

Water resource near Shinejinst city in sw. Mongolia

groundwater samples - stable isotopes O and H

Create the chart:

- 1) GMWL
- 2) LMWL for Ulaanbaatar
- 3) calculate mean stable isotope composition in meteoric water in Ulaanbaatar
- 4) plot groundwater samples
- 5) assess the conditions during groundwater recharge

Ulaanbaatar - meteoric water (GNIP)

Begin of Period	End of Period	Precipitation	Air Temperature	O18	H2
6/1/1990	6/30/1990	58		-9.17	-76.1
1/1/1991	1/31/1991	1	-23.1	-7.36	-57
6/1/1991	6/30/1991	22	15.4	-9.03	-76.1
7/1/1991	7/31/1991	60	16.5	-10.07	-81.4
8/1/1991	8/31/1991	38	18.1	-1.64	-22.4
12/1/1991	12/31/1991	1	-19.1	-22.29	-187.6
4/1/1992	4/30/1992	8	4.6	-16.3	-124.4
6/1/1994	6/30/1994	55	16.8	-7.25	-61.4
8/1/1994	8/31/1994	163	15.2	-9.29	-70
6/1/1996	6/30/1996	28	12.9	-3.62	-16.6
7/1/1996	7/31/1996	84	17.8	-11.52	-88.5
8/1/1996	8/31/1996	62	16.1	-9	-58.6
6/1/1997	6/30/1997	33	16.6	-9.04	-76.9
7/1/1997	7/31/1997	114	18.3	-6.94	-61.95
8/1/1997	8/31/1997	34	16.1	-11.24	-79.3
10/1/1997	10/31/1997	2	-3.8	-11.93	-90.2
7/1/1998	7/31/1998	55	19.4	-11.83	-86.1
8/1/1998	8/31/1998	66	15.9	-13.4	-101.5
9/1/1998	9/30/1998	49	10.8	-9.02	-61
10/1/1998	10/31/1998	19	1.6	-12.62	-80.9
11/1/1998	11/30/1998	11	-11.4	-21.2	-158.4
2/1/1999	2/28/1999	3	-14.5	-27.44	-216.5
3/1/1999	3/31/1999	8	-13	-25.97	-199.85
4/1/1999	4/30/1999	9	3.1	-11.1	-86.45
5/1/1999	5/31/1999	15	11.8	-12.2	-84.85
6/1/1999	6/30/1999	79	15.9	-8.74	-58.5
7/1/1999	7/31/1999	36	16.3	-10.35	-79.75
8/1/1999	8/31/1999	48	16.5	-8.59	-59.65
9/1/1999	9/30/1999	61	8.8	-9.76	-64.15
10/1/1999	10/31/1999	7	-0.5	-16.32	-119.45
11/1/1999	11/30/1999	3	-8.8	-24.06	-177.6
12/1/1999	12/31/1999	2	-17.8	-23.75	-186.8
2/1/2000	2/29/2000	3	-17.9	-30.14	-234.6
3/1/2000	3/31/2000	4	-5.4	-15.8	-125.1
7/1/2000	7/31/2000	60	19.1	-8.53	-61.35
8/1/2000	8/31/2000	138	17.1	-10.36	-73.55
10/1/2000	10/31/2000	8	-2.8	-17.78	-132.95
11/1/2000	11/30/2000	12	-17.5	-28.86	-221
12/1/2000	12/31/2000	5	-21.8	-30.48	-236.5
1/1/2001	1/31/2001	6	-31.9	-13.46	-154.2
2/1/2001	2/28/2001		-29.8	-27.04	-214.8
3/1/2001	3/31/2001	6	-14.1	-26.94	-209

GW samples

039V	-5.3644	-58.5028
023V	-5.03242	-68.9816
001G	-8.95829	-85.8519
GC-01	-7.38207	-77.6009
GC-02	-9.95698	-89.0211
GC-08	-6.96306	-76.5583
GC-09	-8.31855	-80.1728
GC-10	-10.6664	-90.6508
GC-12	-6.99004	-78.5968
GC-13	-8.30341	-81.7066
GC-15	-10.5716	-90.1067
GC-17	-10.945	-89.5728
GC-18	-8.56936	-80.7364
GC-19	-7.15647	-80.4236
GC-21	-6.32689	-75.9867
026G	-7.88599	-76.4305
036V	0.291497	-49.0446
082V	-10.3627	-89.7745
GC-03	-12.4218	-97.7351
GC-07	-11.7592	-96.1435
GC-11	-11.256	-94.0314
012-G	-9.9141	-78.2727
GC-16	-12.5898	-100.967
GC-22	-8.44067	-69.1137
GC-23	-11.4989	-94.0694