

**INFORMATION PAGE ON NEW ACADEMIC AND THEORETICAL
CONTRIBUTIONS OF PhD DISSERTATION**

1. Dissertation title: Research on integrating climate change issues into the spatial planning of Nhon Hoi economic zone, Binh Dinh.

- Code: 62850101
- Specialization: Management of Natural Resources and Environment

2. Ph.D Candidate: Pham Thanh Long

Advisors: Assoc. Prof. Ph.D. Trần Hồng Thái;

Ph.D Phan Thị Anh Đào

Training Institution: Viet Nam Institute of Meteorology, Hydrology, and Climate Change.

3. Introduction to the Dissertation:

Nhon Hoi economic zone is located on Phuong Mai Peninsula, Binh Dinh province, including Quy Nhon city, part of Tuy Phuoc and Phu Cat districts, Thi Nai lagoon and Quy Nhon port.

The coastal area of Nhon Hoi economic zone and Thi Nai lagoon is a region where is rich in natural resources, biological diversity and dynamic marine economic development such as industry-services, construction, transportation, tourism. In addition to the advantages, this area is very sensitive to environmental changes and will be one of the first and most affected areas by climate change, especially sea level rise.

The dissertation "Research on integrating climate change issues into the spatial planning of Nhon Hoi economic zone, Binh Dinh" has used a combination of traditional methods (collecting and surveying, maps, remote sensing and GIS) with specific research methods such as modeling, impact assessment and vulnerability due to climate change, sea level rise and methods of integrating climate change into spatial planning to assess the impacts of climate change on

natural systems (coastline variation, sediment changes, salinity intrusion) and vulnerability due to climate change, sea level rise for population and main economic sectors, then propose measures to integrate climate change into the spatial planning of Nhon Hoi economic zone.

4. New contributions of Dissertation: List the new contributions of dissertation (specific quantitative, clear, concise, bulleted for each new contribution)

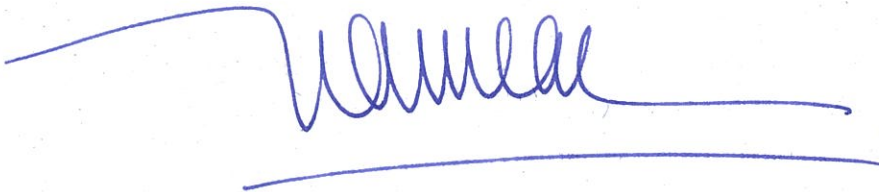
- Detailed assessment of the trend of changing factors of temperature, rainfall and sea level; assessment of coastline variation, sediment changes, salinity intrusion for a small scale as economic zone by the climate change scenario RCP 4.5.

- Quantifying the vulnerability due to climate change, sea level rise to population and main economic sectors of Nhon Hoi economic zone.

- Recommendations for integrating climate change issues into spatial planning of Nhon Hoi economic zone (including coastal spatial planning).

Representative of Advisors

PhD Candidate



Assoc. Prof. Ph.D. Trần Hồng Thái

Phạm Thanh Long