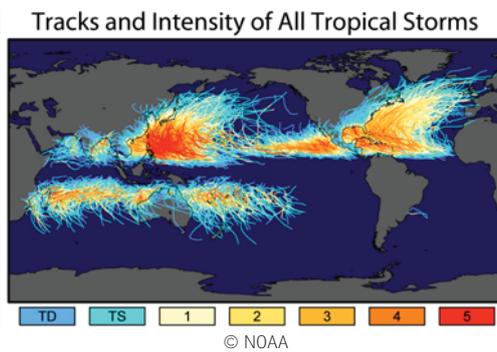


# Geoimage offers targeted solutions for Hazard and Risk Assessment

Spatial data is a fundamental input into the understanding of hazards and risks, at a local, regional, state or continental scale. At Geoimage, our team understands the need to assess risks and to provide evidence-based logic to justify decisions to mitigate, report or plan for those risks. Read on to see how we can help!



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## Maritime Risks

Very high resolution satellite imagery can be used to identify features within a maritime environment, including location of structures, spills and other features that may be impacted by a maritime disaster. GeoSpatial technology can be used to assist modelling of potential impacts in association with discipline experts.

Geoimage can provide advice on the suitability and frequency of cover by a range of satellites and other spatial datasets for maritime risk assessment. Call us today to discuss the options available.

## Mapping Significant Events

Both actual and predicted hazards have a spatial reference – *what, where, when* and *how*. Spatial data assists in assessing the risk, managing a hazard and in the clean up process after a significant event.

Geoimage can assist by making data available to help decisions, to communicate those decisions to the public and to inform other agencies who are relying on accurate, timely and appropriate data.

## Bushfire Hazard Risk Assessment

Bushfire Hazards are a significant risk in many regions. Mapping the level of that risk is aligned with vegetation combustibility and topography. Mapping indicative vegetation combustion rates is dependent on vegetation type but also on the condition of the land and estimated leaf litter accumulation rates.

Satellite imagery together with traditional vegetation mapping can assist in better determining these rates at a range of scales.

Geoimage can provide advice on the methodology to map bushfire hazards, the source of appropriate data and the approaches to derive the ratings used to assess the risk.



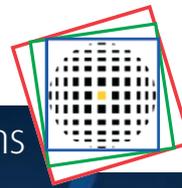
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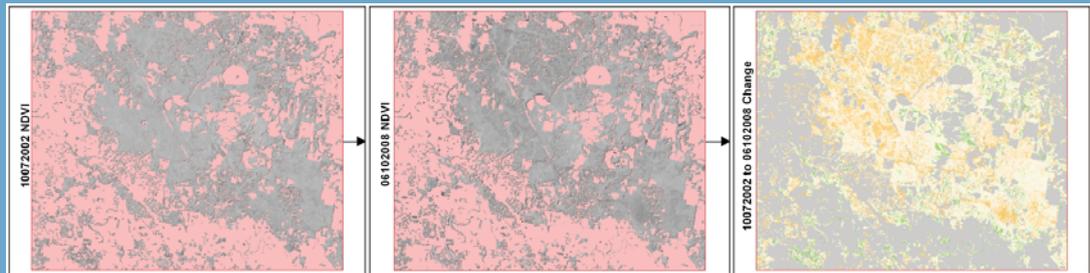
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## Case Study - Impact of Drought on Habitats

Significant events, such as prolonged drought, can have a detrimental effect on habitats used by a range of fauna. The impact on terrestrial vegetation over time can be monitored and mapped using time-series satellite imagery, highlighting the degradation of core habitat. Supporting decisions relating to the ongoing management of the land during and after such an event is a fundamental use of this data, both to support environmental protection and to inform planning decisions.

Geoimage can use time series imagery, in combination with other data sources, to report on changes and to assist in the ecological monitoring and management process.



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## Flood Inundation Mapping

Satellite imagery can be used at a variety of scales to map areas inundated by flood waters. At a regional scale, broader resolution datasets such as MODIS, Landsat and SPOT can be used. At a localised scale, very high resolution sources provide more detail over actual coverage. Traditional optical data can also be used in combination with radar data to improve flood inundation mapping in regions impacted by cloud cover.

Geoimage can advise on suitable data coverage, potentially issues around cloud and alternatives. We can also integrate this data with other data sources and analyse the data to generate extents and metrics around flood inundation.



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## Disaster Recovery

Residential zones along coastal strips are being closely assessed in relation to climate change impact and adaptation. This is influencing the planning of both built and natural resources along our coastline. Satellite imagery, in combination with very high resolution terrain and bathymetry can assist in the interpretation of impacts and the adaptation required to mitigate those impacts.

Geoimage can assist in collating spatial datasets and in the analysis and modelling of those datasets for mapping the impact and change before and after an event.



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## How can Geoimage help?

Risks and Hazards are complex phenomena. At Geoimage, we work with discipline experts by providing the spatial input required to make decisions:

- Image acquisition
- Spatial Data Management and WebGIS
- Maritime hazard mapping
- Generation of derived vegetation datasets
- Analysing and mapping hazards
- Mapping impact of natural events on ecological resources
- Disaster recovery monitoring including before and after assessment
- Flood inundation mapping

### Please contact us at

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