

Location Risk Intelligence

Wildfire HD Edition.

High resolution maps for the analysis and assessment of the increasing risk of wildfires

Potential and advantages of Wildfire HD Edition

Wildfire HD Edition is the ideal modular SaaS solution for companies who want to reliably evaluate the current status of their portfolios or individual locations. Risk scores are calculated using Munich Re's claims experience and scientific assessment of the impacts of climate change.

Wildfire HD Edition offers high-quality natural hazard expertise to perform efficient exposure analyses of your individual risk locations or entire portfolios. You can cluster main risk hotspots, filter dynamically and identify accumulations in your portfolio to provide greater understanding for better decision-making with high-resolution maps in order to generate even more detailed assessments. You can also increase the profitability of your business with optimum risk diversification and advanced portfolio management. Over 50 million risk assessments every year demonstrate that this is a globally proven, trusted tool. The Wildfire Risk HD zoning map supports wildfire risk management in the US states of California, Colorado, Arizona, Nevada, Oregon, Washington and New Mexico, in Alberta and British Columbia in Canada, and Wildfire HD Edition has been extended by the states of New South Wales and Victoria, as well as the state of Australian Capital Territory.



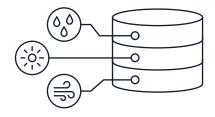
Easy to interpret visualisation

Clear heatmap visualisation of wildfire risk.



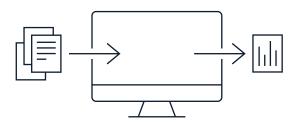
Highly detailed maps

Detailed risk score maps based on the latest claims with a granular 1.5 mile wildland urban interface.



Holistic overview combining multiple data sources

Additional data such as the footprints of historic – and even ongoing! – wildfires, population density and the locations of fire stations, supplement the hazard layer and help facilitate a well-rounded understanding of the risk posed by wildfires.



Easy input & output

Wildfire HD can be accessed via a web application as well as via an API. Because various export formats can be selected, it adapts completely to your needs.

Maximum flexibility	 Single location, portfolio (multiple locations) and area & line requests API (Application Programming Interface) 100% browser based, no plugin or download needed
Search options	– Postal address – Regions, e.g. states – Geo-coordinates (latitude-longitude)
Tools	 Filter by custom attributes Drawing tools for filtering a portfolio or for scoring a drawn object: polygon, circle, line GeoJSON upload
Portfolio management	 Easy management and organisation of the locations Uploading your own portfolio from CSV or Excel (templates available)
Methodology	 Defining zones with similar hazard situations based on detailed data Significantly broadened range of land use categories enriched by sophisticated vegetation data (type, height & canopy-density) allowing for an improved resolution (up to 30m) Distance of urban areas to wildland/bushland by using 5 different wildland urban interface zones and a further smoke damage zone Hazard zones further improved by impact of slope and elevation, population density, perimeter of historic fires, climate region, building density, building class residential Loss experience of major events from 2017 to 2020 is included Risk evaluation based on loss experience and risk analyses: perimeter of historic fires, residential/commercial area, insurance data (Munich Re loss data), estimation of loss return periods
Analytics	– Free marking options (polygon, oval, circle, freehand)
Visualisation based on KPIs (Key Performance Indicators)	 Cluster Heatmap Grid Regions (administrative & postcode regions, CRESTA zones)
Map views	- (dark) Grey, hybrid, satellite, topography, terrain, wildfire risk maps
Elevation profiles	– Line profile of height differences between two locations displayable
Reports and results	 Download as CSV, Excel or PDF API access for individual further processing of the data Clear visualisation of the results/risk scores presented in number statistics, loss amount and pie charts, tables and coloured heatmaps

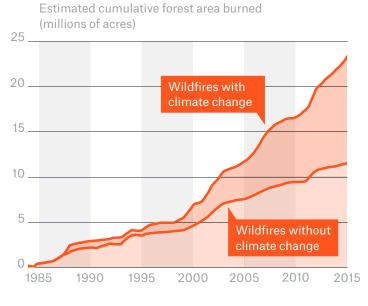
Wildfire risk assessment with specific risk scores and high definition maps

Climate data and claims records indicate a significant rise in wildfire hazard and loss levels in the United States, Canada, and Australia.

The size of the losses highlights the large accumulation potential, something that is often underestimated. The frequency of meteorological conditions that favour severe fire seasons has also increased in many regions around the world. Of major importance for the insurance industry in this context are additional regions with highly exposed values, such as the Mediterranean in Europe and regions in Australia.

Key benefits

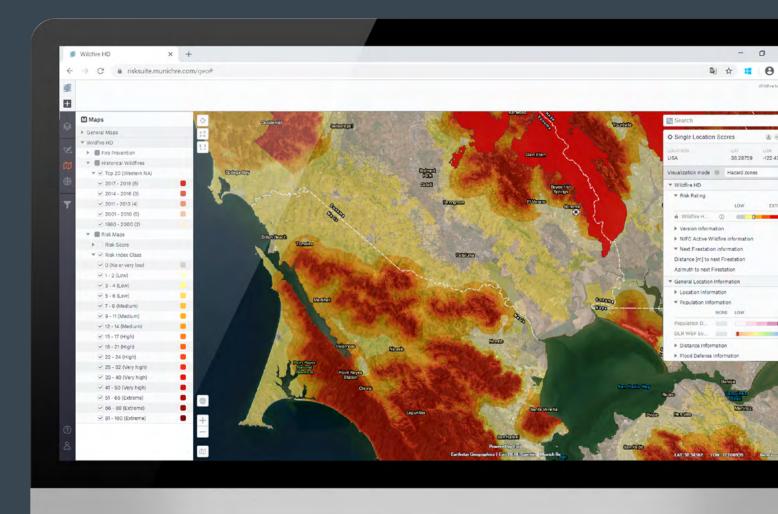
- Higher resolution to better resolve wildland urban interfaces (WUI), key zones for high-risk and high-value locations. The WUI is 1.5 miles (2.4 km) wide and divided into 5 detailed zones.
- Easy to visualise maps for risk acceptance rather than complex stochastic models.
- API available for flexible integration into your existing tools and processes.
- Underpinned by the claims analysis of one of the world's leading reinsurers.
- Taking into account the latest knowledge on the impacts of climate change.



Climate change has increased wildfire risk

Area burned in the western U.S. from 1984 to 2015

Source: Abatzoglou/Williams 2016, PNAS 113





Want to know more? Find more information about the other editions in the respective brochures

See our other editions as part of our Location Risk Intelligence Platform at munichre.com/rmp for:

Climate Change Edition Natural Hazards Edition Climate Financial Impact Edition

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