

Supplementary Materials

Beyond Disaster Counts: A Multidimensional Evidence Audit of Global Hazard Severity, Environmental Modification, Crisis Governance, and Eschatological Interpretation, 2019-September 2026

Supplement S1. Evidence-search scope and reporting standard

The literature and documentary strand is a PRISMA-structured multidisciplinary evidence map embedded within a mixed-method secondary-data study. PRISMA 2020 and PRISMA-S are used to make identification, screening, eligibility and inclusion reproducible; the disaster, cyclone, wildfire, earthquake and volcanism analyses are observational data analyses and are not described as a systematic review.

Search date for the structured evidence map: 25 August 2026. Current hazard surveillance and targeted analytical updates were frozen on 12 September 2026. Language: English or authoritative English-language versions. No lower date limit was imposed where archival or foundational evidence was necessary. Contemporary scientific and governance retrieval emphasized 2000-2026.

Operational quantitative products such as annual BAMS tropical-cyclone summaries, CRED/EM-DAT annual statistical reports, CAMS/GFAS monitoring products, USGS catalogs and Smithsonian GVP data are inventoried as datasets and data products. They are not artificially counted as separate literature-screening records merely because multiple annual releases were used.

Supplement S2. Search families and reproducible query logic

The following conceptual search families were preserved across scholarly indexes, publisher pages, government and intergovernmental repositories, institutional sites, archival sources and reference chaining. Interface-specific syntax was adapted where required.

- ("weather modification" OR "cloud seeding" OR "rain enhancement") AND (efficacy OR evaluation OR operation OR governance)
- ("environmental modification" OR "weather warfare" OR ENMOD OR "Operation Popeye") AND (military OR hostile OR history OR law)
- ("solar geoengineering" OR "solar radiation modification" OR "stratospheric aerosol injection" OR "marine cloud brightening") AND (governance OR experiment OR risk OR oversight)
- (HAARP OR "ionospheric heating" OR "ionospheric research") AND (weather OR atmosphere OR capability)
- ("directed energy" OR "high-energy laser" OR "high-power microwave") AND (weapon OR capability OR wildfire OR ignition)
- ("induced seismicity" OR "injection-induced earthquake" OR "reservoir induced seismicity") AND (causation OR review OR mechanism)
- (wildfire OR "fire weather") AND (climate change OR attribution OR ignition OR trend OR "fire radiative power" OR emissions)
- ("tropical cyclone" OR hurricane OR storm) AND (ACE OR "accumulated cyclone energy" OR "rapid intensification" OR frequency OR intensity OR damage)
- (EM-DAT OR "disasters in numbers" OR NatCatSERVICE OR "natural catastrophe losses") AND (2019 OR 2020 OR 2021 OR 2022 OR 2023 OR 2024 OR 2025 OR 2026)
- (earthquake OR seismicity) AND (magnitude OR energy OR trend OR induced OR attribution)
- (volcano OR volcanism OR eruption) AND (trend OR "Global Volcanism Program" OR 2025 OR 2026)
- ("crisis exploitation" OR "crisis instrumentalization") AND (policy OR governance OR framing)
- ("Pact for the Future" OR "Great Reset" OR "global governance") AND (interdependence OR crisis OR coordination OR reform)

- (PRISMA 2020 OR PRISMA-S) AND (search reporting OR systematic review); targeted contextual update: (religious belief OR Christian eschatology OR “birth pains”) AND (disaster response OR disaster interpretation OR risk perception)

Backward and forward reference chaining was used to locate primary or foundational evidence, especially for Operation Popeye, ENMOD, induced seismicity, solar-geoengineering governance, tropical-cyclone trend analysis, disaster attribution and crisis-exploitation theory.

Supplement S3. Eligibility, appraisal and causal-evidence rules

S3.1 Inclusion criteria

- supplied quantitative evidence for frequency, physical intensity, spatial or energetic magnitude, mortality, affected population, economic loss or upper-tail behavior;
- established, measured or critically evaluated an environmental-modification mechanism, its efficacy, scale or limitations;
- supplied event-specific causal evidence for a forensic case or a credible conventional counter-explanation;
- addressed environmental-modification law, reporting, oversight, transparency or governance;
- provided a peer-reviewed framework for disaster attribution, uncertainty, crisis exploitation or contested-knowledge evaluation;
- constituted a primary governance document directly coded in the manuscript; or supplied peer-reviewed evidence on religion, disaster interpretation, or public disaster response relevant to the bounded eschatological layer.

S3.2 Exclusion criteria

Records were excluded if they were topically remote, duplicative without additional evidentiary value, unavailable for adequate verification, purely rhetorical or opinion-based, dependent only on social-media imagery or anonymous testimony, materially weaker than an accessible primary source for the same claim, or theological material that did not directly inform the bounded Christian eschatological interpretation or disaster-risk interpretation layer.

S3.3 Source appraisal

Sources were appraised by authority, directness, methodological transparency, recency where relevant, reproducibility, and corroboration. Institutional authority was treated as evidence of provenance, not infallibility. Conversely, controversy or stigmatization was not treated as evidence that a claim was true. Contradictory and null findings were retained when they materially constrained the hypothesis.

S3.4 Attribution rule

No record was used to infer hostile intervention merely because a relevant technology exists. Event-specific attribution required sequential consideration of: A, capability; B, scalability; C, deployment; D, predicted physical signature; E, counterfactual exclusion of ordinary explanations; and F, actor linkage. The highest defensible level, not the most dramatic allegation, determined the case classification.

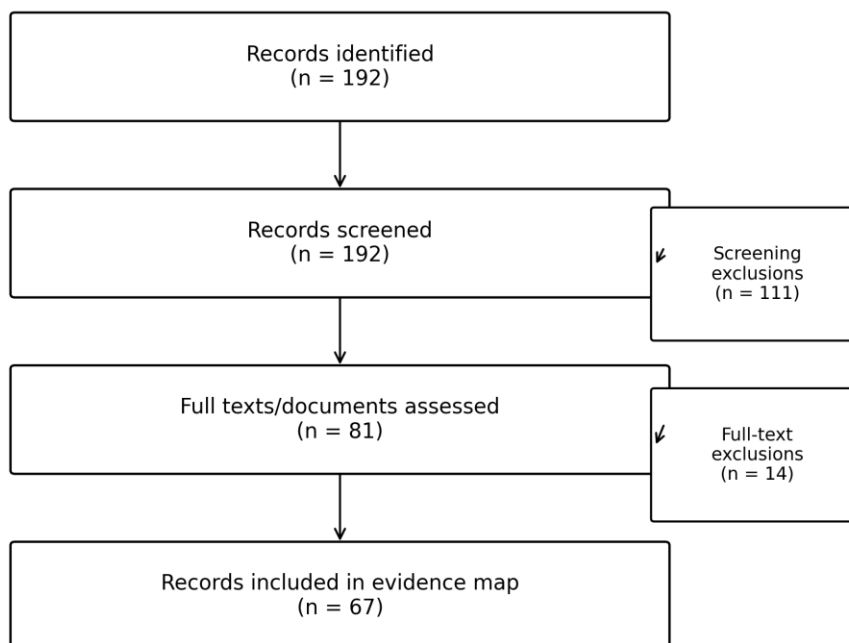
Supplement S4. PRISMA 2020 evidence-flow accounting

Flow stage	n
Records identified	192
Exact duplicates removed after normalized corpus assembly	0

Flow stage	n
Unique records screened	192
Excluded at relevance screening	111
Full texts/documents assessed	81
Full-text/document exclusions	14
Records included in final IJDRR evidence map	67

The structured PRISMA evidence-map flow remains 192 identified and screened records, 111 relevance exclusions, 81 full texts/documents assessed, 14 full-text/document exclusions, and 67 retained records. Two peer-reviewed analytical anchors added during the 12 September 2026 update, Seneviratne et al. (2021) for nonlinear climate extremes and Sun et al. (2018) for religion-disaster interpretation, are disclosed as post-screening contextual additions and do not retroactively alter the screening ledger.

PRISMA-structured evidence-mapping flow



One peer-reviewed tropical-cyclone trend study was added during the magnitude extension. Operational BAMS, CAMS/GFAS, and USGS quantitative data products are inventoried as datasets, not counted as literature-screening records.

Figure S1. PRISMA-structured flow for the multidisciplinary evidence-mapping strand. PRISMA applies to the literature/documentary stream, not to the observational hazard analyses.

Supplement S5. Temporal estimand and multidimensional outcome architecture

The primary estimand is the integrated post-2018 period, 1 January 2019 through 12 September 2026. Complete-year comparisons use 2019-2025. Calendar year 2026 is treated as censored at the data freeze and is analyzed only through same-period, record-period, or explicitly partial-year surveillance. The dates 2019 and 2025 are not imposed as separate causal phases.

Table S1. Multidimensional outcome architecture.

Dimension	Representative indicators	Interpretive boundary
Frequency	Reported disasters; physical event counts; landfalls; M7+ earthquakes	Occurrence is not equivalent to physical intensity.
Physical intensity	Cyclone ACE; maximum winds; earthquake magnitude; fire emissions/FRP where available	Hazard-specific physical scale.
Spatial/energetic magnitude	Burned area; affected footprint; cumulative seismic-energy proxy	Used only where measurement is interpretable.
Human consequences	Deaths; people affected; displacement where consistently available	Strongly conditioned by vulnerability and preparedness.
Economic consequences	Reported or insured losses	Conditioned by exposure, valuation, insurance and inflation.
Upper-tail behavior	Extreme quantiles, rapid intensification, maximum magnitude, regional record seasons	Separates tail risk from changes in the mean.

No single composite severity index is used as the primary outcome. A scalar index would require contestable weights and could hide exactly the cross-dimensional divergence that the study is designed to detect. Standardized dimension ratios are therefore visualization aids only, not causal estimators.

Supplement S6. Disaster frequency and consequence-magnitude data

Table S2. Completed annual CRED/EM-DAT frequency and consequence indicators, 2019-2025.

Year	Reported disasters	Deaths	Affected (millions)	Economic loss (US\$ bn)
2019	396	11,755	94.9	103.00
2020	389	15,080	98.4	171.30
2021	432	10,492	101.8	252.10
2022	387	30,704	185.0	223.80
2023	399	86,473	93.1	202.70
2024	393	16,753	167.2	241.95
2025	358	16,607	110.2	169.68

Across complete years 2019-2025 the mean was 393.4 reported disasters, 26,838 deaths, 121.5 million people affected, and US\$194.9 billion in reported losses per year. The contextual 2000-2018 baseline is reconstructed from rounded CRED/UNDRR 2000-2019 totals after subtracting 2019. Because the historical source reports rounded totals and monetary estimates in the source's stated dollar basis, these comparisons are sensitivity estimates, not exact fixed-vintage event-level estimators.

Supplement S7. Tropical-cyclone physical magnitude

Table S3. Global tropical-cyclone occurrence and accumulated cyclone energy, 2019-2025.

Year	Named TCs	Global ACE (10^4 kt^2)	Named storms vs 1991-2020 climatology
2019	96	795	+10.3%
2020	102	574	+17.2%
2021	97	649	+11.5%
2022	85	517	-2.3%
2023	82	866	-5.7%
2024	82	613	-5.7%
2025	97	711	+11.5%

Annual values were compiled from BAMS State of the Climate tropical chapters based on IBTrACS. The named-storm climatology is 87 for 1991-2020. ACE integrates intensity and duration and therefore cannot be replaced by disaster declarations. The 2026 season remained incomplete at 12 September and was not annualized. Klotzbach et al. (2022, <https://doi.org/10.1029/2021GL095774>) supplies the longer 1990-2021 trend context: declining global hurricane counts and ACE coexist with increased very rapid intensification and damage, emphasizing metric-specific change.

Supplement S8. Wildfire physical magnitude

Table S4. CAMS/GFAS global fire carbon-emission estimates used for magnitude context.

Year	Global fire carbon (Mt)	Coverage
2019	1870	annual
2020	1690	to Dec 7
2021	1760	annual
2022	1455	to Dec 10
2023	2170	annual
2024	1940	annual
2025	1380	Jan-Nov

Global fire emissions are used as a physically meaningful but incomplete wildfire-magnitude indicator. They do not directly equal burned area, fire radiative power, structure loss or disaster counts. The principal inferential result is non-monotonic global behavior alongside severe regional upper tails. CAMS reported that first-half 2026 global biomass-burning emissions were the lowest in its 24-year GFAS record, while later regional fire activity became exceptional in parts of Europe, North America and Indonesia. This global-regional contrast is retained rather than collapsed into a single escalation claim.

Supplement S9. Earthquake frequency, magnitude and energy proxy

Table S5. M7+ earthquake frequency and magnitude proxy, 2019-12 September 2026.

Year	M7+ count	Max M	Cumulative energy (10 ¹⁷ J)	Coverage
2019	10	8.0	1.158	annual
2020	9	7.8	1.030	annual
2021	19	8.2	4.035	annual
2022	11	7.6	0.589	annual
2023	19	7.8	1.476	annual
2024	10	7.5	0.483	annual
2025	16	8.8	11.590	annual
2026	11	7.8	1.276	Jan-Sep 12

The descriptive energy transformation uses $\log_{10}(E[J]) = 1.5M + 4.8$. It is intentionally not interpreted as a linear severity index because one very large earthquake dominates annual cumulative energy. A one-unit magnitude increase corresponds to approximately 31.6 times more energy, and the 2025 M8.8 Kamchatka earthquake therefore represents roughly 500 times the energy proxy of an M7.0 event. Through 12 September 2026, eleven M7+ earthquakes produced a cumulative descriptive proxy of approximately 1.28×10^{17} J. The contrast demonstrates exponential magnitude-energy scaling without implying exponential growth in global earthquake frequency.

Supplement S10. Completed 2025 hazard-specific screen

Table S6. Poisson rate-ratio screening of completed 2025 EM-DAT hazard counts against CRED 2005-2024 annual means.

Hazard	2025	Hist. mean	RR	95% CI	p	BH q	Interpretation
Drought	7	16	0.438	0.207-0.925	0.03049	0.05488	No FDR-significant difference
Earthquake	29	25	1.160	0.798-1.687	0.4371	0.6557	No FDR-significant difference
Extreme temperature	1	23	0.043	0.006-0.309	0.001736	0.005207	Reporting incomplete; not interpreted
Flood	119	169	0.704	0.586-0.845	0.0001693	0.0007619	Lower after FDR correction
Dry mass movement	0	1	0.488	0.030-8.066	0.616	0.7444	No FDR-significant difference
Wet mass movement	19	18	1.056	0.665-1.674	0.8183	0.8183	No FDR-significant difference

Hazard	2025	Hist. mean	RR	95% CI	p	BH q	Interpretation
Storm	156	108	1.444	1.228-1.699	9.186e-06	8.267e-05	Elevated after FDR correction
Volcanic activity	4	5	0.800	0.294-2.173	0.6617	0.7444	No FDR-significant difference
Wildfire	23	12	1.917	1.250-2.940	0.002877	0.006474	Elevated after FDR correction

This screen answers only whether the completed 2025 disaster count in each EM-DAT hazard category differs from the published historical annual mean. It does not establish changes in physical intensity. Nine comparisons were corrected by the Benjamini-Hochberg false-discovery-rate procedure. Extreme-temperature reporting was incomplete at the source reference date and is not interpreted as a physical decline.

Supplement S11. 2026 current hazard surveillance and comparability rules

- Current surveillance was frozen on 12 September 2026 and is not annualized. Copernicus and WMO identified August 2026 as the warmest August in the ERA5 record, with severe European soil-moisture deficits and exceptionally low river flows. These indicators are used as record-period or same-season evidence, not as complete-year totals.
- The Bhote Koshi flood in Nepal remained an active response and recovery event at the data freeze. The Government of Nepal reported on 11 September that 1,385 bodies had been recovered, approximately 5,130 people were reported missing, and 13,676 people had been rescued, with preliminary damage, loss and reconstruction estimates in the billions of U.S. dollars. These figures are explicitly labeled provisional because search and recovery were continuing.
- USGS records show eleven M7+ earthquakes through 12 September 2026. The series remains partial-year and is not converted to a full-year estimate. Magnitude-energy scaling is evaluated separately from event frequency, preserving the distinction between rare upper-tail energy release and secular occurrence trends.
- No full-year 2026 tropical-cyclone ACE total is reported because the annual season is incomplete. WMO reported 19 tropical storms during August 2026, including five hurricane/typhoon-strength systems and four major systems; these observations are treated as current surveillance rather than a finalized annual climatology.
- CAMS reported unusually low global biomass-burning emissions in the first half of 2026 while documenting intense later regional fire seasons. Smithsonian surveillance likewise records significant ongoing eruptions, including Sinabung and Ambae, but the volcanic record is retained as a negative control against claims of a uniform global hazard-rate acceleration. The source inventory below records the provenance and coverage of each current indicator.

Supplement S12. Quantitative source and data-product inventory

Table S7. Principal quantitative, legal, capability and governance source inventory.

Source/data product	Analytical role	DOI or URL
CRED 2019 annual report	2019 total and 2009-2018 comparator	https://www.cred.be/sites/default/files/adsr_2019.pdf
CRED & UNDRR 2020 annual report	2020 total and 2000-2019 comparator	https://www.undrr.org/publication/2020-non-covid-year-disasters
CRED 2021 annual report	2021 total and 2001-2020 comparator	https://cred.be/sites/default/files/2021_EMDAT_report.pdf
CRED 2022 annual report	2022 total and 2002-2021 comparator	https://cred.be/sites/default/files/2022_EMDAT_report.pdf
CRED 2023 annual report	2023 total and 2003-2022 comparator	https://files.emdat.be/reports/2023_EMDAT_report.pdf
CRED 2024 annual report	2024 total and 2004-2023 comparator	https://files.emdat.be/reports/2024_EMDAT_report.pdf
CRED 2025 annual report	2025 total, hazard counts, 2005-2024 comparators	https://files.emdat.be/reports/2025_EMDAT_report.pdf
EM-DAT descriptor	database methods and limitations	https://doi.org/10.1016/j.ijdr.2025.105509
Munich Re 2026 H1	2026 H1 loss surveillance	https://www.munichre.com/en/company/media-relations/media-information-and-corporate-news/media-information/2026/natural-disaster-figures-first-half-2026.html
UN Pact for the Future	governance corpus	https://www.un.org/en/summit-of-the-future/pact-for-the-future
GAO weather modification audit	weather-modification reporting oversight	https://www.gao.gov/products/gao-26-108013
WMO weather modification statement	operational scope and scientific limitations	https://wmo.int/content/wmo-statement-weather-modification
ENMOD	international law	https://disarmament.unoda.org/en/our-work/weapons-mass-destruction/convention-prohibition-military-or-any-other-hostile-use-environmental-modification-techniques
Operation Popeye archival memorandum	historical hostile-use precedent	https://history.state.gov/historicaldocuments/frus1964-68v28/d274
CRED & UNDRR 2000-2019 historical synthesis	Approximate pre-2019 annualized occurrence, mortality, affected-population and loss context	https://www.undrr.org/publication/human-cost-disasters-overview-last-20-years-2000-2019
BAMS State of the Climate 2019, The Tropics	2019 global named tropical-cyclone and ACE metrics	https://doi.org/10.1175/BAMS-D-20-0077.1
BAMS State of the Climate 2020, The Tropics	2020 global named tropical-cyclone and ACE metrics	https://doi.org/10.1175/BAMS-D-21-0080.1
BAMS State of the Climate 2021, The Tropics	2021 global named tropical-cyclone and ACE metrics	https://doi.org/10.1175/BAMS-D-22-0069.1
BAMS State of the Climate 2022, The Tropics	2022 global named tropical-cyclone and ACE metrics	https://doi.org/10.1175/BAMS-D-23-0078.1
BAMS State of the Climate 2023, The Tropics	2023 global named tropical-cyclone and ACE metrics	https://doi.org/10.1175/BAMS-D-24-0098.1

Source/data product	Analytical role	DOI or URL
BAMS State of the Climate 2024, The Tropics	2024 global named tropical-cyclone and ACE metrics	https://doi.org/10.1175/BAMS-D-25-0086.1
BAMS State of the Climate 2025, The Tropics	2025 global named tropical-cyclone and ACE metrics	https://doi.org/10.1175/BAMS-D-26-0101.1
Klotzbach et al. 2022	1990-2021 global cyclone frequency, ACE, rapid-intensification and damage trend context	https://doi.org/10.1029/2021GL095774
CAMS/GFAS wildfire monitoring	Global and regional fire-emission magnitude context, 2019-2026	https://atmosphere.copernicus.eu/
USGS Earthquake Hazards Program	Annual M7+ counts and event-level magnitudes	https://earthquake.usgs.gov/
USGS 2025 Kamchatka M8.8 event	Event mechanism and tectonic attribution	https://earthquake.usgs.gov/earthquakes/eventpage/us6000qw60/executive
Smithsonian Global Volcanism Program	Annual eruption-start negative control and reporting caveats	https://volcano.si.edu/
Swiss Re Institute H1 2026 catastrophe loss release	Partial-year insured-loss surveillance; not annualized	https://www.swissre.com/institute/research/sigma-research/sigma-2026-01.html
Copernicus Climate Change Service, 10 Sep 2026	August 2026 global heat, sea-surface temperature, drought and river-flow surveillance	https://climate.copernicus.eu/copernicus-august-was-worlds-joint-hottest-month-record-pushing-global-temperatures-back-above
WMO, 11 Sep 2026	August 2026 heat, tropical-storm and drought surveillance	https://public.wmo.int/media/news/earth-has-hottest-august-record
WMO, 3 Sep 2026	El Niño status and extreme-weather outlook into 2027	https://public.wmo.int/news/media-centre/el-nino-set-become-very-strong-raising-risks-of-extreme-weather-2027
Government of Nepal MOFA, 11 Sep 2026	Bhote Koshi flood rescue, mortality, missing-person and loss/reconstruction status	https://www.mofa.gov.np/content/1884/the-ministry-s-regular-press-briefing--11-september/
CAMS, 6 Jul 2026	First-half 2026 global biomass-burning emissions benchmark	https://atmosphere.copernicus.eu/copernicus-global-biomass-burning-emissions-2026-their-lowest-level-2003
CAMS, 21 Aug 2026	Regional wildfire upper tails and global-regional emissions contrast	https://atmosphere.copernicus.eu/copernicus-indonesias-seasonal-fires-intensify-boreal-wildfire-smoke-impacts-northern-hemisphere
USGS World M7+ 2026	Current M7+ event list through the 12 Sep 2026 data freeze	https://earthquake.usgs.gov/earthquakes/browse/m7-world.php
Smithsonian/USGS Weekly Volcanic Activity Report	Current eruption surveillance including Sinabung and Ambae	https://volcano.si.edu/reports_weekly.cfm

Source/data product	Analytical role	DOI or URL
Seneviratne et al. 2021	Nonlinear heavy-precipitation and climate-extreme physical scaling	https://doi.org/10.1017/9781009157896.013
Sun, Deng, & Qi 2018	Peer-reviewed religion-disaster interpretation and response context	https://doi.org/10.1016/j.ijdr.2017.10.004

Supplement S13. Reproducibility file inventory

- `run_analysis.py` - reproduces the completed-2025 rate-ratio screen and original publication figures.
- `build_magnitude_extension.py` - reproduces post-2018 magnitude tables and magnitude-extension figures.
- `impact_magnitude_2019_2025.csv` - annual occurrence, mortality, affected-population and economic-loss series.
- `tropical_cyclone_magnitude_2019_2025.csv` - named tropical cyclones and global ACE.
- `wildfire_emissions_2019_2025.csv` - CAMS/GFAS global fire-carbon magnitude series and coverage notes.
- `earthquake_magnitude_energy_2019_2026.csv` - M7+ counts, maxima and cumulative energy proxy through 12 September 2026.
- `hazard_screening_2025.csv` - rate ratios, confidence intervals, p values and BH q values.
- `gvp_new_eruptions_2013_2025.csv` - volcanic negative-control series.
- `h1_2026_loss_indicators.csv` - partial-year loss surveillance.
- `screening_log.csv` - 192-record PRISMA screening ledger and reasons.
- `included_evidence.csv` - 67-record final IJDRR evidence map.
- `prisma_counts.json` - reconciled evidence-flow counts.
- `source_inventory_multidimensional.csv` - source provenance, DOI/URL and analytical role, including September 2026 updates.
- `current_hazard_surveillance_sep12_2026.csv` - frozen current-event indicators for heat, flood, drought, wildfire, earthquakes, volcanism and El Niño.

figures/ - publication figures in reproducible PNG form. Reproduction sequence: run `run_analysis.py`, then `build_magnitude_extension.py`. The scripts consume the supplied processed analytical tables and write derived statistical outputs and figures. Underlying source databases remain subject to their original licensing and access terms.

Supplement S14. Full PRISMA screening ledger

Table S8. Record-level screening ledger. Each excluded record carries its recorded principal reason.

ID	Stratum	Reference	Status / reason
1	author_corpus	Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. <i>International Organization</i> , 54(3), 421-456. https://doi.org/10.1162/002081800551280	included
2	author_corpus	Access Now. (2024, October 24). A human rights-centered approach to digital public infrastructure. https://www.accessnow.org/guide/digital-public-infrastructure/	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
3	author_corpus	Advanced Research and Invention Agency. (2025). Exploring Climate Cooling. ARIA.	included

ID	Stratum	Reference	Status / reason
4	author_corpus	Advanced Research and Invention Agency. (2026). Exploring Climate Cooling: Frequently asked questions and experimental updates. ARIA.	included
5	author_corpus	Agamben, G. (2005). State of exception (K. Attell, Trans.). University of Chicago Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
6	author_corpus	Alence, R., & Pitcher, A. (2019). Resisting state capture in South Africa. <i>Journal of Democracy</i> , 30(4), 5-19. https://www.journalofdemocracy.org/articles/resisting-statecapture-in-south-africa/	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
7	author_corpus	Arnaud, P. (2006). Charbonnerie et maçonnerie: Modèles, transferts et fantasmes. <i>Cahiers de la Méditerranée</i> , 72. https://doi.org/10.4000/cdlm.1167	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
8	author_corpus	Barkun, M. (2015). Conspiracy theories as stigmatized knowledge. <i>Diogenes</i> , 62(3-4), 114-120. https://doi.org/10.1177/0392192116669288	included
9	author_corpus	Barnett, M., & Finnemore, M. (2004). Rules for the world: International organizations in global politics. Cornell University Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
10	author_corpus	Bauckham, R. (1993). The theology of the Book of Revelation. Cambridge University Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
11	author_corpus	Bayly, C. A., & Biagini, E. F. (Eds.). (2008). Giuseppe Mazzini and the globalization of democratic nationalism, 1830-1920. <i>British Academy</i> . https://doi.org/10.5871/bacad/9780197264317.001.0001	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
12	author_corpus	Beale, G. K. (1999). The Book of Revelation: A commentary on the Greek text. Eerdmans.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
13	author_corpus	Bullock, S. C. (1996). Revolutionary brotherhood: Freemasonry and the transformation of the American social order, 1730-1840. University of North Carolina Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
14	author_corpus	Caballero García, J. L. (2025). El katechon paulino (2 Tes 2,6-7): Una aproximación canónica. <i>Cauriensia</i> , 20, 685-710. https://doi.org/10.17398/2340-4256.20.685	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
15	author_corpus	Campbell, H. A. (Ed.). (2013). Digital religion: Understanding religious practice in new media worlds. Routledge.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope

ID	Stratum	Reference	Status / reason
16	author_corpus	Campbell, H. A., & Evolvi, G. (2020). Contextualizing current digital religion research on emerging technologies. <i>Human Behavior and Emerging Technologies</i> , 2(1), 517. https://doi.org/10.1002/hbe2.149	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
17	author_corpus	Carozza, P. G. (2003). Subsidiarity as a structural principle of international human rights law. <i>American Journal of International Law</i> , 97(1), 38-79. https://www.cambridge.org/core/journals/american-journal-of-international-law/article/subsidiarity-as-a-structural-principle-of-international-human-rights-law/E7CE150E892CF4593B950F4F308AE12F	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
18	author_corpus	Carpenter, D., & Moss, D. A. (Eds.). (2014). Preventing regulatory capture: Special interest influence and how to limit it. Cambridge University Press. https://doi.org/10.1017/CBO9781139565875	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
19	author_corpus	Carter, K. M. (2023). Democracy in darkness: Secrecy and transparency in the age of revolutions. Yale University Press. https://doi.org/10.12987/yale/9780300246926.001.0001	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
20	author_corpus	Centre for Research on the Epidemiology of Disasters. (2026). 2025 disasters in numbers: Earth, wind & fire. EM-DAT. https://files.emdat.be/reports/2025_EMDAT_report.pdf	included
21	author_corpus	China Meteorological Administration. (2025). Weather modification development and operational services in China. CMA.	included
22	author_corpus	Cohen, J. L. (2012). Globalization and sovereignty: Rethinking legality, legitimacy, and constitutionalism. Cambridge University Press. https://doi.org/10.1017/CBO9780511659041	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
23	author_corpus	Collins, J. J. (1998). The apocalyptic imagination: An introduction to Jewish apocalyptic literature (2nd ed.). Eerdmans.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
24	author_corpus	Cotta, M. (2018). Political elites beyond the nation state. In H. Best & J. Higley (Eds.), <i>The Palgrave handbook of political elites</i> . Palgrave Macmillan. https://doi.org/10.1057/978-1-137-51904-7_40 Cotter, K., Ritchart, A., De, A., Foyle, K., Kanthawala, S., McAtee, H., & Watson, T. X. (2024). If you're reading this, it's meant for you: The reflexive ambivalence of algorithmic conspiratoriality. <i>Convergence: The International Journal of Research into New Media Technologies</i> , 30(6), 1897-1915. https://doi.org/10.1177/13548565241258949	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
25	author_corpus	Curran, D. (2023). Surveillance capitalism and systemic digital risk: The imperative to collect and connect and the risks of interconnectedness. <i>Big Data & Society</i> , 10(1), 1-12. https://doi.org/10.1177/20539517231177621	included
26	author_corpus	Dahl, R. A. (1961). Who governs? Democracy and power in an American city. Yale University Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
27	author_corpus	Dal Bó, E. (2006). Regulatory capture: A review. <i>Oxford Review of Economic Policy</i> , 22(2), 203-225. https://doi.org/10.1093/oxrep/grj013 del Solar, F. S. (2025). The Bavarian Illuminati and the construction of the Masonic conspiracy in Enlightenment Europe (1776-1792). <i>Revista de Estudios Históricos de la Masonería Latinoamericana y Caribeña</i> , 17(2), 5-21. https://doi.org/10.15517/rehmlac.v17i2.54949	fulltext_excluded: Historical secret-society focus without direct hazard mechanism

ID	Stratum	Reference	Status / reason
28	author_corpus	Di Mauro, L. (2016). Le secret et Polichinelle: Cultures et pratiques de la clandestinité politique à Naples au début du XIXe siècle (1799-1821) [Doctoral dissertation]. https://theses.hal.science/tel-02464295	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
29	author_corpus	DiMascio, J., Feickert, A., O'Rourke, R., & Saylor, K. M. (2024, July 11). Department of Defense directed energy weapons: Background and issues for Congress (CRS Report R46925). Congressional Research Service. https://www.congress.gov/crs-product/R46925	included
30	author_corpus	Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. <i>Current Directions in Psychological Science</i> , 26(6), 538-542. https://doi.org/10.1177/0963721417718261 Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi,	included
31	author_corpus	F. (2019). Understanding conspiracy theories. <i>Political Psychology</i> , 40(S1), 3-35. https://doi.org/10.1111/pops.12568	included
32	author_corpus	Eastlund, B. J. (1987). Method and apparatus for altering a region in the Earth's atmosphere, ionosphere, and/or magnetosphere (U.S. Patent No. 4,686,605). U.S. Patent and Trademark Office.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
33	author_corpus	Ellsworth, W. L. (2013). Injection-induced earthquakes. <i>Science</i> , 341(6142), 1225942. https://doi.org/10.1126/science.1225942	included
34	author_corpus	Etzioni-Halevy, E. (1989). Elite power, manipulation and corruption: A demo-elite perspective. <i>Government and Opposition</i> , 24(2), 215-231. https://doi.org/10.1111/j.1477-7053.1989.tb00117.x	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
35	author_corpus	European Central Bank. (2025). Digital euro: Design features, privacy, and conditional payments. European Central Bank.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
36	author_corpus	European Central Bank. (2026). Digital euro project: Progress on the draft rulebook and design. European Central Bank. European Commission. (n.d.). European digital identity. https://commission.europa.eu/topics/digital-economy-and-society/european-digital-identity_en	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
37	author_corpus	European Parliament and Council of the European Union. (2022). Regulation (EU) 2022/2065 of 19 October 2022 on a single market for digital services and amending Directive 2000/31/EC (Digital Services Act). <i>Official Journal of the European Union</i> , L 277, 1-102. https://eur-lex.europa.eu/eli/reg/2022/2065/oj/eng	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
38	author_corpus	European Parliament and Council of the European Union. (2024a). Regulation (EU) 2024/1183 of 11 April 2024 amending Regulation (EU) No 910/2014 as regards establishing the European Digital Identity Framework. <i>Official Journal of the European Union</i> , L 2024/1183. https://eur-lex.europa.eu/eli/reg/2024/1183/oj/eng	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
39	author_corpus	European Parliament and Council of the European Union. (2024b). Regulation (EU) 2024/1689 of 13 June 2024 laying down harmonised rules on artificial intelligence (Artificial Intelligence Act). <i>Official Journal of the European Union</i> , L 2024/1689. https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
40	author_corpus	Fazekas, M., & Tóth, I. J. (2016). From corruption to state capture: A new analytical framework with empirical applications from Hungary. <i>Political Research Quarterly</i> , 69(2), 320-334. https://doi.org/10.1177/1065912916639137	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope

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41	author_corpus	Ferrer Benimeli, J. A. (2010). El binomio francmasonería-revolución en la época de las luces entre la historia y el mito. <i>Studia Historica. Historia Contemporánea</i> , 23. https://revistas.usal.es/uno/index.php/0213-2087/article/view/6021	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
42	author_corpus	Foertsch, S., Chakraborty, R., & Joosse, P. (2024). Asymmetric conflation: QAnon and the political cooptation of religion. <i>Politics and Religion</i> , 17(1), 58-80. https://doi.org/10.1017/S1755048323000275	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
43	author_corpus	Foulger, G. R., Wilson, M. P., Gluyas, J. G., Julian, B. R., & Davies, R. J. (2018). Global review of human-induced earthquakes. <i>Earth-Science Reviews</i> , 178, 438-514. https://doi.org/10.1016/j.earscirev.2017.07.008	included
44	author_corpus	Freedom House. (2025). Freedom on the Net 2025: An uncertain future for the global internet. https://freedomhouse.org/report/freedom-net/2025/uncertainfuture-global-internet	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
45	author_corpus	Ganser, D. (2006). The ghost of Machiavelli: An approach to Operation Gladio and terrorism in Cold War Italy. <i>Crime, Law and Social Change</i> , 45, 111-154. https://doi.org/10.1007/s10611-006-9015-7	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
46	author_corpus	Gartzke, E., & Naoi, M. (2011). Multilateralism and democracy: A dissent regarding Keohane, Macedo, and Moravcsik. <i>International Organization</i> , 65(3), 589-598. https://doi.org/10.1017/S0020818311000142	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
47	author_corpus	Gilens, M., & Page, B. I. (2014). Testing theories of American politics: Elites, interest groups, and average citizens. <i>Perspectives on Politics</i> , 12(3), 564-581. https://doi.org/10.1017/S1537592714001595	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
48	author_corpus	Ginsburg, T., & Versteeg, M. (2021). The bound executive: Emergency powers during the pandemic. <i>International Journal of Constitutional Law</i> , 19(5), 1498-1535. https://doi.org/10.1093/icon/moab059	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
49	author_corpus	Gorwa, R. (2019). What is platform governance? <i>Information, Communication & Society</i> , 22(6), 854-871. https://doi.org/10.1080/1369118X.2019.1573914	included
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51	author_corpus	Gwagwa, A., & Mollema, W. J. T. (2024). How could the United Nations Global Digital Compact prevent cultural imposition and hermeneutical injustice? <i>Patterns</i> , 5(11), Article 101078. https://doi.org/10.1016/j.patter.2024.101078	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
52	author_corpus	Haas, P. M. (1992). Introduction: Epistemic communities and international policy coordination. <i>International Organization</i> , 46(1), 1-35. https://doi.org/10.1017/S0020818300001442	included
53	author_corpus	Helberger, N., Pierson, J., & Poell, T. (2018). Governing online platforms: From contested to cooperative responsibility. <i>The Information Society</i> , 34(1), 1-14. https://doi.org/10.1080/01972243.2017.1391913	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope

ID	Stratum	Reference	Status / reason
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55	author_corpus	Henao, L. A. (2025, September 23). A doomsday prediction about the Rapture is spreading on TikTok. AP News. https://apnews.com/article/rapture- end-times-evangelical-christians-tiktok7d065520186503a6223ee12df1f02dd	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
56	author_corpus	Hill, K. Q., & Klarnier, C. (2002). The many faces of elite power in the 'system of 1896.' The Journal of Politics, 64(4), 1115-1136. https://doi.org/10.1111/1468- 2508.00165	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
57	author_corpus	Hjarvard, S. (2011). The mediatization of religion: Theorising religion, media and social change. Culture and Religion, 12(2), 119-135. https://doi.org/10.1080/14755610.2011.579719	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
58	author_corpus	Illes, A., Kosse, A., & Wierts, P. (2025). Advancing in tandem: Results of the 2024 BIS survey on central bank digital currencies and crypto (BIS Papers No. 159). Bank for International Settlements. https://www.bis.org/publ/bppdf/bisap159.htm	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
59	author_corpus	Inata, K. (2025). Monarchies in the contemporary world. Oxford University Press. https://doi.org/10.1093/9780198967132.001.0001	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
60	author_corpus	Innes, A. (2014). The political economy of state capture in Central Europe. Journal of Common Market Studies, 52(1), 88-104. https://doi.org/10.1111/jcms.12079	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
61	author_corpus	International Telecommunication Union. (2003). Declaration of principles: Building the information society, a global challenge in the new millennium. World Summit on the Information Society. https://www.itu.int/net/wsis/docs/geneva/official/dop.html	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
62	author_corpus	International Telecommunication Union. (2005). Tunis Agenda for the Information Society. World Summit on the Information Society. https://www.itu.int/net/wsis/documents/doc_multi.asp?id=2267&lang=en	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
63	author_corpus	Italian Republic. (1982). Law No. 17 of 25 January 1982: Implementation of Article 18 of the Constitution concerning secret associations and dissolution of the association known as P2. Gazzetta Ufficiale.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
64	author_corpus	Jacob, M. C. (1998). Illuminati. Routledge Encyclopedia of Philosophy. https://doi.org/10.4324/9780415249126-DB042-1	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope

ID	Stratum	Reference	Status / reason
65	author_corpus	Judicial Commission of Inquiry into Allegations of State Capture. (2022). Report of the Judicial Commission of Inquiry into Allegations of State Capture, corruption and fraud in the public sector including organs of state. Government of South Africa. https://www.statecapture.org.za/	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
66	author_corpus	Kanthawala, S., Cotter, K., Ritchart, A., De, A., McAtee, H., Yun, C., & DeCook, J. (2025). Algorithmic conspirituality: Explicating its emergence, dimensions, and persuasibility. <i>New Media & Society</i> , 27(5), 2885-2910. https://doi.org/10.1177/14614448231217425	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
67	author_corpus	Keohane, R. O., Macedo, S., & Moravcsik, A. (2009). Democracy-enhancing multilateralism. <i>International Organization</i> , 63(1), 1-31. https://doi.org/10.1017/S0020818309090018	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
68	author_corpus	Kim, H. (2023). Monetary technocracy and democratic accountability: How central bank independence conditions economic voting. <i>Review of International Political Economy</i> , 30(3), 939-964. https://doi.org/10.1080/09692290.2022.2058981	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
69	author_corpus	Koester, C. R. (2014). <i>Revelation: A new translation with introduction and commentary</i> . Yale University Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
70	author_corpus	Kreuder-Sonnen, C. (2019). International authority and the emergency problematique: IO empowerment through crises. <i>International Theory</i> , 11(2), 182-210. https://doi.org/10.1017/S1752971919000010	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
71	author_corpus	Lemke, T. (2002). Foucault, governmentality, and critique. <i>Rethinking Marxism</i> , 14(3), 49-64. https://doi.org/10.1080/089356902101242288	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
72	author_corpus	Lerner, C. S. (2018). The tower of Babel revisited: Global governance as a problematic solution to existential threats. <i>North Carolina Journal of Law & Technology</i> , 19(1), 69-121. https://scholarship.law.unc.edu/ncjolt/vol19/iss1/4/	included
73	author_corpus	Li, W. Y. (2023). Regulatory capture's third face of power. <i>Socio-Economic Review</i> , 21(2), 1217-1245. https://doi.org/10.1093/ser/mwad002	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
74	author_corpus	Mair, P. (2013). <i>Ruling the void: The hollowing of Western democracy</i> . Verso.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
75	author_corpus	McAnnally-Linz, R. (2013). Resistance and Romans 13 in Samuel Rutherford's <i>Lex, Rex</i> . <i>Scottish Journal of Theology</i> , 66(2), 140-158. https://doi.org/10.1017/S0036930613000057	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
76	author_corpus	McGann, J. G. (2003). Think tanks and the transnationalization of foreign policy. <i>Connections: The Quarterly Journal</i> , 2(1), 85-90. https://connections-qj.org/article/think-tanks-and-transnationalization-foreignpolicy	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope

ID	Stratum	Reference	Status / reason
77	author_corpus	Michels, R. (1962). Political parties: A sociological study of the oligarchical tendencies of modern democracy (E. Paul & C. Paul, Trans.). Free Press. (Original work published 1911)	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
78	author_corpus	Mills, C. W. (1956). The power elite. Oxford University Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
79	author_corpus	Mosca, G. (1939). The ruling class (H. D. Kahn, Trans.). McGraw-Hill.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
80	author_corpus	Munich Re. (2026, January 13). Climate change presses on: Devastating wildfires and intense thunderstorms exacerbate losses for insurers. https://www.munichre.com/en/company/media-relations/medi a-information-and-corporate-news/media-information/2026/ natural-disaster-figures-2025.html	included
81	author_corpus	National Academies of Sciences, Engineering, and Medicine. (2021). Reflecting sunlight: Recommendations for solar geoengineering research and research governance. National Academies Press. https://doi.org/10.17226/25762	included
82	author_corpus	National Oceanic and Atmospheric Administration. (2024). Fact check: Debunking weather modification claims. https://www.noaa.gov/news/fact-check- debunking-weather-modification-claims	included
83	author_corpus	National Oceanic and Atmospheric Administration. (2024). Solar radiation modification: State of the science. U.S. Department of Commerce. National Oceanic and Atmospheric Administration, Atlantic Oceanographic and Meteorological Laboratory. (n.d.). Project STORMFURY. NOAA AOML.	included
84	author_corpus	Nussbaum, M. C. (2011). Creating capabilities: The human development approach. Harvard University Press. https://www.hup.harvard.edu/books/9780674072350	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
85	author_corpus	Nuti, L. (2007). The Italian 'stay-behind' network: The origins of Operation 'Gladio.' Journal of Strategic Studies, 30(6), 955-980. https://doi.org/10.1080/01402390701676501	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
86	author_corpus	Office for Digital and Emerging Technologies. (2025a). Office for Digital and Emerging Technologies. United Nations. https://www.un.org/digital-emerging- technologies/	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
87	author_corpus	Office for Digital and Emerging Technologies. (2025b). Global Digital Compact. United Nations. https://www.un.org/digital-emerging-technologies/content/glob al-digital-compact	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
88	author_corpus	Office for Digital and Emerging Technologies. (2025c). AI panel and dialogue. United Nations. https://www.un.org/global-digital-compact/en/ai	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
89	author_corpus	Office of the United Nations High Commissioner for Human Rights. (2022, September 15). Spyware and surveillance: Threats to privacy and human rights growing, UN report warns. https://www.ohchr.org/en/press-releases/2022/09/spyware-and-surveillance-threats-privacy-and-human-rights-growing-unreport-warns	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope

ID	Stratum	Reference	Status / reason
90	author_corpus	Office of the United Nations High Commissioner for Human Rights. (2022). The right to privacy in the digital age (A/HRC/51/17). https://www.ohchr.org/en/documents/thematic-reports/ahrc51-17-right-privacy-digital-age	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
91	author_corpus	Office of the United Nations High Commissioner for Human Rights. (2024). A/HRC/56/45: Mapping report: Human rights and new and emerging digital technologies. https://www.ohchr.org/en/documents/thematic-reports/ahrc5645-mapping-report-human-rights-and-new-and-emerging-digital	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
92	author_corpus	Pakulski, J. (2012). The Weberian foundations of modern elite theory and democratic elitism. <i>Historical Social Research</i> , 37(1), 38-56. https://doi.org/10.12759/hsr.37.2012.1.38-56	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
93	author_corpus	Parmar, I. (2004). Think tanks and power in foreign policy: A comparative study of the role and influence of the Council on Foreign Relations and the Royal Institute of International Affairs, 1939-1945. Palgrave Macmillan. https://doi.org/10.1057/9780230000780	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
94	author_corpus	Plantin, J.-C., Lagoze, C., Edwards, P. N., & Sandvig, C. (2018). Infrastructure studies meet platform studies in the age of Google and Facebook. <i>New Media & Society</i> , 20(1), 293-310. https://doi.org/10.1177/1461444816661553	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
95	author_corpus	Posner, E. A., & Vermeule, A. (2009). Crisis governance in the administrative state: 9/11 and the financial meltdown of 2008. <i>University of Chicago Law Review</i> , 76(4), 1613-1682. https://chicagounbound.uchicago.edu/uclrev/vol76/iss4/3/	included
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97	author_corpus	Rath, R. J. (1964). The Carbonari: Their origins, initiation rites, and aims. <i>The American Historical Review</i> , 69(2), 353-370. https://doi.org/10.1086/ahr/69.2.353	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
98	author_corpus	Reuters Institute for the Study of Journalism. (2025, June 17). How the public checks information it thinks might be wrong. https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2025/how-public-checks-information-it-thinks-might-be-wrong	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
99	author_corpus	Rhodes, R. A. W. (1996). The new governance: Governing without government. <i>Political Studies</i> , 44(4), 652-667. https://doi.org/10.1111/j.1467-9248.1996.tb01747.x	included
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101	author_corpus	Rosenau, J. N., & Czempiel, E.-O. (Eds.). (1992). <i>Governance without government: Order and change in world politics</i> . Cambridge University Press. https://doi.org/10.1017/CBO9780511521775	included
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ID	Stratum	Reference	Status / reason
103	author_corpus	Salas-Porras, A., & Murray, G. (Eds.). (2017). Think tanks and global politics: Key spaces in the structure of power. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-56756-7	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
104	author_corpus	Sangwa, S. (2025a). How has the New Age movement evolved into a push for a oneworld religion? Open Journal of Business Theology, 5(2). https://doi.org/10.65655/ga883n60	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
105	author_corpus	Sangwa, S. (2025b). Secret and quasi-secret societies: History, influence, and theological perspective. Open Journal of Stigmatized Knowledge & Suppressed Discourses, 1(2). https://doi.org/10.65655/ktq9ph81	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
106	author_corpus	Sangwa, S. (2025c). Secret societies, central banking, digital surveillance and the Great Reset: The serpentine strategy and biblical prophecy. Open Journal of Stigmatized Knowledge & Suppressed Discourses, 1(2). https://doi.org/10.65655/pe2j7b54	fulltext_excluded: Outside the final IJDRR empirical scope after target-journal rescreeing; retained for companion theological/interpretive study
107	author_corpus	Sangwa, S. (2025d). Statistical evidence of covert weather warfare in the 2025 global disaster surge: Assessing climate geoengineering impacts. Open Journal of Stigmatized Knowledge & Suppressed Discourses. https://doi.org/10.65655/fk8mjc27	included
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109	author_corpus	Sangwa, S. (2026a). Digital identity, conditional access, and human dignity: A Christian policy analysis of biometric governance, surveillance infrastructure, and data justice. Open Journal of Stigmatized Knowledge & Suppressed Discourses, 2(2). https://doi.org/10.65655/OpenChristianPress.2026.111	fulltext_excluded: Digital-governance focus without direct hazard/attribution relevance
110	author_corpus	Sangwa, S. (2026b). From information integrity to epistemic centralization: Stigmatized knowledge, suppressed discourses, and the United Nations' Global Digital Compact. Open Journal of Stigmatized Knowledge & Suppressed Discourses, 2(2). https://doi.org/10.65655/openchristianpress.139	included
111	author_corpus	Sangwa, S. (2026c). From stigmatized knowledge to disciplined discernment: Toward a Christian social epistemology of suppressed discourses, conspiracy labels, and institutional knowledge control [Manuscript]. Open Christian University.	fulltext_excluded: Outside the final IJDRR empirical scope after target-journal rescreeing; retained for companion theological/interpretive study
112	author_corpus	Sangwa, S. (2026d). Proof-of-human systems and conditional participation: A Scripture-first analysis of biometric governance in the age of AI. Open Journal of Business Theology. https://doi.org/10.65655/openchristianpress.121	fulltext_excluded: Outside the final IJDRR empirical scope after target-journal rescreeing; retained for companion theological/interpretive study
113	author_corpus	Sangwa, S. (2026e). The stages of World War III as narrative policy: Computational mapping of conspiracy discourse and biblical prophecy. Open Journal of Stigmatized Knowledge & Suppressed Discourses, 2(1). https://doi.org/10.65655/ynayd346	fulltext_excluded: Outside the final IJDRR empirical scope after target-journal rescreeing; retained for companion theological/interpretive study

ID	Stratum	Reference	Status / reason
114	author_corpus	Sangwa, S., & Mutabazi, P. (2025a). Misinformation laws and free speech: Biblical theology and constitutional principles for global social media governance. <i>Open Journal of Business Theology</i> (ISSN : 2788-709X), 5(3). https://doi.org/10.65655/0nwajh64 https://doi.org/10.65655/0nwajh64	fulltext_excluded: Outside the final IJDRR empirical scope after target-journal rescreening; retained for companion theological/interpretive study
115	author_corpus	Sangwa, S., & Mutabazi, P. (2025b). Programmable CBDCs, digital identity, ISO 20022, and AI: Reconfiguring power in payment infrastructures. <i>Open Journal of Stewardship Economics & Ethical Innovation</i> (ISSN: 3105-3068), 1(2). https://doi.org/10.65655/p0w2r666 https://doi.org/10.65655/p0w2r666	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
116	author_corpus	Sangwa, S., Mutabazi, P., & Muvunyi, J. B. (2026). Disciplined discernment and stigmatized knowledge: A Christian social epistemology of conspiracy labels, institutional trust, and knowledge control. <i>Open Journal of Stigmatized Knowledge & Suppressed Discourses</i> , 2(1). https://doi.org/10.65655/OpenChristianPress.2026.110	fulltext_excluded: Outside the final IJDRR empirical scope after target-journal rescreening; retained for companion theological/interpretive study
117	author_corpus	Saunier, É. (2002). Franc-maçonnerie et Révolution française: Vers une nouvelle orientation historiographique. <i>Cahiers d'histoire. Revue d'histoire critique</i> , 87. https://doi.org/10.4000/chrhc.1672	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
118	author_corpus	Sayler, K. M. (2026, January 7). Defense primer: Directed-energy weapons (IF11882). Congressional Research Service. https://www.congress.gov/crs-product/IF11882	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
119	author_corpus	Schmitt, C. (2005). <i>Political theology: Four chapters on the concept of sovereignty</i> (G. Schwab, Trans.). University of Chicago Press. (Original work published 1922)	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
120	author_corpus	Scholte, J. A. (2023). Norm dynamics in a post-hegemonic world: Multistakeholder global governance after liberal order. <i>Review of International Political Economy</i> , 30(4), 987-1013. https://doi.org/10.1080/09692290.2023.2213441	included
121	author_corpus	Sergi, A., & Vannucci, A. (2023). Protection and obedience: Deviant Masonry, corruption, and Mafia in Italy. <i>Deviant Behavior</i> , 44(9), 1349-1367. https://doi.org/10.1080/01639625.2023.2190001	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
122	author_corpus	Shakibi, Z. (2007). <i>Revolutions and the collapse of monarchy: Human agency and the making of revolution in France, Russia, and Iran</i> . I.B. Tauris.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
123	author_corpus	Slaughter, A.-M. (2004). <i>A new world order</i> . Princeton University Press.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
124	author_corpus	State Council of the People's Republic of China. (2020). Opinions on promoting highquality development of weather modification. State Council.	included
125	author_corpus	Steffek, J. (2008). Public accountability and the public sphere of international governance (RECON Online Working Paper 2008/02). https://ideas.repec.org/p/erp/reconx/p0022.html	included

ID	Stratum	Reference	Status / reason
126	author_corpus	Stigler, G. J. (1971). The theory of economic regulation. The Bell Journal of Economics and Management Science, 2(1), 3-21. https://doi.org/10.2307/3003160	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
127	author_corpus	Stockholm International Peace Research Institute. (2025). Trends in world military expenditure, 2024. https://www.sipri.org/publications/2025/sipri-fact-sheets/trends-world-military-expenditure-2024	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
128	author_corpus	Swann, J., & Félix, J. (Eds.). (2013). The crisis of the absolute monarchy: France from Old Regime to revolution. British Academy. https://doi.org/10.5871/bacad/9780197265383.001.0001	fulltext_excluded: Historical crisis context not relevant to modern environmental hazards
129	author_corpus	Teo, S. A. (2023). Human dignity and AI: Mapping the contours and utility of human dignity in addressing challenges presented by AI. Law, Innovation and Technology, 15(1), 241-279. https://doi.org/10.1080/17579961.2023.2184132 Toward a Christian social epistemology of suppressed discourses, conspiracy labels, and institutional knowledge control. Sangwa, S. (2026). Health, environment, contested claims, and evidence evaluation: Biblical wisdom for truth, care, and discernment in a confused age.	fulltext_excluded: Digital-governance focus without direct hazard/attribution relevance
130	author_corpus	Umbrello, S., & O'Hara, P. (2025). Human dignity in the digital age. Journal of Ethics and Emerging Technologies, 35(1). https://doi.org/10.55613/jeet.v35i1.165	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
131	author_corpus	UNESCO. (2023). Guidelines for the governance of digital platforms. https://www.unesco.org/en/internet-trust/guidelines	included
132	author_corpus	UNESCO. (2025, October 1). Deepfakes and the crisis of knowing. https://www.unesco.org/en/articles/deepfakes-and-crisisknowing	included
133	author_corpus	United Arab Emirates Research Program for Rain Enhancement Science. (2026). Seventh cycle research priorities and awards. National Center of Meteorology.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
134	author_corpus	United Nations. (2019). The age of digital interdependence: Report of the UN SecretaryGeneral's High-level Panel on Digital Cooperation. https://www.un.org/techenvoy/sites/www.un.org.techenvoy/files/s/hlp_on_digital_cooperation-report_final.pdf	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
135	author_corpus	United Nations. (2020). Roadmap for digital cooperation. https://www.un.org/en/content/digital-cooperation-roadmap/as-sets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
136	author_corpus	United Nations. (2023). Our Common Agenda: Policy brief 5. A Global Digital Compact An open, free and secure digital future for all. https://www.un.org/sites/un2.un.org/files/our-common-agendapolicy-brief-gobal-digi-compact-en.pdf	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
137	author_corpus	United Nations. (2024). Global Digital Compact. United Nations.	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
138	author_corpus	United Nations. (2024a). Pact for the Future (A/RES/79/1). https://www.un.org/en/summit-of-the-future/pact-for-the-future	included

ID	Stratum	Reference	Status / reason
139	author_corpus	United Nations. (2024b). Global Digital Compact. https://www.un.org/global-digital-compact/sites/default/files/2024-09/Global%20Digital%20Compact%20-%20English_0.pdf	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
140	author_corpus	United Nations. (2024c). United Nations Global Principles for Information Integrity. https://www.un.org/sites/un2.un.org/files/un-global-principlesfor-information-integrity-en.pdf	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
141	author_corpus	United Nations. (2024d). United Nations Convention against Cybercrime; Strengthening international cooperation for combating certain crimes committed by means of information and communications technology systems and for the sharing of evidence in electronic form of serious crimes (A/RES/79/243). https://digitallibrary.un.org/record/4071955	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
142	author_corpus	United Nations Advisory Body on Artificial Intelligence. (2024). Governing AI for humanity: Final report. https://www.un.org/sites/un2.un.org/files/governing_ai_for_hu_manity_final_report_en.pdf United Nations Department of Economic and Social Affairs. (n.d.). Internet Governance Forum. https://publicadministration.un.org/en/themes/digital-government/wsis/internet-governance-forum	fulltext_excluded: Digital-governance focus without direct hazard/attribution relevance
143	author_corpus	United Nations Development Programme. (2023, September 15). Governing digital legal ID systems effectively to ensure inclusion and respect for human rights. https://www.undp.org/digital/blog/governing-digital-legal-id-systems-effectively-ensure-inclusion-and-respect-human-rights	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
144	author_corpus	United Nations Development Programme. (2024a). The DPI approach: A playbook. https://www.undp.org/publications/dpi-approach-playbook	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
145	author_corpus	United Nations Development Programme. (2024b, September 22). UN releases Universal DPI Safeguards Framework to promote safe and inclusive digital public infrastructure. https://www.undp.org/press-releases/un-releases-universal-dpi-safeguards-framework-promote-safe-and-inclusive-digital-public-infrastructure	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
146	author_corpus	United Nations General Assembly. (2024). The Pact for the Future (A/RES/79/1). https://www.un.org/sites/un2.un.org/files/sotfpact_for_the_future_adopted.pdf	included
147	author_corpus	United Nations General Assembly. (2025). Terms of reference and modalities for the establishment and functioning of the Independent International Scientific Panel on Artificial Intelligence and the Global Dialogue on Artificial Intelligence Governance (A/RES/79/325). United Nations Digital Library. https://digitallibrary.un.org/record/4087699/files/A_RES_79_325-EN.pdf	fulltext_excluded: Digital-governance focus without direct hazard/attribution relevance
148	author_corpus	United Nations High Commissioner for Refugees. (2025, June 12). Global trends: Forced displacement in 2024. https://www.unhcr.org/global-trends	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
149	author_corpus	United Nations Office for Disarmament Affairs. (1976). Convention on the prohibition of military or any other hostile use of environmental modification techniques. United Nations. https://disarmament.unoda.org/en/mod/ United Nations Statistics Division. (n.d.). UN Legal Identity Agenda. https://unstats.un.org/legal-identity-agenda/ University of Alaska Fairbanks. (n.d.). HAARP frequently asked questions. Geophysical Institute. https://haarp.gi.alaska.edu/faq	fulltext_excluded: Digital-governance focus without direct hazard/attribution relevance
150	author_corpus	U.S. Department of State. (1967, January 13). Memorandum from the Deputy Under Secretary of State for Political Affairs to Secretary of State Rusk: Weather modification in North Vietnam and Laos (Project Popeye). Office of the Historian, Foreign Relations of the United States. https://history.state.gov/historicaldocuments/frus1964-68v28/d274	included
151	author_corpus	U.S. Environmental Protection Agency. (2025). Information on contrails from aircraft. https://www.epa.gov/regulations-emissions-vehicles-and-engines/Contrails	included

ID	Stratum	Reference	Status / reason
152	author_corpus	U.S. Geological Survey. (2022). Induced earthquakes. https://www.usgs.gov/programs/earthquake-hazards/science/induced-earthquakes	included
153	author_corpus	U.S. Geological Survey. (2025). How is human activity causing earthquakes? U.S. Geological Survey.	included
154	author_corpus	U.S. Government Accountability Office. (2026). Weather modification: NOAA should strengthen oversight to ensure reliable information (GAO-26-108013). https://www.gao.gov/products/gao-26-108013 U.S. Senate, Committee on Foreign Relations, Subcommittee on Oceans and	included
155	author_corpus	International Environment. (1974). Weather modification hearing. U.S. Government Printing Office.	included
156	author_corpus	Van der Pijl, K. (2023). From indirect to direct rule? Transnational policy planning bodies and global governance in the COVID crisis. <i>American Journal of Economics and Sociology</i> , 82(5), 629-660. https://doi.org/10.1111/ajes.12535 van Prooijen, J.-W., & Douglas, K. M. (2017). Conspiracy theories as part of history: The role of societal crisis situations. <i>Memory Studies</i> , 10(3), 323-333. https://doi.org/10.1177/1750698017701615	included
157	author_corpus	VanDrunen, D. (2016). Power to the people: Revisiting civil resistance in Romans 13:1-7 in light of the Noahic covenant. <i>Journal of Law and Religion</i> , 31(1), 4-18. https://doi.org/10.1017/jlr.2015.41	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
158	author_corpus	Ward, C., & Voas, D. (2011). The emergence of conspirituality. <i>Journal of Contemporary Religion</i> , 26(1), 103-121. https://doi.org/10.1080/13537903.2011.539846	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
159	author_corpus	Wolterstorff, N. (2012). <i>The mighty and the Almighty: An essay in political theology</i> . Cambridge University Press. https://doi.org/10.1017/CBO9781139225779	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
160	author_corpus	World Bank. (2025a). Identification for Development (ID4D) global dataset. https://id4d.worldbank.org/global-dataset World Bank. (n.d.). ID4D practitioner's guide. Identification for Development. https://id4d.worldbank.org/guide/about-guide	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
161	author_corpus	World Economic Forum. (2025). <i>The global risks report 2025</i> (20th ed.). https://www.weforum.org/publications/global-risksreport-2025/	included
162	author_corpus	World Meteorological Organization. (2025). WMO statement on weather modification. https://wmo.int/content/wmo-statement-weather-modification	included
163	author_corpus	World Meteorological Organization. (2026). <i>State of the global climate 2025</i> . https://wmo.int/publication-series/state-of-global-climate/stateof-global-climate-2025	included
164	author_corpus	Yakovaki, N. (2014). The Philiki Etaireia revisited: In search of contexts, national and international. <i>The Historical Review/La Revue Historique</i> , 11, 171-187. https://doi.org/10.12681/hr.334	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
165	author_corpus	York, N. L. (1993). Freemasons and the American Revolution. <i>The Historian</i> , 55(2), 315-330. https://doi.org/10.1111/j.1540-6563.1993.tb00899.x	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
166	author_corpus	Zürn, M. (2012). Global governance as multi-level governance. In D. Levi-Faur (Ed.), <i>The Oxford handbook of governance</i> (pp. 730-744). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199560530.013.0051	included

ID	Stratum	Reference	Status / reason
167	author_corpus	Zürn, M. (2018). A theory of global governance: Authority, legitimacy, and contestation. Oxford University Press. https://doi.org/10.1093/oso/9780198819974.001.0001	included
168	targeted_external	Page, M. J., et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. <i>BMJ</i> , 372, n71. https://doi.org/10.1136/bmj.n71	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
169	targeted_external	Rethlefsen, M. L., et al. (2021). PRISMA-S: an extension to the PRISMA statement for reporting literature searches in systematic reviews. <i>Systematic Reviews</i> , 10, 39. https://doi.org/10.1186/s13643-020-01542-z	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
170	targeted_external	Boin, A., 't Hart, P., & McConnell, A. (2009). Crisis exploitation: Political and policy impacts of framing contests. <i>Journal of European Public Policy</i> , 16(1), 81–106. https://doi.org/10.1080/13501760802453221	included
171	targeted_external	Reynolds, J. L. (2019). Solar geoengineering to reduce climate change: A review of governance proposals. <i>Proceedings of the Royal Society A</i> , 475, 20190255. https://doi.org/10.1098/rspa.2019.0255	included
172	targeted_external	Jinnah, S., & Dove, Z. (2025). Solar radiation management: A history of the governance and political milestones. <i>Environmental Science: Atmospheres</i> , 5, 656–673. https://doi.org/10.1039/D5EA00008D	included
173	targeted_external	Jones, M. W., et al. (2022). Global and regional trends and drivers of fire under climate change. <i>Reviews of Geophysics</i> , 60(3), e2020RG000726. https://doi.org/10.1029/2020RG000726	included
174	targeted_external	Knutson, T. R., et al. (2020). Tropical cyclones and climate change assessment: Part II. Projected response to anthropogenic warming. <i>Bulletin of the American Meteorological Society</i> , 101(3), E303–E322. https://doi.org/10.1175/BAMS-D-18-0194.1	included
175	targeted_external	Otto, F. E. L. (2023). Attribution of weather and climate events. <i>Annual Review of Environment and Resources</i> , 48, 813–828. https://doi.org/10.1146/annurev-environ-112621-083538	included
176	targeted_external	Keranen, K. M., & Weingarten, M. (2018). Induced seismicity. <i>Annual Review of Earth and Planetary Sciences</i> , 46, 149–174. https://doi.org/10.1146/annurev-earth-082517-010054	included
177	targeted_external	Centre for Research on the Epidemiology of Disasters. (2025). 2024 Disasters in Numbers: A Hot and Stormy Year. CRED. https://files.emdat.be/reports/2024_EMDAT_report.pdf	included
178	targeted_external	Delforge, D., et al. (2025). EM-DAT: The Emergency Events Database. <i>International Journal of Disaster Risk Reduction</i> . https://www.emdat.be/publications/	included
179	targeted_external	Smithsonian Institution Global Volcanism Program. (2026). Volcanoes of the World (v. 5.4.0). https://doi.org/10.5479/si.GVP.VOTW5-2026.5.4	included
180	targeted_external	U.S. Geological Survey. (2026). World – M7+ in 2025. https://earthquake.usgs.gov/earthquakes/browse/m7-world.php?year=2025	included
181	targeted_external	Munich Re. (2026, July 30). Lower losses, growing risks: the natural disaster review for the first half of 2026. https://www.munichre.com/en/company/media-relations/media-information-and-corporate-news/media-information/2026/natural-disaster-figures-first-half-2026.html	included
182	targeted_external	Swiss Re Institute. (2026, August 11). First-half 2026 insured natural catastrophe losses: below trend, rising risks. https://sigma.swissre.com/	included
183	targeted_external	Aon. (2026). 2026 Climate and Catastrophe Insight. https://www.aon.com/en/insights/reports/climate-and-catastrophe-report	included
184	targeted_external	NOAA Climate.gov. (2025, February 19). The weather and climate influences on the January 2025 fires around Los Angeles. https://www.climate.gov/news-features/event-tracker/weather-and-climate-influences-january-2025-fires-around-los-angeles	included

ID	Stratum	Reference	Status / reason
185	targeted_external	CAL FIRE. (2026). Palisades Fire incident record. https://www.fire.ca.gov/incidents/2025/1/7/palisades-fire	included
186	targeted_external	CAL FIRE. (2026). Eaton Fire incident record. https://www.fire.ca.gov/incidents/2025/1/7/eaton-fire	included
187	targeted_external	United States Government Accountability Office. (2026). Science & Tech Spotlight: Solar Geoengineering (GAO-26-108837). https://www.gao.gov/products/gao-26-108837	included
188	targeted_external	World Economic Forum. (2020). Digital Transformation: Powering the Great Reset. https://www3.weforum.org/docs/WEF_Digital_Transformation_Powering_the_Great_Reset_2020.pdf	included
189	targeted_external	World Economic Forum. (2020). Annual Report 2019–2020. https://www3.weforum.org/docs/WEF_Annual_Report_2019_2020.pdf	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
190	targeted_external	United Nations. (2024). Pact for the Future, Global Digital Compact and Declaration on Future Generations. https://www.un.org/en/summit-of-the-future/pact-for-the-future	included
191	targeted_external	Kreuder-Sonnen, C. (2019). Emergency powers of international organizations. Review of International Studies, 45(3), 440–459. https://doi.org/10.1017/S026021051900001X	screen_excluded: Outside environmental-hazard, attribution, governance, or epistemology scope
192	magnitude_extension	Klotzbach, P. J., Wood, K. M., Schreck, C. J., Bowen, S. G., Patricola, C. M., & Bell, M. M. (2022). Trends in global tropical cyclone activity: 1990-2021. Geophysical Research Letters, 49(6), e2021GL095774. https://doi.org/10.1029/2021GL095774	included

Supplement S15. Included evidence inventory

Table S9. Records included in the final IJDRR evidence map.

ID	Stratum	Reference
1	author_corpus	Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. International Organization, 54(3), 421-456. https://doi.org/10.1162/002081800551280
3	author_corpus	Advanced Research and Invention Agency. (2025). Exploring Climate Cooling. ARIA.
4	author_corpus	Advanced Research and Invention Agency. (2026). Exploring Climate Cooling: Frequently asked questions and experimental updates. ARIA.
8	author_corpus	Barkun, M. (2015). Conspiracy theories as stigmatized knowledge. Diogenes, 62(3-4), 114-120. https://doi.org/10.1177/0392192116669288
20	author_corpus	Centre for Research on the Epidemiology of Disasters. (2026). 2025 disasters in numbers: Earth, wind & fire. EM-DAT. https://files.emdat.be/reports/2025_EMDAT_report.pdf
21	author_corpus	China Meteorological Administration. (2025). Weather modification development and operational services in China. CMA.
25	author_corpus	Curran, D. (2023). Surveillance capitalism and systemic digital risk: The imperative to collect and connect and the risks of interconnectedness. Big Data & Society, 10(1), 1-12. https://doi.org/10.1177/20539517231177621
29	author_corpus	DiMascio, J., Feickert, A., O'Rourke, R., & Saylor, K. M. (2024, July 11). Department of Defense directed energy weapons: Background and issues for Congress (CRS Report R46925). Congressional Research Service. https://www.congress.gov/crs-product/R46925
30	author_corpus	Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. Current Directions in Psychological Science, 26(6), 538-542. https://doi.org/10.1177/0963721417718261 Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi,

ID	Stratum	Reference
31	author_corpus	F. (2019). Understanding conspiracy theories. <i>Political Psychology</i> , 40(S1), 3-35. https://doi.org/10.1111/pops.12568
33	author_corpus	Ellsworth, W. L. (2013). Injection-induced earthquakes. <i>Science</i> , 341(6142), 1225942. https://doi.org/10.1126/science.1225942
43	author_corpus	Foulger, G. R., Wilson, M. P., Gluyas, J. G., Julian, B. R., & Davies, R. J. (2018). Global review of human-induced earthquakes. <i>Earth-Science Reviews</i> , 178, 438-514. https://doi.org/10.1016/j.earscirev.2017.07.008
49	author_corpus	Gorwa, R. (2019). What is platform governance? <i>Information, Communication & Society</i> , 22(6), 854-871. https://doi.org/10.1080/1369118X.2019.1573914
50	author_corpus	Grusauskaite, K., Harambam, J., & Aupers, S. (2025). Reactionary exiles: How conspiracy theorists deal with socio-technological exclusion. <i>Cultural Sociology</i> , 19(4). https://doi.org/10.1177/17499755241248726
52	author_corpus	Haas, P. M. (1992). Introduction: Epistemic communities and international policy coordination. <i>International Organization</i> , 46(1), 1-35. https://doi.org/10.1017/S0020818300001442
72	author_corpus	Lerner, C. S. (2018). The tower of Babel revisited: Global governance as a problematic solution to existential threats. <i>North Carolina Journal of Law & Technology</i> , 19(1), 69-121. https://scholarship.law.unc.edu/ncjolt/vol19/iss1/4/
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Supplement S16. Claim-level falsification and interpretation rules

Claim	Pre-specified constraint/falsifier
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Claim	Pre-specified constraint/falsifier
Post-2018 generalized escalation	Would be weakened by lower or unchanged physical magnitude, human consequences or negative-control categories even if occurrence rises.
2025 distinct acceleration	Requires convergence across multiple independent indicators; a single hazard count is insufficient.
Weather-modification attribution	Requires evidence beyond capability: scalable mechanism, deployment, signature, counterfactual exclusion and actor linkage.
Earthquake engineering allegation	Large magnitude or unusual timing alone is insufficient; tectonic mechanism and energy scale must be addressed.
Wildfire directed-energy allegation	Requires device/platform evidence, predicted signatures and exclusion of ordinary ignition and fire-weather mechanisms.
Crisis manufacture	Cannot be inferred from institutional benefit, reform proposals, shared vocabulary or crisis instrumentalization.
Eschatological correspondence	Requires explicit biblical textual correspondence and must remain separate from physical attribution; it is weakened by forced one-to-one event matching, unsupported date-setting, or claims that contradict the empirical hazard record.

Supplement S17. Methodological audit and remaining limitations

- The CRED/UNDRR pre-2019 consequence baseline is reconstructed from rounded 2000-2019 totals, so ratios are approximate contextual sensitivities rather than fixed-vintage event-level estimates.
- EM-DAT disaster occurrence depends on impact thresholds, exposure, vulnerability and reporting and must not be interpreted as an exhaustive physical-hazard census.
- Economic losses remain exposure- and valuation-sensitive even when inflation treatment is stated; they are not a direct physical-intensity measure.
- Global tropical-cyclone ACE can coexist with regional changes and does not summarize rainfall, surge, landfall exposure or rapid intensification.
- Fire-carbon emissions do not substitute for burned area, fire radiative power or structure loss and 2025 coverage is incomplete.
- Annual cumulative seismic energy is dominated by the largest event and is used descriptively, not as an independent trend estimator.
- Formal breakpoint-agnostic event-level models require a harmonized fixed-vintage archive with consistent covariates. The manuscript therefore avoids claiming a breakpoint that the available summary products cannot identify defensibly.
- The evidence map was screened by a single investigator using a structured second-pass audit. This should be considered when evaluating selection reproducibility.
- The review was not prospectively registered. Search logic, ledger, exclusions and final corpus are disclosed to limit retrospective flexibility. The Christian eschatological component is an explicitly bounded interpretive layer: textual correspondence is not treated as physical attribution, proof of a prophetic timetable, or a substitute for hazard-specific causal analysis.