Methods

**Datasets**

Global Mountain Biodiversity Assessment Mountain Inventory 2.0 (2020)

* Highly resolved inventory of mountains globally

Preparation (Python create\_clipped\_&\_intersections.py):

* + Intersected with country polygon
  + Intersected with KBA dataset below

Key Biodiversity Areas (2020)

* Mapping of important biodiversity areas globally
* Preparation:
  + None

World Database on Protected Areas (June 2021)

* World Database of Protected Areas
* Preparation (Python wdpa\_cleaning.py):
  + Point files combined and buffered based on their reported area (convert from km to m)
  + Polygon files combined together and with point files and dissolved to avoid double counting
  + Data filtered to exclude UNESCO sites (INT\_CRIT %in% c("Not Applicable", “Not Reported”), sites with a status of “Proposed” or “Not Reported” (STATUS %!in% c(“Proposed”, “Not Reported”))

**Preparation**

**Analysis**

Adapted Birdlife International standard for calculating coverage by protected areas of important sites for mountain biodiversity.

In order to integrate the GMBA spatial polygons, the data were intersected with KBAs in python to create a new subset of KBA’s that are found in mountainous regions. This dataset was then run through the adapted Birdlife script for individual countries, and mountain ranges as well. See figure X for details on handling calculations based on various overlap scenarios.