U. S. WEATHER BUREAU STATION

Station Number	Station Name
1	The Dalles
2	Wasco
3	Arlington
4	Umatilla
5	Hermiston 2S
6	Echo
7	Morgan
8	Mikkalo-Youngman 6W
9	Moro
10	Friend 1W
11	Ione 18S
12	Kent
13	Condon
14	Heppner
15	Pilot Rock 1SE
16	Wickiup Dam
17	Bend
18	Redmond
19	Madras
20	Lower Hay Creek
21	Grizzly
22	Prineville 4NW
23	Ochoco R. S.
24	Antelope 1N
25	Fossil

U. S. WEATHER BUREAU STATION (cont.)

Station Number	Station Name
26	Ukiah 1NE
27	Milton-Freewater 4NW
28	Weston 2SE
29	Minam 7NE
30	Wallowa
31	Enterprise
32	Joseph
33	La Grande
34	Cove
35	Seneca
36	Union
37	Rock Creek
38	Baker KBKR
39	Halfway
40	Richland
41	Huntington
42	Unity
43	Prairie City R. S.
44	John Day
45	Dayville
46	Chemult
47	Chiloquin
48	Keno
49	Klamath Falls 2SSW
50	Tule Lake, California

U. S. WEATHER BUREAU STATION (cont.)

Station Number	Station Name
51	Clear Lake Dam, California
52	Gerber Dam
53	Round Grove
54	Fremont
55	The Poplars
56	Paisley
57	Valley Falls
58	Lakeview
59	Fort Bidwell, California
60	Sheldon, California
65	Paradise Valley, Nevada
66	Hart Mountain
67	Squaw Butte
68	Burns
69	Harney Branch
70	Voltage
71	P Ranch Wildlife Ref.
72	Warm Springs Res.
73	Beulah
74	Harper
75	Danner
76	Owyhee Dam
77	Adrian
78	Nyssa

Table 1. Corresponding values of r and Z 1/

r	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
					Z VALUES					
.00	---	---	---	---	---	---	---	---	---	---
.10	.100	---	---	---	---	---	---	---	---	---
.20	.203	.213	.224	.234	.245	.256	.266	.277	.288	.299
.30	.309	.320	.332	.343	.355	.365	.377	.388	.400	.413
.40	.424	.435	.447	.460	.472	.484	.497	.511	.523	.536
.50	.549	.563	.576	.590	.604	.618	.633	.648	.663	.677
.60	.693	.708	.725	.740	.758	.775	.793	.811	.829	.848
.70	.867	.887	.907	.928	.950	.973	.996	1.021	1.046	1.072
.80	1.098	1.127	1.156	1.188	1.221	1.257	1.294	1.334	1.376	1.422
.90	1.472	1.528	1.589	1.658	1.738	1.832	1.946	2.092	2.298	2.647

1/ Example of use: Z of 1.188 = an r of .83.

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
1	2	1.188	1	54	.829	2	33	.484
1	3	.887	1	55	.950	2	34	.511
1	4	.576	1	56	.775	2	35	.424
1	5	.811	1	57	.604	2	36	.472
1	6	.887	1	58	.484	2	37	.740
1	7	.708	1	59	.563	2	38	.400
1	8	.811	1	60	.320	2	39	.355
1	9	1.257	1	65	.343	2	40	.388
1	10	1.156	1	66	.140	2	41	.309
1	11	.633	1	67	.320	2	42	.424
1	12	.907	1	68	.100	2	43	.472
1	13	.829	1	69	.160	2	44	.693
1	14	.793	1	70	.180	2	45	.677
1	15	.708	1	71	.472	2	46	1.046
1	16	1.221	1	72	.160	2	47	.663
1	17	1.376	1	73	.224	2	48	.633
1	18	1.257	1	74	.256	2	49	.708
1	19	1.046	1	75	.356	2	50	.388
1	20	1.046	1	76	-.170	2	51	.170
1	21	.848	1	77	.060	2	52	.511
1	22	1.996	1	78	-.160	2	53	.648
1	23	1.996	2	3	1.257	2	54	.633
1	24	1.021	2	4	.693	2	55	.950
1	25	.708	2	5	1.072	2	56	.549
1	26	.549	2	6	.950	2	57	.424
1	27	.563	2	7	.996	2	58	.400
1	28	.648	2	8	1.021	2	59	.472
1	29	.460	2	9	1.422	2	60	.355
1	30	.887	2	10	.973	2	65	.343
1	31	.320	2	11	1.046	2	66	.224
1	32	.343	2	12	1.188	2	67	.549
1	33	.472	2	13	1.188	2	68	.309
1	34	.511	2	14	.848	2	69	.299
1	35	.576	2	15	.758	2	70	.332
1	37	.663	2	16	.973	2	71	.563
1	38	.309	2	17	1.221	2	72	.234
1	39	.377	2	18	1.098	2	73	.299
1	40	.234	2	19	1.021	2	74	.224
1	41	.180	2	20	1.334	2	75	.355
1	42	.288	2	21	1.156	2	76	-.060
1	43	.277	2	22	.848	2	77	.040
1	44	.400	2	23	.563	2	78	-.060
1	45	.472	2	24	1.046	3	4	.973
1	46	1.376	2	25	.907	3	5	1.334
1	47	.887	2	26	.618	3	6	1.127
1	48	.793	2	27	.708	3	7	1.156
1	49	.887	2	28	.563	3	8	1.188
1	50	.355	2	29	.576	3	9	1.294
1	51	.256	2	30	.950	3	10	.811
1	52	.563	2	31	.400	3	11	.996
1	53	.887	2	32	.424	3	12	1.127

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
3	13	1.127	3	67	.693	4	43	.447
3	14	.928	3	68	.460	4	44	.758
3	15	.811	3	69	.460	4	45	.708
3	16	.829	3	70	.343	4	46	.549
3	17	.996	3	71	.604	4	47	.677
3	18	.928	3	72	.484	4	48	.604
3	19	.973	3	73	.484	4	49	.775
3	20	1.098	3	74	.549	4	50	.424
3	21	.996	3	75	.576	4	51	.472
3	22	.775	3	76	.120	4	52	.648
3	23	.758	3	77	.256	4	53	.793
3	24	1.127	3	78	.060	4	54	.708
3	25	.950	4	5	1.422	4	55	.563
3	26	.663	4	6	1.221	4	56	.633
3	27	.928	4	7	1.098	4	57	.775
3	28	.758	4	8	1.156	4	58	.708
3	29	.677	4	9	.996	4	59	.618
3	30	.867	4	10	.867	4	60	.563
3	31	.511	4	11	1.021	4	65	.633
3	32	.523	4	12	1.072	4	66	.245
3	33	.523	4	13	1.021	4	67	.829
3	34	.663	4	14	.996	4	68	.618
3	35	.536	4	15	.887	4	69	.648
3	36	.725	4	16	.677	4	70	.677
3	37	.887	4	17	.677	4	71	.811
3	38	.549	4	18	.648	4	72	.793
3	39	.365	4	19	.928	4	73	.725
3	40	.648	4	20	.950	4	74	1.294
3	41	.472	4	21	.950	4	75	.663
3	42	.447	4	22	.708	4	76	.497
3	43	.245	4	23	.648	4	77	.604
3	44	.758	4	24	1.046	4	78	.484
3	45	.725	4	25	.928	5	6	1.658
3	46	.829	4	26	.460	5	7	1.334
3	47	.604	4	27	1.021	5	8	1.257
3	48	.633	4	28	.663	5	9	1.127
3	49	.740	4	29	.648	5	10	1.098
3	50	.511	4	30	.775	5	11	1.472
3	51	.332	4	31	.511	5	12	1.422
3	52	.497	4	32	.590	5	13	1.376
3	53	.758	4	33	.332	5	14	1.188
3	54	.740	4	34	.775	5	15	1.156
3	55	.973	4	35	.536	5	16	.867
3	56	.663	4	36	.740	5	17	.928
3	57	.693	4	37	.829	5	18	.867
3	58	.536	4	38	.549	5	19	1.156
3	59	.549	4	39	.377	5	20	1.294
3	60	.424	4	40	.907	5	21	1.334
3	65	.460	4	41	.472	5	22	.811
3	66	.150	4	42	.633	5	23	.848

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
5	24	1.376	5	78	.266	6	56	.725
5	25	1.221	6	7	1.257	6	57	.725
5	26	.693	6	8	1.334	6	58	.775
5	27	1.156	6	9	1.127	6	59	.563
5	28	.848	6	10	1.422	6	60	.497
5	29	.848	6	11	1.257	6	65	.576
5	30	1.127	6	12	1.294	6	66	.245
5	31	.663	6	13	1.098	6	67	.928
5	32	.663	6	14	1.334	6	68	.740
5	33	.648	6	15	1.257	6	69	.663
5	34	.928	6	16	.928	6	70	.708
5	35	.618	6	17	1.072	6	71	.996
5	36	.811	6	18	.928	6	72	.523
5	37	1.046	6	19	1.188	6	73	.708
5	38	.708	6	20	1.376	6	74	.867
5	39	.424	6	21	1.422	6	75	.604
5	40	.904	6	22	.973	6	76	.277
5	41	.523	6	23	1.156	6	77	.388
5	42	.758	6	24	1.376	6	78	.343
5	43	.484	6	25	1.098	7	8	1.422
5	44	.907	6	26	.758	7	9	1.072
5	45	.907	6	27	1.294	7	10	1.098
5	46	.708	6	28	.775	7	11	1.422
5	47	.648	6	29	.829	7	12	1.528
5	48	.633	6	30	1.098	7	13	1.376
5	49	.871	6	31	.633	7	14	1.257
5	50	.460	6	32	.758	7	15	1.257
5	51	.377	6	33	.793	7	16	.618
5	52	.604	6	34	1.188	7	17	.848
5	53	.758	6	35	.648	7	18	.758
5	54	.758	6	36	.907	7	19	1.156
5	55	.708	6	37	.973	7	20	1.257
5	56	.708	6	38	.663	7	21	1.127
5	57	.693	6	39	.563	7	22	.829
5	58	.604	6	40	.928	7	23	.758
5	59	.576	6	41	.484	7	24	1.257
5	60	.460	6	42	.867	7	25	1.376
5	65	.511	6	43	.549	7	26	.793
5	66	.288	6	44	1.046	7	27	1.098
5	67	.887	6	45	.848	7	28	.618
5	68	.648	6	46	.928	7	29	.677
5	69	.563	6	47	.740	7	30	.848
5	70	.523	6	48	.758	7	31	.604
5	71	.848	6	49	.848	7	32	.497
5	72	.618	6	50	.576	7	33	.549
5	73	.663	6	51	.447	7	34	.887
5	74	1.046	6	52	.590	7	35	.472
5	75	.604	6	53	.848	7	36	.829
5	76	.343	6	54	.793	7	37	.887
5	77	.424	6	55	.677	7	38	.563

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
7	39	.190	8	24	1.294	9	19	1.188
7	40	.633	8	27	1.188	9	20	1.376
7	41	.400	8	28	.793	9	21	1.127
7	42	.511	8	29	.708	9	22	1.046
7	43	.447	8	30	1.021	9	23	.996
7	44	.725	8	31	1.046	9	24	1.257
7	45	.663	8	32	1.046	9	25	.829
7	46	.576	8	33	.633	9	26	.725
7	47	.648	8	34	1.127	9	27	.996
7	48	.677	8	36	1.156	9	28	.740
7	49	.758	8	37	1.257	9	29	.693
7	50	.536	8	38	.867	9	30	.928
7	51	.563	8	41	.648	9	31	.484
7	52	.590	8	42	1.021	9	32	.633
7	53	.775	8	43	.758	9	33	.511
7	54	.663	8	44	1.021	9	34	.677
7	55	.549	8	45	1.334	9	35	.693
7	56	.693	8	48	.811	9	36	.725
7	57	.793	8	49	.973	9	37	.973
7	58	.725	8	50	.811	9	38	.523
7	59	.511	8	51	.708	9	39	.497
7	60	.234	8	52	.663	9	40	.472
7	65	.536	8	54	.996	9	41	.377
7	66	.213	8	55	.887	9	42	.447
7	67	.811	8	56	1.072	9	43	.523
7	68	.576	8	57	.973	9	44	.663
7	69	.811	8	58	.907	9	45	.693
7	70	.447	8	59	.887	9	46	1.098
7	71	.663	8	60	.848	9	47	.907
7	72	.563	8	66	.576	9	48	.848
7	73	.413	8	67	1.294	9	49	.973
7	74	.693	8	68	.775	9	50	.511
7	75	.693	8	69	.775	9	51	.365
7	76	.090	8	70	.663	9	52	.725
7	77	.299	8	71	1.098	9	53	.973
7	78	.140	8	72	.829	9	54	.887
8	9	1.472	8	73	.793	9	55	1.046
8	10	1.072	8	75	.793	9	56	.829
8	11	1.156	8	76	.343	9	57	.758
8	12	1.422	8	77	.484	9	58	.677
8	13	1.376	8	78	.343	9	59	.677
8	14	1.221	9	10	1.098	9	60	.497
8	16	.829	9	11	.887	9	65	.536
8	17	1.046	9	12	1.294	9	66	.277
8	18	.928	9	13	1.221	9	67	.618
8	19	1.221	9	14	1.021	9	68	.355
8	20	1.334	9	15	.848	9	69	.413
8	21	1.472	9	16	1.127	9	70	.424
8	22	1.294	9	17	1.376	9	71	.677
8	23	.887	9	18	1.156	9	72	.447

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
9	73	.447	10	69	.413	11	53	.523
9	74	.472	10	70	.365	11	54	.460
9	75	.549	10	71	.604	11	55	.590
9	76	.050	10	72	.288	11	56	.511
9	77	.213	10	73	.266	11	57	.563
9	78	.080	10	75	.497	11	58	.435
10	11	1.127	10	76	-.160	11	59	.277
10	12	1.257	10	77	-.010	11	60	.299
10	13	1.021	10	78	-.070	11	65	.213
10	14	1.294	11	12	1.658	11	66	.400
10	16	.829	11	13	1.589	11	67	.758
10	17	1.221	11	14	1.738	11	68	.484
10	18	1.072	11	15	1.658	11	69	.256
10	19	1.098	11	16	.648	11	70	.343
10	20	1.156	11	17	.973	11	71	.725
10	21	1.072	11	18	.829	11	72	.234
10	22	.996	11	19	1.156	11	73	.447
10	23	1.221	11	20	1.334	11	75	.472
10	24	1.294	11	21	1.257	11	76	.090
10	27	.973	11	22	.758	11	77	-.020
10	28	.576	11	23	.887	11	78	.090
10	29	.663	11	24	1.334	12	13	1.589
10	30	.973	11	25	2.092	12	14	1.334
10	31	.447	11	26	1.072	12	15	1.098
10	32	.549	11	27	1.257	12	16	1.046
10	33	.740	11	28	.663	12	17	1.021
10	34	.867	11	29	.829	12	18	.973
10	36	.663	11	30	.887	12	19	1.376
10	37	.848	11	31	.648	12	20	1.589
10	38	.460	11	32	.590	12	21	1.422
10	41	.180	11	33	.758	12	22	1.046
10	42	.563	11	34	.973	12	23	1.156
10	43	.523	11	35	.693	12	24	1.658
10	44	.648	11	36	.829	12	25	1.472
10	45	.549	11	37	.950	12	26	.928
10	48	.725	11	38	.663	12	27	1.072
10	49	.758	11	39	.277	12	28	.693
10	50	.320	11	40	.648	12	29	.829
10	51	.435	11	41	.234	12	30	1.156
10	52	.536	11	42	.618	12	31	.725
10	54	.677	11	43	.590	12	32	.740
10	55	.472	11	44	.775	12	33	.663
10	56	.708	11	45	.848	12	34	.928
10	57	.563	11	46	.497	12	35	.604
10	58	.511	11	47	.365	12	36	.848
10	59	.536	11	48	.447	12	37	1.127
10	60	.309	11	49	.484	12	38	.708
10	66	.160	11	50	.424	12	39	.484
10	67	.549	11	51	.150	12	40	.775
10	68	.234	11	52	.203	12	41	.523
						12	42	.693

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
12	43	.604	13	32	.648	14	22	1.021
12	44	.829	13	33	.523	14	23	1.221
12	45	.829	13	34	.793	14	24	1.422
12	46	.848	13	35	.708	14	25	1.334
12	47	.811	13	36	.829	14	26	.928
12	48	.848	13	37	1.156	14	27	1.257
12	49	.907	13	38	.793	14	28	.793
12	50	.511	13	39	.377	14	29	.708
12	51	.536	13	40	.740	14	30	.996
12	52	.829	13	41	.447	14	31	.693
12	53	.775	13	42	.648	14	32	.887
12	54	.775	13	43	.590	14	33	.740
12	55	.793	13	44	.725	14	34	1.221
12	56	.758	13	45	1.072	14	35	.775
12	57	.758	13	46	.663	14	36	1.021
12	58	.793	13	47	.758	14	37	.887
12	59	.758	13	48	.663	14	38	.648
12	60	.424	13	49	.887	14	39	.400
12	65	.590	13	50	.590	14	40	.618
12	66	.377	13	51	.388	14	41	.343
12	67	.758	13	52	.633	14	42	.663
12	68	.549	13	53	.793	14	43	.563
12	69	.633	13	54	.829	14	44	.907
12	70	.497	13	55	.907	14	45	.887
12	71	.848	13	56	.829	14	46	.725
12	72	.604	13	57	.740	14	47	.576
12	73	.604	13	58	.693	14	48	.604
12	74	.677	13	59	.590	14	49	.677
12	75	.648	13	60	.424	14	50	.413
12	76	.203	13	65	.511	14	51	.484
12	77	.400	13	66	.497	14	52	.523
12	78	.256	13	67	.867	14	53	.708
13	14	1.188	13	68	.590	14	54	.677
13	15	1.127	13	69	.536	14	55	.633
13	16	.928	13	70	.472	14	56	.663
13	17	1.072	13	71	.793	14	57	.708
13	18	.907	13	72	.590	14	58	.576
13	19	1.422	13	73	.563	14	59	.523
13	20	1.658	13	74	.708	14	60	.234
13	21	1.658	13	75	.618	14	65	.413
13	22	1.021	13	76	.266	14	66	.377
13	23	.829	13	77	.288	14	67	.648
13	24	1.422	13	78	.170	14	68	.576
13	25	1.422	14	15	1.472	14	69	.590
13	26	.811	14	16	.775	14	70	.435
13	27	1.046	14	17	.973	14	71	.829
13	28	.907	14	18	.758	14	72	.497
13	29	.793	14	19	1.127	14	73	.523
13	30	1.021	14	20	1.294	14	74	.708
13	31	.677	14	21	1.294	14	75	.590

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
14	76	.080	16	30	1.188	17	32	.549
14	77	.245	16	31	.633	17	33	.633
14	78	.170	16	32	.563	17	34	.693
15	17	.907	16	34	.848	17	35	.775
15	18	.887	16	36	.775	17	36	.648
15	19	1.072	16	37	.950	17	37	.950
15	20	1.188	16	38	.740	17	38	.549
15	21	1.294	16	41	.497	17	39	.523
15	22	.973	16	42	.576	17	40	.447
15	23	.887	16	43	.663	17	41	.309
15	24	1.221	16	44	.677	17	42	.511
15	28	.829	16	45	.604	17	43	.648
15	29	.663	16	48	.996	17	44	.708
15	30	1.021	16	49	1.422	17	45	.793
15	31	1.046	16	50	.648	17	46	1.334
15	33	.775	16	51	-.070	17	47	.928
15	34	1.221	16	52	.867	17	48	.829
15	36	1.072	16	54	1.156	17	49	.950
15	37	1.046	16	55	1.127	17	50	.633
15	38	.633	16	56	.740	17	51	.224
15	41	.332	16	57	.973	17	52	.497
15	42	1.046	16	58	.708	17	53	.887
15	44	.996	16	59	.811	17	54	.928
15	48	.563	16	60	.447	17	55	1.098
15	49	.618	16	66	.234	17	56	.793
15	50	.484	16	67	.460	17	57	.648
15	54	.725	16	68	.633	17	58	.484
15	56	.811	16	69	.234	17	59	.549
15	58	.693	16	70	.633	17	60	.413
15	59	.536	16	71	.576	17	65	.400
15	60	.663	16	72	.320	17	66	.245
15	66	.663	16	73	.663	17	67	.633
15	67	1.021	16	75	.633	17	68	.400
15	68	.576	16	76	.388	17	69	.332
15	70	.377	16	77	.343	17	70	.447
15	72	.590	16	78	.413	17	71	.663
15	75	.725	17	18	1.472	17	72	.234
15	76	.150	17	19	1.188	17	73	.460
15	78	.140	17	20	1.376	17	74	.309
16	17	1.156	17	21	1.257	17	75	.400
16	18	.996	17	22	1.188	17	76	-.020
16	19	1.188	17	23	1.294	17	77	.050
16	20	1.188	17	24	1.294	17	78	.020
16	21	1.021	17	25	.887	18	19	1.188
16	22	1.156	17	26	.725	18	20	1.156
16	23	1.127	17	27	.793	18	21	.996
16	24	1.294	17	28	.758	18	22	1.127
16	27	.618	17	29	.576	18	23	.928
16	28	.973	17	30	.867	18	24	1.127
16	29	1.188	17	31	.447	18	25	.848

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
18	26	.648	19	21	1.946	19	75	.740
18	27	.663	19	22	1.294	19	76	.224
18	28	.604	19	23	1.021	19	77	.320
18	29	.484	19	24	1.589	19	78	.190
18	30	.867	19	25	1.098	20	21	1.738
18	31	.523	19	26	.848	20	22	1.221
18	32	.497	19	27	1.046	20	23	.511
18	33	.460	19	28	.973	20	24	1.658
18	34	.536	19	29	.677	20	25	1.098
18	35	.590	19	30	.973	20	26	.811
18	36	.549	19	31	.708	20	27	1.188
18	37	.887	19	32	.663	20	28	.973
18	38	.343	19	33	.472	20	29	1.072
18	39	.677	19	34	.829	20	30	1.046
18	40	.549	19	35	.811	20	31	.648
18	41	.400	19	36	.811	20	32	.590
18	42	.511	19	37	1.098	20	33	.648
18	43	.435	19	38	.648	20	34	.887
18	44	.677	19	39	.536	20	35	.829
18	45	.677	19	40	.758	20	36	.775
18	46	1.334	19	41	.633	20	37	1.046
18	47	.996	19	42	.633	20	38	.725
18	48	1.046	19	43	.618	20	39	.484
18	49	1.021	19	44	.758	20	40	.775
18	50	.618	19	45	1.098	20	41	.355
18	51	.413	19	46	.928	20	42	.590
18	52	.758	19	47	1.072	20	43	.693
18	53	.973	19	48	1.156	20	44	.708
18	54	.996	19	49	1.294	20	45	.950
18	55	1.021	19	50	.848	20	46	.829
18	56	.758	19	51	.633	20	47	.848
18	57	.604	19	52	.996	20	48	.848
18	58	.576	19	53	1.188	20	49	1.021
18	59	.758	19	54	1.188	20	50	.775
18	60	.648	19	55	1.156	20	51	.299
18	65	.497	19	56	.973	20	52	.604
18	66	.180	19	57	.950	20	53	1.046
18	67	.618	19	58	.848	20	54	.950
18	68	.332	19	59	.811	20	55	.996
18	69	.332	19	60	.484	20	56	.907
18	70	.355	19	65	.708	20	57	.907
18	71	.633	19	66	.377	20	58	.677
18	72	.288	19	67	.829	20	59	.536
18	73	.447	19	68	.708	20	60	.472
18	74	.277	19	69	.775	20	65	.424
18	75	.549	19	70	.604	20	66	.400
18	76	.010	19	71	.928	20	67	.793
18	77	.160	19	72	.549	20	68	.576
18	78	.010	19	73	.633	20	69	.288
19	20	2.298	19	74	.693	20	70	.472

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
20	71	.950	21	68	.758	22	67	.775
20	72	.245	21	69	.388	22	68	.563
20	73	.604	21	70	.633	22	69	.576
20	75	.663	21	71	.996	22	70	.633
20	76	.170	21	72	.424	22	71	.950
20	77	.040	21	73	.708	22	72	.590
20	78	.140	21	75	.677	22	73	.758
21	22	1.294	21	76	.299	22	74	.549
21	23	.996	21	77	.080	22	75	.775
21	24	1.422	21	78	.234	22	76	.299
21	25	1.046	22	23	.950	22	77	.400
21	26	.793	22	24	1.156	22	78	.309
21	27	1.589	22	25	.740	23	24	1.334
21	28	1.072	22	26	.633	23	25	.867
21	29	1.046	22	27	.811	23	26	.708
21	30	1.098	22	28	.811	23	27	.867
21	31	.740	22	29	.549	23	28	.472
21	32	.758	22	30	1.046	23	29	.907
21	33	.775	22	31	.677	23	30	.040
21	34	1.127	22	32	.725	23	31	.377
21	35	1.098	22	33	.460	23	32	.618
21	36	1.021	22	34	.848	23	33	.950
21	37	1.127	22	35	.758	23	34	.887
21	38	.928	22	36	.829	23	35	.907
21	39	.523	22	37	.829	23	36	.648
21	40	.907	22	38	.693	23	37	.758
21	41	.484	22	40	.811	23	38	.460
21	42	.829	22	41	.497	23	39	.708
21	43	.887	22	42	.633	23	40	.604
21	44	.907	22	43	.576	23	41	.277
21	45	1.334	22	44	.648	23	42	.590
21	46	.693	22	45	.928	23	43	.708
21	47	.708	22	46	1.021	23	44	.867
21	48	.725	22	47	1.127	23	45	.740
21	49	.907	22	48	.950	23	46	1.072
21	50	.693	22	49	1.156	23	47	.604
21	51	.190	22	50	.829	23	48	.693
21	52	.424	22	51	.708	23	49	.663
21	53	.973	22	52	.811	23	50	.388
21	54	.928	22	53	1.294	23	51	.020
21	55	1.098	22	54	1.334	23	52	.497
21	56	.928	22	55	1.294	23	53	.618
21	57	.950	22	56	1.098	23	54	.604
21	58	.725	22	57	1.127	23	55	.758
21	59	.536	22	58	.973	23	56	.460
21	60	.484	22	59	.907	23	57	.472
21	65	.447	22	60	.725	23	58	.309
21	66	.523	22	65	.677	23	59	.523
21	67	1.098	22	66	.460	23	60	.277

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
23	65	.299	24	66	.288	26	41	.648
23	66	.160	24	67	.677	26	42	.740
23	67	.523	24	68	.677	26	44	.907
23	68	.472	24	69	.725	26	48	.867
23	69	.245	24	70	.523	26	49	.740
23	70	.377	24	71	.775	26	50	.648
23	71	.708	24	72	.549	26	54	.648
23	72	.950	24	73	.663	26	56	.460
23	73	.618	24	74	.708	26	58	.604
23	75	.355	24	75	.775	26	59	.648
23	76	.020	24	76	.224	26	60	.288
23	77	-.090	24	77	.388	26	66	.400
23	78	.203	24	78	.277	26	67	.424
24	25	1.294	25	28	.648	26	68	.793
24	26	1.098	25	29	.708	26	70	.576
24	27	1.072	25	30	.928	26	72	.460
24	28	.973	25	31	.693	26	75	.590
24	29	.867	25	33	.677	26	76	.234
24	30	1.156	25	34	.848	26	78	.775
24	31	.793	25	36	.829	27	28	.887
24	32	.829	25	37	1.127	27	29	.633
24	33	.693	25	38	.576	27	30	.907
24	34	1.021	25	41	.299	27	31	.633
24	35	.867	25	42	.618	27	32	.950
24	36	.950	25	44	.677	27	33	.604
24	37	1.257	25	48	.576	27	34	1.188
24	38	.758	25	49	.590	27	36	1.221
24	39	.618	25	50	.435	27	37	.950
24	40	.758	25	54	.549	27	38	.848
24	41	.576	25	56	.633	27	41	.460
24	42	.708	25	58	.497	27	42	.775
24	43	.693	25	59	.447	27	43	.590
24	44	.928	25	60	.288	27	44	1.422
24	45	.867	25	66	.277	27	45	.973
24	46	1.021	25	67	.758	27	48	.576
24	47	.996	25	68	.413	27	49	.511
24	48	.973	25	70	.343	27	50	.190
24	49	1.156	25	72	.484	27	51	.447
24	50	.663	25	75	.549	27	52	.536
24	51	.536	25	78	-.130	27	54	.590
24	52	.887	26	28	.693	27	55	.775
24	53	1.021	26	29	.648	27	56	.590
24	54	1.072	26	30	.811	27	57	.758
24	55	.907	26	31	1.046	27	58	.677
24	56	.848	26	33	.708	27	59	.447
24	57	.887	26	34	1.127	27	60	.224
24	58	.740	26	36	.996	27	66	.523
24	60	.424	26	37	1.257	27	67	.907
24	65	.590	26	38	.618	27	68	.663

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
27	69	.693	28	74	.758	29	78	.413
27	70	.576	28	75	.677	30	31	.867
27	71	.829	28	76	.424	30	32	.928
27	72	.618	28	77	.320	30	33	.576
27	73	.663	28	78	.190	30	34	.996
27	75	.677	29	30	.811	30	35	.590
27	76	.245	29	31	.618	30	36	.775
27	77	.299	29	32	.829	30	37	.973
27	78	.332	29	33	.775	30	38	.708
28	29	.907	29	34	.740	30	39	.633
28	30	.811	29	35	.867	30	40	.775
28	31	.740	29	36	.758	30	41	.472
28	32	1.046	29	37	.928	30	42	.996
28	33	.511	29	38	.793	30	43	.633
28	34	.775	29	39	.811	30	44	.887
28	35	1.156	29	40	1.072	30	45	.708
28	36	.973	29	41	.424	30	46	.907
28	37	1.021	29	42	.887	30	47	.775
28	38	.950	29	43	.447	30	48	.708
28	39	.511	29	44	.829	30	49	.793
28	40	.758	29	45	.867	30	50	.447
28	41	.536	29	46	.740	30	51	.447
28	42	.618	29	47	.576	30	52	.708
28	43	.511	29	48	.497	30	53	.829
28	44	.549	29	49	.633	30	54	.848
28	45	1.021	29	50	.758	30	55	.758
28	46	.549	29	51	.120	30	56	.663
28	47	.693	29	52	.497	30	57	.740
28	48	.604	29	53	.536	30	58	.693
28	49	.887	29	54	.677	30	59	.811
28	50	.758	29	55	.708	30	60	.693
28	51	.288	29	56	.618	30	65	.663
28	53	.867	29	57	.435	40	66	.511
28	54	1.072	29	58	.365	30	67	.618
28	55	1.021	29	59	.511	30	68	.590
28	56	.996	29	60	.511	30	69	.424
28	57	.867	29	65	.472	30	70	.633
28	58	.604	29	66	.400	30	71	.811
28	59	.604	29	67	.633	30	72	.618
28	60	.424	29	68	.848	30	73	.648
28	65	.460	29	69	.343	30	74	.693
28	66	.604	29	70	.484	30	75	.725
28	67	.549	29	71	.793	30	76	.447
28	68	.740	29	72	.484	30	77	.523
28	69	.472	29	73	.848	30	78	.400
28	70	.424	29	74	.563	31	32	1.156
28	71	.708	29	75	.484	31	33	.472
28	72	.604	29	76	.473	31	34	.996
28	73	.590	29	77	.299	31	35	.633

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
31	36	1.021	32	49	.511	33	65	.060
31	37	1.021	32	50	.299	33	66	.256
31	38	.725	32	51	.377	33	67	.590
31	39	.848	32	52	.549	33	68	.472
31	40	.907	32	54	.604	33	69	.160
31	41	.775	32	55	.708	33	70	.190
31	42	1.127	32	56	.663	33	71	.536
31	43	.811	32	57	.663	33	72	.234
31	44	.793	32	58	.523	33	73	.472
31	45	1.098	32	59	.677	33	74	.355
31	46	.299	32	60	.472	33	75	.213
31	47	.590	32	66	.867	33	76	-.040
31	48	.663	32	67	.388	33	77	.010
31	49	.648	32	68	.708	33	78	.020
31	50	.677	32	69	.536	34	35	.758
31	51	.648	32	70	.497	34	36	1.334
31	52	.549	32	71	.848	34	37	.928
31	53	.563	32	72	.677	34	38	.887
31	54	.693	32	73	.793	34	39	.618
31	55	.536	32	75	.604	34	40	1.046
31	56	.693	32	76	.497	34	41	.536
31	57	.887	32	77	.460	34	42	1.127
31	58	.740	32	78	.472	34	43	.708
31	59	.829	33	34	.867	34	44	1.156
31	60	.677	33	35	.848	34	45	.950
31	65	.693	33	36	.793	34	46	.511
31	66	.793	33	37	.708	34	47	.549
31	67	.677	33	38	.618	34	48	.549
31	68	.887	33	39	.576	34	49	.604
31	69	.677	33	40	.523	34	50	.497
31	70	.523	33	41	.224	34	51	.424
31	71	.848	33	42	.708	34	52	.365
31	72	.793	33	43	.472	34	53	.829
31	73	.693	33	44	.793	34	54	.663
31	74	.740	33	45	.740	34	55	.576
31	75	.907	33	46	.549	34	56	.633
31	76	.511	33	47	.224	34	57	.576
31	77	.604	33	48	.277	34	58	.693
31	78	.424	33	49	.299	34	59	.523
32	33	.663	33	50	.266	34	60	.377
32	34	1.098	33	52	.040	34	65	.447
32	36	1.334	33	53	.245	34	66	.472
32	37	1.072	33	54	.309	34	67	.867
32	38	.996	33	55	.497	34	68	.950
32	41	.618	33	56	.435	34	69	.758
32	42	1.188	33	57	.245	34	70	.740
32	43	.775	33	58	.180	34	71	.811
32	45	1.156	33	59	.190	34	72	.413
32	48	.590	33	60	.190	34	73	.793

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
34	74	.867	36	60	.435	37	77	.447
34	75	.663	36	65	.563	37	78	.234
34	76	.447	36	66	.740	38	39	.388
34	77	.511	36	67	.907	38	40	.848
34	78	.576	36	68	.973	38	41	.677
35	36	1.046	36	69	.775	38	42	.677
35	37	1.072	36	70	.604	38	43	.775
35	38	.663	36	71	1.021	38	44	.549
35	41	.511	36	72	.928	38	45	.973
35	42	.758	36	73	.811	38	46	.332
35	44	.775	36	74	.848	38	47	.536
35	48	.648	36	75	.867	38	48	.377
35	49	.793	36	76	.377	38	49	.618
35	50	.928	36	77	.472	38	50	.663
35	54	.950	36	78	.365	38	51	.424
35	56	.793	37	38	.887	38	52	.388
35	58	.549	37	39	.740	38	53	.460
35	59	.618	37	40	.775	38	54	.708
35	60	.400	37	41	.663	38	55	.740
35	66	.775	37	42	1.098	38	56	.775
35	67	.648	37	43	.848	38	57	.829
35	68	.928	37	44	.907	38	58	.648
35	70	.424	37	45	1.156	38	59	.497
35	72	.604	37	46	.693	38	60	.365
35	75	.523	37	47	.887	38	65	.377
35	76	.309	37	48	.907	38	66	.633
35	78	.234	37	49	.950	38	67	.811
36	37	1.156	37	50	.811	38	68	.793
36	38	.928	37	51	.484	38	69	.604
36	39	.740	37	52	.693	38	70	.604
36	40	1.021	37	53	.725	38	71	.648
36	41	.618	37	54	.867	38	72	.775
36	42	1.098	37	55	.848	38	73	.887
36	43	.590	37	56	.928	38	74	.928
36	44	1.098	37	57	.775	38	75	.523
36	45	1.589	37	58	.758	38	76	.708
36	46	.435	37	59	.811	38	77	.576
36	47	.576	37	60	.633	38	78	.511
36	48	.633	37	65	.740	39	41	1.046
36	49	.663	37	66	.693	39	42	1.098
36	50	.618	37	67	.867	39	44	.887
36	51	.536	37	68	.740	39	48	.829
36	52	.460	37	69	.618	39	49	.811
36	53	.663	37	70	.563	39	50	.604
36	54	.725	37	71	.973	39	54	.758
36	55	.928	37	72	.740	39	56	.576
36	56	.811	37	73	.677	39	58	.536
36	57	.887	37	74	.758	39	59	1.589
36	58	.867	37	75	.740	39	60	1.072
36	59	.663	37	76	.332	39	66	.447

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
39	67	.549	41	69	1.046	43	56	.365
39	68	.829	41	70	.793	43	57	.400
39	70	.523	41	71	.758	43	58	.355
39	71	.740	41	72	.829	43	59	.484
39	72	.633	41	73	1.472	43	60	.377
39	75	.907	41	74	.928	43	66	.708
39	76	.523	41	75	.663	43	67	.633
39	78	.536	41	76	.973	43	68	.867
40	41	1.156	41	77	.811	43	69	.590
40	42	.996	41	78	.811	43	70	.907
40	44	.973	42	43	1.188	43	71	.867
40	48	.472	42	44	1.188	43	72	.355
40	49	.740	42	45	1.098	43	73	.758
40	50	.793	42	46	.400	43	75	.343
40	54	.848	42	47	.472	43	76	.435
40	56	.648	42	48	.563	43	77	.288
40	58	.907	42	49	.523	43	78	.523
40	59	.663	42	50	.472	44	45	1.021
40	60	.887	42	51	.288	44	46	.576
40	66	.377	42	52	.413	44	47	.460
40	67	1.528	42	53	.460	44	48	.604
40	68	1.422	42	54	.484	44	49	.523
40	70	.811	42	55	.460	44	50	.424
40	72	1.334	42	56	.484	44	51	.140
40	75	1.221	42	57	.536	44	52	.447
40	76	.950	42	58	.576	44	53	.536
40	78	.811	42	59	.758	44	54	.523
41	42	.740	42	60	.740	44	55	.618
41	43	.590	42	65	.740	44	56	.277
41	44	.793	42	66	.693	44	57	.472
41	45	.907	42	67	.907	44	58	.413
41	46	.320	42	68	.950	44	59	.590
41	47	.511	42	69	.484	44	60	.511
41	48	.775	42	70	.740	44	65	.523
41	49	.740	42	71	1.046	44	66	.288
41	50	.740	42	72	.758	44	67	.950
41	51	.693	42	73	.811	44	68	1.021
41	52	.867	42	75	.829	44	69	.775
41	53	.424	42	76	.576	44	70	.725
41	54	.663	42	77	.497	44	71	.793
41	55	.663	42	78	.523	44	72	.549
41	56	.460	43	44	1.221	44	73	.887
41	57	.618	43	45	1.021	44	75	.793
41	58	.633	43	48	.549	44	76	.400
41	59	.867	43	49	.511	44	77	.266
41	60	.663	43	50	.472	44	78	.484
41	65	.677	43	51	.256	45	46	.950
41	66	.332	43	52	.472	45	48	.523
41	67	.708	43	54	.447	45	49	.725
41	68	1.334	43	55	.472	45	50	.693

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
45	51	.299	47	78	.472	49	77	.590
45	52	.377	48	49	1.472	49	78	.377
45	54	.758	48	50	1.072	50	51	1.422
45	55	.867	48	51	.950	50	52	.793
45	56	.973	48	52	1.738	50	53	.973
45	57	.677	48	53	1.072	50	54	1.127
45	58	.563	48	54	1.046	50	55	.775
45	59	.604	48	55	.867	50	56	.950
45	60	.523	48	56	.740	50	57	1.098
45	66	.829	48	57	.848	50	58	.725
45	67	1.156	48	58	.887	50	59	.740
45	68	.793	48	59	1.156	50	60	.648
45	69	.472	48	60	.693	50	65	.950
45	70	.563	48	65	1.072	50	66	.332
45	71	1.021	48	66	.213	50	67	.708
45	72	.725	48	67	.472	50	68	.811
45	73	.793	48	68	.633	50	69	.677
45	75	.725	48	69	.887	50	70	.633
45	76	.388	48	70	.758	50	71	.973
45	77	.130	48	71	.829	50	72	.460
45	78	.213	48	72	.497	50	73	.793
46	48	1.098	48	73	.576	50	75	.848
46	49	1.098	48	74	.549	50	76	.413
46	50	.576	48	75	.775	50	77	.343
46	54	.907	48	76	.224	50	78	.299
46	56	.604	48	77	.484	51	52	.950
46	58	.424	48	78	.299	51	54	.758
46	59	.758	49	50	1.294	51	55	-.070
46	60	.460	49	51	.829	51	56	.887
46	66	-.020	49	52	1.589	51	57	1.156
46	67	.355	49	53	1.376	51	58	1.098
46	68	.309	49	54	1.658	51	59	.973
46	70	.511	49	55	1.156	51	60	.677
46	72	.130	49	56	1.072	51	66	.355
46	75	.424	49	57	1.046	51	67	.484
46	78	.100	49	58	.950	51	68	.523
47	48	1.422	49	59	1.127	51	69	.793
47	49	1.946	49	60	.693	51	70	.484
47	50	1.072	49	65	.907	51	71	1.021
47	54	1.422	49	66	.234	51	72	.829
47	56	.907	49	67	.590	51	73	.907
47	58	.907	49	68	.740	51	75	1.156
47	59	1.021	49	69	.848	51	76	.511
47	60	.677	49	70	.740	51	77	.887
47	66	.140	49	71	.887	51	78	.388
47	67	.472	49	72	.648	52	54	1.188
47	68	.633	49	73	.829	52	55	.604
47	70	.887	49	74	.758	52	56	.740
47	72	.604	49	75	.829	52	57	.740
47	75	.740	49	76	.447	52	58	.887
47	76	.447						

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
52	59	1.376	55	60	.447	58	66	.618
52	60	.708	55	65	.100	58	67	.693
52	66	.234	55	66	.413	58	68	.576
52	68	.663	55	67	.663	58	69	.793
52	69	.793	55	68	.604	58	70	.663
52	70	.633	55	69	.100	58	71	.758
52	71	.928	55	70	.536	58	72	1.046
52	72	.677	55	71	.663	58	73	.663
52	73	1.294	55	72	.511	58	74	.829
52	75	.950	55	73	.663	58	75	1.188
52	76	.708	55	75	.563	58	76	.618
52	77	.775	55	76	.288	58	77	.848
52	78	.633	55	77	.130	58	78	.563
53	54	1.658	55	78	.150	59	60	1.221
53	56	.996	56	57	1.098	59	65	.190
53	58	.973	56	58	.950	59	66	.460
53	59	.887	56	59	.811	59	67	.435
53	60	.633	56	60	.618	59	68	.604
53	66	.180	56	65	.590	59	69	.648
53	67	.618	56	66	.604	59	70	.563
53	68	.618	56	67	.740	59	71	.758
53	70	.677	56	68	.400	59	72	.829
53	72	.536	56	69	.460	59	73	.775
53	75	.950	56	70	.288	59	74	.677
53	76	.343	56	71	.775	59	75	1.156
53	78	.299	56	72	.708	59	76	.563
54	55	1.221	56	73	.523	59	77	.775
54	56	1.221	56	74	.648	59	78	.549
54	57	1.334	56	75	.775	60	65	1.021
54	58	.928	56	76	.224	60	66	.511
54	59	1.046	56	77	.388	60	67	.648
54	60	.793	56	78	.020	60	68	.447
54	65	.725	57	58	1.376	60	69	.447
54	66	.413	57	59	.996	60	70	.497
54	67	.663	57	60	.775	60	71	.775
54	68	.604	57	66	.424	60	72	.693
54	69	.693	57	67	.758	60	73	.740
54	70	.536	57	68	.758	60	75	.996
54	71	.663	57	69	.928	60	76	.633
54	72	.511	57	70	.793	60	77	.648
54	73	.663	57	71	.663	60	78	.484
54	74	.725	57	72	.867	65	66	.413
54	75	.563	57	73	.775	65	67	.497
54	76	.288	57	75	1.098	65	68	.775
54	77	.523	57	76	.677	65	70	1.021
54	78	.377	57	77	.740	65	72	.725
55	56	.973	57	78	.590	65	75	1.021
55	57	1.021	58	59	1.046	65	76	.633
55	58	.775	58	60	.740	65	78	.633
55	59	.708	58	65	.907	66	67	.435

Station No.	Station No.	Z Value	Station No.	Station No.	Z Value	Station No.	Station No.	Z Value
66	68	.309	71	76	.460			
66	69	.080	71	77	.424			
66	70	.213	71	78	.355			
66	71	.811	72	73	1.156			
66	72	.604	72	74	1.472			
66	73	.277	72	75	.928			
66	75	.435	72	76	1.156			
66	76	.256	72	77	1.156			
66	77	.020	72	78	.740			
66	78	.060	73	74	1.528			
67	68	.848	73	75	.829			
67	69	.511	73	76	1.072			
67	70	.663	73	77	.950			
67	71	.887	73	78	.928			
67	72	.811	74	75	.618			
67	73	.928	75	76	.708			
67	75	.740	75	77	.725			
67	76	.497	75	78	.633			
67	77	.309	76	77	1.658			
67	78	.365	76	78	1.376			
68	69	1.589	77	78	1.658			
68	70	1.072						
68	71	.996						
68	72	.758						
68	73	1.257						
68	75	.996						
68	76	.829						
68	77	.618						
68	78	.793						
69	70	1.046						
69	71	.523						
69	72	.811						
69	73	.928						
69	75	.811						
69	76	.793						
69	77	.907						
69	78	.887						
70	71	.775						
70	72	.618						
70	73	.848						
70	75	.633						
70	76	.793						
70	77	.811						
70	78	.928						
71	72	.693						
71	73	.928						
71	75	.829						