

EMEP – 36th intercomparison of analytical methods - % deviation from expected value

Lab no	Precipitation																																											
	SO ₄ ²⁻				NH ₄ ⁺				NO ₃ ⁻				Na ⁺				Mg ²⁺				Cl ⁻				Ca ²⁺				K ⁺				pH				Cond							
	% deviation form expected value				% deviation form expected value				% deviation form expected value				% deviation form expected value				% deviation form expected value				% deviation form expected value				% deviation form expected value				% deviation form expected value				% deviation form expected value											
	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4
3	-1	-1	3	5	5	2	4	4	1	0	-1	-2	-2	0	-3	-1	-4	-4	-4	-6	-13	-10	-5	-3	46	27	21	19	-5	1	-5	-4	0.05	0.00	0.04	0.01	6	3	5	2				
4	-4	-3	-2	-3	3	1	1	1	-1	2	1	1	-2	-1	-3	-3	-28	-19	-17	-15	2	2	-2	-1	-34	-21	-15	-19	-30	-22	-17	-17	-0.01	0.01	0.03	0.03								
5	-2	1	-1	0	-2	-1	0	0	1	0	-1	0	0	0	-2	-2	4	4	4	3	1	0	0	0	5	4	3	2	0	2	2	1	0.10	0.12	0.13	0.06	-3	0	1	-1				
6	3	4	5	4	14	9	-8	-11	-2	-1	-1	-1	2	1	-2	-2	1	0	1	0	-2	-3	2	1	-2	6	3	-1	2	2	2	1	1	1.00	0.16	0.22	0.21	1	3	3	1			
7	-5	-6	-3	-5	-3	-1	-1	-1	-2	-1	0	0	-13	-13	-15	-15	-7	-5	0	-3	3	2	2	1	5	5	6	4	30	15	5	3	-0.20	-0.06	0.28	-0.12	-7	-8	-7	-6				
8	1	2	2	2	1	1	0	0	1	2	-3	-4	0	0	2	1	2	2	1	2	2	2	2	2	2	1	2	0	-5	-6	3	4	0.01	0.01	0.04	-0.02	8	8	7	5				
10	4	4	4	5	-9	-7	6	5	2	2	3	3	3	3	1	1	3	2	3	2	-5	3	-3	-3	-7	0	2	2	3	2	3	3	0.04	0.03	0.08	0.11	6	6	5	4				
12	0	-2	-3	-3	-7	-3	6	3	-9	-4	-3	-3	-9	-7	-8	-7	1	1	0	-1	-4	-5	-4	-4	-14	-15	-11	-2	-12	-6	-3	-1	-0.16	-0.05	-0.03	-0.03	-2	0	1	0				
15	-3	1	-2	-3	3	1	5	5	1	10	1	1	7	7	3	2	-3	2	5	4	1	2	-2	-2	-9	-5	-3	-3	-4	0	5	7	0.02	0.04	0.04	0.02	-2	-1	-1	-1				
16	-2	-4	-4	-4	4	1	-3	-3	-1	-3	-4	1	-1	-1	-7	-6	1	2	-1	0	-2	-2	-3	-4	3	12	14	15	3	3	4	3	0.04	0.04	0.06	0.05	0	0	2	0				
19	-4	-7	-3	-5	-36	-32	18	16	-3	0	-1	-1	-6	-4	-6	-6	-3	-3	2	3	6	2	-8	-8	-6	-2	-1	1	-2	0	1	-1	0.04	0.08	0.09	0.07	6	7	7	6				
20	3	1	-12	14	24	20	8	6	3	2	16	-14	-3	-1	-1	-10	-1	0	-1	-1	0	2	-2	-2	-1	0	0	1	-5	-1	2	5	-0.09	-0.06	-0.04	-0.03	3	3	3	3				
23	-11	-9	-7	-8	-7	-5	1	0	1	0	1	0	-4	-3	-4	-2	4	-4	-7	-7	-1	0	-2	-2	-7	-7	-6	-13	-15	-16	-15	-14	0.08	0.06	0.04	0.07	59	9	4	8				
24					-7	-10	2	4					-1	-3	-4	-3	-8	0	5	4					-4	1	4	10	-9	-2	-2	1	0.01	0.09	0.07	0.00								
26	0	-1	-1	-1	0	0	1	1	1	1	-2	-2	1	2	-1	-1	1	3	2	1	1	0	-1	-2	1	1	2	1	2	4	4	4	-0.05	-0.04	0.00	-0.07								
27	2	2	2	2	5	0	6	6	4	4	-2	-2	0	0	-2	-3	0	1	2	1	5	4	0	0	2	3	2	0	1	2	3	2	0.15	0.11	0.11	0.05	4	5	4	2				
30	0	-2	1	0	1	-1	1	1	1	0	1	1	2	1	-2	-1	7	5	5	5	4	5	11	12	15	9	10	-6	1	1	1	1	0.09	-0.01	0.13	0.16	-14	-12	-12	-14				
31	33	23	11	-2	-4	-5	1	-1	5	6	4	-3	-3	-2	-5	-4	-13	-10	-9	-7	-6	-5	-5	-11	-9	-9	-15	-12	-12	-5	-8	-4	-0.01	-0.06	-0.10	-0.13	15	7	8	7				
32	-4	-3	-2	0	16	16	4	4	-7	-3	0	0	0	-4	-5	-5	0	-4	-5	-5	4	0	3	2	-5	1	-8	10	8	-4	3	0	-0.12	-0.08	0.03	0.00	1	-3	4	1				
33	4	4	13	4	-40	-40	-9	-2	5	3	7	5	7	9	16	-3	0	0	-2	0	-1	-3	0	-4	5	12	9	0	1	-4	0	-3	-0.02	-0.07	-0.06	-0.07	4	5	5	3				
34	-76	-75	-75	-76	-81	-93	-46	-43	-88	-85	-83	-82	-26	11	0	-7	-17	-16	-13	-14	-27	-27	-18	-15	-34	-29	-23	-23	1	-6	-2	-8	-1.07	-1.09	-0.02	-0.27	53	4	13	11				
35	2	3	3	2	2	0	4	4	2	2	2	1	2	2	-1	1	-6	-3	-2	-1	2	1	1	-1	-7	-6	-4	-6	-2	-1	1	1	0.04	0.03	0.06	0.04	4	2	2	0				
36	3	4	3	2	-2	-2	-13	2	-1	-1	0	0	1	0	-3	-3	3	4	2	1	-1	-4	-5	-5	-2	3	-1	1	-1	-6	-2	-2	0.01	-0.03	0.01	-0.02	-1	0	1	-1				
38	-3	-2	-2	-3	2	0	2	1	-2	-1	-2	-1	-9	-8	-7	-6	-3	-3	-1	-3	-2	-2	-4	-6	-4	1	-4	-5	-7	-11	-7	-6	-0.09	-0.31	-0.12	-0.23	0	-2	2	-2				
39	1	-3	-3	1	9	-6	2	1	-2	0	-3	-1	3	3	2	-3	3	-1	3	-1	-4	-3	-5	-4	4	3	3	2	-7	-3	0	0	-0.04	0.04	0.04	0.04	-1	-3	-2	1				
40																																		-0.17	-0.18	-0.11	0.00	-14	-7	-5	-2			
42	40	34	33	33	-47	25	32	30	19	16	18	14	59	11	8	0	87	22	15	14	1948	249	133	70	300	119	80	64	6248	695	377	137	-0.68	-0.15	-0.01	-0.01	390	104	96	0				
45	7	7	4	3	412	256	90	86	6	7	3	2	6	6	-5	-8	0	4	0	1	3	1	51	3	2	3	-2	1	-7	1	-1	3	-0.09	-0.30	-0.14	-0.20	3	4	2	2				
46																																		0.05	0.06	0.04	0.07	1	-2	-2	1			
49	-1	-1	2	1	7	2	6	4	1	0	-1	-1	5	6	0	-1	0	-2	3	2	-1	0	-1	-1	11	3	1	0	-3	-20	-7	-4	-0.10	-0.02	0.05	0.08	-4	-4	-3	-4				
50	-4	-4	-3	-4	16	11	4	1	-4	-5	-4	-3	-5	-5	-7	-6	-11	-2	-4	-6	-6	-9	-3	-3	-23	-14	-11	-19	-3	1	-7	-6	0.13	0.17	0.16	0.13	3	6	5	4				
110	1	0	-2	-1	-6	-1	5	5	4	5	-2	-3	0	0	-3	-5	1	3	3	1	-4	-1	3	2	-2	0	-2	-2	-5	-6	-3	-6	0.01	0.01	0.02	0.02	-4	-1	1	-2				
112	0	-2	1	-1	3	4	6	5	3	0	1	0	5	3	0	0	-3	-3	2	3	-2	-1	-3	-3	2	-2	-1	-1	-2	-6	-3	-1	0.03	0.01	0.01	-0.05	-4	-7	-5	-5				
114	0	-4	-3	-3	3	4	2	-2	3	0	-1	-3	-2	-2	-6	-4	-3	-3	-3	-3	1	-5	-1	-4	31	37	61	29	-12	6	5	14	-0.07	-0.01	-0.03	0.00	-2	1	1	1				
115	-5	-5	-2	-5	-1	1	0	0	-6	-3	-3	-2	0	0	-7	-5	-7	-8	-5	-6	-7	-10	-4	-2	-4	-6	-10	-9	-4	-7	-30	-27	0.07	0.05	0.05	0.06	-3	-3	-4	-10				
116	-2	0	0	1	3	0	1	2	-5	-5	-11	-5	-9	-9	-10	-10	-9	-9	-10	-10	-9	-9	-10	-10	-9	-9	-10	-10	-9	-9	-9	-9	-0.09	0.03	0.13	0.05	-2	-8	-9	-10				
117	-5	-3	-2	-2	-13	-13	-1	-2	-5	-5	-6	-4	-19	-18	-17	-18	-3	-2	-1	-2	-13	-13	-7	-12	-3	-4	-2	-2	-24	-24	-18	-19	0.11	0.08	0.03	0.00	11	-4	-2	-2				
118	4	4	1	-1	8	6	5	5	7	4	3	1	-13	-12	-12	-12	-18	-8	-6	-7	-5	-2	-2	-2	-22	-12	-6	-12	-12	-12	-8	-6	-0.07	-0.04	0.00	-0.06	0	-7	-5	-7				
120	-3	-5	-4	-3	22	4	4	5	3	4	1	3	0	1	-2	-2	3	3	3	3	-12	-3	4	-2	2	1	1	2	-1	-2	-2	0	0.07	-0.01	0.05	0.08	0	3	7	3				
121	20	24	12	14	-1	-8	1	1	1	1	-1	-2	-6	-7	-8	-9	1	0	1	1	-7	-9	-7	-6	0	-3	-2	-2	-5	-7	-4	-6	1.03	0.70	1.07	1.17	377	125	228	215				
125	-5	-6	-4	-4	-1	-1	4	3	1	-3	-1	0	-2	-5	-7	-6	-2	-6	-4	-5	-6	-6	-5	-3	-2	-7	-3	-2	-3	-5	-5	-5	-0.07	0.00	0.09	0.08	203	30	9	6				
126	-9	-6	-7	-11	-23	-31	-20	-17	-4	0	-5	-4	-23	-9	-8	7	-21	-29	-2	-3	-2	-5	-8	0	137	112	77	78	31	-19	-18	11	0.01	-0.14	0.02	-0.04	-4	-3	-6	-8				
145	-7	-5	-2	-4	-3	-9	7	7	-7	-5	-3	-3	-6	-4	-4	-3	18	7	10	10	-6	-5	-2	-2	52	19	10	20	-17	-14	-5	-4	-0.13	-0.02	-0.02	-0.20	-4	-2	-1	-1				
153	-6	-6	-5	-6	-19	3	-6	-5	-7	-6	-7	-4	22	4	11	6	-21	-3	2	-1	-9	-8	-9	-8	13	12	13	24	-8	0	-3													