Greenhouse Effect Due to Chlorofluorocarbons
Climatic Implications

V. Ramanathan
15 AUGUST 1980

JUDGING A THEORY BY ITS PREDICTIONS

Science

Detecting Climate Change due to Increasing Carbon Dioxide

Roland A. Madden and V. Ramanathan

PREDICTION

WARMING DUE TO \text{CO}_2 \text{ SHOULD BE DETECTABLE BY YEAR 2000}
CAUSES OF CLIMATE CHANGE HAVE ALSO BEEN DEDUCED FROM OBSERVATIONS

Ramanathan, Barkstrom and Harrison, Physics Today, 1989

Ramanathan, Crutzen, Et al, 1998

RETREATING ICE INCREASES ARCTIC SOLAR HEATING

PISTONE, EISENMAN AND RAMANATHAN,
Proceedings of the National Academy of Sciences, 2014
POLEWARD SHIFT OF STORM TRACK CLOUDS

Frida A-M. Bender · V. Ramanathan · George Tselioudis

CLIMATE DYNAMICS, 2011
ONE BILLION LIVE WITH SEEMINGLY UNLIMITED ACCESS TO FOSSIL FUELS.

THE BOTTOM 3 BILLION LACK ACCESS TO FOSSIL FUELS EVEN FOR COOKING
SOME IN THE POLITICAL REALM CONTINUE TO DEBATE THE CAUSE OF A WARMING PLANET AND DEMAND MORE DATA. YET MAB MEMBER GENERAL GORDON SULLIVAN, UNITED STATES ARMY, RETIRED, HAS NOTED:

“SPEAKING AS A SOLDIER, WE NEVER HAVE 100 PERCENT CERTAINTY. IF YOU WAIT UNTIL YOU HAVE 100 PERCENT CERTAINTY, SOMETHING BAD IS GOING TO HAPPEN ON THE BATTLEFIELD.”

MAY 2014