

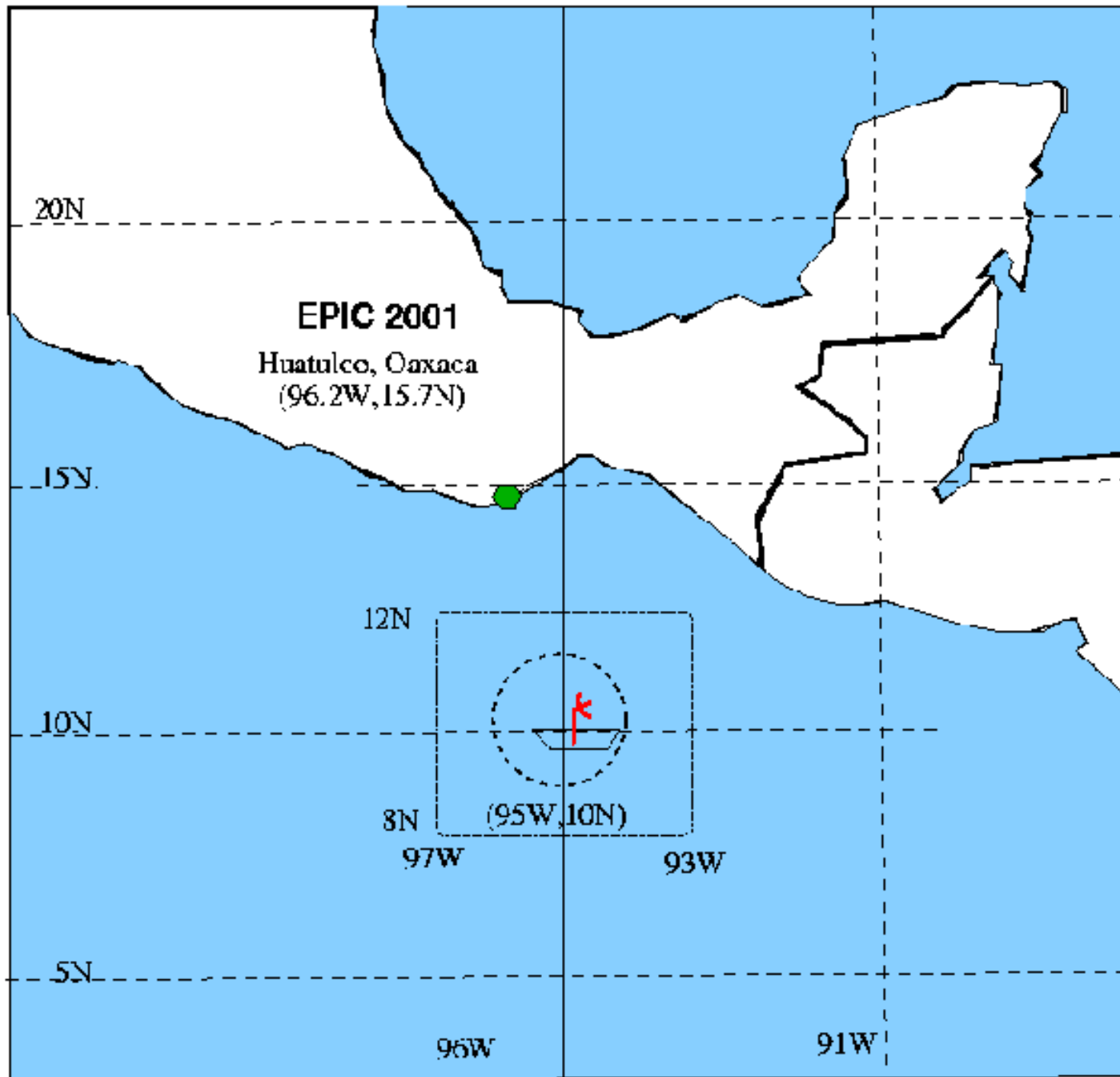
# The Diurnal Cycle of Convection over the east Pacific \*

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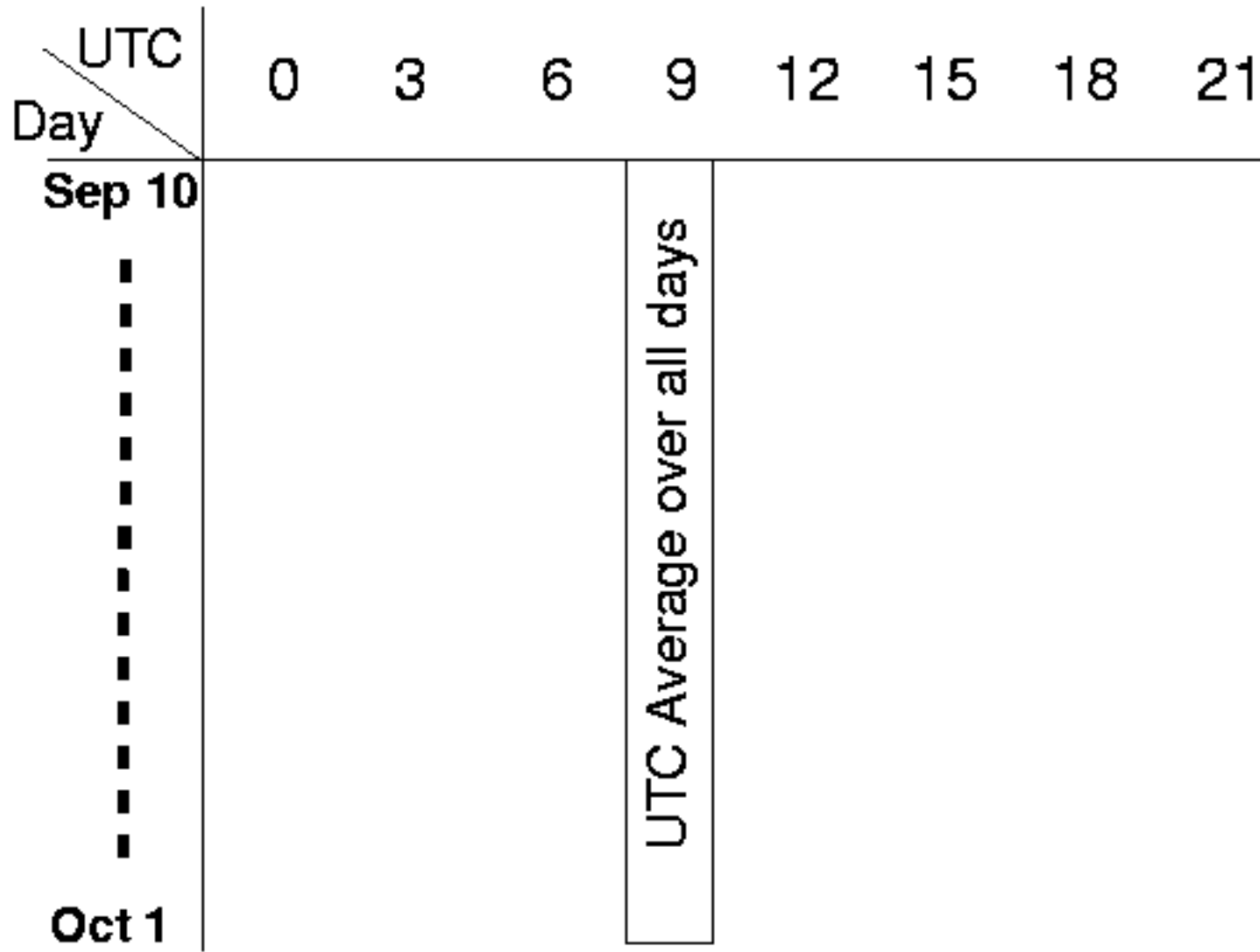
May 10, 2005

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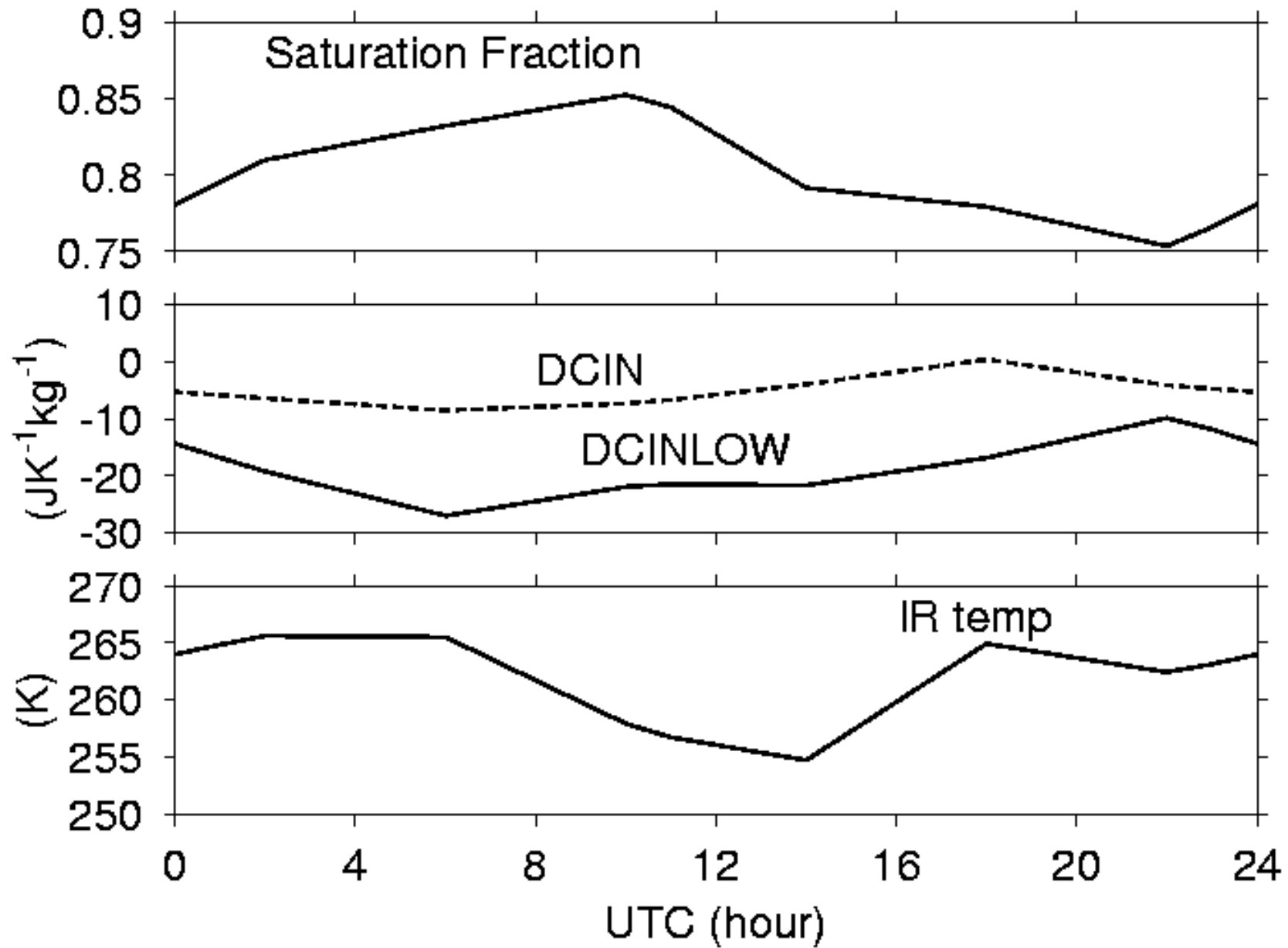
\*Research supported by **NSF**



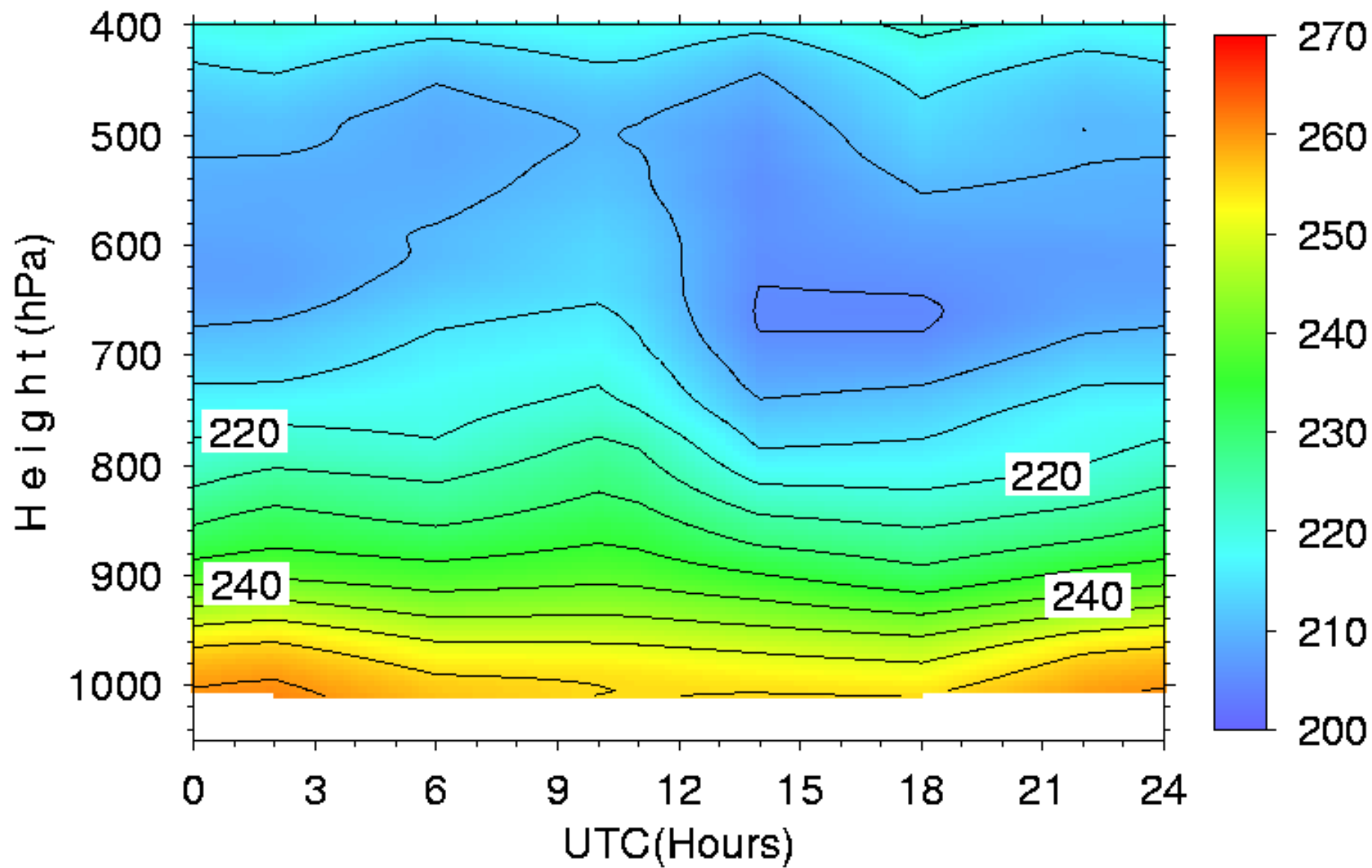
# Diurnal Cycle

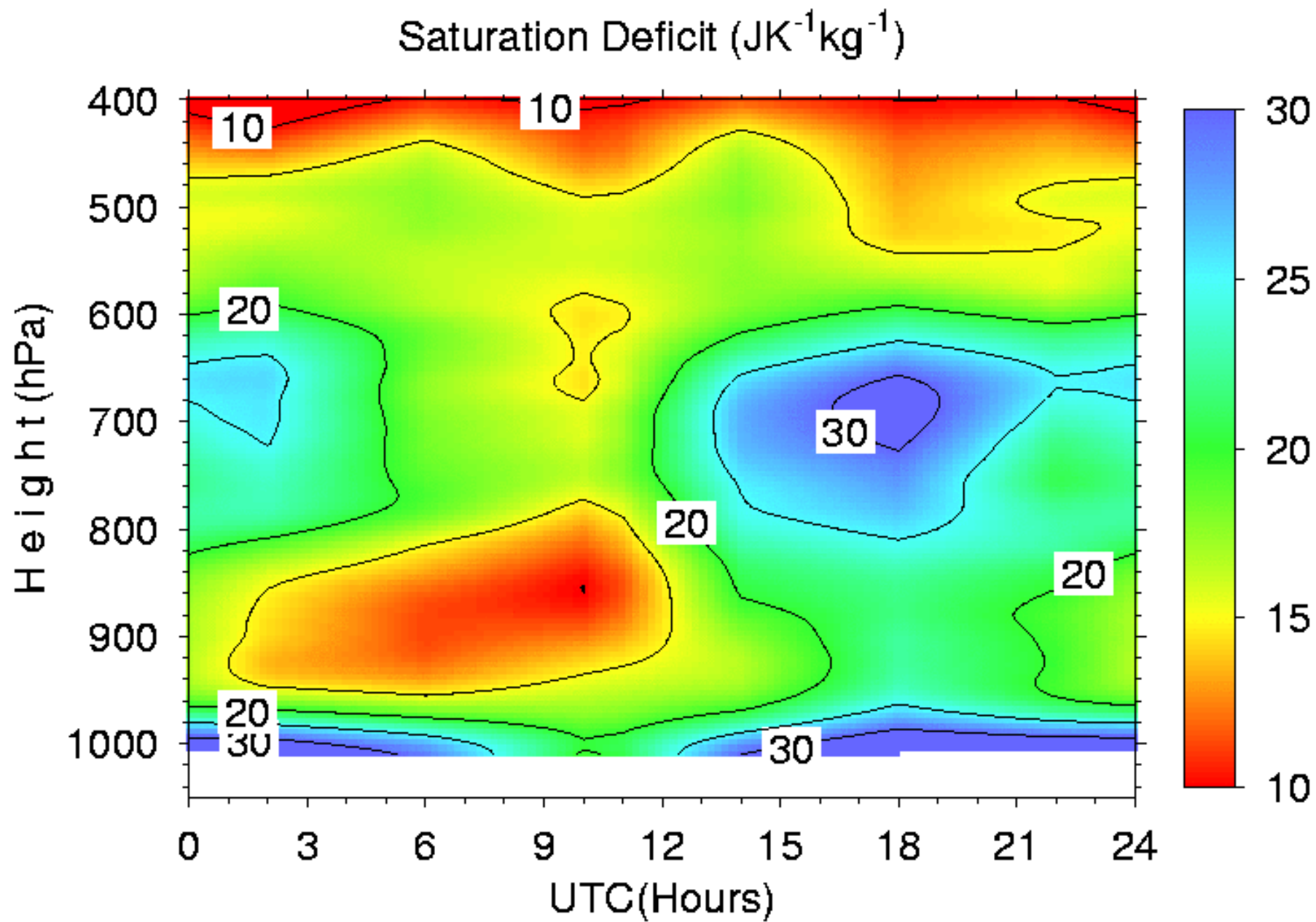


# EPIC2001 95 W, 10 N; Ron Brown

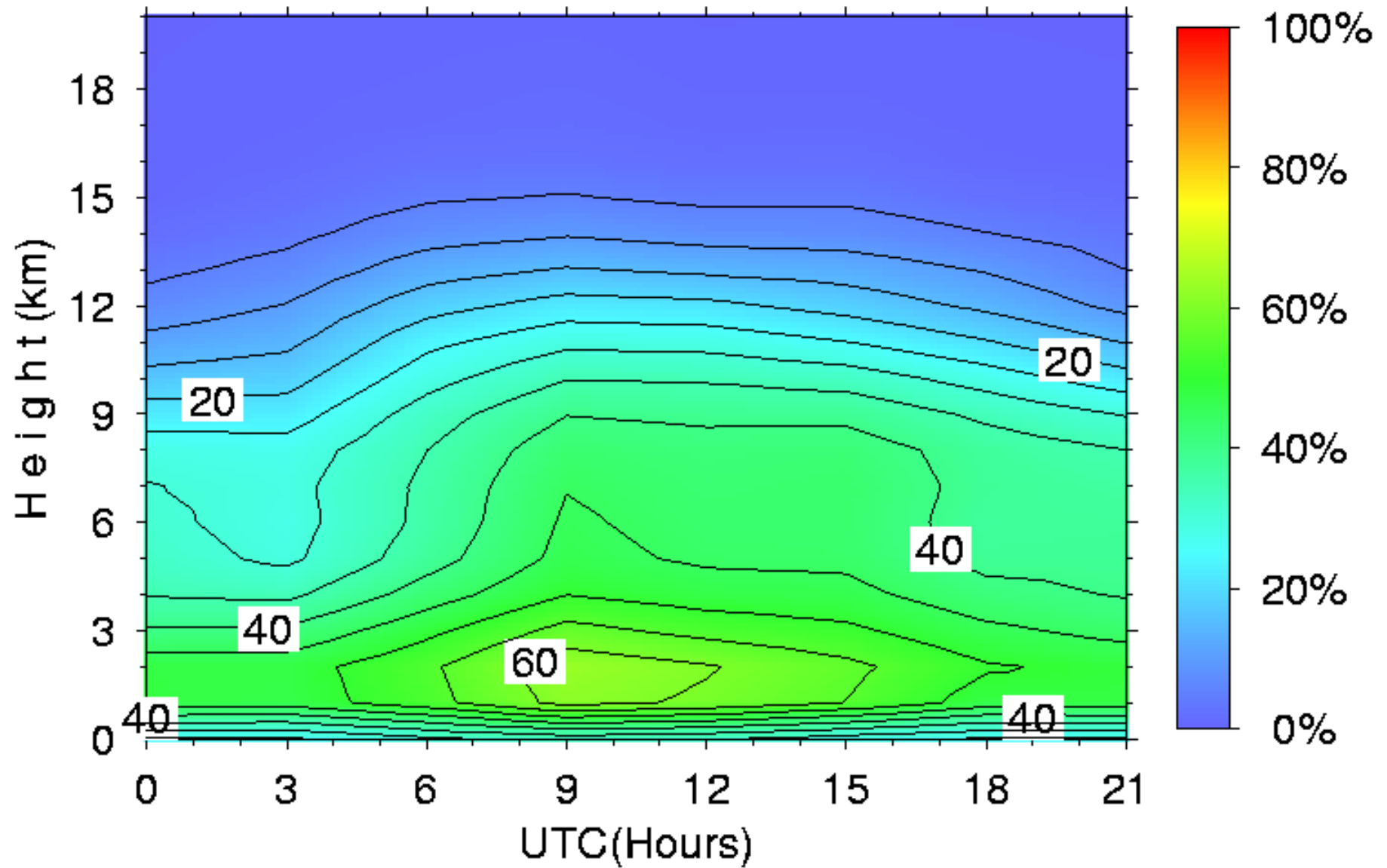


# Moist Entropy ( $\text{JK}^{-1}\text{kg}^{-1}$ )

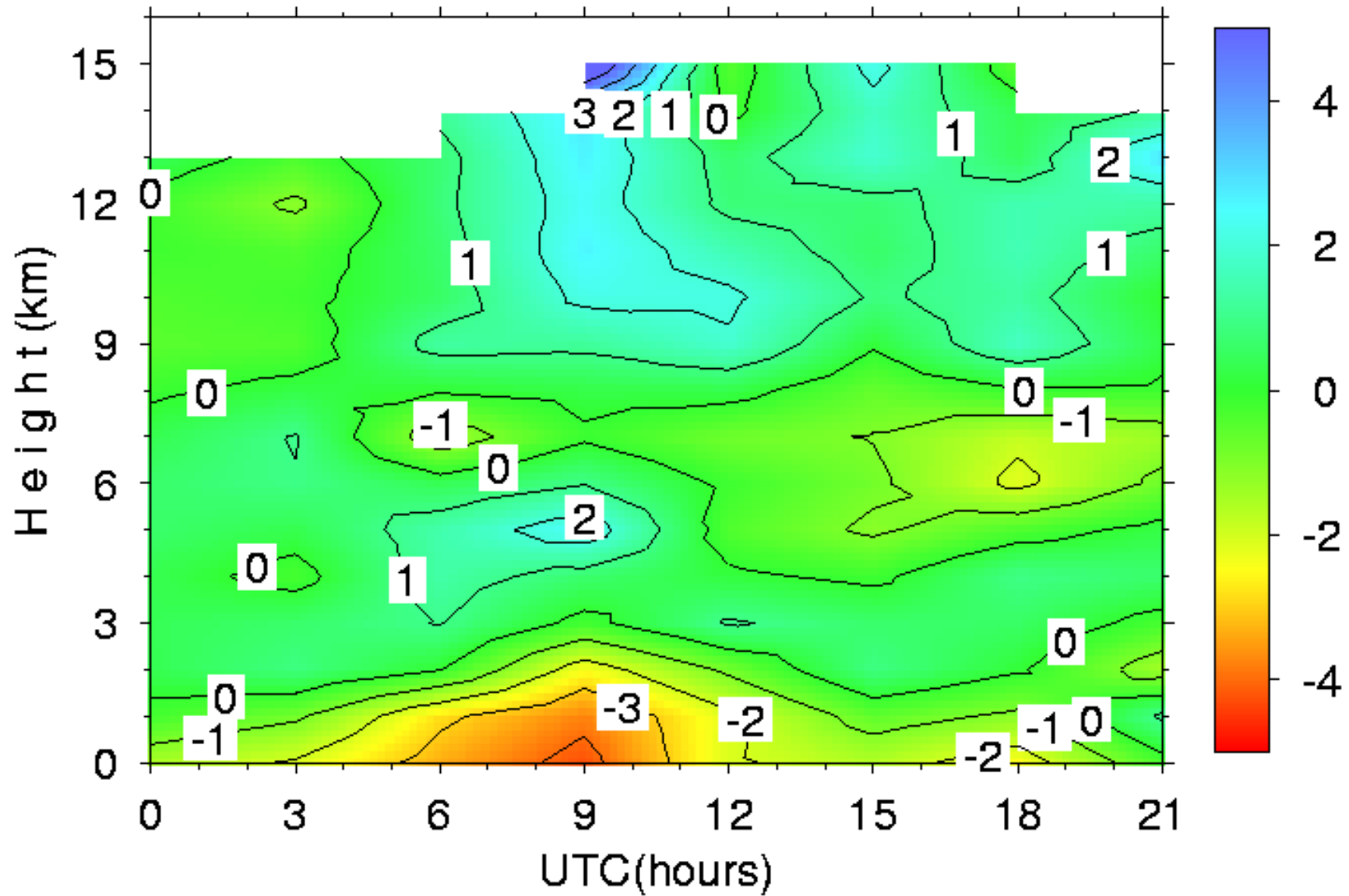




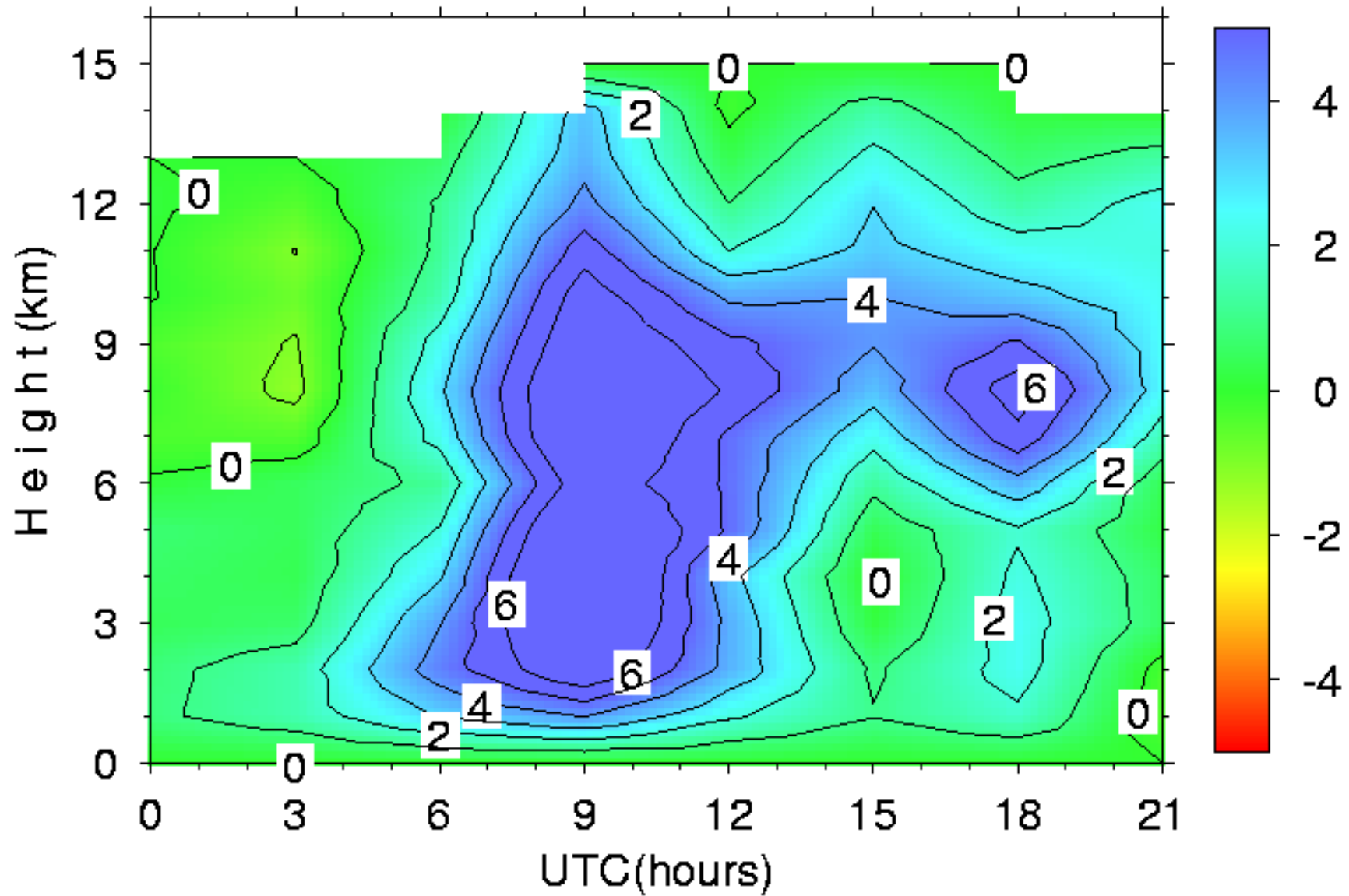
Fractional Area cover by Precipitation(dbz > 0)



# Horizontal Mass Flux ( $\text{kgm}^{-3}\text{s}^{-1} \times 10^{-6}$ )



# Vertical Mass Flux ( $\text{kgm}^{-2}\text{s}^{-1} \times 10^{-3}$ )



# Summary

1. The convective intensity reaches a maximum, in the study region, between 9 and 12 UTC during the average day.
2. The minimum in DCINLOW leads the maximum in convective intensity.
3. Mid-level moisture has its maximum in phase with the maximum in convective intensity
4. The minimum in the infrared temperature follows the maximum in convective intensity.