

## Benefits of the NDC in Costa Rica since 2012 and inter-institutional collaboration on the use of data from IMS monitoring technologies

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### INTRODUCTION AND MAIN RESULTS

Both the country and OVSICORI-UNA have benefited from various training cycles on the three IMS monitoring technologies. The Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), in cooperation with the Government of Costa Rica, has also offered training in Costa Rica for users from Latin America and the Caribbean (LAC), improving data analysis skills. Costa Rica's National Data Centre users have been trained in the different IMS monitoring technologies. Additionally, in 2018, a temporary infrasound station project was set up in Costa Rica with the CTBTO's support. It is also important to involve more participants in the analysis and use of IMS data, such as SINAMOT, the Atmospheric Chemistry Laboratory, and the UNA School of Physics.



## Introduction

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Fig. 1 NDC-CR in 2010



Fig. 2 I69CR installed 2018

The installation of the I69CR station was carried out in 2018, in cooperation with the CTBTO Infrasound Division, in the Selva Biológica Reserve. The NDC-CR operated from 2010 to 2022, using data acquisition from primary and auxiliary seismic stations.

## Participations of users from Costa Rica and joint activities

NDC Capacity Building and Regional Seismic Travel Time Workshop and Training 7-11 September 2015, Costa Rica



Fig. 3 RSTT event in Costa Rica

Latin America and Caribbean Regional Infrasound Workshop and integrated Training for NDCs, 25 February - 01 March 2019, San José, Costa Rica



Fig. 4 LACRIW event in Costa Rica

National Data Centre Training for Spanish-speaking Countries November 20–24, 2023, San José, Costa Rica



Fig. 5 NDC event in Costa Rica

STM24: Specialized Technical Meeting on Operations and Maintenance of IMS November 19-21, 2024



2024 NDC Workshop  
October 21 – 25, 2024



## Other agencies that may participate in CTBTO training courses and provide contributions

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Fig. 6 Other Scientific Departments

SINAMOT of the UNA is the National Tsunami Monitoring System. The Atmospheric Chemistry Laboratory of the National University (UNA) is a specialized unit focused on studying the chemical composition of the air and its interactions with the environment and human health. The School of Physics of the National University (UNA) has, among its areas of specialization, the study and application of radiation in various scientific and technological contexts. At UNA, this line is usually related to collaborative projects with the Ministry of Health, the National Atomic Energy Commission, and international organizations such as the IAEA (International Atomic Energy Agency).

## Conclusions

It is important to include new organizations in the CTBTO system for the analysis of seismic, infrasound, hydroacoustic, and radionuclide data, in order to increase the use of the data and scientific products.

