



## **Verification the data on critical facilities inventory and vulnerability for seismic risk assessment taking into account possible accidents**

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The paper contains the results of the recent study that has been done by Seismological Center of IGE, Russian Academy of Sciences and Extreme Situations Research Center within the Russian Academy of Sciences Project “Theoretical and Methodological basis for seismic risk assessment taking into account technological accidents at local level; constructing the seismic risk maps for the Big Sochi City territory including the venue of Olympic Games facilities.” The procedure of critical facilities inventory and vulnerability verification which makes use of space images and web technologies in social networks is presented. The numerical values of the criteria of accidents at fire and chemical hazardous facilities triggered by strong earthquakes are obtained. The seismic risk maps for Big Sochi City territory including the Olympic Games venue constructed taking into account new data on critical facilities obtained with application panorama photos of these facilities, space images of high resolution and web technologies. The obtained values of individual seismic risk taking into account secondary technological accidents exceed the values seismic risk without taking secondary hazard, return period  $T= 500$  years, at 0.5-1.0 10-51/year.