# BES-SIM literature

**BES-SIM protocol, synthesis, and outlook papers, which will be presented at the BES-SIM webinar on 8 April 2022:**

- **Methods**: Kim, H., Rosa, I.M.D., Alkemade, R., Leadley, P., Hurtt, G., Popp, A., van Vuuren, D.P., Anthoni, P., Arneth, A., Baisero, D., Caton, E., Chaplin-Kramer, R., Chini, L., De Palma, A., Di Fulvio, F., Di Marco, M., Espinoza, F., Ferrier, S., Fujimori, S., Gonzalez, R.E., Gueguen, M., Guerra, C., Harfoot, M., Harwood, T.D., Hasegawa, T., Haverd, V., Havlík, P., Hellweg, S., Hill, S.L.L., Hirata, A., Hoskins, A.J., Janse, J.H., Jetz, W., Johnson, J.A., Krause, A., Leclère, D., Martins, I.S., Matsui, T., Merow, C., Obersteiner, M., Ohashi, H., Poulter, B., Purvis, A., Quesada, B., Rondinini, C., Schipper, A.M., Sharp, R., Takahashi, K., Thuiller, W., Titeux, N., Visconti, P., Ware, C., Wolf, F., Pereira, H.M., 2018. A protocol for an intercomparison of biodiversity and ecosystem services models using harmonized land-use and climate scenarios. Geosci. Model Dev. 11, 4537–4562. https://doi.org/10.5194/gmd-11-4537-2018
- **Synthesis**: Pereira, H.M., Rosa, I.M.D., Martins, I.S., Kim, H., Leadley, P., Popp, A., van Vuuren, D.P., Hurtt, G., Anthoni, P., Arneth, A., Baisero, D., Chaplin-Kramer, R., Chini, L., Di Fulvio, F., Di Marco, M., Ferrier, S., Fujimori, S., Guerra, C.A., Harfoot, M., Harwood, T.D., Hasegawa, T., Haverd, V., Havlík, P., Hellweg, S., Hilbers, J.P., Hill, S.L.L., Hirata, A., Hoskins, A.J., Humpenöder, F., Janse, J.H., Jetz, W., Johnson, J.A., Krause, A., Leclère, D., Matsui, T., Meijer, J.R., Merow, C., Obersteiner, M., Ohashi, H., Poulter, B., Purvis, A., Quesada, B., Rondinini, C., Schipper, A.M., Settele, J., Sharp, R., Stehfest, E., Strassburg, B.B.N., Takahashi, K., Talluto, M.V., Thuiller, W., Titeux, N., Visconti, P., Ware, C., Wolf, F., Alkemade, R., 2020. Global trends in biodiversity and ecosystem services from 1900 to 2050 (preprint). Ecology. https://doi.org/10.1101/2020.04.14.031716
- **Outlook:** Rosa, I.M.D., Purvis, A., Alkemade, R., Chaplin-Kramer, R., Ferrier, S., Guerra, C.A., Hurtt, G., Kim, H., Leadley, P., Martins, I.S., Popp, A., Schipper, A.M., van Vuuren, D., Pereira, H.M., 2020. Challenges in producing policy-relevant global scenarios of biodiversity and ecosystem services. Glob. Ecol. Conserv. 22, e00886. https://doi.org/10.1016/j.gecco.2019.e00886

**Individual model-specific papers published from BES-SIM:**

- Baisero, D., Visconti, P., Pacifici, M., Cimatti, M., Rondinini, C., 2020. Projected Global Loss of Mammal Habitat Due to Land-Use and Climate Change. One Earth 2, 578–585. https://doi.org/10.1016/j.oneear.2020.05.015
- Chaplin-Kramer, R., Sharp, R.P., Weil, C., Bennett, E.M., Pascual, U., Arkema, K.K., Brauman, K.A., Bryant, B.P., Guerry, A.D., Haddad, N.M., Hamann, M., Hamel, P., Johnson, J.A., Mandle, L., Pereira, H.M., Polasky, S., Ruckelshaus, M., Shaw, M.R., Silver, J.M., Vogl, A.L., Daily, G.C., 2019. Global modeling of nature's contributions to people. Science 366, 255–258. https://doi.org/10.1126/science.aaw3372
- Di Marco, M., Harwood, T.D., Hoskins, A.J., Ware, C., Hill, S.L.L., Ferrier, S., 2019. Projecting impacts of global climate and land‐use scenarios on plant biodiversity using compositional‐turnover modelling. Glob. Change Biol. 25, 2763–2778. https://doi.org/10.1111/gcb.14663
- Krause, A., Haverd, V., Poulter, B., Anthoni, P., Quesada, B., Rammig, A., Arneth, A., 2019. Multimodel Analysis of Future Land Use and Climate Change Impacts on Ecosystem Functioning. Earths Future 7, 833–851. https://doi.org/10.1029/2018EF001123
- Ohashi, H., Hasegawa, T., Hirata, A., Fujimori, S., Takahashi, K., Tsuyama, I., Nakao, K., Kominami, Y., Tanaka, N., Hijioka, Y., Matsui, T., 2019. Biodiversity can benefit from climate stabilization despite adverse side effects of land-based mitigation. Nat. Commun. 10, 5240. https://doi.org/10.1038/s41467-019-13241-y
- Powers, R.P., Jetz, W., 2019. Global habitat loss and extinction risk of terrestrial vertebrates under future land-use-change scenarios. Nat. Clim. Change 9, 323–329. https://doi.org/10.1038/s41558-019-0406-z

- Schipper, A.M., Hilbers, J.P., Meijer, J.R., Antão, L.H., Benítez‐López, A., Jonge, M.M.J., Leemans, L.H., Scheper, E., Alkemade, R., Doelman, J.C., Mylius, S., Stehfest, E., Vuuren, D.P., Zeist, W., Huijbregts, M.A.J., 2019. Projecting terrestrial biodiversity intactness with GLOBIO 4. Glob. Change Biol. gcb.14848. https://doi.org/10.1111/gcb.14848
- Thuiller, W., Guéguen, M., Renaud, J., Karger, D.N., Zimmermann, N.E., 2019. Uncertainty in ensembles of global biodiversity scenarios. Nat. Commun. 10, 1446. https://doi.org/10.1038/s41467-019-09519-w