

A Science Service Feature

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? WHY THE WEATHER ?

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SKY BLUENESS

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"The mere contemplation of the sky," wrote the German meteorologist Kametz a century ago, "at once proves to us that its color is not the same at all points of the same vertical; it is generally deeper in the zenith, then it becomes brighter toward the horizon, where it is frequently completely white. This contrast becomes still more striking by the use of the cyanometer. Thus de Saussure found one day that the color corresponding to No. 23 of his cyanometer was in the neighborhood of the zenith, and that corresponding to No. 4 near the horizon. But the color of the same part of the sky changes very regularly during the day, in that it becomes deeper from morning to midday, and becomes lighter from this time to evening. When we ascend from the plain to the mountains the sky appears deeper and deeper; the chamois-hunters and shepherds have long known this. Deluc was the first to direct attention to this fact, which de Saussure verified in the Alps and M. de Humboldt in the Cordilleras. In our climates the sky has the deepest blue color when, after several days' rain, the east wind drives away the clouds."

The "cyanometer" mentioned above was a circular card, devised by H. B. de Saussure in 1790, on which were arranged in order of increasing depth of color a series of 53 numbered sections, ranging from zero, which was pure white, to No. 52, which was a deep shade of indigo indistinguishable from jet black. The observer recorded the color of any part of the sky by comparison with this scale. Several other devices have been used for the same kind of observations. The latest is a set of 14 color match cards introduced by Dr. F. Linke in 1925. Their tints range from almost white to a very dark blue.

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