**INTRODUCTION:** Currently focusing in the northern part of the proposed biological corridor (13°N to 19°N and 94°W to 86°W).

**OBSERVATIONS: CURRENT CLOUD FORMATION (from GOES) AND PROPERTIES (from MODIS)**

The hypothesis here is that the dominant factors responsible for the observed cloud form and properties is due to three factors: Underlying ecosystem type; Elevation; and Distance from the coast. Results show that cloud forms more frequently over forested areas. All cloud optical thickness were higher at elevations around 500m and higher or over the forests than wooded grasslands or croplands. Cloud effective radius is higher over the forests at elevations higher than around 500m from the mean sea level. Cloud Liquid Water Path shows high variability at elevations below around 500m when values could be higher over the forests, wooded grasslands or croplands. But above 500m they are considerably higher over forests than over wooded grasslands or croplands. Cumulus cloud optical thickness show that the cumulus clouds over forests have higher optical thickness at the higher than 500m than the ones that are detected over wooded grassland. Effective radius of cumulus clouds detected over evergreen broadleaf forests in comparison to those detected over wooded grassland shows that at elevations of around 500m the difference can be as large as 2x differences. Above 500m the differences between the mean values of the Cloud Liquid Water Path could be as high as 30 g/m².

**OBSERVATIONS: AREAS WITH HIGH DEFORESTATION RATES**

The effect of the dry season and the wet season are clearly visible in all the plots with maximum in March and April and higher frequencies in the other months. Also, though the cloud frequency has some variations as a function of distance from the coast it shows in particular trends.

**Conclusions**

• Clouds form more frequently over forested regions.
• Clouds were generally also optically thicker with larger effective radius and integrated liquid water content over the forests.
• With pastures surrounding protected forests and corridors several locations within the protected regions will have...