

Harnessing the power of digital for climate disaster prevention and recovery: Hitachi's innovations for climate adaptation

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The era of global warming has ended;

The era of global boiling has arrived.

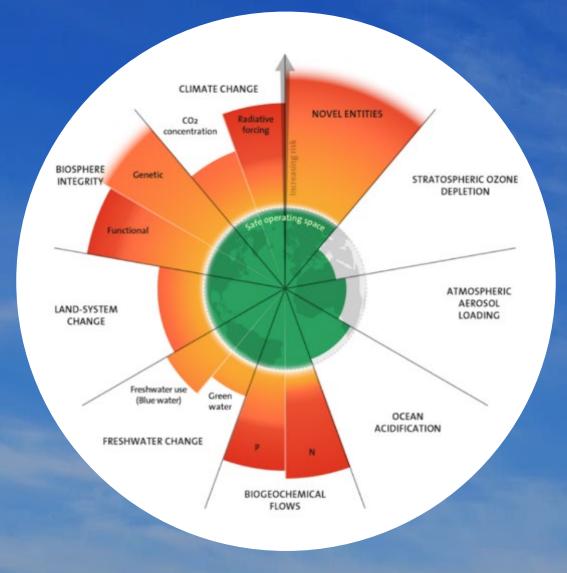
All countries must respond and protect their people from the searing heat, fatal floods, storms, droughts, and raging fires that result. – António Guterres *2

Floods

Pakistan (2022), China, Libya, Somalia, Dubai (2023)...

Six out of nine Planetary Boundaries have been crossed:

Increasing risk of "large-scale abrupt or irreversible environmental changes"



The Planetary Boundaries and Hitachi's R&D

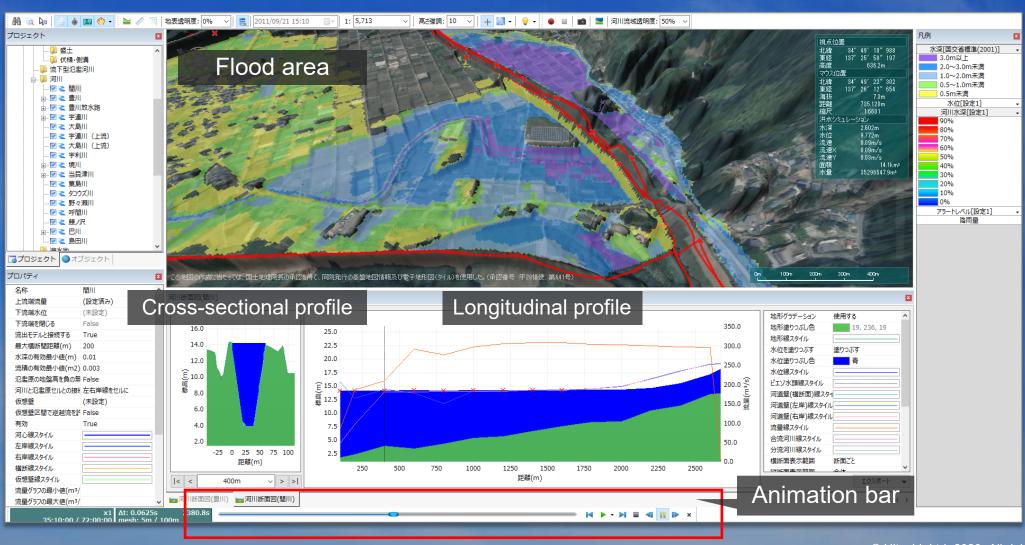


Developing climate change solutions in a multi-dimensional planetary health approach

EU Taxonomy Solutions Planetary Boundaries Climate change mitigation **Climate Change Energy decarbonization Greener mobility Ocean Acidification** Climate change adaptation **Fresh Water Change** Sustainable use and protection of **Novel Entities Preventing climate disasters** water and marine resources **Atmospheric Aerosol Loading Securing recoveries** Pollution prevention and control **Stratospheric Ozone Depletion Biogeochemical Flows** Transition to a circular economy **Land-System Change** Protection and restoration of **Biosphere Integrity** biodiversity and ecosystems

Flood simulator: DioVISTA

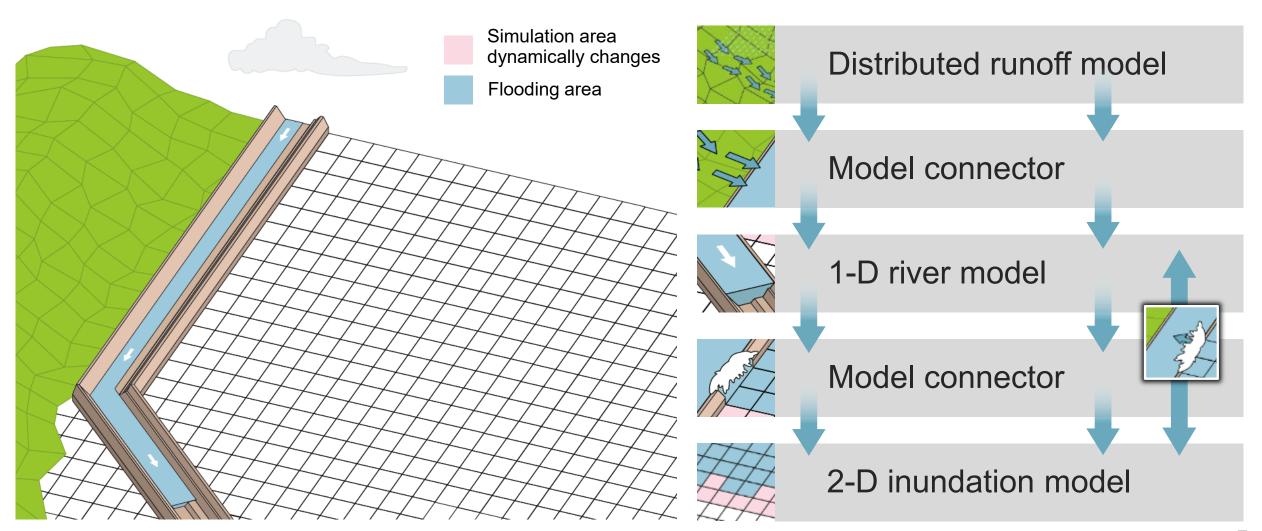
In 2006, Hitachi Power Solutions released "DioVISTA," a software which allows users to simulate and visualize flooding risks in Japan on an intuitive map-based interface.



Flood simulator: DioVISTA



DioVISTA provides high-speed simulation results based on Hitachi's unique rainfall and water overflow models. It can also simulate the effect of built structures such as dams and reservoir ponds.



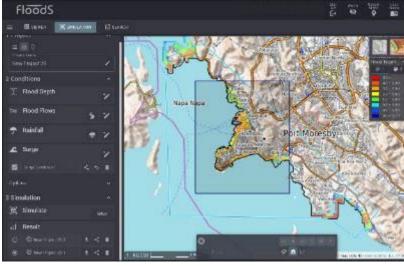
FloodS: Overview



"FloodS" is a policy decision-making assistance service for climate adaptation, designed to support administrative staff in climate-vulnerable areas in building narratives for financial measures.







- In partnership with the Ministry of the Environment of Japan,
 Hitachi developed an easy-to-control web-based application to simulate flooding risk in different parts of the world
- Not only flooding caused by rainfall, but also flooding caused by storm surge and future sea level rise can be simulated
- "FloodS" is available for free from Nov. 30th

For future



Hitachi will continue to support the global climate disaster prevention and recovery efforts through international government, science and business collaborations, harnessing the power of digital technologies.







