

Tool profile: GeoCAT - geospatial conservation assessment tools

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| Author/Creator | Justin Moat; Steven Bachman |
| Programming language | Javascript, HTML5 |
| URL to access app/tool | http://geocat.kew.org/ |
| Access rights (Open/license etc.) | Code is open source: https://github.com/Vizzuality/GeoCAT |
| Brief summary: What is it and what is it trying to do? | <p>A web application with map interface and options to generate metrics such as EOO and AOO, based on point data.</p> <p>User can import their own lat, long data (CSV), manually add points to the map or query several online resourced e.g. GBIF, iNaturailist and Flickr.</p> <p>Calculations include:</p> <ul style="list-style-type: none"> - Extent of occurrence - Area of Occupancy <p>Other options include layers overlay to online sources e.g. protected planet (not currently working) or via XYZ, Carto DB map, KML, Web mapping service</p> |
| Associated research publication(s) / examples of where it has been used | <p>Bachman S, Moat J, Hill AW, de la Torre J, Scott B. "Supporting Red List threat assessments with GeoCAT: geospatial conservation assessment tool." (2011).</p> <p>In: Smith V, Penev L (Eds) e-Infrastructures for data publishing in biodiversity science. ZooKeys 150: 117–126. doi: 10.3897/zookeys.150.2109</p> <p>https://pensoft.net/J_FILES/1/articles/2109/2109-G-3-layout.pdf</p> |
| Help/vignette file | <p>https://www.kew.org/science/collections-and-resources/data-and-digital/tools/geocat-help</p> <p>https://www.kew.org/science/collections-and-resources/data-and-digital/tools/geocat-faqs</p> <p>https://www.kew.org/science/collections-and-resources/data-and-digital/tools/geocat-links</p> |
| Support network? Who can we ask for help | j.moat@kew.org ; s.bachman@kew.org |
| Relevant Red List Parameters | <p>Criterion B:</p> <p>AOO (in km²) – user defined grid cell size</p> <p>EOO (in km²) - based on minimum convex polygon (MCP)</p> |
| Input data formats | a set of x,y points. Points are projected by the application. User can also query occurrence data from online sources e.g. GBIF |

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| | using a binomial search. Only georeferenced points will be returned. |
| Can it do batch processing? | No |
| Is internet access needed or can it be used offline? | Online only - see rCAT for same algorithms that can be run offline. |
| Technical knowledge required? | No |
| Computing requirements (e.g. will it run on low spec laptop in the field) | Standard |
| Stability - long term support - maintenance? | Maintainer with institutional support. Code is open source, but reliance on maintenance from Vizuality. |
| Notes | May not run well on some old browsers. GeoCAT is also problematic with http and https, is its only http, most browsers will throw a warning of "not secure" – some institutions may block. |