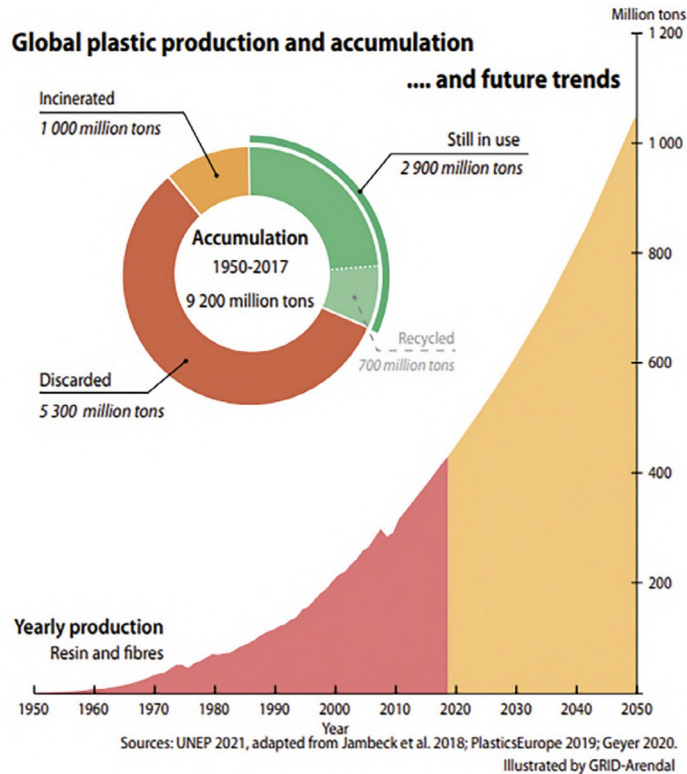


Nanoplasty a vnitřní aktivita Země jakožto další faktory ve změně klimatu

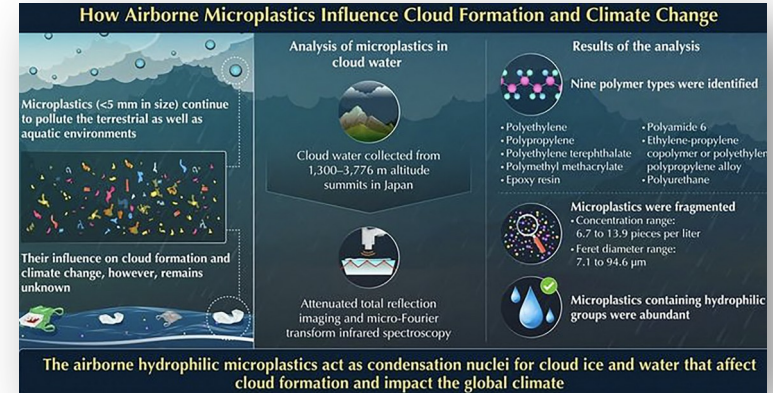
Nanoplasty



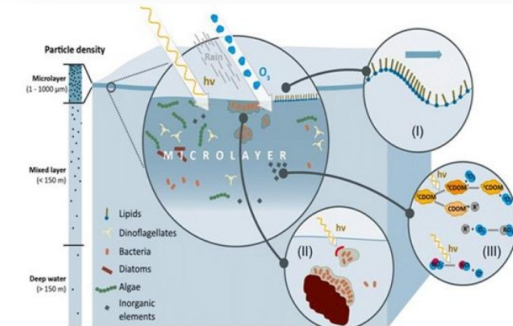
- Vytrobili jsme přes 10 mld tun plastů
- V přírodě vydrží stovky a více let
- Jen se drobí na menší a menší části
- Jsou od Antarktidy po Mariánský příkop

Nanoplasty a klima

- Nanoplasty cirkulují ve vzduchu
- Fungují jako kondenzační a ledová jádra – ovlivňují tvorbu mraků a krup – přispívají k extrémně srážek
- V oceánu otravují zooplankton a vedou tak ke změnám v povrchové mikrovrstvě – změny v odparu, výměně plynů a aerosolů



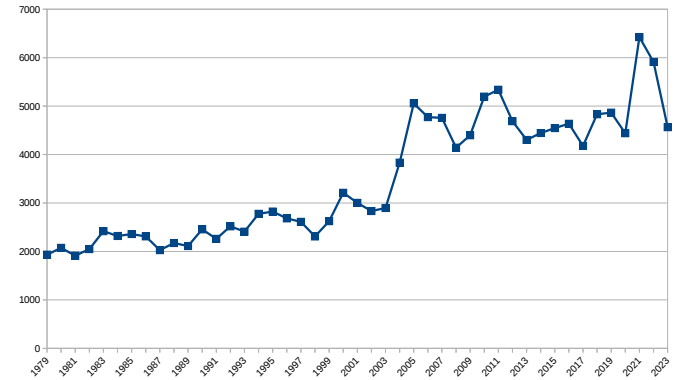
<https://www.nature.com/articles/s41561-022-01051-9>



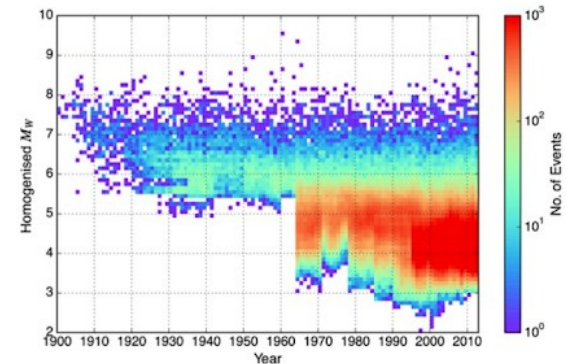
<https://journalijecc.com/index.php/IJECC/article/view/1392>

Vnitřní aktivita Země

- Považuje se za konstantní
- Ale je opravdu?



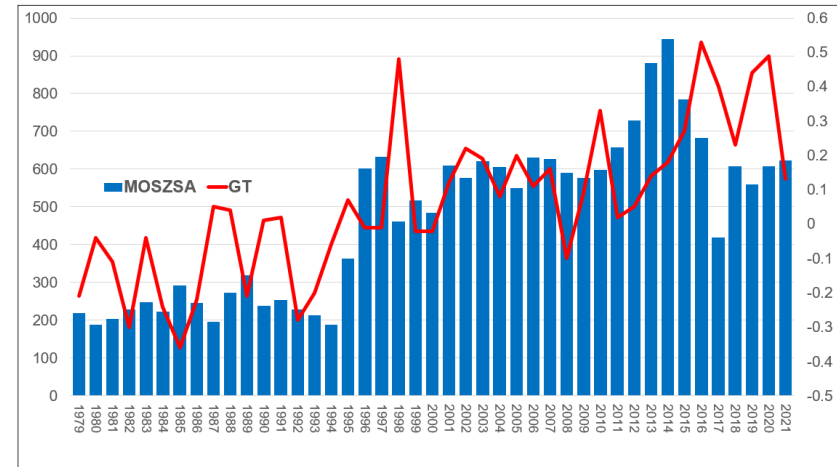
Počet zemětřesení s mag. 5 a více. Katalog ISC.



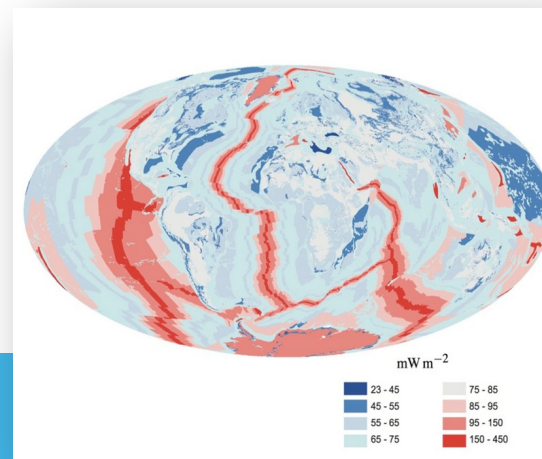
Hustota magnitud v katalogu ISC, <https://academic.oup.com/gji/article/206/3/1652/2583518?login=false>

Aktivita na středooceánských hřbetech

- Zvýšený počet zemětřesení na středooceánských hřbetech předchází nárůst globální teploty o 1.5-2 roky



Arthur Viterito, <https://juniperpublishers.com/ijesnr/IJESNR.MS.ID.556271.php>



Aktivita na středooceánských hřbetech

- Zemětřesné roje v Jaderském moři vedly k následnému výraznému zvýšení povrchové teploty vody
- Statistická souvislost mezi seismickou aktivitou v rovníkovém Pacifiku a jevem El Nino - zpoždění ~1.5 roku

Corpus ID: 235642024

Earthquakes Linked to 2003 European Heat Wave: Implications for Global Warming-Evidence in the Adriatic and Mediterranean Basins (Revisited)

Published 2020 • Geology, Environmental Science

New evidence reveals: 1.) Clustered earthquake patterns at the base of the lithosphere/upper mantle concentrated mostly within the ocean basins. 2.) Followed by Sea Surface Temperature (SST) anomalies hypothesized to originate from underlying magma generation and seafloor heat release during hydrothermal venting. Joule heating at the base of the lithosphere created from electrical emanations deep within the core-mantle-boundary manifest as clustered earthquakes could provide the driving mechanism for elevated temperatures. Clustered earthquake swarms at 10km depths, which burst pulse over short, several daysto week-periods appear correlated to subsequent Sea Surface Temperature (SST) anomalies and a reversal in Adriatic Sea circulation. Authors suggest this and other like events may be the natural drivers of global warming. [Collapse](#)

About climate-seismicity coupling from correlation analysis

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Abstract. We have analyzed together the slow climate temperature variations in the near-equatorial Pacific Ocean area (SSTOI indices) and crustal seismic activity in the same region during 1973–2008 time period using correlation analysis and found similarity in seismic and ENSO periodicities (the latter with time lag about 1.5 years). Trends of the processes are also similar showing about 2 times increase in average seismic energy release during the whole period of analysis and conventional 0.1 °C(10 years) increase in SSTOI index anomalies. Our major conclusion is on real credibility of climate-seismicity coupling. It is rather probable that at least partially climate ENSO oscillations and temperature anomaly trends are induced by similar variation in seismicity.

fect (Robock and Oppenheimer, 2003), or in connection with tidal influence on seismic triggering, which revealed from analysis of short-term (about daily) and local seismic variations (e.g. Tsurutoka et al., 1995; Schekotov et al., 2006). Here we are going to analyze a correlation of the long-term and large-space variations in climate and earthquake activity.

2 Data

There are several methods to register the global climate changes and corresponding activity indices (see e.g. information of USA Climate Prediction Center <http://www.cpc.ncep.noaa.gov/data/indices/>): zonal and trade wind indices,

Závěr

- Je třeba detailněji prozkoumat a vzít v potaz další vlivy na klima
- Vliv znečištění nanoplasty
- Vliv vnitřní aktivity Země