



WeatherProof Insurance

**Proposal Form** 



# About WeatherProof

## About us

WeatherProof is a specific weather insurance product which has been designed to protect any business which is affected by the Weather.

Through our exclusive partnership with Athenium Analytics, a leading provider of global weather data and predictive analytics, we can supply global weather insurance solutions based on the precise latitude and longitude of your risk, providing tailored, scientific cover to suit your exposure to snow, rain, wind, or extremes of temperature.

# Why choose WeatherProof?

50 times more global historical climate data than any other provider, hour by hour for every country and every ocean.

Fast and efficient claims service. Provision of a verification report within 48 hours. No onsite observers, no loss adjusters, no hassle.

#### Who we insure

Wherever you are in the world, whatever your industry sector, we can source individual weather insurance solutions for your specific exposure whether this is Event, Leisure, Sport, Film and TV. Agriculture, Construction, Energy, Food and Drink, Retail, Tourism or Local Authority.

# Our products

Event, Film and TV, Cost Containment, Income Stabilisation or Sales Promotion

#### How it works

We price and verify using the same data source. We recommend that you read Addendum 3 for full details but in short, our verification sources are:

- Our Gridded Data System Model. Athenium Analytics split the world into grids ranging from 1km by 1km in radius to 30km by 30km depending on the Insured Weather Location and the Insured Weather Peril. Your location will be situated somewhere in one of these grids. The data for each grid is sourced from Weather Stations, Radars and Satellites and your pricing and verification will be based on an average of the weather readings across your grid. Or
- · A Ground Weather Station which records and reports on the Insured Weather Perils as selected by you.

The choice is yours.

As such, an ATHENIUM ANALYTICS LLC WDPS report will be the **ONLY** weather data report relied upon in the settlement of a claim under a purchased Policy. Please see Addendum 3.

In the event of verified loss under this policy, we will pay the amount stated in the schedule in full.

#### What we need

A completed proposal form as below. If you would like to include more information, please append it to this submission.

Because this insurance covers weather, it is a requirement that we receive a fully completed application <u>at least 14 days</u> prior to the event date and before binding, we require that you sign a claims verification documents in acceptance of the policy terms and conditions.

# Contact

If you have any further questions, please don't hesitate to contact us on:

weatherproof@tmhcc.com or +44 (0)20 7648 1282 or at www.tmhccweatherproof.com



# About the insured

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7	Ful	l add	ress

# Insured weather exposure

- 3. Type of event or business
- 4. Name of event or type of exposure
- 5. Venue Address

Latitude

Longitude

# Insured weather period

6. Period of cover(s)

Date(s)

Start/end hour(s) (24 hour)

# Insured weather peril (see addendum 1)

7. Weather peril type (please include threshold and unit of measurement)

Peril	Unit		t	Threshold	
RAIN: Incremental Accumulation	mm	cm	inches		
RAIN: Consecutive Dry Hours	mm	cm	inches		
RAIN: Non-Consecutive Dry Hours	mm	cm	inches		
SNOW: Incremental Accumulation	mm	cm	inches		
TEMPERATURE: Maximum	(°C)	(°F)			
TEMPERATURE: Minimum	(°C)	(°F)			
WIND: Maximum Sustained Excluding Gusts	kph	mph			
WIND: Gusting	kph	mph			
OTHER: (please specify)					



um insured Amount (please provide a per day breakdown (if necessary))
Currency
Representing
ote: this does not have to represent your 100% exposure
ales period
). If your insured event is a sales promotion please state the sales period (s) below (date and times)
From To
Declaration
ease carefully read the below addendum 1, 2 and 3 before signing:
We agree that this proposal form and all other written information which is provided are incorporated into and form the basis of an ontract of insurance.
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# Addendum 1 - insured weather peril definitions

#### Rain: Incremental accumulation

The total quantity of rain to fall within the Insured Weather Period at the Insured Weather Location.

#### Rain: Non-consecutive dry hours

A specified number of insured dry hours which pass in within the Insured Weather Period at the Insured Weather Location. A dry hour is defined as an hour in which less than a pre-determined quantity of rain falls.

This predetermined quantity is usually 0.01 inches but it can be more if the Insured so wishes and so instructs.

In the example below, a client has bought the following cover:

#### Insured weather period:

15/07/2015. 8am-8pm.

## Insured weather peril:

Rain: Non Consecutive Dry Hours (9 hours from 12) i.e. the client needs any 9 dry hours between 8am and 8pm for their event to go ahead or to complete their film shoot. So a claim is triggered if there are 4 hours or more between 8am and 8pm in which the requested rain threshold occurs per hour.

Time	Insured Hour	Recorded Rainfall (Inches)		
		Claim Scenario (8 Dry Hours)	No Claim Scenario (10 Dry Hours)	
8am-9am	Yes	0.00	0.00	
9am-10am	Yes	0.00	0.00	
10am-11am	Yes	0.03	0.03	
11am-12am	Yes	0.00	0.00	
12pm-1pm	m-1pm Yes 0.00		0.00	
1pm-2pm	Yes	0.00	0.00	
2pm - 3pm	Yes	0.04	0.30	
3pm - 4pm	Yes	0.06	0.00	
4pm - 5pm	Yes	0.00	0.00	
5pm-6pm	Yes	0.00	0.00	
6pm-7pm	Yes	0.00	0.00	
7pm-8pm	Yes	2.00	0.00	

#### Rain: Consecutive dry hours

A specified number of insured dry hours which pass in consecutive, chronological order within the Insured Weather Period at the Insured Weather Location. A dry hour is defined as an hour in which a pre-determined quantity of rain or less falls.

This predetermined quantity is usually 0.01 inches but it can be more if the Insured so wishes and so instructs. In the example below, a client has bought the following cover:

# Insured weather period:

being 15/07/2015. 8am-8pm.

#### Insured weather peril being rain:

Consecutive Dry Hours (9 hours from 12) i.e. the client needs 9 consecutive dry hours between 8am and 8pm for their event to go ahead or to complete their film shoot.



Time	Insured Hour	Recorded Rainfall (Inches)		
		Claim Scenario	No Claim Scenario	
		(9 Dry Hours)	(9 Dry Hours)	
8am-9am	Yes	0.00	0.02	
9am-10am	Yes	0.00	0.00	
10am-11am	Yes	0.03	0.00	
11am-12am	Yes	0.00	0.00	
12pm-1pm	Yes	0.00	0.00	
1pm-2pm	Yes	0.00	0.00	
2pm - 3pm	Yes	0.04	0.00	
3pm - 4pm	Yes	0.06	0.00	
4pm - 5pm	Yes	0.00	0.00	
5pm-6pm	Yes	0.00	0.00	
6pm-7pm	Yes	0.00	0.01	
7pm-8pm	Yes	0.00	0.04	

## Snow: Incremental accumulation

The total quantity of snow to fall within the Insured Weather Period at the Insured Weather Location.

# Temperature: Maximum

The maximum temperature recorded within the Insured Weather Period at the Insured Weather Location.

## Temperature: Minimum

The minimum temperature recorded within the Insured Weather Period at the Insured Weather Location.

## Wind: Maximum sustained excluding gusts

Defined as the maximum hourly wind average recorded during the Insured Weather Period.

E.g. if the cover was in force for 4 hours between 7am and 11am and the wind averaged 25kph, 28kph, 29kph and 15kph respectively, then the recorded Wind: Maximum Sustained Excluding Gusts would be 29kph.

## Wind: Gusting

The maximum instantaneous wind gust recorded within the Insured Weather Period at the Insured Weather Location.



# Addendum 2 - Rainfall thresholds and beaufort scale

These threshold descriptions are merely a guideline to help you choose the right coverage for your exposure.

#### Rainfall thresholds

**1/100 (.01) inch of rain (0.025cm)** - The least amount of measurable rainfall recorded by the national weather service. This amount would not leave puddles on the ground and would slightly wet the surface. Considered to be non-intrusive to outdoor events. Example: A light shower for 2-5 minutes or drizzle for two hours.

**1/10 (.10) inch of rain (0.25cm)** - A light rain for 30-40 minutes, moderate rain for 10 minutes or heavy rain for 5 minutes. Small puddles would form but usually disappear after a short while.

1/4 (.25) inch of rain (0.635cm) - A light rain for 2-3 hours, moderate rain for 30-60 minutes or heavy rain for 15 minutes. Many puddles on ground that do not disappear easily.

1/2 (.50) inch of rain (1.27cm) - Moderate rain for 1-2 hours or heavy rain for 30-45 minutes. Deep standing water for long periods of time (a light rain never reaches this amount).

**3/4 (.75) inch of rain (1.91cm)** - Heavy rain for 2-4 hours. Deep standing water for long periods of time (a light or moderate rain never reaches this amount).

1 inch of rain (2.54cm) - Heavy rain for several hours (2-5 hours). Deep standing water for long periods of time (a light or moderate rain never reaches this amount).

#### Beaufort wind scale

Beaufort Wind Scale	Wind Speed			nd Scale Wind Speed Wind Descrip		Wind Description
	Knots	ms <sup>-1</sup>	kph	Mph		
0	0	0	0.00	0.00	Calm	
1	2	1	3.70	2.30	Light air	
2	5	3	9.26	5.75	Light breeze	
3	9	5	16.67	10.36	Gentle breeze	
4	13	7	24.08	14.96	Moderate breeze	
5	19	10	35.19	21.86	Fresh breeze	
6	24	12	44.45	27.62	Strong breeze	
7	30	15	55.56	34.52	Near gale	
8	37	19	68.52	42.58	Gale	
9	44	23	81.49	50.63	Strong Gale	
10	52	27	96.30	59.84	Storm	
11	60	31	111.12	69.05	Violent storm	
12	-				Hurricane	



## Addendum 3 – Athenium analytics gridded data

# What weather data sources are available to verify a claim?

The verification of any potential claim under this insurance can be derived from one of the following.

- A specified ground weather station OR
- The gridded data system model

The same data source will be used for both pricing and claims verification.

However, **ground weather station** data may not be available due to the location of your risk or due to the quality of data for that **ground weather station** being poor.

## Tell me more about ground weather stations

A ground weather station is a weather station with instruments and equipment for measuring atmospheric conditions. A ground weather station can only be selected for verification under this insurance policy if it:

- Meets the qualitative and quantitative data requirements of Athenium Analytics LLC
- Records and reports upon the insured weather peril
  per the insured weather period parameters as you
  have selected as the Insured.

Ground Weather Station observations represent what happened at that specific point. There is huge variability between Ground Weather Stations due to terrain, types of sensors used and altitude and in some countries (such as the UK) weather stations are sparse and therefore Gridded Data is recommended as a verification source.

The graphic below shows the comparison between the number of 8km by 8km data grids in the South of the UK against the number of available Ground Weather Stations

#### Tell me more about the gridded data system model



Gridded data is Athenium
Analytics' first choice
for verification because
it has consistent coverage
and is always available,
where high-quality weather
stations are not.

Athenium Analytics split the world into hexagonal grids of varying size depending on the Insured Weather Peril as below. Your Insured Weather Location (as expressed by a latitude and longitude) will be situated in one of these grids.

Weather Peril	Global	Continental US	
Rain	8km by8km	1km by 1km	
Snow	30km by 30km	1km by 1km	
Freezing Rain	30km by 30km	1km by 1km	
Wind	30km by 30km	1km by 1km	
Temperature	30km by30km	1km by 1km	

The graphic below shows rainfall totals for a specific day (24 hours) over a number of 1km by 1km grids within Continental US.



Athenium Analytics have a worldwide database of 40 years' worth of historical gap-free data updated hourly. The database comes from various sources such as:

- Public Weather Stations (example: NOAA MADIS)
- Airports (example: METAR- METeorological Aviation Report)
- Weather radar (example: National Weather Service NEXRAD Radar network)
- Satellites (example: GOES- Geostationary Operational Environmental Satellite)
- Climate Forecasts (example: CFSR- Climate Forecast System Reanalysis)

Athenium Analytics then rationalizes the above data and then groups it into the aforementioned data grids. This data is then used to both price your Weather Policy and to also verify any potential claim.

To do this, Athenium Analytics begin by analyzing the most accurate data source for your **insured**, **weather location**. In the US, it would be the 1km Satellite dataset which is then cross-referenced with nearby **ground stations/public weather stations** to make sure data is accurate. If data is missing or unavailable, Athenium use the next highest resolution data source available for the location. For example, if hours 0800-1000 are missing, Athenium Analytics will use another dataset for those specific hours only. Athenium never blend datasets together to produce new "averaged" or "estimated" values.



# Tell me about the athenium analytics verification reports

In the event of a potential claim under your insurance policy, please advise us via your Insurance broker and Athenium Analytics will produce a claims or verification report. We will aim to respond within 48 hours but due to the complex nature of many meteorological events, verification may sometimes take a little longer order to ensure the highest level of scientific quality and accuracy.

The report (as illustrated below) will detail the hourly weather data measurements and will highlight whether your **Insured Weather**Peril has been triggered or not.



To provide Insureds with the most accurate report possible, Athenium Analytics perform the following quality control checks once the report template has been populated.

- The senior meteorologist cross-examines the hourly accumulations with radar imagery to ensure the measurements found are consistent in both time and location.
- The senior meteorologist checks the accumulations found at any nearby Ground Weather Stations, if such stations exist and the data is reliable enough to reference.
- The senior meteorologist checks other data resources, such as satellite-derived data, whenever needed or appropriate to supplement the analysis.

# Any further questions?

If anything is unclear, then please don't hesitate to get in touch via your broker.



# Data protection clause

The **Insurer** respects the **Insured's** right to privacy. The **Insurer** explains who it is, how it collects, shares and uses personal information about the **Insured**, and how the **Insured** can exercise their privacy rights.

If further information is required as to how data is processed by the **Insurer**, or as to the exercise of any rights under any data privacy laws, the **Insured** should read the Data Protection Policy on the **Insurer's** website at https://www.tmhcc.com/en/legal/privacy-policy. or contact:

#### The Data Protection Officer

- a) In respect of **Policies** insured by Tokio Marine Europe S.A
  - Tokio Marine Europe S.A., 33, Rue Sainte Zithe, L-2763 Luxembourg
  - DPO-TMELuxembourg@tmhcc.com
- b) In respect of Policies insured by Tokio Marine HCC International Insurance Company, Houston Casualty Company (UK Branch) or HCC International Insurance Company plc (Swiss Branch) HCC Underwriting Agency Ltd Lloyd's Syndicate 4141 or Lloyd's Insurance Company SA
  - Tokio Marine HCC, 1 Aldgate, London, EC3N 1RE
  - DPO@tmhcc.com

The **Insurer** may collect the **Insured's** personal information such as name, email address, postal address, telephone number, gender and date of birth. The **Insurer** may also collect the **Insured's** sensitive personal information such as data relating to their physical or mental health or condition. The **Insurer** needs the personal or sensitive personal information to enter into and perform a contract with the **Insured**. The **Insurer** retains personal information and sensitive personal information it collects from the **Insured** where it has an ongoing legitimate business need to do so.

The **Insurer** may disclose the **Insured's** personal or sensitive personal information to:

- the Insurer's group companies;
- third party services providers and partners who provide data processing services to the Insurer or who otherwise
  process personal information for purposes that are described in the Privacy Policy or notified to the Insured when
  their personal information is collected;
- any competent law enforcement body, regulatory, government agency, court or other third party where the Insurer
  believes disclosure is necessary (i) as a matter of applicable law or regulation, (ii) to exercise, establish or defend
  our legal rights, or (iii) to protect the Insured's interests or those of any other person;
- a <u>potential buyer</u> (and its agents and advisers) in connection with any proposed purchase, merger or acquisition
  of any part of the **Insurer's** business, provided that it informs the buyer it must use the **Insured's** personal
  information only for the purposes disclosed in its Privacy Policy; or
- any other person with the Insured's consent to the disclosure.

The **Insured's** personal and sensitive personal information may be transferred to, and processed in, countries other than the country in which they are a resident. These countries may have data protection laws that are different to the laws of the **Insured's** country. The **Insurer** transfer data within the Tokio Marine group of companies by virtue of its Intra Group Data Transfer Agreement, which includes the EU Standard Contractual Clauses.

The **Insurer** use appropriate technical and organisational measures to protect the personal information that is collected and processed about the **Insured**. The measures the **Insurer** use are designed to provide a level of security appropriate to the risk of processing the **Insured**'s personal information.

The **Insured** is entitled to know what data is held on them and to make what is referred to as a Data Subject Access Request ('DSAR'). The **Insured** is also entitled to request that their data be corrected in order that the **Insurer** hold accurate records. In certain circumstances, the **Insured** has other data protection rights such as that of requesting deletion, objecting to processing, restricting processing and in some cases requesting portability. Further information on the **Insured's** rights is included in the Privacy Policy.

The **Insured** can opt-out of marketing communications sent to them by the **Insurer** at any time. The **Insured** can exercise this right by clicking on the "unsubscribe" or "opt-out" link in the marketing e-mails sent to them. Similarly, if the **Insurer** has collected and processed personal or sensitive personal information with the **Insured's** consent, then they can withdraw **their** consent at any



time. Withdrawing consent will not affect the lawfulness of any processing the **Insurer** conducted prior to the **Insured's** withdrawal, nor will it affect processing of the **Insured's** personal information conducted in reliance on lawful processing grounds other than consent. The **Insured** has the right to complain to a data protection authority about the **Insurer's** collection and use of their personal information.