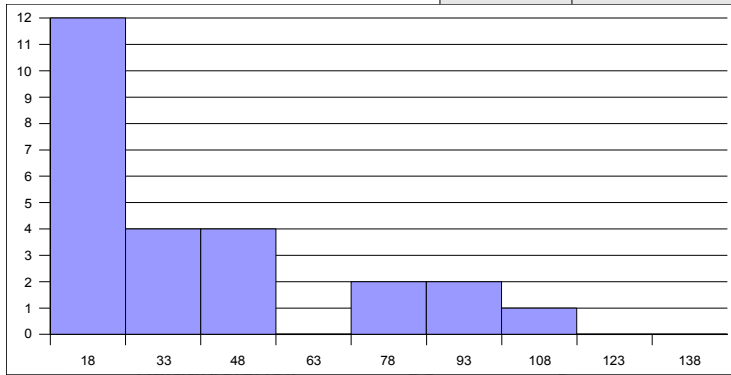


soln

Glacier name	Annual retreat rate/m
Breidamerkurjökull	48
Breidamerkurjökull	108
Breidamerkurjökull	18
Falljökull	18
Fjallsjökull	10
Fjallsjökull	18
Fjallsjökull	16
Fláajökull	22
Gígjökull	75
Hrútárjökull	6
Kverkjökull	42
Kvíárjökull	3
Morsárjökull	9
Múlajökull	48
Nathagajökull	8
Öldufellsjökull	88
Sátujökull	93
Síðujökull	44
Skaftafellsjökull	4
Skeiðarárjökull	27
Skeiðarárjökull	9
Skeiðarárjökull	69
Skeiðarárjökull	21
Svínafellsjökull	3
Tungnaárjökull	23

level	ratio
Count	<b>25</b>
Mean	<b>33.20</b>
Median	<b>21</b>
Mode	<b>18</b>
Min	<b>3</b>
Max	<b>108</b>
Range	<b>105</b>
Standard dev	<b>30.96</b>
CV	<b>0.93</b>
Width	<b>15</b>

Year	Skeiðarárjökull
1996	-13
1997	-38
1998	-35
1999	-150
2000	-110
slope	<b>-30.6</b>
intercept	<b>61069.6</b>
r	<b>-0.83</b>
r <sup>2</sup>	<b>0.69</b>
2007	<b>-344.6</b>
2007	<b>-1147.4</b>
<b>1995.74</b>	0
<b>1969.99</b>	0



Bins	Freq	RF
<b>18</b>	<b>12</b>	<b>0.48</b>
<b>33</b>	<b>4</b>	<b>0.16</b>
<b>48</b>	<b>4</b>	<b>0.16</b>
<b>63</b>	<b>0</b>	<b>0</b>
<b>78</b>	<b>2</b>	<b>0.08</b>
<b>93</b>	<b>2</b>	<b>0.08</b>
<b>108</b>	<b>1</b>	<b>0.04</b>
	<b>25</b>	<b>1</b>

Kvíárjökull	4	0
Morsárjökull	-31	-14
Múlajökull	-8	-50
Nathagajökull	-5	-5
Sátujökull	-200	-51
Skaftafellsjökull	51	-70
Skeiðarárjökull	-33	-1
Skeiðarárjökull	-31	-10
Skeiðarárjökull	-4	-14
Skeiðarárjökull	-13	-110
Svínafellsjökull	5	-5
Tungnaárjökull	-53	-19

standard error	<b>6.19</b>
tc	<b>2.06</b>
margin error E	<b>12.78</b>

$$20.42 \leq \mu \leq 45.98$$

zero possible mean?	<b>No</b>
Hypothesis test:	<b>Reject</b>
pop mean	<b>0</b>
t-statistic	<b>5.36</b>
p-value	<b>0.000017</b>
max c	<b>0.999983</b>

avg	<b>-14.5</b>	<b>-32.18</b>
Paired	<b>0.2</b>	0.18

## iceland

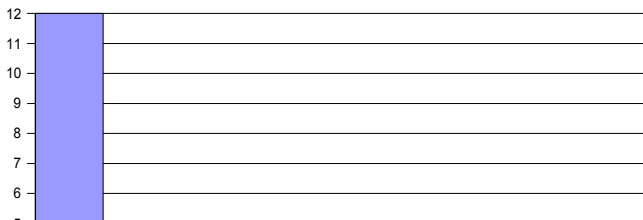
				1996	1997	1998	1999	2000	avg	slope
199 BREIDAMJOK.E.B	IS1126B	1937	1993		-186		-81	-56	-107.67	44.64
200 BREIDAMJOK.W.A	IS1125A	1934	1995	-20	0	-15	-50	-5	-18	-2
201 BREIDAMJOK.W.C	IS1125C	1933	1995	-45	-55	-60	-40	-40	-48	2.5
202 FALLJOKULL	IS1021	1958	1995	1	-11	-33	-12	-37	-18.4	-7.7
203 FJALLS.FITJAR	IS1024B	1936	1995	23	-18	-10	-10	-63	-15.6	-16.4
204 FJALLSJ.BRMSJ	IS1024A	1934	1995	-10	0	-20	-15	-5	-10	-0.5
205 FJALLSJ.G-SEL	IS1024C	1934	1995	12	-20	-10	-50	-20	-17.6	-9.4
206 FLAAJ E148	IS1930C	1931	1994	10		-23		-53	-22	-15.75
207 GIGJOKULL	IS0112	1934	1994	10		-100		-136	-75.33	-36.5
208 GLJUFURARJOKULL	IS0103	1933	1995	-3	-X	-X	-2	-16	-7	-2.42
209 HAGAFELLSJOK.E	IS0306	1902	1997			-359	"1165"	-44	-201.5	157.5
210 HAGAFELLSJOK.W	IS0204	1972	1993			-306		-94	-200	106
211 HOFFELLSJ.W	IS2031	1931	1992			-72			-72	
212 HRUTARJOKULL	IS0923	1948	1995	-20	-10	0	0	0	-6	5
213 HYRNINGSJOKULL	IS0100	1933	1995	-19	-21	-2	-2 SN		-11	7
214 JOKULKROKUR	IS0007	1936	1991		28			-22	3	-16.67
215 KALDALON SJOKULL	IS0102	1931	1995	38	669	150	146	0	200.6	-59.9
216 KVERKJOKULL	IS2500	1971	1993					-42	-42	
217 KVIARJOKULL	IS0822	1935	1995	4	0	-10	-5	0	-2.2	-1.3
218 LEIRUFJ.JOKULL	IS0200	1886	1995	737	169	75	94	36	222.2	-147.7
219 MORSARJOKULL	IS0318	1935	1995	-31	9	0	-8	-14	-8.8	1.7
220 MULA JOKULL S	IS0311A	1935	1995	-8	-60	-106	-14	-50	-47.6	-3.8
221 NAUTHAGAJOKULL	IS0210	1935	1995	-5	-4	-15	-13	-5	-8.4	-0.9
222 OLDUFELLSJOKULL	IS0114	1967	1993	-88					-88	
223 REYKJAFJARDARJ.	IS0300	1914	1995	-12	-7	-11	0	-5	-7	2.1
224 SATUJOKULL	IS0530	1991	1993	-200		-27		-51	-92.67	37.25
225 SIDUJOK.E M177	IS0015B	1934	1995	-14	-42	-26	-92		-43.5	-21.8
226 SKAFTAFELLSJ.	IS0419	1934	1995	51	15	24	-40	-70	-4	-29.7
227 SKEIDARARJ. E1	IS0117A	1951	1995	-33	-14	-32	-53	-1	-26.6	2.5
228 SKEIDARARJ. E2	IS0117B	1932	1995	-31	-13	-36	-13	-10	-20.6	4.2
229 SKEIDARARJ. E3	IS0117C	1932	1995	-4		-12	-4	-14	-8.5	-1.77
230 SKEIDARARJ. W	IS0116	1932	1995	-13	-38	-35	-150	-110	-69.2	-30.6
231 SOLHEIMAJOK. W	IS0113A	1931	1995	-3	-10	-30	-20	-24	-17.4	-5.2
232 SVINAFELLSJ.	IS0520A	1951	1995	5	-13	-3	0	-5	-3.2	-0.7
233 TUNGNAARJOKULL	IS2214	1946	1995	-53	-6	-12		-19	-22.5	5.89
234 VIRKISJOKULL	IS0721	1933	1995							
				9.62	14.48	-37.2	-17.36	-31.45	-26.18	-11.4
				0.15	0.14	0.75	0.28	1		

iceland

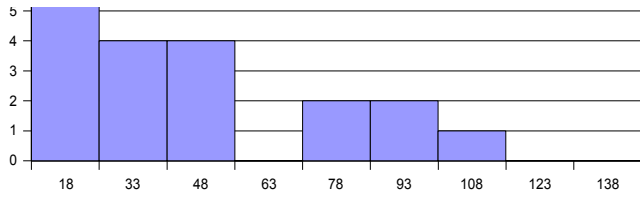
inter	correl	http://www.iceland.pl/lodowce_spis.html				
-89333.86	0.99	Breidamerkurjökull	1998/2003	SE	64.22 N	16.33 W
3978	-0.16	Breidamerkurjökull				
-5043	0.44	Breidamerkurjökull				
#VALUE!		Brúarjökull	1994/2003	E	64.67 N	16.17 W
#VALUE!		Dyngjujökull				
#VALUE!		Eyjabakkajökull	1994/2003	E	64.65 N	15.58 W
15366.2	-0.76	Falljökull				
32751.6	-0.84	Fjallsjökull				
989	-0.1	Fjallsjökull				
18763.6	-0.67	Fjallsjökull				
31446.5	-1	Fláajökull				
72851.67	-0.96	Gígjökull				
4835.12	-0.65					
-315044	1					
-212094	1					
#VALUE!						
#VALUE!		Hofsjökull East	1989/2003	Central	64.8 N	18.58 W
#VALUE!		Hofsjökull North	1988/2003	Central	64.95 N	18.92 W
#VALUE!		Hofsjökull Southwest	1990/2003	Central	64.72 N	19.05 W
-9996	0.88	Hrútárjökull				
-13993.5	0.87					
33311.33	-1					
119880.8	-0.35	Kaldaklofsfjöll				
#VALUE!		Koldukvislarjökull	1995/2003	Central	64.58 N	17.83 W
#VALUE!		Kverkjökull				
2595.2	-0.38	Kvíárjökull				
#VALUE!		Langjökull, South dome	1997/2003	Central	64.62 N	20.3 W
295326.8	-0.8					
-3405.4	0.18	Morsárjökull				
7544.8	-0.15	Múlajökull				
1789.8	-0.27	Nathagajökull				
#VALUE!		Öldufellsjökull				
-4202.8	0.68					
-74518.17	0.79	Sátujökull				
43502	-0.82	Síðujökull				
59336.6	-0.95	Skaftafellsjökull				
-5021.6	0.2	Skeiðarárjökull				
-8412.2	0.55	Skeiðarárjökull				
3531.26	-0.58	Skeiðarárjökull				
61069.6	-0.83	Skeiðarárjökull				
10372.2	-0.76					
1395.4	-0.17	Svínafellsjökull				
	0.48	Tungnaárjökull	1994/2003	Central	64.32 N	18.07 W
		Virkisjökull				
	-0.77					

I

http://www.iceland.pl/I odowce_spis.html	Len km	Glacier name	Annual retreat rate/m	Annual retreat rate/m
Breidamerkurjökull	40	Breidamerkurjökull	-48	48
Brúarjökull	45	Breidamerkurjökull	-107.67	108
Eyjabakkajökull	18	Breidamerkurjökull	-18	18
Falljökull	8	Falljökull	-18.4	18
Fjallsjökull	15	Fjallsjökull	-10	10
Gígjökull	8	Fjallsjökull	-17.6	18
Hofsjökull East	19	Fjallsjökull	-15.6	16
Hrútárjökull	9	Fláajökull	-22	22
Koldukvislarjökull	25	Gígjökull	-75.33	75
Kverkjökull	11	Hrútárjökull	-6	6
Kvíárjökull	13	Kverkjökull	-42	42
Morsárjökull	10	Kvíárjökull	-2.2	3
Múlajökull	20	Morsárjökull	-8.8	9
Nathagajökull	18	Múlajökull	-47.6	48
Öldufellsjökull	15	Nathagajökull	-8.4	8
Sátujökull	20	Öldufellsjökull	-88	88
Síðujökull	40	Sátujökull	-92.67	93
Skaftafellsjökull	18	Síðujökull	-43.5	44
Skeiðarárjökull	50	Skaftafellsjökull	-4	4
Svínafellsjökull	12	Skeiðarárjökull	-26.6	27
Tungnaárjökull	40	Skeiðarárjökull	-8.5	9
Virkisjökull	9	Skeiðarárjökull	-69.2	69
		Skeiðarárjökull	-20.6	21
	22	Svínafellsjökull	-3.2	3
	8	Tungnaárjökull	-22.5	23
	50			
	42			
	18	Count	25	25
	18	Min	-107.67	3
	21.05	Max	-2.2	108
	6	Range	105.47	105
	7	Mode	#VALUE!	18
		Median	-20.6	21
	15 10	Mean	-33.05	33.2000
	22 6	Standard dev	30.97	30.96
	29 1	CV	-0.94	0.93
	36 0	4	26.3667	26.2500
	43 3	5	21.0933	21.0000
	50 2	6	17.5778	17.5000
		7	15.0667	15.0000
		8	13.1833	13.1250
		Width		15
				18 12
				33 4



I



48	4
63	0
78	2
93	2
108	1
123	0
138	0

standard error	6.19	6.19
pop mean	0	0
t-statistic	-5.34	5.36
p-value	0.000018	0.000017
max c	0.999982	0.999983

Glacier name	Annual retreat rate/m
Breidamerkurjökull	48
Breidamerkurjökull	108
Breidamerkurjökull	18
Falljökull	18
Fjallsjökull	10
Fjallsjökull	18
Fjallsjökull	16
Fláajökull	22
Gígjökull	75
Hrútárjökull	6
Kverkjökull	42
Kvíárjökull	3
Morsárjökull	9
Múlajökull	48
Nathagajökull	8
Öldufellsjökull	88
Sátujökull	93
Síðujökull	44
Skaftafellsjökull	4
Skeiðarárjökull	27
Skeiðarárjökull	9
Skeiðarárjökull	69
Skeiðarárjökull	21
Svínafellsjökull	3
Tungnaárjökull	23



## II

<b>Glacier</b>	<b>1996</b>	<b>2000</b>
Breidamerkurjökull	-20	-5
Breidamerkurjökull	-45	-40
Falljökull	1	-37
Fjallsjökull	23	-63
Fjallsjökull	-10	-5
Fjallsjökull	12	-20
Fláajökull	10	-53
Gígjökull	10	-136
Hrútárjökull	-20	0
Kaldaklofsfjöll	38	0
Kvíárjökull	4	0
Morsárjökull	-31	-14
Múlajökull	-8	-50
Nathagajökull	-5	-5
Sátujökull	-200	-51
Skaftafellsjökull	51	-70
Skeiðarárjökull	-33	-1
Skeiðarárjökull	-31	-10
Skeiðarárjökull	-4	-14
Skeiðarárjökull	-13	-110
Svínafellsjökull	5	-5
Tungnaárjökull	-53	-19
	-14.5	-32.18
	0.2	0.18



III

Main Title

Year	Skeiðarárjökull
1996	-13
1997	-38
1998	-35
1999	-150
2000	-110
2007	-344.6
1995.74	0

slope	-30.6
intercept	61069.6
r	-0.83
r <sup>2</sup>	0.69

