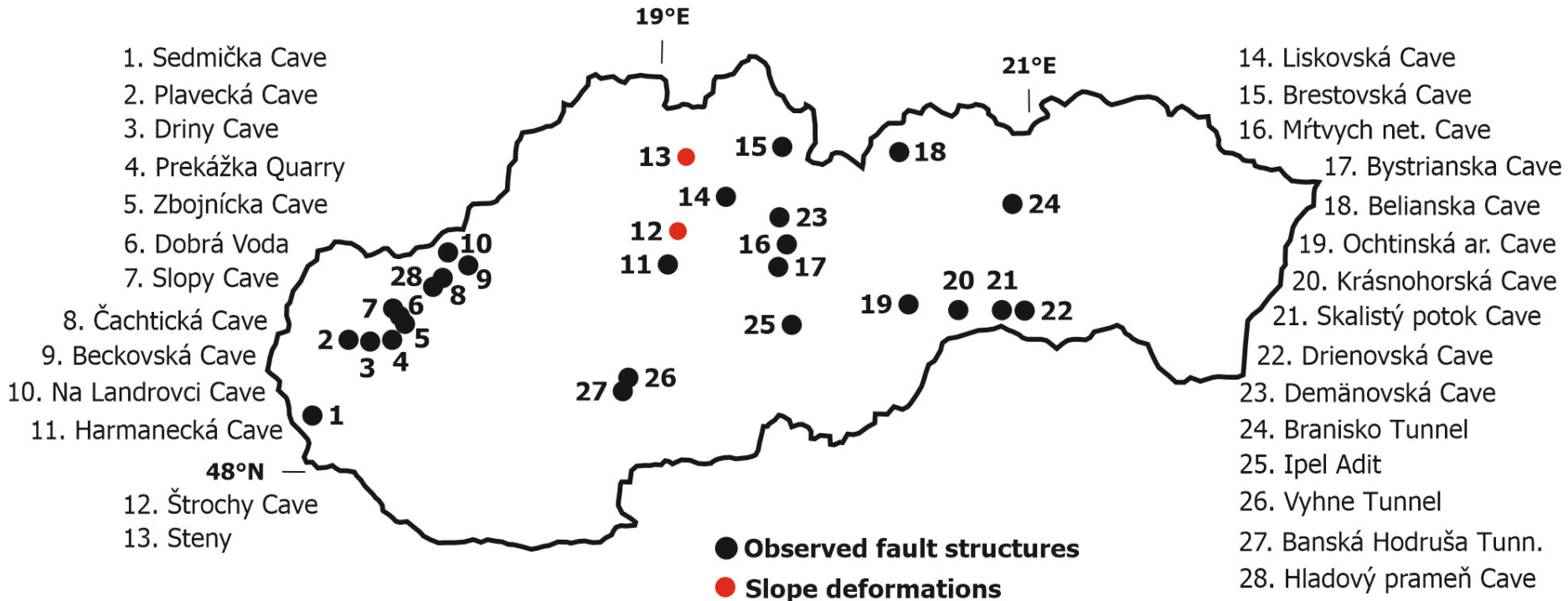




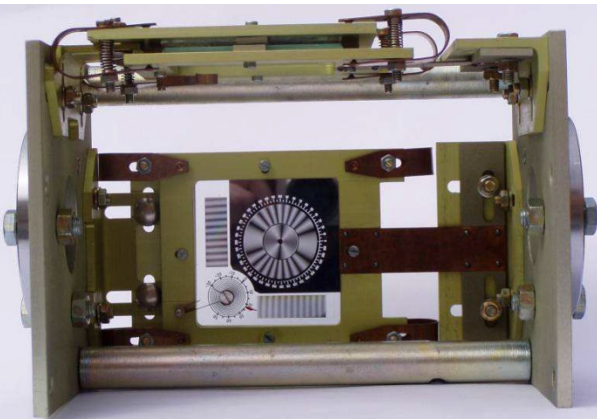
Tectonic gap 2015-2018 - an example from Slovak TecNet

Author: Miloš Briestenský, Josef Stemberk

Slovak TecNet



38 extensometers of TM-71 type



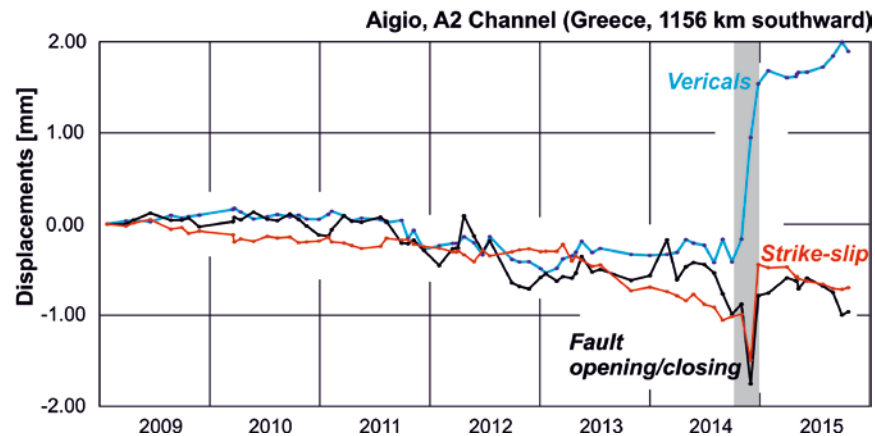
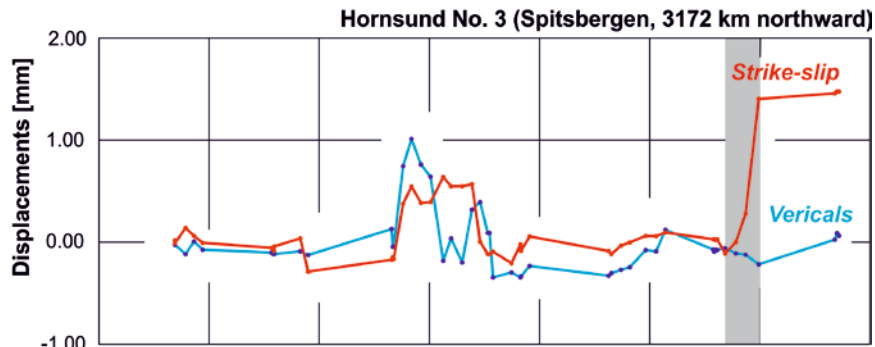
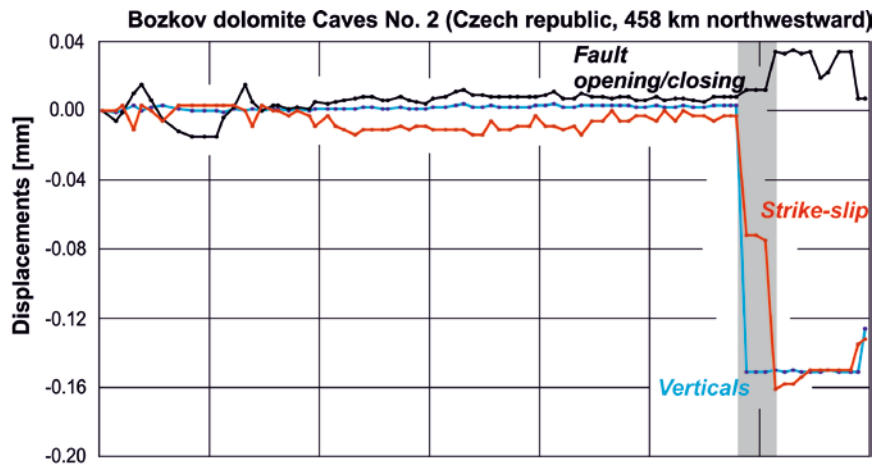
Department of Engineering Geology, Institute of Rock Structure & Mechanics,
Czech Academy of Sciences, v. v. i.;

State Geological Institute of Dionýz Štúr;

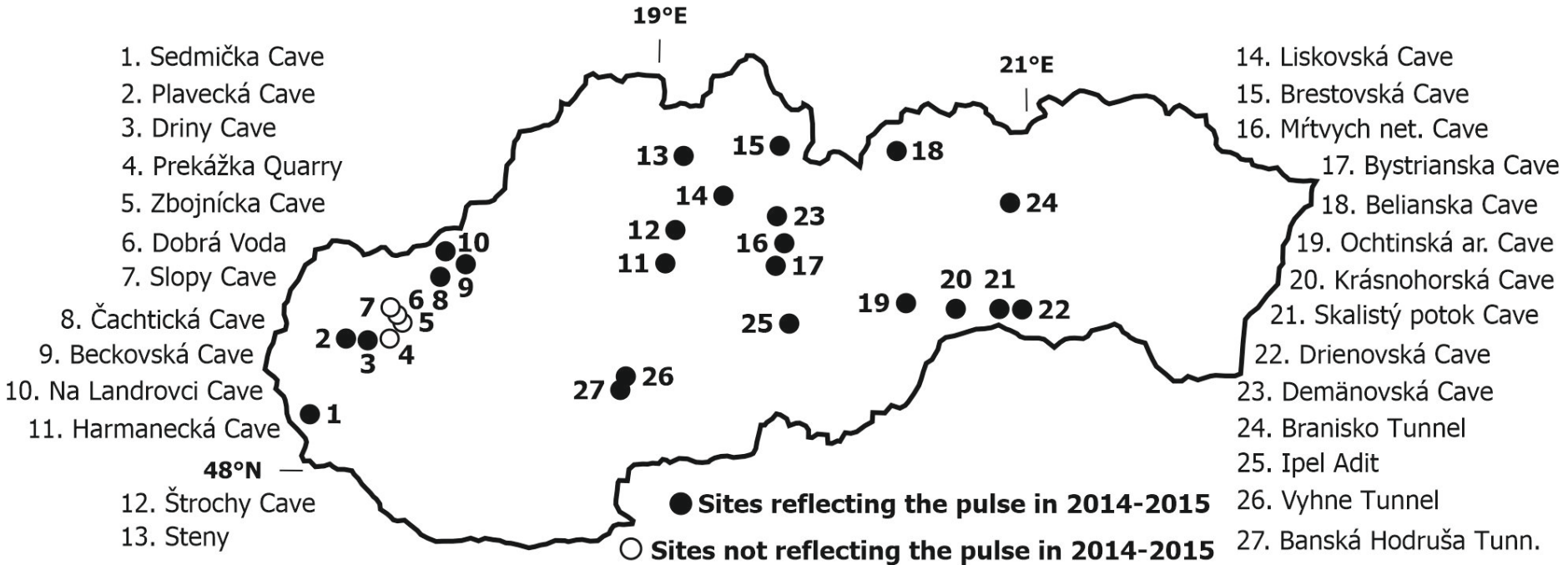
State Nature Conservancy of the Slovak Republic, Slovak Caves Administration;

Institute of Geography, Faculty of Science UPJŠ in Košice.

Tectonic pulse over European plate 2014/2015

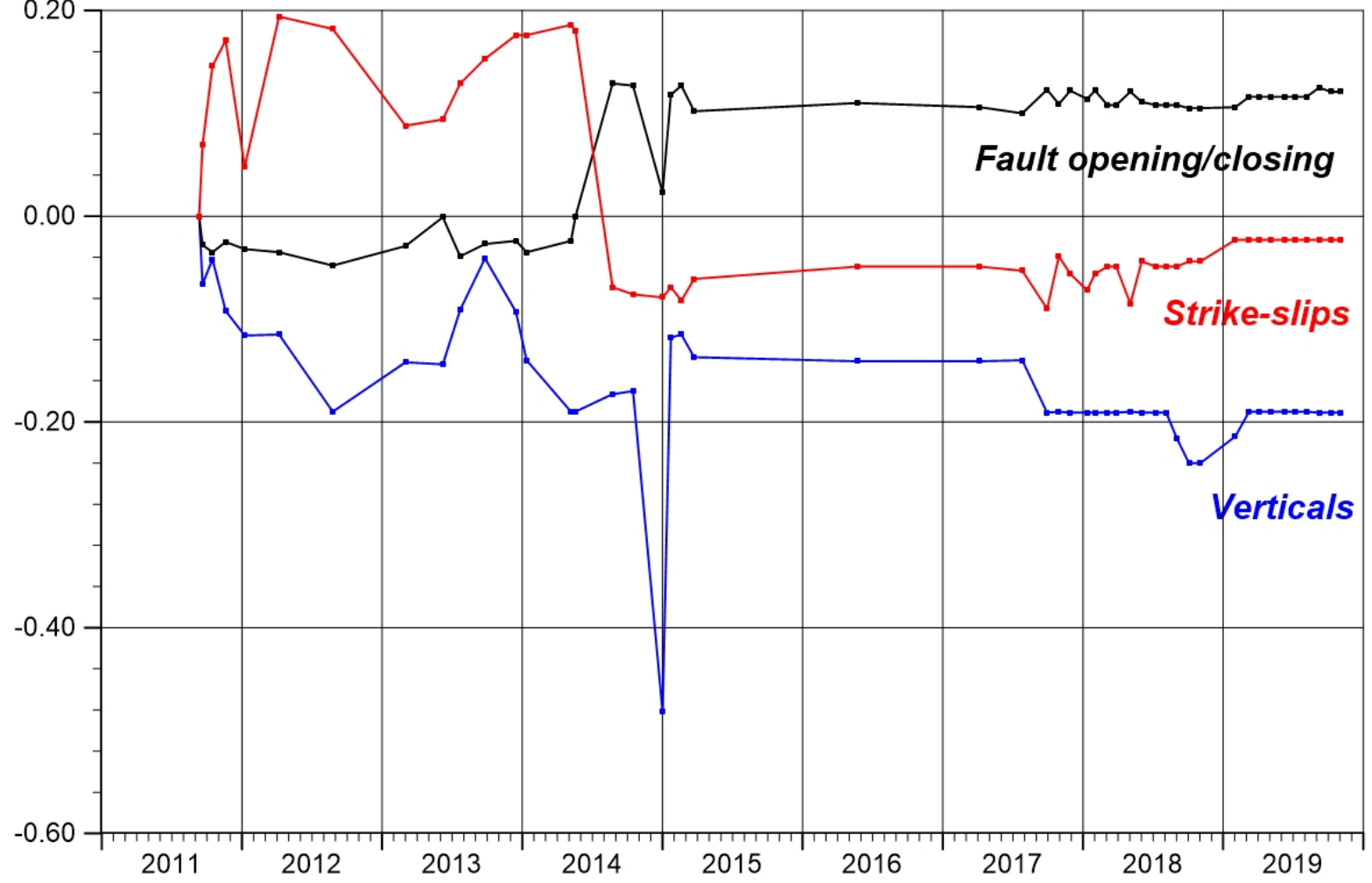


Tectonic pulse 2014/2015 in Slovak TecNet



Krásnohorská Cave

[mm] displacement x,y,z



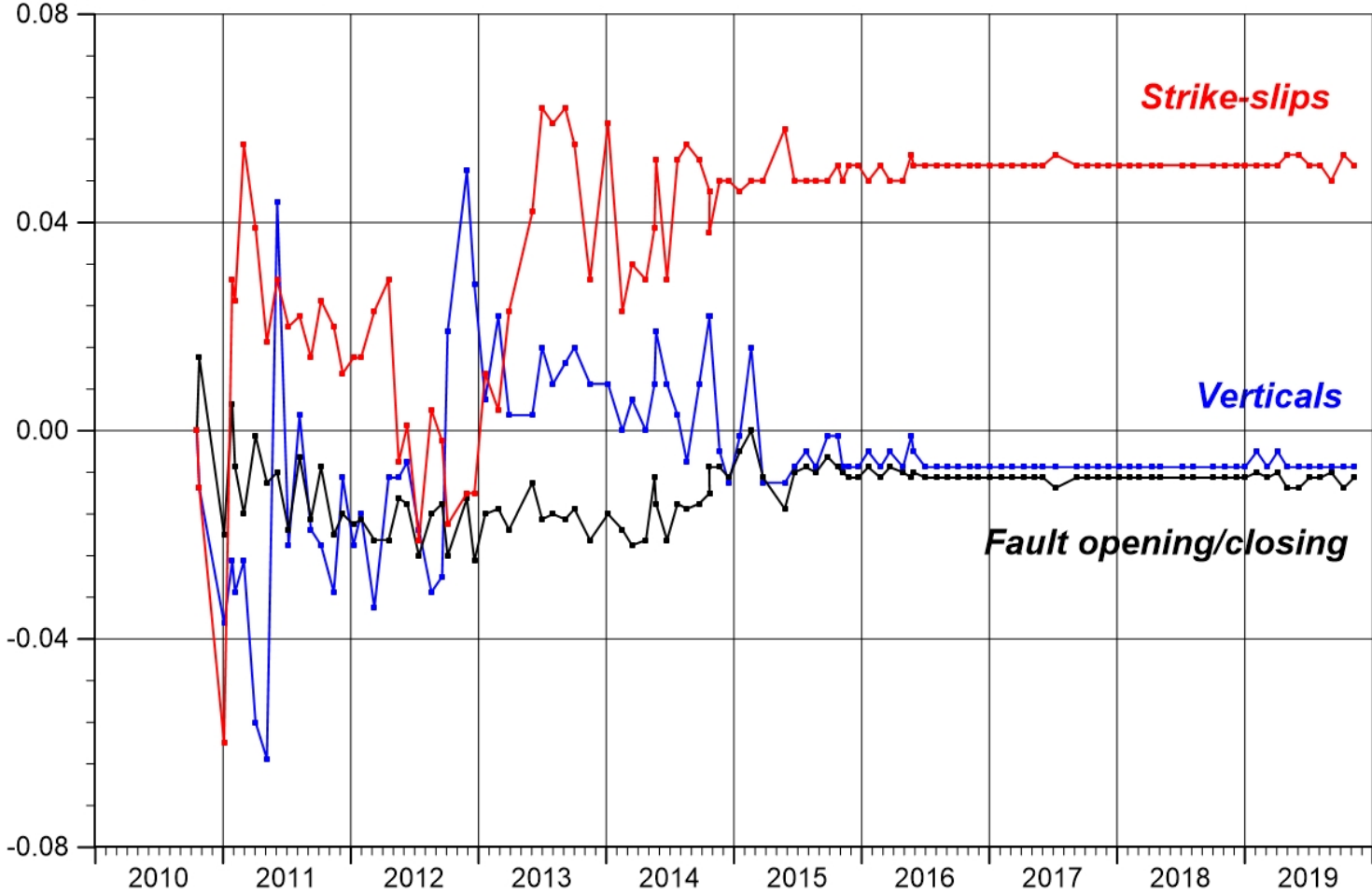
Fault opening/closing

Strike-slips

Verticals

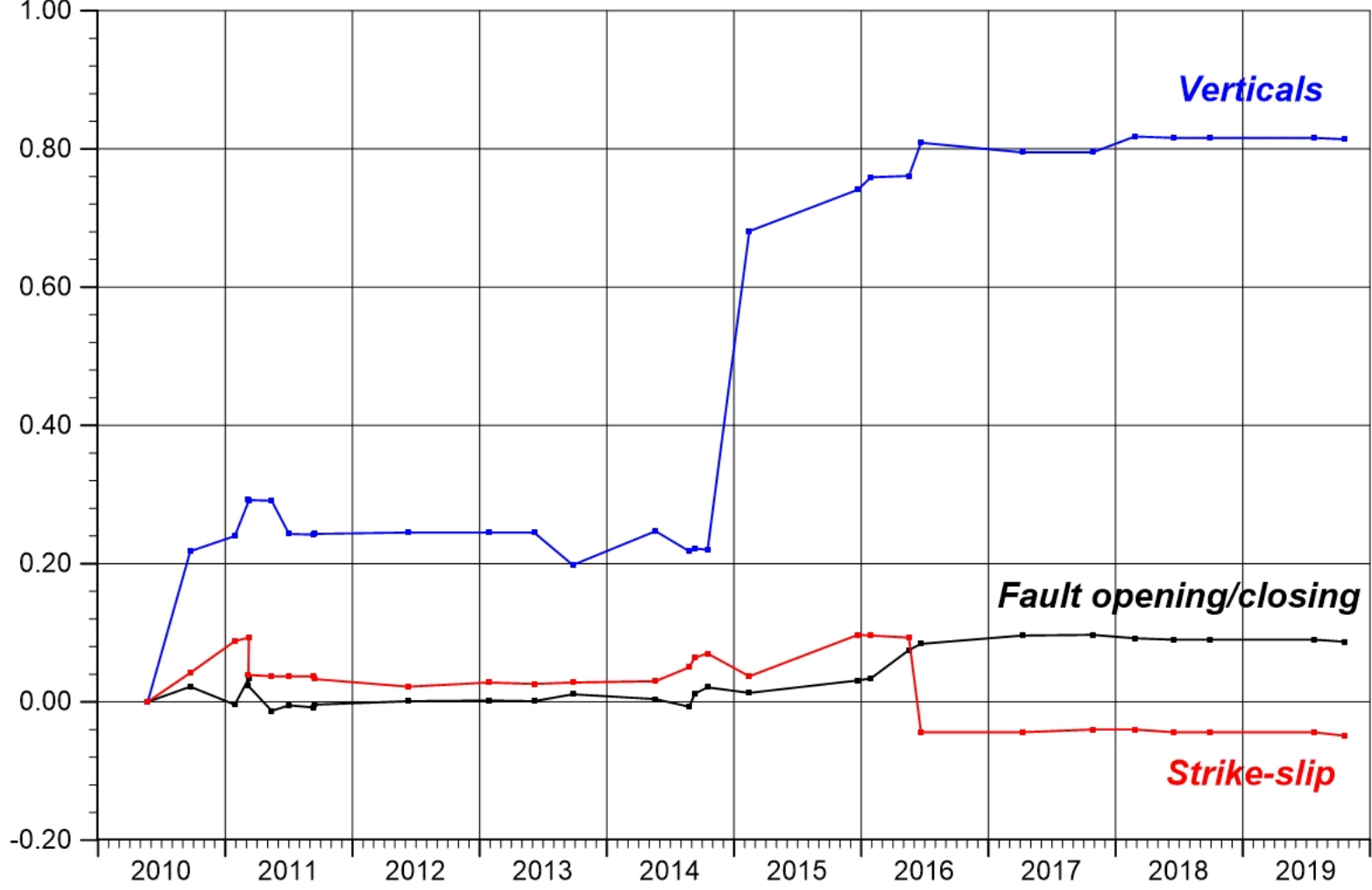
Harmanecká Cave

[mm] displacement x,y,z



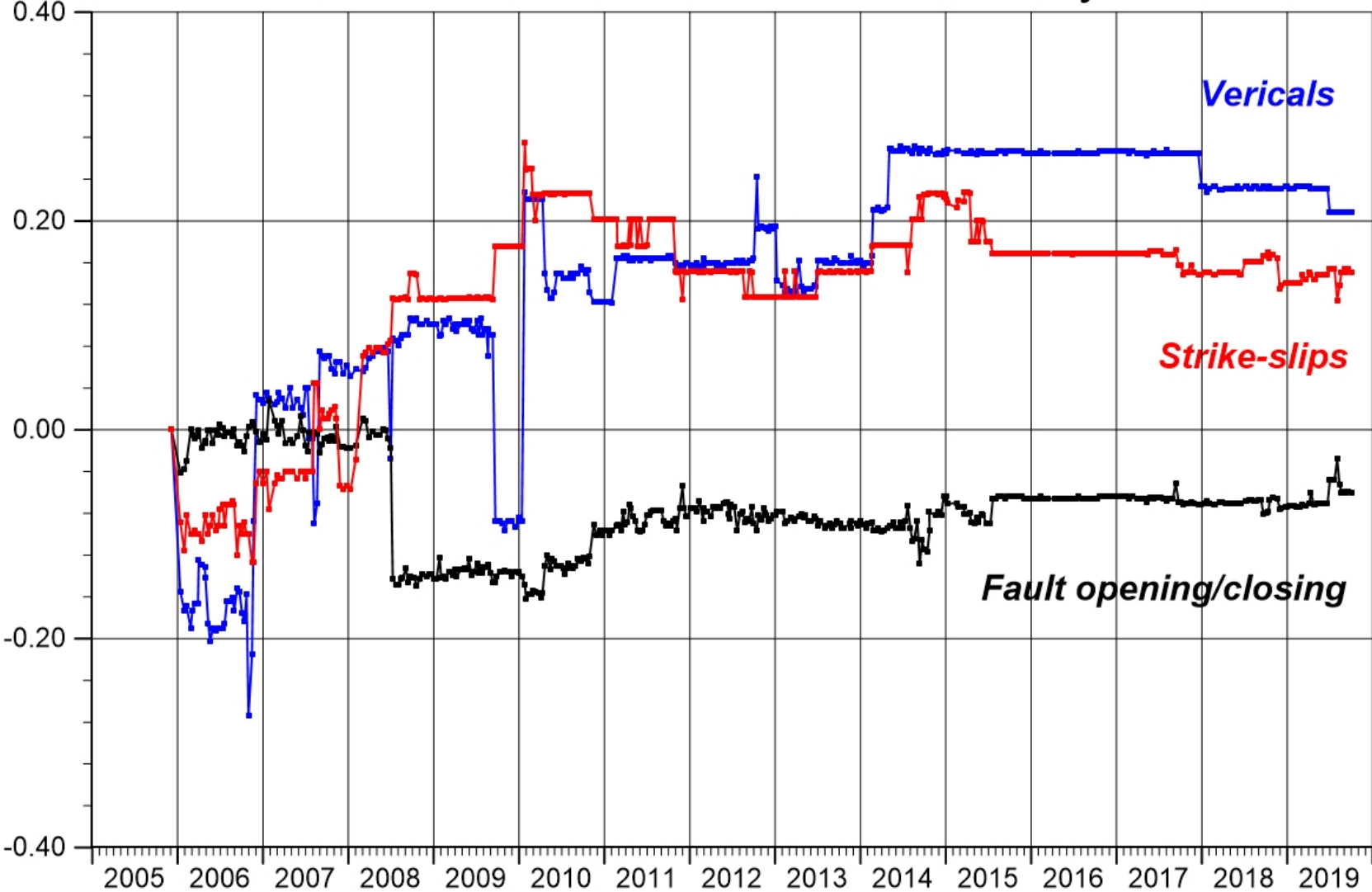
Belianska Cave

[mm] displacement x,y,z



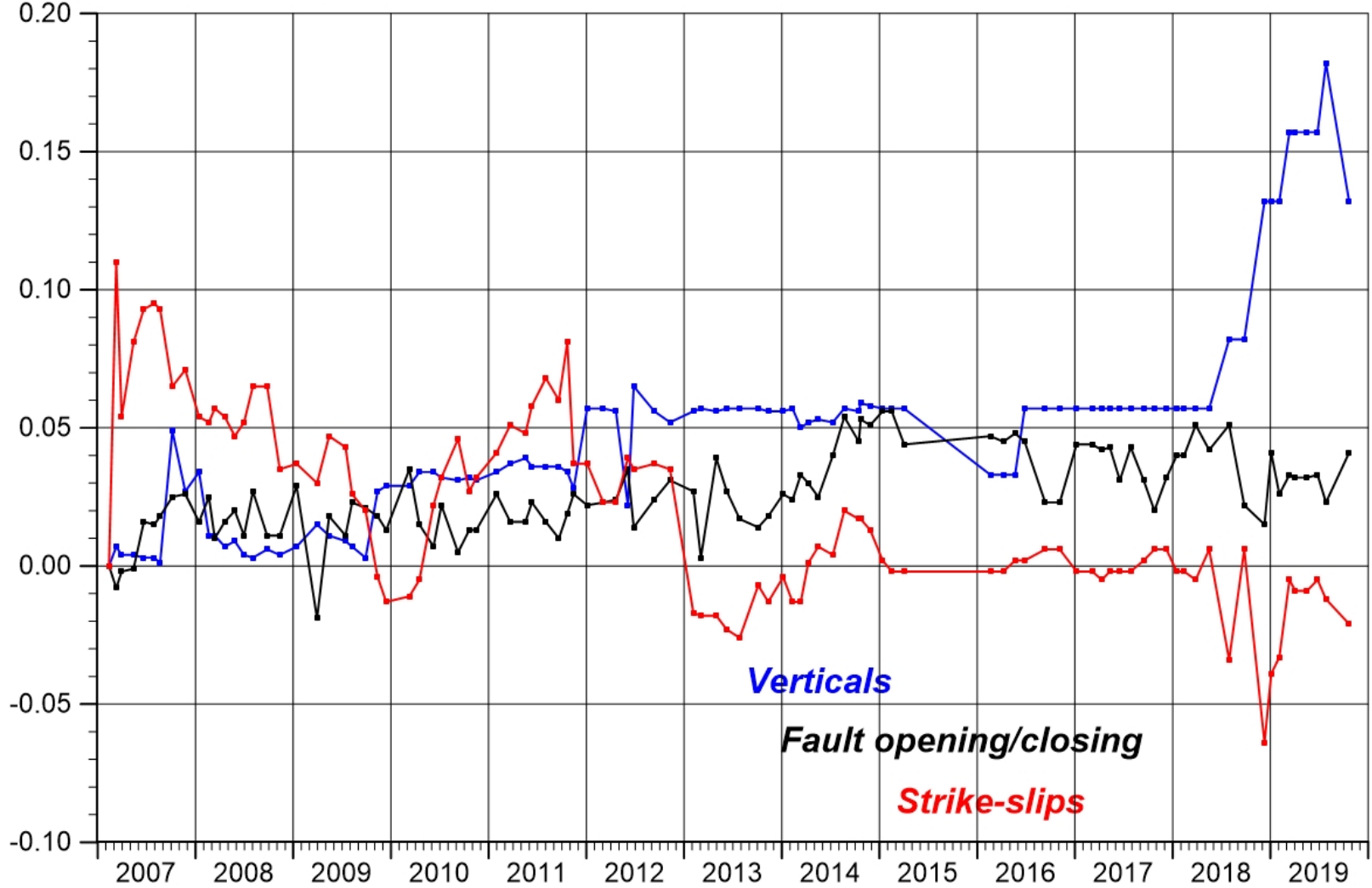
Driny Cave No. 1

[mm] displacement x,y,z



[mm] displacement x,y,z

Plavecká Cave No. 1



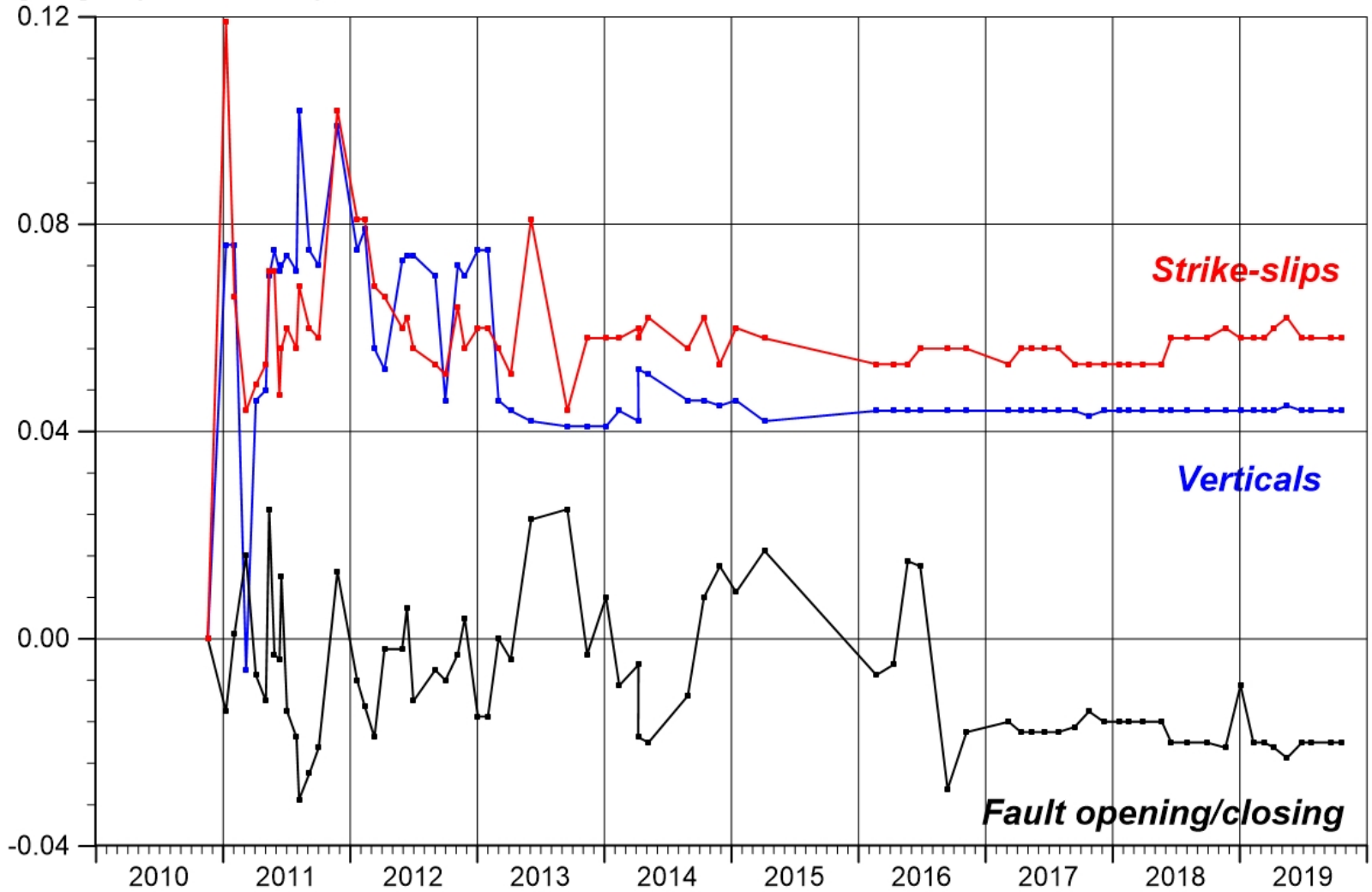
Verticals

Fault opening/closing

Strike-slips

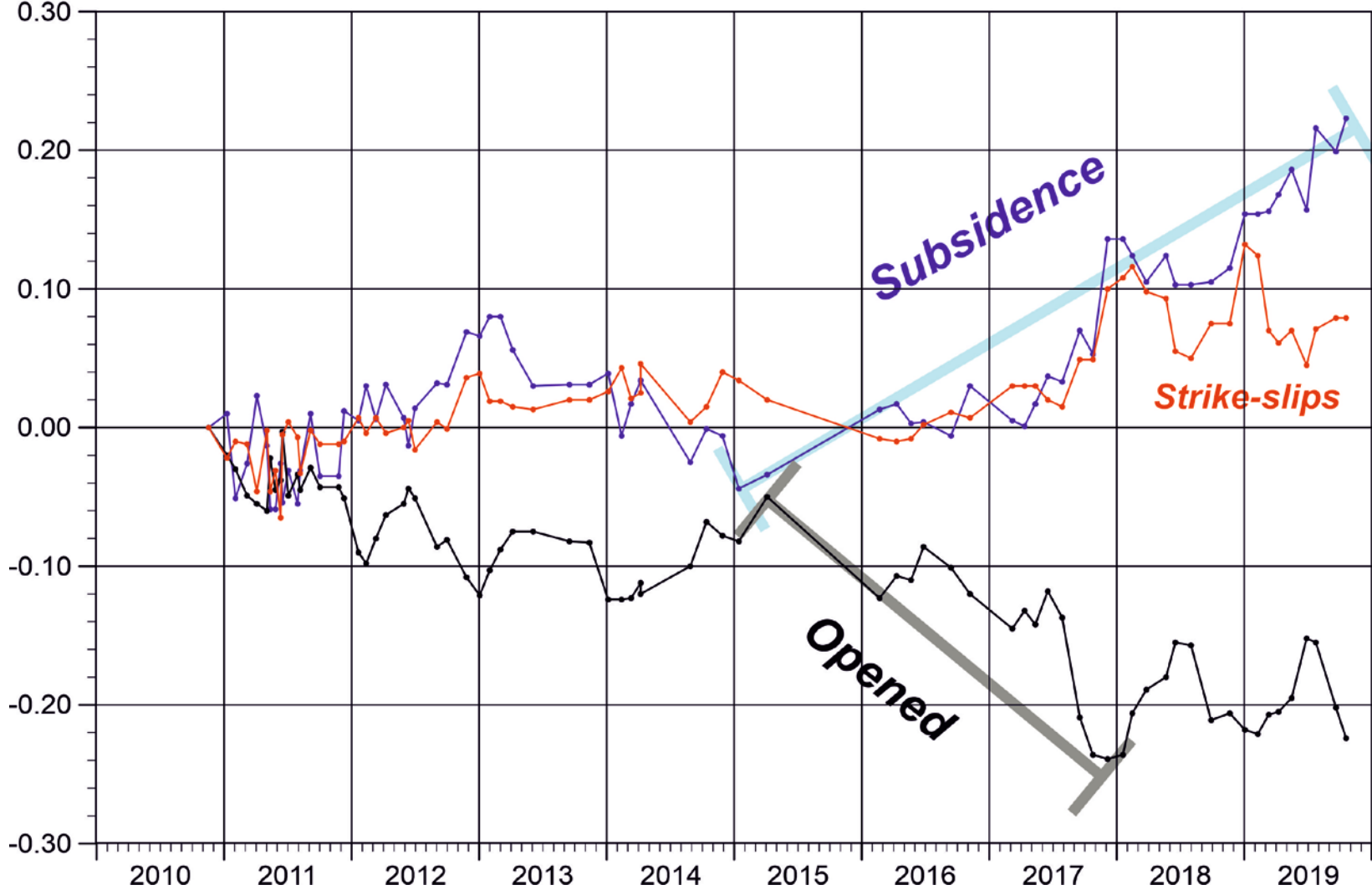
Landrovec Cave No. 2

[mm] displacement x,y,z



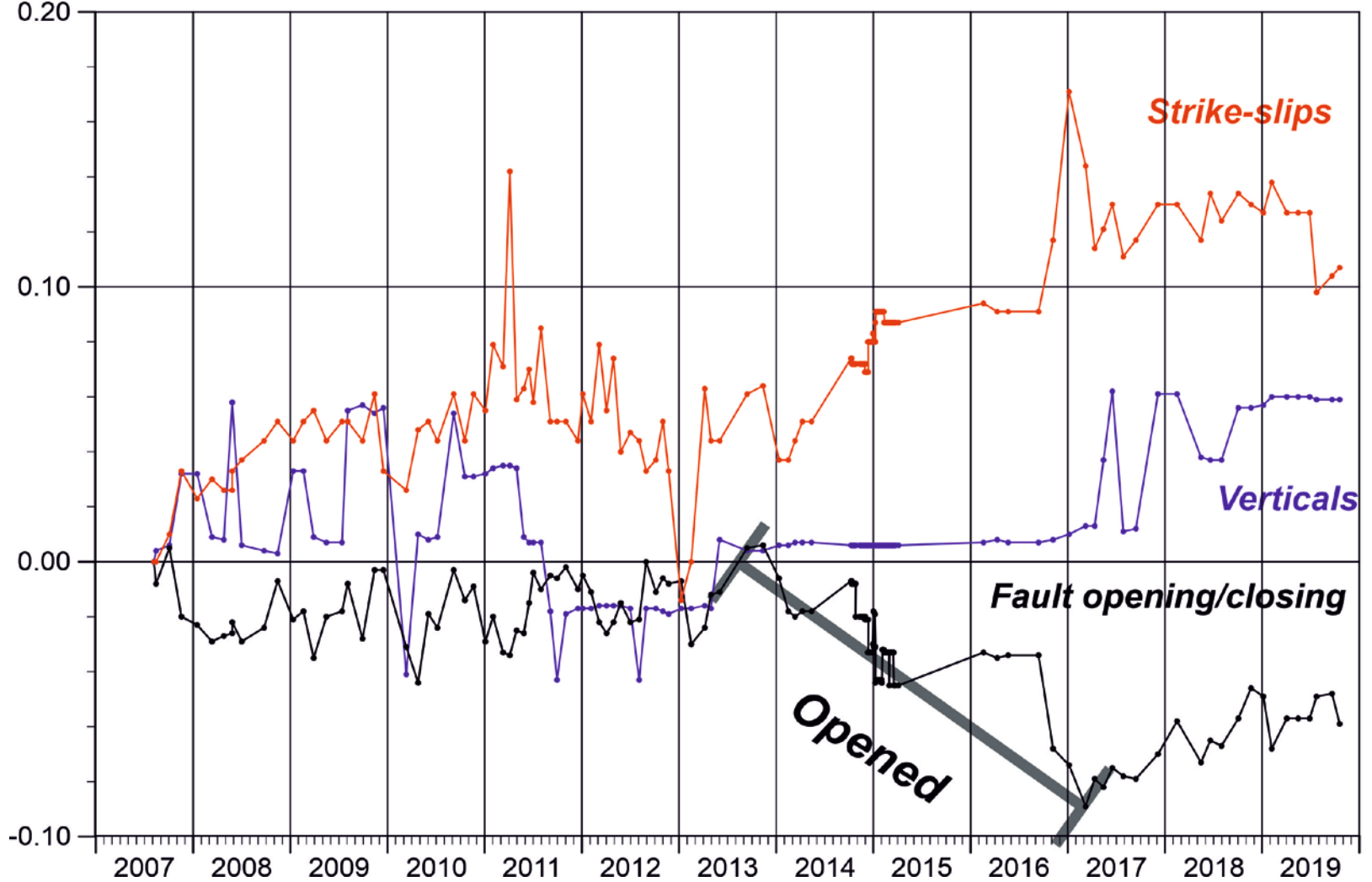
[mm] displacement x,y,z

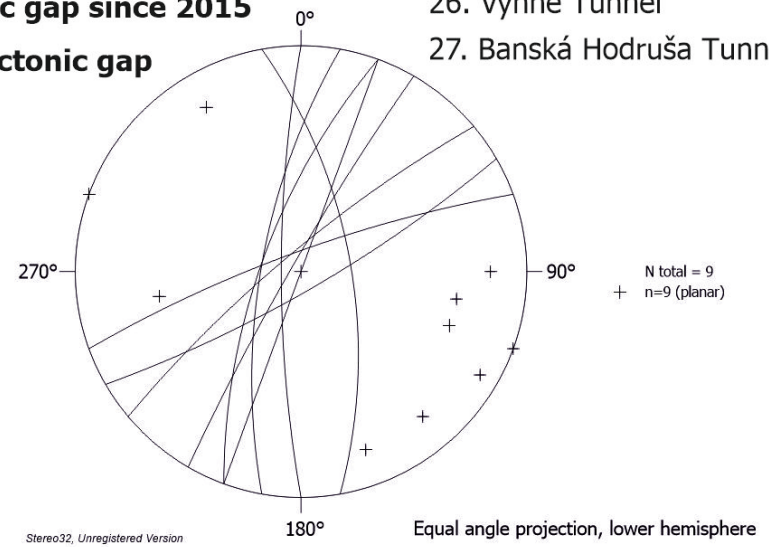
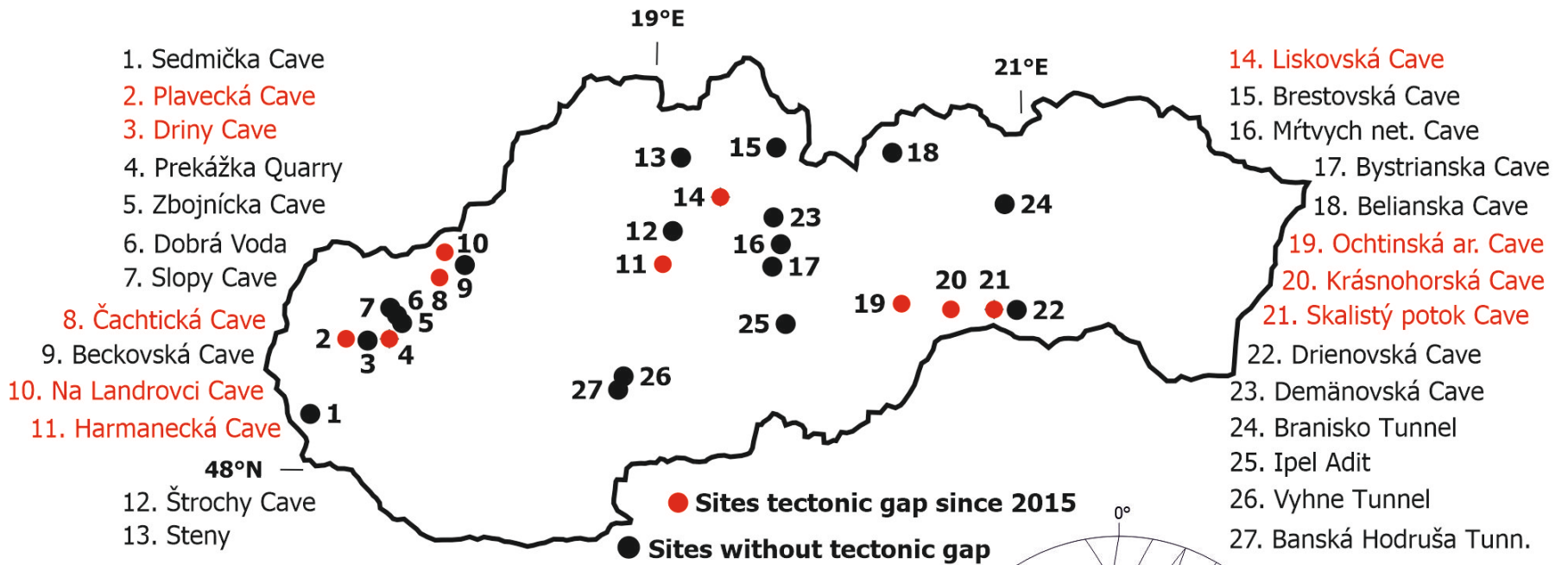
Landrovec Cave No. 1



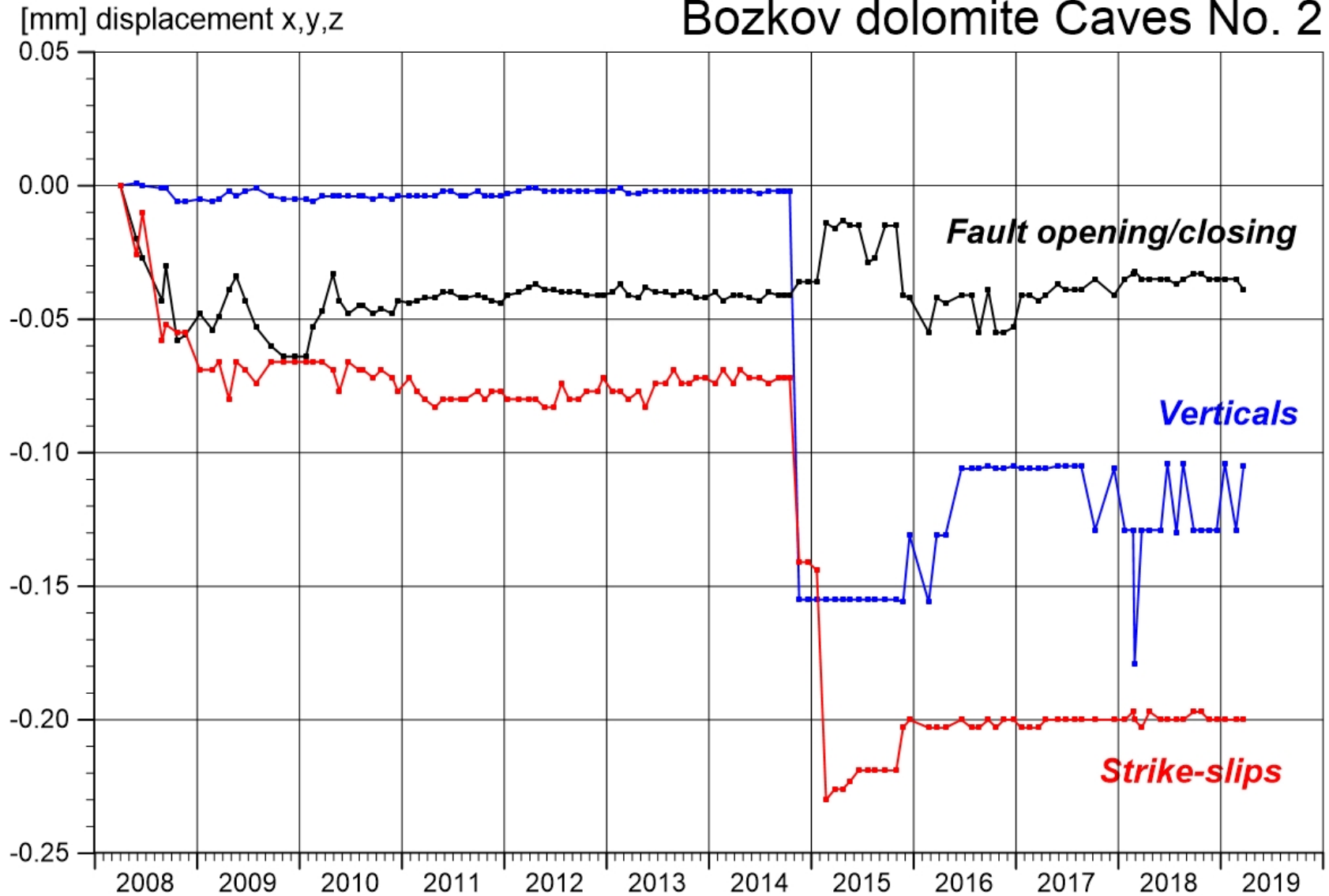
Čachticka Cave

[mm] displacement x,y,z



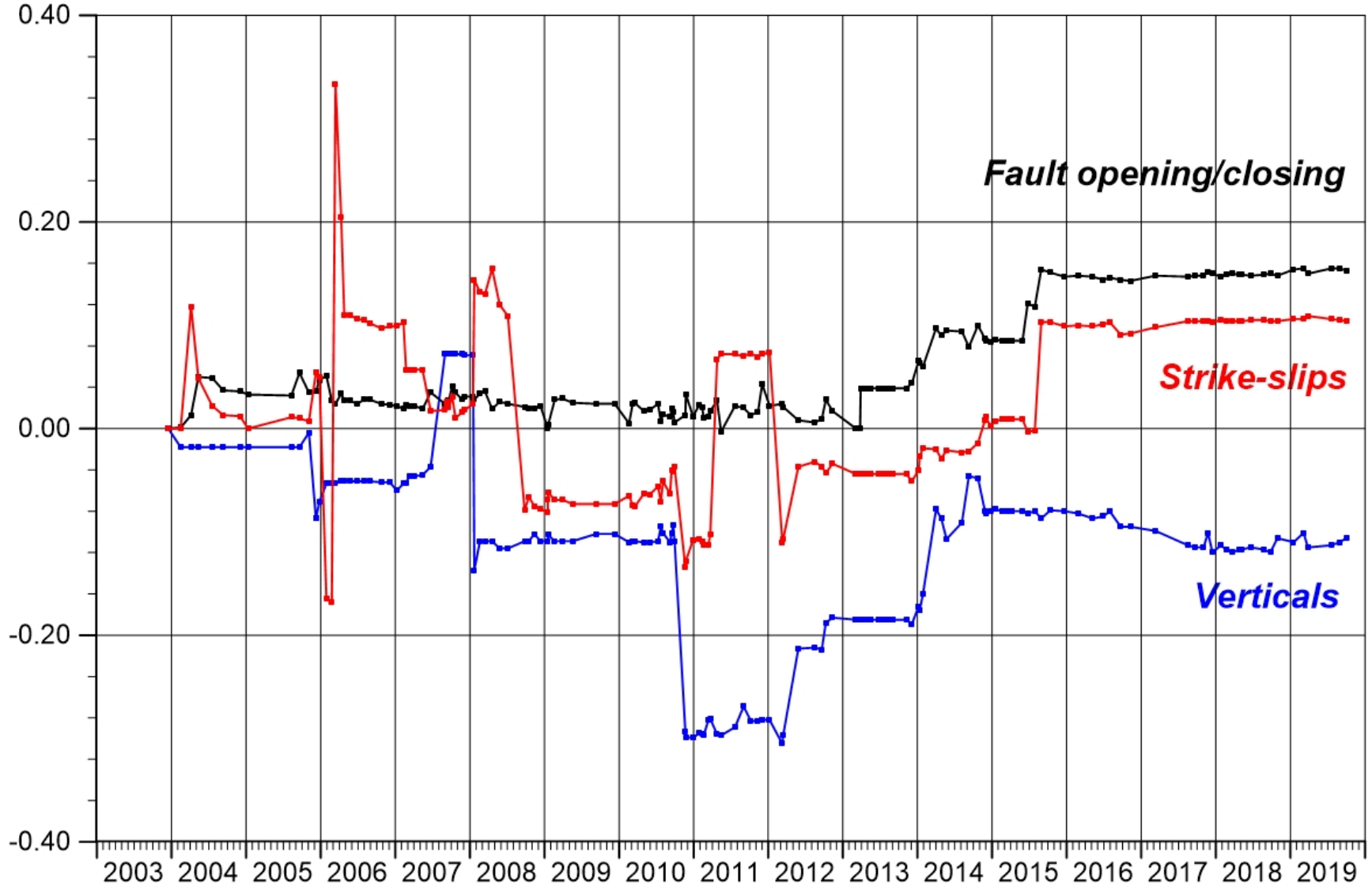


Bozkov dolomite Caves No. 2



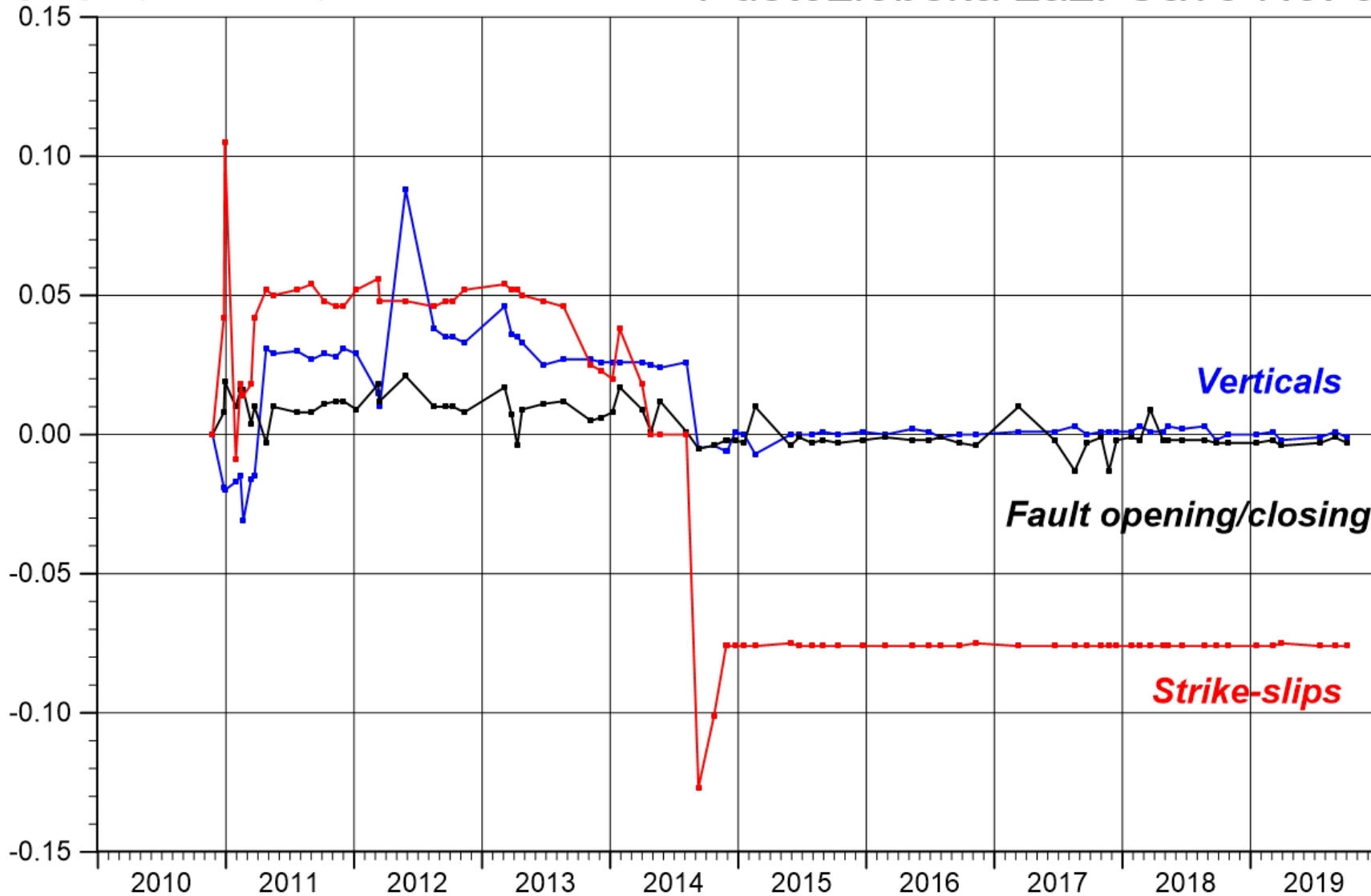
[mm] displacement x,y,z

Pustožlebská zaz. Cave No. 1

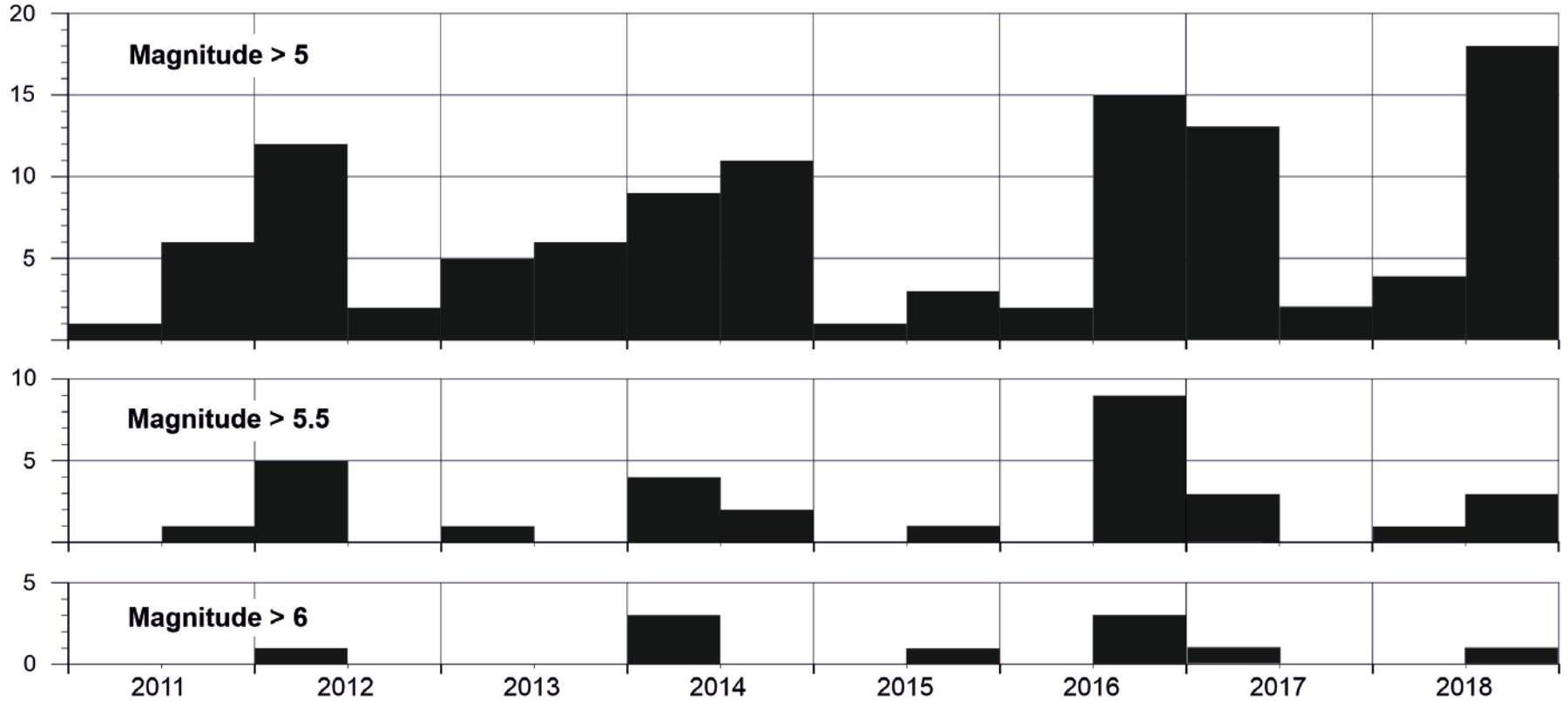


[mm] displacement x,y,z

Pustožlebská zaz. Cave No. 3



Half-yearly earthquakes sum (in 1600 km circle, centered to 13C Cave)



<https://earthquake.usgs.gov/earthquakes>

Conclusions

1. Tectonic gap 2015-2018 was observed after significant pulse, which occurred at the end of 2014;
2. The gap had character of relaxation;
3. Generally, it was observed along NE-SW striking faults;
4. The most significant calm period during extensometric monitoring .

Thank you for attention