Maritime Convection

GOES-12 PATMOS-X
Valid 11:45Z 02/06

Brightness Temperature 6.7 micron 11:45Z 20120207
- Note: Added 50%, 75% convective precip contours to identify weaker convection

- Northern most marine convection in upper 95%

- Southern convection in upper 50% but displaced NE of observed

- Significant DMS outflow from convection at 100-95W/12-16N
RAQMS 48hr SFC FX (02/08)

- Extensive region of low surface O3 at Equator
- Deep maritime convection predicted to west (105-100W/12N) with off shore inflow
RAQMS 48hr 12km FX (02/08)

- Long range pollution transport (high CO/O3) NE of Galapagos likely overestimated
- Marine deep convective outflow (elevated DMS low O3) at 110-105W/12N
RAQMS 72hr SFC FX (02/09)

- Extensive region of low surface O3 at Equator
- Deep maritime convection weakens to west and strengthens south of Panama
RAQMS 72hr 12km FX (02/09)

- Western DMS outflow weakens and Southern DMS outflow increases
- Upper level S. American outflow moving west towards Galapagos
RAQMS 96hr SFC FX (02/10)

- Extensive region of low surface O3 at Equator
- Deep maritime convection predicted to west (105-100W/12N) and South (85-80W/6N)
• Western DMS outflow very low. Southern DMS outflow increases
• Upper level S. American outflow moving North towards Costa Rica
RAQMS 120hr SFC FX (02/11)

- Extensive region of low surface O3 at Equator
- Deep maritime convection predicted to west (105-100W/16N) and South (85W/6N)
RAQMS 120hr 12km FX (02/11)

- Western DMS outflow gone. Southern DMS outflow dominates
- Upper level S. American outflow moving Northeast over Costa Rica