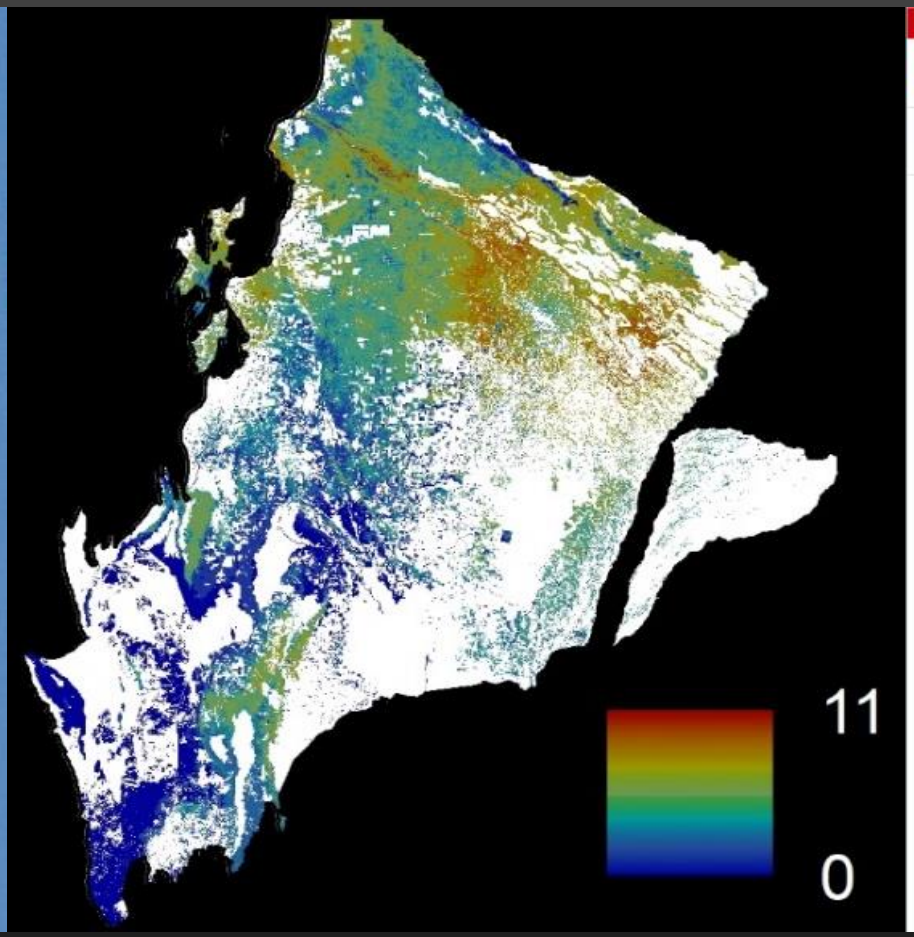
Modeling endangered species' forest habitats, and updating forest land use plans in Argentina in support of the UN Sustainable Development Goals



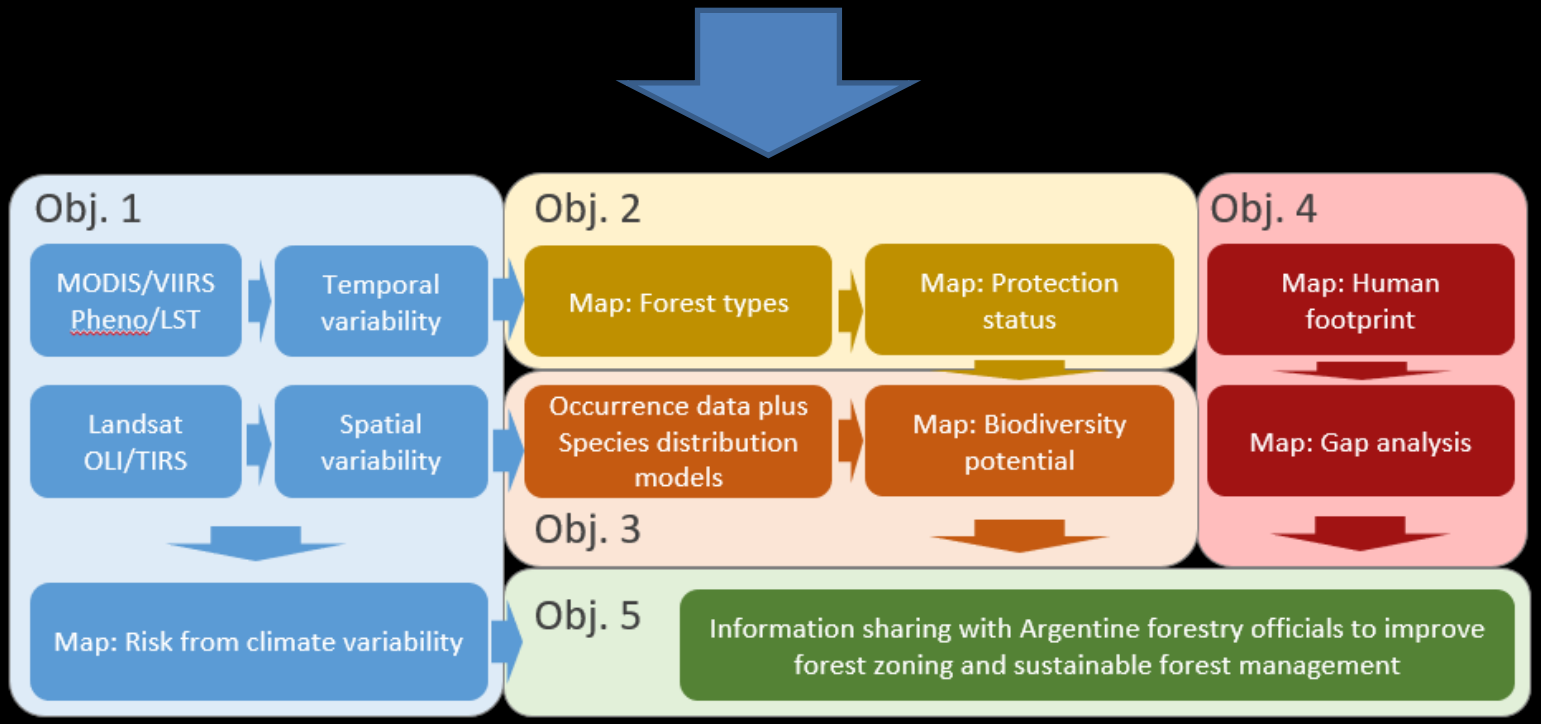
Anna Pidgeon, University of Wisconsin
N. Politi, L. River[1], S. Martinuzzi, V. C. Radeloff, E.M.O. Silveira, A. Olah, L. Lizarraga, G. Martinez Pastur

Introduction

Environmental Conservation (2018) **45** (3): 252–260 © Foundation for Environmental Conservation 2017 doi:10.1017/S0376892917000455

Enhancing biodiversity conservation in existing land-use plans with widely available datasets and spatial analysis techniques

SEBASTIAN MARTINUZZI*[1], LUIS RIVERA[2], NATALIA POLITI[2], BROOKE L. BATEMAN[1,3], ESTEFANIA RUIZ DE LOS LLANOS[2], LEONIDAS LIZARRAGA[4], M. SOLEDAD DE BUSTOS[5], SILVIA CHALUKIAN[6], ANNA M. PIDGEON[1] AND VOLKER C. RADELOFF[1]



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Becaria Doctoral
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Análisis Geoespacial

Sebastian Martinuzzi,
Investigador
Análisis Geoespacial, conservación

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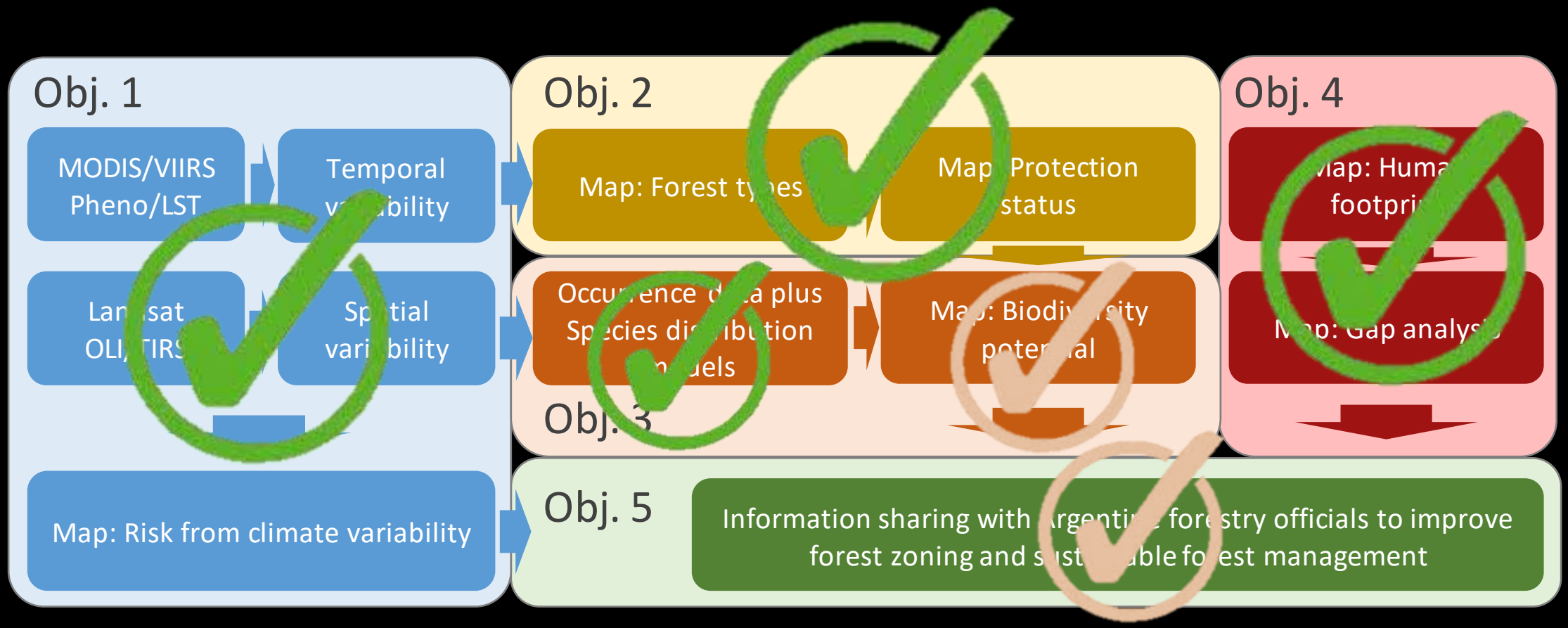
Introduction

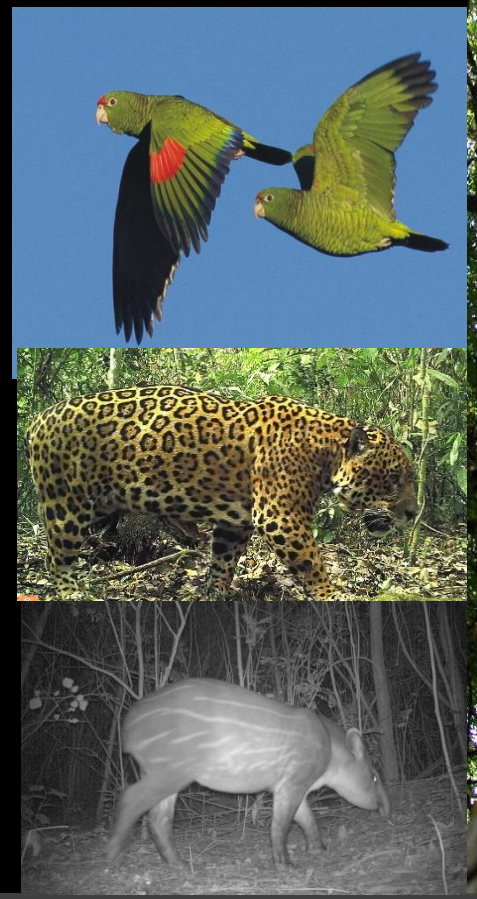


Biodiversity Mapping

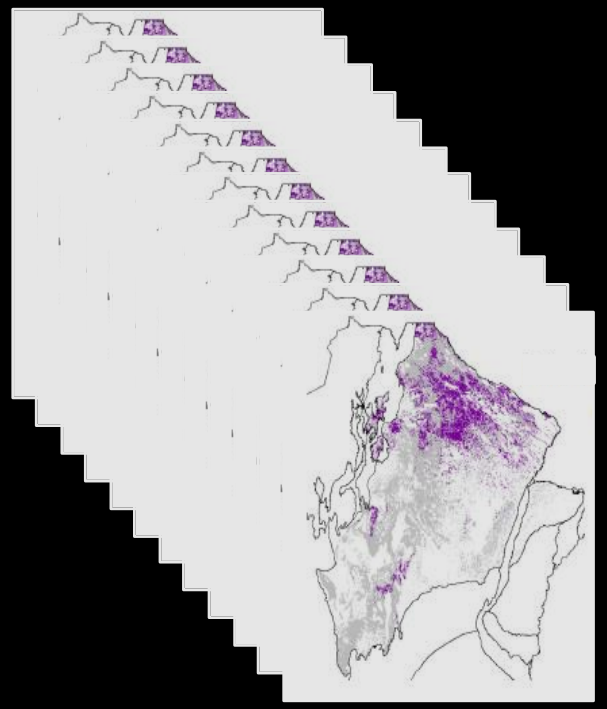
1. Map potential habitat distributions of species of regional importance

- Trees, Mammals, Birds
- Endangered species, cultural icons, species providing ecosystem services

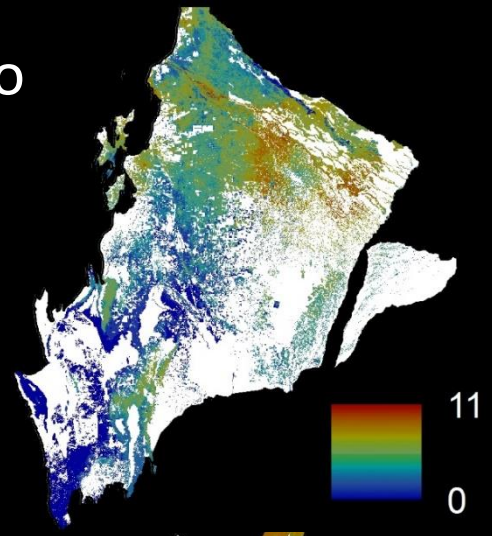
Region	Initial list	Modeled
Andean-Patagonian	17	**17**
Atlantic	23	**20**
Chaco	17	**12**
Espinal	13	**12**
Yungas	16	**15**



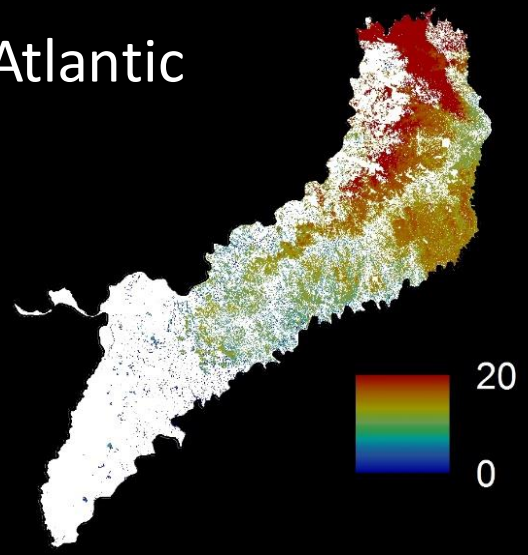
Biodiversity Mapping



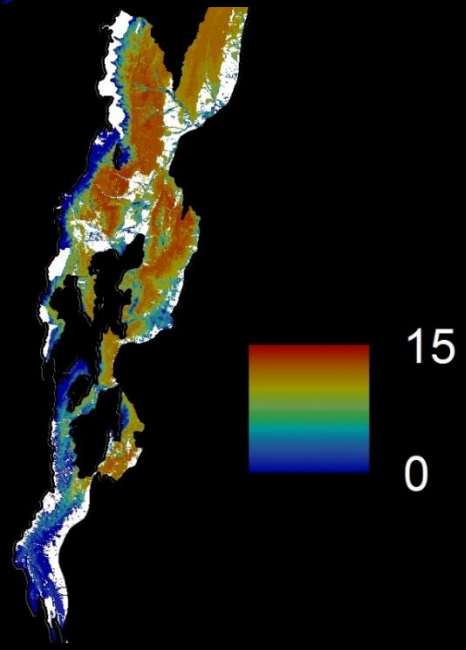
Chaco



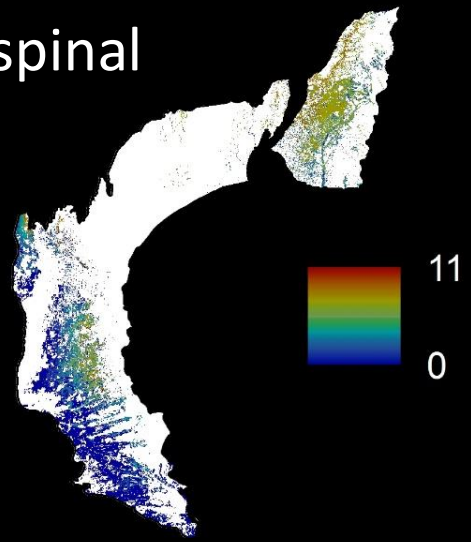
Atlantic



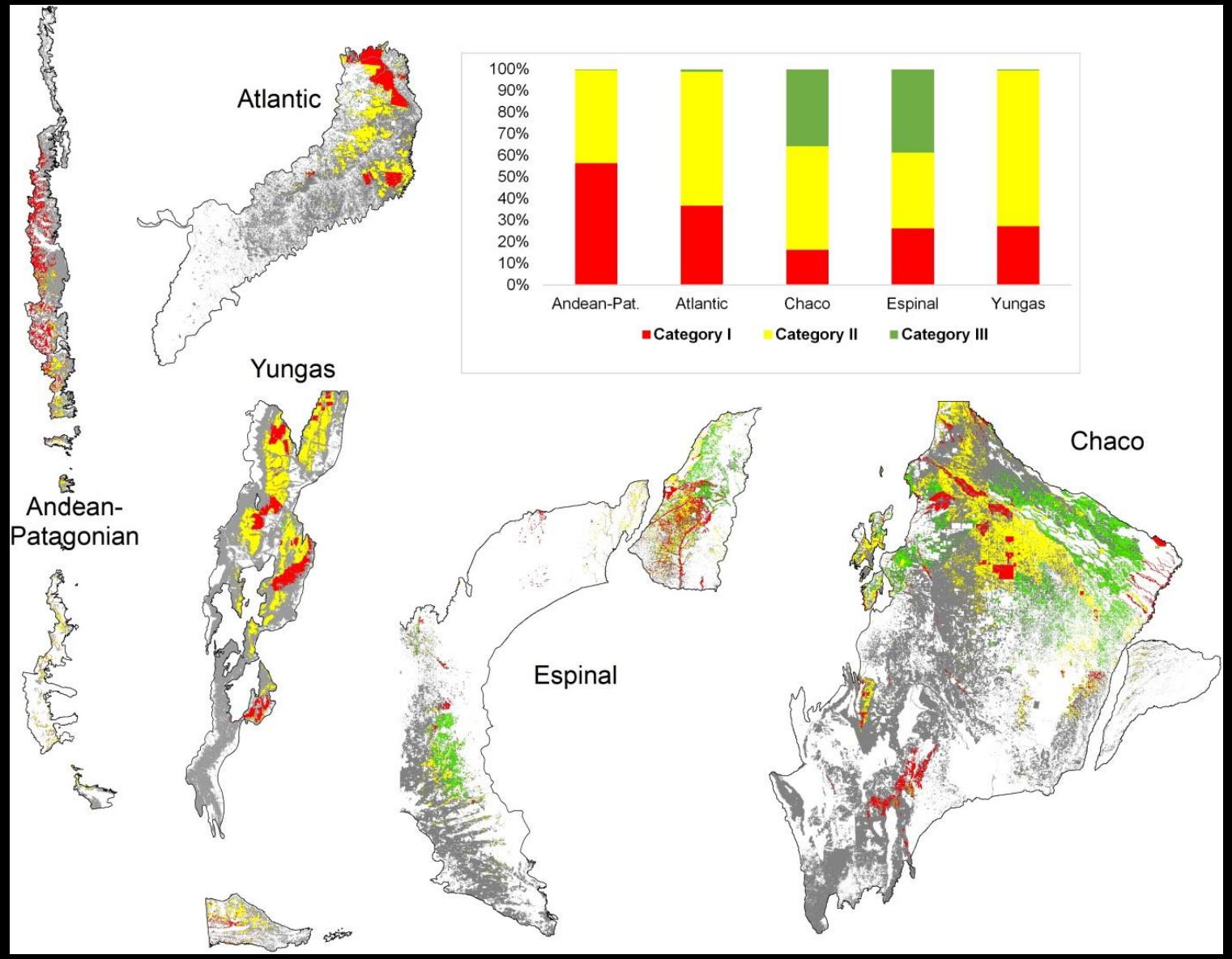
Yungas



Espinal

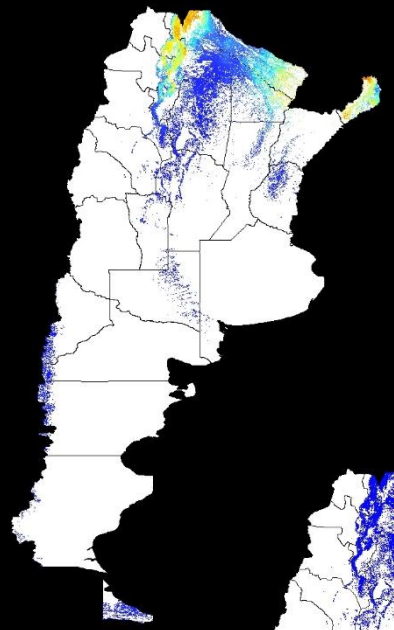


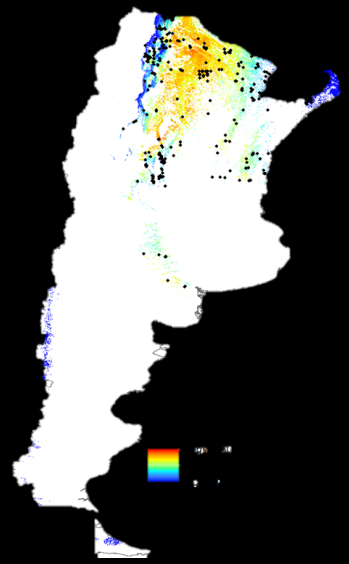
Biodiversity Mapping

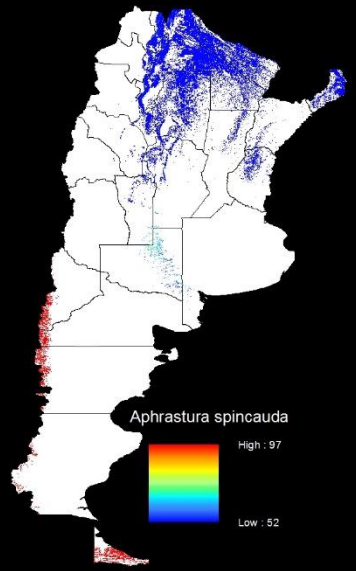


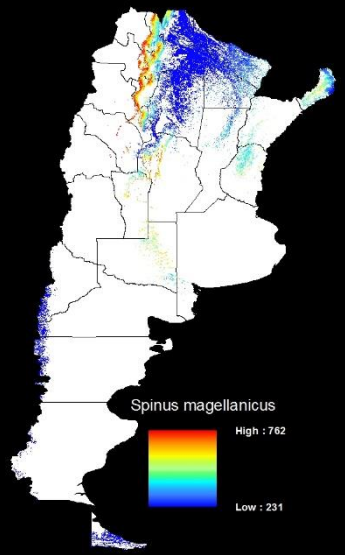
Biodiversity Mapping

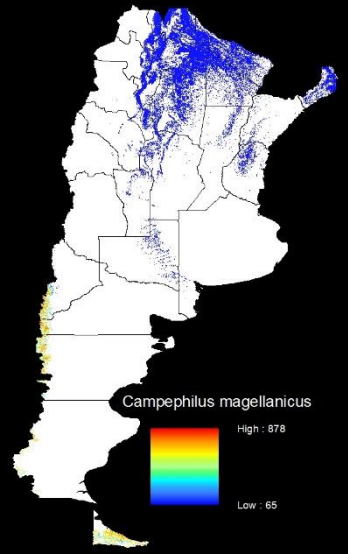
2. Map 152 forest bird species

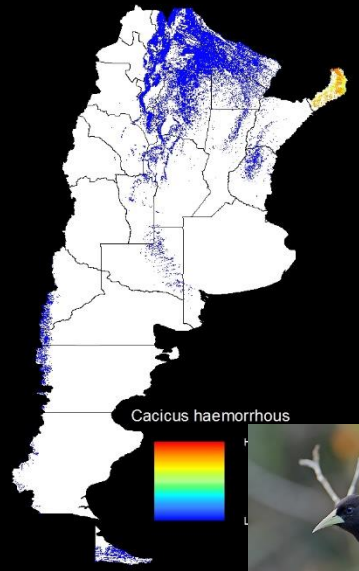




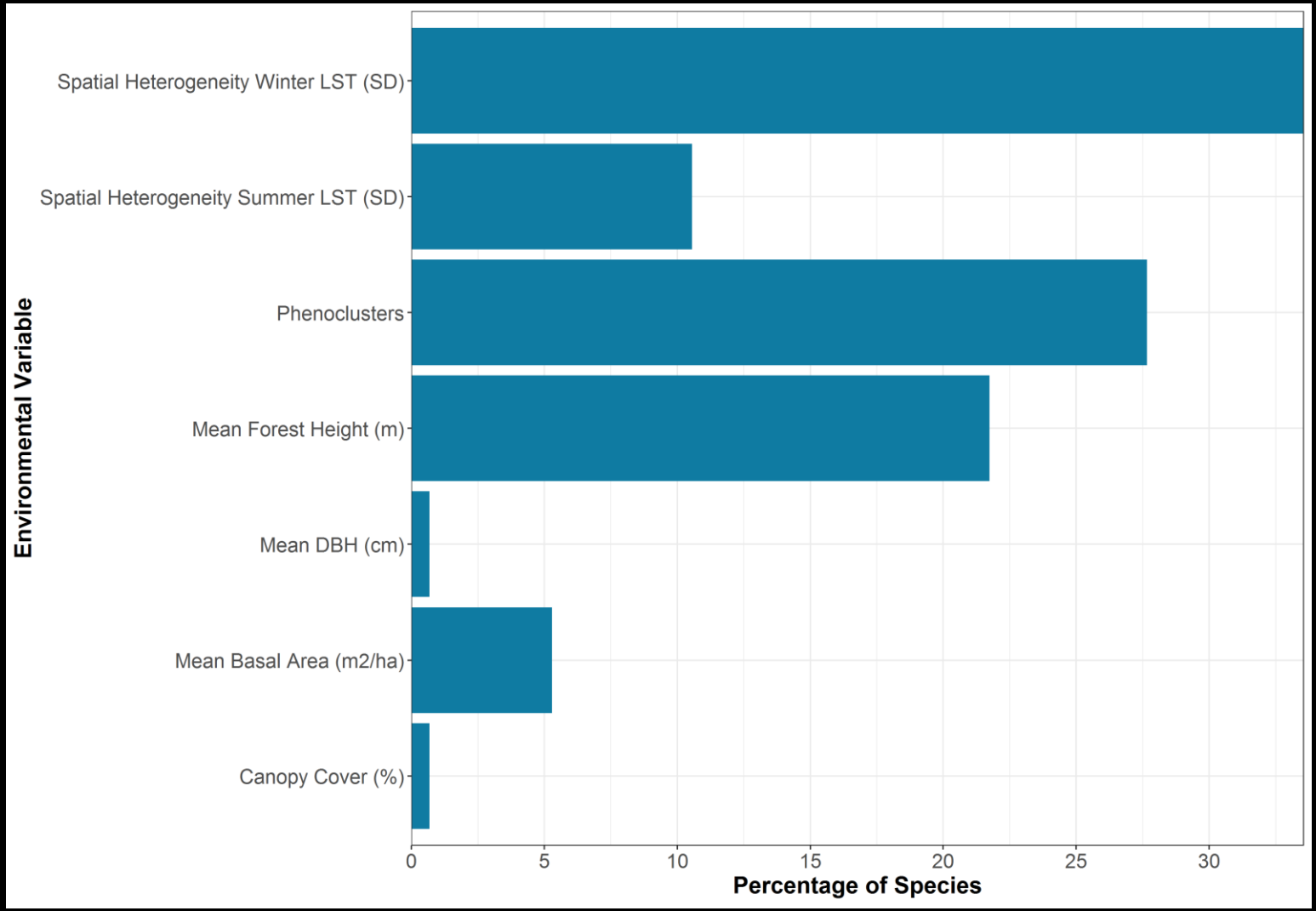




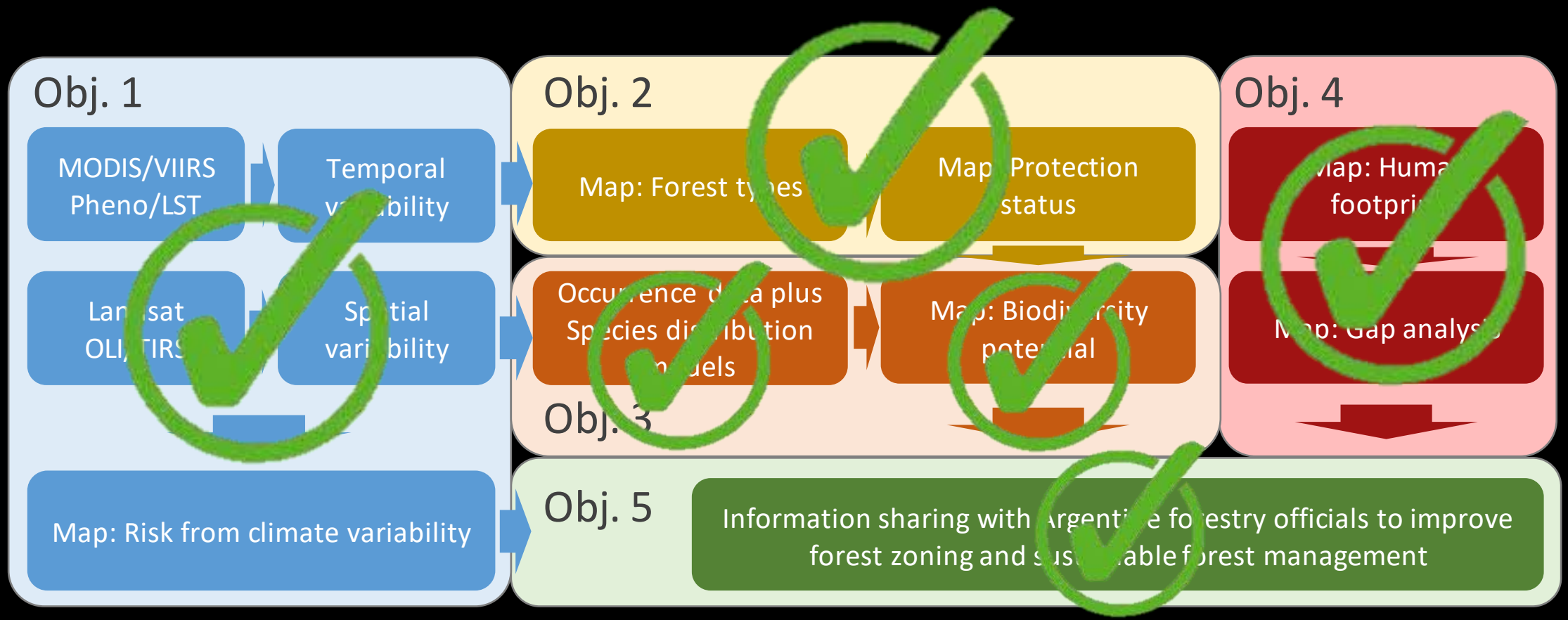




Biodiversity Mapping



Biodiversity Mapping



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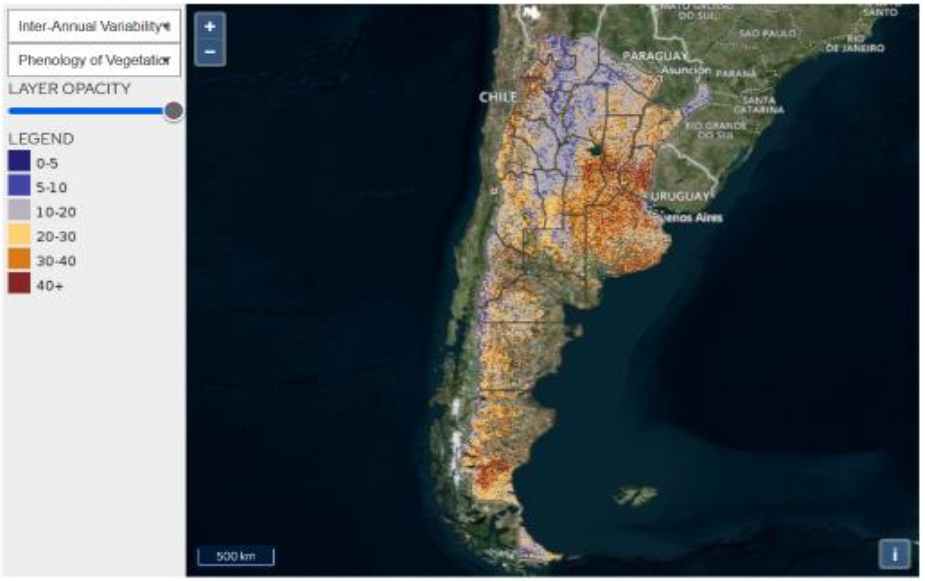
Map products in support of sustainable management of Argentina's forests



Related Publications

Silveira, E.M.O., Radeloff, V.C., Martinuzzi, S., Pastur, G.J.M., Bono, J., Politi, N., Lizarraga, L., Rivera, L.O., Ciuffoli, L., Rosas, Y.M., Olah, A.M., Gavier-Pizzaro, G.I., Pidgeon, A.M.. 2022. Nationwide native forest structure maps for Argentina based on forest inventory data, SAR Sentinel-1 and vegetation metrics from Sentinel-2 imagery. Remote Sensing of Environment, 2022,113391.

Inicio | Institucional | Áreas Protegidas | Especies | Mapas | GEPIN | Fuentes y Citas | Ecorregiones | Documentos | Novedades

Modelando el hábitat de especies amenazadas para actualizar los ordenamientos de bosques de Argentina

Publicado el 01-09-2020 a las 22:14 hs

Este es el título del proyecto desarrollado entre 2018 y 2021 por investigadores de la Universidad de Wisconsin-Madison, el CADIC (Centro Austral de Investigaciones Científicas), la Universidad de Jujuy, la Administración de Parques Nacionales y el INTA . En esta sección, presentamos sus objetivos y productos generados.

Últimas novedades

- 20 años de la Ley Nº 25.463: Monumento Natural Yaguareté
- Plan de Educación Ambiental del Parque Nacional Sierra de las Quijadas
- Restauración ecológica: Indicios de recolonización de la gallineta chica (Rallus antarcticus) en el Parque Nacional Bosques Petrificados de Jaramillo
- Web Educativa del Parque Nacional Talampaya: Por la tierra de dinosaurios y capayanes
- Caracterización de la situación de incendios en las áreas protegidas nacionales de Argentina, a partir de focos de calor MODIS y VIIRS (Periodo 2003-2020)
- Avances en la implementación de la Zona de Amortiguamiento del Parque Nacional Campos del Tuyú
- Evaluación de sitios de escalada en los Parques Nacionales
- Esquema Biogeográfico de la República Argentina

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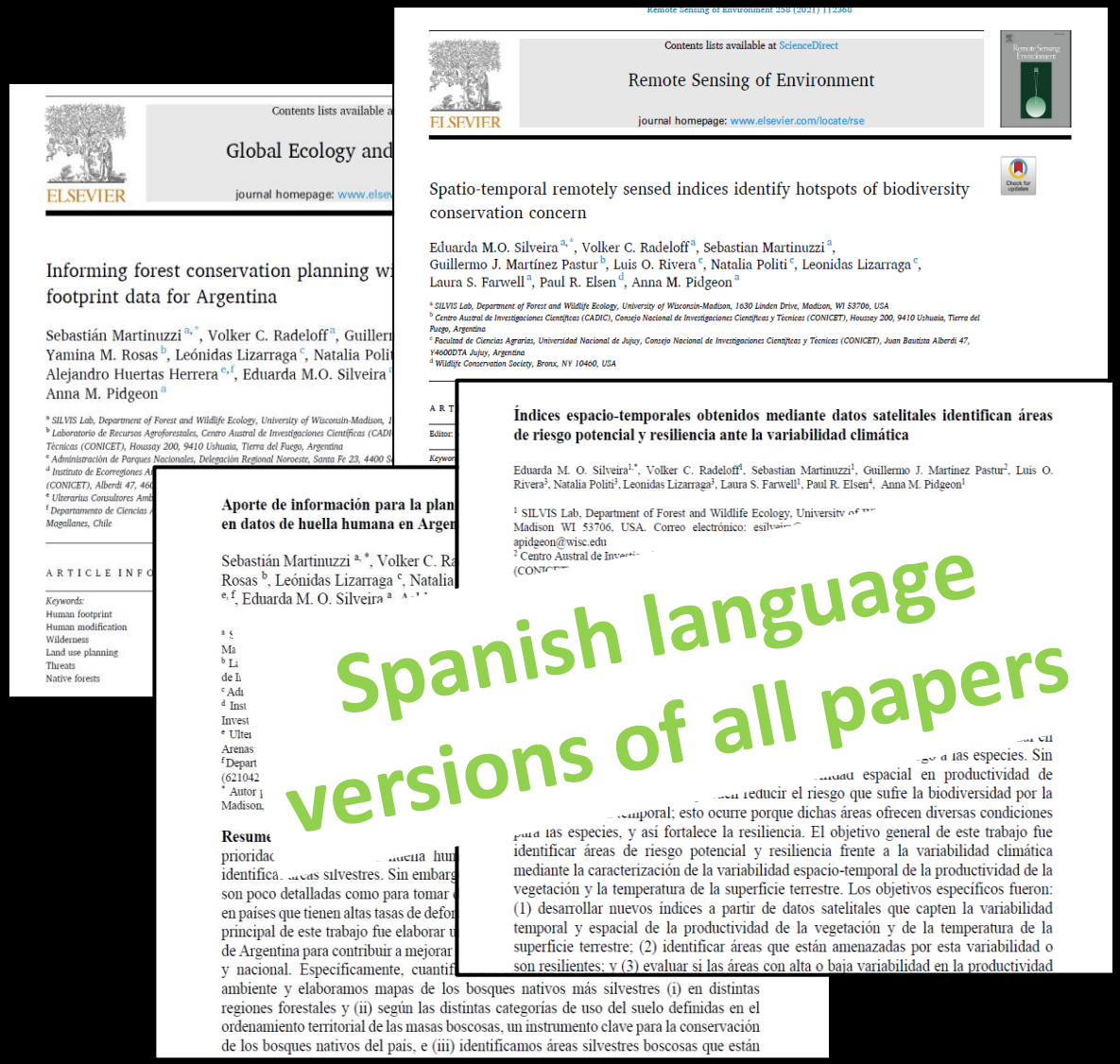
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A. Pidgeon [1], N. Politi [2], L. Rivera [2], S. Martinuzzi [1], V. C. Radeloff [1], E.M.O. Silveira [1], A. Olah [1], L. Lizarraga[3], G. Martinez Pastur[4]
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Ministerio de Ambiente y Desarrollo Sostenible Argentina
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PROGRAMA NACIONAL FORESTALES
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Conclusions

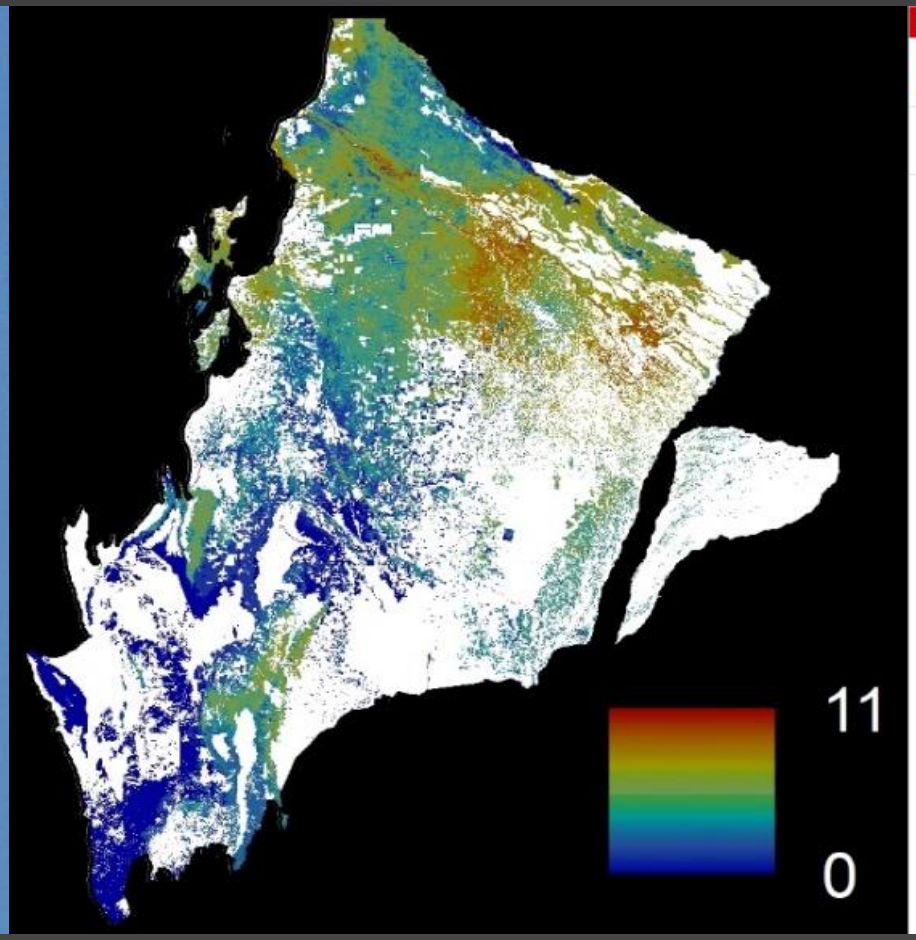
Remote sensing contribution

- New satellite metrics good predictors in SDMs

Conservation impact

- Improving existing land use plans with satellite data, species distribution modeling, and gap analysis
- Focus on species of regional importance
- Long-term partnerships

THANK YOU!!!



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