



AI Guide for Shock Tracker

Shock Tracker collects all the information about a shocking event that you experienced firsthand. AI should support you in expressing the story you want to tell. Follow the instructions and remember to use AI only when a simple Google search is insufficient.

Description of the Shock Event

Can AI help me? No.

Perform a simple Google search, without using AI, and piece together aspects of the event that you remember. Very welcome is the contribution of stakeholders from different knowledge systems (e.g. indigenous realities). Stretch your perspective and look for literature that goes beyond the material AI is pre-trained on. Provide us with what you think we cannot easily find online, such as local governance dynamics, ecological events that did not make international news, real estate construction and more!

Culture & Leisure

Can AI help me? Depends.

Do not use AI to explain cultural nuances. The cultural context of a shock event is the most unique contribution you can offer to the database. Scholars cannot grasp it by just reading literature. You can use AI to quantify losses if parks, pools, monuments or temples were damaged. Do not use AI to describe the value of the intangible heritage impacted, but leverage it to extract from your literature economic damage in USD, hectares of recreational natural areas burned, or even loss of transhumance tracks – for example.

Biosphere & Resources

Can AI help me? Yes.

You can use AI to quantify ecological drivers, such as the windspeed of hurricanes, or impacts, like the volume of water polluted in a river. Even if numerical data is not explicitly mentioned in the papers you initially selected, go the extra mile and look for other documents that assess the role of Nature in the shock event.

Society, Governance, Economy

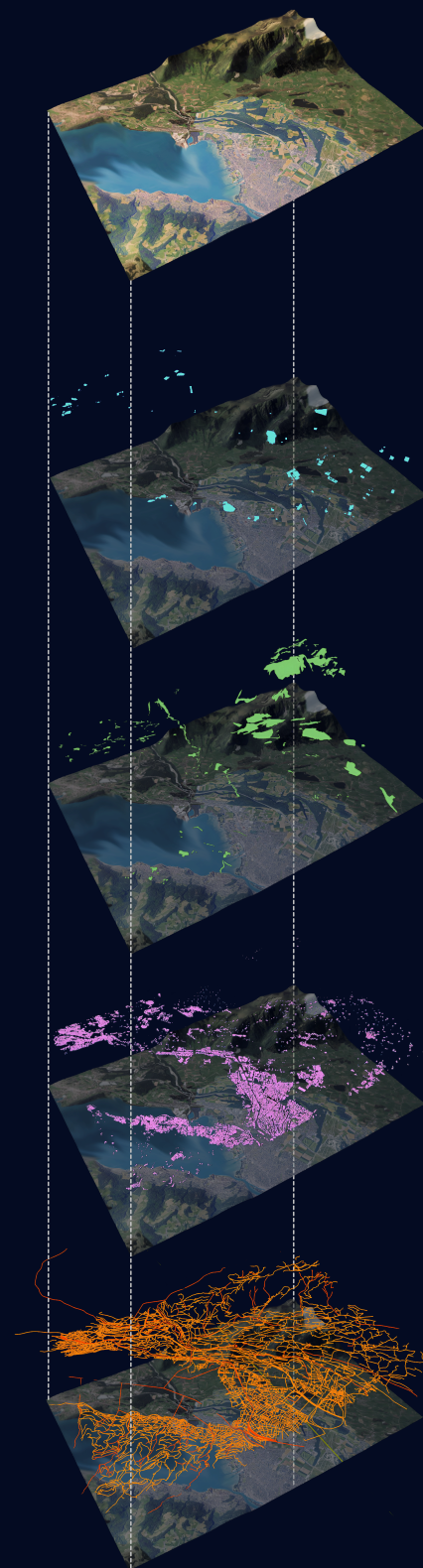
Can AI help me? Yes.

After you've selected your literature, use AI to extract from your text the amount of lives lost, the number of interrupted services or even the loss of religious spaces due to the shock. Use the questions in the Shock Tracker Google Form as potential prompts. You can refine the wording, or not use AI at all: you may provide a better explanation of the social and political context without AI software!

Infrastructure & Services

Can AI help me? Depends.

AI will pick out information about the shock impacts on roads, bridges or dams. However, by infrastructure we also mean what is needed to have your specific community function: governance systems, legislation, transport arrangements or even rescue services. Your understanding of social infrastructure is irreplaceable by AI, so use GPTs sparingly!



Why am I reading these AI guidelines?

Shock Tracker aligns with the AI literacy principles developed by the European Union in the EU Artificial Intelligence Act-Recital 20¹ to obtain the greatest benefits from AI systems while protecting fundamental rights, fairness, health and safety.

We equip you with the necessary notions to make informed decisions regarding AI systems. This document contains the most important information to make optimal use of GPTs for the Shock Tracker project, to improve your AI literacy and limit your ecological footprint. And remember: your engagement helps us improve the guidelines for future users!

AI is a powerful tool that can enhance users' efficiency in reporting cases to the Shock Tracker and we encourage its use – provided that appropriate compliance to these GPT guidelines and correct enforcement of ethical and sustainable principles are followed.

Glossary of Frequently Used Terms

AI

Artificial intelligence refers to computer systems that can perform complex tasks normally done by human-reasoning, decision making, creating (...) ¹.

GPT(s)

Generative Pre-Trained software is a type of artificial intelligence technology that can produce various types of content including text, imagery, audio and synthetic data. Examples include ChatGPT, NovelAI, Jasper AI, Rytr AI, DALL-E, etc ².

ML

Machine learning is a subfield of artificial intelligence, which is broadly defined as the capability of a machine to imitate intelligent human behavior. Artificial intelligence systems are used to perform complex tasks in a way that is similar to how humans solve problems ³.

LLM

Large language models are a deep-learning algorithm that use massive amounts of parameters and training data to understand and predict text. This generative artificial intelligence-based model can perform a variety of natural language processing tasks outside of simple text generation, including revising and translating content ⁴.

¹ What is Artificial Intelligence? (2024) NASA. Available at: <https://www.nasa.gov/what-is-artificial-intelligence/> (Accessed: 1 April 2025).

² Generative AI policies for journals www.elsevier.com. Available at: <https://www.elsevier.com/about/policies-and-standards/generative-ai-policies-for-journals> (Accessed: 1 April 2025).

³ Brown, S. (2021) Machine learning, explained, MIT Sloan. Available at: <https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained> (Accessed: 1 April 2025).

⁴ Large language model (2025) Encyclopædia Britannica. Encyclopædia Britannica, inc. Available at: <https://www.britannica.com/topic/large-language-model> (Accessed: 1 April 2025).



How do I optimally use GPTs?

Quality Assurance

Use GPTs to improve language clarity and readability. They can help with translation, grammar checks, and setting the right tone for your case study analysis. Always double-check any citations generated by GPTs since they might be inaccurate or made up. Use the model to create summaries but ensure that important details are not lost. Finally, GPTs can quickly provide information on a certain theme or topic based on the information they were trained on. The material is written and selected by people, which means there will always be a bias (intentional or not) towards a specific narrative. Always prioritize your opinion and wording to that of a GPT text, as we want to capture insights and nuances that the GPT model might miss. Your perspective is essential and irreplaceable, this is why we ask you to participate in the case study analysis!

Also, remember that AI training (i.e. choosing training material, performing computational runs, tweaking the algorithm so to improve responses etc.) is primarily performed by agents in the Global North, due to funding availability. This implies that the output of GPT software lacks diverse perspectives, which may skew the quality and reliability of responses.

FAIR Principles

According to the international [FAIR principles](#), data should be findable through unique, persistent identifiers and detailed, searchable metadata. It should be accessible via open and standard protocols, even when the data itself is no longer available. Data should be interoperable, meaning it uses shared languages and vocabularies, and it should be reusable, with clear licensing and detailed provenance. Not all GPTs ensure open access to the training data that has been used, nor do all developers describe whether your personal data is being stored or used for training purposes. Privacy is only guaranteed on platforms such as ChatGPT when you use a personal account and explicitly indicate that you don't want your data to be stored by the company's servers. Many GenAI services, such as ChatGPT free, Bing CoPilot, and Google Gemini, use your input as training data as a default. Always be weary of how the data handling norms are being followed by GPT software providers.

GDPR standards

GDPR standards are designed to protect personal data and privacy for individuals within the European Union. Organizations must process data fairly and transparently, ensuring that they have a legal basis for using personal information. GDPR gives individuals clear rights over their data, including access, correction, deletion, and portability, while requiring strict measures to secure data and quickly notify authorities of any breaches. This legislation exists in Europe, but not all GPT servers are based in the EU. Remember to not disclose sensitive or confidential information to a GPT platform, including unpublished research, proprietary data, or personal data.

If you are unsure, verify server locations and review training material – when possible – since it directly influences the outputs of AI models. Knowing where servers are hosted helps determine compliance with regional data protection laws, while understanding the source of training data ensures transparency about potential biases. Data Protection Agreements (DPAs) are essential in this context, as they are created to guarantee that data is handled securely and in accordance with legal standards.



Legal and Ethical Standards

Never cite AI as co-author to your work, as the author is ultimately responsible for the final output and will be held accountable for any content inputted in the Shock Tracker database, regardless of whether the content was generated by a GPTs. Always use GenAI ethically and responsibly, avoiding the creation or dissemination of harmful, offensive, or misleading content. Repeated violations of usage policies may result in account suspension and in the rejection of the case study inputted to the Shock Tracker database. If unsure, review and adhere to guidelines provided by GenAI providers, such as OpenAI. Legal standards can be found in the [EU Artificial Intelligence Act](#).

Disclosure of AI use for research purposes

We ask all contributors to the Shock Tracker database to disclose if they have used GPT tools while filling in the Shock Tracker Google Form, and for which specific task they were employed. This information can be simply provided by answering the last question on the form. The reason why we collect this data is to observe patterns of AI use in qualitative text mining and eventually create a guide of best practices for academic researchers to consult if they were to ever create an open-access database like Shock Tracker.

The information also helps Shock Tracker developers and reviewers ensure rigorous transparency and traceability of the data shared in the database. As previously said, GPTs are known to generate citations that do not exist, or to aggregate concepts from a variety of different texts which the reviewers would not be able to fact check. Without your disclosure of AI use, there is a risk that your case study will be rejected even if the quality of the content is more than sufficient. Clear data collection enables future replicability of the Shock Tracker project, aligns the project with the FAIR principles initiative, and informs AI scholars on the use of GPTs in sustainability and governance research. This means that you might benefit from the studies published on GPTs and be able to apply the software in the most effective manner for your work or recreation.

Sustainable use of AI

Deep Learning models for NLP come with both financial and environmental costs. Generally, the financial ones arise from hardware and storage computational time, and the environmental ones from the significant carbon footprint needed to power modern tensor processing hardware over weeks or months – that is the time it takes to train an AI model. In response to the escalating impacts of AI development, the concept of Green AI has emerged, promoting research that uses AI tools to improve efficiency of the work stream, while considering resource consumption. Green AI opposes Red AI, which has focused on maximising accuracy while disregarding the resources needed to finetune a model, driving the rapid escalation of resource and carbon costs, biodiversity degradation and ethical questions.

AI efficiency is measured through factors like runtime, electricity consumption, and the number of parameters used by the model, with each factor influenced by local infrastructure and hardware specifics. For projects like Shock Tracker, it is important not to rely on GPTs for simple tasks that you can perform individually and, when AI use is necessary to improve the equality of the analysis of the case study, to always consider the energy source behind your operations.

After inputting a case in the Shock Tracker database you can use tools like the [Machine Learning Emissions Calculator](#) to learn about your impact on the environment when you use Google, Amazon and Microsoft clouds. This prototype accounts for the geographical zone of the server, the GPU used, training time, and gives as output the approximate amount of CO₂eq produced. If you live in the USA, you can consult the map on [Environmental Burden of United States Data Centers](#) prototyped by Harvard T.H. Chan, UCLA and Università di Pisa.

Additional Bibliography

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