

Yoshimura Laboratory

[Climate System and Water Cycle]

Institute of Industrial Science

Department of Human and Social Systems / Chiba Experiment Station

Eng/Department of Civil Engineering
Front/Department of Natural Environmental Studies

Isotope Meteorology

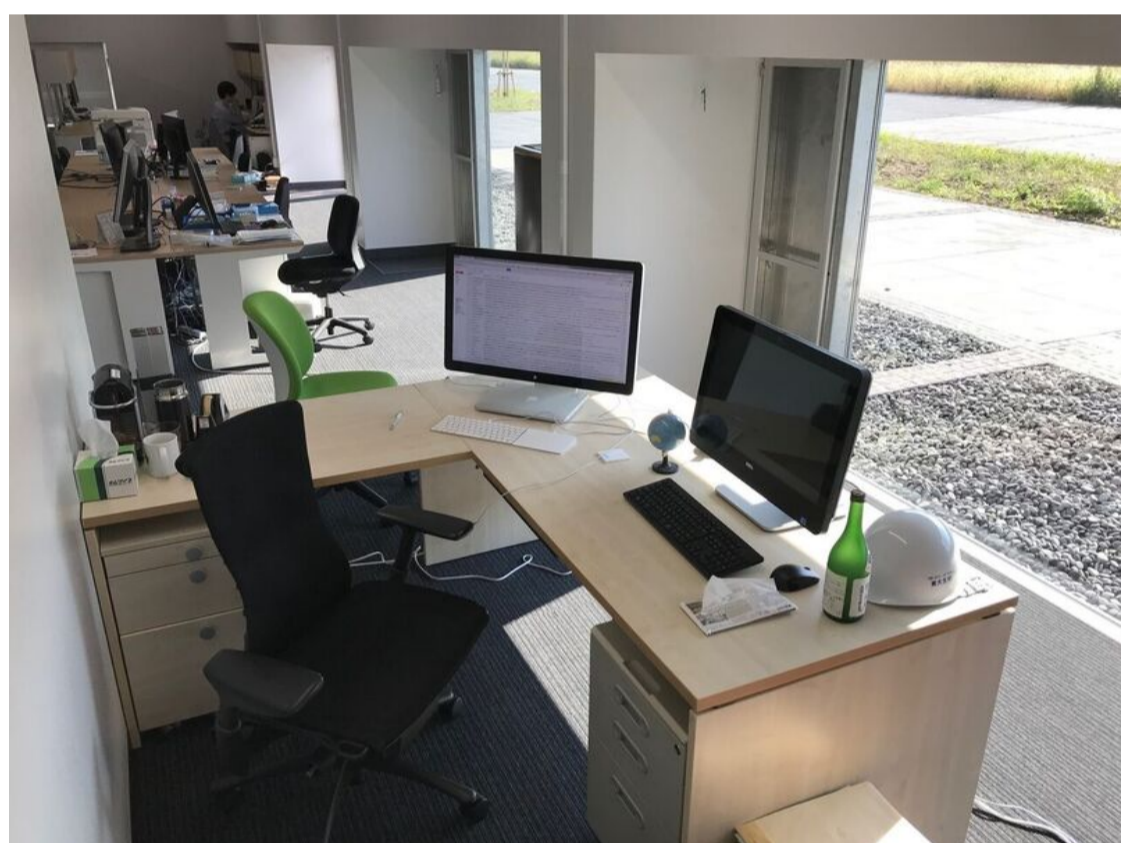
<http://isotope.iis.u-tokyo.ac.jp/>

Y-Lab contribute to the society by understanding of climate and water cycle.

We study the earth from viewpoints of climate, water, and isotopes to make a contribution to understanding of climate system and prevention of water-related disasters.

Where we are

Y-Lab is located in the Chiba Experiment Station of Institute of Industrial Science in Kashiwa campus.



Office

Big windows help to get a lot of sunshine and make the office comfortable.



Reception Space

Lab members often take a rest and chat with others here.



Open Campus

Visualization of water cycle with spherical display helps visitors understand research topics.



Isotope Experiment Room

Y-lab is fully equipped with experimental instruments including mass and laser spectrometers.



Field Survey

We sometimes conduct a field survey for better understanding of local conditions.

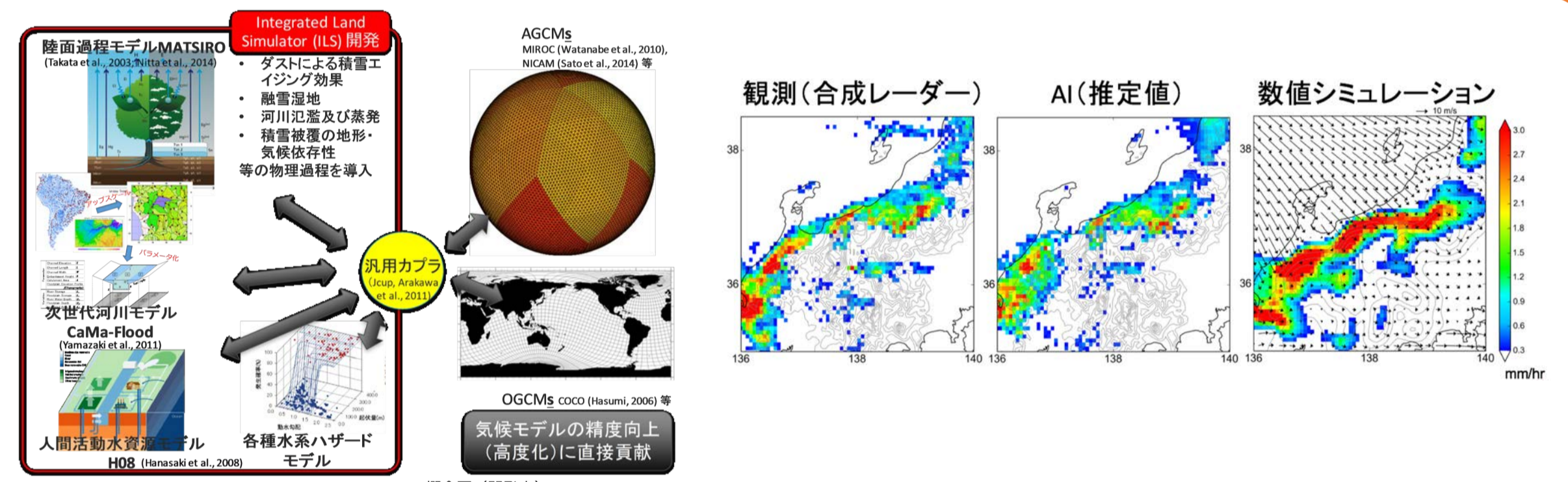


Many Lab Members

Communication and discussion with lab members are driving force of Y-Lab.

What we do

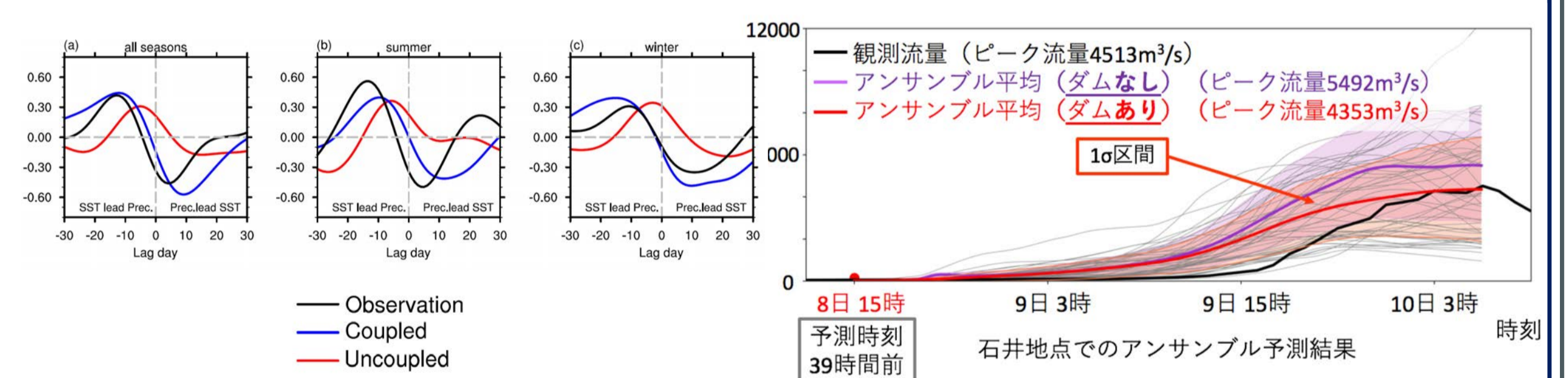
Climate



Integrated Land Simulator(ILS) Estimation of local precipitation based on numerical simulation with AI is under development

Provision of useful information for climate change through understanding climate system using model development and its application

Water Cycle

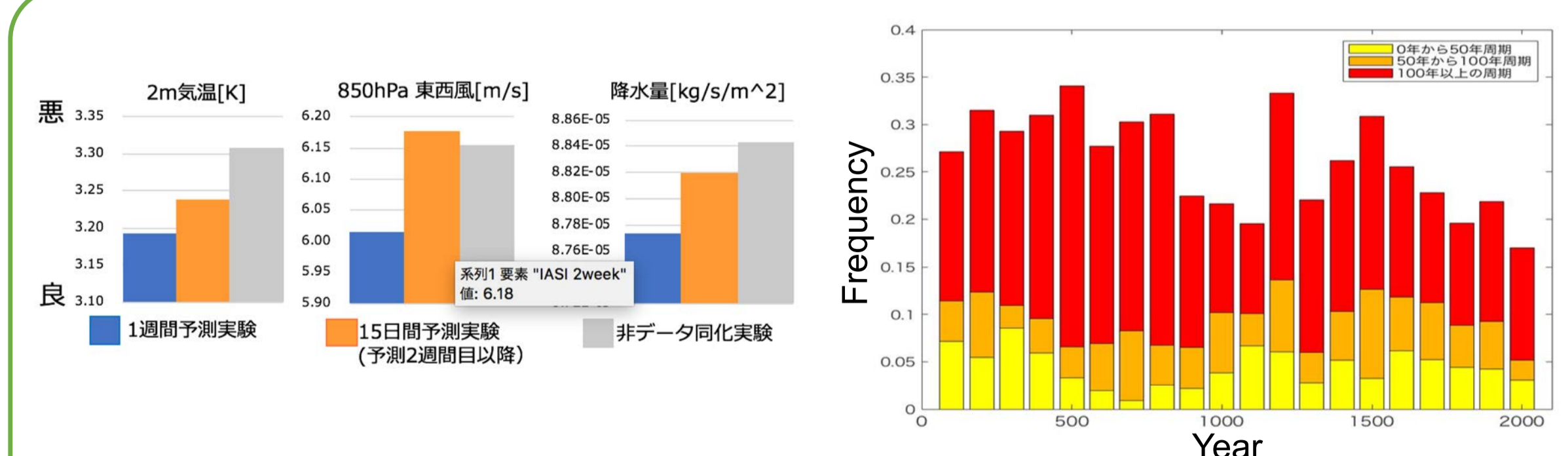


Simulation of interseasonal relationship between SST and precipitation

Improvement of prediction accuracy combining with dam operation in case of flood

Contribution to world water resource management and disaster mitigation through representation and prediction of water cycle based on model development and its application

Isotope



Improvement of prediction accuracy by direct data assimilation of isotope

Reconstructed global climatic frequency using proxy isotope

Development of methods for climate reconstruction and improvement of model accuracy with isotope and seeking better understanding of climate system