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? WHY THE WEATHER ?

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RAINY VS. DRY LOWS

Two "lows" or storm areas may look like twins, judging from their appearance on the weather maps, and yet behave very differently. Why does one produce plenty of rain or snow and the other pass with nothing but wind and clouds?

The difference rests on two factors, the amount of moisture present and the extent to which it is cooled. Generally a wind off the ocean entering a low will provide more moisture for rain than a land wind. But cooling is necessary to convert vapor into rain or snow. If a storm passes rapidly there is no time for large masses of moist air to become involved, carried north on the front of the storm and cooled. Hence when a low goes by quickly it will rain but a short time in any given place. Other things being equal, a storm passing at half the speed will give twice as much rain. Occasionally a low becomes blocked, and a most discouraging, steady rain falls persistently in the same place for several days. Ships crossing the Atlantic from west to east travel with the storms, and so each lasts longer and gives more rain. On the return trip, the weather changes more rapidly, storms are briefer, but more are encountered.

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(Tomorrow: Daily Weather as Climate Unit)

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