A Science Service Feature

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? WHY THE WEATHER ?

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SNOW CRYSTALS

Snow crystals are ice crystals, but they are probably not formed by the freezing of liquid water, as are the crystals that compose many other kinds of ice. They are supposed to be condensed in solid form directly from the invisible water vapor in the atmosphere. As water crystallizes in the hexagonal system, perfect snow crystals always have six sides or six principal branches. The majority take the shape of thin plates, with or without rays, but some are columnar and yet others are combinations of plates and columns.

"The forms of snow srystals," says Dr. Gustav Hellmann, "are rarely noticed during such a snowfall as one observes at the earth's surface. It is only when it is just beginning to snow in calm air and when the crystals fall on dark objects that one distinctly recognizes their shapes, sometimes without the aid of a magnifying-glass! This stage is the most favorable for microphotographic work, but it does not last long.

"The crystals become more numerous and often reach the earth in a damaged state, since they have collided with one another in their downward passage. As the fall of snow becomes denser, a number of crystals combine into a conglomerate of crystal fragments, forming what is called a 'snowflake'. The latter is by far the most frequent form in our snowfalls, while in the polar regions the individual crystals are somewhat more common."

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