

# Indian Ocean Salinity And Temperature Data Visualization

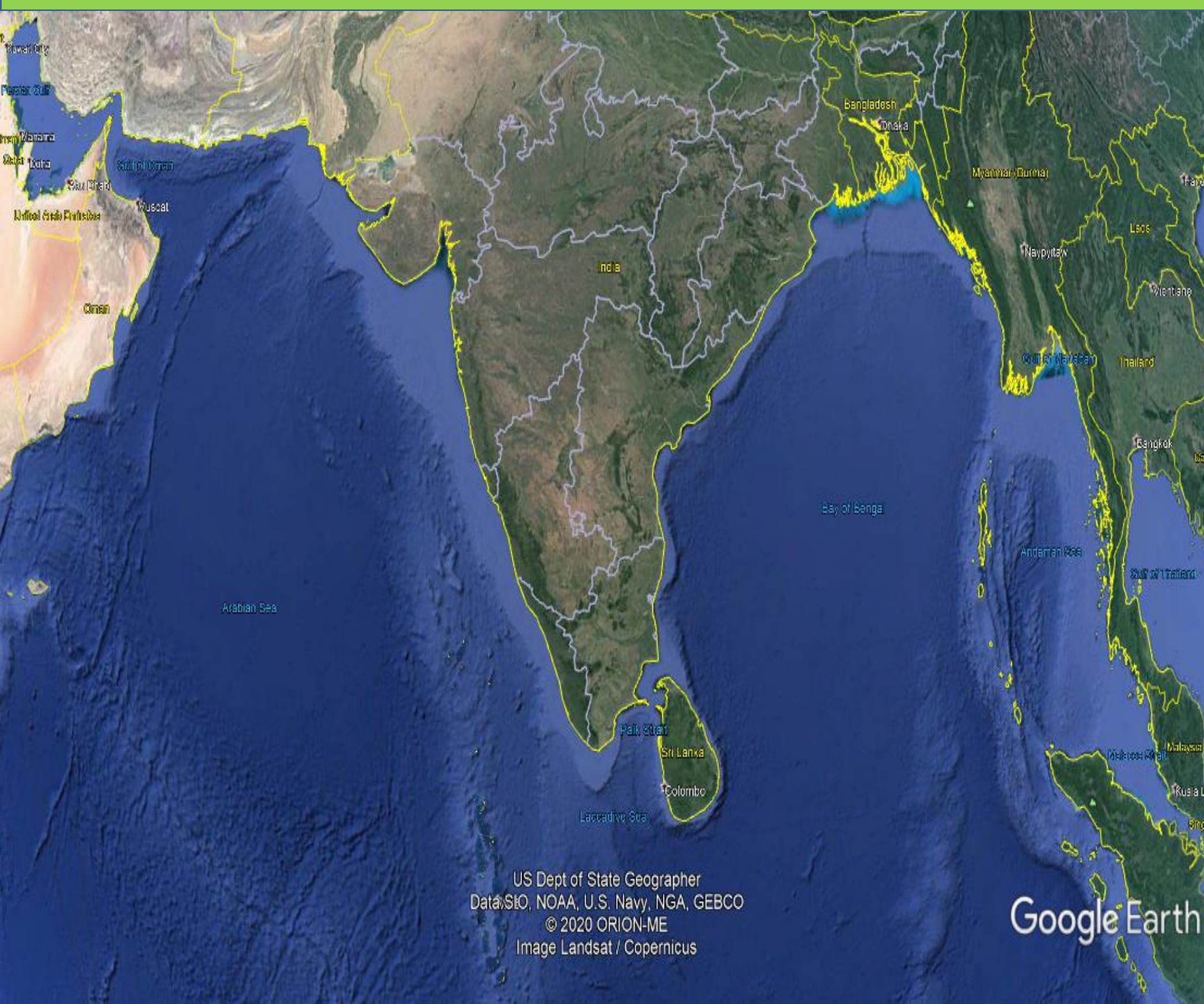
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## Introduction

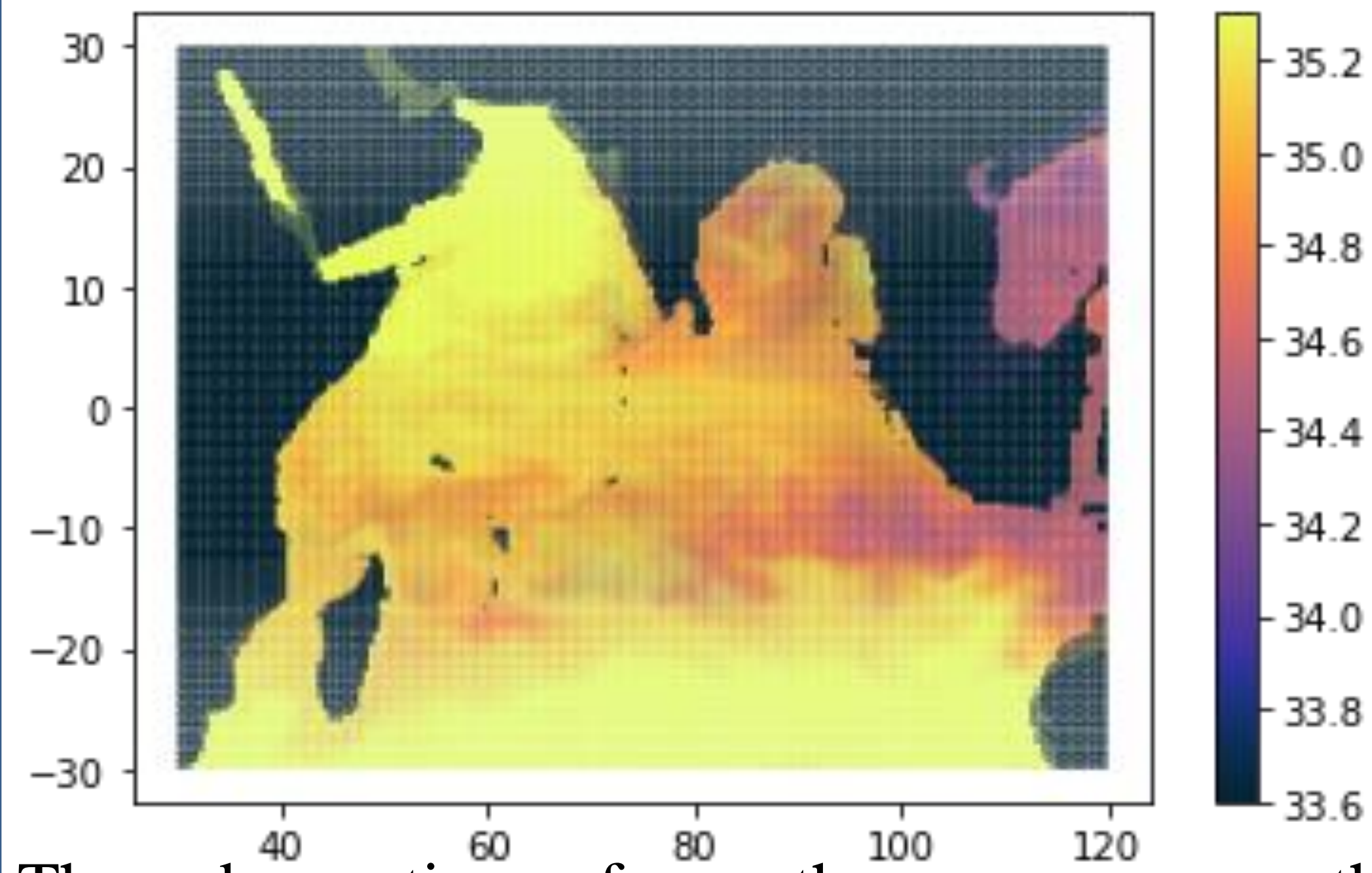
Sea surface salinity (SSS) and sea surface temperature (SST) are the key components of the Earth's global water cycle. Reliable information on SSS, SST are very important for ocean modelling, data assimilation, and ocean and climate research applications. In this study, SSS and SST variability in the Indian Ocean were analyzed using the python code from LAS INCOIS website.

**Source:** <https://las.incois.gov.in/las/>

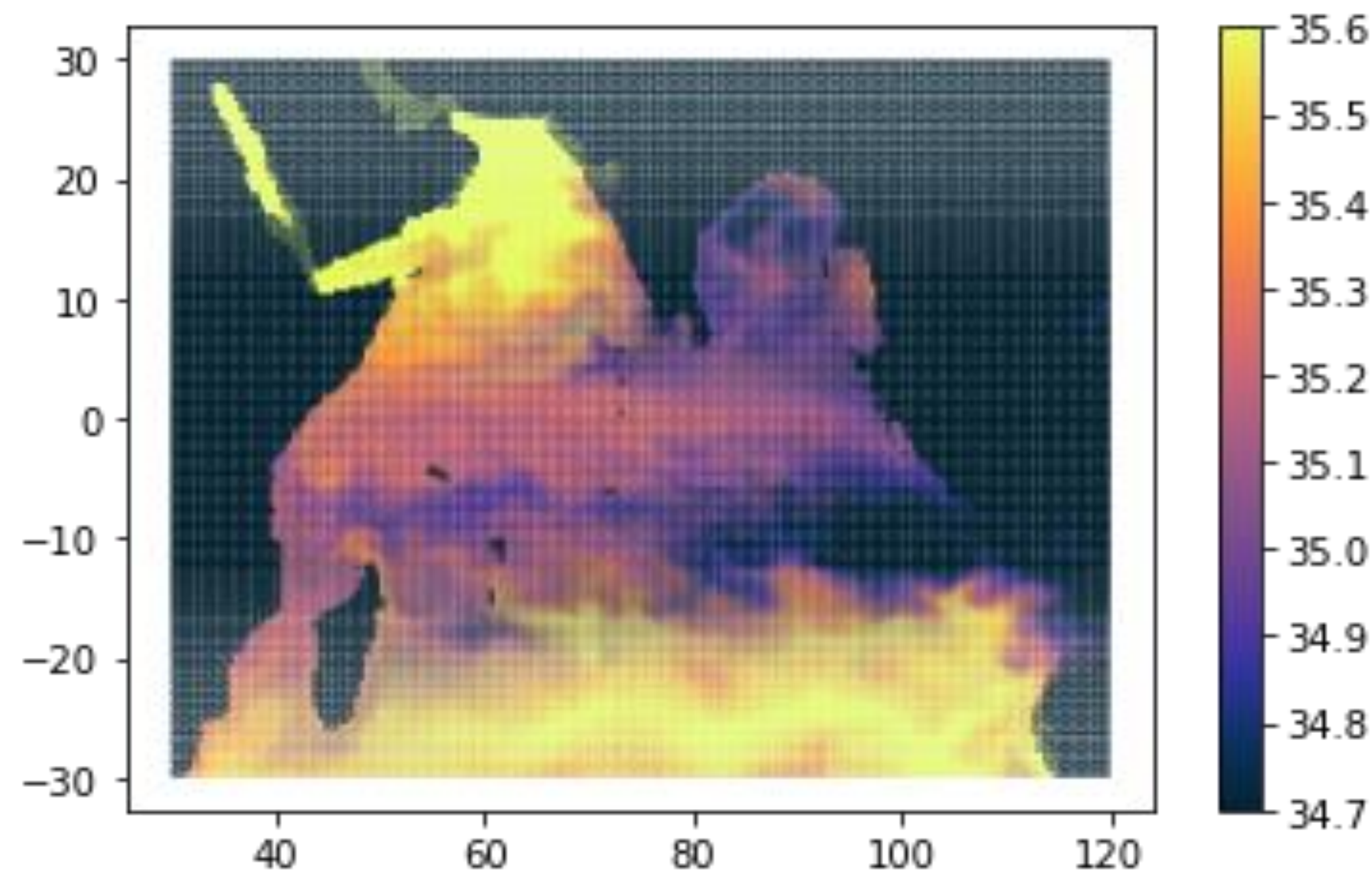
## Study Area



## Methodology and Results



The observations from the oceans are the backbone for any kind of operational services (potential fishing zone advisory services, ocean state forecast, storm surges, cyclones, monsoon variability. Here is my study area, I have been working on SSS and SST data visualization. In this methods, I am using python code and plot the SST and SSS data.



## Conclusion

Recent progress on visual analysis causes more and more interests in ocean data analysis.

- Various environmental elements visualization and multivariate analysis.

- At the same time, we perform the correlation analysis of multiple physical variables. For example, the correlation between sea surface temperature (SST), flow velocity and the water depth is often investigated.

## Acknowledgment

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## References

- Bea, 2008 A framework for visualization and exploration of events Information Visualization, 7 (2008), 10.1057/palgrave.ivs.9500165.
- Blower J.D., Haines K., Santokhee A., Liu C .Godiva2: interactive visualization of environmental data on the web Philos. Trans. Math. Phys. Eng. Sci., 367 (1890) (2009), pp. 1035-1039, [10.1098/rsta.2008.0180](https://doi.org/10.1098/rsta.2008.0180)