

BYLAWS OF ULTIMA

Preface

ULTIMA is an international consortium that aims at promoting collaborative research on the magnetosphere, ionosphere, and upper atmosphere through the use of ground-based magnetic field observatories. ULTIMA is composed of individual magnetometer arrays in different countries/regions, and it provides a platform for each of them to easily and efficiently collaborate with other arrays in order to expand observational coverage. ULTIMA also helps identify the importance and need of individual arrays to continue operation or establish new stations in their host countries.

Article I. Name and Purpose

- A. *Name*: The name of this organization shall be the “Ultra Large Terrestrial International Magnetometer Array.” The official abbreviation of the organization’s name shall be “ULTIMA.”
- B. *Broad Purpose*: The purpose of this organization shall be:
- to provide a platform for individual magnetometer arrays to collaborate in scientific research;
 - to promote ground-based magnetic field observations for research on the magnetosphere, ionosphere and upper atmosphere.
- C. *Scientific Rationale* for ULTIMA

In order to properly understand multi-scale couplings in the complex Sun-Earth system, it is becoming increasingly clear to concerned science investigators that the international geomagnetic community must achieve the following three objectives:

- (1) Observe the earth with large magnetometer networks; and
- (2) Coordinate these regional networks as one big array (i.e., one array of several different networks) on a long-term basis ("long-term" defined as more than 11 years – one solar cycle); and
- (3) Promote data exchange, coordinate metadata, and provide guidelines for instrument operation and data collection.

In short, the scientific value of each network is greatly enhanced when their outputs are brought together. This is the aim of ULTIMA.

D. *Political Rationale* for ULTIMA

Each magnetometer network has internal political and financial challenges. In particular, it is difficult for any single network to secure stable funding for over ten years.

Therefore, to assist the funding of regional networks, it is imperative for these networks to work together and promote the international scientific value of global magnetometer coverage. An important ramification of this effort is to obtain support for the installation and upkeep of magnetometer networks.

Article II. Membership

- A. *Types of membership*: The members of this organization are composed of regular members, rotating members, and observers. All memberships shall be granted upon a majority vote of current members.
- B. *Eligibility of voting members*: (1) A regular member shall be the Principal Investigator or the representative of a magnetometer array or a combination of magnetometer arrays that consist of approximately ten or more established ground magnetometer stations. (2) A rotating member shall be the Principal Investigator or the representative of a smaller magnetometer array.
- C. *Observers*: Individuals who may enrich the organization's scientific values can be elected as observers.
- D. *Member composition*: Regular members shall occupy no less than fifty percent of the overall membership.
- E. *Terms*: Regular members do not have term limitation. Each rotating member shall serve a two-year term, and is not eligible in an immediate new term.

Article III. Officers, Duties, and Terms of Office

- A. *Officers and duties*: The officers of the organization shall consist of the Chair and Secretary. Officers shall be members of the organization.
- B. *Duties*: The *Chair* shall convene regularly scheduled meetings and call for special committees when necessary. The *Secretary* shall be responsible for managing meeting affairs, distributing newsletters and electronic messages, and assuring that organization records are maintained.
- C. *Terms*: The Chair shall serve a four-year term and is eligible for re-election.
- D. *Selection of officers*: The Chair will be elected by a simple majority of members. The elected Chair shall select the Secretary.

Article IV. Activities

- A. *Regular meetings:* An annual meeting of the organization shall be held for deciding organizational directions, establishing special committees, conducting elections, and modifying bylaws, at a time designated by the Chair.
- B. *Special meetings:* Special meetings may be called by the Chair or a simple majority of the members for discussing timely issues.
- C. *Quorum:* Fifty percent of the members present, physically or by telephone, at any properly announced meeting shall constitute a quorum.
- D. *Voting:* All issues to be voted on shall be decided by a simple majority of the quorum.
- E. *Newsletters:* A newsletter shall be issued annually to circulate the summaries of research activities and status of the magnetometer arrays contributed by each member.
- F. *Electronic mailing list:* An electronic mailing list shall be established and used for timely communications.

Article V. Instrument Operation

- A. The operation of ULTIMA is conducted by individual members' magnetometer arrays.
- B. Each member shall provide updates about member's own magnetometer array at least annually to the Secretary for publication on the Newsletter.
- C. Special observation campaigns can be arranged as appropriate.

Article VI. Data Exchange, Distribution, and Usage

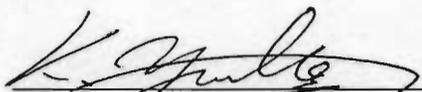
- A. *Data exchange:* Each member shall share data with other members for collaborative research, given a reasonable amount of time after the data are collected.
- B. *Data distribution:* ULTIMA shall establish mechanisms to share data and analysis tools among members and to distribute them to the international scientific community.
- C. *Usage:* Scientific presentations and publications using ULTIMA data should provide appropriate acknowledgments to the relevant magnetometer arrays and their funding agencies. The acknowledgment text will be provided by the individual arrays and distributed to the users with data.

Article VII. Amendment of Bylaws

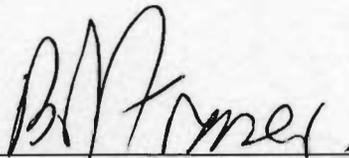
- A. These bylaws may be amended when necessary by two-thirds majority of the members at regular or special meetings. Proposed amendments must be submitted to the Secretary to be sent out via e-mail.

CERTIFICATION

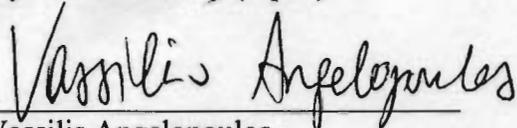
These bylaws were approved at the ULTIMA Ad Hoc Committee Meeting
unanimously on **November 17, 2006 at UCLA.**



Kiyohumi Yumoto, Chair
Kyushu University (Japan)



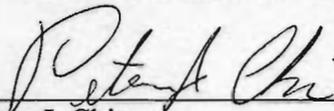
Brian J. Fraser
University of Newcastle (Australia)



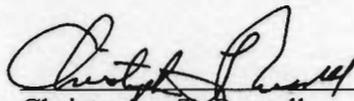
Vassilis Angelopoulos
University of California, Berkeley (USA)



Ian R. Mann
University of Alberta (Canada)



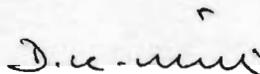
Peter J. Chi
UCLA (USA)



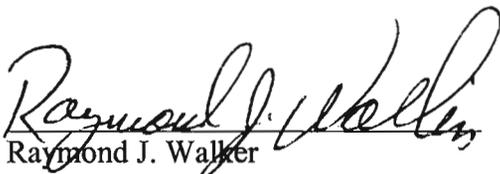
Christopher T. Russell
UCLA (USA)



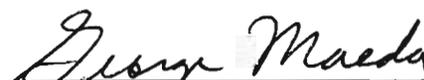
Mark B. Moldwin (USA)



David K. Milling
University of Alberta (Canada)



Raymond J. Walker
UCLA (USA)



George Maeda
Kyushu University (Japan)