

# ET and Precipitation during the 120 day corn growing season in 2002

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Cumulative precipitation and corn evapotranspiration for the 120-day corn growing period at Colby, Kansas from May 15, 2002 through September 11, 2002 was 9.01 inches and 27.68 inches, respectively. The long term average (1972-02) precipitation and corn evapotranspiration for the period 12.1 inches and 23.0 inches, respectively.

The decreased precipitation and increased evapotranspiration essentially means there was an approximately 7.77 inches greater irrigation requirement in the year 2002. Timing of precipitation and evapotranspiration periods can increase or decrease the need to schedule irrigation to some extent. August precipitation was 4.17 inches, but this occurred too late to accomplish much good for many of the dryland summer crops. However, it helps greatly for the fallow fields to be seeded in the fall.

The severity of the high ET and low precipitation in 2002 has been compounded by nearly identical conditions in 2000 and 2001. Deep soil water reserves that usually help to buffer plant water stress were exhausted in these previous years and have not been replenished during the fallow and overwinter periods. Marginal capacity irrigation systems without these deep soil water reserves often failed to produce an acceptable crop in 2002.

