Instructions and Sample for papers to be submitted for inclusion in the Conference Proceedings

Articles must be submitted to the Secretary of the Scientific Committee, as attachments to e-mail:

Dr. Silas Chr.Michaelides e-mail: <u>silas@ucy.ac.cy</u>

All articles must be ready for reproduction in Microsoft Word.

Every article must not exceed 8 pages, including tables, figures and references.

Fonts throughout the article must be Times New Roman 11pt.

Margins on all sides will be 30mm.

The title must be in Bold Times New Roman 11pt, page centered.

Below the title there will be an empty line followed by the author(s) names(s) in Bold Times New Roman 11pt. For papers with several authors with different affiliations, a reference number should be placed to the right of the author's name, as superscript, referring to his/her affiliation (e.g. **G. Jurgens**¹).

An empty line follows right below and then the authors' affiliations are entered in Bold Times New Roman 11pt. In case of authors with different affiliatons, each affiliation should be referred to the author with the respective number (e.g. ¹Meteorological Service).

An empty line follows and then a short Abstract is inserted. The word **Abstract** will be Bold Times New Roman 11pt, <u>without numbering</u>.

Chapter headings will be numbered consecutively (e.g. 1. Introduction, 2. Data and methodology) in Bold Times New Roman 11pt. An empty line will be placed between chapters. Sub-chapters will be numbered consecutively as 2.1 Winter, 2.2 Spring also in Bold Times New Roman 11pt.

The text follows immediately below the chapter heading in Regular Times New Roman 11pt.

Figures and Tables will be in the appropriate position and embedded in the text. Figures will be numbered and referred to such as Figure 1, Figure 2 etc. Figure captions will be placed under the figures in Regular Times New Roman 11pt.

All figures will be published in black&white. Any colored figures will be transformed into black&white with possible reduction in their quality. Therefore, authors are encouraged to undertake the transformation of any colored figures into high quality black&white.

Tables will be numbered, as follows: Table 1, Table 2, etc. Table headings will be placed above the table in Regular Times New Roman 11pt.

Any **Appendices** will be placed at the end of the chapters before the **References** and will be numbered accordingly (e.g. Appendix 1).

References will be placed at the end of the article.

Examples of references in text:

Thompson (1992) Michael and Smith (1995) Ryan *et al.* (2001) (Rosenberg 1995, Michaelides and Nicolaides 1998, Jacobs *et al.* 2003)

Examples of References:

Journal article:

Gleeson T. A., 1954: Cyclogenesis in the Mediterranean region. Archiv. Met. Geoph. Bioklim., Series A, 6, 153-171.

Book:

Petterssen S., 1956: Weather analysis and Forecasting. McGraw-Hill.

Conference Proceedings:

Nicolaides A.K., Michaelides S.C. and Karacostas T., 1998: *Statistical analysis of winter baroclinic depressions in the area of Cyprus*. 4th Panhellenic Conference of Meteorology, Climatology and Atmospheric Physics, Athens September 1998.

A sample paper follows.

ISOBARIC DISTRIBUTIONS OF DYNAMIC FIELDS OVER THE BROAD EUROPEAN REGION

Silas Michaelides¹, Kleanthis Nicolaides¹ and Theodore Karacostas²

¹Meteorological Service, Nicosia, Cyprus. ²Department of Meteorology and Climatology, Aristotelian University of Thessaloniki.

Abstract

In the present study the results of a series of calculations are presented which aim at the determination of the average spatial distribution of various dynamic parameters of the upper atmosphere, for a period of 10 years, from 1988 to 1997. More specifically, the average distributions of the temperature, relative vorticity, divergence of wind, vertical velocity and a static stability parameter are presented, for an area bounded by the meridians 20^{0} W and 45^{0} E and the latitude circles 25^{0} N and 65^{0} N.

1. Introduction

The cyclogenetic potential of the Mediterranean basin, especially during the cold season, has long been recognized and is well documented (Gleeson 1954, Meteorological Office 1962, Reiter 1975). Also, numerous diagnostic studies have shed light on the complex processes underlying the formation and evolution of such systems (e.g. Kallos and Metaxas 1980, Karacostas and Flocas 1983, Michaelides 1987, Prezerakos and Michaelides 1989, Maheras et al. 2000).

Unsettled weather over the area of Cyprus is largely determined, at least during the winter period, by the evolution of baroclinic depressions that, either reach the area traveling from the surrounding wider area, or develop over the area of east Mediterranean (El-Fandy 1946). Baroclinic depressions are more frequent during the cold period, when a low index circulation is established over the northern hemisphere. The cold period can safely be assumed to span from late Autumn to late Spring (El-Fandy 1946, Boast and McGinnigle 1971, Metaxas 1976, Kallos and Metaxas 1980).

2. Data and methodology 2.1 Winter

2.2 Spring

3. Results

From the study of the temperature distributions on the isobaric surfaces from 850 to 250hPa, it is obvious that the Mediterranean basin is an area of intense average zonal temperature gradient (see Figure 1).



Figure 1. The average distribution of temperature on the 850, 500 kot 300hPa isobaric levels. Isopleths are drawn for every 2^0 C.

Table 1 displays the number of depressions of different origin entering the area in each month.

Table 1. The number of depressions cross tabulated with respect to the month in which they first make their appearance in the area and their origin

	November	December	January	February	March	Total
Originating from North Originating	6	1	3	3	9	22
from East	3	3	8	7	2	23
from South	3	1	4	4	2	14
from West	12	16	11	22	12	73
in the area	4	3	5	4	2	18
Total	28	24	31	40	27	150

4. Conclusions

The isobaric distributions presented above are the result of the spatial averaging of the respective fields over a period of ten years, from 1988 till 1997.

Appendix 1

- Symbol interpretation:
- horizontal divergence of the wind, δ
- ζ λ relative vorticity,
- longitude,

References

El-Fandy M. G., 1946: Barometric Lows of Cyprus. Q. J. Roy Met. Soc., 72, 291-306.

Flocas H.A., Macheras P., Karakostas S.T., Patrikas I. and Anagnostopoulou C., 2001: A 40 year climatological study of relative vorticity distribution over the Mediterranean. *Int. J. Climatol.*, *21*, *1759-1778*.

Gleeson T. A., 1954: Cyclogenesis in the Mediterranean region. Archiv. Met. Geoph. Bioklim., Series A, 6,153-171.

Holton J., 1979: Introduction to Dynamic Meteorology. 2nd ed., Academic Press.

Meteorological Office, 1962: Weather in the Mediterranean. Vol. 1, 2nd ed., HMSO.

Michaelides S.C., 1987: Limited area energetics of Genoa cyclogenesis. Mon. Wea. Rev, 115, 13-26.

Nicolaides K, Michaelides S, Karacostas T., 1998: *Statistical Analysis of the Winter Baroclinic Depressions over the area of Cyprus*. 4th Panhellenic Conference on Meteorology, Climatology and Atmospheric Physics. Athens, Greece, September 1998. pp.1-5 (In Greek).

Petterssen S., 1956: Weather analysis and Forecasting. McGraw-Hill.