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| **Problem Chosen** ABCDEF | **2024 MCM/ICM Summary Sheet** | **Team Control Number** 2410605 |

Summary Sheet

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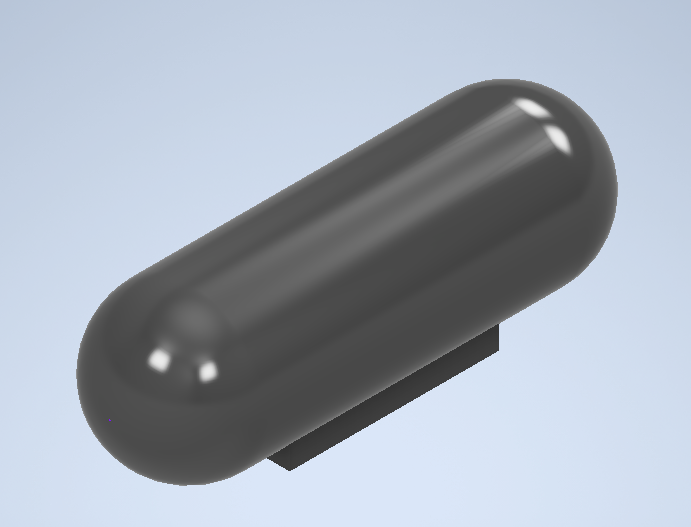
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1. **Introduction**
   1. **Problem Background**
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4. **Model I: Submersible Location Prediction Model**
   1. **Submersible configuration**



* 1. **State of the Ionian Sea**

Data 收集 三线表

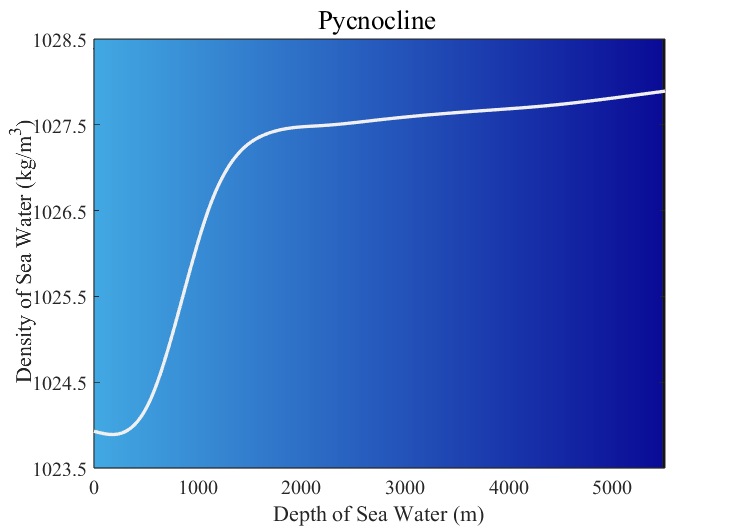
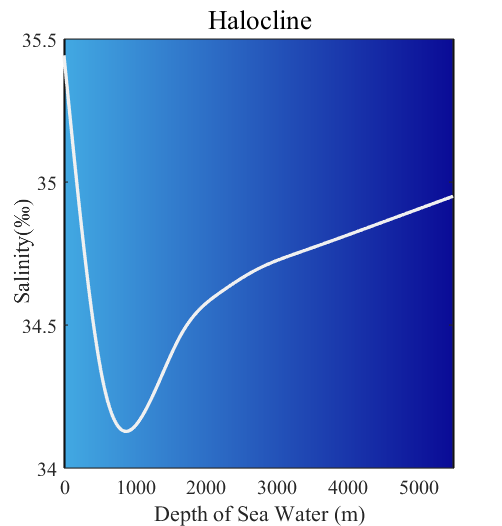
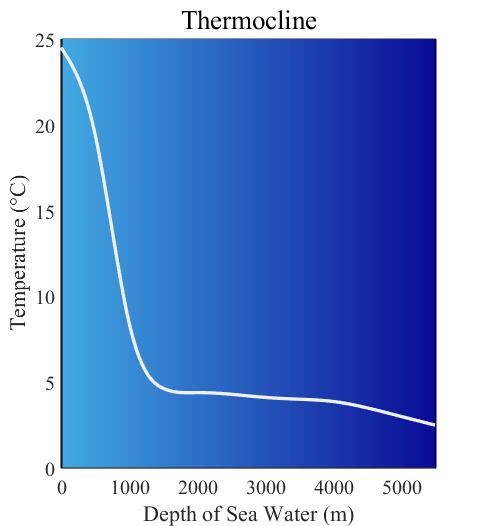
Currents（方向&大小 0.008）

Sea Water Density

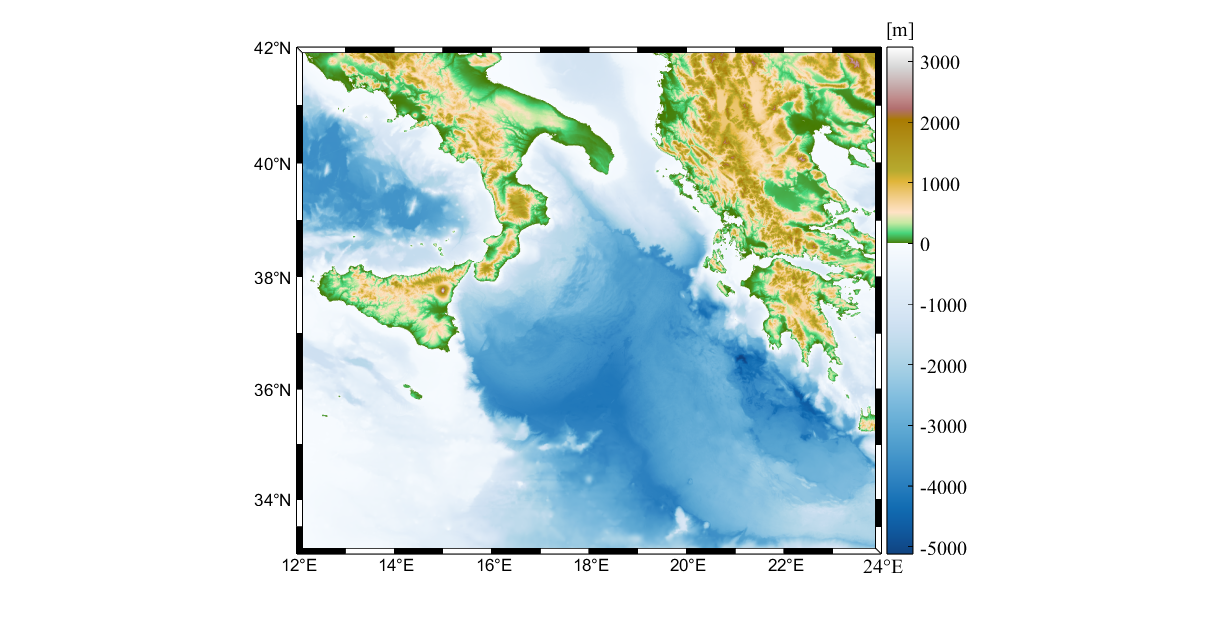
Density Measurement by Miller [1],



为关于温度的函数，

* Temperature主要描述温度随海水深度的变化Thermocline
* Salinity Halocline主要描述盐度随海水深度的变化Halocline

Geography of the Sea Floor（今晚出）



* 1. **Dynamic analysis of submersibles**

假设失事时位置

Weight

Floatage

FrictionC=0.03 类比鱼





* 1. Model Evaluation of Uncertainty

1. 1

Reference

密度[1] Frank J. Millero, Alain Poisson, International one-atmosphere equation of state of seawater, Deep Sea Research Part A. Oceanographic Research Papers, Volume 28, Issue 6,

1981, Pages 625-629

[2]