COARE (Computing and Archiving Research Environment) of the Department of Science and Technology - Advanced Science and Technology Institute (DOST-ASTI) provides researchers, data analysts and students from academic and corporate research groups with a high-performance computing (HPC) facility to efficiently and more accurately solve big and complex problems.

THE COARE IDEA
Research and development (R&D) is complex and risky process. Performing experiments at speed and scale involves enormous time, effort and financial investment and setting up a dedicated computing facility to do modeling and simulations is expensive. COARE enables research groups to quickly tap the tremendous computational and storage capabilities of its HPC facility housed at DOST-ASTI’s Research Data Center (RDC). It offers scientists and researchers the needed modeling and simulation infrastructure to develop products and analyze test scenarios that could reduce R&D costs, minimize risks and shorten the time-to-market compared to actual experiments.

Today, over 36 research groups have subscribed to COARE’s services. These groups work on problems ranging from climate change, infectious diseases to food security.

NOAH-WISE performed numerical modeling of millions of weather data for high-resolution prediction for climate change adaptation and disaster risk preparedness.

UP Manila’s National Institute of Health implemented next generation sequencing of thousands of clinical data on Dengue for future antiviral solutions to address the epidemic.

The International Rice Research Institute (IRRI) conducted genomic variation of 3,000 rice genomes for plant breeding to combat hunger.

THE COARE ADVANTAGE
- One of the fastest in the country, COARE provides more than 200 Teraflops of compute power needed to reduce time to market of new products and designs
- High-speed network connectivity at 10Gbps to international R&D centers so that you can work with your models whenever and wherever you are
- Collaborative opportunities with various local and international research groups as COARE partners with DOST-ASTI’s PREGINET (Philippine Research, Education and Government Network) research group through the Information Network for Open and Viable Applications and Technology Exchange (INNOVATE) initiative
- Accessible and long-term online support for storing large research data sets through COARE’s Data Catalog
- Cut R&D costs and capital investment, and for now, you can avail COARE’s services as a research grant

Be part of the COARE!
We are looking for partnership with industry and experts to increase our country’s R&D competitiveness. Visit our website at https://asti.dost.gov.ph/projects/coare/ and facebook page at https://www.facebook.com/coare.project or connect with us through twitter at https://twitter.com/coare_asti or email at gridops@asti.dost.gov.ph. We want you to be part of the COARE partners leveraging HPC to tackle our pressing challenges!

For more details, kindly contact:
Jessi Christa R. Rubio, M.S.E.E.
COARE R&D Team Leader
Research and Development Division
Advanced Science and Technology Institute
Department of Science and Technology
+6309164404112
+63 2 426 3572
jessi@asti.dost.gov.ph