

EMEP – 35th 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				pH-units from 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						
3	2	2	3	3	-13	16	12	11	0	0	1	1	0	0	0	0	0	-2	-2	-2	-2	0	-21	-6	-7	-1	-2	0	-2	-0.01	0.02	-0.01	0.02	1	2	0	6					
4	-3	-4	-1	-2	2	1	0	-1	-6	-6	-3	-3	-2	-3	-1	-2	-11	-11	-9	-9	-7	-6	-6	-5	-10	-9	-9	-9	-15	-15	-13	-12	-0.02	-0.02	-0.02	0	0	0	-1	4		
5	1	0	0	0	3	2	4	-1	0	0	3	1	2	2	3	1	1	-1	2	1	2	1	2	1	6	5	9	6	6	5	9	6	-0.01	0.01	-0.01	0.02	0	0	-1	4		
7	1	1	1	0	-1	-5	12	10	0	0	1	1	1	2	2	2	-6	-12	-5	-5	-2	-4	0	0	-8	-17	-7	-5	-1	-1	1	0	-0.05	0.01	0.02	0.05	2	2	-5	4		
8	-1	-2	0	0	-5	-9	-1	-2	-5	2	-2	-2	-2	-3	0	-1	-3	-8	-1	-1	3	2	-4	-5	-7	-7	-5	-3	-6	-6	-5	-0.04	-0.03	-0.03	0	0	1	-1	4			
10	7	4	5	5	2	3	2	1	3	2	4	4	-2	-2	-3	1	4	8	7	6	15	12	-5	-6	15	19	-14	-8	5	8	7	4	0.03	0.03	0.01	0.03	0	1	-1	5		
12	1	0	0	0	4	-6	12	12	1	-1	1	1	1	-5	-4	-1	-3	-6	-15	2	-3	4	0	15	-22	-14	-14	-2	-7	0	1	-0.04	-0.03	-0.03	0	-8	-3	-1	1			
15	3	5	3	2	0	3	1	0	1	3	2	2	2	1	3	2	2	5	2	2	2	2	2	2	-2	-3	-1	0	-1	-2	2	1	-0.03	-0.01	-0.02	0.01	-3	-1	-5	-13		
16	-1	-2	0	-1	2	4	2	4	0	2	0	0	-1	2	-4	-1	-1	0	-1	-2	-2	5	5	5	7	-4	-2	-4	-5	0.02	0.03	0.03	0.04	0	0	1	6					
19	-3	-3	-10	-10	8	11	7	6	-1	-1	2	2	-3	-4	-4	-3	3	-3	2	2	-2	-2	-7	-3	-1	-4	-2	-2	2	1	0.02	0.03	2	2	-1	0	-2	2				
20	-3	-3	-3	-3	1	4	2	1	-1	-1	0	0	-14	-15	-12	-14	-5	-4	-4	-5	8	7	8	11	3	10	5	2	-10	-12	-7	-10	-0.06	-0.03	-0.02	0.01	-3	0	-2	3		
21	1	0	-1	-1	3	3	2	3	0	1	1	0	0	-1	-1	0	0	1	2	2	-2	0	-1	0	-1	3	-2	-1	-5	-6	-4	-4	-0.03	-0.02	-0.03	0	1	2	1	6		
22	8	16	16	13	-3	-1	-3	-2	10	14	10	11	-7	-10	-4	-3	-11	-14	-10	-10	22	27	38	37	-11	-17	-14	-14	-16	-21	-12	-13	-0.27	-0.41	-0.32	-0.33	-35	-32	-33	-30		
23	-1	-2	-1	-2	-3	-1	-3	-2	0	1	2	1	-7	-10	-4	-3	-11	-14	-10	-10	-7	-9	-4	-5	-11	-17	-14	-14	-16	-21	-12	-13	0.21	-0.12	-0.13	-0.07	0	-2	0	6		
24	0	2	4	5	2	0	5	4	-2	0	1	3	-12	-12	-11	-12	3	2	3	5	-2	0	1	6	3	1	2	2	-10	-16	-5	-4	-0.01	0	-0.01	0.01	-2	1	-2	4		
26	0	0	0	0	2	4	2	1	0	0	1	0	1	-1	0	1	3	3	1	3	1	-1	1	1	3	1	1	1	0	0	0	0	-0.06	-0.06	-0.05	-0.02	1	2	1	5		
27	-1	-1	-2	-2	4	4	5	4	-1	1	-1	-1	-4	-4	-3	-3	-1	-2	0	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	-0.02	-0.02	0.01	0	1	2	1	5
30	11	12	11	11	-9	-8	-2	-7	7	6	9	9	2	-5	-11	0	4	3	0	0	0	0	9	2	4	0	-9	2	4	0	-0.42	0.14	0.09	0.17	5	6	4	10				
31	6	8	6	5	1	3	-2	-6	-3	-2	1	1	-17	-17	-17	-15	-13	-14	-9	-9	-7	-7	-8	-8	-18	-19	-16	-13	-19	-19	-15	-10	-0.08	-0.1	-0.08	-0.03	0	1	-1	4		
32	1	3	2	2	9	15	0	2	1	1	1	1	0	-4	-4	1	0	-3	2	-2	0	0	0	-43	-52	-61	-38	0	0	0	0	-0.05	-0.06	0	0.05	-1	-6	-3	2			
33	1	-3	4	1	-5	-6	-5	-5	-2	-4	4	3	-12	-13	-11	-10	-4	-4	-1	-2	-14	2	-2	-8	-9	-13	-8	-9	-10	-11	-6	-8	-0.08	-0.04	-0.04	-0.02	1	1	1	6		
34	189	187	191	190	-95	-99	-100	-85	321	328	333	327	94	96	94	99	-12	-11	-9	-10	-11	-9	-12	-11	0	1	9	6	98	100	97	103	-4.26	-3.94	-2.7	-2.01	-15	-9	-88	-90		
35	1	2	2	1	2	5	2	2	1	1	2	2	-3	-2	1	0	-2	-3	-2	2	-1	-1	1	1	-6	-10	-6	-6	-1	-2	1	0	-0.05	-0.03	-0.03	0	-1	-1	-1	4		
36	-1	-1	2	1	1	3	1	-1	0	0	3	4	-1	-1	-2	-2	-1	0	0	2	-11	-9	-6	-6	-1	-3	1	-1	-1	0	1	-0.05	-0.04	-0.04	0	-5	-3	-7	1			
38	0	0	0	0	-2	-3	0	-1	-1	1	1	1	-6	-10	-2	-4	-3	-2	0	0	-8	2	0	-8	-11	-10	-10	-11	-9	-14	-10	-2	-0.08	-0.05	-0.03	0.03	-4	-4	-1	6		
39	-1	0	0	-1	0	1	1	0	0	-1	0	0	0	-1	0	-1	2	2	4	4	2	3	0	1	1	1	-3	1	-3	1	2	0	0	0	-0.05	-0.06	0	0.05	-1	-6	-3	2
42	-3	-6	-2	-1	-11	-10	-8	-7	1	10	3	3	1	10	3	3	14	25	10	11	-20	-34	-11	-15	108	121	89	95	33	78	37	34	0	0.02	0	0.04	-18	-15	-17	-14		
45	8	9	7	7	-39	-88	-17	-14	1	2	1	1	2	4	5	5	5	5	5	5	-2	-1	-1	-1	7	5	6	4	4	2	6	4	-0.16	-0.05	-0.1	-0.07	-10	-2	-3	-1		
46	-7	-4	-4	-4	3	3	2	3	-6	0	1	0	0	-5	-5	-3	-5	0	-3	1	1	1	1	-2	1	2	2	0	5	1	4	7	-0.05	-0.03	-0.05	-0.02	-5	-5	-5	-1		
49	3	3	3	2	8	14	6	3	4	5	4	3	-5	-9	-1	-2	-4	-2	0	0	-1	3	2	2	-7	-14	-7	-3	-4	-2	2	1	0.03	0.04	0.05	0.07	0	2	2	6		
110	19	17	14	21	-22	-29	-9	-9	-4	5	-6	-3	-7	-7	-7	-7	-5	-6	-5	-6	-1	-9	-1	-1	-2	-2	-2	-1	-4	-4	-5	-5	-0.44	-0.18	-0.16	0	-2	-1	0	6		
112	0	0	0	-1	-1	-1	-1	-2	0	1	0	0	-2	-1	-2	-2	0	-4	-2	-2	0	0	1	1	1	1	1	0	-3	-1	-1	-2	-0.03	-0.04	-0.02	0	-4	-6	-2	3		
114	5	0	1	0	4	6	-5	-5	1	-4	-2	-3	-1	-1	1	0	3	8	7	7	2	-5	-3	-7	15	39	22	18	-2	3	4	1	-0.03	0	-0.03	0.03	-1	1	1	6		
115	6	-1	0	-1	-3	1	-2	0	-1	-7	-1	4	-2	1	0	0	-5	-8	-4	-4	-6	-6	-7	0	-3	-6	-2	0	-8	3	-10	-6	-0.12	-0.02	0.02	0.05	-24	-12	-5	1		
117	4	4	6	7	-5	-6	-3	-3	-3	-4	-1	-2	-6	-4	-6	-7	8	14	13	13	14	14	13	13	14	21	22	18	-12	-2	4	6	-0.04	0.04	-0.02	0	-7	4	-3	-2		
118	3	20	22	27	8	6	2	3	12	7	8	6	-16	-18	-5	-1	5	6	3	4	15	12	9	8	259	465	25	6	-9	-12	0	1	-0.06	-0.05	-0.04	-0.01	-7	-6	-2	4		
120	-5	-7	-4	-4	1	2	-2	-3	4	3	4	5	3	3	2	5	4	6	3	4	6	3	4	10	1	3	5	5	6	5	6	3	-0.02	0	0.03	0	2	3	0	5		
121	-1	3	-2	-3	0	-1	2	3	-4	2	-5	-4	-5	-5	-4	-4	-3	6	-9	-8	-1	-2	-4	-3	-8	-9	-3	-7	-8	-9	-3	-7	-0.04	-0.03	-0.01	0.01	1	-3	-1	4		
124	2	-4	3	1	-1	-12	1	2	1	-1	4	3	-6	-1	-13	-10	-1	2	0	1	6	6	5	5	-3	-3	-3	-2	-2	8	-10	-7	-0.06	-0.06	-0.04	0	2	-2	0	4		
125	-4	155	0	63	4	6	7	7	2	158	2	50	-3	1	0	0	-4	-1	-2	-1	2	100	5	50	-7	-3	-5	-5	-6	0	-2	-3	-0.08	-0.1	-0.1	0	-4	-2	0	5		
126	1	-6	-9	-13	-23	-28	-16	-13	3	-7	-1	-7	-11	20	-11	-9	-7	-27	-29	-28	-9	71	-10	-20	233	128	47	22	-21	32	-16	-12	-0.04	0.13	-0.03	-0.01	-4	-4	-3	2		
145	1	0	1	0	4	-4	3	2	0	0	2	1	-6	-5	-2	-4	-8	-9	-7	-7	-3	-3	-2	-3	-4	-9	-7	-7	-11	-10	-7	-8	-0.03	-0.04	-0.02	-0.01	-4	-4	-3	2		
153	-4	-5	-2	-3	0	1	-1	-1	-6	-6	-5	-4	-4	-7	-1	-3	-3	-9	-2	-3	-12	-12	-10	-10	-6	-14	-7	-7	-9	-10	-7	-7	-0.09	-0.09	-0.08	-0.05	0	1	0	6		
155	1	0	2	2	-2	-4	0	2	-1	-3	-1	-1	-4	-5	-2	-2	-3	-3	-1	-2	-3	-3	-1	-2	-6	-6	-7	-6	-10	-11	-8	-10	-0.03	-0.02	-0.02	0.01	-1	0	0	5		
158	-6	-8	-4																																							