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## Asset-level assessment of climate physical risk matters for adaptation finance

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Climate physical risk assessment is crucial to inform adaptation policies and finance. However, science-based and transparent solutions to assess climate physical risks are still missing. This is a main limitation to fill the adaptation gap. We provide a methodology that quantifies physical risks on geolocalized productive assets, considering their exposure to both chronic and acute impacts (hurricanes) across the scenarios of the Intergovernmental Panel on Climate Change. Then, we translate asset-level shocks into economic and financial losses. We illustrate the methodology in an application to Mexico, a country that is highly exposed to physical risks, and attracts adaptation finance and foreign investments. We find that investor losses are underestimated up to 70% when neglecting asset-level information, and up to 82% when neglecting acute risks. Therefore, neglecting the asset-level and acute dimensions of physical risks can lead to large errors in the identification of the relevant adaptation policy response, investments and finance tools aimed to build resilience to climate change.