It was a big week for Earth-based research as an international team of Earth scientists made the first observational evidence of Beaufort Gyre stabilization—a finding that suggests a huge freshwater release in the
Arctic Ocean could be imminent. Also, a team of environmental engineers at the University of Strathclyde in Scotland and Dalhousie University Halifax in Canada found that recycling plastics might be increase environmental microplastics as cleaning plastics during the recycling process sheds microplastics into water sources. And a combined team from the University of California, Irvine and NASA's Jet Propulsion Laboratory discovered a cause of rapid ice melting in Greenland—shifting ice that allows warmer water to intrude into shelf interior areas.

In technology news, a team with members from TU Delft, LONGi Green Energy Technology Co., Ltd. and Sun Yat-Sen University developed silicon heterojunction solar cells with up to 26.81% efficiency. And a team at the University of California, Berkeley found that ChatGPT has memorized a large amount of copyrighted material and that inclusion of such data may introduce a bias to analytics conducted with OpenAI models. Also, a team at Columbia University created a generative AI writing tutor system that produces personalized feedback for English learners—called Scraff, the system is meant to support student learning, not assist with cheating. Another team, Stanford University's Human-Centered AI research group, found that source validation issues hurt ChatGPT reliability results.

In other news, an international team of medical researchers working with computer scientists has found that artificial intelligence applications could improve heart attack diagnosis and reduce pressure on emergency department personnel. Also, a large group of medical researchers affiliated with a host of institutions across the U.S. warned that the COVID-19 pandemic has led to an increase in the unnecessary use of antimicrobial chemicals that have been linked to health problems, antimicrobial resistance and environmental harm. And finally, a team at Ruhr University Bochum showed via demonstrations that human thoughts influence tactile perception—when subjects were made to
believe, for example, that their index finger was bigger than it was, their sense of touch improved.

© 2023 Science X Network

Citation: Best of Last Week—Evidence of Beaufort Gyre stabilization, bias in OpenAI models and thoughts influencing senses (2023, May 15) retrieved 10 December 2023 from https://sciencex.com/news/2023-05-ewekevidence-beaufort-gyre-stabilization-bias.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.