



Results of Substation Insulator Testing

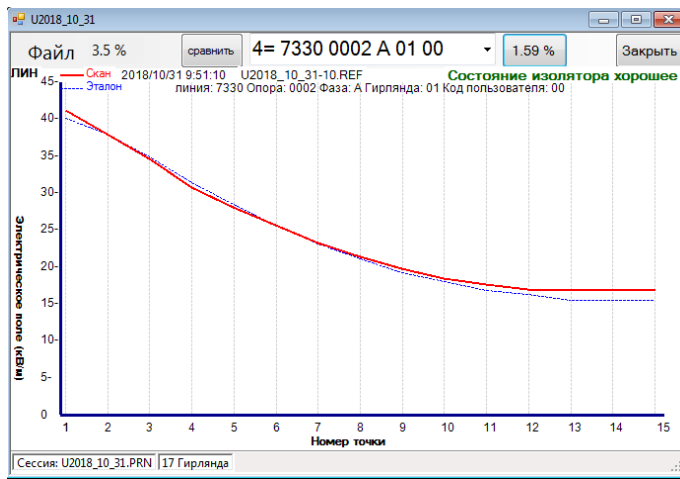
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Comision Federal de Electricidad, Mexico, Santa Fe substation

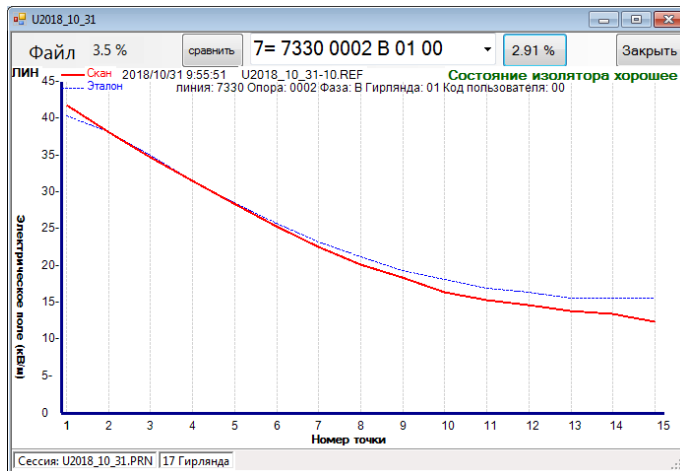
➤ 115 kV Porcelain Vertical Breaker (Lower section)



31 October 2018

Deviation = 1.59 %

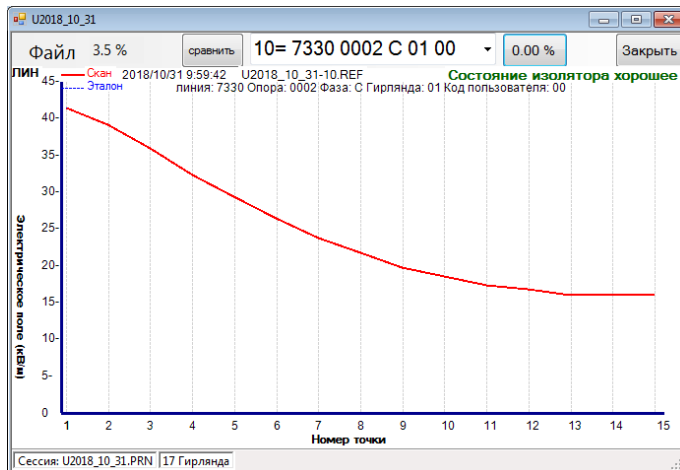
Phase A, no defect



31 October 2018

Deviation = 2.91 %

Phase B, no defect

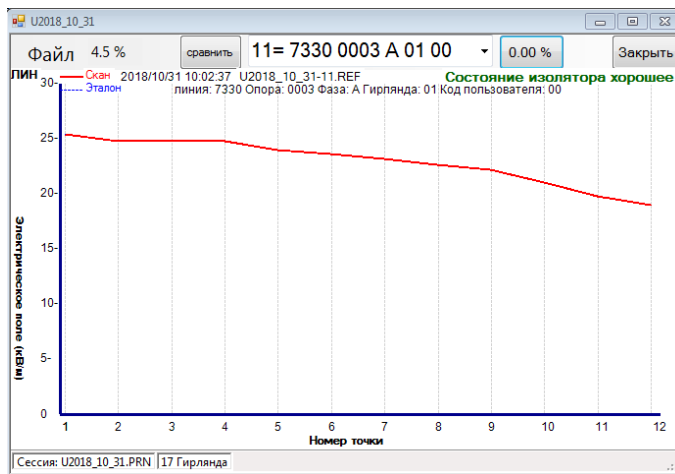


31 October 2018

Reference

Phase C, no defect

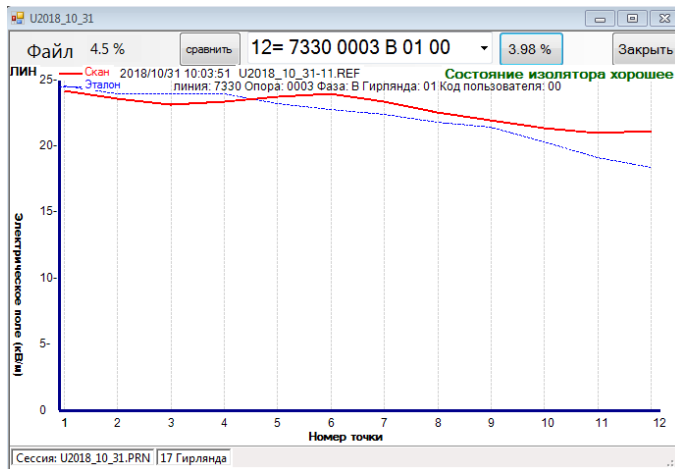
➤ 115 kV Porcelain Surge Arrester



31 October 2018

Reference

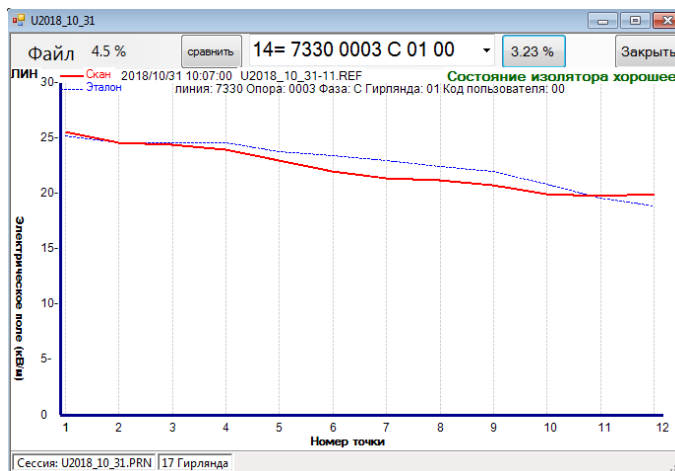
Phase A, no defect



31 October 2018

Deviation = 3.98 %

Phase B, no defect



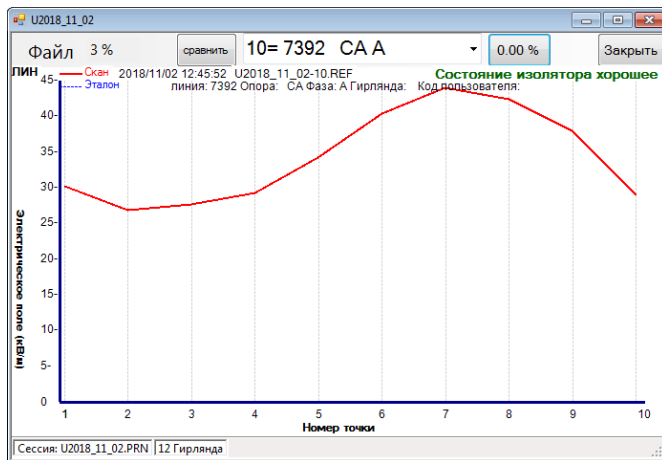
31 October 2018

Deviation = 3.23 %

Phase C, no defect

Comision Federal de Electricidad, Mexico, Vistamar substation

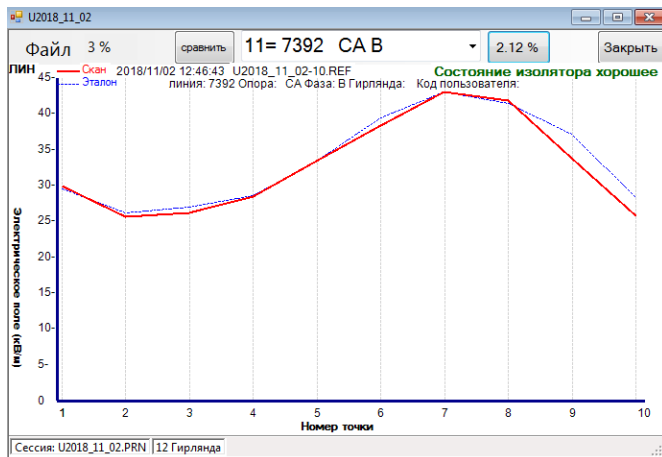
➤ 115 kV Composite Cable Termination



2 November 2018

Reference

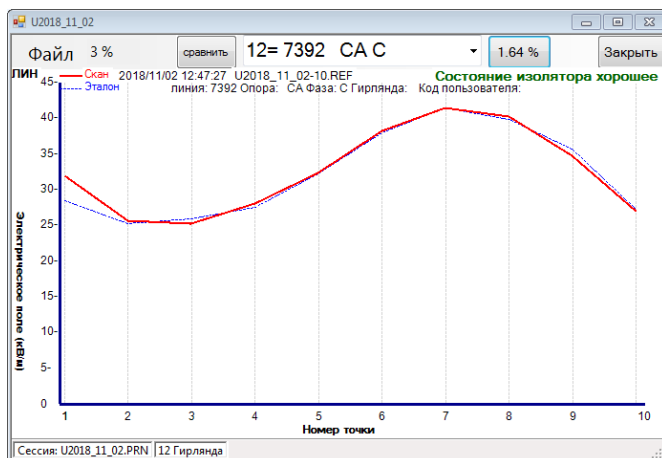
Phase A, no defect



2 November 2018

Deviation = 2.12 %

Phase B, no defect

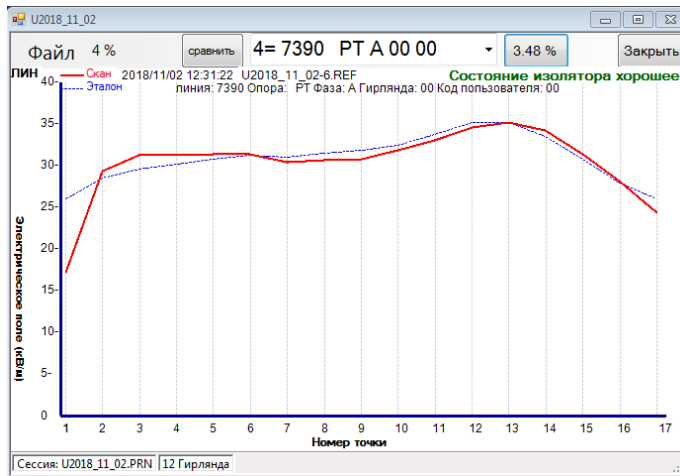


2 November 2018

Deviation = 1.64 %

Phase C, no defect

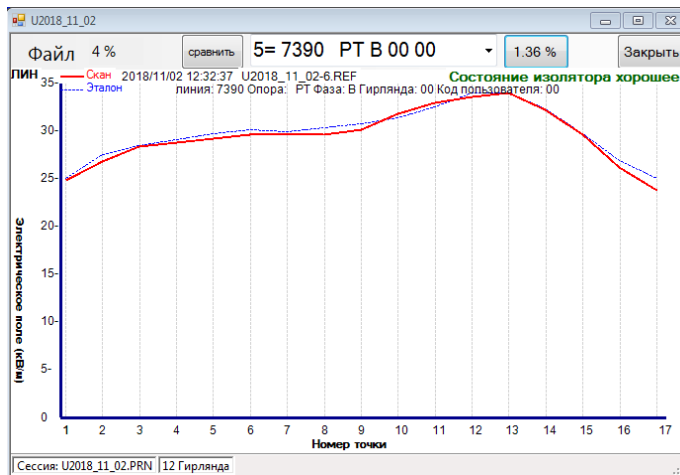
➤ 115 kV Potential Transformer



2 November 2018

Deviation = 3.48 %

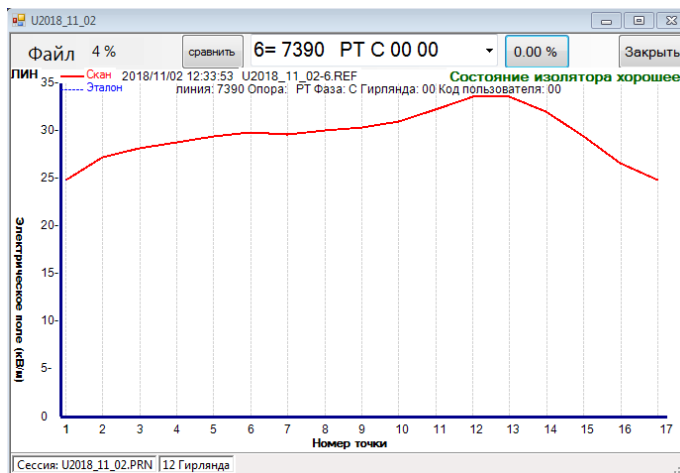
Phase A, no defect



2 November 2018

Deviation = 1.36 %

Phase B, no defect

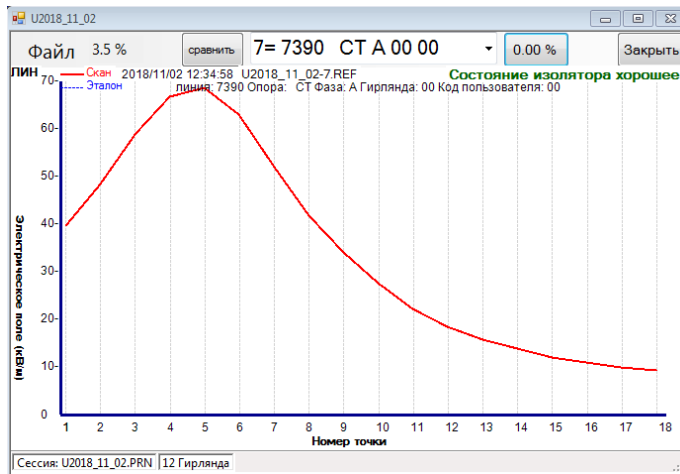


2 November 2018

Reference

Phase C, no defect

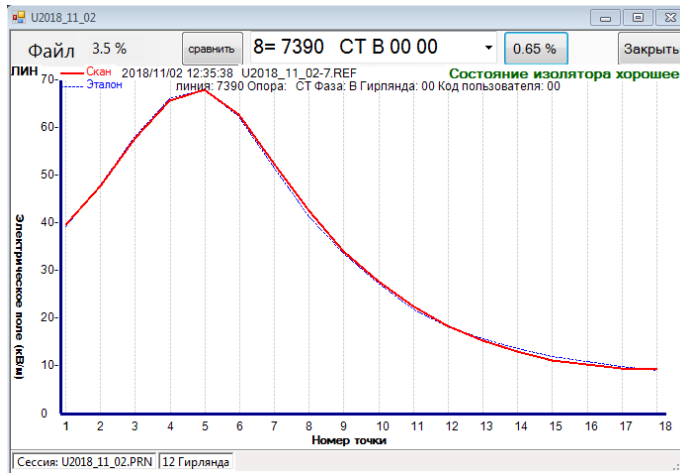
➤ 115 kV Current Transformer



2 November 2018

Reference

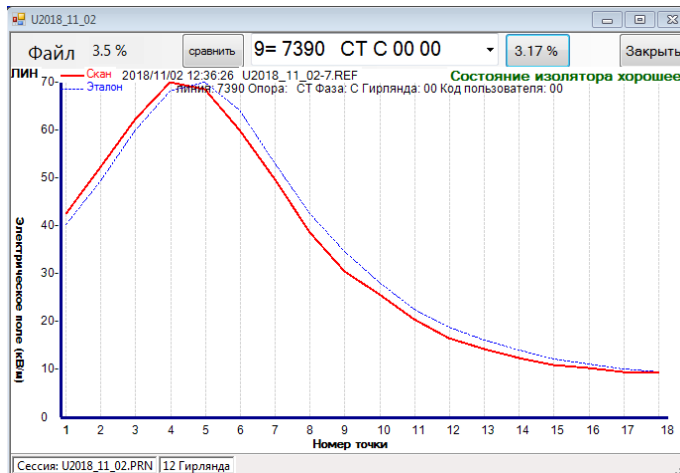
Phase A, no defect



2 November 2018

Deviation = 0.65 %

Phase B, no defect



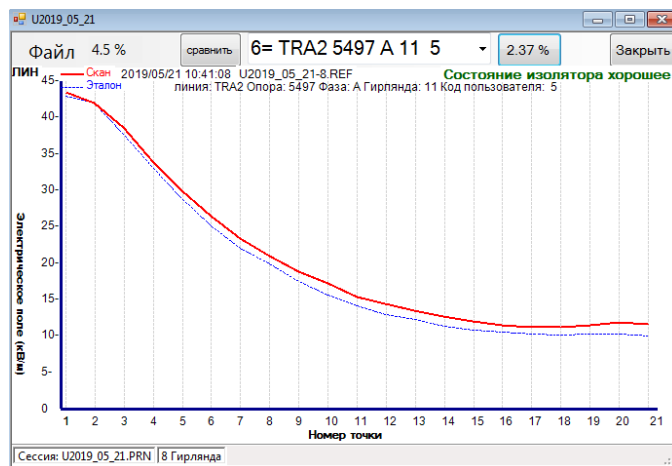
2 November 2018

Deviation = 3.17 %

Phase C, no defect

Empreso de Energia de Bogota, Colombia, Tunja substation

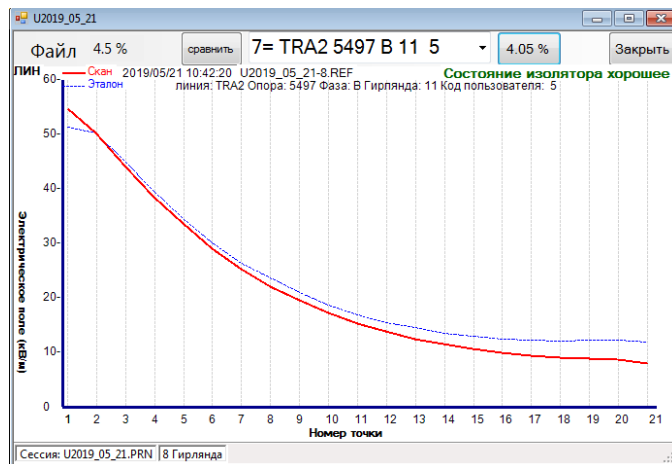
➤ 115 kV Porcelain Vertical Breaker (Lower section)



21 May 2019

Deviation = 2.37 %

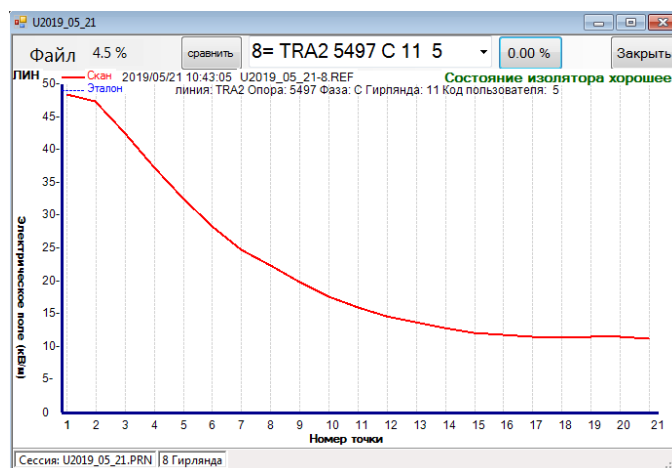
Phase A, no defect



21 May 2019

Deviation = 4.05 %

Phase B, no defect

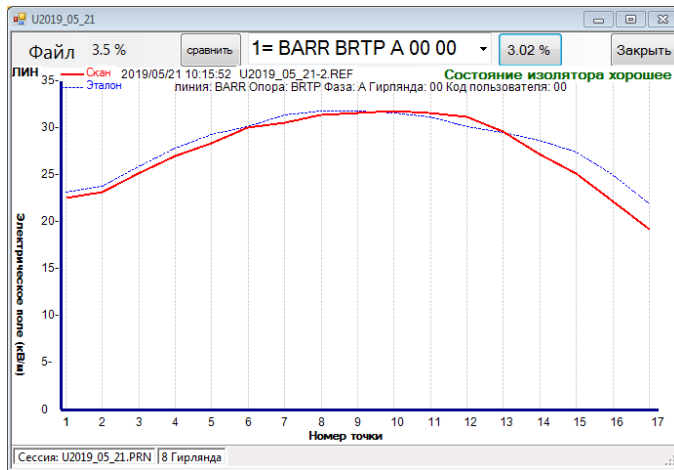


21 May 2019

Reference

Phase C, no defect

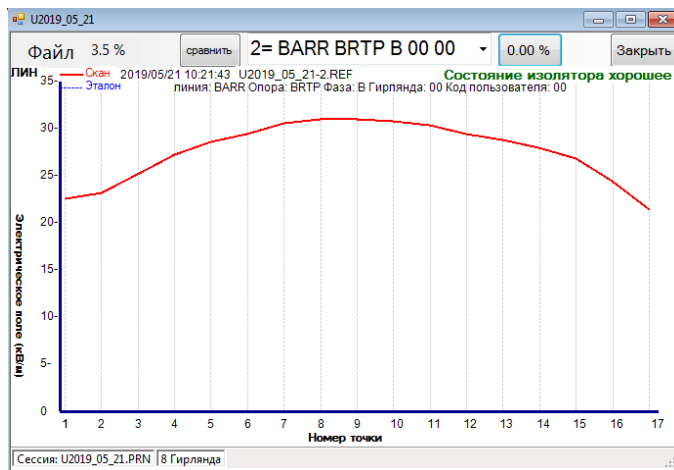
➤ 115 kV Porcelain Potential Transformer (PT)



21 May 2019

Deviation = 3.02 %

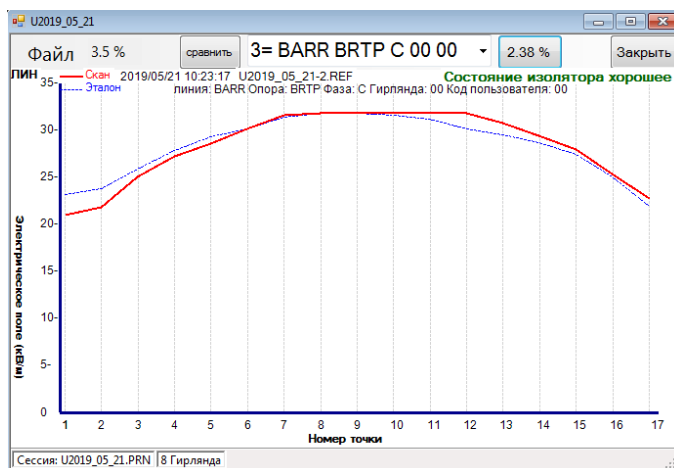
Phase A, no defect



21 May 2019

Reference

Phase B, no defect



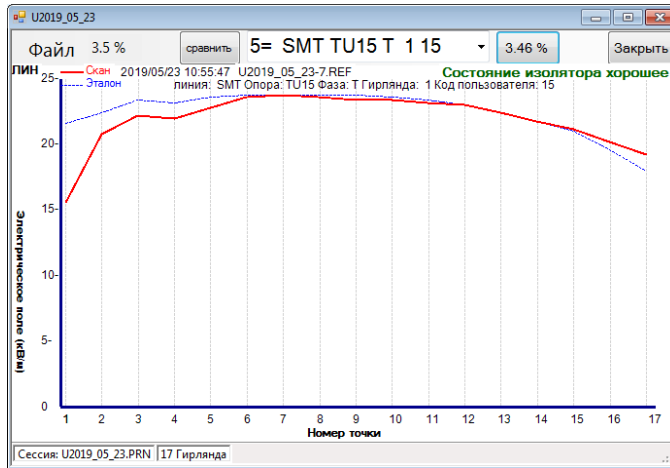
21 May 2019

Deviation = 2.38 %

Phase C, no defect

Cucuta, Colombia, San Mateo substation

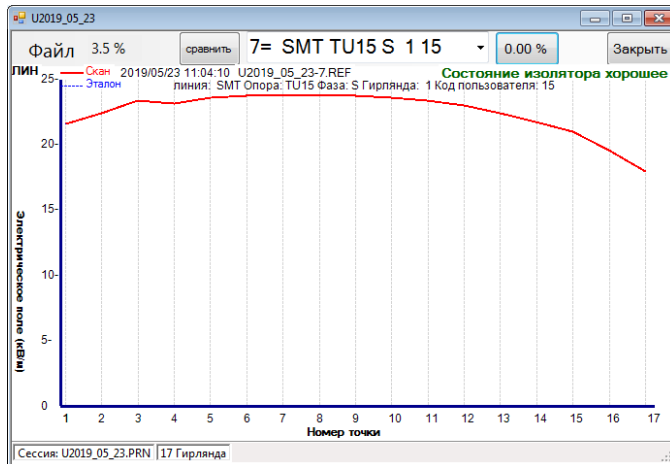
➤ 115 kV Porcelain Potential Transformer (PT)



23 May 2019

Deviation = 3.46%

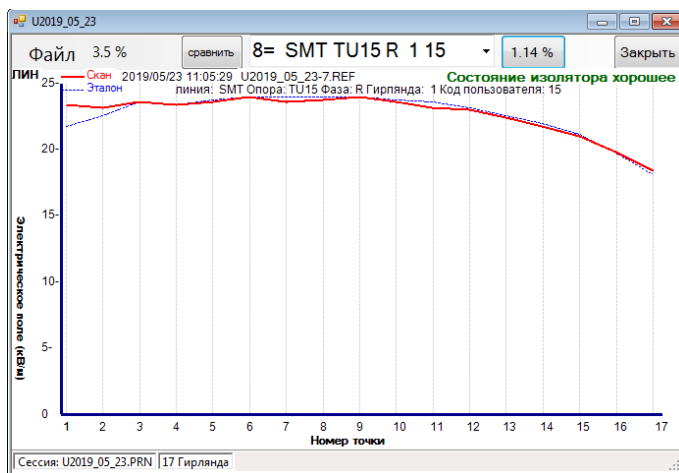
Phase T, no defect.



23 May 2019

Reference

Phase S, no defect.



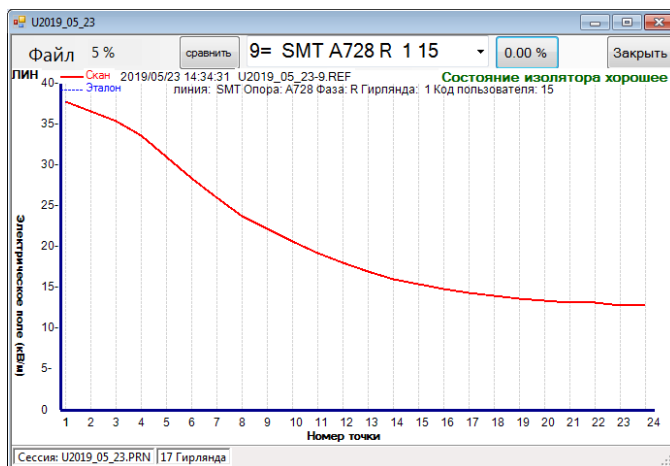
23 May 2019

Deviation = 1.14 %

Phase R, no defect.

Cucuta, Colombia, Belen substation

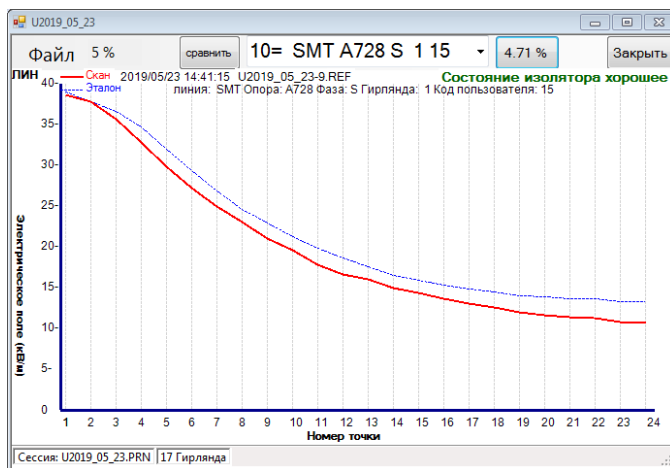
➤ 115 kV Porcelain Switch Post



23 May 2019

Reference

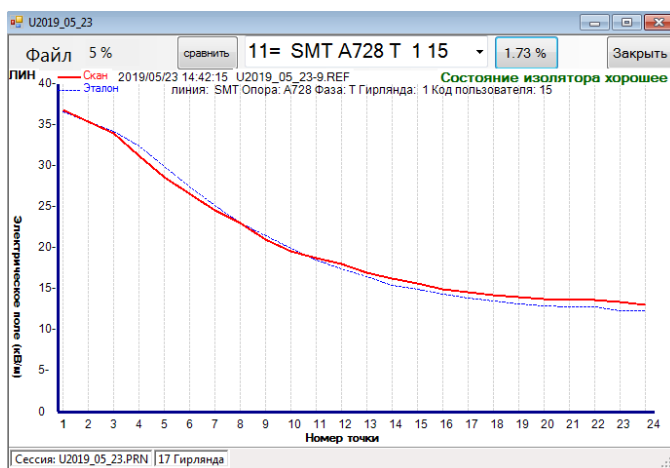
Phase R, no defect.



23 May 2019

Deviation = 4.71 %

Phase S, no defect.



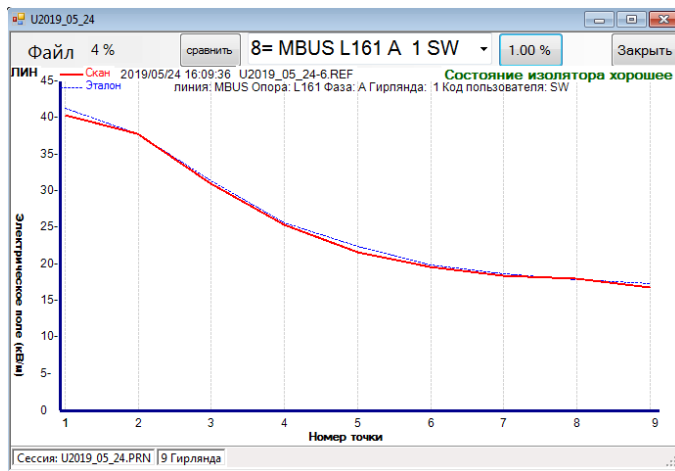
23 May 2019

Deviation = 1.73 %

Phase T, no defect.

CHEC, Colombia, Manizales substation

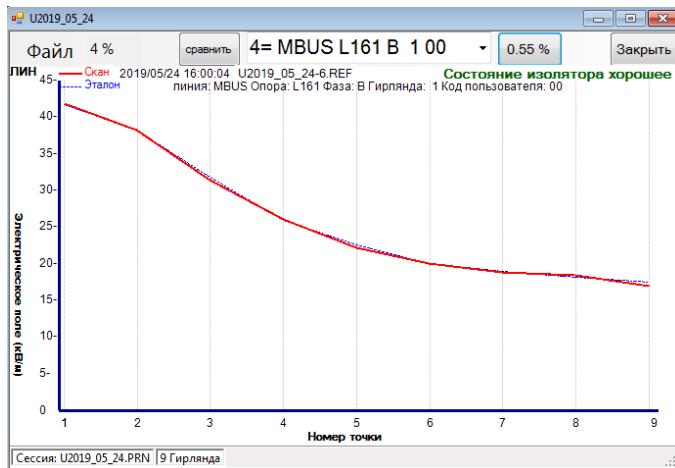
➤ 115 kV Porcelain Switch Post #1



24 May 2019

Deviation = 1.00 %

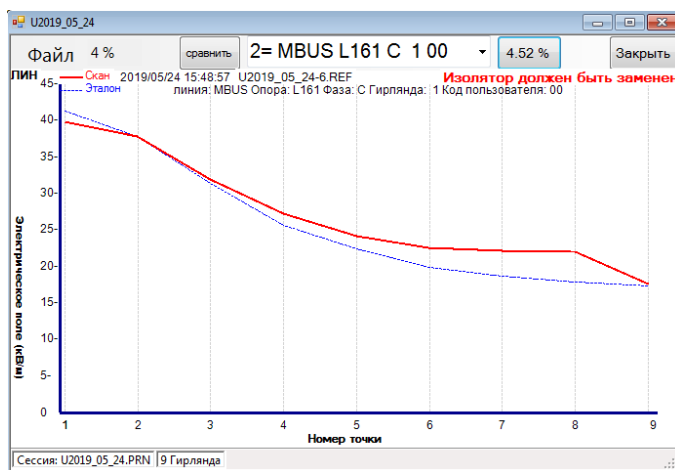
Phase A, no defect.



24 May 2019

Deviation = 0.55 %

Phase B, no defect.

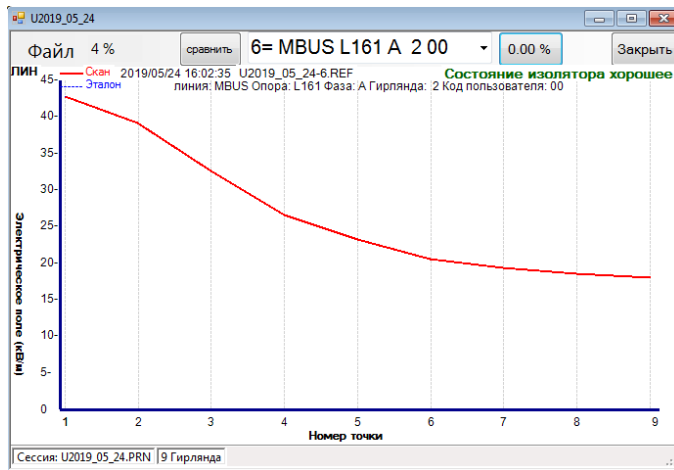


24 May 2019

Deviation = 4.52 %

Phase C, broken skirt near the base

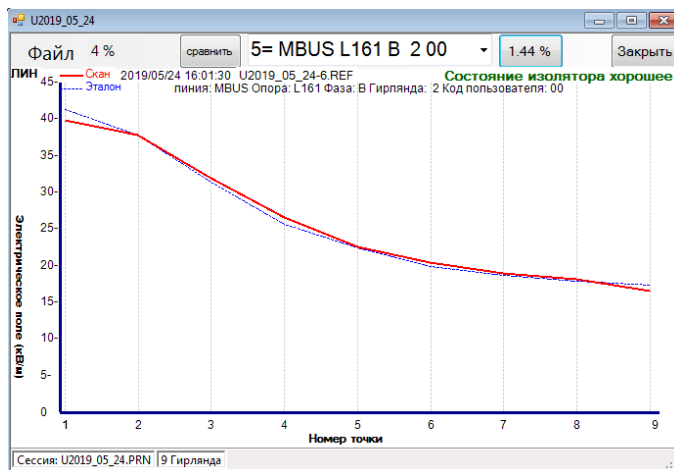
➤ 115 kV Porcelain Switch Post #2



24 May 2019

Reference

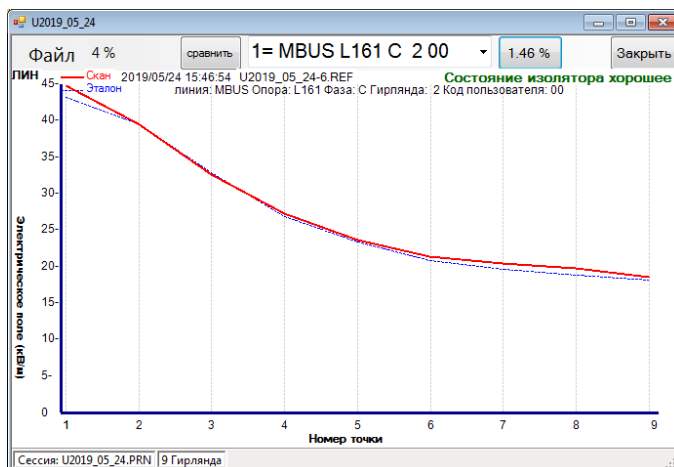
Phase A, no defect.



24 May 2019

Deviation = 1.44 %

Phase B, no defect



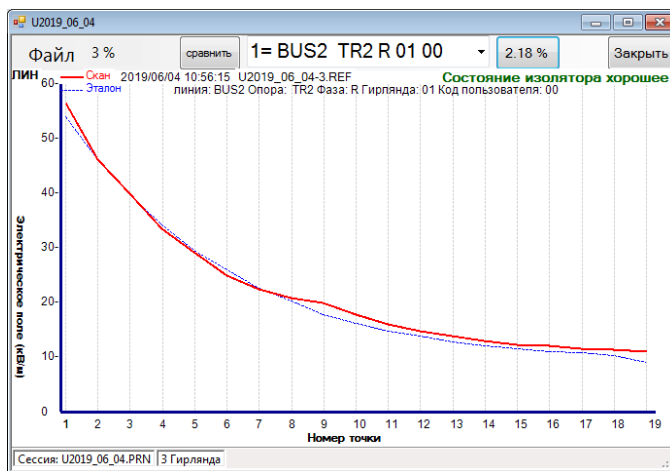
24 May 2019

Deviation = 1.46 %

Phase C, no defect

Santiago, Chili, Enel, Bicentenario substation

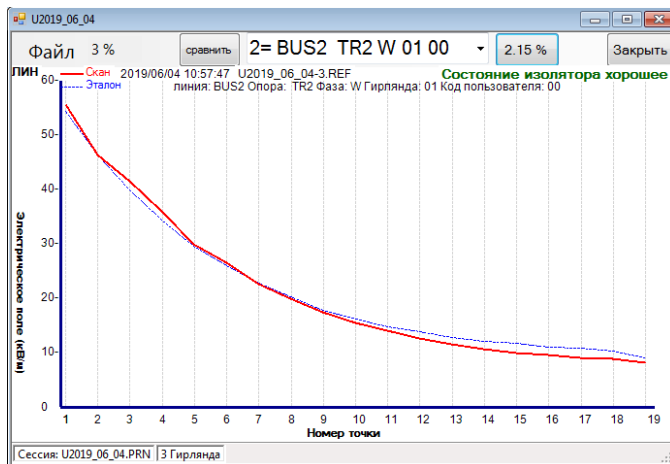
➤ 110 kV Porcelain Vertical Breaker (Lower section)



4 June 2019

Deviation = 2.18 %

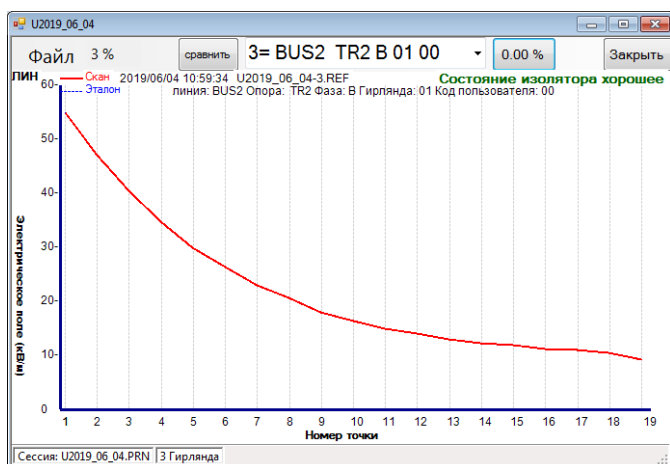
Phase R, no defect



4 June 2019

Deviation = 2.15 %

Phase W, no defect



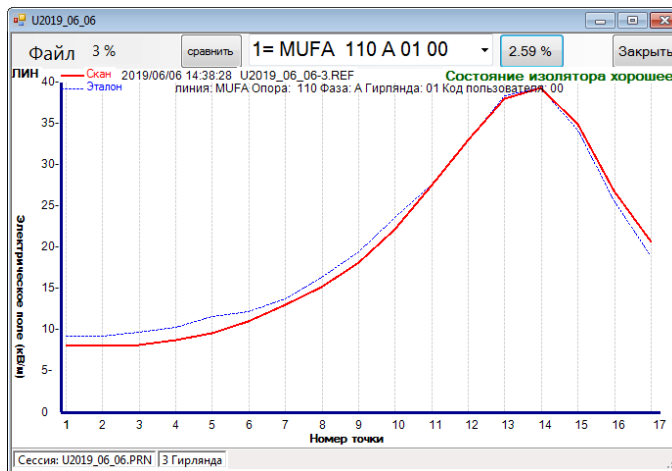
4 June 2019

Reference

Phase B, no defect

Chili, Antofagasta substation

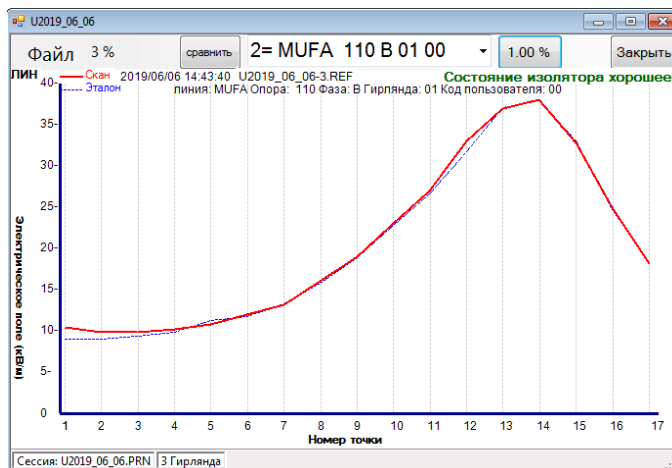
➤ 110 kV Porcelain Cable Termination



6 June 2019

Deviation = 2.59%

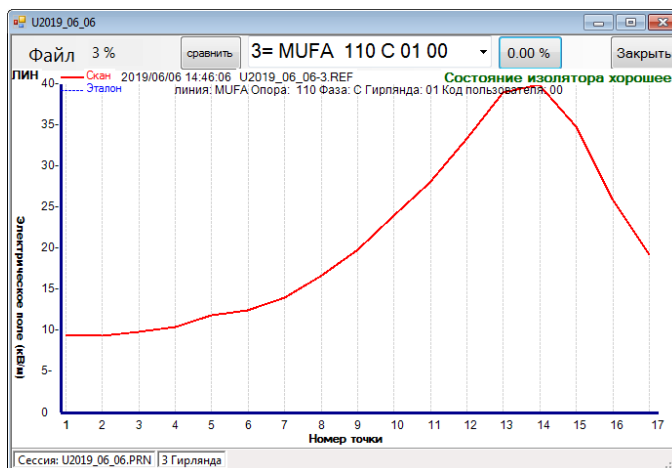
Phase A, no defect.



6 June 2019

Deviation = 1.00%

Phase B, no defect.



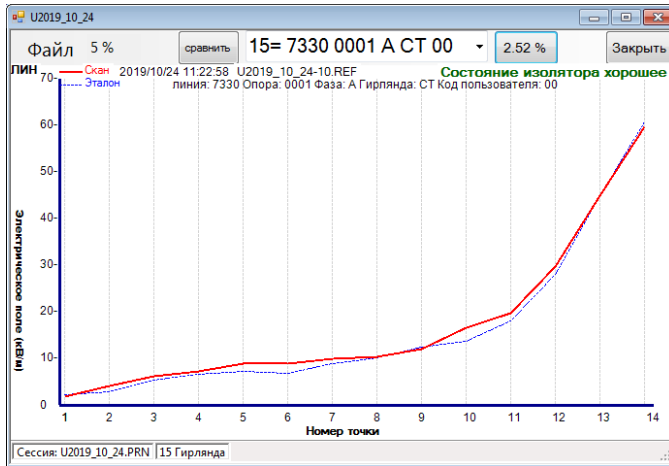
6 June 2019

Reference

Phase C, no defect.

Comision Federal de Electricidad, Mexico, Veracruz

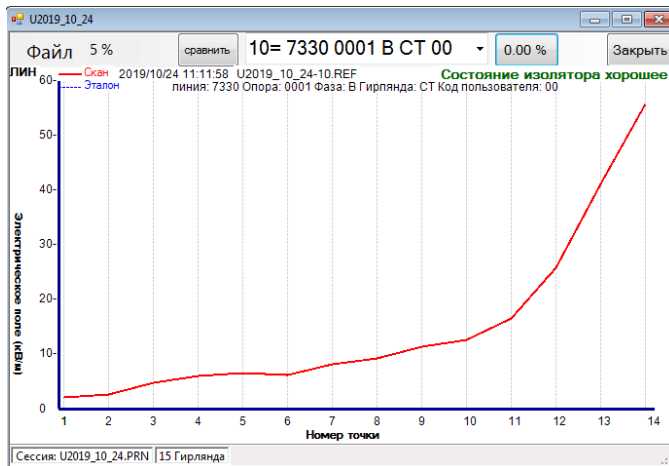
➤ 115 kV Composite Cable Termination



24 October 2019

Deviation = 2.52 %

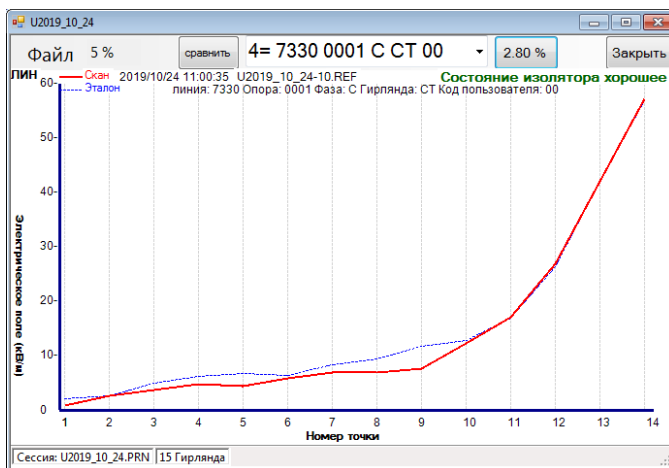
Phase A, no defect



24 October 2019

Reference

Phase B, no defect

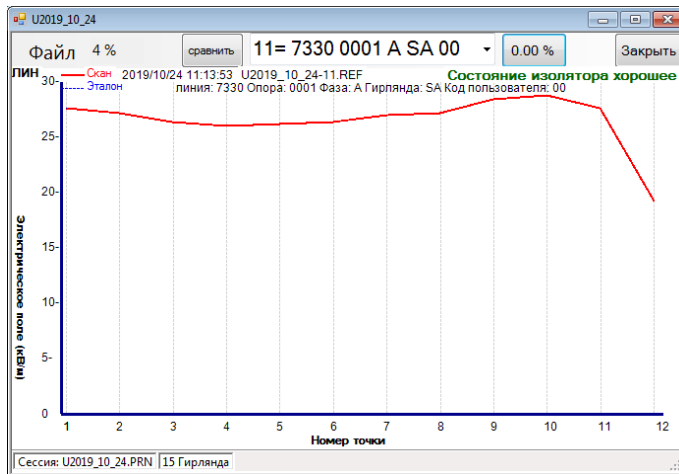


24 October 2019

Deviation = 2.80 %

Phase C, no defect

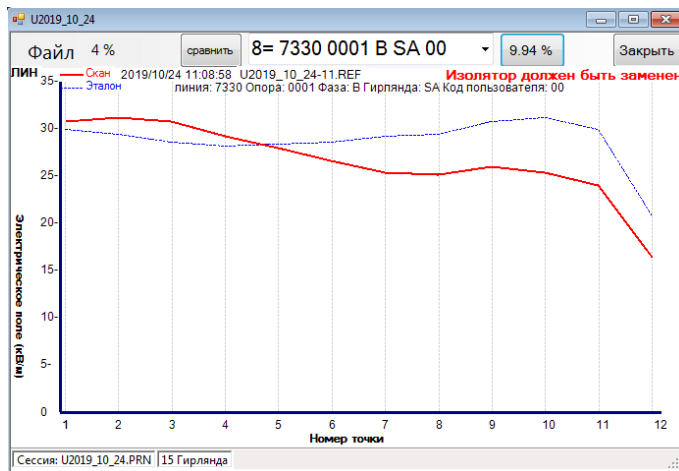
➤ 115 kV Porcelain Surge Arrester



24 October 2019

Reference

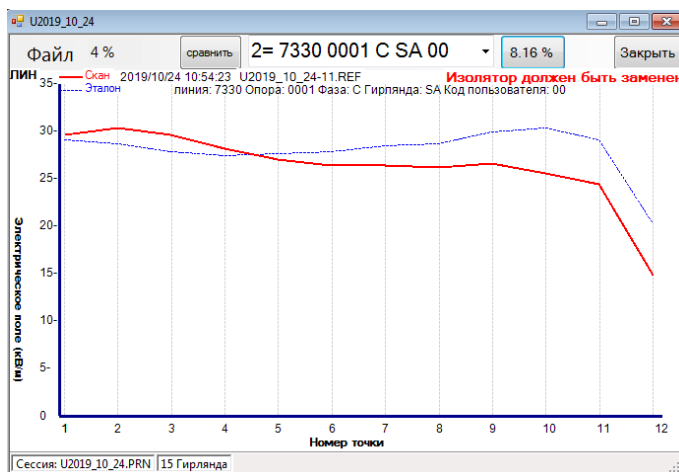
Phase A, no defect



24 October 2019

Deviation = 9.94 %

Phase B, bad arrester with
trace of flashover



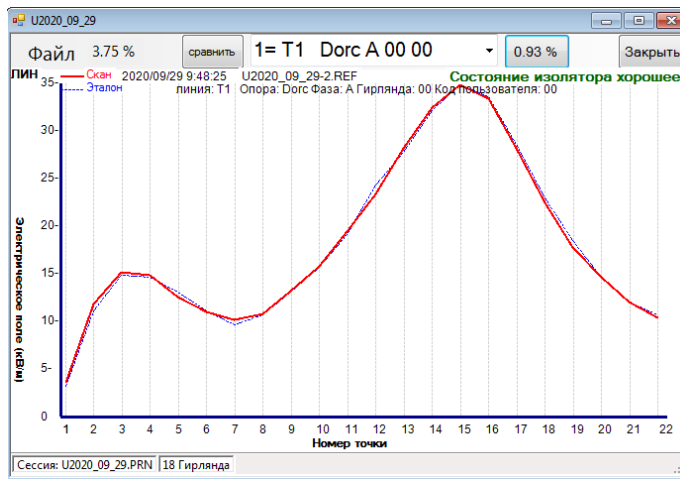
24 October 2019

Deviation = 8.16 %

Phase C, bad arrester

Montreal Canada, Hydro Quebec, Poste Dorchester

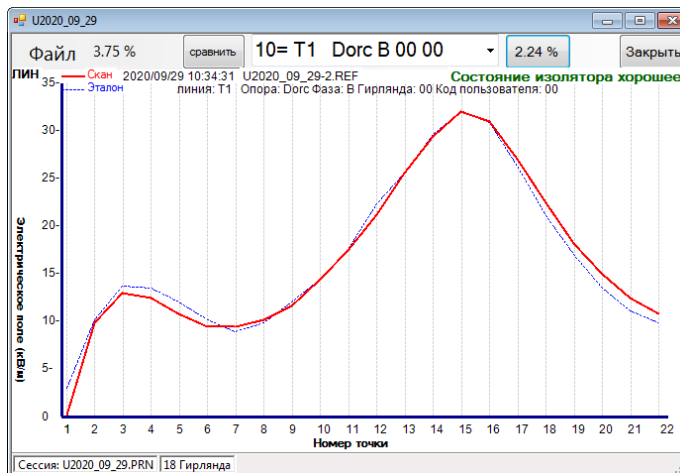
➤ 120 kV Composite Cable Termination



29 September 2020

Deviation = 0.93%

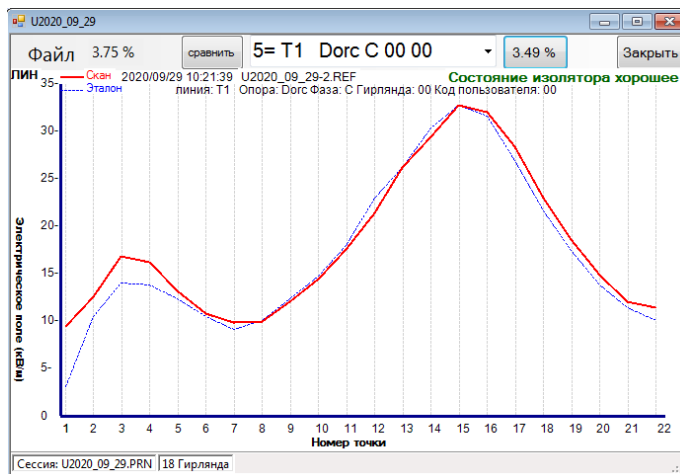
Phase A, no defect.



29 September 2020

Deviation = 2.24%

Phase B, no defect.



29 September 2020

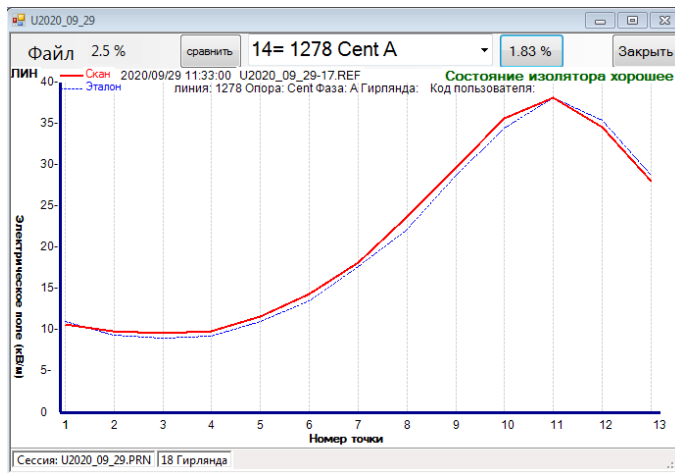
Deviation = 3.49%

Phase C, oil level to check.

Positron recommended testing it again in one year.

Montreal Canada, Hydro Quebec, Poste Central

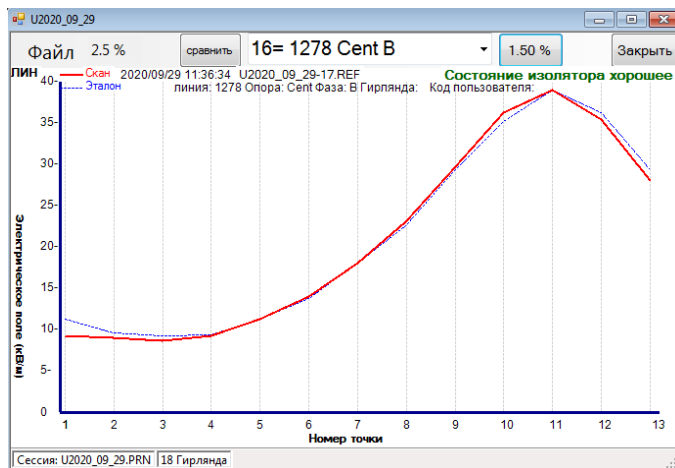
➤ 120 kV Porcelain Cable Termination



29 September 2020

Deviation = 1.83%

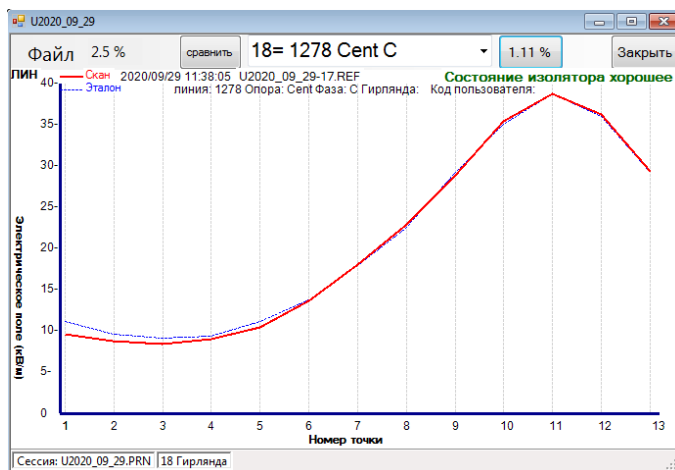
Phase A, no defect.



29 September 2020

Deviation = 1.5%

Phase B, no defect.



29 September 2020

Deviation = 1.11%

Phase C, no defect.