Overview of 2016 Summer climate and crop over central agricultural region of Mongolia

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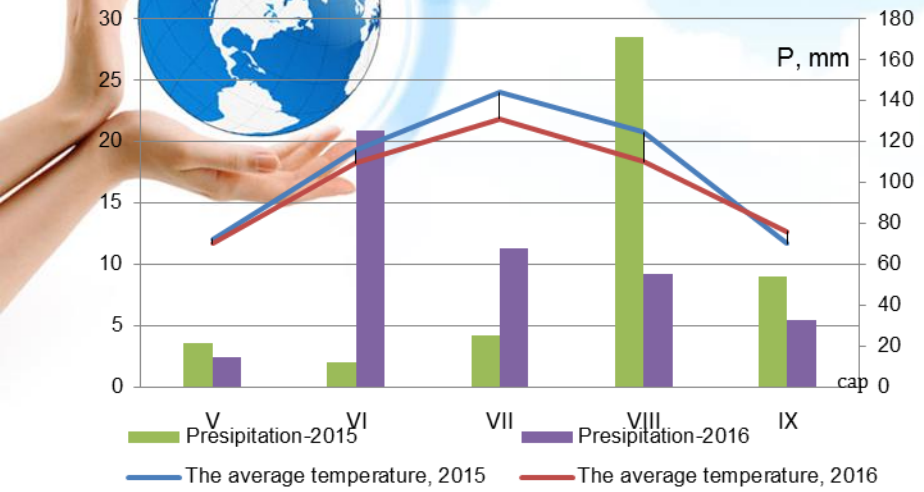
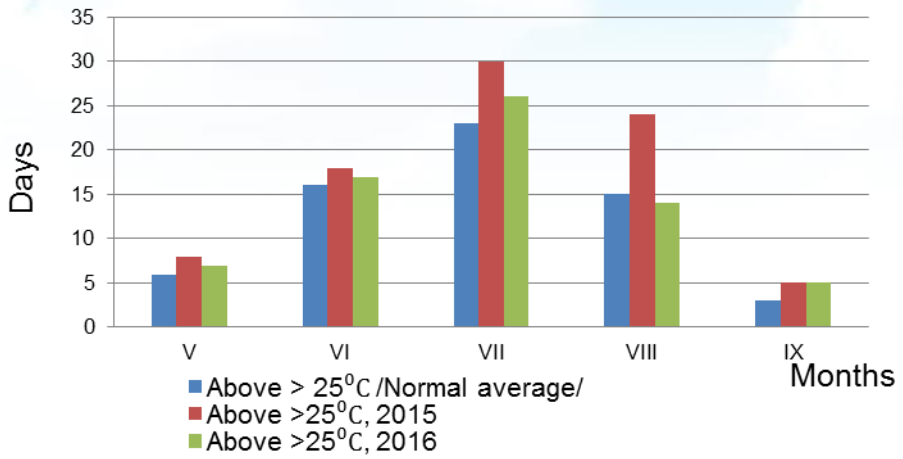
OBJECTIVIES

THE OBJECTIVE OF THIS STUDY FOCUSED TO REVEAL RELATIONSHIP BETWEEN WEATHER IN GROWING SEASON OF 2016 AND ITS EFFECT TO PASTURE GROWTH AND WHEAT YIELD IN THE CENTRAL CROPPING REGION

Temperatura and precipitation





First 9 days hot >25^0 and precipitation 15,5 mm

Second 9 days hot >25^0 and precipitation 51,3 mm

Third 8 days hot >25^0 and precipitation 16,3 mm

Hot air temperature was the number of days from 25, and at 30^{0}C

Intel VII/1 to VIII/13, 13 days hot and 4.2 mm

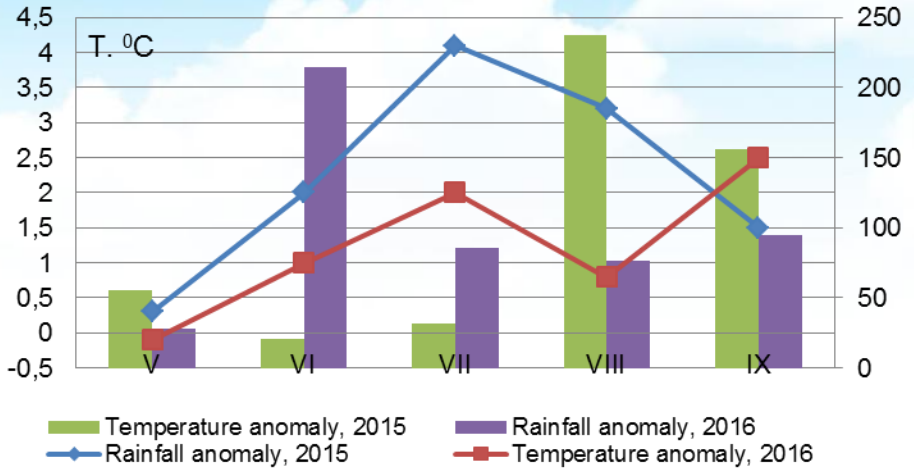
Intel VII/15 to VIII/12, 27 days hot and 83,2 mm

Intel VIII/14 to VIII/15 , 2 days hot and 102.0 mm

Intel VIII/20 to VIII/28, 8 days hot and 3.6 mm

Specification			months				
			V	VI	VII	VIII	IX
Normal average	Above 30^{0}C<		2	5	6	2	2
Air temperature	Above 25^{0}C<	2015	8	18	30	24	5
		2016	7	17	26	14	5
	Above 30^{0}C<	2015	2	12	21	11	1
		2016		4	11	4	

Temperature and rainfall indix growing season	Temperature and rainfall index during months V,VI
1.2 Moisture scarce, 2016	Acceptable, 1.7 -2016
1.1 Moisture extreme scarce, 2015	0.4 Dry, 2015



The maximum temperature, 2016

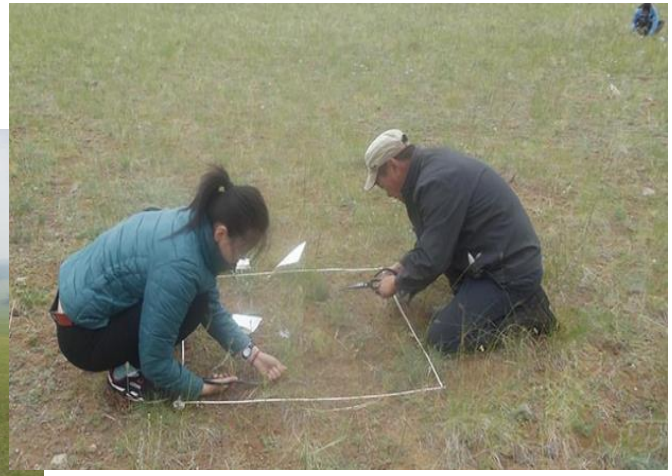
Maximum air	Soil surface	Soil surface temperature above 40⁰C<	Soil surface temperature above 60⁰C<
VIII/2 37,4⁰C	VII/31 62,9⁰C	V-IX, 112	VII/30-VIII/2, 4

Fallow field layer

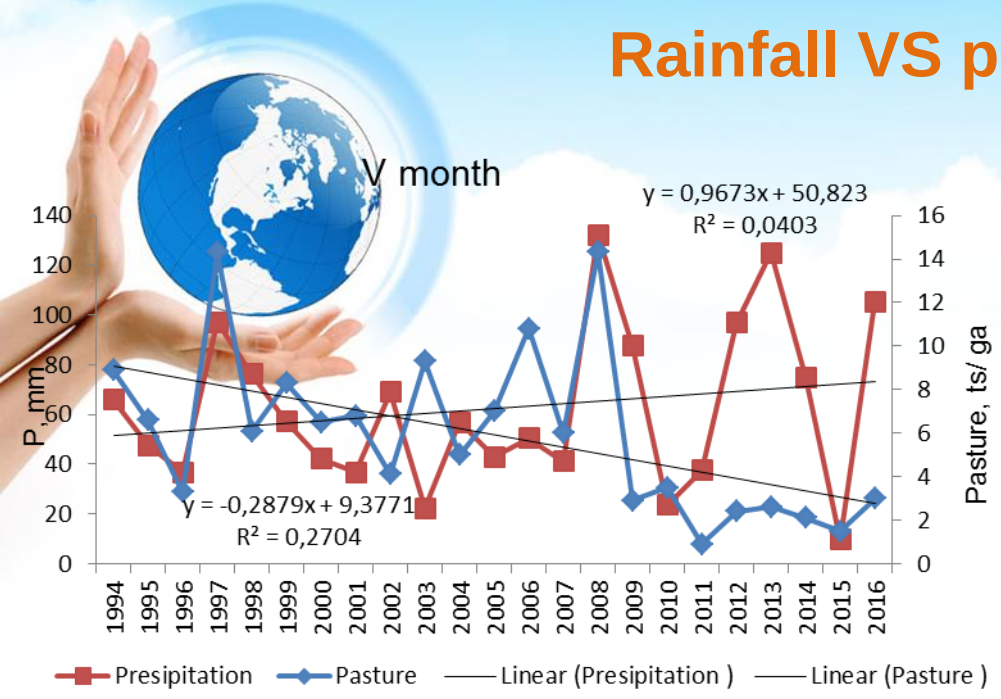
Soil moisture	Years	Soil depth, mm		
		0-20	0-50	0-100
Moisture, mm	2015	42.0	82.0	191.6
	2016	30.1	80.8	134.2
Differences		11.9	1.2	57.4

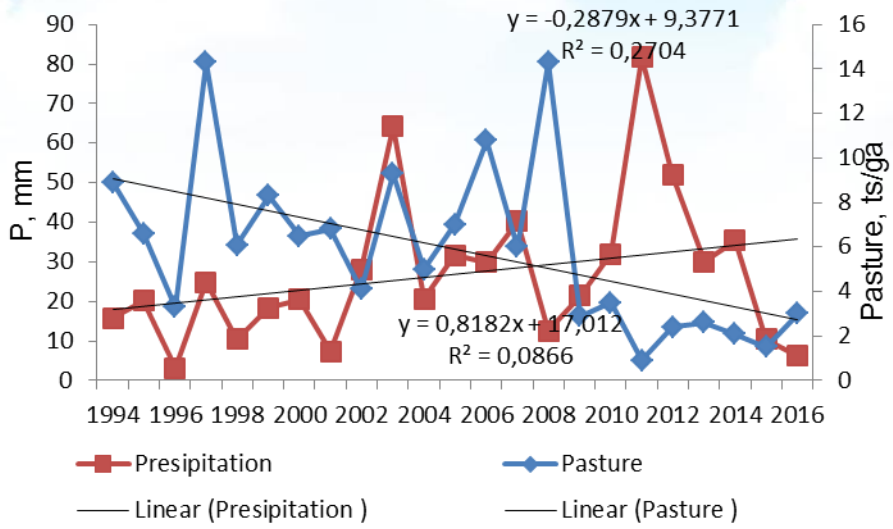
Distribution of pasture crops, tons per ha

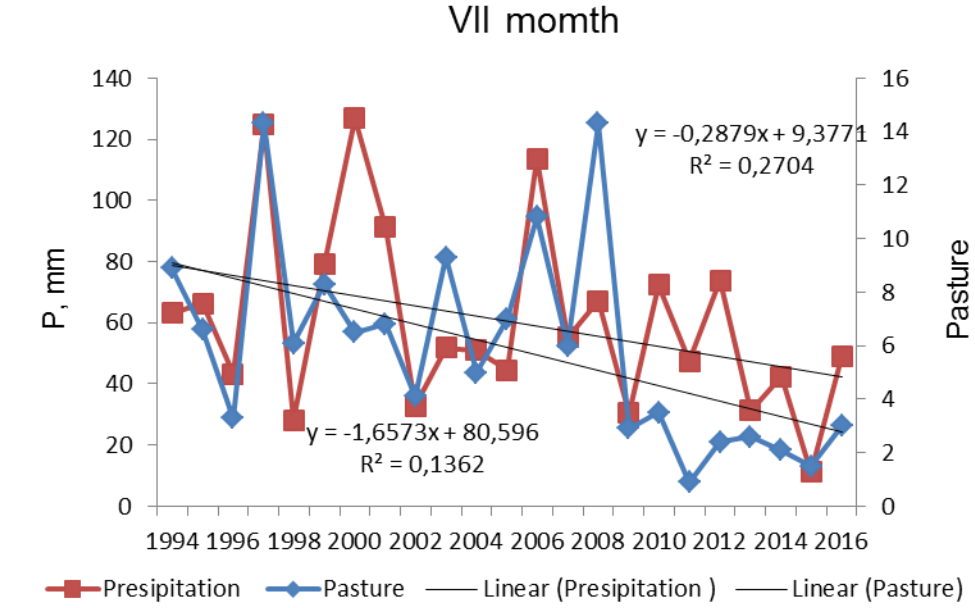
Year	Monts					
	V	VI	VII	VIII	IX	Normal
2015	0.5	0.3	0.3	3.0	3.5	1,5
2016	1.4	2.4	5.5	3.3	2.5	
Differencies	1.2	2.1	5.2	0.3	1.5	

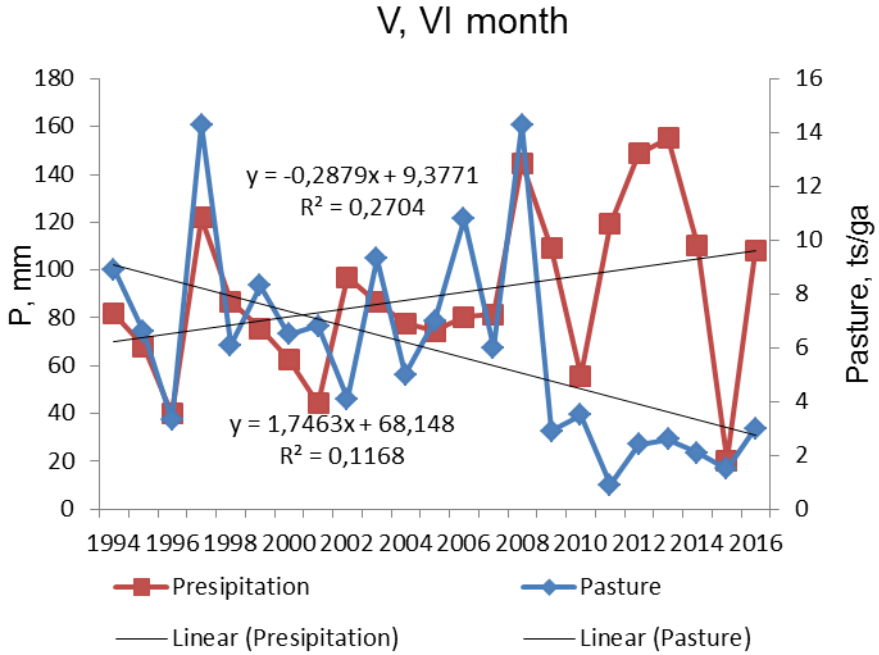


Rainfall VS pasture growth

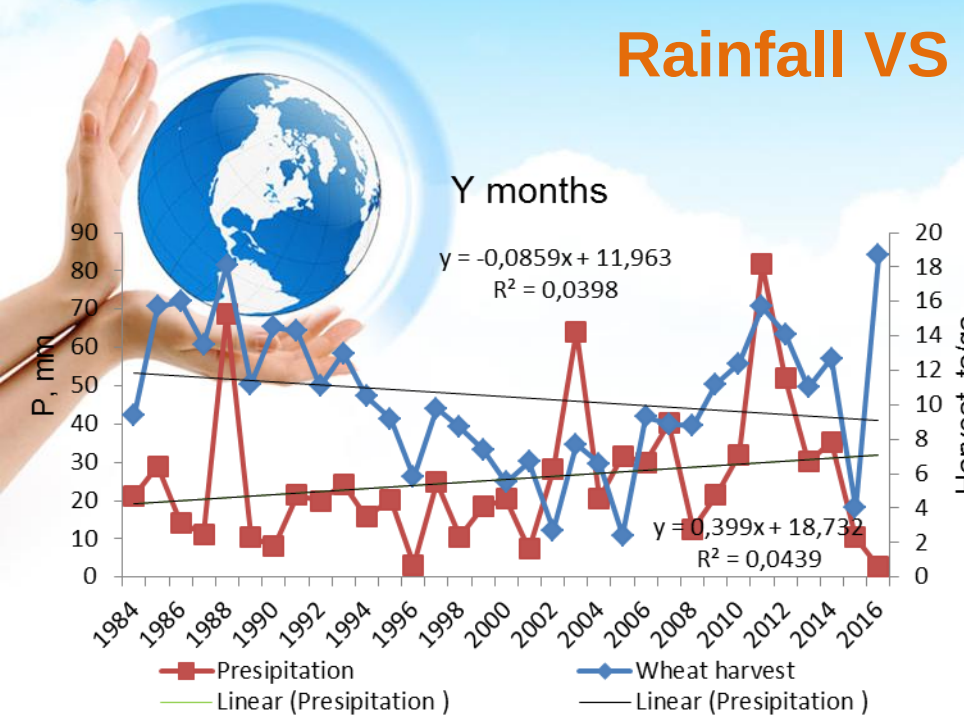


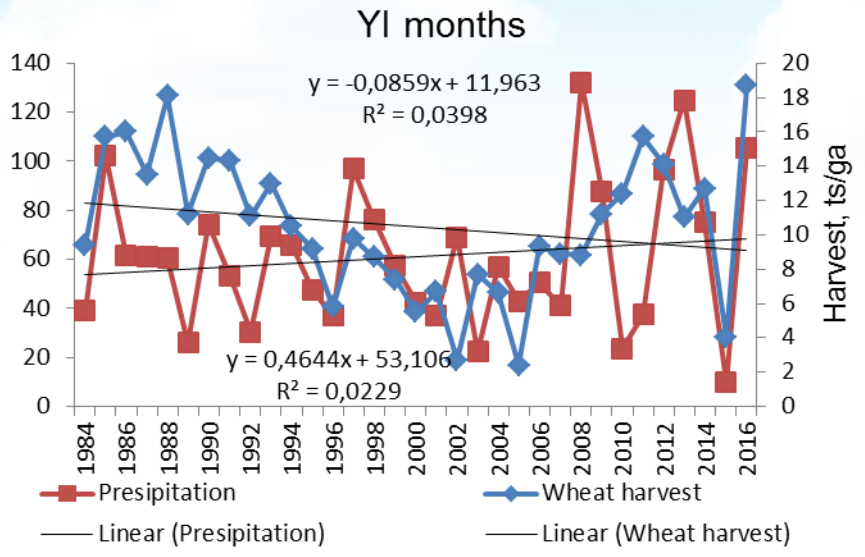


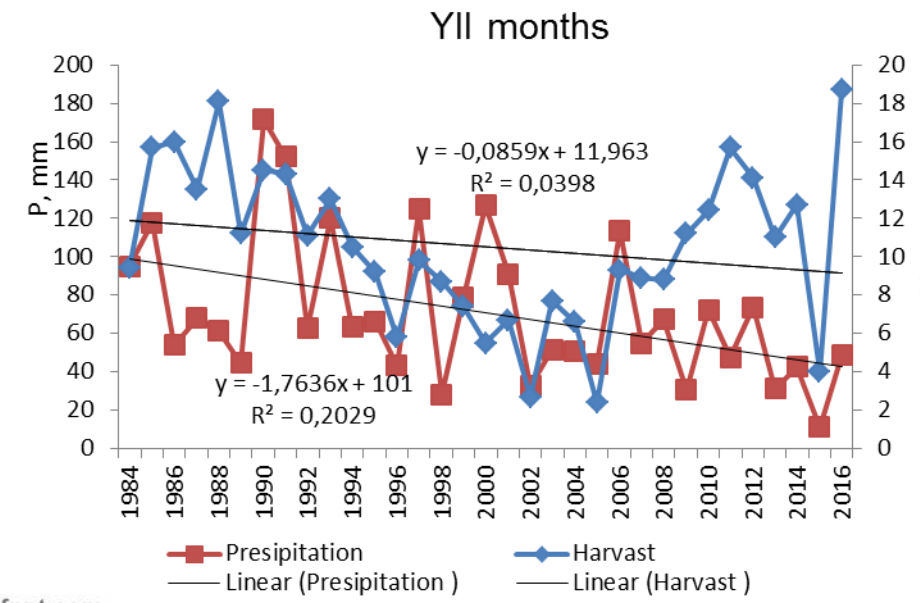


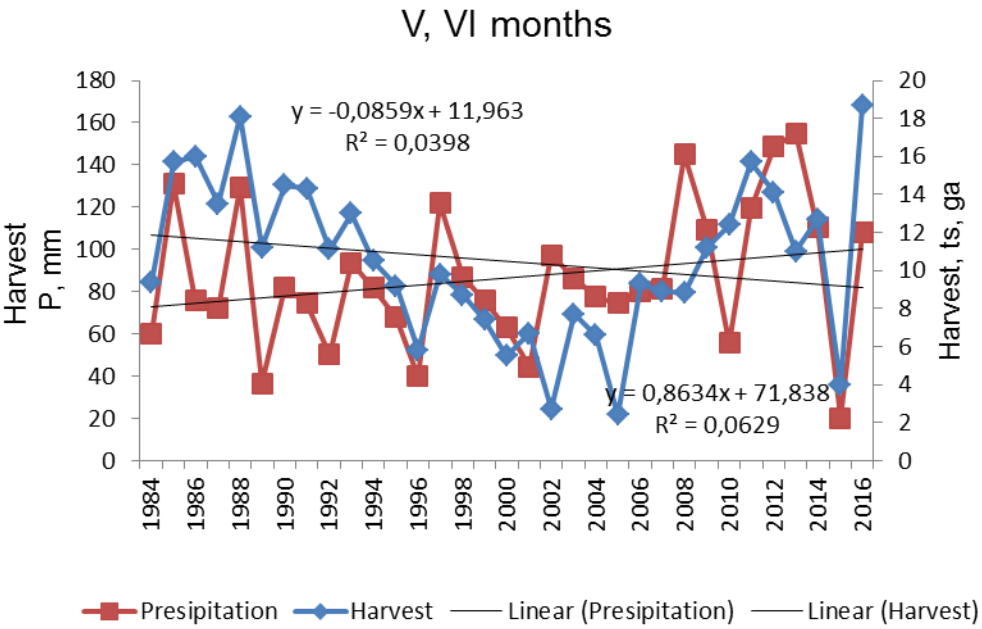


Rainfall VS wheat havest

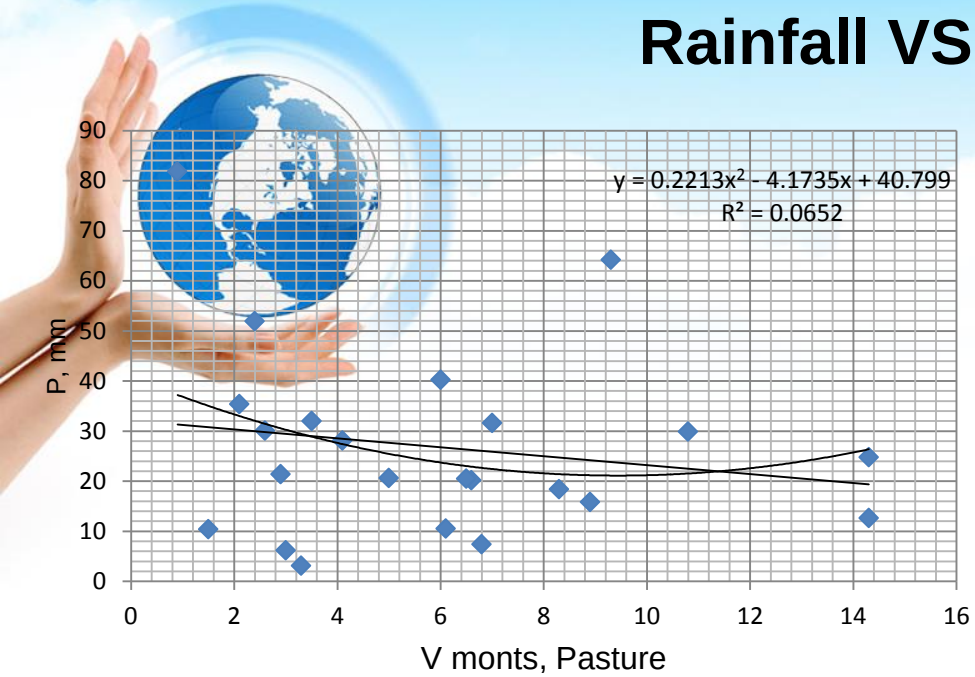


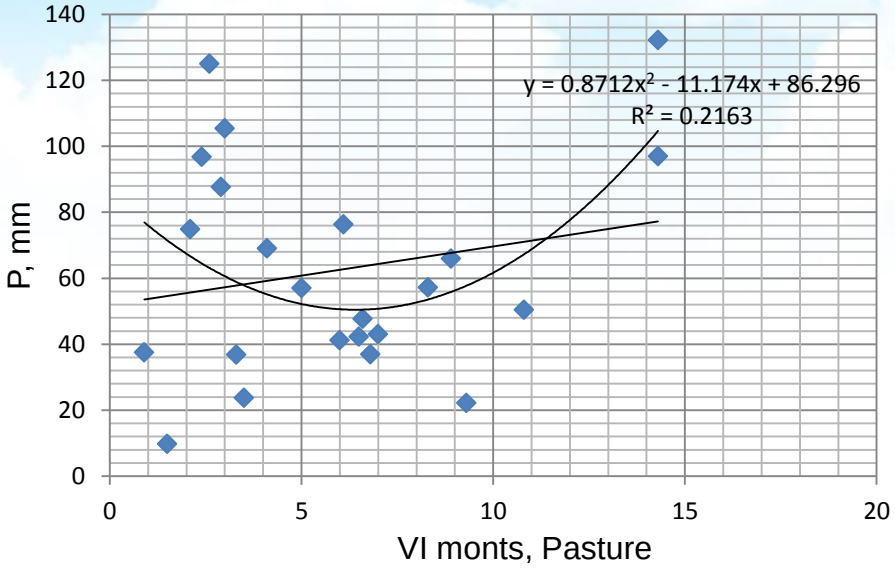


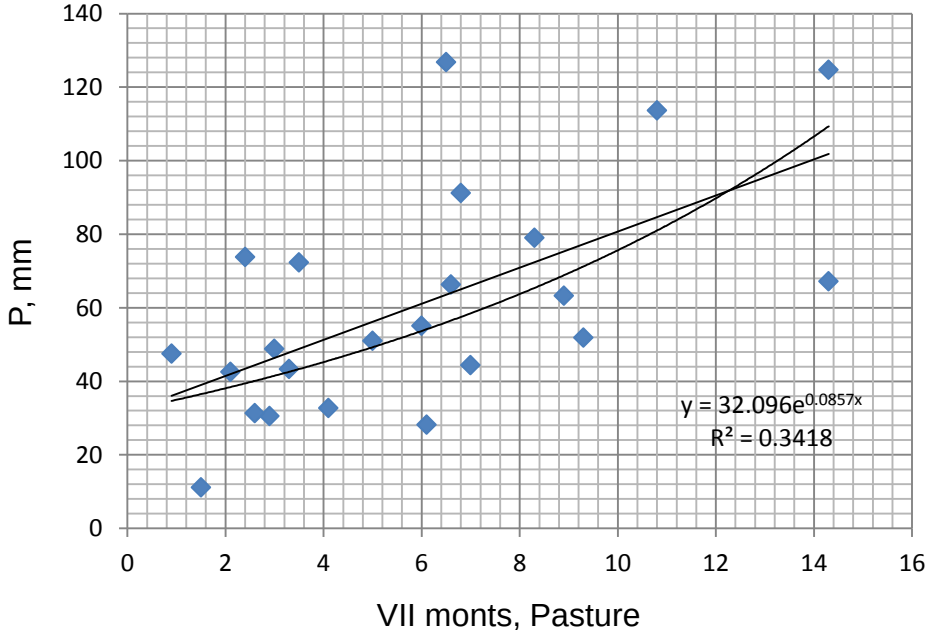


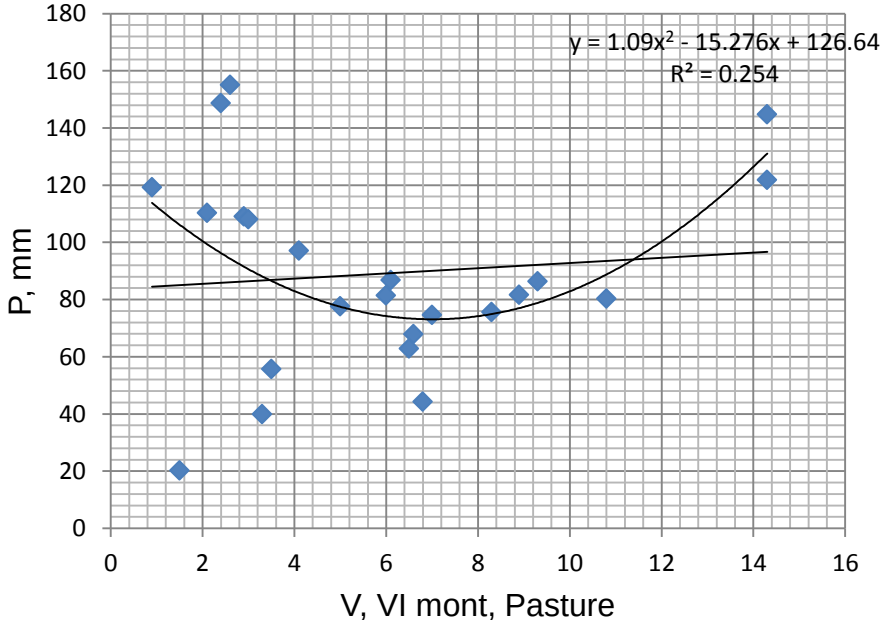


Rainfall VS wheat harvest









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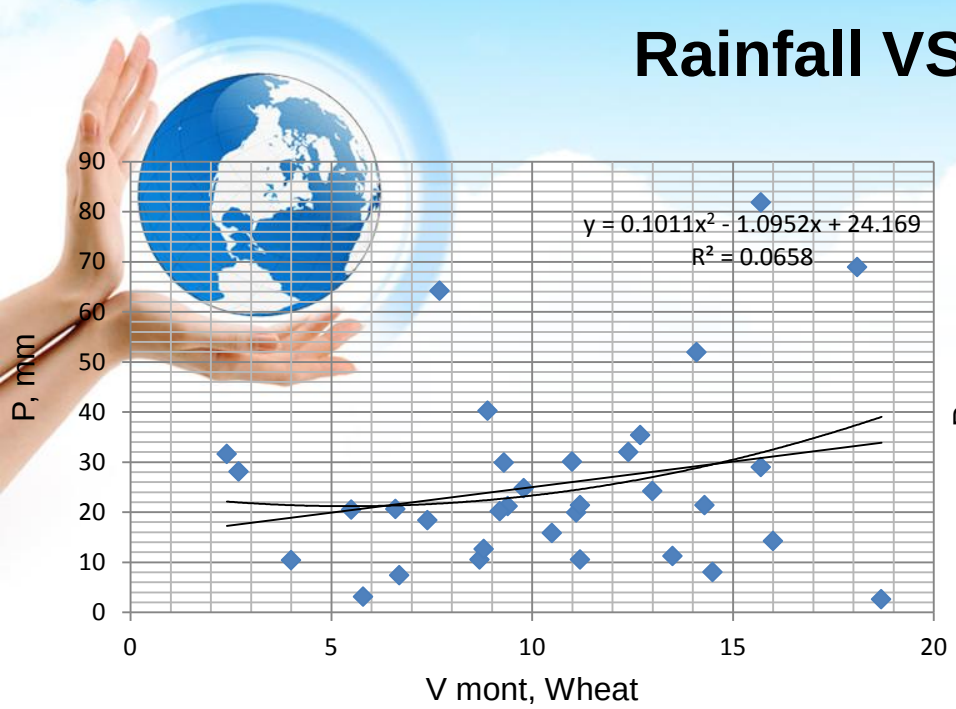

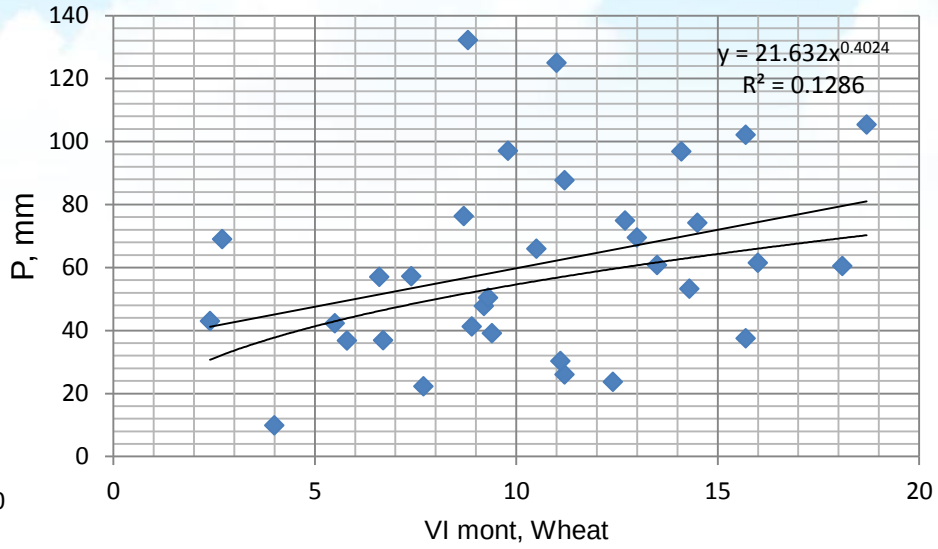

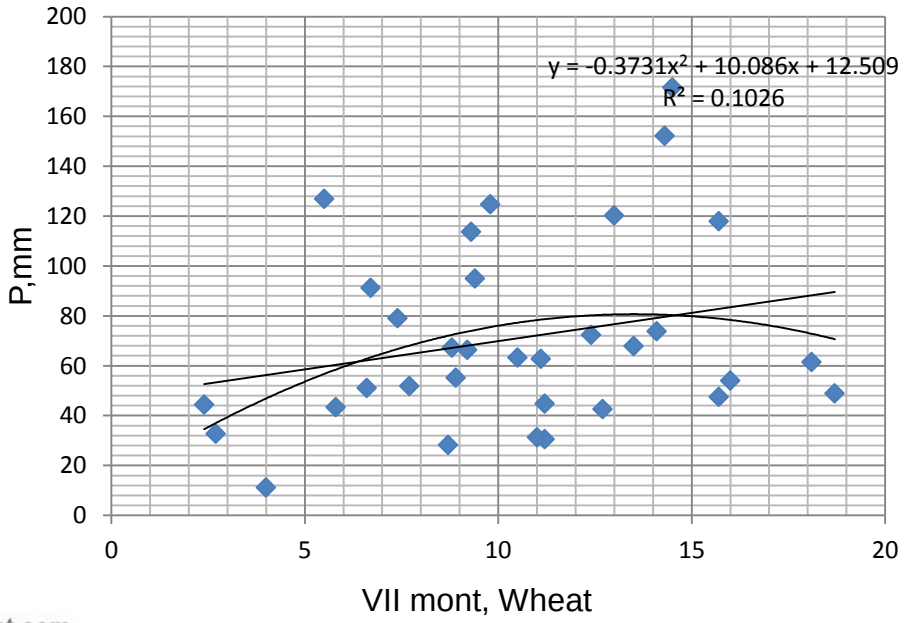

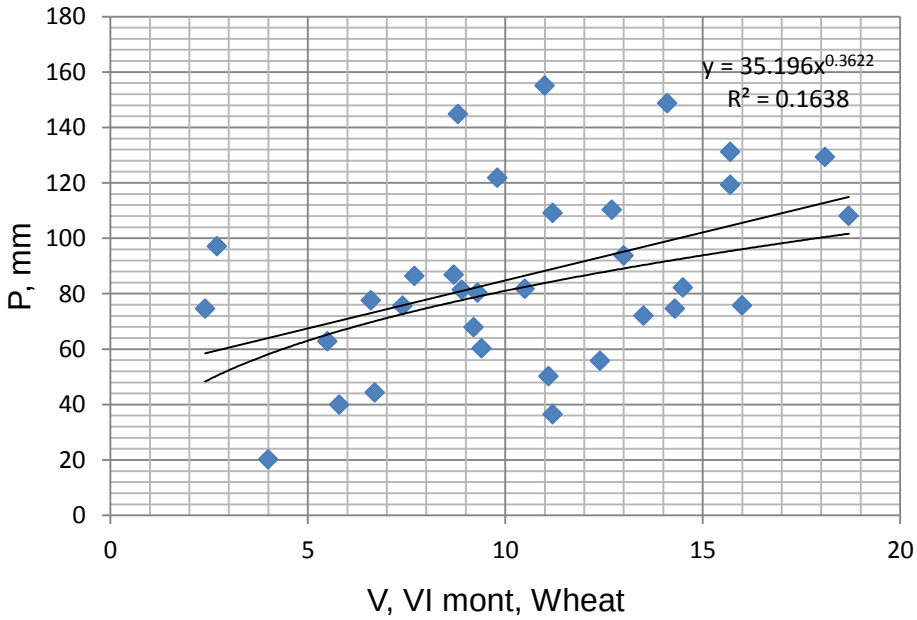

Wheat harvest in Darkhan-Uul areas

Tsaidam → **Бурятская остистая** → wheat harvest 0,2 ton 2015 → wheat harvest 1,4 ton, 2016

Altangadas → **Darkhan-144** → wheat harvest 0,3 ton 2015 → wheat harvest 3.0 ton, 2016

6-r brigad → **Darkhan-144** → wheat harvest 7.0 h/ha, 2015 → wheat harvest 1,2 ton, 2016

CONSLUSION

1. WARMING IS RAISING ACCORDING TO WEATHER CHANGE IN MONGOLIA, ESPECIALLY, HOT DAY FREQUENCIES IN JULY INCREASED, AS IN 2016 MAXIMUM AIR TEMPERATURE REACHED 37^0C DEGREES AND SOIL SURFACE MAXIMUM 62.9^0C DEGREES.

2. NUMBER OF HOT DAY FREQUENCIES IS INCREASED IN CENTRAL CROPPING AREAS, IN 2016 REACHED TOTALLY 34 DAYS.

3. THIS YEAR'S WEATHER FINENESS PROVIDED AN ADEQUATE HARVEST OF PASTURE GRASS 0.55 TONS PER HA AND WHEAT 1.76 TONS PER HA.


Thank you for attention