

# RELIEF INFLUENCE ON THE DISTRIBUTION OF THE PRECIPITATION AT THE TUNKINSKIE GOLTSY MOUNTAIN RANGE

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## ВЛИЯНИЕ РЕЛЬЕФА НА РАСПРЕДЕЛЕНИЕ СУММ АТМОСФЕРНЫХ ОСАДКОВ НА ПРИМЕРЕ ТУНКИНСКИХ ГОЛЬЦОВ

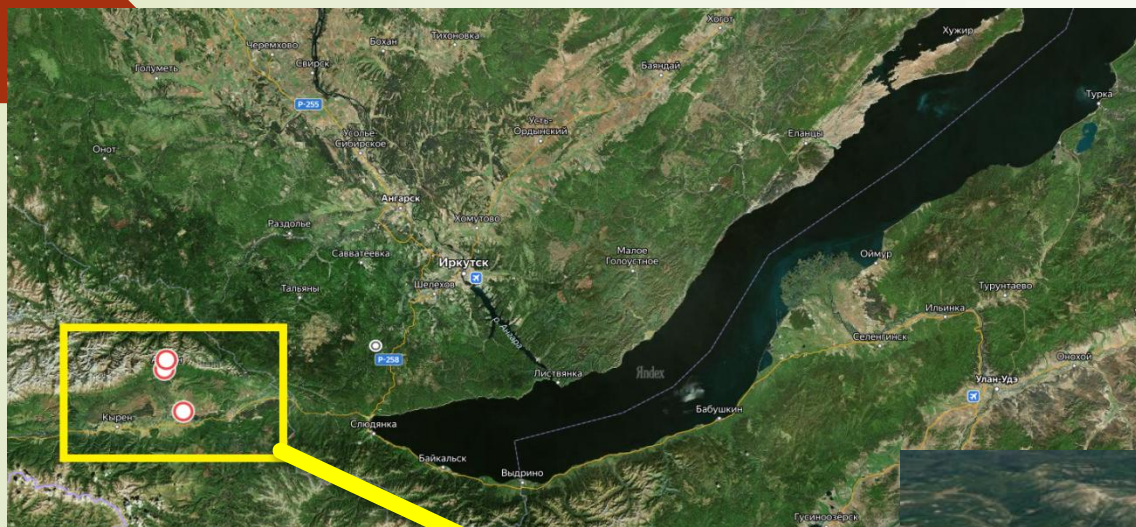
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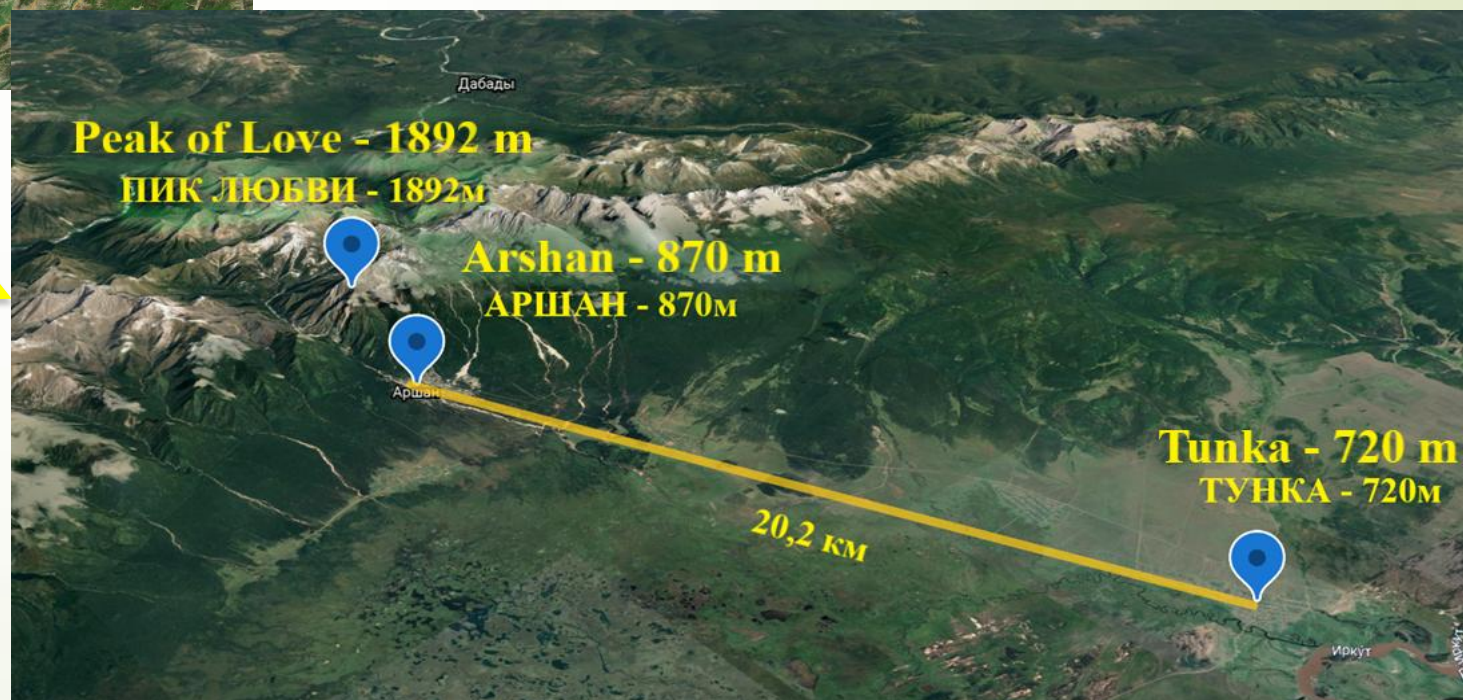
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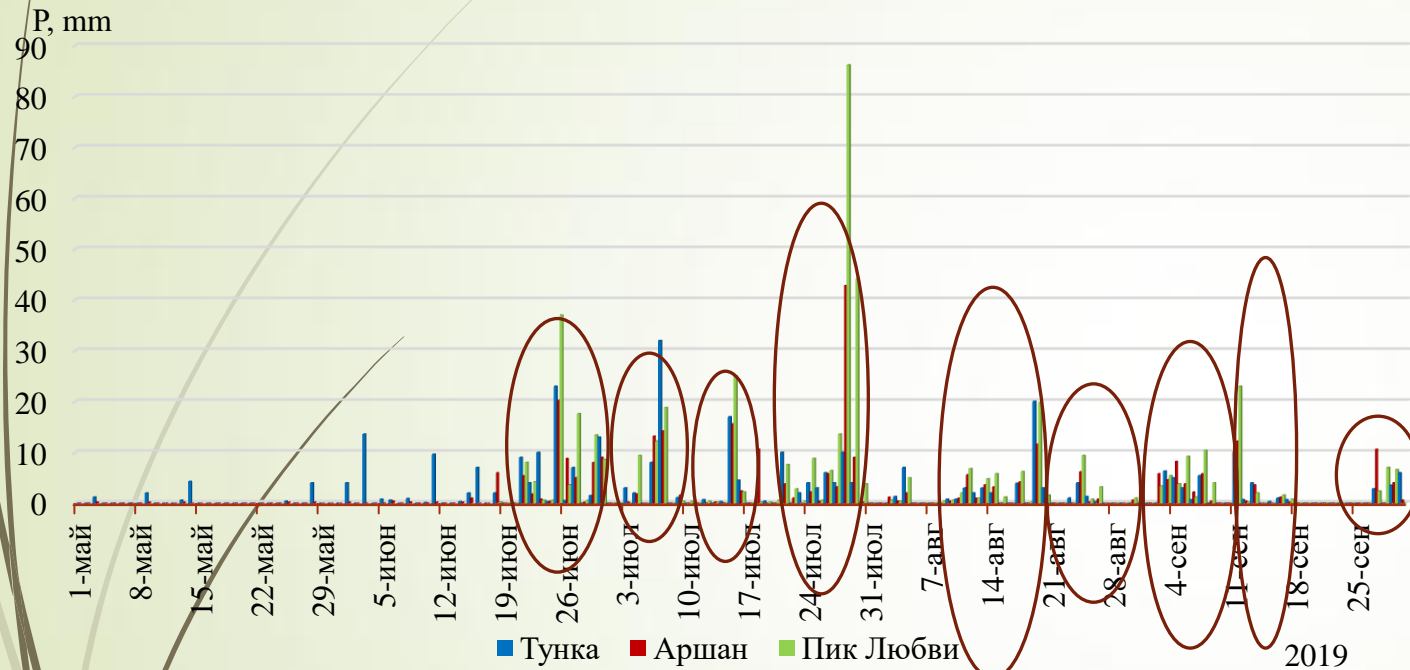
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Objective: to Assess the impact of terrain on the distribution of precipitation amounts on the example of Tunka char (Tunka depression, Republic of Buryatia).

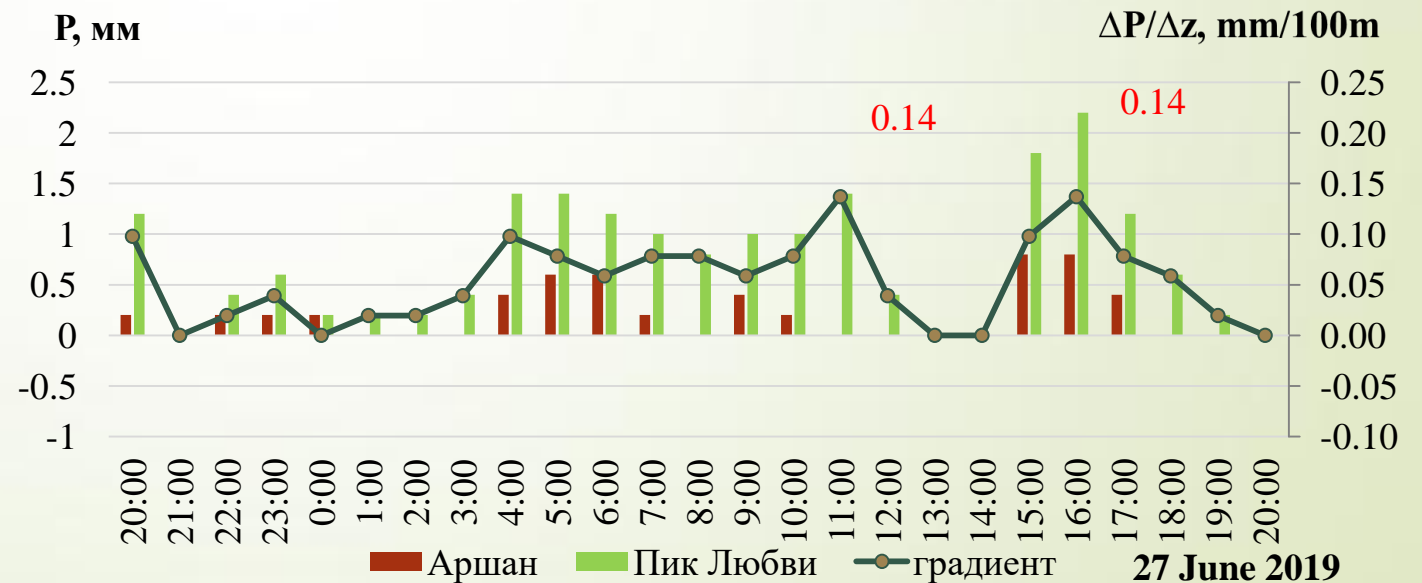
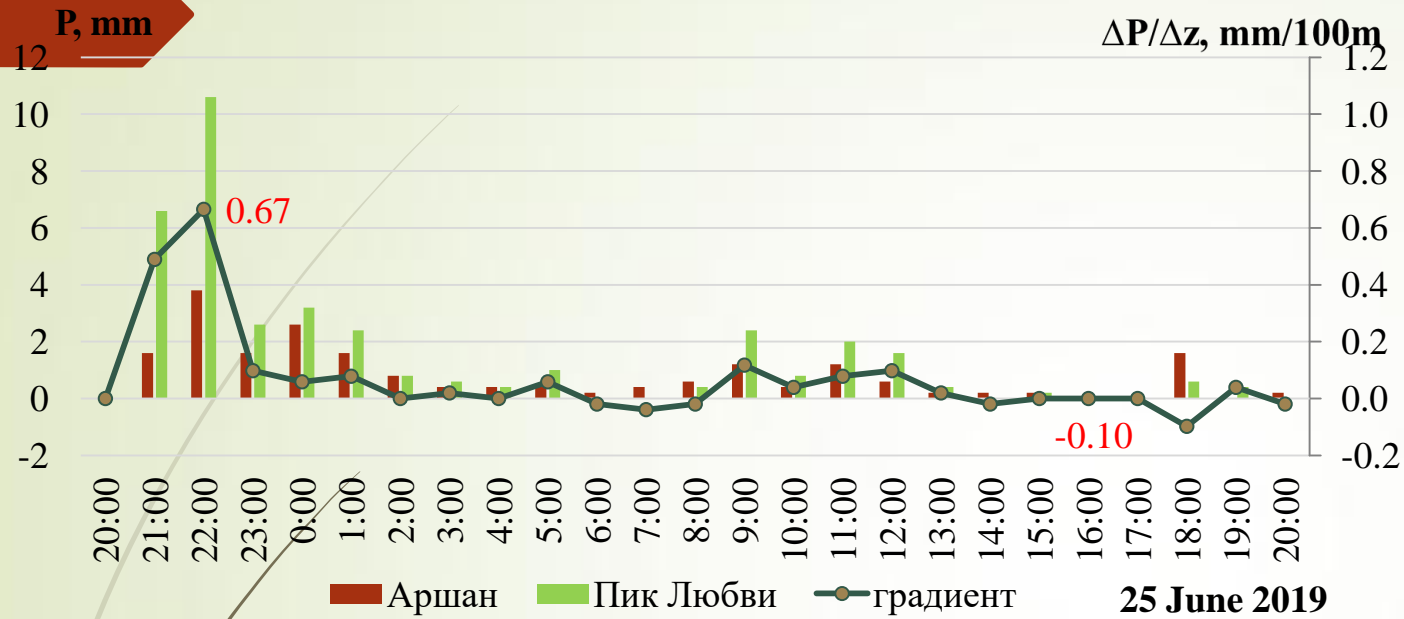


# Daily precipitation totals, periods with prolonged rains

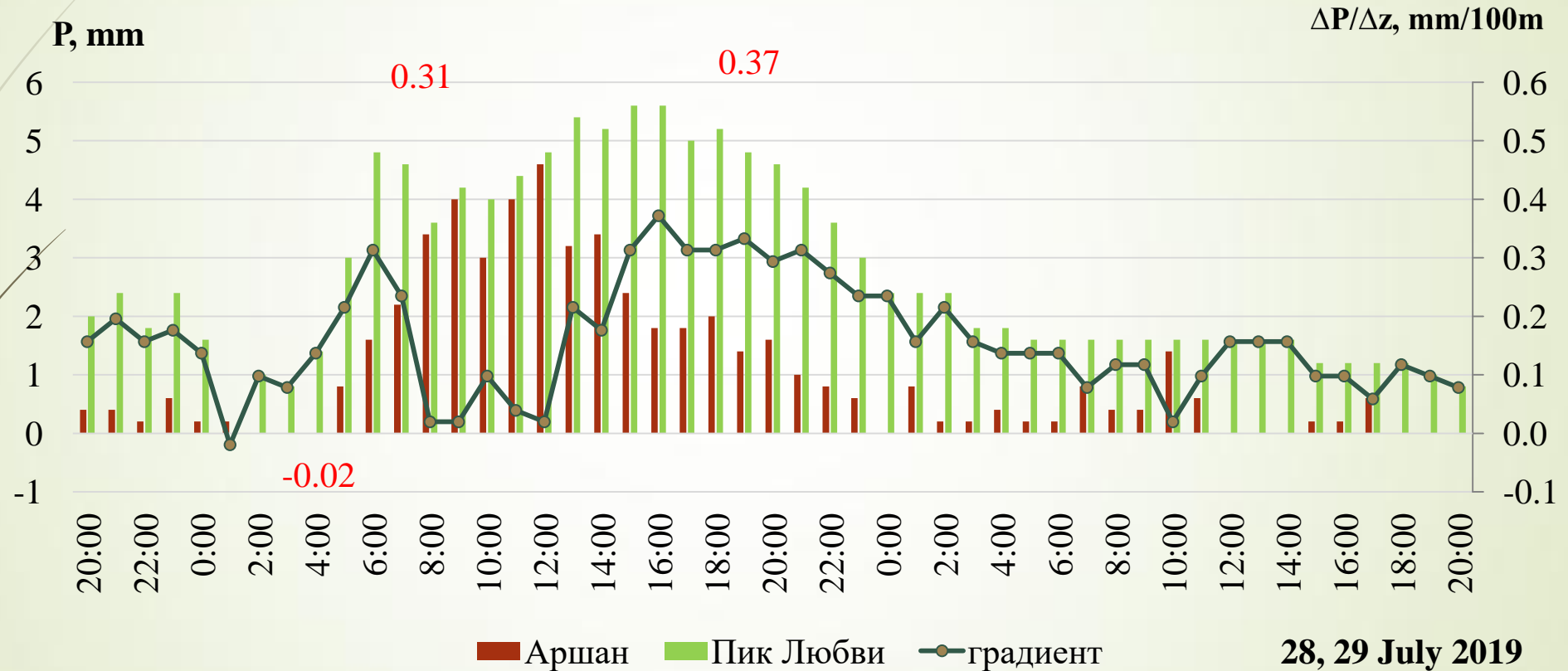


Period	The amount of precipitation, mm		
	Tunka (H=720 m)	Arshan (H= 870 m)	Peak Of Love (H=1982 m)
<b>21.06 - 30.06</b>	68,3	59,6	94,2
<b>03.07 - 09.07</b>	46,1	31	40,8
<b>12.07 - 16.07</b>	22,5	18,2	27,8
<b>18.07 - 30.07</b>	43,4	79	175,4
<b>09.08 - 14.08</b>	11,6	14,8	21

# Daily course of the vertical gradient for June 25 and 27




# Daily course of the vertical gradient for July 28 and 29



# Conclusions:

- ▶ When comparing the devices: Tretyakov sedimentation meter and Davis 7852 m sedimentation meter, it was found that there are no significant differences for this work and it is correct to compare the results of observation for these two devices. In the future, it is necessary to continue observations to make a final conclusion about the differences in devices.
- ▶ Based on the results of the analysis, two periods with continuous most abundant precipitation were selected. The first period is from 21.06 to 30.06, and the second period is from 18.07 to 30.07. The amount of precipitation in the mountain area (Peak of Love) is greater than in the foothill area (Arshan station). The biggest difference in precipitation is observed in the period from 18.07 to 30.07, where 175.4 mm of precipitation was recorded at the Peak station, and 79 mm at the Arshan station;
- ▶ After analyzing individual periods with precipitation totals, it was concluded that the Tunka station (center of the basin) receives approximately the same amount of precipitation as the Arshan station;

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- ▶ After analyzing the summer period from May 1 to September 30, it is concluded that the Peak of Love station (H= 1892m) receives more precipitation than the foothill station Arshan (H= 870 m), as evidenced by the gradients and differences in the amount of precipitation;
  - ▶ In total, during the study period, namely from May to September, 336.6 mm of precipitation fell in the village of Tunka, 303.4 mm of precipitation fell in the village of Arshan, and 490.6 mm of precipitation fell at the Peak of Love, where the period begins on June 18. Despite the fact that the device was installed later than others, it was found that precipitation in the mountainous part falls more than in the foothills or plains. Based on this, it was concluded that during the study period, there were small differences in the amount of precipitation in the plains and foothills, while these differences were significant in the foothills and mountains.



THANKS FOR YOUR ATTENTION!