

DEPARTMENT OF DATA SCIENCE

Date: 23-10-2025

Academic Year: 2025-2026

Activity: One Day “Industrial Visit”- Indian National Centre for Ocean Information Services (INCOIS), Hyderabad

Consolidated Report

The Department of Data Science organized an industrial visit to the **Indian National Centre for Ocean Information Services (INCOIS)**, Hyderabad, on 23rd Oct 2025. The visit was planned as part of the academic curriculum enrichment program to provide students with practical exposure to real-world applications of Information Technology in providing the nation with the best possible ocean information and advisory services.

A total of 172 III & IV-Year CSD students and 5 faculty members, along with the coordinator, actively participated in this educational tour.

Objectives:

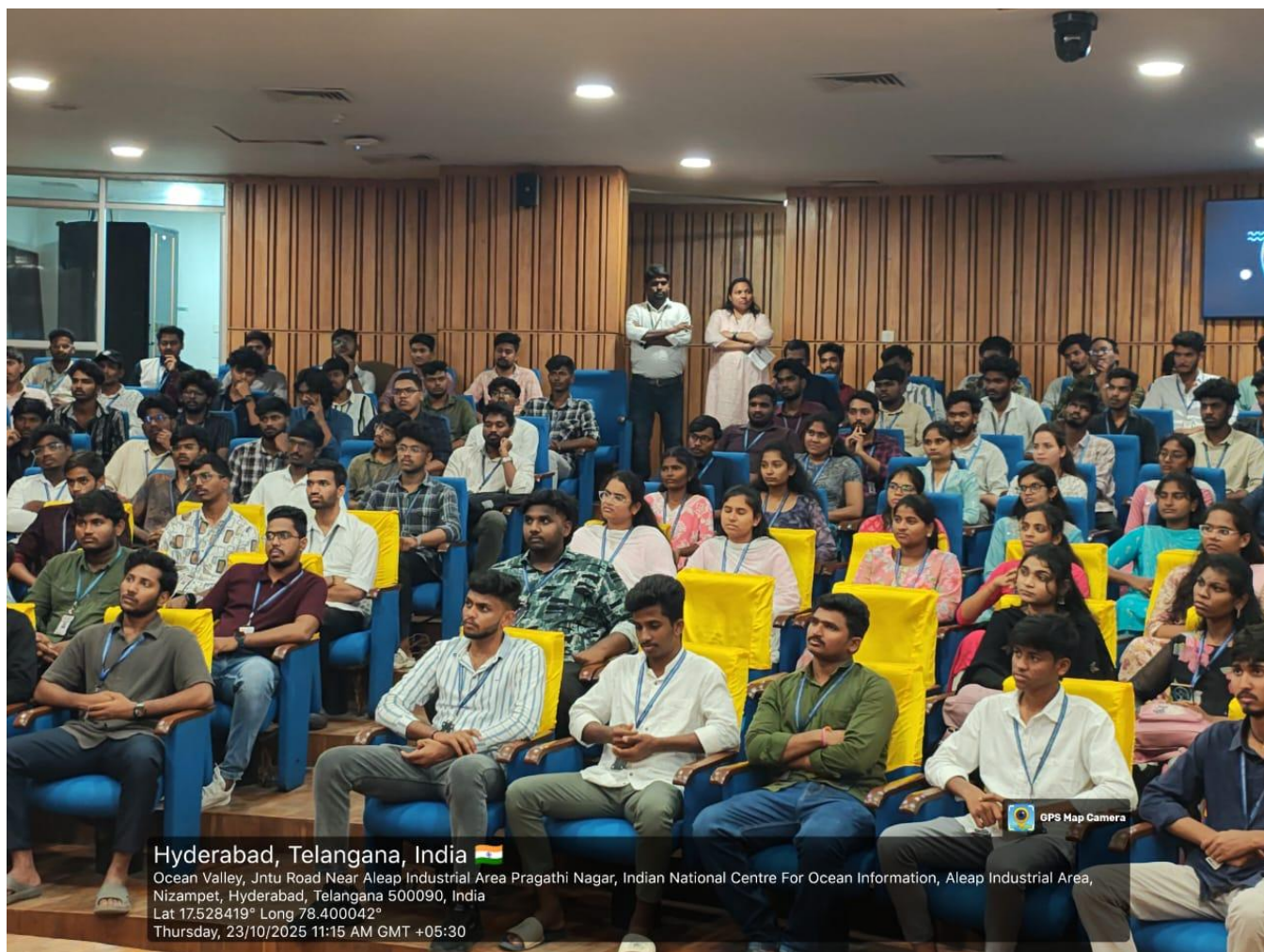
The main objectives of the industrial visit were:

- To gain insights into the functioning and research activities of INCOIS.
- To understand the advancing research in ocean modeling, climate prediction, and marine spatial planning.
- To bridge the gap between classroom learning and industry practices.
- To expose students to emerging technologies in space research and data analytics.

Activities During the Visit:

1. Orientation Session:

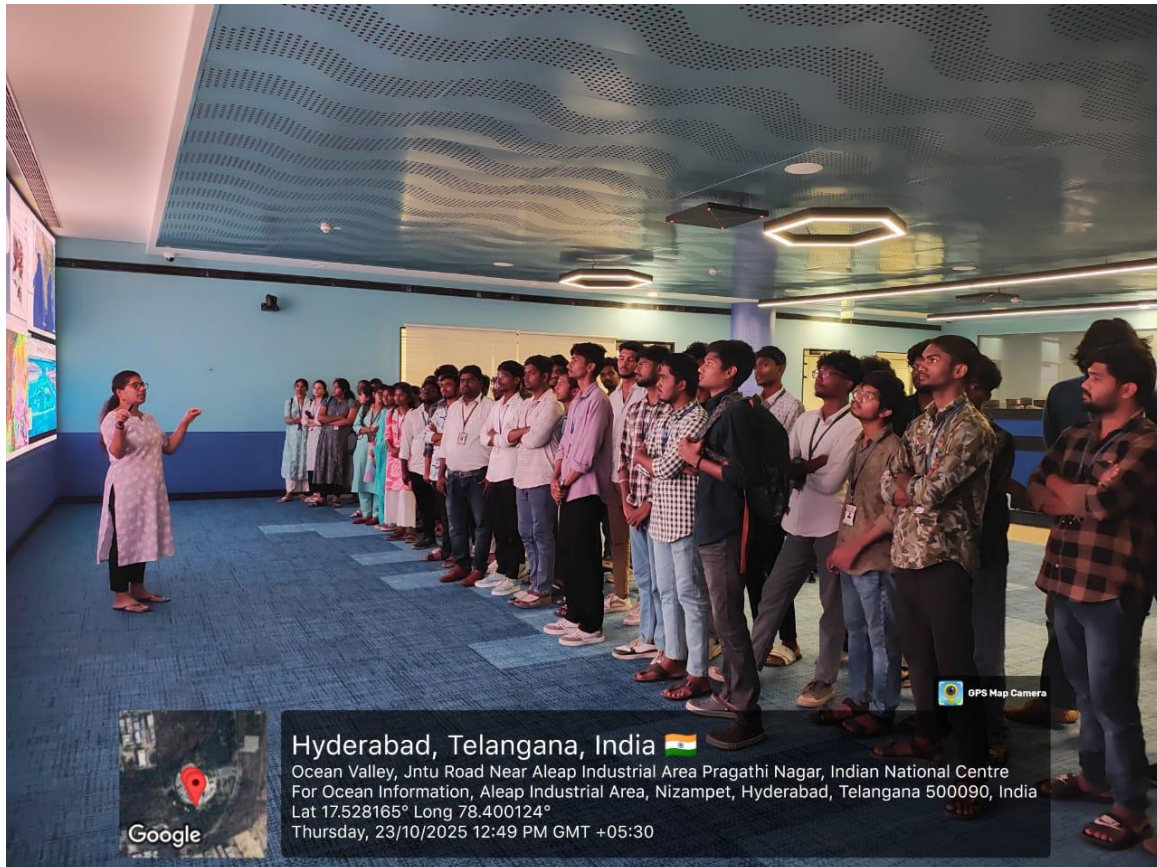
Officials at INCOIS welcomed the students and gave an introduction.



2. Presentation & Demonstration:

- Students attended a technical session where experts explained:
- **Tsunami Early Warning:** Operates 24x7 through the Indian Tsunami Early Warning Centre (ITEWC), monitoring seismic activity and sea-level changes to issue alerts within minutes.
- **Potential Fishing Zone (PFZ) Advisory:** Uses satellite data to identify fish-rich ocean zones, helping fishermen reduce time and fuel consumption.
- **Ocean State Forecast (OSF):** Provides 3–7 day forecasts for waves, currents, winds, and sea surface temperature, supporting ports, shipping, and naval operations.
- **Data Management and Archiving:** Acts as India's National Oceanographic Data Centre, managing physical, chemical, and biological ocean data collected from buoys, floats, ships, and

- satellites.
- **Climate and Ocean Research:** Develops numerical models for ocean circulation, monsoon prediction, and climate studies.
- **International Collaboration:** Works with UNESCO, IOC, and global observation networks like Argo to share ocean data worldwide.



Outcome:

The visit proved to be highly informative and inspiring. Students gained knowledge beyond textbooks, understood real-world IT applications, and were motivated to align their career paths toward innovative technologies in space research, data science, and remote sensing.

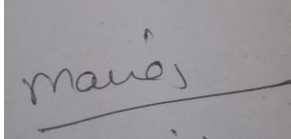
Conclusion:

The industrial visit to INCOIS, Hyderabad, on 23rd Oct 2025 was a successful and enriching experience for the III-Year and IV-Year DS Students of NNRG. The Department of Data Science extends heartfelt thanks to INCOIS officials **Mr. M Nagaraja Kumar** Scientist-f and Division head and **Miss.Pragna** Industrial visit activities team head for their valuable time and guidance.

Such visits not only enhance technical knowledge but also inspire students to contribute to India's growth in the field of technology and space research.



Students and Staff Group Photo at INCOIS



FACULTY COORDINATOR



HEAD-CSD