# **Understanding the Variability of Low Marine Clouds in Three Oceanic Regions**



- Earth's climate.



frequency in marine stratocumulus clouds.



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- all regions.

- linear relationship studied.

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on Strength	0.68	0.14	0.13
erature	0.05	0	0
perature	0.67	0.29	0.13
ce	0.32	0	0.07
nidity	0.34	0.11	0.09
tion Level	0.39	0.15	0.12

(values in green correspond to negative correlations)

• EIS and surface temperature have the highest mean R<sup>2</sup> values in

• 850 hPa temperature has the lowest mean R<sup>2</sup> value in all regions. No one variable correlates with seasonal drizzle frequency in all three regions in the same manner or magnitude.

- There may be a strong positive correlation between EIS and drizzle frequency in the southeast Pacific, but that correlation is reversed and weaker in the northeast Pacific.

## Conclusions

1) This analysis shows that the average seasonal drizzle frequency in the three selected regions does not consistently correlate with any of the environmental variables examined.

2) Strong correlations can be found between drizzle frequency and EIS and surface temperature. However, inconsistencies in the magnitude and direction of the correlation indicate more complicated interactions between the variables than the simple

3) Future work will look into these interactions and how they are the same, or different, between the observed regions.