**Work Broke down Structure (WBS) and time line**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Activity | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. **Launch the program and meeting (Kickoff meeting)** |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Satellite data processing |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Sampling Desigining, vessel selection |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Implementation of the sampling program |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Data input |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Predictions and verifications |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. **Mid-term progress SAFE Meetings** |  |  |  |  |  |  |  |  |  |  |  |  |

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| Activity | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 1. Argo data processing |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Modeling and technical support |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Training and analysis |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Verification and analysis |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Model finalizing |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. **Stakeholders meeting a** |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. **SAFE Meetings, Final Report** |  |  |  |  |  |  |  |  |  |  |  |  |

Note: You can change items according to your project activities. But bold items are common items you are supposed to adopt.

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| **Goal** | **“Overall Objective”** | | |
| **Result** | **Activity** | **Indicator** | **Means of Verification** |
| 1. Argo data processing | Argo data processing for vertical temperature and salinity profiles and quality control of the data | Vertical temperature and salinity profiles |  |
| 1. Satellite data processing | MODIS (1km) for cholrophyll and AMSR-E (0.25 Deg) for sea surface temperature | Chlorophyll and SST maps |  |
| 1. Sampling Desigining, vessel selection | Sampling strategy, fishing area, fishing depths, monthly schedule of sampling, data formats etc.  SAMPLE | All documented | Printed documents of sampling methodolgy and the program |
| 1. Procument of TD sensors | Document processing for purchasing of ST sensors (Tender, TEC) | Procument documents | NARA Inventry |
| 1. Modelling of thermal fronts | Data analyses and modelling exercise for predicting mixed layer depth and thermocline | Subsurface temperature maps indicating frontal zones | Prediction model for subsurface temperature |
| 1. Implementation of the sampling program | Mobilisation of vessels and data (fishery and TD) collection at every landing from selected 4 vessels and monitoring. | Filled datasheets, digital data from TD sensors and Argo data | Hard copies of datashetts,  Printed logbook data |
| 1. Data input | Quality controll, database administration | Updated data records | Monthly data report |
| 1. Predictions and verifications | Prediction of subsurface temperature using the model and verification of the result using TD sensor data |  |  |

**Description of key-WBS**