

Weather Briefing 20060117

Weather Conditions:

A bright sunny day today. For the first time in 10 total days in Costa Rica I can see the tops of the volcanoes. There is a divergence in the trade wind flow in the Caribbean upstream of Costa Rica, caused by strong southerly flow over the Gulf of Mexico associated with a midlatitude front in that region. The 12Z sounding at Juan SantaMaria airport has only 10 knots at 850 mb. It is not likely that we will go higher than that at the surface until possibly very late today. Conditions are moist enough to 700 mb that we will get a few clouds, but not much more.

As the cold front moves eastward, winds over the Gulf of Mexico will shift to northerly. The impact on the tropics is that the trade winds upstream will be NE instead of E and the magnitudes will be close to seasonal normals. This implies winds down the runway in the 15-20 knot range in the afternoon. No precip is expected except for the usual drizzle in the mountains.

For the next possible flight day, which is the 19<sup>th</sup> (Thursday), the trade winds upstream resume a more easterly angle as the midlatitude cold front's influence wanes. Models suggest some minor weakening in the winds at Juan SantaMaria relative to Wednesday. Still, the basic picture is for seasonal winds, no rain, and partly cloudy skies.

Science possibilities for the 19<sup>th</sup> will be examined this afternoon.

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