



Effects of ENSO on global cloud cover

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We investigate the relative anomalies of atmospheric water vapor, cloud fraction and cloud top height during the strong ENSO event 1997/98 using spectrally resolved UV/vis satellite observations. For all three parameters, strong changes are found over selected regions on Earth, especially over the central Pacific. Also the global average value of the atmospheric water vapor column shows a strong positive anomaly during the ENSO period, which correlates well with an increase of the global average surface near temperature. Interestingly, no significant change in the global averaged cloud cover and cloud altitude is found indicating a potential balancing of changes in cloud parameters in different regions.