TECHNICAL DOCUMENTATION

Physical Risk: Storms

Scientific Climate Ratings
An EDHEC Venture

V1.00.01 – July 2025

About Scientific Climate Ratings

Scientific Climate Ratings is a new venture born from EDHEC's Climate Finance applied research ecosystem. It delivers forward-looking ratings that quantify the financial materiality of climate risks for infrastructure companies and investors worldwide. Leveraging high-resolution geospatial data, proprietary climate risk models, and the world's largest financial dataset for infrastructure assets, Scientific Climate Ratings evaluates both transition risks (linked to the shift toward a low-carbon economy) and physical risks (arising from climate hazards such as floods, storms, heatwaves, and wildfires).

The ratings offer a dual perspective:

- Potential Climate Exposure Ratings assess current exposure to future climate risks under a "continuity" scenario, reflecting the most likely pathway based on today's global policies and trends.
- Effective Climate Risk Ratings go further by integrating climate risk data into financial valuation models across multiple scenarios — each weighted by its probability of occurrence — to estimate the financial effects of climate-related risks until 2035 and 2050.

While initially focused on infrastructure, Scientific Climate Ratings will soon extend its methodology to the listed equities segment, applying the same scientific rigor and forward-looking approach to a broader set of financial assets.

Scientific Climate Ratings aims to set a new standard in climate risk management — driving informed and responsible decision-making for a more resilient future.

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This document summarises the development of the physical risk damage model on **Storms**, which is part of the ***Potential Climate Exposure Rating (PCER)*** and the ***Effective Climate Risk Rating (ECRR)***. It explains the general approach, provides the data sources used, justifies the methodology, and presents the results. For general information on the Scientific Climate Ratings, please see the respective technical documentations.

All procedures were developed by the *EDHEC Climate Institute*, hereafter referred to as ECI or "we."

1. General Approach

Storms, including extratropical storms and tropical cyclones, are among the most significant natural hazards, leading to considerable global damage. Over the past century, storms have been the second most frequently recorded disaster after floods (Lee et al., 2024) and the costliest, resulting in major economic losses (WMO, 2023).

Extratropical storms, more prevalent in mid-latitudes, cause severe disruptions due to high winds, flooding, and snow. **Tropical cyclones**, on the other hand, are driven by warm ocean waters and generate extreme winds, storm surges, and heavy rainfall, often resulting in catastrophic destruction (NOAA, 2023). High winds and flooding from extratropical storms regularly damage transportation networks, power grids, and agricultural resources. At the same time, tropical cyclones amplify these impacts with concentrated energy that can devastate entire urban centres. Coastal infrastructure, including ports and energy facilities, is particularly vulnerable to storm surges, which account for a significant proportion of cyclone-induced damages. Storms' cascading effects, such as displacement, economic stagnation, and long-term environmental harm, amplify their overall impact (Nederhoff et al., 2024).

Both types of storms are expected to increase in frequency and magnitude because of climate change, which exacerbates atmospheric instability and raises sea surface temperatures (Hawcroft et al., 2018; Sugi et al., 2016). Accordingly, storms are critical hazards to address globally.

To quantify physical risks stemming from storms, our approach follows a stepwise progression from sourcing inputs on assets and hazards to the geospatial transformation. This results in quantified physical metrics, representing the potential damage for each asset. Figure 1 summarises our approach, which we elaborate on in the methodology sections.

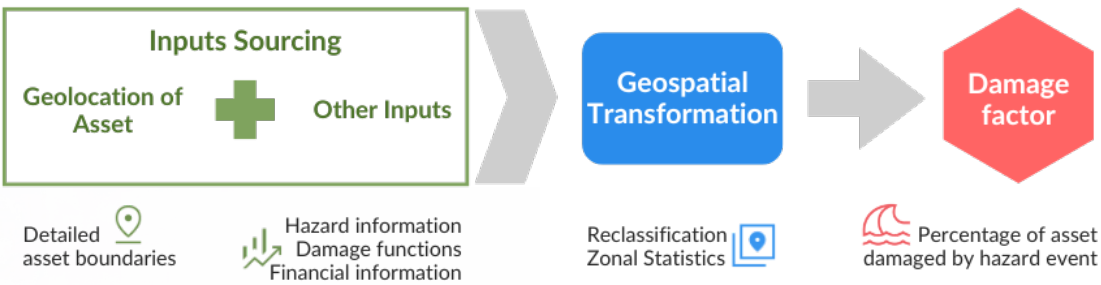


Figure 1: General approach for calculating physical hazard risks

2. Data Sources

To provide quantified storm risk metrics for specific physical assets, three key data points are needed:

- We include **financial information** for each identified asset (e.g., total asset value and revenue) as extracted from *infra*Metrics[1] to quantify the financial impact of each physical risk on the asset.
- Global **climate hazard information** (e.g., hazard maps) illustrates which areas would be affected to what extent by a particular hazard and, hence, specifies the proximity to a potential hazard. Table 1 provides details on the considered hazard maps and data sources.
- We also use **detailed asset boundaries** to define each asset's size and geolocation. These boundaries are prepared, checked, and updated regularly.

Combined, these inputs are proxies for an asset's *exposure* (i.e., the presence of assets in settings that could be adversely affected by hazard events) and account for its *vulnerability* (i.e., the propensity of an asset to be adversely affected by a hazard event) to a storm event.

3. Methodology

We adopt the framework previously established by Bouwer (2013) and Muis et al. (2015), who consider three main factors when measuring physical risks:

- the changing nature of hazards (due to climate change and natural weather variations),
- assets' vulnerability (the probability that assets will be damaged due to a hazard), and
- their exposure (the placement and characteristics of assets that could be impacted by hazards).

To account for assets' vulnerability and exposure to a given hazard, we utilise damage functions, also known as fragility curves (Prahl et al., 2016). Two types of damage are estimated by damage functions – absolute and relative. The **absolute damage** approach considers the value of assets and outputs the estimated monetary damage of an item or a group of items. The **relative damage** approach quantifies damage as a fraction or percentage of damage against the total damage and, hence, outputs a ratio expressed in percentage instead of a monetary value (Ghimire & Sharma, 2020). Our work focuses on the relative damage approach and its respective damage functions. This allows us to quantify the proportion of damage to each asset first, which can subsequently be transformed into absolute damage.

The following sections explain the steps for calculating physical risks from storms, from identifying the location to measuring the damage, and projecting the growth of damages in climate scenarios.

[1] infraMetrics is EIPA's index and data platform, offering asset-level investment metrics for private infrastructure across more than 20 markets by sector, business risk, and corporate structure peer groups. In our models, we update this data on a quarterly basis.

Table 2: Sources for storm hazard maps

Hazard type	Hazard unit	Maps resolution	Underlying data and models
Tropical cyclones	Max wind speed	Global 11km by 11km	Static hazard maps are derived from a state-of-the-art probabilistic tropical cyclone database (Bloemendaal et al, 2020). The database contains 10,000 years of synthetic cyclone activity. To statistically extend 38 years of historical data (from 1980 to 2018) to 10,000 years of cyclone data, the team applied STORM – a newly developed resampling algorithm – to historical cyclone data from the International Best Track Archive for Climate Stewardship (IBTrACS) project (Knapp, 2010). Additionally, Bloemendaal et al. (2023) provide similar hazard maps for four global climate models that represent the climate in 2050 based on the worst-case scenario RCP8.5. We include the model with median intensity for each return period for our future estimations.
		Australia 2km by 2km	A static dataset from the 2018 Australian National Tropical Cyclone Hazard Assessment, based on cyclone data for the time period from 1970 to 2016 (TCHA18; Arthur, 2018).
Extratropical storms	Max wind gust	Global 0.25° by 0.25°	Wind gusts for wind speeds above 33 metre per second are taken from the ERA5 re-analysis dataset, developed by the European Centre for Medium-Range Weather Forecasts (ECMWF; Hersbach et al., 2020). The ERA5 combines vast amounts of historical atmospheric, land, and oceanic climate observations with global estimates using advanced modelling and data assimilation systems. The dataset includes hourly data since 1940. ERA5 includes several wind parameters, such as wind speed, instantaneous wind gust, and wind gust since previous post-processing.
		Regional Europe: 11km by 11km Australia, Southeast Asia: 22km by 22km Africa, North America, South America: 44km by 44km	For future periods, we use daily maximum wind gusts provided by the CORDEX initiative (Giorgi & Gutowski, 2015), which are downscaled simulations from the CMIP6 outputs (Eyring et al., 2016). We calculate the intensity based on the median values of the CORDEX simulation outputs for different return periods and two RCPs – the intermediate RCP4.5 and the worst-case RCP8.5 scenario.
	Max wind speed	Global 25km by 25km	Outside of the specific regions, we apply the maximum daily wind speed (compared to wind gust) – a common variable from the high resolution CMIP6 simulations (Eyring et al., 2016). We take the specific output from the CNRM-CM6-1-HR model (Voldoire et al., 2019) and apply it to two RCPs – the intermediate RCP4.5 and the worst-case RCP8.5 scenario for three time horizons (2010, 2030, and 2050).

Note: The RCP8.5 is the worst-case scenario of the set of Representative Concentration Pathways (RCP) that were developed on demand of the IPCC to explore impacts of (future) greenhouse gas concentrations in the atmosphere on the climate (Van Vuuren et al., 2011).

3.1. Geospatial Transformation

To derive the expected damage from storms, we require several inputs. These inputs undergo a process known as **geospatial transformation**, in which individual data inputs are converted into the necessary format. Consequently, geospatial transformation involves a series of smaller processing steps, from reclassification to zonal statistics, that prepare the inputs unique to each asset.

These are the steps of the geospatial transformation needed to calculate damage from storms:

1. First, we extract detailed **geographical boundaries** of each asset and evaluate an asset's exact conditions and environment. This process, known as **geolocation**, involves manually checking that each asset is still operating and retrieving its address. We then proceed to draw the asset boundary and relevant geospatial outlines using a variety of commercial and open-source geographic information system platforms and map sources. Figure 2 shows an example of a geoshape extraction for Wellington International Airport.

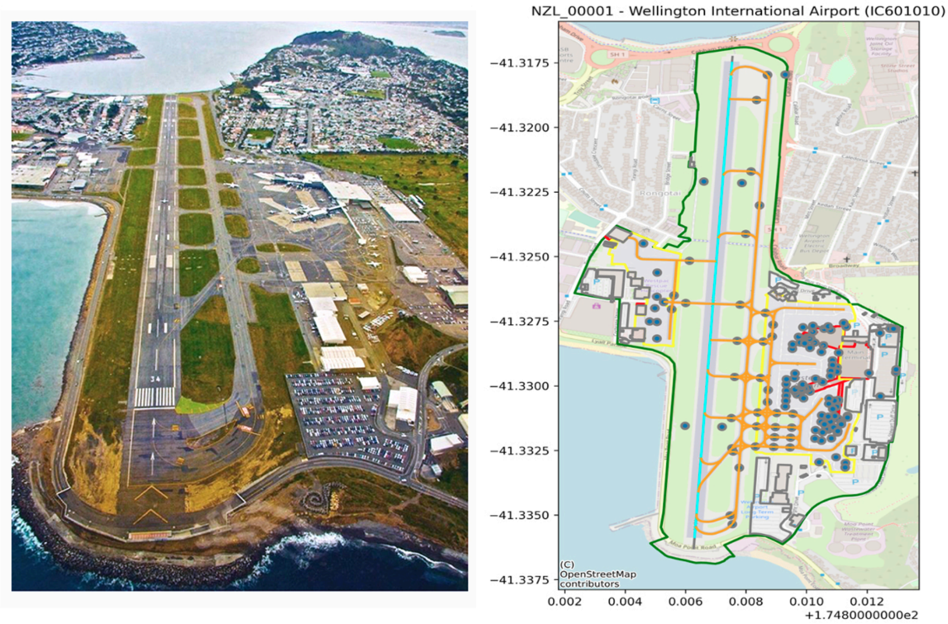


Figure 2: Example of a geoshape extraction for Wellington Airport

2. Second, we apply **Extreme Value Analysis (EVA)** to generate return periods[2] for the raw hazard maps that do not yet contain return periods. EVA is a statistical approach to model extreme events and a robust tool for calculating return periods of wind speeds. For this, we use the Gumbel distribution – a specific type of the Generalised Extreme Value (GEV) distribution characterised by a fixed shape with a light-tailed distribution.

[2] The return period estimates the average time interval between occurrences of a hazard event of a defined size or intensity. To obtain return periods, statistical estimates are first calculated for a range of all possible hazard events based on historical observations. If a particular hazard event value has a 1% frequency of occurrence, it has a one in a hundred probability of occurrence at any given year and is hence known as the 100-year return period.

The Gumbel distribution is widely used in climate studies to model annual maximum wind speeds. Compared to other GEV types, it provides a straightforward and widely accepted method for estimating return periods of wind speeds (Naess, 1998).

3. Third, we extract the expected maximum wind speed in metres per second for each pixel (i.e., a square patch of land) of the generated **storm hazard maps** with return periods. Each pixel is transformed from wind speed to expected damage based on damage functions.
   Damage functions are mathematical models that convert the severity of a physical hazard into the damage sustained by specific assets, considering the assets' exposure and vulnerability (Prahl et al., 2016). The output of these relative damage functions is the **damage factor**, typically defined as the ratio of repair costs to replacement costs (ibid.). The calculated damage factors range from 0 to 1, where 0 indicates no damage, and 1 signifies complete damage. In the latter case, the cost of repair is equivalent to the cost of replacement. Consequently, damage factors are interpreted interchangeably as the percentage of the asset value that requires repair or replacement.
   Accordingly, this **reclassification** process creates new hazard maps that provide information on respective hazards (wind speed) and damage factors (level of damage in percent) for each TICCS[3] subclass in each country.

4. Next, we apply **zonal statistics** to the asset's boundaries and the reclassified storm hazard maps to derive asset-specific damage from storms. This approach overlays a given asset boundary on the corresponding storm hazard map and calculates the average of all damage values per pixel that fall within that boundary. The output provides an asset's expected storm damage for a given return period.

5. Lastly, we conduct a process known as **interpolation** to obtain a full set of consistent return periods for tropical cyclones that also align with the return periods we developed for the extratropical storm hazard map using EVA. This approach follows the assumption that the damage intensity grows linearly between return periods.

We developed our physical risk model for storms (as of December 2024) based on the work of Unanwa and colleagues (2000). It includes four unique damage functions for institutional, mid-rise, commercial/industrial, and residential buildings in the United States. Generally, storm damage functions consider various components of a building (e.g., roof, windows, frame, etc.). In practice, we use forward-looking maps that describe the intensity of storm hazards at various return periods.

[3] The Infrastructure Company Classification Standard (TICCS) provides investors with a frame of reference for approaching the infrastructure asset class. It offers an alternative to investment categories inherited from the private equity and real estate universe, which are less informative when classifying infrastructure investments (Scientific Infra, 2022). We focus only on relevant TICCS subclasses, which are theoretically exposed to physical risks. Accordingly, we exclude underground asset classes, like long-distance cables and most networks, from most physical risk calculations.

3.2. Expected Damage from Storms

Based on the previous steps, we compute the average annual loss for a specific hazard type and based on the sum of all return periods (considering that every year, there is a specific probability for storm hazard events of various return periods to happen). For this, we compute the expected damage (expressed in percentage) for each asset by combining the damage factors for all return periods into one overall damage factor value for a particular hazard. To calculate the average annual loss in monetary terms, we multiply the expected damage by the total asset value. This is also referred to as the **expected damage value**. To calculate the expected damage for a given year, we combine the damage factor with a hazard's probability of happening (Bressan et al., 2024; see also Wilks, 2011.

In our calculation, we draw a clear relationship between an event's likelihood, needed for calculating expected damage, and its cumulative frequency, which is often easier to work with for risk modelling. With this perspective shift from individual probabilities to cumulative frequencies, we use a more intuitive and practical approach to modelling physical risks. This provides a solid foundation for assessing hazards and their associated damages in a probabilistic framework.

3.3. Growth of Storm Damages in Climate Scenarios

IIn order to calculate storm damages for climate scenarios and make future predictions, we need to estimate the hazard intensity in future climate scenarios and adapt the expected damage accordingly. This is possible using the future assessments on tropical cyclones by Bloemendaal et al. (2023) and the future return periods and intensities from the CORDEX simulations on extratropical storms (Giorgi & Gutowski, 2015). As the CORDEX dataset uses different resolutions, which may lead to inconsistencies, we calculate the average annual increase in storm event intensity for each return period, year, and scenario. If the assessed location is outside of the regions specified (see Table 1), we calculate the average annual increase based on the daily maximum wind speed (instead of wind gust) from the high-resolution CMIP6 simulation (Eyring et al., 2016). Based on this information, we can then combine present storm intensity with the various average annual intensity increases to derive future intensities and storm damages.

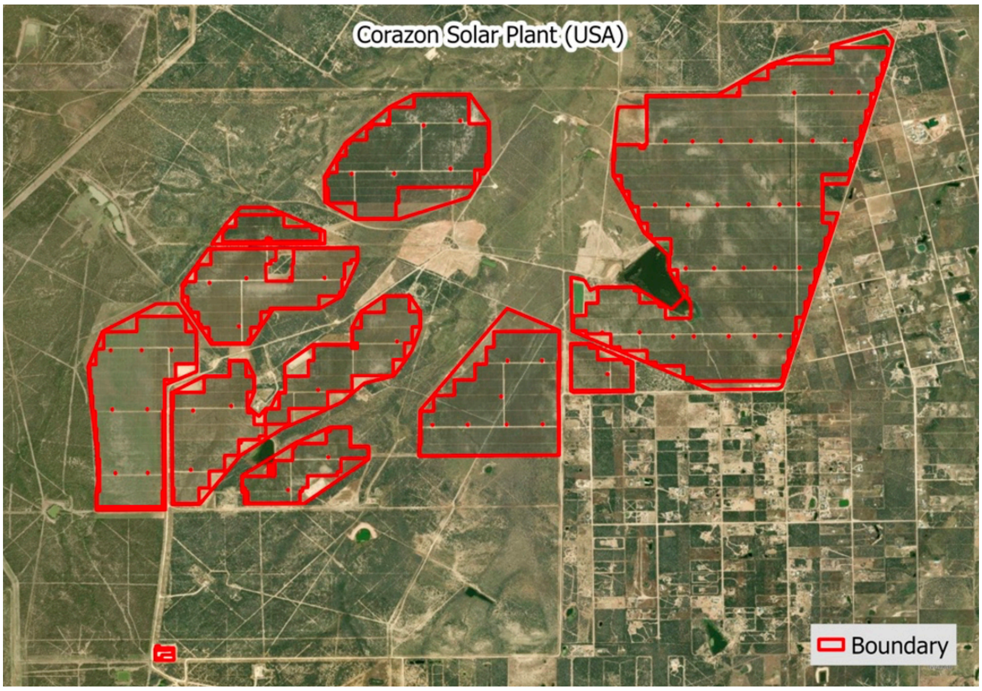
4. Results

Our findings are precise and widely applicable, spanning across various sectors and countries.

4.1. Detailed Asset Boundaries

Typical market solutions assess physical risks using an approximate buffer and a single coordinate representing the asset's location (a point provided by the user). This simplified data results in risk estimations that are less accurate than those derived from detailed asset boundaries. We illustrate this approach in our example of the *Corazon* solar power plant in the United States and a 500-year storm risk calculation. As shown in Figure 3, the detailed asset boundary approach has produced an asset-specific estimation of physical damage at risk with an expected value of USD 9.7 million at risk.

Figure 3: *Example of storm damage to the Corazon solar power plant in the United States*



Our solution:

Detailed asset boundary and resulting wind speed and risk estimation, which is more accurate.

Average wind speed:
39 metres per second

Physical Damage at Risk:
4.5%

Physical Value at Risk:
USD 9.7 million

Annualised loss:
USD 19,000

As infrastructure assets can span over large, irregular areas (like airports or utilities) or stretch across hundreds of kilometres (such as roads and wind farms), physical risk metrics based on single-point or vector geolocation are unlikely to represent an asset's physical risk exposures correctly. A more accurate assessment requires knowing the precise spatial footprint of assets and the varying levels of physical risk that could materialise across its entire length or area.

References

Arthur, C. (2018). 2018 national tropical cyclone hazard assessment. *Geoscience Australia, Record 2018, 40*. https://doi.org/10.11636/Record.2018.040

Bloemendaal, N., Haigh, I.D., de Moel, H., Muis, S., Haarsma, R.J., & Aerts, J.C. (2020). Generation of a global synthetic tropical cyclone hazard dataset using STORM. *Scientific Data, 7, 40*. https://doi.org/10.1038/s41597-020-0381-2

Bloemendaal, N., de Moel, H., Dullaart, J., Haarsma, R.J., Haigh, I.D., Martinez, A.B., Muis, S., Roberts, M., Ward, P.J., van der Wiel, K., & Aerts, J.C. (2023). STORM climate change tropical cyclone wind speed return periods (Version 4) [Dataset]. *4TU. ResearchData*. https://doi.org/10.4121/14510817.V4

Bouwer, L.M. (2013). Projections of future extreme weather losses under changes in climate and exposure. *Risk Analysis, 33(5)*, 915–930. https://doi.org/10.1111/j.1539-6924.2012.01880.x

Bressan. G. Duranović, A., Monasterolo, I., & Battiston, S. (2024). Asset-level assessment of climate physical risk matters for adaptation finance. *Nature Communications, 15*, 5371. https://doi.org/10.1038/s41467-024-48820-1

Eyring, V., Bony, S., Meehl, G.A., Senior, C.A., Stevens, B., Stouffer, R.J., & Taylor, K.E. (2016). Overview of the Coupled Model Intercomparison Project Phase 6 (CMIP6) experimental design and organization. *Geoscientific Model Development, 9(5)*, 1937–1958. https://doi.org/10.5194/gmd-9-1937-2016

Ghimire, E., & Sharma, S. (2020). Flood damage assessment in HAZUS using various resolution of data and one-dimensional and two-dimensional HEC-RAS depth grids. *Natural Hazards Review, 22(1)*. https://doi.org/10.1061/(ASCE)NH.1527-6996.0000430

Giorgi, F. & Gutowski, W.J. (2015). Regional dynamical downscaling and the CORDEX initiative. *Annual Review of Environment and Resources, 40*. 467–490. https://doi.org/10.1146/annurev-environ-102014-021217

Hawcroft, M., Walsh, E., Hodges, K., & Zappa, G. (2018). Significantly increased extreme precipitation expected in Europe and North America from extratropical cyclones. *Environmental Research Letters, 13(12)*, 124006. https://doi.org/10.1088/1748-9326/aaed59

Hersbach, H., Bell, B., Berrisford, P., Hirahara, S., Horányi, A., Muñoz-Sabater, J., Nicolas, J., Peubey, C., Radu, R., Schepers, D., Simmons, A., Soci, C., Dee, D. P., & Thépaut, J.-N. (2020). The ERA5 global reanalysis. *Quarterly Journal of the Royal Meteorological Society, 146(730)*, 1999–2049. https://doi.org/10.1002/qj.3803

Knapp, K.R., Kruk, M.C., Levinson, D.H., Diamond, H.J., & Neumann, C.J. (2010). The international best track archive for climate stewardship (IBTrACS) unifying tropical cyclone data. *Bulletin of the American Meteorological Society, 91(3)*, 363–376. https://doi.org/10.1175/2009BAMS2755.1

Lee, R., White, C.J., Adnan, M.S., Douglas, J., Mahecha, M.D., O'Loughlin, F.E., Patelli, E., Ramos, A.M., Roberts, M.J., Martius, O., Tubaldi, E., van den Hurk, B., Ward, P.J., & Zscheischler, J. (2024). Reclassifying historical disasters: From single to multi-hazards. *Science of The Total Environment, 912*, 169120. https://doi.org/10.1016/j.scitotenv.2023.169120

Muis, S., Güneralp, B., Jongman, B., Aerts, J.C., & Ward, P.J. (2015). Flood risk and adaptation strategies under climate change and urban expansion: A probabilistic analysis using global data. *Science of The Total Environment, 538*, 445–457. https://doi.org/10.1016/j.scitotenv.2015.08.068

Naess, A. (1998). Estimation of long return period design values for wind speeds. *Journal of Engineering Mechanics, 124(3)*, 252–259. https://doi.org/10.1061/(asce)0733-9399(1998)124:3(252)

Nederhoff, K., Leijnse, T.W., Parker, K., Thomas, J., O'Neill, A., van Ormondt, M., McCall, R., Erikson, L., Barnard, P.L., Foxgrover, A., Klessens, W., Nadal-Caraballo, N.C., & Massey, T.C. (2024). Tropical or extratropical cyclones: What drives the compound flood hazard, impact, and risk for the United States Southeast Atlantic Coast? *Natural Hazards, 120(9)*, 8779–8825. https://doi.org/10.1007/s11069-024-06552-x

NOAA (2023). Hurricanes. Frequently Asked Questions. *Atlantic Oceanographic & Meteorological Laboratory*. https://www.aoml.noaa.gov/hrd-faq/#what-is-a-hurricane

Prahl, B.F., Rybski, D., Boettle, M., & Kropp, J.P. (2016). Damage functions for climate-related hazards: Unification and uncertainty analysis. *Natural Hazards and Earth System Sciences, 16(5)*, 1189–1203. https://doi.org/10.5194/nhess-16-1189-2016

Scientific Infra (2022). The Infrastructure Company Classification Standard (TICCS). 2022 Edition – includes NACE and EU Taxonomy. *Scientific Infra Documentation*. https://publishing.edhecinfra.com/standards/ticcs_2022.pdf

Sugi, M., Murakami, H., & Yoshida, K. (2016). Projection of future changes in the frequency of intense tropical cyclones. *Climate Dynamics, 49(1–2)*, 619–632. https://doi.org/10.1007/s00382-016-3361-7

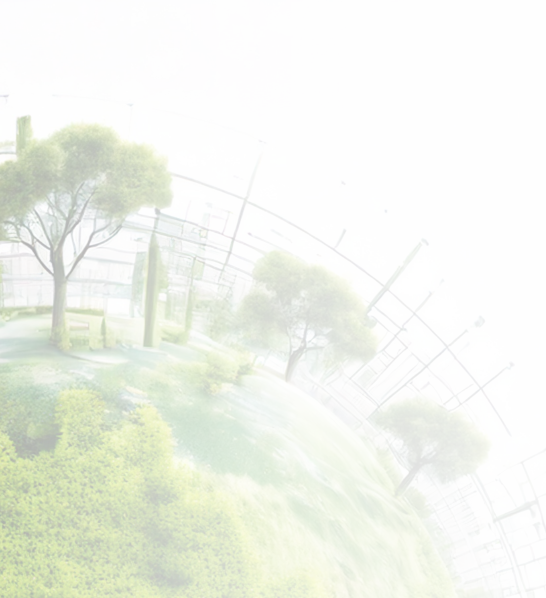
Unanwa, C.O., McDonald, J.R., Mehta, K.C., & Smith, D.A. (2000). The development of wind damage bands for buildings. *Journal of Wind Engineering and Industrial Aerodynamics, 84(1)*, 119–149. https://doi.org/10.1016/S0167-6105(99)00047-1

Van Vuuren, D.P., Edmonds, J., Kainuma, M., Riahi, K., Thomson, A., Hibbard, K., Hurtt, G.C., Kram, T., Krey, V., Lamarque, J.-F., Masui, T., Meinshausen, M., Nakicenovic, N., Smith, S.J., & Rose, S.K. (2011). The representative concentration pathways: An overview. *Climatic Change, 109*, 5-31. https://doi.org/10.1007/s10584-011-0148-z

Voldoire, A., Saint-Martin, D., Sénési, S., Decharme, B., Alias, A., Chevallier, M., Colin, J., Guérémy, J.-F., Michou, M., Moine, M.-P., Nabat, P., Roehrig, R., Salas y Mélia, D., Séférian, R., Valcke, S., Beau, I., Belamari, S., Berthet, S., Cassou, C. ... & Waldman, R. (2019). Evaluation of CMIP6 DECK experiments with CNRM-CM6-1. *Journal of Advances in Modeling Earth Systems, 11(7)*, 2177–2213. https://doi.org/10.1029/2019MS001683

Wilks, D.S. (2011). *Statistical Methods in the Atmospheric Sciences*. Academic Press.

WMO. (2023, May 22). Atlas of mortality and economic losses from weather, climate and water-related hazards (1970-2021). *World Meteorological Organization*. https://wmo.int/publication-series/atlas-of-mortality-and-economic-losses-from-weather-climate-and-water-related-hazards-1970-2021



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