

Wright, James L. and Marvin E. Jensen. June 1969.

The Importance of Large Scale Advection in Evapotranspiration
from Irrigated Crops in Southern Idaho.

Intensive measurements of evapotranspiration during two growing seasons show that large scale advected sensible heat is a significant source of energy to evaporation from irrigated crops in southern Idaho. Even though the site of the study was several miles from the boundary of the irrigated areas and the surrounding desert, measured latent heat flux exceeded net radiation by as much as 25%. Inversion conditions near the surface of well-watered crops having complete cover were typical throughout the day in mid-summer. The results emphasize the importance of developing a meaningful concept and measure of potential evapotranspiration for irrigated areas in arid regions and for the development of reliable methods of predicting the evapotranspiration from various crops throughout the season as the stage of maturity and crop cover changes under these arid, climatic conditions.