

MIZURA: Inclusive citizen science from power wheelchair users to study Bushfires

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MIZURA: Science Through Inclusion, Empowering Disabled Citizen Scientists for a More Resilient Future

Harnessing Adaptive Advantages

MIZURA transforms the way we conduct science by including disabled citizens—often overlooked as contributors—into cutting-edge research. By leveraging the stability and power supply of battery-powered wheelchairs, these citizen scientists can collect high-resolution LiDAR data to build 3D models of urban and wildland environments.

Addressing Wildfire Risk

Using LiDAR sensors mounted on wheelchairs, participants can generate data to assess Bushfires risk in the Wildland-Urban Interface (WUI). By integrating this information with Earth observation data, MIZURA can help communities make informed decisions on fire prevention and management.

A Digital Twin for Science

The collected data can serve as a “digital twin” for satellite remote sensing, improving environmental studies beyond Bushfires risk, including air quality, urban heat mapping, and AI-driven urban planning solutions.

Un sensor en una silla de ruedas permite a personas con ELA reconstruir en 3D espacios arquitectónicos

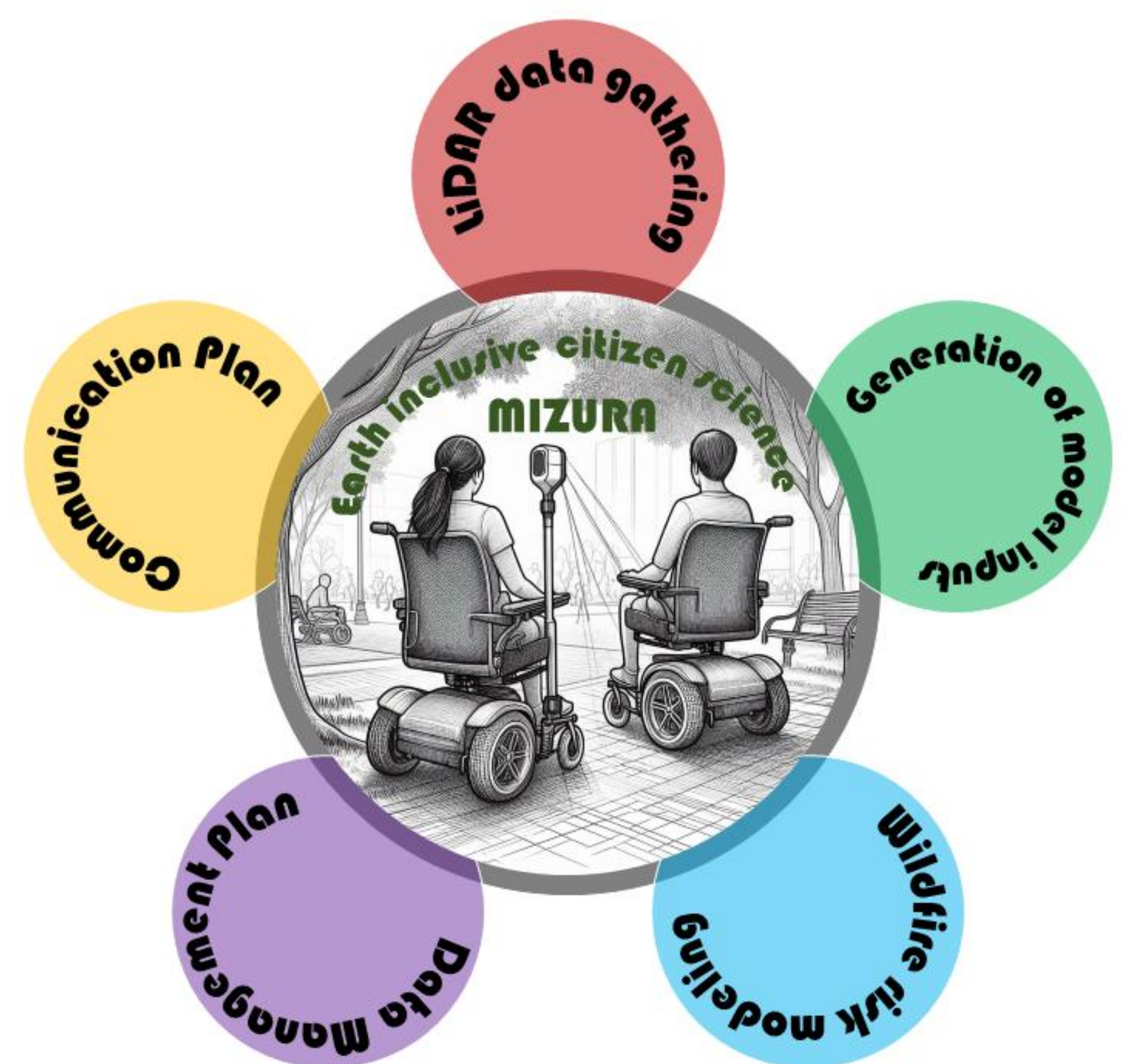
De esta forma, se logra reconstruir modelos en 3D de las calles de las ciudades para realizar la posterior evaluación de su accesibilidad



<https://www.telemadrid.es/salud/Un-sensor-en-una-silla-de-ruedas-permite-a-personas-con-ELA-reconstruir-en-3D-espacios-arquitectonicos-0-2698830117-20240819070726.html>



<https://www.europapress.tv/sociedad/898222/1/personas-ela-reconstruyen-calles-edificios-3d-proyecto-cientifico>



Building an Inclusive Scientific Community

MIZURA ensures that disabled citizen scientists are involved in every step—from data collection to analysis, interpretation, and publication. The project can also produce a practical guide, enabling more people worldwide to contribute to Earth science research.

Creating Awareness and Change

By highlighting the contributions of disabled citizens, MIZURA promotes diversity, inclusion, and sustainability. The project actively engages media, policymakers, and the public to shift perceptions and drive systemic change.

Open Science for All

All data and findings can be openly shared in public repositories and open-access journals, ensuring transparency and global collaboration.

Join MIZURA in reshaping science through inclusion—because diverse perspectives lead to stronger, smarter, and more sustainable solutions.

MIZURA: Where Diversity Fuels Discovery!

Funded from Spanish Foundation for Science and Technology for urban applications. Yet unfunded for Bushfires applications and seeking for collaborators and funding