



Scientists Create Rainstorms in the Desert

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A rainstorm moved along the East Coast on Sept. 30, 2010. (MyFox DC)

(CANVAS STAFF REPORTS) - The defining feature of a desert is its consistent lack of rainfall. Yet Sheikh Khalifa bin Zayed bin Sultan Al Nahyen, president of the United Arab Emirates and Emir of Abu Dhabi, claims that this will change soon.

This week Sheikh Khalifa announced that the unusually high number of downpours occurring in the southern Al Ain of Abu Dhabi was due to the work of a secret \$11 million project called Weathertec, headed by Swiss company Metro Systems International.

The [U.K. Telegraph](#) reported that Helmet Fluhrer, founder of Metro Systems International, is taking credit for "a number of rainfalls" since June 2010. The Al Ain region underwent 52 rainfalls during this time, an unusually large number for the dry season.

[Arabian Business](#) explained the theory behind the technology. Huge ionizers, which work exactly the same way as many commercial air purifiers (but on a much larger scale), were installed in Al Ain. They use high voltage to electrically charge tiny motes of dust in the atmosphere over the desert.

Naturally occurring convection currents of air then push these motes upward. If the atmospheric humidity is sufficient, water molecules in the air will supposedly be attracted to the negatively charged motes. This may then result in clouds, which may then produce rainfall.

The science behind Weathertec makes sense in theory, but no one knew if it could work in reality.

According to [The Daily Mail](#), the convection current does not stop pushing motes once they reach optimal cloud height, so it is unclear how clouds can form before the motes rise too high. Additionally, water has only a partial positive charge on the oxygen end of the molecule, so negatively charged dust motes might be just as likely to be repelled by as they are attracted to the water.

Furthermore, the resulting clouds, if formed at all, might not even produce rain. Yet the Al Ain ionizers seem to show that the process may be possible.

The Max Planck Institute for Meteorology monitored the entire process. Scientists seem torn on whether the rainfalls were due to Weathertec. Abu Dhabi lies on the coast, and natural summer rainfall is not unheard of. The true test will be if the same high rainfall result can be maintained multiple years in a row.

As [Time Newsfeed](#) pointed out, the currently dominant form of creating rainfall is cloud seeding, which works by adding small dustmote-like particles such as silver iodide into the air. Although cloud seeding is undeniably safe, very few scientists actually believe it works in practice. Claimed successes in cloud seeding may just as easily have been natural rainfalls that would have occurred without cloud seeding being used.

This lack of success with cloud seeding is what gives many scientists caution before blindly believing that Weathertec is definitely responsible for the rainfall Al Ain received last summer.