

## Supplemental Appendix 1

Search Terms used for Scopus (A) and Web of Science (B):

A. TITLE-ABS-KEY ( ( "paleo\*" AND "niche" ) OR ( "palaeo\*" AND "niche" ) OR ( "hindcasting" AND "niche" ) OR ( "fossil" AND "niche" ) OR ( "paleo" AND "enm" ) OR ( "palaeo\*" AND "enm" ) OR ( "fossil" AND "enm" ) OR ( "fossil" AND "sdm" ) OR ( "deep" AND "time" AND "enm" ) OR ( "deep" AND "time" AND "sdm" ) OR ( "paleoclimat\*" AND "envelope" AND "model\*" ) OR ( "palaeoclimat\*" AND "envelope" AND "model\*" ) OR ( "deep" AND "time" AND "spatial" AND "model\*" ) OR ( "climat\*" AND "niche" AND "model\*" AND "fossil" ) OR ( "climat\*" AND "niche" AND "model\*" AND "paleo\*" ) OR ( "climat\*" AND "niche" AND "model\*" AND "palaeo\*" ) OR ( "paleoenm" ) OR ( "palaeoenm" ) OR ( "paleodistribution" ) OR ( "palaeodistribution" ) OR ( "climat\*" AND "niche" AND "overlap" AND "fossil" ) OR ( "climat\*" AND "niche" AND "overlap" AND "paleo\*" ) OR ( "climat\*" AND "niche" AND "overlap" AND "palaeo\*" ) OR ( "bioclimatic" AND "paleo\*" ) OR ( "bioclimatic" AND "palaeo\*" ) OR ( "bioclimatic" AND "fossil" ) OR ( "bioenvelope" AND "paleo\*" ) OR ( "bioenvelope" AND "palaeo\*" ) OR ( "bioenvelope" AND "fossil" ) OR ( "ecological" AND "niche" AND "model\*" AND "fossil" ) OR ( "ecological" AND "niche" AND "model\*" AND "paleo\*" ) OR ( "ecological" AND "niche" AND "model\*" AND "palaeo\*" ) OR ( "ecological" AND "niche" AND "model\*" AND "historic" ) OR ( "distribution" AND "model\*" AND "paleo\*" ) OR ( "distribution" AND "model\*" AND "palaeo\*" ) OR ( "distribution" AND "model\*" AND "historic" ) OR ( "distribution" AND "model\*" AND "fossil" ) ) AND ( LIMIT-TO ( PUBSTAGE,"final" ) ) AND ( LIMIT-TO ( DOCTYPE,"ar" ) OR LIMIT-TO ( DOCTYPE,"ch" ) ) AND ( LIMIT-TO (

SUBJAREA,"ENVI" ) OR LIMIT-TO ( SUBJAREA,"AGRI" ) OR LIMIT-TO ( SUBJAREA,"EART" ) OR LIMIT-TO ( SUBJAREA,"BIOC" ) ) AND ( LIMIT-TO ( LANGUAGE,"English" ) ) AND ( EXCLUDE ( EXACTKEYWORD,"Fossil Fuels" ) OR EXCLUDE ( EXACTKEYWORD,"Fossil Fuel" ) )

B. TS = ( ( paleo\* AND niche ) OR ( palaeo\* AND niche ) OR ( hindcasting AND niche ) OR ( fossil AND niche ) OR ( paleo AND enm ) OR ( palaeo\* AND enm ) OR ( fossil AND enm ) OR ( fossil AND sdm ) OR ( deep AND time AND enm ) OR ( deep AND time AND sdm ) OR ( paleoclimat\* AND envelope AND model\* ) OR ( palaeoclimat\* AND envelope AND model\* ) OR ( deep AND time AND spatial AND model\* ) OR ( climat\* AND niche AND model\* AND fossil ) OR ( climat\* AND niche AND model\* AND paleo\* ) OR ( climat\* AND niche AND model\* AND palaeo\* ) OR ( paleoenm ) OR ( palaeoenm ) OR ( paleodistribution ) OR ( palaeodistribution ) OR ( climat\* AND niche AND overlap AND fossil ) OR ( climat\* AND niche AND overlap AND paleo\* ) OR ( climat\* AND niche AND overlap AND palaeo\* ) OR ( bioclimatic AND paleo\* ) OR ( bioclimatic AND palaeo\* ) OR ( bioclimatic AND fossil ) OR ( bioenvelope AND paleo\* ) OR ( bioenvelope AND palaeo\* ) OR ( bioenvelope AND fossil ) OR ( ecological AND niche AND model\* AND fossil ) OR ( ecological AND niche AND model\* AND paleo\* ) OR ( ecological AND niche AND model\* AND palaeo\* ) OR ( ecological AND niche AND model\* AND historic ) OR ( distribution AND model\* AND paleo\* ) OR ( distribution AND model\* AND palaeo\* ) OR ( distribution AND model\* AND historic ) OR ( distribution AND model\* AND fossil ) )

Limited to language == English and document type == Article