2	9.9	11.5	13.2	11.2

EU≥50 % are highlighted in red

Table 17 - Bias, En-scores and Overall Expanded Uncertainties of the LVS comparison

Low volume samplers		Bi				En -s	scores		Over		ed Uncert	ainty
Laboratory ===>		9 SE				S	EA				K EA	
Compound / sample	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene		-		-	-	-		-		-		-
Anthracene												
Fluoranthene												
Pyrene												
Benzo[a]anthracene		-31.9	-40.2	-39.3		-1.1	-1.5	-1.5		72.1	80.4	79.5
Chrysene												
Benzo[b]fluoranthene Benzo[j]fluoranthene												
Benzo[k]fluoranthene												
Benzo[e]pyrene												
Benzo[a]pyrene	-12.7	-11.7	-20.4	-18.3	-0.6	-0.5	-0.8	-0.8	37.3	36.3	45.0	42.9
Perylene												
Indeno[1,2,3,-c,d]pyrene	2.8	-5.7	-5.8	-9.5	0.1	-0.2	-0.2	-0.3	33.4	36.3	36.4	40.1
Dibenzo[a,h]anthracene		55.7	33.7	35.1		0.7	0.5	0.5		101.3	79.3	80.7
Benzo[g,h,i]perylene												
*Chrysene+Triphenylene *Benzo[b.j,k]fluoranthene	2.2	-9.6	-5.7	-9.8	0.1	-0.4	-0.2	-0.4	27.0	34.4	30.5	34.6
Laboratory ===>	2.2	0.0 VN		5.0	0.1		MM	0.4	27.0		/M	34.0
Compound / sample	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
Phenanthrene							-				-	
Anthracene												
Fluoranthene	-11.5	-12.5	-37.0	-36.8	-0.3	-0.3	-1.2	-1.1	59.5	60.5	85.0	84.8
Pyrene	-18.7	-14.4	-32.5	-34.0	-0.5	-0.3	-1.0	-1.0	66.7	62.4	80.5	82.0
Benzo[a]anthracene	-27.6	-28.8	-27.2	-31.1	-0.7	-0.7	-0.7	-0.8	80.6	81.8	80.2	84.1
Chrysene	2.0	2.9	2.2	1.6	0.0	0.1	0.0	0.0	50.0	50.9	50.2	49.6
Benzo[b]fluoranthene	49.3	37.1	40.2 -19.4	39.0 -20.0	0.4	0.3	0.3 -0.3	0.3 -0.3	141.1 105.1	128.4 110.7	131.8 111.1	130.7
Benzo[j]fluoranthene Benzo[k]fluoranthene	-13.3 5.3	-19.3 -3.0	-19.4	-20.0	-0.2 0.1	-0.3 0.0	-0.3	-0.3	97.1	94.3	95.2	111.7 97.5
Benzo[e]pyrene	5.5	-3.0	-3.0	-3.9	0.1	0.0	0.0	-0.1	57.1	54.5	55.2	57.5
Benzo[a]pyrene	-11.2	-14.2	-23.1	-28.6	-0.3	-0.4	-0.7	-0.9	51.2	54.2	63.1	68.6
Perylene												
Indeno[1,2,3,-c,d]pyrene	-21.2	-19.7	-18.3	-21.2	-0.5	-0.5	-0.4	-0.5	71.2	69.7	68.3	71.2
Dibenzo[a,h]anthracene	-12.4	3.6	3.8	2.3	-0.2	0.0	0.0	0.0	88.4	79.6	79.8	78.3
Benzo[g,h,i]perylene	-6.6	-0.8	-2.4	-4.2	-0.1	0.0	0.0	-0.1	58.6	52.8	54.4	56.2
*Chrysene+Triphenylene												
*Benzo[b.j,k]fluoranthene	19.3	21.4	28.3	24.1	0.3	0.3	0.3	0.3	81.3	83.4	90.3	86.1
Laboratory ===> Compound / sample	SLB	CH SAA	SCA	SKA	SLB	SAA	HMI SCA	SKA	SLB	SAA	IMI SCA	SKA
Phenanthrene	3.5	33.2	-12.2	-8.1	0.1	0.8	-0.4	-0.2	27.8	57.5	36.4	32.5
Anthracene	-25.0	-7.7	-13.3	44.7	-0.3	-0.2	-0.3	1.0	42.1	25.1	30.7	62.2
Fluoranthene	2.2	-4.3	-22.4	-14.7	0.1	-0.1	-1.0	-0.6	30.4	32.5	50.6	42.9
Pyrene	-10.4	-13.3	-27.9	-20.7	-0.4	-0.5	-1.4	-1.0	34.2	37.1	51.8	44.5
Benzo[a]anthracene	19.0	6.0	8.6	16.5	0.7	0.2	0.3	0.6	39.2	26.4	28.9	36.8
Chrysene	-24.2	-25.2	-24.0	-19.4	-0.9	-1.1	-0.8	-0.7	45.7	46.7	45.5	40.9
Benzo[b]fluoranthene	-6.9	-10.3	-9.8	-7.8	-0.3	-0.3	-0.4	-0.3	34.6	38.0	37.5	35.5
Benzo[j]fluoranthene	-10.8	3.7	-1.3	-7.0	-0.4	0.1	0.0	-0.3	37.7	30.5	28.1	33.8
Benzo[k]fluoranthene Benzo[e]pyrene	4.5	14.3 -23.0	8.0 - 28.0	6.8 - 30.1	0.1	0.5	0.3	0.2	29.6 48.6	39.5 47.0	33.2	32.0
Benzo[a]pyrene	-24.5 -1.5	-23.0 - 0.5	-28.0	-50.1	-1.0 -0.1	-0.8 0.0	-0.9 -0.5	-0.8 -0.3	46.0 24.3	23.3	52.0 34.2	54.1 29.2
Perylene	-25.8	-9.6	-1.6	2.0	-0.8	-0.3	-0.1	0.1	50.0	33.7	25.7	26.0
Indeno[1,2,3,-c,d]pyrene	9.0	-0.5	2.1	10.9	0.3	0.0	0.1	0.4	36.0	27.5	29.1	37.9
Dibenzo[a,h]anthracene	74.0	72.1	73.6	118.0	1.2	1.2	1.4	1.8	101.1	99.3	100.8	145.2
Benzo[g,h,i]perylene	-18.7	-19.1	-21.2	-20.3	-0.8	-1.0	-1.0	-1.0	38.4	38.8	40.9	40.0
*Chrysene+Triphenylene												
*Benzo[b.j,k]fluoranthene	-8.0	5.9	8.4	5.2	-0.4	0.3	0.4	0.2	24.6	22.2	24.7	21.6
Laboratory ===>		JRC ·					-LVS				-LVS	
Compound / sample Phenanthrene	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA	SLB	SAA	SCA	SKA
	-4.0	9.5	5.4	-13.1	-0.1	0.5	0.2	0.0	20.2	32.0	17.7 29.6	10.3
Anthracene Fluoranthene	15.0 32.0	14.4 0.9	3.1 1.1	23.0 -9.7	0.3 0.4	0.4 0.2	0.1 0.5	0.4 0.6	94.4 26.1	65.5 19.8	28.6 26.7	33.2 22.3
Pyrene	27.6	5.4	2.4	-10.1	0.4	0.2	0.6	0.7	18.4	22.4	27.3	22.0
Benzo[a]anthracene	-0.4	-5.4	-10.1	-10.2	0.1	0.4	-0.2	0.3	12.1	17.9	17.3	14.9
Chrysene												
Benzo[b]fluoranthene	10.2	-2.2	-1.9	-2.3	1.4	0.4	0.3	0.7	31.0	20.4	19.6	22.3
Benzo[j]fluoranthene	-6.3	-9.3	-9.1	-12.6	-0.1	0.0	-0.2	0.2	11.1	13.6	16.8	12.1
Benzo[k]fluoranthene	6.5	-7.1	-5.3	-2.6	0.9	0.5	0.1	0.8	25.8	16.1	14.1	20.5
Benzo[e]pyrene	57.6	-18.1	7.5	21.0	2.6	1.3	0.8	1.0	182.9	82.0	68.4	144.7
	0.3 -17.7	- 4.8	-11.4	- 10.4	0.4	0.5	- 0.3	0.2	14.6 29.0	19.2	20.0	14.2 20.7
Benzo[a]pyrene	1 -1/./	-8.7	-2.1	-10.0	0.0	0.1	0.2	0.5	29.0	19.7	16.3	20.7 12.9
Perylene		-11 2	_Q 1	85	0.2	0.0			126	10.8	16.0	
Perylene Indeno[1,2,3,-c,d]pyrene	10.0	-11.3 14.0	-9.1 11.6	8.5 -2.9	0.2 3.0	0.0 0.8	-0.2 0.6	-0.1 1.3	12.6 165.8	10.8 41.3	16.9 30.9	
Perylene Indeno[1,2,3,-c,d]pyrene Dibenzo[a,h]anthracene		-11.3 14.0 -1.7	11.6	8.5 -2.9 29.3	3.0	0.0 0.8 0.6	-0.2 0.6 0.2	-0.1 1.3 0.5	12.6 165.8 15.5	10.8 41.3 23.0	16.9 30.9 18.6	48.1 20.4
Perylene Indeno[1,2,3,-c,d]pyrene	10.0 -22.7	14.0		-2.9		0.8	0.6	1.3	165.8	41.3	30.9	48.1

|bias| \geq 25%, En-scores \geq 1 and OEU \geq 50% are highlighted in red

8. Conclusions

- The call for participation for the second JRC PAHs comparison was well supported with 15 participating laboratories from AQUILA. However, at the voluntary sampling exercise, only three laboratories participated with their own LVS.
- Gas chromatography followed by mass spectrometry was the predominant technique for analysis of PAHs, being used by 70% of participants, while the remaining laboratories used HPLC with FLD detection.
- Accelerated solvent extraction, ASE (35%), followed by SOXLET (25%) and ultrasonic (25%) were the preferred extraction techniques of the participants. The use of a variety of solvents or mixture of solvents with different polarities without a clear agreement between applied methodologies was noted. Clean up techniques were however applied by 56% of the participants.
- Most of the participants (75%) used internal standard and CRM.
- No significant biases due to the use of specific techniques for analysis (GC-MS, HPLC-FLD), extraction and the use of solvents or clean-up techniques were observed. Nevertheless, two of the three outlier-laboratories did not report the use of a reference material.
- The homogeneity of the filter was estimated to be around 6%, which was sufficient to allow each of the HVS filters a test comparison by their subdivision between participants.
- Analytical blanks showed an important effect in outliers' production, this was the case of those compounds characterised by their omnipresence or by their low concentration in the filters as: Phe, B[a]A, Per, Anth, Pyr and B[ah]A, with analysed concentrations in the blank between 10% and 30% of the lower filter concentration.
- The average data reporting was of circa 75% of the total considered compounds considered in this exercise, varying from 28% to 100% between laboratories and from 40% to 97% between compounds. Between filters, the total data reporting varied from 68% to 75%.
- By considering all compared filters and compounds, the average of the absolute value of the bias, after excluding the identified outliers' laboratories, was of circa 14%, being the corresponding average for the reported expanded uncertainty of circa 30%. Between laboratories, averaged OEU ranged from 25% to 81%, with a median value of 43%. For LVS filters, the OEU ranged between 22% and 80% with a median value of 38%.
- For the filter comparison, the average robust repeatability uncertainty and reproducibility were around 14.5%, with a robust average overall expanded uncertainty (OEU_R) of 30%. The average repeatability standard deviation for replicated analysis was 1.9%. In the case of B[a]P the robust OEU_R was around 24%.
- In the case of the low volume sampling, robust values of repeatability uncertainty and reproducibility did not differ significantly from those of the filter comparison, being the robust OEU_R of around 36%.
- The bias of the median inter-compound value of the LVS with respect to the HVS value was of circa -5.6%. This was not significant in the context of the comparison, but could justify the slight increase of the robust OEU_R with respect to the filters comparison.
- The robust OEU_R was considered as the best indicator of the method uncertainty used for comparison. The obtained results suggested that the general methodology was able to fulfil the DQO mentioned in the directive 2004/107/EC, at least for individual measurements within the range of concentrations under comparison.

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List of abbreviations and definitions

- AcN: acetonitrile Anth: anthracene ASE: accelerate solvent extraction AU ENVS: Aerhus University Department of Environmental science B[a]A: benzo[a]anthracene B[b]F: benzo[b]fluoranthene B[bjk]F: benzo[b,j,k]fluoranthene B[j]F: benzo[j]fluoranthene B[k]F: benzo[k]fluoranthene B[a]P: benzo[a]pyrene B[e]P: benzo[e]pyrene B[ghi]P: benzo[ghi]perylene $blank_{i:}$: is the system blank level associated with the analysis of the filter i. CHMI: Czech Hydrometeorological Institute Chry: chrysene Chry+Tph: chrysene + triphenylene CRM: certified reference material CO: carbon monoxide \overline{C} : inter-laboratory average value C_i : concentration reported by laboratory i $\overline{C_i^*}$: robust concentration average, Eq. 1 $\overline{C_{lab}}$: average concentration of the reported values by a laboratory C_{ref} : reference concentration DB[ah]A: dibenzo[a,h]anthracene DQO: data quality objectives EMEP: European Monitoring and Evaluation Programme En: En-score, Eq. 10 EU: expanded uncertianty FLD: Fluorescence detector Flu: fluoranthene FMI: Finnish Meteorological Institute $f_{i,j}$: concentration calculated for the injection j of the filter i $\overline{f_{i,j}}$: is the average value of all injections and filters
- GC: gas chromatographer
- HMS: Hungarian Meteorological Service
- HPLC: high performance liquid chromatography

HVS: high volume sampler

IARC: International Agency for Research on Cancer

IMROH: Institute for Medical Research and Occupational Health

INERIS: Institut National de l'Environnement insdustriel et des RISques

ISCIII: Instituto de Salud Carlos III

IVL: Swedish Environmental Institute

Ind[123cd]P: indeno[1,2,3,-c,d]pyrene

JRC: Joint Research Centre

LANUV: Landesumweltamt für Natur, Umwelt und Verbraucherschutz NRW

LEGMC: Laboratory of Latvian Environment, Geology and Meteorology Centre

LVS: low volumen sampler

MS: mass spectrometry

n: number of replicate analysis.

NILU: Norwegian Institute for Air Research

NO: nitrogen monoxide

NO2: nitrogen dioxide

OEU: overall expanded uncertainty, Eq. 13

 OEU_R : robust overall expanded uncertainty, Eq. 14

OOE: Amt der oberösterreichischen Landesregierung - Abteilung: Umweltschutz

O3: ozone

P: numbe of laboratories

PAHs: polycyclic aromatic hydrocarbons

Per: perylene

Phe: phenantrhene

PM: particulate matter

PM10: particulate matter under 10 µm

PM2.5: particulate matter under 2.5 μm

P atm: atmospheric pressure

Pyr: pyrene

QAQC: quality assurance quality control

RM: reference material

SEA: Slovenian Environment Agency

SAA: high volume filter code for the 01/02/2018

SBL: high volume filter code for the 12/02/2018

SKA: high volume filter code for the 11/02/2018

SCA: high volume filter code for the 03/02/2018

stdev() : standard deviation

 s^* : standard deviation of the robust concentration average, Eq. 2

 $S_{i:} \mbox{ standard deviation of replicated measurements of the laboratory <math display="inline">i$

- $S_{\mbox{\scriptsize L}:}$ standard deviation of the average inter-laboratory value
- Sr: repeatability standard deviation, Eq. 8
- $S_{\text{R:}}$ reproducibility standard deviation, Eq. 9Eq. 8

UBA: Umweltbundesamt GmbH

 $u_{\mbox{\tiny bias}}$: standard uncertainty of the bias, Eq. 5

 u_{ci} : uncertainty of the reported value from laboratory I

 $u_{\mbox{\tiny cl}}$ uncertainty of the calibration and the reference value

 U_{lab} : expanded uncertainty for the reported value

 U_{ref} : expanded uncertainty for the reference value

VMM: Vlaamse Milieumaatschappij

WHO: World Heath Organization

Z: random variable of two tails statistic for normal distribution P, Eq. 6

Z': Z'-score, Eq. 11

 $\hat{\sigma}_{PT}$: Standard deviation for proficiency test

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Annexes

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ANNEX X: Low volume sampling scattering results

ANNEX XI: En scores for low volume samplers by laboratories

ANNEX XII: Overall expanded uncertainty for the low volume samplers by compounds

ANNEX XIII: Comments on uncertainty calculations and analysis reported by participants

ANNEX I: Guide to operation

This envelope (Fig. a) contains 6 PM2.5 filters pieces with the following characteristics:

two blanks filters from the sampling campaign

four loaded filters at different concentrations

The filters have been carefully packed in such a way that they can be easily kept in the freezer until analysis (Fig. b). Each filter has been wrapped independently for easier management and protection (Fig. c).













Approximately, the loading of the filters corresponds to the volume sampled by a typical LVS, i.e. 50 m³, the expected B[a]P concentration for the loaded filters would range from 0.1 to 2 ng/m³.

ANNEX II: Procedure

Record and write the arrival date of the package at your laboratory. Keep the filters in the freezer until analysis.

Each filter has been assigned a particular code, written on the individual container: The first letter identifies loaded filters (S) or blanks (B).

To unwrap the filter the following material is needed: gloves, scissors and appropriate tweezers (Fig.1A).

To unwrap the filters proceed carefully as described in Figures 2A to 5A.



Fig. 1A.- Material



Fig. 2A.- Cut the plastic envelope by the edge



Fig. 3A.- Take out the aluminium envelope from inside



Fig. 4A.- Unwrap the aluminium foil to get the filter

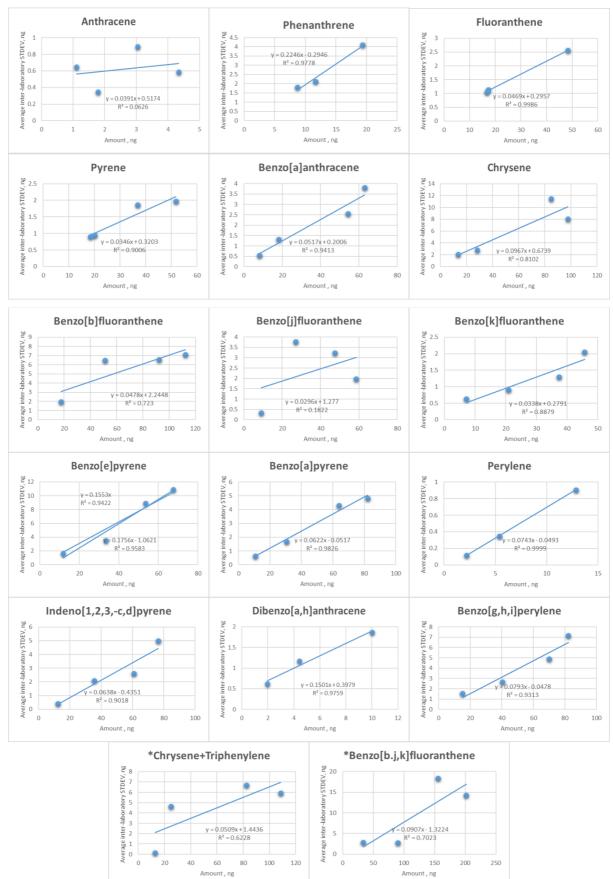


Fig. 5A.- Unfold the filter and introduce it into your container for extraction

Note that the comparison exercise will be based on the amount of compound (ng) quantified on the filter. Therefore, assure that the whole filter is extracted and analysed.

ANNEX III: Data reporting sheet

have used to analyse the samples of the current inter-laboratory comparison. It is very important this information be accurate and complete, as this will be a relevant source of information to interpret your results and compare the methodologies of the different laboratories. All this information will be collected in the final EUR report and available to all of you. Please try to be clear in the method description and in the calculation of your analytical uncertainty; this may help you in the discussion of the results.																							
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ANNEX IV: Standard deviation of the average inter-laboratory value

ANNEX V: Isomers, reporting data and statistical treatment: benzo[b,j,k]fluoranthene, chrysene + triphenylene

The table below shows the reporting of the corresponding isomers of Benzo[b,j,k]fluranthene and chrysene+thriphenylene by the participating laboratories

Table Reported and estimated values of concentration and uncertainties for the B[b,j,k] and
Chry+TPh isomers

Laboratory	B[b]F	B[j]F	B[k]F	Chry	B[b,j,k]F	Chry + TPh
AU_ENVS	v. & u.	v. & u.	v. & u.	v. & u.	e.v & e.u	n.p.
СНМІ	v. & u.	v. & u.	v. & u.	v. & u.	e.v & e.u	n.p.
FMI	n.p.	n.p.	n.p.	n.p.	v. & u.	v. & u.
HMS	v. & u. for	B[b,j]F	v. & u.	v. & u.	e.v & e.u	n.p.
IMROH	v. & u.	v. & u.	v. & u.	v. & u.	e.v & e.u	n.p.
INERIS	v. & u.	v. & u.	v. & u.	v. & u.	e.v & e.u	n.p.
ISCIII	v. & u. for	B[b,j]F	v. & u.	v. & u.	e.v & e.u	n.p.
IVL	v. & u.	v. & u.	v. & u.	v. & u.	e.v & e.u	n.p.
LANUV	v. & u.	v. & u.	v. & u.	n.p.	e.v & e.u	n.p.
NILU	v. & u.	v. & u.	v. & u.	v. & u.	e.v & e.u	n.p.
LEGMC	v. & u. for	B[b,j]F	v. & u.	v. & u.	e.v & e.u	n.p.
OOE	v. & u. for	· B[b,j]F	v. & u.	v. & u.	e.v & e.u	n.p.
SEA	n.p.	n.p.	n.p.	n.p.	v. & u.	v. & u.
UBA	v. & u.	v. & u.	v. & u.	v. & u.	e.v & e.u	n.p.
VMM	v. & e.u.	v. & e.u.	v. & e.u.	v. & u.	v. & u.	n.p.
JRC	v. & u.	v. & u.	v. & u.	n.p.	e.v & e.u	v. & u.

B[b,j]F was evaluated as B[b,j]F

n.p. : laboratory did not provide any value or uncertainty

v. & u. : laboratory reported value and corresponding uncertainty

v. & e.u.: Laboratory provided values without uncertainties. An estimated uncertainties were assigned.

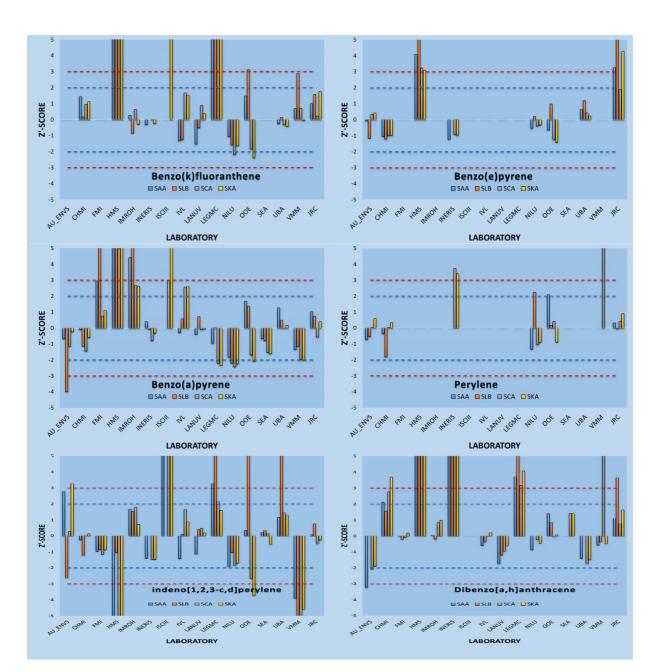
e.v & e.u.: Laboratory did not provided values or uncertainties:

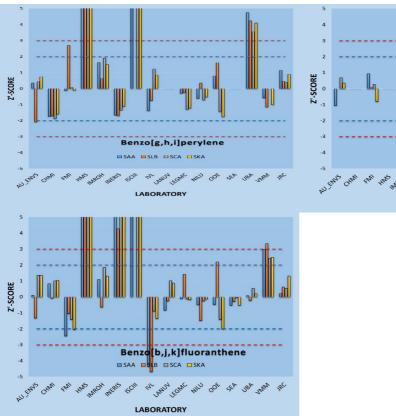
B[b,j,k]F was calculated as the sum of the individual isomers.

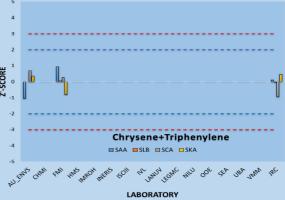
Uncertainty variances of $\mathsf{B}[\mathsf{b},\mathsf{j},\mathsf{k}]\mathsf{F}$ were estimated as the square root of the uncertainty variances of the individual compounds

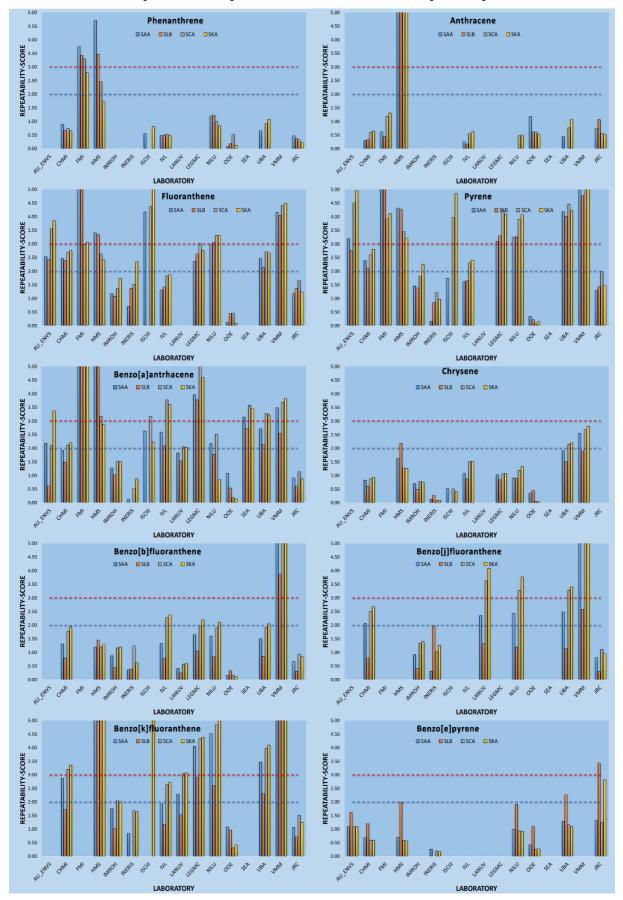


ANNEX VI: Z'-scores. Tests results by compounds

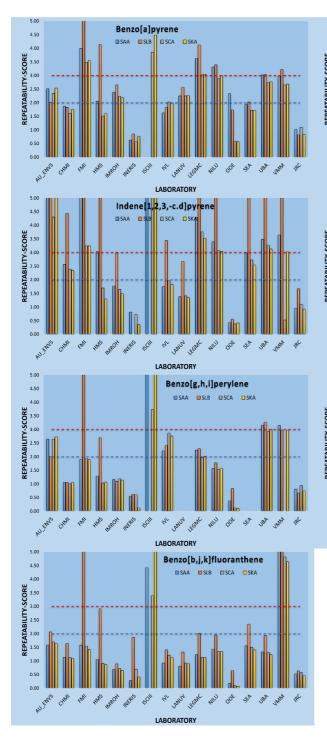


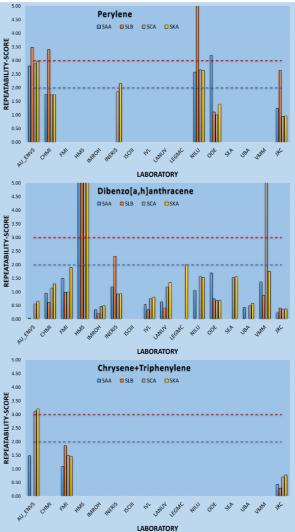






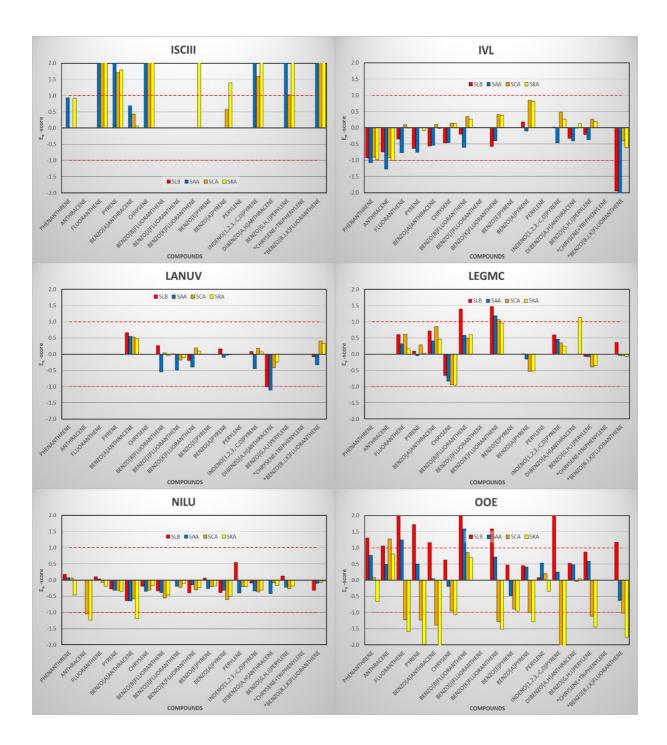
ANNEX VII: Repeatability Score. Test results by compounds

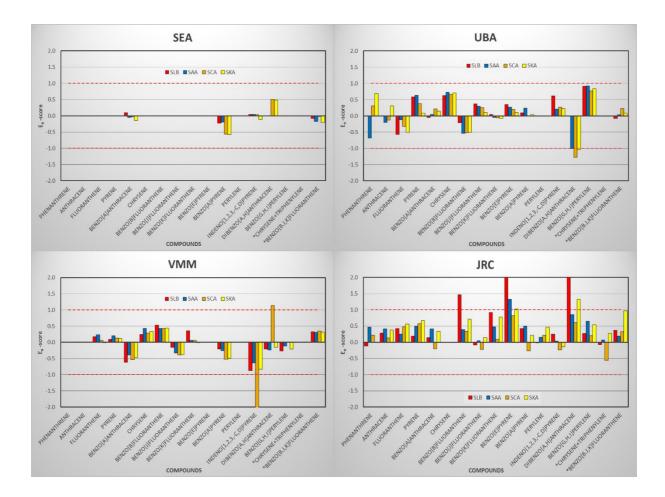






ANNEX VIII: En scores. Test results by laboratories



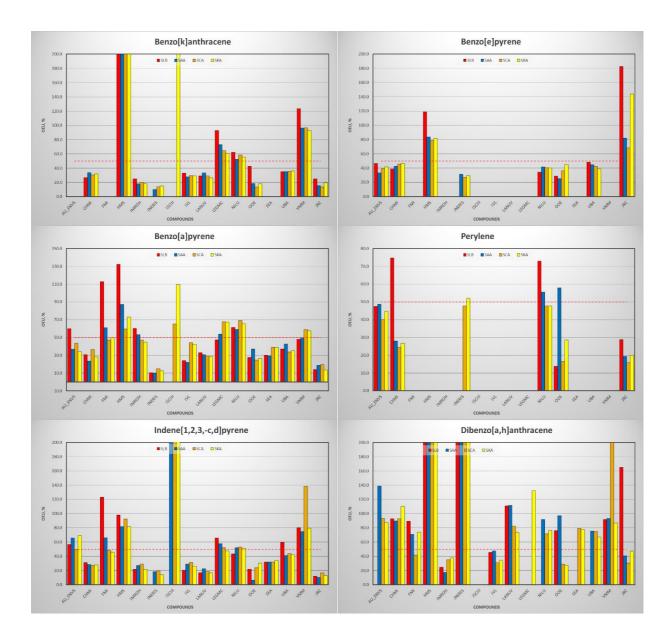


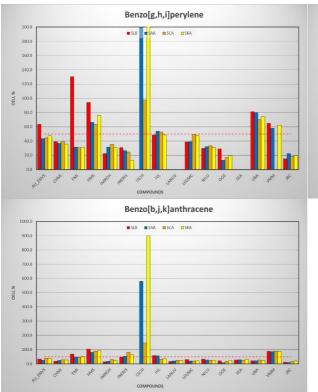


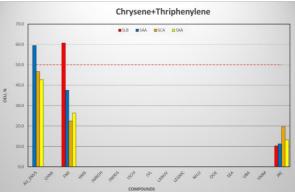
ANNEX IX: Overall expanded uncertainty. Results by compounds

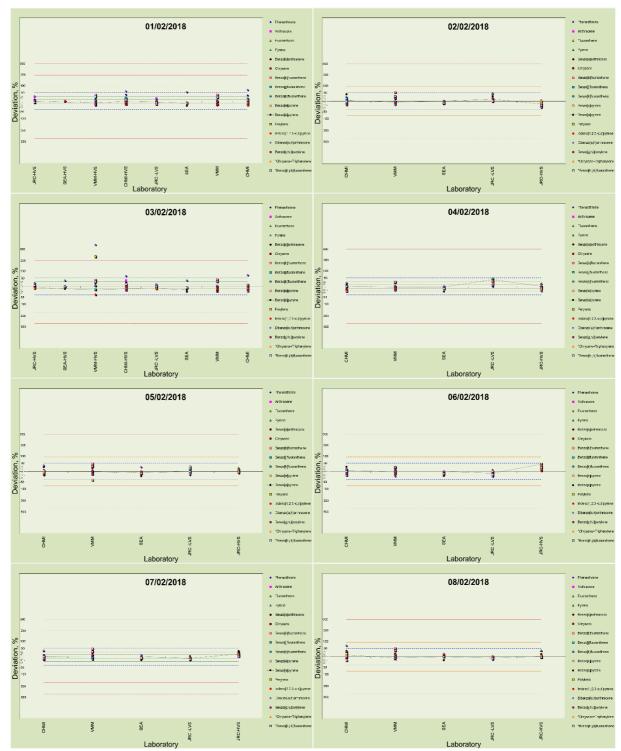
CC

CO

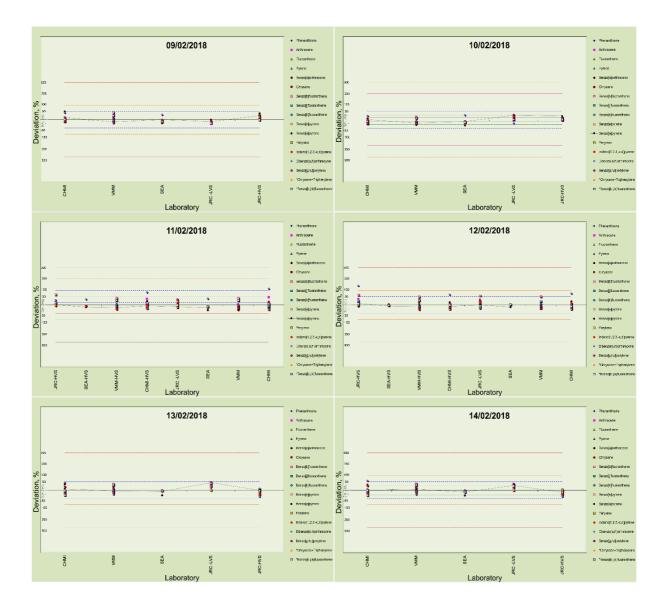


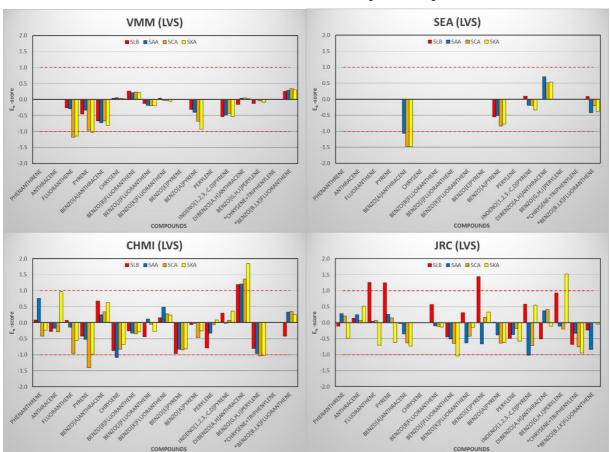




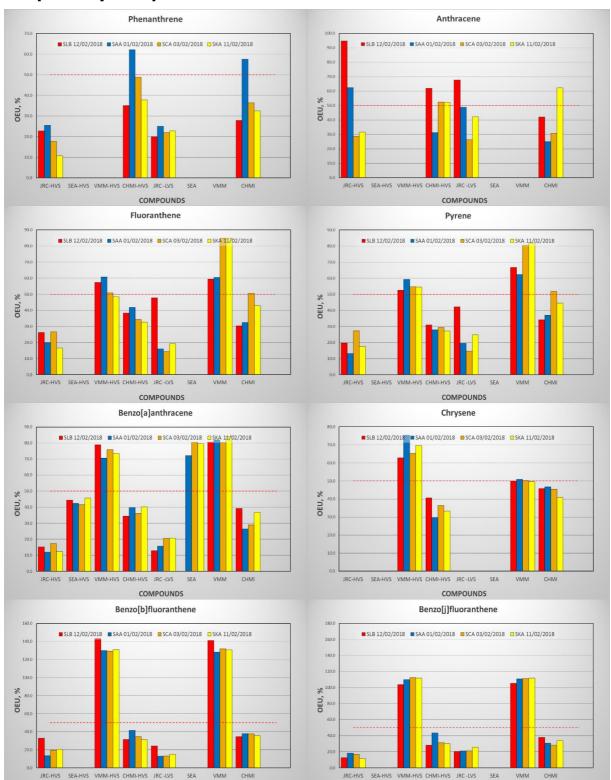


ANNEX X: Low volume sampling scattering results





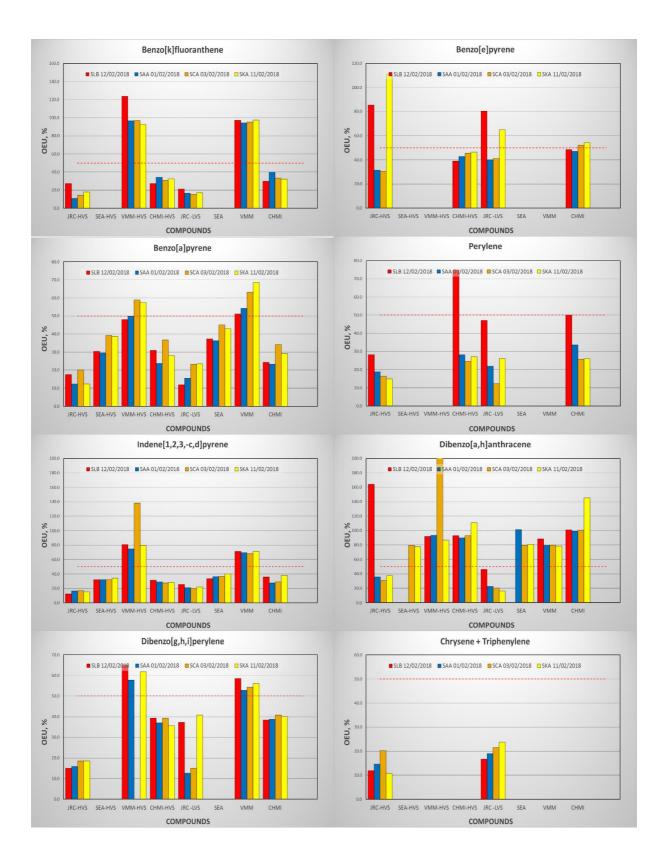
ANNEX XI: En scores for low volume samplers by laboratories



ANNEX XII: Overall expanded uncertainty for the low volume samplers by compounds

COMPOUNDS

COMPOUNDS



ANNEX XIII: Comments on uncertainty calculations and analysis reported by participants

AU_ENVS

Description of uncertainty calculations:

The uncertainty of the method has been estimated on the basis of the analysis of the certified material ERM-CZ100 Fine Dust (BCR). The uncertainty has been estimated using the Measurement Uncertainty Estimation according to Nordtest Technical Report 537 (Handbook for calculation of measurement uncertainty in environmental laboratories). The estimated MU takes into account repeatability and bias.

Comments on the analysis:

Benzo(b,j,k)fluoranthenes were reported together

Chrysene was reported with Triphenylene

СНМІ

Description of uncertainty calculations:

Assessment of measurement uncertainty was done with software Effi Validation 4.0. Data from our method validation were used. Combined uncertainty was estimated on the base of the uncertainties of calibration standards preparation, uncertainty of internal standard addition, uncertainty from sample duplicates, uncertainty of repeatability of the measurement and bias of the method. Repeatability studies were performed with standards (at four concentration ranges – 2 pg/µL, 50 pg/µL, 200 pg/µL and 1000 pg/µL) and real samples. Relative standard deviations were estimated and their average value was used for estimation combined uncertainty (to represent repeatability in the whole concentration range). Bias of the method was assessed by using a Certified Reference Material - Urban Dust 1649b and ERM - CZ100 Fine dust. Concentration level of selected PAHs between 20 pg/µL to 200 pg/µL. Combined uncertainty ranged from 9 % to 15 % of the reported concentration depending on the compound. For concentrations close to MDL combined uncertainty is between 18 % to 40 % depends on the compound.

The expanded uncertainty at 95 % confidence was estimated by multiplying combined uncertainty with a coverage factor k=2. Expanded uncertainties ranged from 18 % to 30 % of the reported concentration depending on the compound.

Comments on the analysis:

It was noted that the peak of dibenzo[a,h]anthracene is much wider than the one in the standard - probably an impurity with the same ions

FMI

Description of uncertainty calculations:

B[a]P MU calculations					
based from EN 15549			Target value (1ng/m3) level	medium level (0.4 ng/m3)	low level (10 % of target value)
			B[a]P	B[a]P	B[a]P
partial uncertainties:		requirement	u(x)/x	u(x)/x	u(x)/x
Sample volume (m3)	Usam	<2 %			
sampling time (min)	t	<0.1 %	0.035 %	0.035 %	0.035 %
b(a)p mass in the sample	msam				
sampling efficiency	S	>90 % , MU <3 %			
analytical stability	A	-			
Extraction efficiency	UE/E		7 %	7 %	7 %
<u>b(a)p mass in the</u> <u>sample</u>	mE				
ISTD-method	mmeas				
b(a)p response factor	Uf	<5 %	1.1 %	0.30 %	4.1 %
ISTD conc	mISE	<2 %	2.3 %	2.3 %	2.3 %
Response measurement accuracy (RSD)	sf		2.5 %	6 %	9 %
selectivity	R	RF>1			
B[a]P extract combined MU	Umeas,	UE	3.6 %	6.4 %	10.4 %
B[a]P mass in lab blank	mbl	<0.55 ng/ml	-	-	-
<u>b(a)p mass in field blank</u>	mbl	<2.55 ng/ml	0.15 %	0.30 %	1.48 %
<u>Between lab MU</u>			-	-	-
<u>combined MU (sum of</u> <u>squares)</u>			7.9 %	9.5 %	12.6 %
Enhanced MU (k=2)			15.7 %	19.0 %	25.2 %

MU:s with daily filters.						
target value level	low level (<0.4 ng/m3)					
15 %	85 %	k=2		phenantrene		
25 %	25 %	k=2		anthracene		
15 %	30 %	k=2		fluoranthene		
15 %	45 %	k=2		pyrene		
30 %	40 %	k=2		benz(a)anthracene		
10 %	25 %	k=2		chrycene/triphenylene		
15 %	20 %	k=2		benzo(k+b+j)fluoranthene		
15 %	20 %	k=2		benzo(ghi)perylene		
20 %	30 %	k=2		indeno(1,2,3-cd)pyrene		
20 %	35 %	k=2		dibenz(a,h+a,c)anthracene		
20 %	25 %	k=2		benzo(a)pyrene		

This corrsponds to 22 n			
(0.4 ng/m3 * 2.3 m3/h * 2	24h)		

Comments on the analysis:

Benzo(b,j,k)fluoranthenes were reported together

Chrysene was reported with Triphenylene

HMS

Description of uncertainty calculations:

According to: ISO 12884:2003 standard: Ambient air. Determination of total (gas and particle-phase) polycyclic aromatic hydrocarbons. Collection on sorbent-backed filters with gas chromatographic/mass spectrometric analyses

IMROH

Description of uncertainty calculations:

Uncertainty calculation were according to CEN/TS 16645:2014 Annex E

INERIS

Description of uncertainty calculations:

1 écart-type

ISCIII

Description of uncertainty calculations:

The uncertainty has been estimated as follows:

$$U = \sqrt{u_{VR}^2 + \left(\frac{w_R \cdot S_R}{\sqrt{n_M}}\right)^2 + u_{cl}^2}$$

Being

 u_{VR} : uncertainty of the standards

 W_R = factor (2,3)

 S_R = standard deviation

N: number of repetitions

 $U_{cl}{:}\ 0.025\ x$ average of all injections

Comments on the analysis:

Benzo(b,j) fluoranthenes were reported together

IVL

Description of uncertainty calculations:

Uncertainty calculations are based on R % for duplicate samples and inter-laboratory variations according to Nordtest 537

Comments on the analysis:

Sample might have been evaporated to harshly

LANUV

Description of uncertainty calculations

The general uncertainty of PAH measurements is estimated according to GUM using the model equation:

cBaP=((m*x)*VMulti*VDispen/VDilu*E)

cBaP - Concentration of Benzo[a]pyrene (or another PAH-compound)

m - Slope of the analytical function

x - Peak area

Vmulti - Volume of Multipette

Vdispen - Volume of Dispensette

Vdilu - Volume of Diluter

E - Extraction yield of Benzo[a]pyrene (or another PAH-compound)

LEGMC

Description of uncertainty calculations:

Uncertainty was estimated using internal quality control data. Combined standard uncertainty can be expressed as: $u^2 = Rw^2 + u(bias)^2$, where Rw is within-laboratory reproducibility, estimated from standard deviation of control samples over a period of time approximately one year and u(bias) is uncertainty component for bias, estimated from recovery tests. u(bias) can be expressed as: $u(bias)^2 = bias^2 + bias^2/On + u(Cref)^2$, where bias=100-R, sbias is recovery standard deviation, n - number or recovery measurements and u(Cref) is the uncertainty of concentration of standard addition used for recovery tests. Estimated values for the standard uncertainty (k=1): anthracene u=11.5 %, fluoranthene u=9 %, pyrene u=11 %, benzo(a)anthracene u=14 %, chrysene u=9 %, benzo(b)fluoranthehe u=9 %, benzo(k)fluoranthehe u=9 %, benzo(a)pyrene u=13 %, indeno(1,2,3-c,d)pyrene u=12 %, dibenzo(a,h)anthracene u=12 %, benzo(g,h,i)perylene u=11 %.

Comments on the analysis:

No deviations were investigated

NILU

Description of uncertainty calculations:

Uncertainty Calculation for this SLP is based on the method uncertainty estimated for NILUs methods.

A calculation has been made for each component based on our performance in other SLPs and reference materials.

Parameters included in that calculation are u(Cref), u(bias), RMS bias and more.

The calculation has resulted in a % of uncertainty for the method. This % has been used to calculate the uncertainty of the results of this SLP.

Comments on the analysis:

For *BAB and BOC*: Phenanthrene, anthracene, fluoranthene and pyrene were Lower than 10 times method blank, while the rest of the compounds were lower than detection limit at signal:noise 3:1

Phenanthrene was found lower than 10 times method blank for all the samples.

Anthracene was lower than detection limit at signal:noise 3:1 for SAA and SLB

Fluoranthene and pyrene were lower than 10 times method blank for SLB.

00E

Description of uncertainty calculations:

Comments on the analysis:

Benzo(b,j,k) fluoranthenes were reported together

SEA

Description of uncertainty calculations:

Comments on the analysis:

Benzo(b,j,k) fluoranthenes were reported together

UBA

Description of uncertainty calculations:

The extended uncertainty was carried out according to our VA 021, for the calculation 75 benzo (a) pyrene d12 values were used.

For the Calculation of the combined uncertainty the middle deviation from the setpoint, the fluctuation deviation from the set point and a reference material were used.

$$\frac{u_c}{P_{op}} = \sqrt{u(x_1)^2 + u(x_2)^2 + u(x_3)^2}$$

 $u_{c} \, ... \mbox{ combined uncertainty }$

 P_{op} ... analyte content in the sample

The expanded uncertainty is estimated by multiplying the combined uncertainty by a coverage of 2.

$$U(P_{op}) = u_c(x) \cdot P_{op} \cdot 2 = U \cdot P_{op}$$

U(Pop) ... expanded uncertainty

Comments on the analysis:

Samples were diluted prior before injection

VMM

Description of uncertainty calculations:

		estimated uncertain	
Fluoranthene	estimate based on average of similar compounds	48%	
Pyrene	estimate based on average of similar compounds	48%	
Benzo[a]anthracene	middel of the range of field test TS16645:2015 (table F5)	53%	
Chrysene	estimate based on average of similar compounds	48%	
sum of benzo(b,j,k)fluoranthene	middle of the range of field test TS16645:2015 (table F5)	62%	
Benzo[a]pyrene	middle of the range of field test TS16645:2015 (table F5)	40%	
Indeno[1,2,3,-c,d]pyrene	middle of the range of field test TS16645:2015 (table F5)	50%	
Dibenzo[a,h]antracene	middle of the range of field test TS16645:2015 (table F5)	76%	
Benzo[g,h,i]perylene	middle of the range of field test TS16645:2015 (table F5)	52%	

Comments on the analysis:

Benzo(b,j,k) fluoranthenes were reported together

JRC

Description of uncertainty calculations:

The evaluation of the concentration and the associated budget uncertainty, reported by JRC, was based on the results of the averaging of at last three filter samples analysed by thermal desorption, gas chromatography and mass spectrometry detection. Uncertainty for the thermal desorption analyses was based on the reproducibility analysis of a number of cuts randomly distributed around the whole high volume filter, plus the corresponding sources of uncertainties related to standards, calibration and system blank. This uncertainty evaluation did not consider uncertainties attributed to biases with respect to the analysis of reference materials.

The final uncertainty, u, was estimated as it follows:

$$u = \sqrt{\sum_{i=1}^{m} \left(\frac{stdev[f_{i,j}]}{\sqrt{n}}\right)^2 + u_{cl}^2 + u_{blank}^2 + u_{de}^2}$$

Where:

 $u_{cl} = 0.025 \cdot \overline{f_{i,j}}$ as an approach value for the uncertainty of the calibration and the reference standard (see referencies: B.L. Vand Drooge et al. J. Chromatogr. A 1216 (2009) 4030-4039).

$$u_{blank} = \sqrt{\left(\frac{stdev(blank_i)}{\sqrt{m}}\right)^2 + \overline{blank_i^2}}$$

 $f_{i,j} \, \text{is the concentration estimated for the injection <math display="inline">j$ of the filter i.

n, is the number of injections (j= 1 to n)

m, is the number of filters (i=1 to m)

is the average value of all injections and filters

blank_i, is the system blank level associated with the analysis of the filter i.

 u_{de} : uncertainty of desorption coefficient derived of the regression between desorbed and reference material.

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