

No. 14

A Science Service Feature

May 28

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society
discusses:

EVENING RED AND MORNING GRAY

Beware of weather proverbs, Or, better still, pick the true ones and throw aside those which have not been proved. A good one which has survived the test of time, even from the days of Christ, is that

Evening red and morning gray,
Help the traveller on his way;
Evening gray and morning red,
Bring down rain upon his head.

Christ, asked for a sign from Heaven, said: "When it is evening, ye say, it will be fair weather: for the sky is red. And in the morning, It will be foul weather today: for the sky is red and lowering."

When the sun shines clear and reddens the western sky there are no clouds for a long distance to the west, and the normally dusty atmosphere is transmitting the red rays of sunlight in larger measure than the blue ones. Since the weather usually comes from the west this indicates fair, dry weather for some distance in that direction. If the following night is clear and the upper air dry the cooling by radiation will be so favored that it is likely to produce a fog as water condenses on the cold dust particles. This makes the "morning gray". Thus, both "evening red" and "morning gray" indicate the same condition: clear dry weather, which "helps the traveller on his way."

On the other hand when the western sky is banked with dense clouds, giving "evening gray", and when on the following morning the rising sun shines red through fogless, dusty atmosphere, and perhaps ^{lights} up the under surface of the cloud sheet which has spread over the sky during the night, the dry weather is evidently to the east, and the wet weather with the thickening clouds is near at hand in the west, and will "bring down rain upon his head".

(Tomorrow: Windshift Line Is Strong.)

All rights reserved by Science Service,
1115 Connecticut Ave., Washington, D.C.