LONG-YEAR DYNAMICS OF SNOW COVER IN THE TERRITORY OF THE BAIKAL REGION

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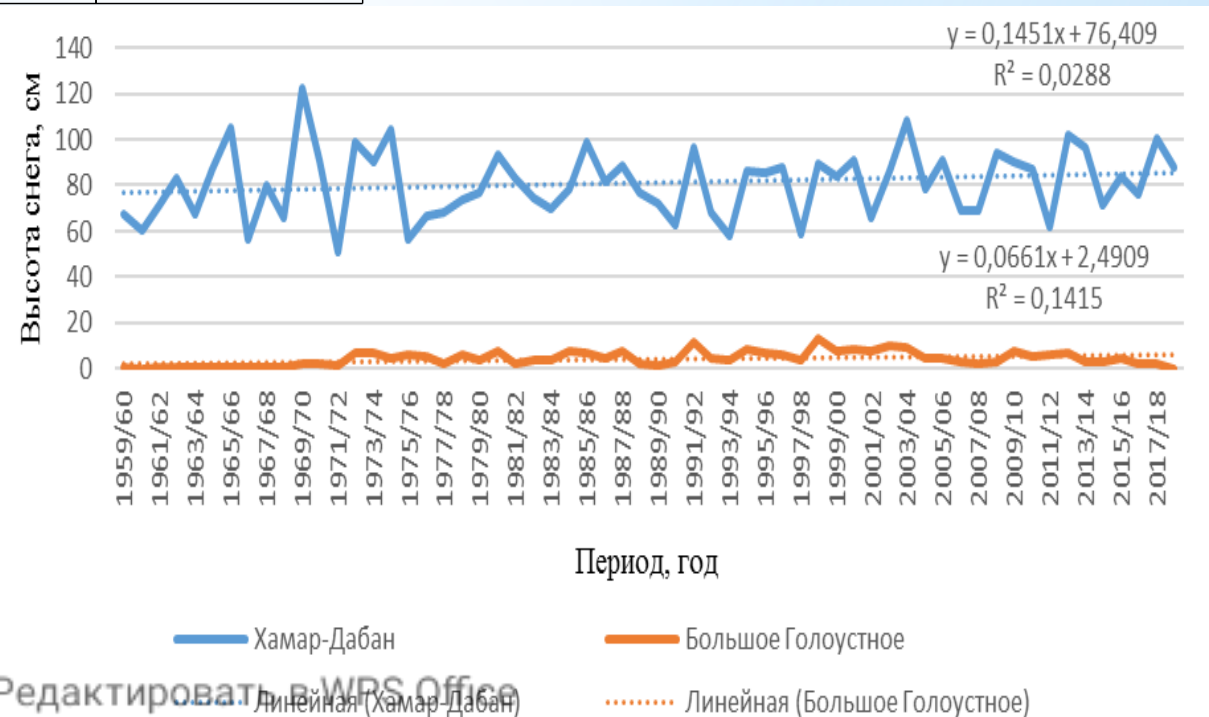| Weather station	Height above sea level	Geographical coordinates	Distance from the coast
Nizhneangarsk	487 m	55° 47' N, 109° 35' E	1,8 km
Barguzinskii zapovednik	468 m	54° 20' N, 109° 32' E	150 m
Bolshoi Ushkanii ostrov	460 m	53° 51' N, 108° 36' E	0 m
Ust`-Barguzin	459 m	53° 25' N, 109° 01' E	2,9 km
Irkutsk	469 m	52° 16' N, 104° 19' E	54,9 km
Homutovo	453 m	52° 28.5' N, 104° 24.9' E	83 km
Hamar-Daban	1442 m	51° 32' N, 103° 36' E	17,9 km
Babushkin	469 m	51° 43' N, 105° 51' E	0,8 km
Karam	497 m	55° 09' N, 107° 37' E	97,1 km
Baiandai	757 m	53° 06' N, 105° 32' E	78,4 km
Barguzin	489 m	53° 37' N, 109° 38' E	30,6 km
Bolshoe Goloustnoe	461 m	52° 02' N, 105° 25' E	1,4 km
Ulan-Ude	514 m	51° 50' N, 107° 36' E	100 km

Location of meteorological stations
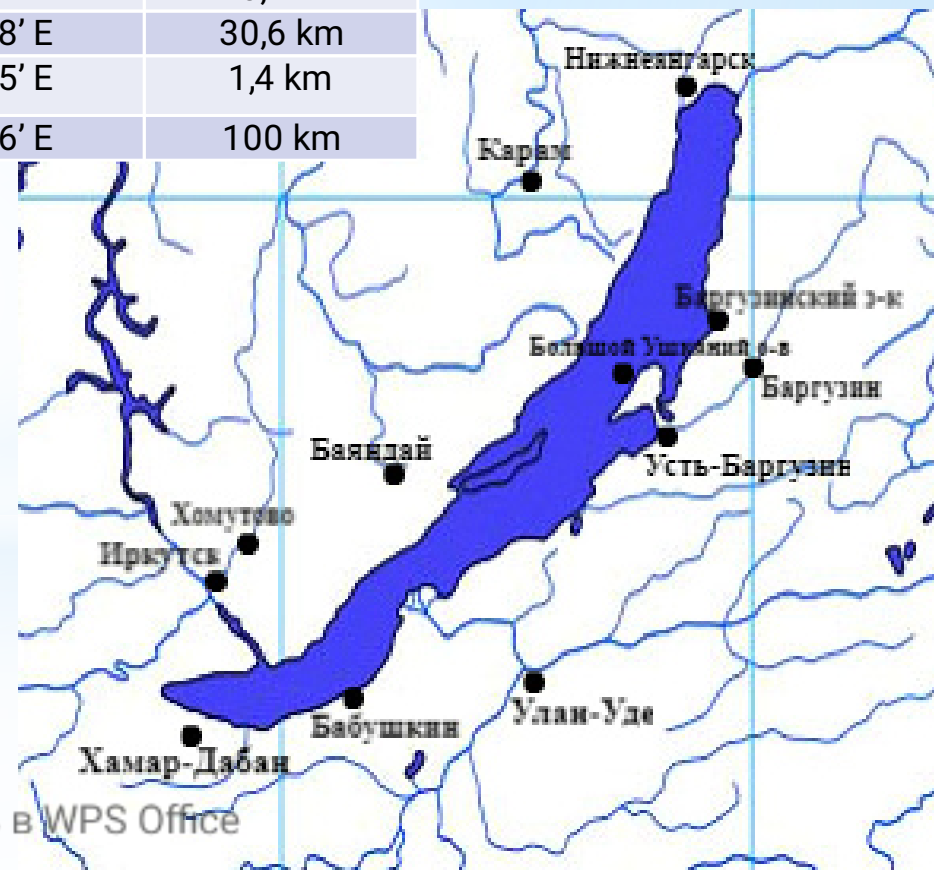
Weather station	H max, год	H сред., sm
Babushkin	39 sm, 2015/16	9,1
Barguzin	84 sm, 2008/09	31,5
Barguzinskii Zapovednik	87 sm, 1961/62	42,1
Baiandai	40 sm, 1996/97	15,1
Bolshoe Goloustnoe	21 sm, 2001/02	4,5
Bolshoi Ushkanii ostrov	86 sm, 1993/94	18,9
Irkutsk	55 sm, 2017/18	20,3
Karam	64 sm, 2017/18	30,3
Nizhneangarsk	67 sm, 1970/71 and 2012/13	22,9
Ulan-Ude	69 sm, 1959/60	8,3
Ust-Barguzin	87 sm, 2012/13	21,5
Hamar-Daban	175 sm, 2003/04	80,8
Homutovo	38 sm, 1997/98	11,6

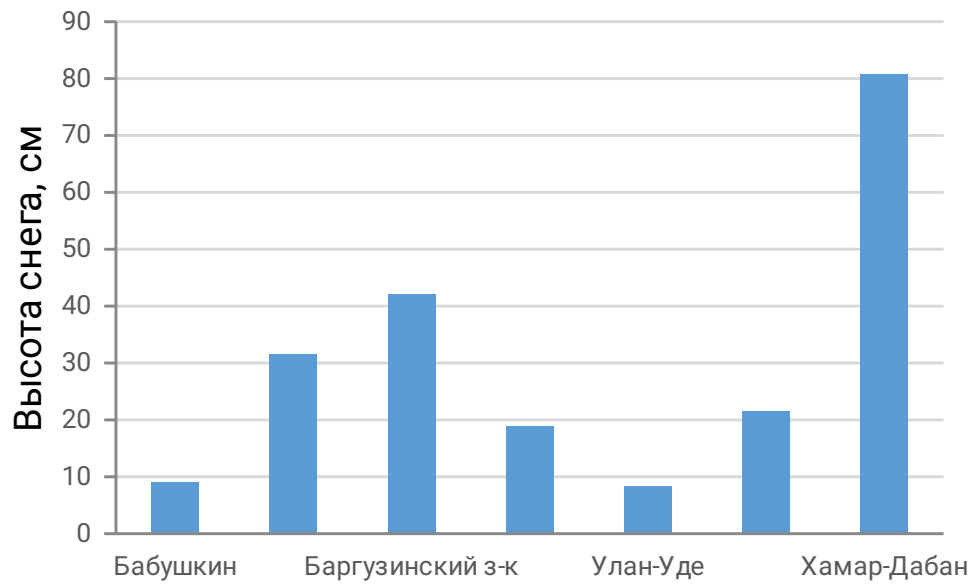Maximum and average long-term snow depth over a 61-year period at meteorological stations in the Baikal region

Distribution of the mean long-term snow depth at the Khamar-Daban and Bolshoe Goloustnoye stations
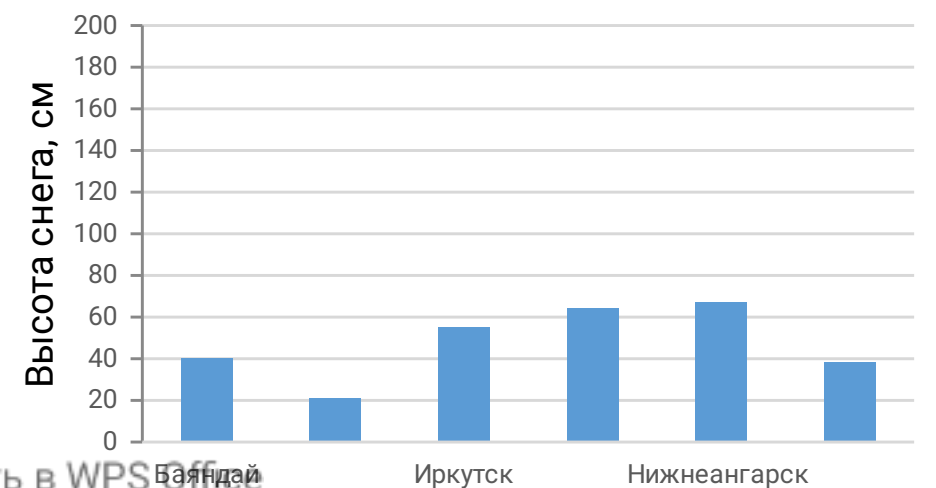

$y = 0,1451x + 76,409$
$R^2 = 0,0288$

$y = 0,0661x + 2,4909$
$R^2 = 0,1415$

Высота снега, см

Период, год

Хамар-Дабан   Большое Голоустное
Линейная (Хамар-Дабан)   Линейная (Большое Голоустное)

eastern Baikal region   **western Baikal region**

Average long-term snow depth

Maximum snow depth

Weather station	Dates of snow cover		Date of snow cover melt	
	Trend, days / 10years	Significance	Trend, days / 10years	Significance
Babushkin	7,4	0,00	-9,7	0,00
Barguzin	0,4	0,48	-0,4	0,42
Barguzinskii Zapovednik	0,0	0,97	-2,1	0,01
Baiandai	-0,8	0,42	-0,5	0,64
Bolshoe Goloustnoe	1,1	0,72	3,8	0,01
Bolshoi Ushkanii ostrov	-1,2	0,12	-0,6	0,42
Irkutsk	1,0	0,18	0,3	0,64
Karam	-3,1	0,07	-1	0,24
Nizhneangarsk	0,3	0,68	-1,8	0,01
Ulan-Ude	-0,4	0,46	1,8	0,00
Ust-Barguzin	1,1	0,18	-3	0,00
Hamar-Daban	-1,6	0,10	-1,9	0,08
Homutovo	-1,9	0,05	1,8	0,10

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Stations with statistically significant trends are highlighted

Average long-term duration snow cover

eastern Baikal region

western Baikal region
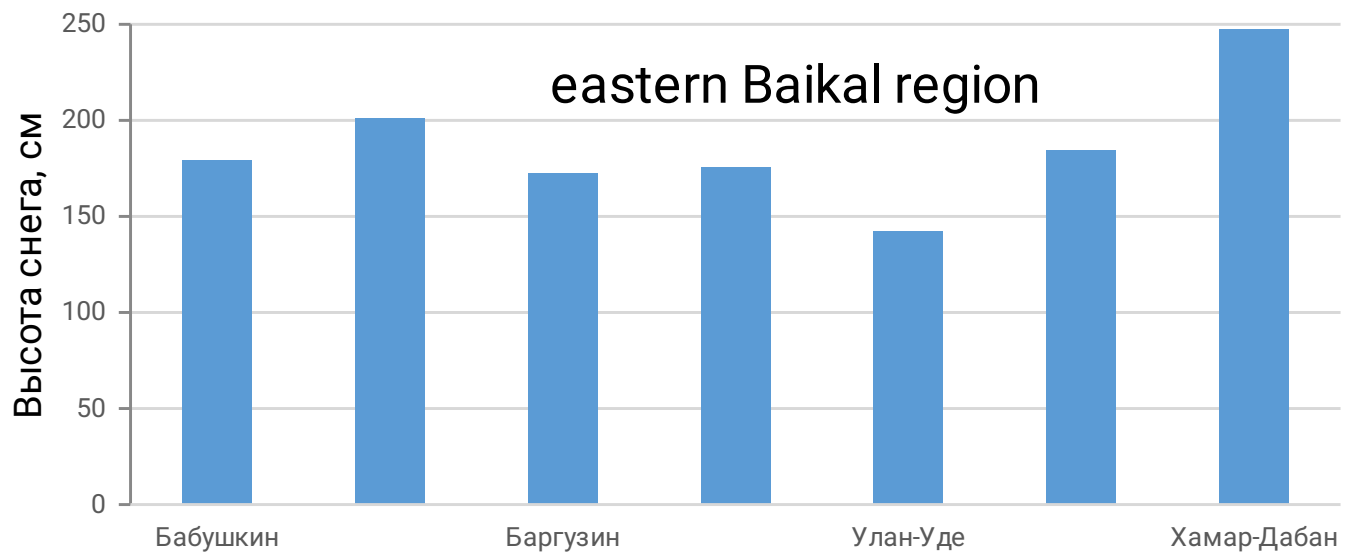
Changing the duration of the snow cover

(Stations with statistically significant trends are highlighted)
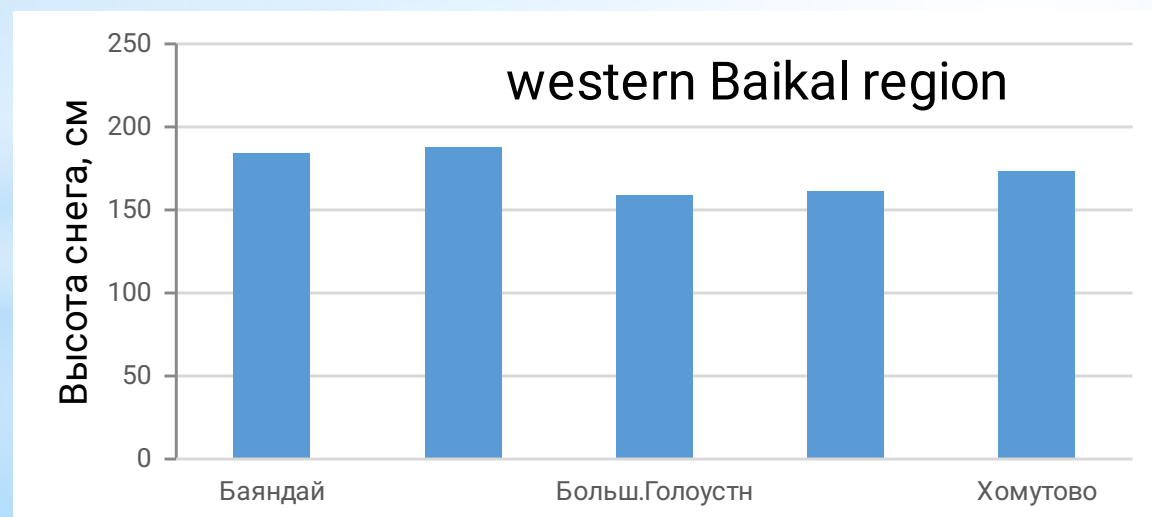
Weather station	Trend, days / 10years	Significance
Babushkin	-7,1	0,00
Barguzin	-0,8	0,33
Barguzinskii Zapovednik	-2,1	0,12
Baiandai	0,2	0,88
Bolshoe Goloustnoe	7,0	0,01
Bolshoi Ushkanii ostrov	-2,3	0,25
Irkutsk	-0,6	0,58
Karam	2,1	0,28
Nizhneangarsk	-2,2	0,08
Ulan-Ude	2,3	0,01
Ust-Barguzin	-4,2	0,00
Hamar-Daban	-0,2	0,88
Homutovo	0,8	0,74

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Thanks for your attention!

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