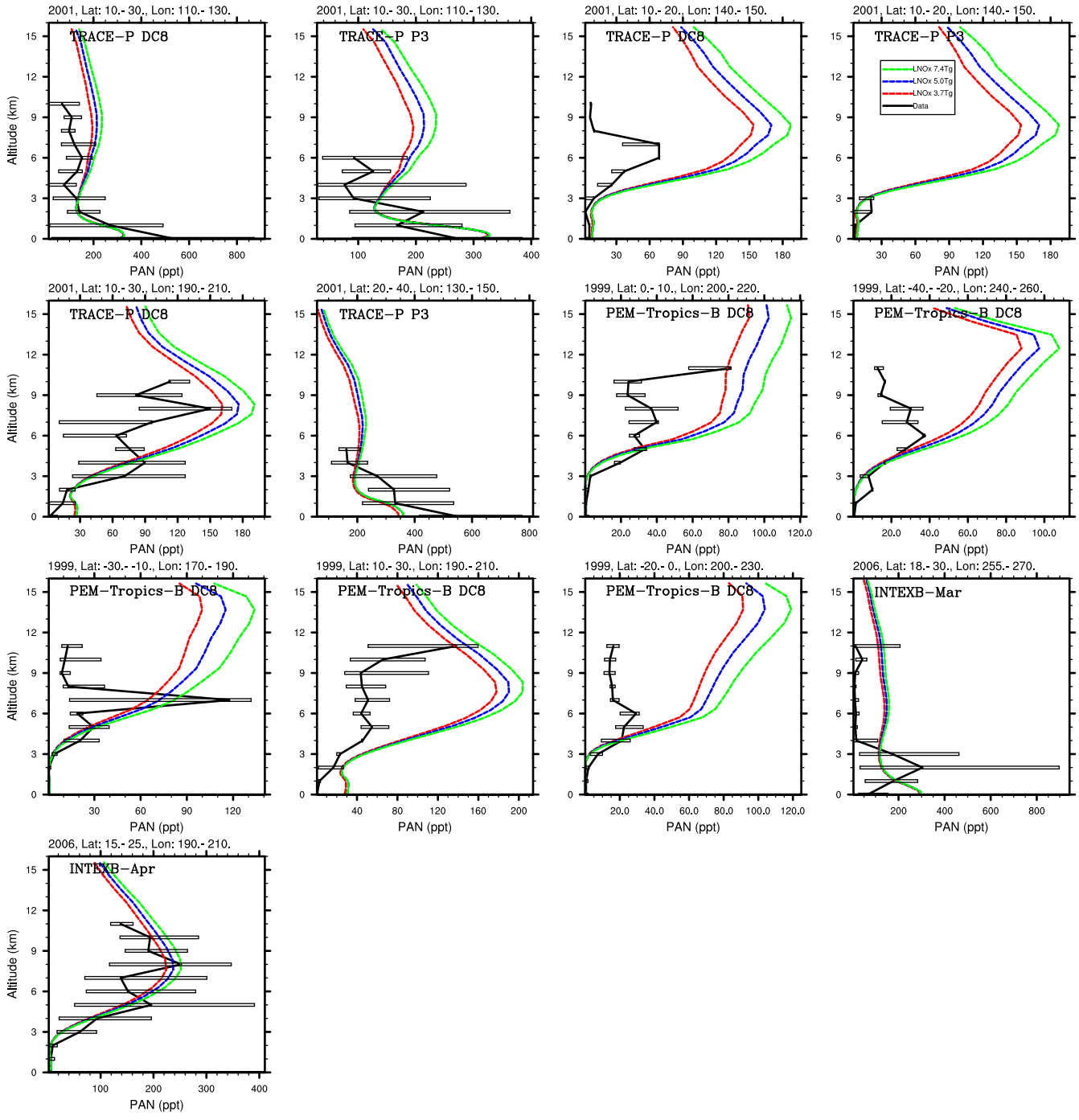Tropics MAM PAN