

# The Performance of Several Current Interpolation Methods for Variability of cations in Groundwater in Esfarayen Plain, Iran: A Case Study

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## Supplementary file 1

**Table S1. The numbers of active wells and coordinates of point in 1988**

Well No.	X	Y
1	542450	4097800
2	542450	4097800
3	542450	4097800
4	542450	4097800
5	542450	4097800
6	542450	4097800
7	542450	4097800
8	485050	4106600
9	486700	4105650
10	486700	4109900
11	487150	4112500
12	489050	4105150
13	489650	4107550
14	491850	4105700
15	492800	4111100
16	493750	4110100
17	496900	4111000
18	497650	4098950
19	498250	4098000

20	499750	4109850
21	501200	4097750
22	502850	4097250
23	503850	4098250
24	506950	4097950
25	507000	4106900
26	507750	4110450
27	508200	4096800
28	509250	4099250
29	509900	4104550
30	510050	4108400
31	513550	4100300
32	513900	4108500
33	514450	4097150
34	514700	4101850
35	517450	4098950
36	517600	4102900
37	517750	4109300
38	518200	4097650
39	519200	4101500
40	519300	4104000
41	522200	4100800
42	522300	4104550
43	522500	4098300
44	523050	4104250
45	525500	4100800
46	525750	4104200
47	527800	4102250
48	529050	4109250
49	530300	4104800
50	531600	4111800
51	533900	4108200
52	534350	4097450
53	535400	4101450
54	535700	4109750
55	535850	4105100
56	536800	4099700
57	539500	4106200
58	540100	4104650
59	540450	4102750
60	541050	4096150

61	541850	4099350
62	542550	4101950
63	542950	4095200
64	544400	4096700
65	545200	4100100
66	545600	4094850
67	545800	4104600
68	546900	4096900
69	548400	4094900
70	548550	4091950
71	552100	4091700
72	552750	4094150
73	528550	4103600
74	528550	4103600
75	528550	4103600
76	528550	4103600
77	528550	4103600
78	528550	4103600
79	528550	4103600
80	528550	4103600
81	542000	4102550
82	542000	4102550
83	542000	4102550
84	542000	4102550
85	542000	4102550
86	542000	4102550
87	542000	4102550
88	542000	4102550
89	536150	4105750
90	536150	4105750
91	536150	4105750
92	536150	4105750
93	536150	4105750
94	536150	4105750
95	536150	4105750
96	536150	4105750
97	513100	4098600
98	513100	4098600
99	513100	4098600
100	513100	4098600
101	513100	4098600

102	513100	4098600
103	513100	4098600
104	513100	4098600
105	513100	4098600
106	506150	4097800
107	506150	4097800
108	506150	4097800
109	506150	4097800
110	506150	4097800
111	506150	4097800
112	506150	4097800
113	506150	4097800
114	506150	4097800
115	508850	4104100
116	508850	4104100
117	508850	4104100
118	508850	4104100
119	508850	4104100
120	508850	4104100
121	508850	4104100
122	508850	4104100
123	498700	4099100
124	498700	4099100
125	498700	4099100
126	498700	4099100
127	498700	4099100
128	498700	4099100
129	498700	4099100
130	590350	4052250
131	591150	4048950
132	489550	4103650
133	489550	4103650
134	489550	4103650

**Table S2. The numbers of active wells and coordinates of point in 2019**

Well No.	X	Y
1	491404	4109887
2	491404	4109887
3	491404	4109887

4	491404	4109887
5	491404	4109887
6	491404	4109887
7	491404	4109887
8	491404	4109887
9	545282	4095384
10	545282	4095384
11	545282	4095384
12	545282	4095384
13	545282	4095384
14	545282	4095384
15	545282	4095384
16	545282	4095384
17	487150	4112500
18	531600	4111800
19	522433	4097529
20	535448	4109683
21	540372	4102522
22	523760	4101941
23	497626	4098399
24	453199	4000081
25	487434	4110268
26	489309	4105683
27	542531	4101863
28	499334	4109939
29	514321	4096973
30	507024	4097650
31	552225	4091329
32	517715	4109010
33	520272	4097436
34	529891	4104780
35	541135	4096070
36	541564	4102469
37	541564	4102469
38	541564	4102469
39	541564	4102469
40	541564	4102469

41	541564	4102469
42	541564	4102469
43	541564	4102469
44	550056	4092572
45	514103	4101599
46	523790	4100862
47	550796	4091925