Key words used: georeferencing of specimens

Reference	*Method of dealing with geospatial error*
Velásquez-Tibatá, J., Graham, C. H. and Munch, S. B. (2016) 'Using measurement error models to account for georeferencing error in species distribution models', Ecography. John Wiley & Sons, Ltd (10.1111), 39(3), pp. 305–316. doi: 10.1111/ecog.01205.	Bayesian logistic regression with measurement error
Feeley, K. J. and Silman, M. R. (2010) 'Modelling the responses of Andean and Amazonian plant species to climate change: the effects of georeferencing errors and the importance of data filtering', *Journal of Biogeography*. John Wiley & Sons, Ltd (10.1111), 37(4), pp. 733–740. doi: 10.1111/j.1365-2699.2009.02240.x.	Data filtering (removing data before modelling if it does not meet minimum requirements (which can be quite strict) of quality.
Guralnick, R. P., Wieczorek, J., Beaman, R., and Hijmans, R. J., (2006) 'BioGeomancer: Automated Georeferencing to Map the World's Biodiversity Data', PLoS Biology. Public Library of Science, 4(11), p. e381. doi: 10.1371/journal.pbio.0040381.	Point-radius method
Beaman, R. and Conn, B. (2003) 'Automated geoparsing and georeferencing of Malesian collection locality data', Telopea, 10(1), pp. 43–52. doi: 10.7751/telopea20035604.	None used, but state error analysis is needed
Garcia-Milagros, E. and Funk, V. A. (2010) 'data: Improving the use of information from museum specimens: Using Google Earth© to georeference Guiana Shield specimens in the US National Herbarium', Frontiers of Biogeography, 2(3). doi: 10.21425/f5fbg12348.	Gazetteer coordinates as a measure of uncertainty, Point-radius
Funk, V. A., Zermoglio, M. F. and Nasir, N. (1999) 'Testing the use of specimen collection data and GIS in biodiversity exploration and conservation decision making in Guyana', Biodiversity and Conservation. Kluwer Academic Publishers, 8(6), pp. 727–751. doi: 10.1023/A:1008877222842.	None used
Rivers, M. C, Taylor, L., Brummitt, N. A., Meagher, T. R., Roberts, D. L. and Lughadha, E. N. (2011) 'How many herbarium specimens are needed to detect threatened species?', Biological Conservation. Elsevier, 144(10), pp.	None used

2541–2547. doi: 10.1016/J.BIO-CON.2011.07.014.	
Kozak, K. H. and Wiens, J. J. (2007) 'Climatic zonation drives latitudinal variation in speciation mechanisms', Proceedings of the Royal Society B: Biological Sciences. The Royal SocietyLondon, 274(1628), pp. 2995–3003. doi: 10.1098/rspb.2007.1106.	None used – say all georefecences were from systematic studies with ref being taken from original authors (so probably lat long coords).
Stein, B. R. and Wieczorek, J. R. (2004) 'Mammals of the World: MaNIS as an example of data integration in a distributed network environment', Biodiversity Informatics, 1(0). doi: 10.17161/bi.v1i0.7.	Point-radius method
Rowe, R. J. (2005) 'Elevational gradient analyses and the use of historical museum specimens: a cautionary tale', Journal of Biogeography. John Wiley & Sons, Ltd (10.1111), 32(11), pp. 1883–1897. doi: 10.1111/j.1365-2699.2005.01346.x	Post-hoc 3-dimensional georeferencing (point radius but including a *z* parameter as far as I can tell).
Brummitt, N., Bachman, S. and Moat, J. (2008) 'Applications of the IUCN Red List: towards a global barometer for plant diversity', Endangered Species Research, 6(2), pp. 127–135. doi: 10.3354/esr00135.	None specified, alludes to error being computed for georeferences
Särkinen, T., Iganci, J. RV., Linares-Palomino, R., Simon, M. F., and Prado, D. E. (2011) 'For-gotten forests - issues and prospects in biome mapping using Seasonally Dry Tropical Forests as a case study', BMC Ecology. BioMed Cen-tral, 11(1), p. 27. doi: 10.1186/1472-6785-11-27.	Data filtering (they allude to georef errors but don't incorporate into study)
Soberón, J. M., Llorente, J. B. and Oñate, L. (2000) 'The use of specimen-label databases for conservation purposes: an example using Mexican Papilionid and Pierid butterflies', Biodiversity and Conservation. Kluwer Academic Publishers, 9(10), pp. 1441–1466. doi: 10.1023/A:1008987010383.	No formal method, localities were assigned to be 1 min arc (transating to pixels of 1.1km a side)
Riordan, E. C. and Rundel, P. W. (2009) 'Modelling the distribution of a threatened habitat: the California sage scrub', Journal of Biogeography. John Wiley & Sons, Ltd (10.1111), 36(11), pp. 2176–2188. doi: 10.1111/j.1365-2699.2009.02151.x.	Data filtering (I think, they basically eyeballed it to remove any obvious errors in data entry)

Rivers, M. C., Bachman, S. P., Meagher, T. R., Lughadha E. N., Brummitt, N. A.. (2010) 'Subpopulations, locations and fragmentation: applying IUCN red list criteria to herbarium specimen data', Biodiversity and Conservation. Springer Netherlands, 19(7), pp. 2071–2085. doi: 10.1007/s10531-010-9826-9.	None mentioned, assuming that as with many of these if the authors are not conducting the georeferencing someone else has done so probably using point-radius as that is the most widely used method
Hopkins, M. J. G. (2007) 'Modelling the known and unknown plant biodiversity of the Amazon Basin', Journal of Biogeography. John Wiley & Sons, Ltd (10.1111), 34(8), pp. 1400–1411. doi: 10.1111/j.1365-2699.2007.01737.x.	No method described for georef'd points, but say that uncertainty was +-50km (this was used as a reason for not using a particular model)
Roberts, D. L., Taylor, L. and Joppa, L. N. (2016) 'Threatened or Data Deficient: assessing the conservation status of poorly known species', Diversity and Distributions. Edited by J. Beggs. John Wiley & Sons, Ltd (10.1111), 22(5), pp. 558–565. doi: 10.1111/ddi.12418.	None used. Data was filtered
Barros, F. S. M., Siqueira, M. F. de and Costa, D. P. da (2012) 'Modeling the potential geographic distribution of five species of Metzgeria Raddi in Brazil, aiming at their conservation', The Bryologist. American Bryological and Lichenological Society, pp. 341–349. doi: 10.2307/23321035.	Arbitrary precision of 5 arc minutes given to all localities
Buckley, L. B. (2008) 'Linking traits to energetics and population dynamics to predict lizard ranges in changing environments.', The American naturalist. The University of Chicago Press , 171(1), pp. E1–E19. doi: 10.1086/523949.	None mentioned, however data was from GBIF and herpnet (GBIF definitely uses point-radius for its data, but as the author makes no mention, I assume they haven't included error)
GBIF https://www.gbif.org/	Used point-radius method when post-hoc georeferencing
Foley, D. H., Weitzman, A. L., Miller, S. E., Faran, M. E., Rueda, L. M., and Wilkerson, R. C. (2007) 'The value of georeferenced collection records for predicting patterns of mosquito species richness and endemism in the Neotropics', Ecological Entomology. John Wiley & Sons, Ltd (10.1111), 0(0), pp. 071203162814003-??? doi: 10.1111/j.1365-2311.2007.00927.x.	None used. Precision was either of lat long or 1km – 100m depending on if MGRS coords were used or specimens were re-georef'd

McCormack, J. E., Zellmer, A. J. and Knowles, L. L. (2010) 'Does niche divergence accompany allopatric divergence in Aphelocoma Jays as predicted under ecological speciation?: Insights from tests with niche models', Evolution. John Wiley & Sons, Ltd (10.1111), 64(5), pp. 1231–1244. doi: 10.1111/j.1558-5646.2009.00900.x.	None mentioned. Some data was direct observation recorded with a GPS logger, but museum specimens were used as well
Linder, P. H., Antonelli, A., Humphreys, A. M., Pirie, M. D., and Wüest, R. O. (2013) 'What determines biogeographical ranges? Historical wanderings and ecological constraints in the danthonioid grasses', Journal of Biogeography. Edited by R. Ladle. John Wiley & Sons, Ltd (10.1111), 40(5), pp. 821–834. doi: 10.1111/jbi.12070.	None mentioned, GBIF was used for part of the dataset so some point radius possibly
Duursma, D. E., Gallagher, R. V., Roger, E., Hughes, L., Downey, P. O., and Leishman, M. R. (2013) 'Next-Generation Invaders? Hotspots for Naturalised Sleeper Weeds in Australia under Future Climates', PLoS ONE. Edited by P. Adam. Public Library of Science, 8(12), p. e84222. doi: 10.1371/journal.pone.0084222.	None mentioned. GBIF used, but also georeferenced themselves, do not mention error/uncertainty
Chang, C.S., Chang, K.S., Ahn, Y.S. and Kim, H. (2012) 'Georeferencing of primary species occurrence data and necessity of data quality control-a case study of two varieties of Ox-Knee, Achyranthes bidentata Blume', Journal of Korean Society of Forest Science, 101(2), pp. 185–194. Available at: http://www.koreascience.or.kr/article/JAKO201219069094059.page.	Yes, seems like point-radius but a little difficult to tell
Gómez-Mendoza, L. and Arriaga, L. (2007) 'Modeling the Effect of Climate Change on the Distribution of Oak and Pine Species of Mexico', Conservation Biology. John Wiley & Sons, Ltd (10.1111), 21(6), pp. 1545–1555. doi: 10.1111/j.1523-1739.2007.00814.x.	None mentioned – as with many, if the author isn't doing the georefing they don't seem to think about uncertainty
Anacker, B. L. and Strauss, S. Y. (2014) 'The geography and ecology of plant speciation: range overlap and niche divergence in sister species', Proceedings of the Royal Society B: Biological Sciences. The Royal Society, 281(1778), p. 20132980. doi: 10.1098/rspb.2013.2980.	None used – applied a 10km buffer as range estimation, but no error added to geographical point

Neufeld, D. L., Guralnick, R. P., Glaubitz, R. and Allen, J. R. (2003) 'Museum Collections Data and Online Mapping Applications', https://doi.org/10.1659/0276-4741(2003)023[0334:MCDAOM]2.0.CO;2. International Mountain Society, 23(4), pp. 334–337. doi: 10.1659/0276-4741(2003)023[0334:MCDAOM]2.0.CO;2.	None used
Campbell, T. L., Lewis, P. J. and Williams, J. K. (2011) 'Analysis of the modern distribution of South African Gerbilliscus (Rodentia: Gerbillinae) with implications for Plio-Pleistocene palaeoenvironmental reconstruction', South African Journal of Science. Academy of Science of South Africa, 107(1/2), pp. 1–7. doi: 10.4102/sajs.v107i1/2.497.	None used – some data was accepted to have error as was georef'd using older mapping systems, but still only used point data
Boumans, L. (2011) 'The Plecoptera Collection At The Natural History Museum In Oslo', Illiesia, 7(25), pp. 280–290. Available at: http://www2.pms-lj.si/illiesia/papers/Illiesia07-25.pdf.	None used – they simply say they georef'd the specimens as best they could to a coord.
Droissart, V., Hardy, O. J., Sonké, B., Dahdouh-Guebas, F., and Stévart, T. (2012) 'Subsampling Herbarium Collections to Assess Geographic Diversity Gradients: A Case Study with Endemic Orchidaceae and Rubiaceae in Cameroon', Biotropica. John Wiley & Sons, Ltd (10.1111), 44(1), pp. 44–52. doi: 10.1111/j.1744-7429.2011.00777.x.	Filtered data to 'precise' only (accurate to 10km)
Miller, J. S., Krupnick, G. A., Stevens, H., Porter-Morgan, H., Boom, B., Acevedo-Rodríguez, P., Ackerman, J., Kolterman, D., Santiago, E., Torres, C., and Velez, J. (2013) 'Toward Target 2 of the Global Strategy for Plant Conservation: An Expert Analysis of the Puerto Rican Flora to Validate New Streamlined Methods for Assessing Conservation Status', Annals of the Missouri Botanical Garden. Missouri Botanical Garden Press, 99(2), pp. 199–205. doi: 10.3417/2011121.	None mentioned
Tobler, M., Honorio, E., Janovec, J., and Reynel, C. (2007) 'Implications of collection patterns of botanical specimens on their usefulness for conservation planning: an example of two	Manually checked coords to reduce error (error between 1-100km reported in this paper, no formal method of adding uncertainty mentioned)

neotropical plant families (Moraceae and Myristicaceae) in Peru', Biodiversity and Conservation. Kluwer Academic Publishers, 16(3), pp. 659–677. doi: 10.1007/s10531-005-3373-9.	
DeWalt, R. E., Cao, Y., Hinz, L., and Tweddale, T. (2009) 'Modelling of historical stonefly distributions using museum specimens', Aquatic Insects. Taylor & Francis , 31(sup1), pp. 253–267. doi: 10.1080/01650420903024249.	None used
Syfert, M. M.. Serbina, L., Burckhardt, D., Knapp, S., and Percy, D. M. (2017) 'Emerging New Crop Pests: Ecological Modelling and Analysis of the South American Potato Psyllid Russelliana solanicola (Hemiptera: Psylloidea) and Its Wild Relatives', PLOS ONE. Edited by X.-Q. Li. Public Library of Science, 12(1), p. e0167764. doi: 10.1371/journal.pone.0167764.	Error calculated, don't say how. Give a median value of 8km and range of 500m to over 100km
Strenghts and weaknesses of museum and Guralnick, R. and Van Cleve, J. (2005) 'Strengths and weaknesses of museum and national survey data sets for predicting regional species richness: comparative and combined approaches', Diversity and Distributions. John Wiley & Sons, Ltd (10.1111), 11(4), pp. 349–359. doi: 10.1111/j.1366-9516.2005.00164.x.	Points to methods of data prep in supplementary materials, which are not available (broken web link)
Arrigo, N., Therrien, J., Anderson, C. L., Windham, M. D., Haufler, C. H., and Barker, M. S. (2013) 'A total evidence approach to understanding phylogenetic relationships and ecological diversity in Selaginella subg. Tetragonostachys', American Journal of Botany. John Wiley & Sons, Ltd, 100(8), pp. 1672–1682. doi: 10.3732/ajb.1200426.	None used – discarded imprecise georefs (or gave them new coords, no mention of error)
Boakes, E. H., McGowan, P. J. K., Fuller, R. A., Chang-qing, D., Clark, N. E., O'Connor, K., and Mace, G. M. (2010) 'Distorted Views of Biodiversity: Spatial and Temporal Bias in Species Occurrence Data', PLoS Biology. Public Library of Science, 8(6), p. e1000385. doi: 10.1371/journal.pbio.1000385.	A bewildering variety of methods used – accuracy to 1degree, or 10minutes or if description matched two or more places a midpoint was taken, so long as it was accurate to 1degree. Data was then required to meet arbitrary requirements such as that it was within a reasonable distance of the species known range (what this constitutes is not specified)
Crawford, P. H. C. and Hoagland, B. W. (2009) 'Can herbarium records be used to map alien species invasion and native species expansion	Georef'd to township (93.3km2) resolution (present or absent essentially)

over the past 100 years?', Journal of Biogeography. John Wiley & Sons, Ltd (10.1111), 36(4), pp. 651–661. doi: 10.1111/j.1365-2699.2008.02043.x.	
Zeilinger, A. R., Rapacciuolo, G., Turek, D., Oboyski, P. T., Almeida, R. P. P., and Roderick, G. K. (2017) 'Museum specimen data reveal emergence of a plant disease may be linked to increases in the insect vector population', Ecological Applications. John Wiley & Sons, Ltd, 27(6), pp. 1827–1837. doi: 10.1002/eap.1569.	Point-radius method!
Lozier, J. D., Aniello, P. and Hickerson, M. J. (2009) 'Predicting the distribution of Sasquatch in western North America: anything goes with ecological niche modelling', Journal of Biogeography. John Wiley & Sons, Ltd (10.1111), 36(9), pp. 1623–1627. doi: 10.1111/j.1365-2699.2009.02152.x.	Georef'd to place name only (presumably Yellowstone has equal meaning here to Medstead (a small village), so resolution varies wildly).
Cason, M. M., Baltensperger, A. P., Booms, T. L., Burns, J. J., and Olson, L. E. (2016) 'Revised distribution of an Alaskan endemic, the Alaska Hare (Lepus othus), with implications for taxonomy, biogeography, and climate change', Arctic Science. NRC Research Press http://www.nrcresearchpress.com, 2(2), pp. 50–66. doi: 10.1139/as-2015-0019.	Point-radius (by the sound of it, "assigned coords and error radii")
Phillips, S. J. and Dudík, M. (2008) 'Modeling of species distributions with Maxent: new extensions and a comprehensive evaluation', Ecography. John Wiley & Sons, Ltd (10.1111), 31(2), pp. 161–175. doi: 10.1111/j.0906-7590.2008.5203.x.	A machine learning method of distribution probability, does not seem to deal with initial error in georef's, but many papers use this method
Zhang, M.-G., Zhou, Z-K., Chen, W-Y., Cannon, C. H., Raes, N., and Slik, J. W. F. (2013) 'Major declines of woody plant species ranges under climate change in Yunnan, China', Diversity and Distributions. Edited by B. Bradley. John Wiley & Sons, Ltd (10.1111), 20(4), pp. 405–415. doi: 10.1111/ddi.12165.	Ref'd to five arc minutes, as this was resolution of climate data
Kozak, K. H., Graham, C. H. and Wiens, J. J. (2008) 'Integrating GIS-based environmental data into evolutionary biology', Trends in Ecology & Evolution. Elsevier Current Trends, 23(3), pp. 141–148. doi: 10.1016/J.TREE.2008.02.001.	None mentioned

Schmidt, M., Kreft, H., Thiombiano, A. and Zizka, G. (2005) 'Herbarium collections and field data-based plant diversity maps for Burkina Faso', Diversity and Distributions. John Wiley & Sons, Ltd (10.1111), 11(6), pp. 509–516. doi: 10.1111/j.1366-9516.2005.00185.x.	5-10km if older record made using gazetteer, precise location from newer GPS ref'd specimens
Gutiérrez, E. E., Boria, R. A. and Anderson, R. P. (2014) 'Can biotic interactions cause allopatry? Niche models, competition, and distributions of South American mouse opossums', Ecography. John Wiley & Sons, Ltd (10.1111), 37(8), pp. 741–753. doi: 10.1111/ecog.00620.	Error is acknowledged, but how it was calculated is not specified. I think, based on the supplementary material and figures, point-radius or an equivalent was used.
Donoso, D. A., Salazar, F., Maza, F., Cárdenas, R. E., and Dangles, O. (2009) 'Diversity and distribution of type specimens deposited in the Invertebrate section of the Museum of Zoology QCAZ, Quito, Ecuador', Annales de la Société entomologique de France (N.S.). Taylor & Francis Group, 45(4), pp. 437–454. doi: 10.1080/00379271.2009.10697628.	Point radius, follows methods outlined in Wieczorek *et al.,* (2004), categorises description data into nine bins depending on certainty/quality of description
Droissart, V. Sonké, B., Hardy, O. J., Simo, M., Taedoumg, H., Nguembou, C. K., and Stévart, T. (2011) 'Do plant families with contrasting functional traits show similar patterns of endemism? A case study with Central African Orchidaceae and Rubiaceae', Biodiversity and Conservation. Springer Netherlands, 20(7), pp. 1507–1531. doi: 10.1007/s10531-011-0042-z.	None used – imprecise data was discarded, what counted as imprecise isn't mentioned, however they do mention that spp were grouped into classes based on distance from the ocean at 1degree, more than 2-3degree and more than 3degree classes. In this case 1deg corresponds to 111km
Beentje, H.J., Luke, W.R.Q., Ghazanfar, S.A. and Moat, J. (2006) 'Restricted range endemism in East African plants', Taxonomy and ecology of African plants, their conservation and sustainable use. Proceedings of the 17th AETFAT Congress, pp. 229–245.	None mentioned
McElwain, J. C. (2004) 'Climate-independent paleoaltimetry using stomatal density in fossil leaves as a proxy for CO2 partial pressure', Geology. GeoScienceWorld, 32(12), p. 1017. doi: 10.1130/G20915.1.	None mentioned
Davenport, T. R. B., De Luca, D. W., Bracebridge, C. E., Machaga, S. J., Mpunga, N. E., Kibure, O., and Abeid, Y. S. (2010) 'Diet and feeding patterns in the kipunji (Rungwecebus	None mentioned – modern GPS loggers used for georefing so little error on the points I think

kipunji) in Tanzania's Southern Highlands: a first analysis', Primates. Springer Japan, 51(3), pp. 213–220. doi: 10.1007/s10329-010-0190-x.	
Bendiksby, M., Mazzoni, S., Jørgensen, M. H., Halvorsen, R., and Holien, H. (2014) 'Combining genetic analyses of archived specimens with distribution modelling to explain the anomalous distribution of the rare lichen Staurolemma omphalarioides: long-distance dispersal or vicariance?', Journal of Biogeography. Edited by P. Pearman. John Wiley & Sons, Ltd (10.1111), 41(11), pp. 2020–2031. doi: 10.1111/jbi.12347.	None mentioned
Stigall, A. L., Bauer, J. E. and Brame, H. M. R. (2014) 'The digital Atlas of Ordovician life: Digitizing and mobilizing data for paleontologists and the public', Estonian Journal of Earth Sciences, 63(4), pp. 312–316. doi: 10.3176/earth.2014.36.	Point radius method (I think, as it says it follows Wieczorek & Chapman, 2006)
Craven, P. and Vorster, P. (2006) 'Patterns of plant diversity and endemism in Namibia', Bothalia, 36(2), pp. 175–189. doi: 10.4102/abc.v36i2.360.	Quarter degree square system of Edwards and Leistner (1971)
Endemism in the moss flora of North America	Data aggregated to 1degree squares, so resolution/error would have to be large to affect the results of the study
Carlson, C. J., Burgio, K. R., Dougherty, E. R., Phillips, A. J., Bueno, V. M., Clements, C. F., Castaldo, G., Dallas, T. A., Cizauskas, C. A., Cumming, G. S., Doña, J., Harris, N. C., Jovani, R., Mironov, S., Muellerklein, O. C., Proctor, H. C., and Getz, W. M. (2017) 'Parasite biodiversity faces extinction and redistribution in a changing climate', Science Advances. American Association for the Advancement of Science, 3(9), p. e1602422. doi: 10.1126/sciadv.1602422.	Probably point-radius (Wieczorek & Chapman, 2006)
Sidlauskas, B. L. and Vari, R. P. (2012) 'Diversity and distribution of anostomoid fishes (Teleostei: Characiformes) throughout the Guianas', Cybium, 36(1), pp. 71–103.	None mentioned
Gotelli, N. J., Chao, A., Colwell, R. K., Hwang, W-H., and Graves, G. R. (2012) 'Specimen-Based Modeling, Stopping Rules, and the Extinction of the Ivory-Billed Woodpecker', Conservation Biology. John Wiley & Sons, Ltd	None mentioned

(10.1111), 26(1), pp. 47–56. doi: 10.1111/j.1523-1739.2011.01715.x.	
Rissler, L. J. and Apodaca, J. J. (2007) 'Adding More Ecology into Species Delimitation: Ecological Niche Models and Phylogeography Help Define Cryptic Species in the Black Salamander (Aneides flavipunctatus)', Systematic Biology. Edited by J. Weins. Narnia, 56(6), pp. 924–942. doi: 10.1080/10635150701703063.	None mentioned
Martin, M. D. and Omland, K. E. (2011) 'Environmental Niche Modeling Reveals Climatic Differences among Breeding Ranges of Orchard Oriole Subspecies', The American Midland Naturalist, 166(2), pp. 404–414.	Point-radius
Matthews, E. R. and Mazer, S. J. (2016) 'Historical changes in flowering phenology are governed by temperature × precipitation interactions in a widespread perennial herb in western North America', New Phytologist. John Wiley & Sons, Ltd (10.1111), 210(1), pp. 157–167. doi: 10.1111/nph.13751.	None mentioned
Molgo, I. E., Soltis, D. E. and Soltis, P. S. (2017) 'Cytogeography of Callisia section Cuthbertia (Commelinaceae).', Comparative cytogenetics. Pensoft Publishers, 11(4), pp. 553–577. doi: 10.3897/CompCytogen.v11i4.11984.	None mentioned
Wehr, J. D., Stancheva, R., Truhn, K., and-Sheath, R. G. (2013) 'Discovery of the Rare Freshwater Brown Alga Pleurocladia lacustris (Ectocarpales, Phaeophyceae) in California Streams', Western North American Naturalist. Monte L. Bean Life Science Museum, Brigham Young University, 73(2), pp. 148–157. doi: 10.3398/064.073.0204.	None mentioned
McAllister, C. A. et al. (2019) 'Specimen-based analysis of morphology and the environment in ecologically dominant grasses: the power of the herbarium', Philosophical Transactions of the Royal Society B: Biological Sciences. The Royal Society, 374(1763), p. 20170403. doi: 10.1098/rstb.2017.0403.	None mentioned – climatic data associted with locality was at the 30-arc second resolution, so might be a proxy in some cases

Andrew, M. E., Wulder, M. A., Coops, N. C., and Baillargeon, G. (2012) 'Beta-diversity gradients of butterflies along productivity axes', Global Ecology and Biogeography. John Wiley & Sons, Ltd (10.1111), 21(3), pp. 352–364. doi: 10.1111/j.1466-8238.2011.00676.x.	None mentioned – used cbif (canadian biodiversity information facility) so may have used data that had point-radius error, but if so no mention of incorporating it into the study is made
Graham, M. R., Jaeger, J. R., Prendini, L., and Riddle, B. R. (2013) 'Phylogeography of the Arizona hairy scorpion (Hadrurus arizonensis) supports a model of biotic assembly in the Mojave Desert and adds a new Pleistocene refugium', Journal of Biogeography. Edited by M. McGeoch. John Wiley & Sons, Ltd (10.1111), 40(7), pp. 1298–1312. doi: 10.1111/jbi.12079.	Alludes to standard georeferencing techniques and states anything with error greater than 5km was dropped from modelling, however no indication of what 'standard' technique used actually is. MAXENT is also used, however I do not believe this in of itself deals with georef errors
Stockwell, D. R. B., Beach, J. H., Stewart, A., Vorontsov, G., Vieglais, D., and Pereira, R. S. (2006) 'The use of the GARP genetic algorithm and Internet grid computing in the Lifemapper world atlas of species biodiversity', Ecological Modelling. Elsevier, 195(1–2), pp. 139–145. doi: 10.1016/J.ecolmodel.2005.11.016.	None mentioned – pulls georef'd records from a wide variety of sources it seems. Error not thought about in this context
Graham, C. H., Elith, J., Hijmans, R. J., Guisan, A., Townsend P. A., and Loiselle, B. A. (2007) 'The influence of spatial errors in species occurrence data used in distribution models', Journal of Applied Ecology. John Wiley & Sons, Ltd (10.1111), 45(1), pp. 239–247. doi: 10.1111/j.1365-2664.2007.01408.x.	Demonstrate that MaxEnt and boosted regression trees are both robust to moderate geographical error, interestingly
McGowan, A. and Kiessling, W. (2013) 'Using abundance data to assess the relative role of sampling biases and evolutionary 2 radiations in Upper Muschelkalk ammonoids', Acta Palaeontologica Polonica. Institute of Paleobiology, Polish Academy of Sciences, 58(3), pp. 561–572. doi: 10.4202/app.2010.0040.	Resolution of 10km – I'm guessing point radius as BioGeoMancer used. Justification used of 10km is broadly considered acceptable in ecological studues, and 100km in paleontology
Henebry, G., Putz, B. C. and Merchant, J. W. (2001) 'Modeling Reptile and Amphibian Range Distributions from Species Occurrences and Landscape Variables', GAP Analysis Bulletin No. 10, 10, pp. 22–26. Available at: https://digitalcommons.unl.edu/usgspubs/30 (Accessed: 5 August 2019).	Error of one quarter section (65 ha) if specimens had to be georef'd. Point data was used for the other previously ref'd specimens
Andrew, M. E., Wulder, M. A. and Coops, N. C. (2011) 'How do butterflies define ecosystems? A comparison of ecological	Mention sampling resolution of 1km2 at best and median of 101km2, georef error not explicitly mentioned

regionalization schemes', Biological Conservation. Elsevier, 144(5), pp. 1409–1418. doi: 10.1016/J.BIOCON.2011.01.010.	
Burgio, K. R., Carlson, C. J. and Bond, A. L. (2018) 'Georeferenced sighting and specimen occurrence data of the extinct Carolina Parakeet (Conuropsis carolinensis) from 1564 - 1944.', Biodiversity data journal. Pensoft Publishers, (6), p. e25280. doi: 10.3897/BDJ.6.e25280.	Point radius
Sandall, E. and Deans, A. (2018) 'Temporal differentiation in environmental niche modeling of Nearctic narrow-winged damselflies (Odonata: Coenagrionidae)', PeerJ Preprints, pp. 0–14. doi: 10.7287/peerj.preprints.27261.	Point radius (resolution to 30arcseconds)
Damerval, C., Ben Othman, W., Manicacci, D. and Jabbour, F. (2018) 'Distribution area of the two floral morphs of Nigella damascena L. (Ranunculaceae): a diachronic study using herbarium specimens collected in France', Botany Letters. Taylor & Francis, 165(3–4), pp. 396–403. doi: 10.1080/23818107.2017.1422437.	None mentioned
Magwé-Tindo, J., Zapfack, L. and Sonké, B. (2016) 'Diversity of wild yams (Dioscorea spp., Dioscoreaceae) collected in continental Africa', Biodiversity and Conservation. Springer Netherlands, 25(1), pp. 77–91. doi: 10.1007/s10531-015-1031-4.	Point radius (also using handheld gps logger, so less error in modern collection)
Campbell, T.L., Lewis, P.J., Thies, M.L. and Williams, J.K., (2012) 'A Geographic Information Systems (GIS)-based analysis of modern South African rodent distributions, habitat use, and environmental tolerances', Ecology and Evolution. John Wiley & Sons, Ltd, 2(11), pp. 2881–2894. doi: 10.1002/ece3.384.	None mentioned – translational errors between map projections are talked about, but they do not mention anything else. Projection errors are deemed acceptable 20-90m long and 292-300m lat.
Chatfield-Taylor, W. and Cole, J. A. (2017) 'Living rain gauges: cumulative precipitation explains the emergence schedules of California protoperiodical cicadas', Ecology. John Wiley & Sons, Ltd, 98(10), pp. 2521–2527. doi: 10.1002/ecy.1980.	None mentioned – say they use GEOLocate which can calculate polygonal error

Aedo, C. and Pando, F. (2017) 'A distribution and taxonomic reference dataset of Geranium in the New World', Scientific Data. Nature Publishing Group, 4(1), p. 170049. doi: 10.1038/sdata.2017.49.	1-minute accuracy
Wilkin, P., Hladik, A., Weber, O., Hladik, C.M. and Jeannoda, V., (2009) 'Dioscorea orangeana (Dioscoreaceae), a new and threatened species of edible yam from northern Madagascar', Kew Bulletin. Springer-Verlag, 64(3), pp. 461–468. doi: 10.1007/s12225-009-9126-2.	None mentioned – I think GPS handloggers were used here
Erb, L. P., Ray, C. and Guralnick, R. (2011) 'On the generality of a climate-mediated shift in the distribution of the American pika (Ochotona princeps)', Ecology. John Wiley & Sons, Ltd, 92(9), pp. 1730–1735. doi: 10.1890/11-0175.1.	Point radius
de la Torre, L., Cerón, C., Balslev, H. and Borchsenius, F., (2012) 'A biodiversity informatics approach to ethnobotany: Meta-analysis of plant use patterns in Ecuador', Ecology and Society, 17(1). doi: 10.5751/ES-04582-170115.	None mentioned
Wieringa, J. J. and Sosef, M. S. M. (2011) 'The applicability of relative floristic resemblance to evaluate the conservation value of protected areas', Plant Ecology and Evolution, 144(3), pp. 242–248. doi: 10.5091/plecevo.2011.588.	None mentioned – do talk about species being included if they were within a 10km buffer of parks, but this isn't the same as error radius really
Rajbhandary, S., Hughes, M., Phutthai, T., Thomas, D.C. and Shrestha, K.K., (2011) 'Asian Begonia: out of Africa via the Himalayas', Gard Bull Singapore, 63, pp. 277–286.	None mentioned
Dodd, A.J., Burgman, M.A., McCarthy, M.A. and Ainsworth, N., (2015) 'The changing patterns of plant naturalization in Australia', Diversity and Distributions. Edited by R. Duncan. John Wiley & Sons, Ltd (10.1111), 21(9), pp. 1038–1050. doi: 10.1111/ddi.12351.	None mentioned
Escudero, M., Hipp, A.L., Hansen, T.F., Voje, K.L. and Luceño, M., (2012) 'Selection and inertia in the evolution of holocentric chromosomes in sedges (Carex, Cyperaceae)', *New Phytologist*. John Wiley & Sons, Ltd (10.1111), 195(1), pp. 237–247. doi:	None mentioned – went for high precision of lat/long coords but didn't discuss error of measurement

10.1111/j.1469-8137.2012.04137.x.	
Syfert, M.M., Castañeda-Álvarez, N.P., Khoury, C.K., Särkinen, T., Sosa, C.C., Achicanoy, H.A., Bernau, V., Prohens, J., Daunay, M.C. and Knapp, S., (2016) 'Crop wild relatives of the brinjal eggplant (Solanum melongena): Poorly represented in genebanks and many species at risk of extinction', *American Journal of Botany*. John Wiley & Sons, Ltd, 103(4), pp. 635–651. doi: 10.3732/ajb.1500539.	None mentioned – georeferenced to 'a high standard' no quantative measure of what this is given
Couvreur, T.L., Porter-Morgan, H., Wieringa, J.J. and Chatrou, L.W., (2011) 'Little ecological divergence associated with speciation in two African rain forest tree genera', BMC Evolutionary Biology. BioMed Central, 11(1), p. 296. doi: 10.1186/1471-2148-11-296.	None mentioned
Cook, D., Lee, S.T., Taylor, C.M., Bassüner, B., Riet-Correa, F., Pfister, J.A. and Gardner, D.R., (2014) 'Detection of toxic monofluoroacetate in Palicourea species', Toxicon. Pergamon, 80, pp. 9–16. doi: 10.1016/J.toxicon.2013.12.003.	None mentioned
Nuelle Jr, R.J., Aicezs, K.K., Nuelle III, R.J. and Whitbeck, M., 'Automeris louisiana (Lepidoptera: Saturniidae) populations in the chenier plain habitat of coastal Texas, with new distributional and larval host plant records', Journal of Entomology and Zoology Studies, 6(2), pp. 1182–1188. Available at: https://pdfs.semanticscholar.org/d635/217f684865e167bd97e0297df8bf63389d4f.pdf.	None mentioned
Boedeker, C., Eggert, A., Immers, A. and Wakana, I., (2010) 'Biogeography of Aegagropila linnaei (Cladophorophyceae, Chlorophyta): a widespread freshwater alga with low effective dispersal potential shows a glacial imprint in its distribution', Journal of Biogeography. John Wiley & Sons, Ltd (10.1111), 37(8), p. no-no. doi: 10.1111/j.1365-2699.2010.02309.x.	None mentioned
Snyder, J.L., Powell, G.S., Behring, R.S., Alford, A.M., Mccarty, M.E. and Zaspel, J.M., (2016) 'Distribution, Phenology, and Notes on the Life History of Calyptra canadensis (Bethune) (Erebidae: Calpinae)', *Journal of the Lepidopterists' Society*. The Lepidopterists'	Point -raidus I think (Wieczorek et al. (2012))

Society, 70(4), pp. 253–259. doi: 10.18473/lepi.70i4.a1.	
De Giovanni, R., Bernacci, L.C., de Siqueira, M.F. and Rocha, F.S., (2012) 'The real task of selecting records for ecological niche modelling', Natureza a Conservacao, 10(2), pp. 139–144. doi: 10.4322/natcon.2012.018.	Point-radius
Bontrager, M. and Angert, A. L. (2016) 'Effects of range-wide variation in climate and isolation on floral traits and reproductive output of Clarkia pulchella', American Journal of Botany. John Wiley & Sons, Ltd, 103(1), pp. 10–21. doi: 10.3732/ajb.1500091.	Error distance calculated, but how is not said. Potentially point raidius.
Miller, R.J., Carroll, A.D., Wilson, T.P. and Shaw, J., (2009) 'Spatiotemporal Analysis of Three Common Wetland Invasive Plant Species Using Herbarium Specimens and Geographic Information Systems', Castanea, 74(2), pp. 133–145. doi: 10.2179/08-001.1.	Coords assigned through 10km locality names
Martellos, S., Attorre, F., Farcomeni, A., Francesconi, F., Pittao, E. and Tretiach, M., (2014) 'Species distribution models backing taxa delimitation: the case of the lichen Squamarina cartilaginea in Italy', Flora - Morphology, Distribution, Functional Ecology of Plants. Urban & Fischer, 209(12), pp. 698–703. doi: 10.1016/J.FLORA.2014.08.008.	Difficult to tell – mention wiezoreck 2004 but also say georef'd to 1km2 grids
Christenhusz, M. J. M. and Toivonen, T. K. (2008) 'Giants invading the tropics: the oriental vessel fern, Angiopteris evecta (Marattiaceae)', Biological Invasions. Springer Netherlands, 10(8), pp. 1215–1228. doi: 10.1007/s10530-007-9197-7.	None mentioned
Nemitz, D., Huettmann, F., Spehn, E.M. and Dickoré, W.B., (2012) 'Mining the Himalayan Uplands Plant Database for a Conservation Baseline Using the Public GMBA Webportal', in Protection of the Three Poles. Tokyo: Springer Japan, pp. 135–158. doi: 10.1007/978-4-431-54006-9_6.	Mentions error distances, but not how they were calculated
Ralston, J. and Kirchman, J. J. (2012) 'Continent-scale genetic structure in a boreal forest migrant, the Blackpoll Warbler (Setophaga striata)', *The Auk*. Narnia, 129(3), pp. 467–478. doi: 10.1525/auk.2012.11260.	MAXENT used, but no error of coords mentioned (visual checks for obvs discrepancies)

Sérgio, C., Garcia, C.A., Hespanhol, H., Vieira, C., Stow, S. and Long, D., (2012) 'Bryophyte diversity in the peneda-Gerês National Park (Portugal): Selecting important plant areas (IPA) based on a new survey and past records', Botanica Complutensis, 36, pp. 39–50. https://doi.org/10.5209/rev_BOCM.2012.v36.39443	1kmx1km scale of georef
Lash, R.R., Carroll, D.S., Hughes, C.M., Nakazawa, Y., Karem, K., Damon, I.K. and Peterson, A.T., (2012) 'Effects of georeferencing effort on mapping monkeypox case distributions and transmission risk', International Journal of Health Geographics. BioMed Central, 11(1), p. 23. doi: 10.1186/1476-072X-11-23.	Point-radius
Ralston, J. and Kirchman, J. J. (2013) 'Predicted range shifts in North American boreal forest birds and the effect of climate change on genetic diversity in blackpoll warblers (Setophaga striata)', Conservation Genetics. Springer Netherlands, 14(2), pp. 543–555. doi: 10.1007/s10592-012-0418-y.	Point-radius (not explicitly mentioned, but talk about uncertainty radius and the georefs coming from GBIF)