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# Science

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A photograph of three golden snub-nosed monkeys (Rhinopithecus roxellana) sitting on a thick, mossy tree branch. The monkeys have thick, golden-brown fur and distinctive blue faces. One adult monkey is on the left, another adult is on the right, and a smaller juvenile is nestled between them in the center. They are all looking towards the camera.

PRIMATE  
GENOMES



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## ON THE COVER

The golden snub-nosed monkeys (*Rhinopithecus roxellana*) depicted here are one of the hundreds of primate types found all over the world. An international team of researchers analyzed the genomes of nonhuman primates from more than 230 different species and demonstrated how these data can help us learn about both nonhuman primate biology and our own health. See the special section beginning on page 904.  
*Image: Guanli Ouyang*



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should be made available that explains the high-level structure of the NMF and its relation to published decennial statistics and tabulation geographies. Aggregation specifications should link raw noisy measurements to traditional tabulation statistics to facilitate statistical analysis. An additional version of the NMF for which these aggregations have already been performed should also be made available, so that each tabulation has a single estimate. Detailed geographic information for the NMF, including shapefiles and geography assignment files that describe the relationship between traditional tabulation geographies and NMF geographies, will also help analysts.

Census data serve as the backbone for a substantial number of scientific analyses and policy decisions. Producing a more accessible and useful NMF will benefit researchers and facilitate more accurate and applicable conclusions without compromising the confidentiality of individual Census responses.

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10.1126/science.adi7004

## Chile's road plans threaten ancient forests

During the United Nations Biodiversity Conference (COP15) in December 2022, nearly 200 countries, including Chile, agreed to halt biodiversity loss by 2030 and to take urgent actions to stop the extinction of endangered species. Despite

this commitment, the Chilean government is pushing for the construction of a road that would cross the Alerce Costero National Park (1), an area of global importance for biodiversity conservation (2) and home to the endangered conifer *Fitzroya cupressoides* (3). Throughout the world, roads threaten biodiversity and ecosystem functions (4). Before pushing this project ahead, Chile should consider the likelihood that the road will undermine the country's progress toward international environmental commitments.

*Fitzroya*, which grows exclusively in Chile and Argentina, is one of the longest-living tree species on Earth (5, 6). *Fitzroya* forests are among the forests that sequester the most carbon worldwide, and they provide critical ecosystem services and a wealth of historical and environmental information (7). *Fitzroya* populations face a high risk of extinction after centuries of overexploitation and burning (7) and, more recently, as a result of climate change (3).

The Alerce Costero National Park is the only area that protects a genetically unique *Fitzroya* population and the last remnants of species-rich Valdivian temperate rainforests from the Coastal range (8, 9). Building a road through this vulnerable ecosystem would increase the risk of invasion by alien species, facilitate illegal logging, and greatly increase the probability of extensive wildfires in the park (4). More than 90% of wildfires occur within 1 km of roads in Chile (10).

Chile's proposed road completely ignores the COP15 agreement. The government must honor its commitments and prioritize the protection of the country's most endangered species. The global biodiversity crisis and the unprecedented high risk of species extinction (11) call for timely and concrete actions. The preservation of roadless areas is critical to the goals of reducing extinction risks and protecting 30% of the planet.

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#### TECHNICAL COMMENT ABSTRACTS

##### Comment on "Policy impacts of statistical uncertainty and privacy"

Yifan Cui *et al.*

Steed *et al.* illustrate the crucial impact that the quality of official statistical data products may exert on policy decisions. We underscore the importance of conducting principled quality assessment of official statistical data products. We observe that the quality assessment procedure employed by Steed *et al.* needs improvement, due to the inadmissibility of the estimator used and the inconsistent probability model it induces on the joint space of the estimator and the observed data. We propose alternative statistical methods to conduct principled quality assessments for official statistical data products.

Full text: dx.doi.org/10.1126/science.adf9724

##### Response to Comment on "Policy impacts of statistical uncertainty and privacy"

Ryan Steed *et al.*

Cui *et al.* propose a valuable improvement to our method of estimating lost entitlements due to data error. Because we don't have access to the unknown, "true" number of children in poverty, our paper simulates data error by drawing counterfactual estimates from a normal distribution around the official, published poverty estimates, which we use to calculate lost entitlements relative to the official allocation of funds. But, if we make the more realistic assumption that the published estimates are themselves normally distributed around the "true" number of children in poverty, Cui *et al.*'s proposed framework allows us to reliably estimate lost entitlements relative to the unknown, ideal allocation of funds—what districts would have received if we knew the "true" number of children in poverty.

Full text: dx.doi.org/10.1126/science.adh2297



## Chile's road plans threaten ancient forests

Roco Urrutia-Jalabert, Jonathan Barichivich, Ivaro G. Gutierrez, and Alejandro Miranda

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## Los planes viales de Chile amenazan los bosques antiguos

Durante la Conferencia de las Naciones Unidas sobre la Biodiversidad (COP15) en diciembre de 2022, casi 200 países, incluido Chile, acordaron detener la pérdida de biodiversidad para 2030 y tomar medidas urgentes para evitar la extinción de especies en peligro. A pesar de este compromiso, el gobierno chileno está impulsando la construcción de una carretera que cruzaría el Parque Nacional Alerce Costero (1), un área de importancia global para la conservación de la biodiversidad (2) y hogar de la conífera en peligro *Fitzroya cupressoides* (3). En todo el mundo, las carreteras amenazan la biodiversidad y las funciones de los ecosistemas (4). Antes de impulsar este proyecto, Chile debería considerar que esta carretera afecte el progreso del país hacia los compromisos ambientales internacionales.

*Fitzroya*, que crece exclusivamente en Chile y Argentina, es una de las especies de árboles más longevas de la Tierra (5, 6). Los bosques de *Fitzroya* se encuentran entre los bosques que más carbono capturan en todo el mundo y brindan servicios ecosistémicos críticos, así como una riqueza de información histórica y ambiental (7). Las poblaciones de *Fitzroya* enfrentan un alto riesgo de extinción después de siglos de sobreexplotación y quema (7) y, más recientemente, como resultado del cambio climático (3).

El Parque Nacional Alerce Costero es la única área que protege una población genéticamente única de *Fitzroya* y los últimos remanentes de los ricos bosques templados Valdivianos de la Cordillera Costera (8, 9). Construir una carretera a través de este ecosistema vulnerable aumentaría el riesgo de invasión por especies invasoras, facilitaría la tala ilegal y aumentaría enormemente la probabilidad de incendios forestales extensos en el parque (4). Más del 90% de los incendios forestales ocurren dentro de 1 km desde las carreteras en Chile (10).

La carretera propuesta por Chile ignora por completo el acuerdo de la COP15. El gobierno debe cumplir con sus compromisos y priorizar la protección de las especies más amenazadas del país. La crisis mundial de biodiversidad y el riesgo sin precedentes de extinción de especies (11) exigen acciones oportunas y concretas. La preservación de áreas sin carreteras es fundamental para los objetivos de reducir el riesgo de extinción de especies y proteger el 30% del planeta.