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## A HISTORICAL ESSAY ON SEA FOG

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### Abstract

A historical review of research on sea fog is presented. The period of interest is essentially the 20<sup>th</sup> century, beginning with the celebrated work of G. I. Taylor in the aftermath of the *Titanic* tragedy. It has been argued that relative maxima in fog frequency over the North Atlantic (including the British Isles and the Grand Banks of Newfoundland) and the North Pacific (including the U. S. West Coast) has led to major contributions by scientists in England and the United States. The early work (pre-W. W. II) tended to be phenomenological – i. e., conceptual with broad inference from statistical summaries. Yet, this early work laid the foundation for numerical modeling that came with the advent of computers in the postwar period. The subtleties associated with sea fog formation and maintenance are explored by analyzing some of the results from the numerical simulations. The essay ends with a speculative view on our prospects for a more-complete understanding of sea fog in light of the earlier contributions.

### 6. NUMERICAL SIMULATION

### 7. EPILOGUE

### 1. INTRODUCTION

### 2. SEA FOG FREQUENCY

### 3. RESEARCH IN GREAT BRITAIN: TAYLOR, DOUGLAS, AND LAMB

#### 3.1 *G. I. Taylor*

#### 3.2 *C. K. M. Douglas*

#### 3.3 *H. H. Lamb*

### 4. RESEARCH IN THE UNITED STATES: BYERS, PETTERSEN, AND LEIPPER

#### 4.1 Byers

#### 4.2 Petterssen

#### 4.3 Leipper

### 5. SEA FOG: STATE OF AFFAIRS AT MID-20<sup>th</sup> CENTURY

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