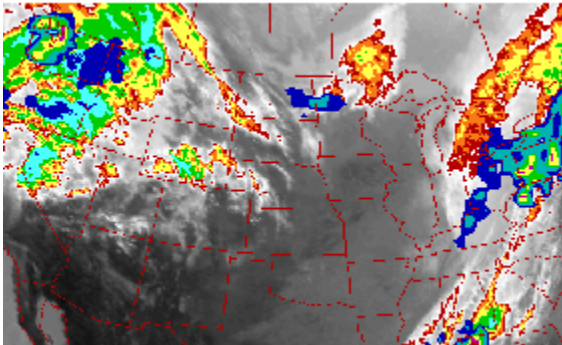


9.2 Weather Analysis and Modification System

Brief Description

A global network of sensors provides "weather warriors" with the means to monitor and accurately predict weather activities and their effects on military operations. A diverse set of weather modification tools allows manipulation of small-to-medium scale weather phenomena to enhance friendly force capabilities and degrade those of the adversary. Many of the sensors required for this system are assumed to be external (i.e., part of the global information management system (GIMS), discussed in System 8.1).



Capabilities

- Understanding and predicting local weather effects on military operations
- Precipitation inducement or suppression using particulate seeding or directed energy
- Fog generation/dissipation using directed energy techniques
- Storm triggering/enhancement using airborne cloud seeding
- High-power microwave (HPM) devices (ground-based) and ionospheric mirrors for communications and radar enhancement/disruption
- Ionospheric charging for spacecraft disruption using crossed HPM beams

Enabling Technologies (MCTL)

- 2.6, Micromechanical Devices
- 4.1, Digital Processing
 - 4.1.1, High-Performance Computing
- 4.2, Software
 - 4.2.5, Data Fusion
 - 4.2.9, Artificial Intelligence
- 4.3, Hybrid Computing
- 6.9 Other Sensors
- 11.2, High-Power RF Systems

White Papers

- Γ, Weather Modification