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CLIMATE DISINFORMATION AND DIGITAL MOBILIZATION: HEATWAVES IN BRAZIL AND SOCIO-ENVIRONMENTAL JUSTICE

DESINFORMAÇÃO CLIMÁTICA E MOBILIZAÇÃO DIGITAL: ONDAS DE CALOR NO BRASIL E JUSTIÇA SOCIOAMBIENTAL

DESINFORMACIÓN CLIMÁTICA Y MOVILIZACIÓN DIGITAL: OLAS DE CALOR EN BRASIL Y JUSTICIA SOCIOAMBIENTAL

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ABSTRACT

The year 2024 was the hottest ever recorded in Brazil, with an average temperature of 25.02°C, revealing the intensification of the climate crisis. Paradoxically, climate risk denial almost doubled, rising from 5% to 9% of the population, according to Datafolha. This contradiction reveals an epistemic and communicational crisis that undermines public understanding of global warming. This study aims to analyze how climate disinformation circulates in Brazil, compromising adaptation and mitigation policies. To this end, a qualitative and documentary approach was adopted, grounded in Luciano Floridi's concept of the infosphere and supported by INMET data, UN reports, and recent scientific literature. Findings indicate that the contamination of the infosphere by false narratives—amplified by social media and political groups—functions as an active environmental risk vector, turning disinformation into an instrument of symbolic and economic power. The results demonstrate that confronting the climate crisis also requires protecting the informational environment. It is concluded that future sustainability depends on an epistemic governance capable of integrating science, technology, and cognitive justice, ensuring that climate information remains a public good guided by truth and the preservation of life.

Keywords: Infosphere. Climate Disinformation. Climate Denial. Extreme Events. Scientific Communication.

RESUMO

O ano de 2024 foi o mais quente já registrado no Brasil, com temperatura média de 25,02°C, revelando o agravamento da crise climática. Paradoxalmente, a negação dos riscos ambientais quase dobrou, passando de 5% para 9% da população, segundo o Datafolha. Tal contradição evidencia uma crise epistêmica e comunicacional que afeta a percepção pública sobre o aquecimento global. Objetiva-se analisar como a desinformação climática se propaga no país, comprometendo políticas de adaptação e mitigação. Para tanto, procede-se a uma abordagem qualitativa e documental, fundamentada no conceito de infoesfera, proposto por Luciano Floridi, e apoiada em dados do INMET, relatórios da ONU e literatura científica recente. Observa-se que a contaminação da infoesfera por narrativas falsas —

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amplificadas por redes sociais e grupos políticos — atua como vetor ativo de risco ambiental, transformando a desinformação em instrumento de poder simbólico e econômico. Os resultados indicam que o enfrentamento da crise climática requer também a proteção do ambiente informacional. Conclui-se que a sustentabilidade futura depende de uma governança epistêmica, capaz de articular ciência, tecnologia e justiça cognitiva, garantindo que a informação climática seja um bem público orientado pela verdade e pela preservação da vida.

Palavras-chave: Infoesfera. Desinformação Climática. Negação Climática. Eventos Extremos. Comunicação Científica.

RESUMEN

El año 2024 fue el más caluroso jamás registrado en Brasil, con una temperatura media de 25,02°C, lo que revela la profundización de la crisis climática. Paradójicamente, la negación de los riesgos ambientales casi se duplicó, pasando del 5% al 9% de la población, según datos de Datafolha. Esta contradicción expresa una crisis epistémica y comunicacional que afecta la comprensión pública del calentamiento global. El objetivo de este estudio es analizar cómo la desinformación climática se propaga en el país, debilitando las políticas de adaptación y mitigación. Para ello, se adopta un enfoque cualitativo y documental, basado en el concepto de infosfera propuesto por Luciano Floridi, con apoyo en datos del INMET, informes de la ONU y literatura científica reciente. Se observa que la contaminación de la infosfera por narrativas falsas —amplificadas por redes sociales y grupos políticos— actúa como vector activo de riesgo ambiental, transformando la desinformación en instrumento de poder simbólico y económico. Los resultados muestran que enfrentar la crisis climática requiere también proteger el entorno informacional. Se concluye que la sostenibilidad futura depende de una gobernanza epistémica capaz de articular ciencia, tecnología y justicia cognitiva, garantizando que la información climática sea un bien público orientado por la verdad y la preservación de la vida.

Palabras clave: Infosfera. Desinformación Climática. Negación Climática. Eventos Extremos. Comunicación Científica.

1 INTRODUCTION

This article discusses a recent and complex phenomenon that affects not only Brazilian society, but several others around the world, namely, climate disinformation, which transcends digital borders and directly impacts public opinion around the world about the climate and environmental crisis. The year 2024 was marked, in Brazil, by intense temperatures that exceeded all previous records, reaching an average of 25.02°C — almost one degree above historical normality. Something that corroborates what INMET already warned, which pointed to the last decade as the warmest. (National Institute of Meteorology, 2022). Despite this situation, there are still many people and government leaders who minimize or deny - deniers - the seriousness of climate change.

The term "public opinion" is treated in the manner of Gabriel Tarde (2005), as a psychosociological concept. This means that the public in question is not subdivided into a merely political public (left, right or center) that defines the legal rules and shapes the political institutions that, in turn, would form a dominant political opinion; and on the other hand, the mass of consumers of tastes, ideas, fads of all kinds. On the contrary, the term "public opinion" refers to a shared opinion in which elements of tradition, politics, customs, reason, and social networks are conflictingly shaped in a given time and space.

In this way, the disinformation shared and updated in posts and face-to-face does not act in isolation. It is connected to power structures, inequalities and exclusion that cross Brazilian society, mainly affecting populations that already live in conditions of socio-environmental vulnerability — residents of urban peripheries, indigenous peoples and traditional communities.

As Torres *et al* (2020) observe, these groups have the least access to digital education, reliable information, and institutional protection structures, since they are located on the margins of the flows of communication and power that structure environmental risk management, and are often made invisible in public policies and scientific information networks, which amplifies the impact of climate catastrophes on these groups, limiting their collective response capacity.

This process of marginalization, which makes environmental costs unfeasible for a portion of the population, is what Henri Acselrad (2010) calls environmental racism. It is a perverse logic in which the costs of ecological degradation fall disproportionately on the shoulders of the victims, most of whom are racialized and discriminated groups. These victims inhabit territories with a history of absence of territorialized public policies of the

State, more exposed to the risks of large development projects, such as mining and hydroelectric projects.

Consequently, unraveling the flows of disinformation is to understand the very power dynamics that perpetuate environmental inequality. On the other side of the spectrum, community collectives and social movements occupy the infosphere to counter hegemonic narratives, announce possible alternatives, and strengthen practices of socio-environmental justice (Porto, 2012).

Understanding these informational flows is, therefore, a fundamental step towards the realization of socio-environmental justice. This concept, widely discussed by several authors, is related to the need to ensure that all social groups — especially the most vulnerable — have equitable access to natural resources and the decisions that affect their use:

> This is understood as the set of principles that ensure that no group of people, whether ethnic, racial or class groups, bears a disproportionate share of the negative environmental consequences of federal, state and local economic operations, policies and programs, as well as those resulting from the absence or omission of such policies. (Herculano, 2002)

A survey by the United Nations (UN, 2025) pointed to the occurrence of 10 extreme weather events in Brazil throughout 2024. Among these, we can mention three that were classified as unprecedented in their breadth and impact: the devastating floods in Rio Grande do Sul, the severe drought in the Amazon and the prolonged heat waves in the Midwest region.

In the hottest year in Brazil's history, surprisingly more Brazilians have come to deny that climate change is dangerous. A Datafolha survey showed that this number rose from 5% to 9% between 2024 and 2025 (Datafolha, 2025). How is this possible? How can people deny something they are feeling on their skin?

To understand this paradox, we use the concept of infosphere created by the Italian philosopher Luciano Floridi (2015). He explains that we no longer live only in the physical world or only in the digital world - we live in a mixture of the two, which he calls the infosphere:

> A new type of conviviality, connected and unlimited, extended in spatiality and not only in physical personal relationships, "face to face", but characterized by connective forms that, through their translation into bits, continuously transform people, streets, squares, houses, things, into data networks, creating an unprecedented and hybrid condition, defined by Luciano Floridi (2015) "on-life. (Schlemmer; Di Felice; Serra,

2020, p. 4).

This is like the air we breathe, but made of information rather than oxygen. Just as polluted air is bad for our lungs, false information is bad for our ability to understand reality and make good decisions.

2 THE ECOSYSTEM OF THE INFOSPHERE

2.1 THE FIVE VECTORS OF CONTAMINATION IN THE BRAZILIAN CLIMATE INFOSPHERE

During the year 2024, the Brazilian infosphere composed of social networks, digital platforms, media channels, and messaging apps was flooded with five main types of false information about the climate, which function as vectors of cognitive pollution (Floridi, 2015).

In that same year, the circulation of false information about the climate in Brazil took on unprecedented dimensions because it coincided with a convergence of critical factors: the worsening of extreme events, especially heat waves and fires in the Amazon and the Pantanal, the intensification of political disputes around the energy transition, and the increase in digital engagement on platforms with low informational control.

We can identify five main vectors of this cognitive pollution (Floridi, 2015), which help to understand how disinformation spreads and affects the collective perception of the climate crisis. The first vector refers to the systematic denial of scientific data produced by consolidated institutions, such as INMET (National Institute of Meteorology). Even in the face of records of extreme heat, discourses that discredited global warming circulated widely on social networks, accusing science of ideological manipulation (Aguiar; Martin; Batista, 2022). This type of disinformation is based on strategies of delegitimization of scientific knowledge and intentional confusion between fact and opinion.

The second vector is manifested by the attempt to naturalize or trivialize extreme weather events. The floods in Rio Grande do Sul or the prolonged drought in the Amazon were often treated as phenomena of "nature", in the face of which man would have almost nothing to do, except to reconstruct the shards left by the phenomenon.

The third vector, which has a political nature, refers to ideological polarization, which transforms the environmental debate into a field of partisan dispute between the extreme left and the extreme right. Throughout 2024, but not only, because this scenario remains in 2025,

climate policies were treated as "communist threats" or part of a "globalist agenda", reducing scientific questions about global warming to ideological debates (Evangelista; Garcia, 2024).

The fourth vector refers to a process of commodification of sustainability, very close to the idea of an ecological modernization, which centers its merely discursive action on campaigns and business discourses that appropriate the environmental vocabulary to only sell products and reputations. In this process, the collective sense of sustainability is diluted in individual and consumerist practices, diverting the focus from the structural causes of the crisis and rewarding individualistic actions as redemptive.

Finally, the fifth element acts in a treacherous way, stifling the reports and experiences of the people most impacted by the climate crisis. Thus, the opinions of native peoples, residents of the banks of rivers and remaining quilombo communities are constantly silenced or misrepresented. Such omission intensifies what Acselrad (2010) calls environmental discrimination, an injustice that brings together the lack of balance in nature and the contempt for traditional knowledge. To understand, therefore, the paths of disinformation is also to understand the debates about knowledge that builds the idea of the climate crisis in Brazil.

2.2 DIFFERENTIATED VULNERABILITIES AND EPISTEMIC RESISTANCES IN THE INFOSPHERE

Informational contamination does not affect everyone in the same way. It is possible to see that populations from the urban peripheries, indigenous peoples, and traditional communities in Brazil experience this process in a more accentuated way, as they face not only the physical impacts of climate change, but also barriers to access to knowledge and public protection policies (Torres *et al* 2020). During the 2024 heat waves, these previously mentioned groups felt the effects in a concrete way. There was, among them, an increase in cardiovascular diseases and difficulties in water supply and food production.

Among the most striking reports are those of Amazonian riverside dwellers, who describe the intensification of the "heat" and noticeable changes in the cycles of flood and drought of the rivers. However, the empirical knowledge of these populations — so rich and situated — rarely finds dialogue with the scientific information that circulates in institutional environments. This distance between what is lived and what is explained deepens what we are calling epistemic and climatic injustice, in which historically marginalized groups bear the double burden: they suffer more from the effects of the crisis and are less able to face it based on accessible and contextualized data.

This observation reinforces the thought of Enrique Leff (2001), for whom the environmental crisis is also a crisis of knowledge. The author argues that the current ecological collapse reflects the limitation of a rationality that separated man from nature and reduced knowledge to the logic of production.

As Vieira (2001, p. 9), the socio-environmental crisis that was once treated as if it were something punctual and surmountable, has become an inevitable reality of our times:

> Almost three decades after the Stockholm Conference was held in 1972, it would not be an exaggeration to say that we continue to deal with the socio-environmental crisis as if it represented only an untimely disturbance, a kind of background noise to be dealt with in a reactive and fragmented way, without implying the transgression of the profound logic that conditions the organization of contemporary societies.

In fact, climate disinformation is not just an isolated fact, but an expression of a dominant rationality that reduces reality to *fake news* and knowledge to capitalist utility. The infosphere contaminated by disinformation is, in this sense, the digital mirror of instrumental rationality that Leff (2006) criticizes, by transforming information into a manipulative commodity and truth into an algorithmic performance. The aforementioned author defends an environmental rationality as a means to overcome this totalitarian rationality, based on Marx's thought, Bookchin's anarchist naturalism, Baudrillard's postmodern thought, the ideas of Georgescu-Roegen, Prigogine, Morin, Habermas and Heidegger's ontology:

> The construction of a new productive paradigm based on principles and bases of environmental rationality implies a strategy of deconstruction of economic rationality through social actors capable of mobilizing political processes that lead to productive and knowledge transformations to achieve the purposes of sustainability, rather than through norms that can be imposed on capital and consumers to reform the economy. In addition to the capitalization of nature through a formal economic-ecological rationalization, sustainability is debated in the emerging field of political ecology, where the perceptions and interests of the majority groups of society, Third World populations and indigenous peoples come into play, who resist being globalized, reduced to the condition of producers and consumers of a greenish market system. (Leff, 2006, p. 232)

This vision moves the interaction between science and society to the field of the ecology of knowledge, where different ways of understanding – scientific, popular, ancestral – can communicate in a reciprocal way. In this sense, significant movements of epistemic resistance emerged in the Brazilian infosphere, promoted by peripheral and traditional

communities. By flooding the infosphere with their own stories about global warming, sustainability, and the environmental crisis, they generate anti-hegemony discourses that break the prevailing monopoly of truth and reestablish the territory as a legitimate source of knowledge and sustainable practices that can be the solution to the challenge imposed by climate change that has been experienced more intensely in recent decades.

Thus, the infosphere becomes a terrain of confrontation between the unique rationality of technoscience and the various rationalities of the ecology of knowledges. Socio-environmental activism and community movements of collective struggle tactically appropriate digital platforms to combat misinformation and develop mitigation and adaptation policies.

Indigenous leaders such as Txai Suruí and quilombola activists use Instagram, Facebook, and other digital social networks to promote climate advocacy and occupy the digital space with critical and creative educational content (Evangelista; Garcia, 2024).

2.3 COLONIALITY OF KNOWLEDGE AND THE EPISTEMIC CRISIS

The climate crisis, which is currently characterized by the increase in extreme events and the spread of online disinformation, is also a crisis of knowledge. We are living, more than an ecological collapse, a global epistemic crisis, the result of the domination of modern rationality and the coloniality of knowledge, a concept elaborated by Aníbal Quijano (2005) to refer to the way in which the European positivist project of modernity structured the world based on the hierarchization between different forms of knowledge. Colonization not only exploited bodies and lands, but also imposed a single rationality — scientific, Eurocentric, instrumental — as the standard of universal truth.

Boaventura de Sousa Santos (2007, p. 71) argues that:

> Modern Western thought is abyssal thinking. It consists of a system of visible and invisible distinctions, the latter of which underlie the former. Invisible distinctions are established through radical lines that divide social reality into two distinct universes: "on this side of the line" and "on the other side of the line"

This line defines what is considered science and what is relegated to ignorance — silencing the culture of the original peoples, the peasant folk wisdom and the epistemologies of the basal urban peripheries. To break this separation, the author proposes an *ecology of knowledges*, understood as "post-abyssal thinking is premised on the idea of the

inexhaustible epistemological diversity of the world, the recognition of the existence of a plurality of forms of knowledge beyond scientific knowledge. This implies renouncing any general epistemology" (Santos, 2007, p. 85-86)

These formulations converge on a point that seems inescapable, namely, climate disinformation in the Brazilian infosphere is not, in short, an isolated phenomenon, much less restricted to the technological field. It is, rather, a hasty incarnation of our known forms of epistemic coloniality, contained in the world-system as Immanuel Wallerstein called it. The infosphere, conceived as an ecosystem of hybrids of life and information, reproduces and amplifies the asymmetries of power between the various social groups when it itself concentrates cognitive power in the corporations and knowledge-producing institutions of the global North, relegating other forms of knowledge to the condition of noise, curiosity or folklore.

In a land and a time like contemporary Brazil, cognitive inequality takes on very particular contours. It manifests itself in phenomena such as the digital divide and the epistemic invisibility of the populations that, as already mentioned, most directly experience climate change: indigenous peoples, quilombola communities, riverside populations, among others.

By finding circulation channels for their own readings of the climate crisis, these organizations build what Santos (2018) would call intercultural translations: dialogues between knowledges that are not subject to hierarchy, but are strengthened in reciprocity.

These examples demonstrate that epistemic climate governance, in order to be democratic, needs to adopt strategies for the recognition and integration of traditional and territorial knowledge as a legitimate part of the production of environmental knowledge. Climate information should not be treated only as technical data, but as a shared cultural heritage, whose effectiveness depends on the diversity of voices that build it. The ethical and political challenge is to ensure that public policies for communication and climate education consider local knowledge not as cultural ornaments, but as active epistemologies in the formulation of solutions.

Ecological epistemic governance must be based on the reappropriation of the knowledge of traditional peoples, in which the quality of information and the diversity of knowledge are considered interdependent dimensions of sustainability. Therefore, addressing climate disinformation goes beyond preserving the informational environment; It is about restoring the connection between knowledge and cultural diversity, between the

digital and the physical, between the global and the local (glocal). From the perspective of the Epistemologies of the South, epistemic governance takes on a decolonial trait: it aims to decentralize the power of knowledge, sharing the right to name, interpret, and propose remedies for the climate crisis.

By adopting the Epistemologies of the South, with all their diversity and potentiality, the State has the opportunity to propose an epistemic governance with a decolonial character. In other words, this governance model seeks to decentralize colonizing power, redistributing the right to name, interpret, and propose solutions to the climate crisis. In other words, it is a matter of transforming the *infosphere* — today contaminated by mercantile interests and hegemonic narratives — into an ecosystem of plural knowledge, where knowledge becomes a common good and an instrument of emancipation.

In this sense, climate justice cannot be dissociated from cultural, economic, social and epistemic justice. Climate epistemic governance, in the light of the epistemologies of the South, is not limited to the technical management of information, but configures a civilizing project, aimed at reconfiguring humanity's way of thinking, feeling, and communicating about its relationship with the Earth

2.4 EPISTEMIC GOVERNANCE AND PUBLIC POLICIES

Brazilian epistemic governance is shaped by the recognition that climate disinformation is structurally favored by the algorithmic logic of digital platforms. During the aforementioned year 2024, recommendation algorithms on YouTube, Facebook, and TikTok, for example, were identified as multipliers of denialist content, favoring controversial and emotionally charged narratives. This dynamic reveals that the protection of information requires the regulation of information infrastructures, as argued by Floridi (2015).

In response to this active vector of environmental risk, the Brazilian government established in 2025 the Network of Partners for the Integrity of Climate Information. The network is part of the "Brazilian Chapter" of the Global Initiative for the Integrity of Information on Climate Change, which was launched globally in partnership with the UN and UNESCO. This initiative is the result of a collaboration between the Secretariat of Social Communication of the Presidency of the Republic (Secom PR), through the Secretariat of Digital Policies (SPDigi), the Ministry of Foreign Affairs (MRE) and the Ministry of Environment and Climate

Change (MMA).[3]

This initiative seeks to integrate environmental protection and informational quality, articulating scientific institutions (INMET, INPE), government agencies, civil society and digital platforms. The Network's actions include the creation of information quality indicators, the development of rapid response protocols to disinformation during extreme events, and the strengthening of digital climate education.

Experience has shown that traditional scholarly communication is insufficient, requiring the development of strategies that combine scientific rigor with narrative competence to compete for audience engagement. Proposed initiatives involve the creation of specialized scientific influencers and the adaptation of communication formats (such as *stories* and *reels*) for different platforms.

The contamination of the infosphere raises ethical issues governed by the principle of distributed responsibility (Floridi, 2015). This responsibility is shared among digital platforms, which must ensure the integrity of the algorithms; digital influencers, who must prioritize the quality and veracity of the content they produce; scientific institutions, which must make their communications accessible and understandable to the public; and citizens, who must exercise careful verification of the information they consume. The ultimate goal is to promote scientific accuracy and social justice through an ethics of climate information.

3 METHODOLOGY

To this end, a qualitative and documentary approach is carried out, based on the concept of infosphere, proposed by Luciano Floridi, and supported by data from INMET, UN reports and recent scientific literature. It is observed that the contamination of the infosphere by false narratives — amplified by social networks and political groups — acts as an active vector of environmental risk, transforming disinformation into an instrument of symbolic and economic power.

4 RESULTS AND DISCUSSIONS

The year 2024 was the year in which the increasing frequency of extreme weather events was met with the denial of these risks by the population.

[3] Brazil. Presidency of the Republic. Secretariat of Social Communication. Available at: https://www.gov.br/secom/pt-br/assuntos/noticias/2025/03/governo-apresenta-rede-que-une-sociedade-civil-e-orgaos-internacionais-para-proteger-o-debate-climatico Accessed on: 05 nov. 2025.

According to the assessment of the Brazilian infosphere, climate disinformation is an active vector of environmental risk because it amplifies socio-environmental vulnerabilities, which makes it even more difficult to implement climate change adaptation and mitigation policies that are indispensable to address the climate crisis.

The five vectors of cognitive pollution identified - scientific denialism, naturalization of extreme events, ideological polarization, invisibility of vulnerable populations, and commodification of sustainability - revealed how the algorithmic architecture of digital platforms can be instrumentalized to fragment public debate and weaken scientific consensus. The Brazilian experience demonstrates that protecting the climate necessarily requires protecting the quality of information, ensuring the effectiveness of epistemic governance that is as crucial as traditional environmental governance.

The creation of the Network of Partners for the Integrity of Climate Information represents a significant advance in the development of public policies that integrate environmental protection and informational quality. This pioneering initiative sets an important precedent for other countries to address similar challenges, demonstrating that future sustainability will depend on algorithms and narratives that prioritize scientific evidence over polarizing ideologies. However, as evidenced by studies on environmental governance in Brazil, structural challenges still persist that require articulation between multiple levels of government and sectors of organized civil society to ensure the effectiveness of these policies.

The analysis of differentiated vulnerabilities in the infosphere pointed out that epistemic climate injustice intensifies already existing socio-environmental inequities. The marginalized populations in history – indigenous peoples, quilombola communities, riverside communities – are the ones who suffer the most simultaneously from the effects of climate change and the ones who least access duly confirmed scientific information. On the other hand, epistemic resistance movements indicate the transformative power of the critical appropriation of digital technologies by socio-environmental entities.

As the country will hold COP 30 in Belém, the Brazilian context becomes particularly relevant, as Brazil will be at the epicenter of climate governance and global Amazon preservation narratives. Therefore, it is necessary to take advantage of the historic opportunity that this global event offers Brazil to debate its role in combating climate change, strengthening national capacities in confronting climate disinformation and fostering epistemically based narratives.

Future studies should investigate the effectiveness of different scholarly communication strategies that take into account the regional and cultural contexts of Brazil. This includes the integration of traditional and scientific knowledge, the development of analyses to assess the quality of climate information, and the creation of rapid response protocols to disinformation about specific extreme weather events. It will also be necessary to deepen the analysis of the impact of artificial intelligence and recommendation algorithms on climate information flows, advancing ethical *frameworks* to guide the design of digital technologies that promote scientific accuracy and social justice in every field.

Therefore, the construction of an ethics of climate information constitutes an interdisciplinary challenge to the traditional division between the natural and social sciences and technology. As Floridi (2015) alludes to, as everything is related, the environment is no longer exclusively the responsibility of those who deal directly with the land, the rural world or the oceans. Acting in solidarity, the natural, social, and technological sciences must converge in a common project of informational sustainability, capable of articulating the production of knowledge, digital regulation, and socio-environmental justice in the same ethical horizon.

5 FINAL CONSIDERATIONS

Projections for future climate change scenarios in Brazil indicate the intensification of extreme events and the increase in socio-environmental vulnerability in several regions (National Institute of Meteorology, 2024). In this context, the ability to maintain complete information becomes even more crucial for the effective implementation of adaptation policies and for building social resilience. Brazilian sustainability in the twenty-first century will depend not only on the protection of its physical ecosystems, but also on the preservation of an informational environment that facilitates decision-making based on scientific evidence and promotes the inclusion of all social groups in the climate debate.

We conclude that addressing the Brazilian climate crisis requires an integrated approach that recognizes the interdependence between environmental protection and informational quality. The experience of 2024 has shown that it is not enough to produce scientific knowledge: it is necessary to ensure that this knowledge circulates in an accessible, understandable, and culturally relevant way in the infosphere. Epistemic governance thus emerges as an essential component of climate governance, requiring institutional, technological, and educational innovations that place scientific precision and socio-

environmental justice at the center of Brazilian public policies. The future of the sustainability of Brazil's natural assets and intangible wealth will depend on our collective ability to build an infosphere that serves life, not the interests that threaten.

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