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A Science Service Feature

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? WHY THE WEATHER ?

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

RAINBOW, CONE OF COLORS

The usual conception of a rainbow is that it exists as if painted on a flat surface. Such is not the case, however, though it may appear that way to the eye. Looking at the rainbow the gaze is centered on the open end of a cone, the walls of which extend as far back as the farthest raindrop which is acting to separate the white light of the sun into its prismatic colors and turn them back in the direction of the observer. Physically, the phenomenon could be roughly reproduced by taking seven cones of glass, - violet, indigo, blue, green, yellow, orange and red, - <sup>and</sup> telescoping them. Looking at the open end the nested cone would be as the cone of the rainbow.

The intensity of the colors depends upon the size of the raindrops, the larger the drops the more brilliant the coloring. The same phenomenon is witnessed in the dewdrop, and in spray from fountains or waterfalls.

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