

Letter from the Co-Chairs

Mark Rounsevell^{1,2} and Natasha Macbean³

¹Karlsruhe Institute of Technology, Germany, ²University of Edinburgh, U.K., ³Western University, Canada

We are delighted to welcome you to the first edition of the AIMES Bulletin. The Bulletin is intended to celebrate and communicate the achievements of the Analysis, Integration, and Modeling of the Earth System (AIMES) project in fostering Earth system science across the world. Whilst AIMES started back in 1993 as the International Global Biosphere Programme (IGBP) Global Analysis, Integration and Modelling (GAIM) Task Force (Schimel et al., 2015), it has transitioned into its current form as a major contributor to Earth system science through the [Future Earth](#) network. In its early days, the focus of AIMES was very much on establishing communities of Earth system scientists working on the carbon cycle and its contribution to the climate system. Since then, AIMES has evolved over 30 years to embrace the challenges of integrating across the human and biophysical components of the Earth system, and latterly to also recognise all life on Earth, especially the critical role of biodiversity and ecosystems in planet Earth: our life support system. These changing agendas are also reflected in developments in international science-policy initiatives with, in addition to the on-going work of the International Panel on Climate Change (IPCC), the emergence of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) being critical in highlighting the interactions between biodiversity and climate change. Set against this evolving landscape and the changing demands on Earth system science research, AIMES has been busy over the last few years in establishing a new way of supporting Earth system science research. The introduction of Working Groups has provided a focus for much of what AIMES is seeking to achieve by bringing diverse research communities together to tackle specific Earth system research goals. There are now five active working groups covering diverse topics,

such as the human dimensions of Earth system modeling, model-data integration (data assimilation) for quantifying and reducing model uncertainties, tipping points in the Earth system, and behavioral models of the land system. This Bulletin and the monthly AIMES e-newsletter provide updates of the Working Group activities. Also in this issue, AIMES Scientific Steering Committee (SSC) Member Julia Pongratz discusses the role of land use in achieving carbon neutrality, members of the AIMES SSC provide perspectives across a range of Earth system topics, we say goodbye to former AIMES SSC members, and we introduce four new members, as well as highlight upcoming events. Moving forward, the Bulletin will serve as an avenue for insights and perspectives into the latest developments and trends in Earth system science research, both from our own SSC members and from the wider community at large.

Looking forward, AIMES will continue to support its existing Working Groups, as well as explore the establishment of new Working Groups around emerging Earth system research topics. One of AIMES' key goals is to bridge the gaps between the social and physical sciences to foster new methods and novel directions in interdisciplinary Earth system science research - without which we will be unable to tackle the grand challenges facing our environments and societies. We will continue to endorse relevant projects and activities and seek to support expert workshops, early career development, open science initiatives, and other events that further our mission. This includes contributing to the scientific evidence base for future IPCC and IPBES assessment, especially where these contributions cut across the human-environment divide and better integrate the protection of nature as a key component of climate change

mitigation and adaptation.

So, please get involved. You can sign up to become a member of AIMES, [register here](#) and follow us on Twitter [@AIMES_IPO](#), and if you are interested in contributing to one of the Working Groups then please contact the coordinators through the information provided on our [working group webpage](#). If you have ideas for AIMES' future activities, would like to contribute an article to this Bulletin, or ask AIMES to consider endorsing your project, please email aimes@futureearth.org.

We would also like to take this opportunity to thank all of the contributors to AIMES across the working groups and the SSC, who are central to supporting the AIMES activities, and especially to Hannah Liddy, our Executive Officer who makes all AIMES magic happen and keeps us all going through the NASA-sponsored, International Project Office based at Columbia University. We'd also like to extend our thanks to former contributors to AIMES: Victor Brovkin for four years as an AIMES Co-chair and Lisa Alexander and Govindasamy Bala for their contributions to the AIMES SSC. □



Prof. Natasha MacBean
AIMES Co-Chair
Western University, Canada



Prof. Mark Rounsevell
AIMES Co-Chair
Karlsruhe Institute of Technology,
Germany
University of Edinburgh, UK