



Laboratory 10, Institute for Atmospheric Physics (Hungary)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>*</sup>
A1	2	0.178	0.188	0.181	0.016	-0.186	S
A2	SO <sub>2</sub>	0.16	0.172	0.17	0.028	-0.377	S
A4	μg S/ml	0.062	0.076	0.073	0.006	-1.786	S
A5	μς 3/1111	0.054	0.068	0.067	0.008	-1.476	S

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**X** EMEP quality norm; the letters in the column indicates:

- S Satisfactory: Your result deviates less than  $\pm 10\%$  of the expected value for samples A1 and A2 and less than  $\pm 20\%$  for samples A4 and A5.
- Q Questionable: Your result deviates between  $\pm 10$ -20% of the expected value for samples A1 and A2 and between  $\pm 20$ -40% for samples A4 and A5.
- U Unsatisfactory: Your result deviates more than  $\pm 20\%$  of the expected value for samples A1 and A2 and more than  $\pm 40\%$  for samples A4 and A5.
- B Blank: You reported either no value or the detection limit

<sup>\*</sup> z score is unitless





Laboratory 15, Norwegian Institute for Air Research NILU (Norway)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	2	0.188	0.188	0.181	0.016	0.42	S
A2	SO <sub>2</sub>	0.175	0.172	0.17	0.028	0.183	S
A4	μg S/ml	0.073	0.076	0.073	0.006	0.039	S
A5	μς 3/1111	0.082	0.068	0.067	0.008	1.906	Q

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Laboratory 19, Centro Nacional de Sanidad Ambiental (Spain)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	2	0.13	0.188	0.181	0.016	-3.28	U
A2	SO <sub>2</sub>	0.11	0.172	0.17	0.028	-2.163	U
A4	μg S/ml	< 0.100	0.076	0.073	0.006		В
A5	μς 3/1111	< 0.100	0.068	0.067	0.008		В

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Laboratory 20, Swedish Environmental Research Institute IVL, Gothenburg (Sweden)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>*</sup>
A1	2	0.18	0.188	0.181	0.016	-0.09	S
A2	SO <sub>2</sub>	0.166	0.172	0.17	0.028	-0.142	S
A4	μg S/ml	0.074	0.076	0.073	0.006	0.212	S
A5	μς 3/1111	0.066	0.068	0.067	0.008	-0.061	S

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Laboratory 34, Ministry of Environment and Urbanisation (Turkey)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	00	0.176	0.188	0.181	0.016	-0.345	S
A2	SO <sub>2</sub>	0.158	0.172	0.17	0.028	-0.431	S
A4	μg S/ml	0.069	0.076	0.073	0.006	-0.656	S
A5	μς 3/1111	0.073	0.068	0.067	0.008	0.799	S

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Laboratory 178, Environmental Chemistry and EANET Monitoring Laboratory, Limnological Institute RAS/SB, Irkutsk (Russian Federation)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	2	0.184	0.188	0.181	0.016	0.165	S
A2	SO <sub>2</sub>	0.167	0.172	0.17	0.028	-0.106	S
A4	μg S/ml	0.081	0.076	0.073	0.006	1.428	S
A5	μς δ/ΙΙΙΙ	0.062	0.068	0.067	0.008	-0.553	S

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Please check the EMEP intercalibration website for more statistics, Youden plots, updated expected values ect: http://www.nilu.no/projects/ccc/intercomparison.html

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<sup>\*</sup> z score is unitless





Laboratory 183, Public health institute Uzice (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>*</sup>
A1	2	0.184	0.188	0.181	0.016	0.197	S
A2	SO <sub>2</sub>	0.165	0.172	0.17	0.028	-0.196	S
A4	μg S/ml	0.069	0.076	0.073	0.006	-0.743	S
A5	μς 3/1111	0.059	0.068	0.067	0.008	-0.861	S

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<sup>\*</sup> z score is unitless





Laboratory 184, Institute for Public Health Pozarevac (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	2	0.19	0.188	0.181	0.016	0.548	S
A2	SO <sub>2</sub>	0.168	0.172	0.17	0.028	-0.07	S
A4	μg S/ml	< 0.100	0.076	0.073	0.006		В
A5	μς δ/ΙΙΙΙ	< 0.100	0.068	0.067	0.008		В

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Laboratory 188, Institute of Public Health - Krusevac (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	22	0.192	0.188	0.181	0.016	0.675	S
A2	SO <sub>2</sub>	0.169	0.172	0.17	0.028	-0.034	S
A4	μg S/ml	< 0.100	0.076	0.073	0.006		В
A5	μς δ/ΙΙΙΙ	< 0.100	0.068	0.067	0.008		В

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Laboratory 189, Institute of Public Health - Kikinda (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>*</sup>
A1	2	0.186	0.188	0.181	0.016	0.293	S
A2	SO <sub>2</sub>	0.168	0.172	0.17	0.028	-0.07	S
A4	μg S/ml	0.072	0.076	0.073	0.006	-0.135	S
A5	μς 3/1111	0.06	0.068	0.067	0.008	-0.799	S

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Laboratory 193, Institute of Public Health of Vojvodina (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	2	0.194	0.188	0.181	0.016	0.803	S
A2	SO <sub>2</sub>	0.185	0.172	0.17	0.028	0.543	S
A4	μg S/ml	0.095	0.076	0.073	0.006	3.861	Q
A5	μς δ/ΙΙΙΙ	0.073	0.068	0.067	0.008	0.799	S

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Laboratory 194, Institute of Public Health - Zrenjanin (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	2	0.182	0.188	0.181	0.016	0.025	S
A2	SO <sub>2</sub>	0.246	0.172	0.17	0.028	2.752	U
A4	μg S/ml	< 0.167	0.076	0.073	0.006		В
A5	μς 3/1111	< 0.167	0.068	0.067	0.008		В

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Laboratory 196, Institute of Public Health Leskovac (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	SO <sub>2</sub>	0.19	0.188	0.181	0.016	0.548	S
A2		0.171	0.172	0.17	0.028	0.038	S
A4	μg S/ml	0.08	0.076	0.073	0.006	1.255	S
A5	μς 3/1111	0.07	0.068	0.067	0.008	0.43	S

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Laboratory 203, The Public Health Institute Vranje (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>x</sup>
A1	SO <sub>2</sub>	0.185	0.188	0.181	0.016	0.229	S
A2		0.172	0.172	0.17	0.028	0.074	S
A4	μg S/ml	0.075	0.076	0.073	0.006	0.386	S
A5	μς Μπ	0.065	0.068	0.067	0.008	-0.184	S

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<sup>\*</sup> z score is unitless





Laboratory 204, Institute for Public Health "Pomoravlje" Cuprija (Republic of Serbia)

### Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value <sup>¥</sup>	Expected value	Mean value	Standard deviation	Z score *	EMEP quality norm <sup>*</sup>
A1	2	0.326	0.188	0.181	0.016	9.223	U
A2	SO <sub>2</sub>	0.298	0.172	0.17	0.028	4.622	U
A4	μg S/ml	< 0.200	0.076	0.073	0.006		В
A5	μς Μπ	< 0.200	0.068	0.067	0.008		В

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