Weather discussion for Thursday, January 26, 2012
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Overview: The Amazon high aloft continues to expand with the subtropical jet moving southward. A trough in the westerlies is expected to cross 80W on Friday, south of 40S. The cold front associated with the trough will bring precipitation onshore south of Concepcion.

A southern research flight is scheduled for Friday, 27 Jan. Low clouds can be avoided by staying north of 40S. Low clouds along the coast south of SCFA are expected to clear by 3 PM local time.
Subtropical jet core is progged to be well SW of SCFA to near SCIE. The polluted air aloft should be observed N of 30S.

A stronger jet (50 m/s) is found S of 40 S. Fairly high values of PV (-5 PVU) are found in this region.
Cross-section along the eastern track (PARAL to 45S, 77W).

The STJ core (40 m/s) is about 800 km south of PARAL at FL390.

High PVU air is present in the midlatitude jet core (52 m/s) around 45S.
WRF predicts clear skies from 30 to 40S along the Chilean coast (a rather unusual situation to say the least). Frontal clouds and rain arc from about 42S, 72W to 32S, 80W.

Low clouds are forecast from 25S to 30S along the coast at noon local time.
By 3 PM local time low clouds are predicted to clear away from the BL sampling region near 26S.