

MEMORIAL MILLÁN MILLÁN: UNA TRAYECTORIA SINGULAR EN LA INVESTIGACIÓN AMBIENTAL ATMOSFÉRICA (I)

Etapla Madrileña: CIEMAT 1986-1991

Valencia, 12 Septiembre 2024

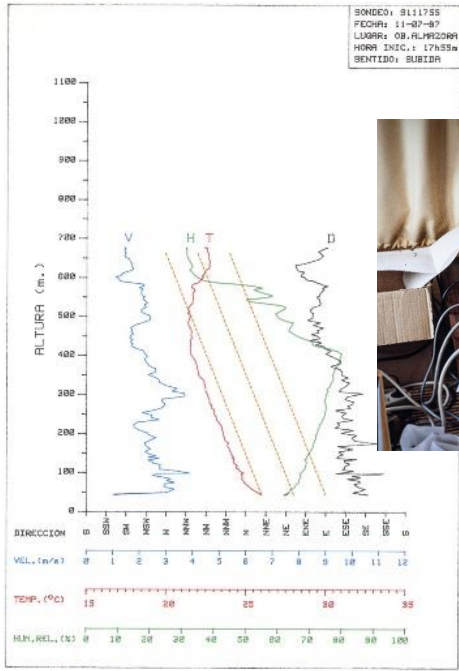
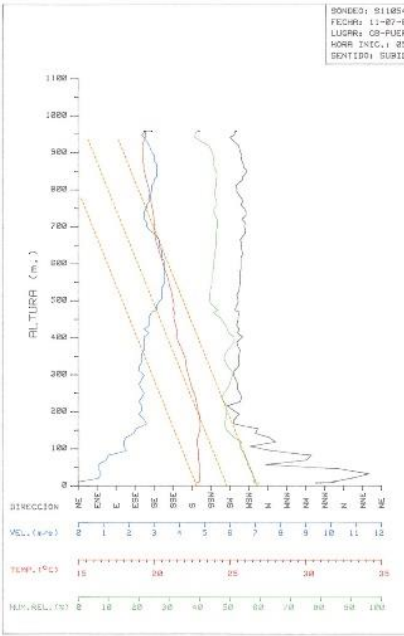
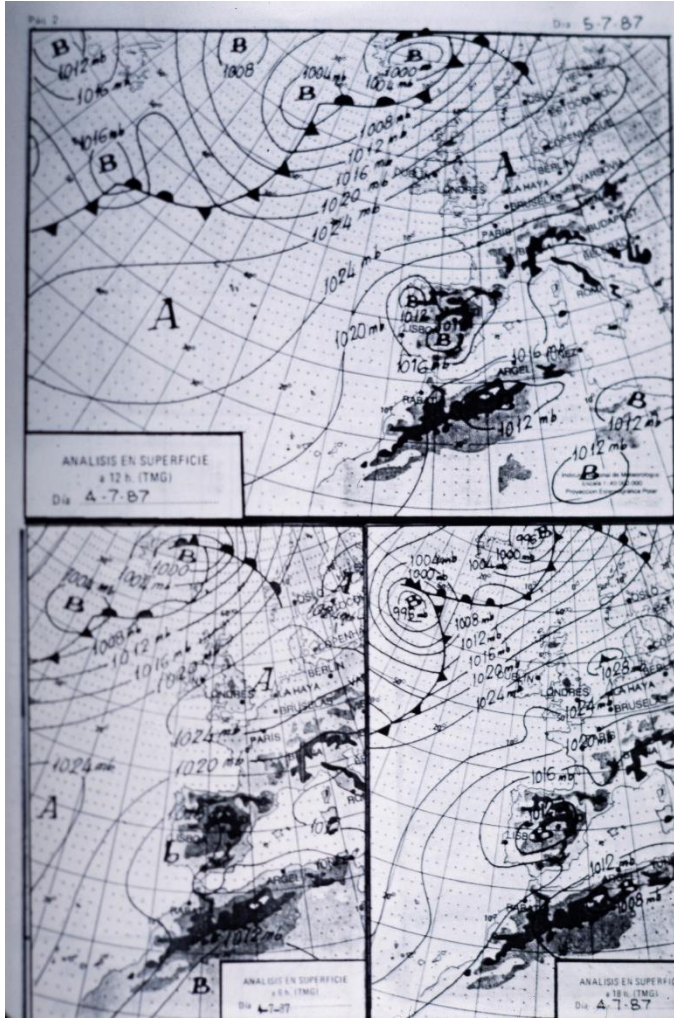
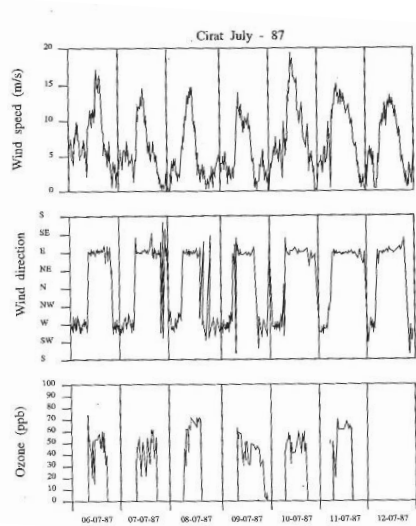
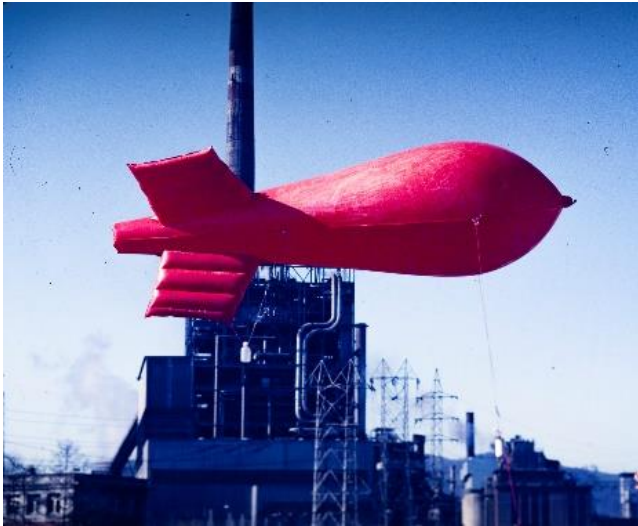
Begoña Artíñano
Departamento de Medio Ambiente, CIEMAT



Unidad de Medio Ambiente Convencional

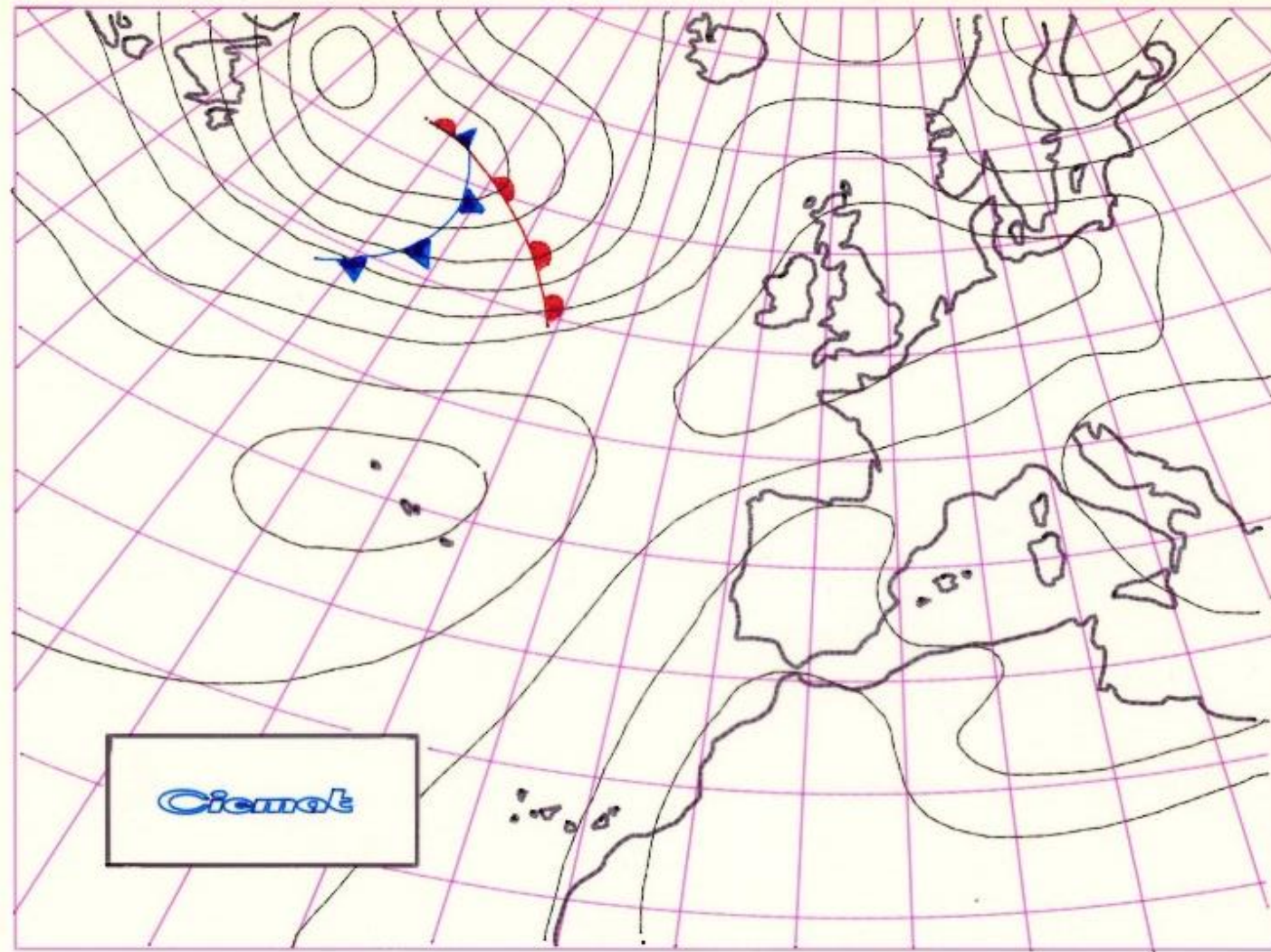
Proyectos Programa P.I.E. OCIDE

- Definición de una metodología global para la determinación y prevención de los efectos atmosféricos y ecológicos de las centrales térmicas convencionales (1986)
- Tipificación meteorológica de emplazamientos de centrales térmicas (1987-1989)



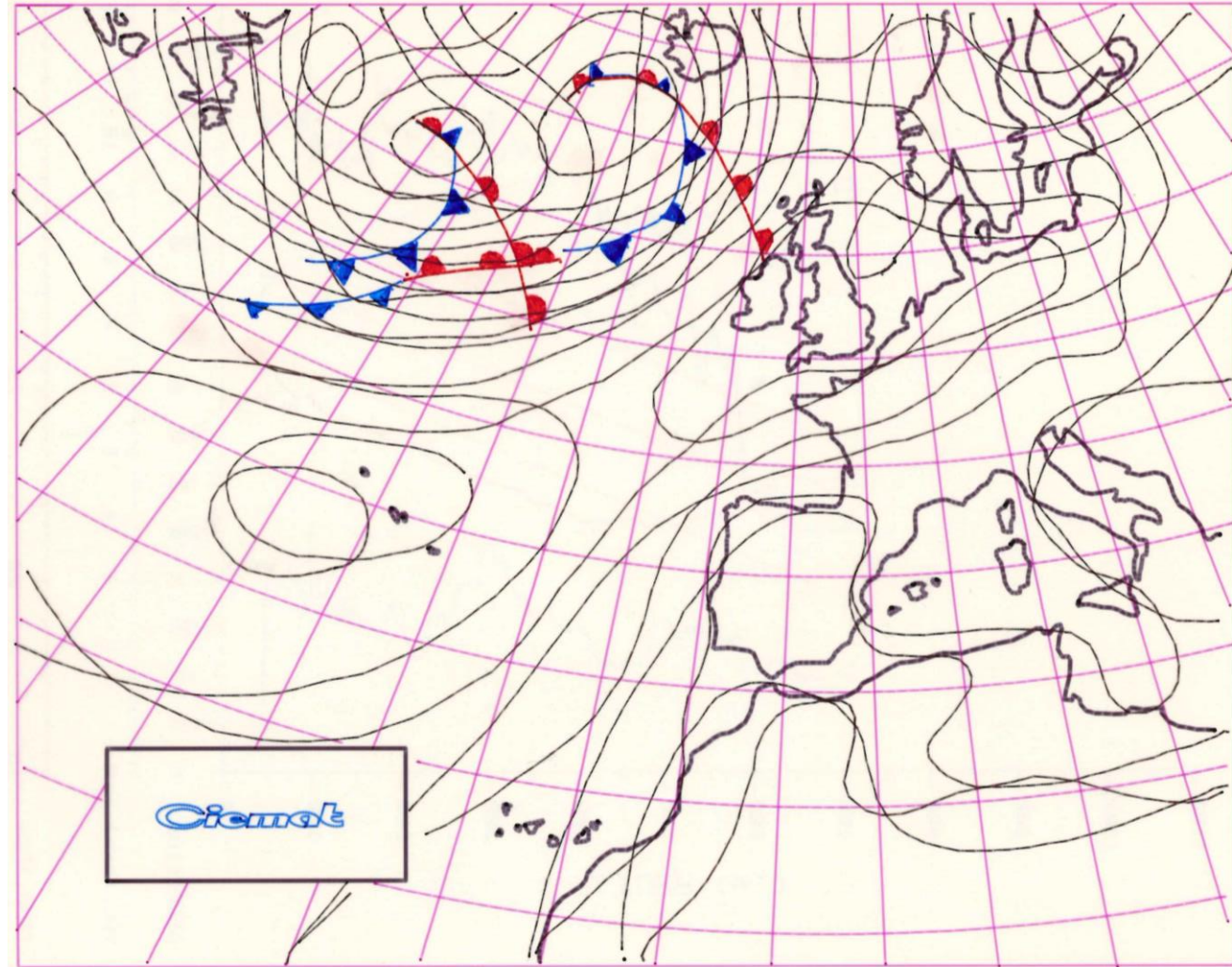
12:00 h

2 - 7 - 87



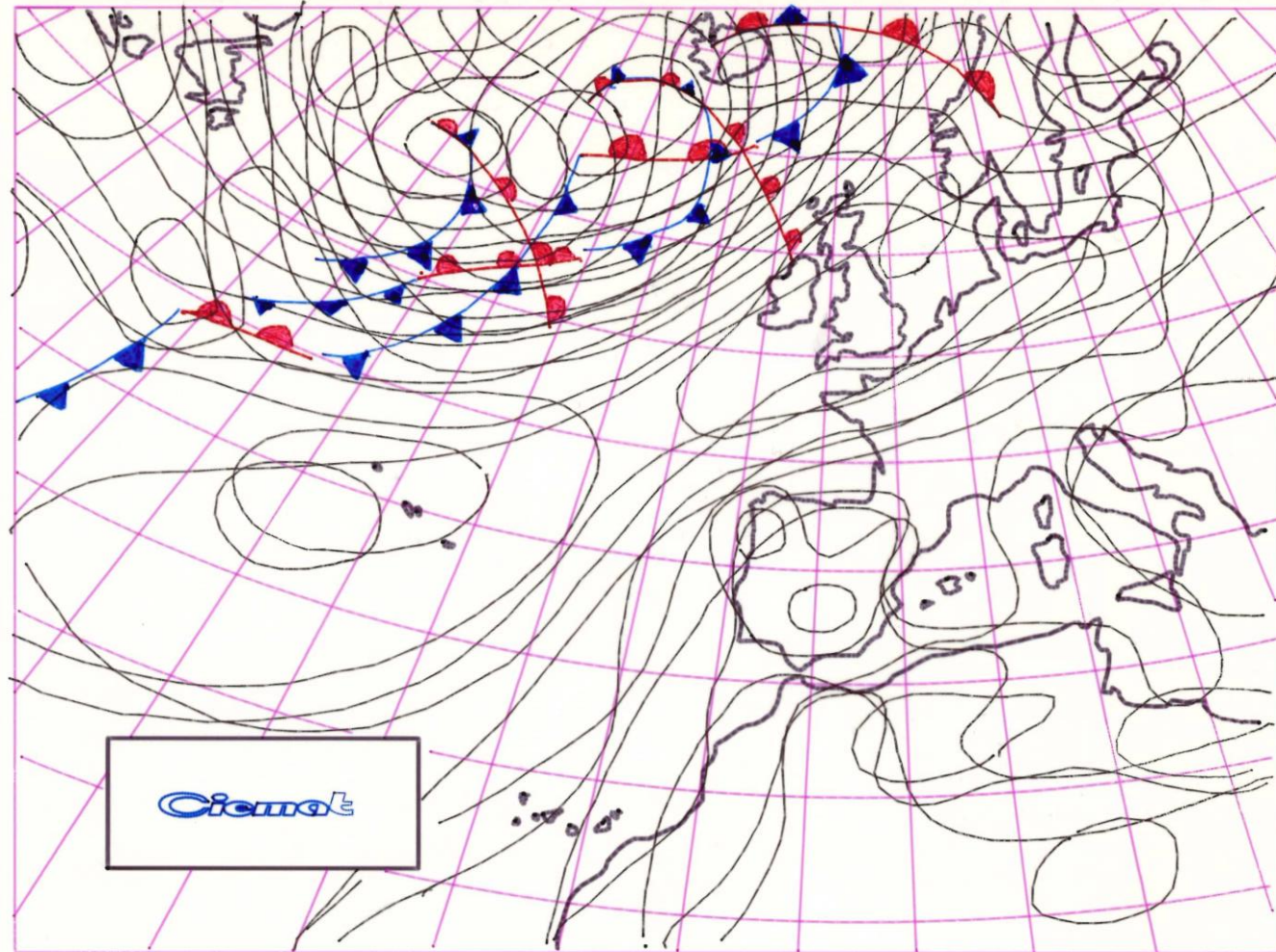
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2 / 3 - 7 - 87



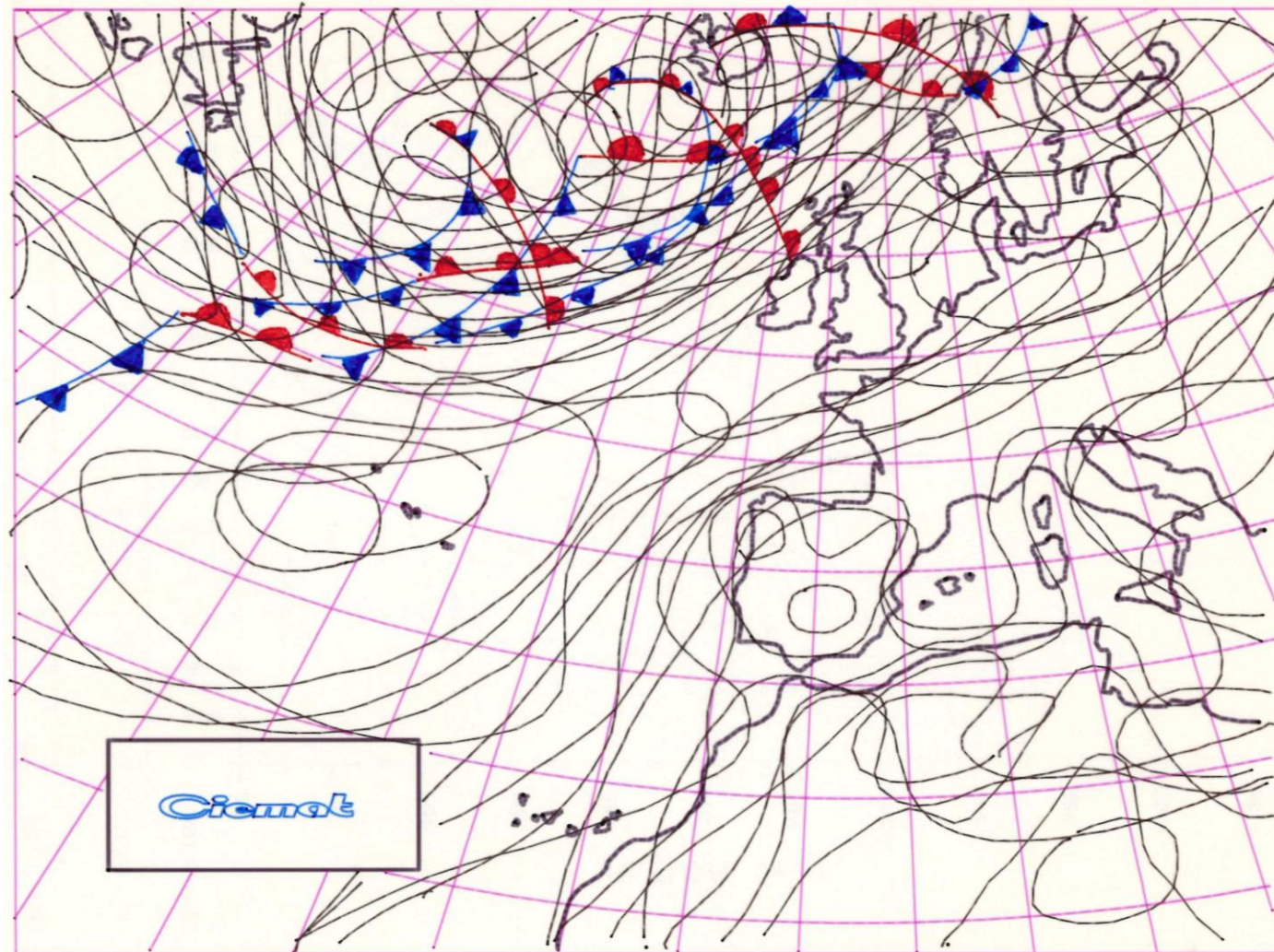
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2 / 3 / 4 - 7 - 87

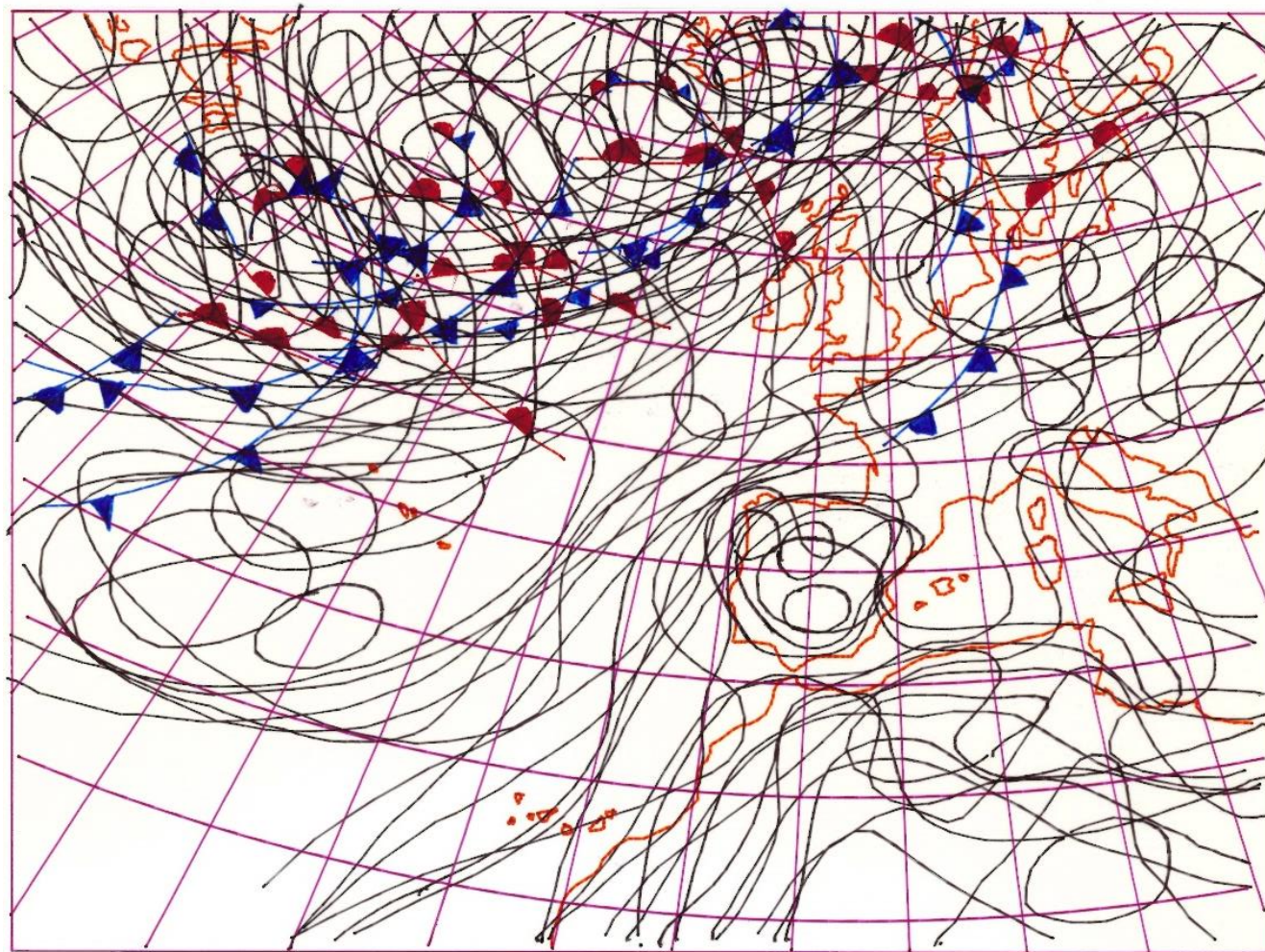


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2/3/4/5 - 7 - 87

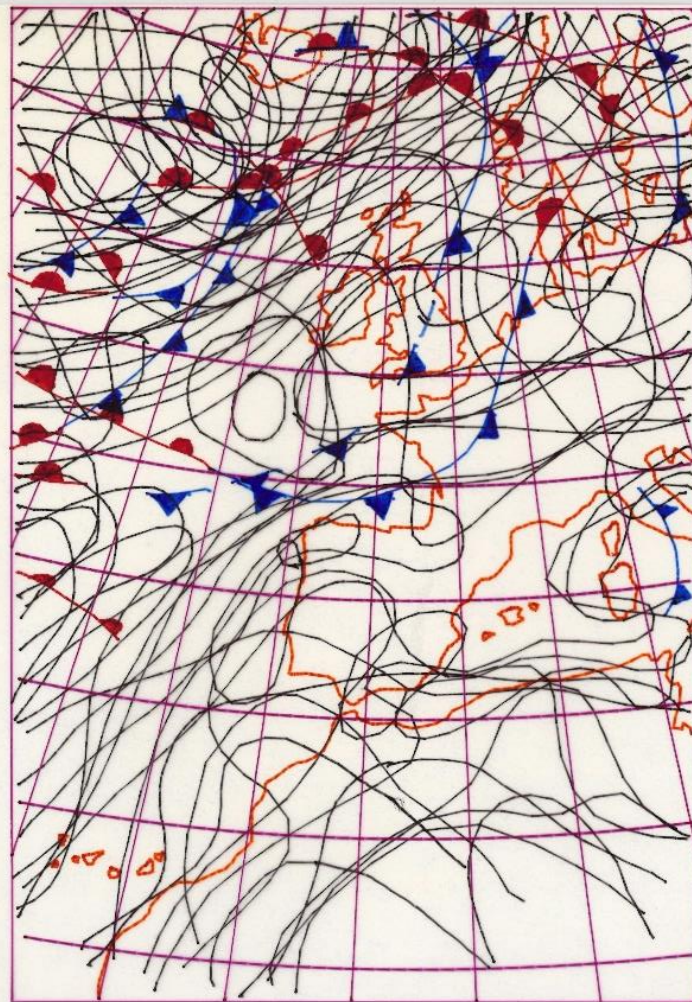


From 2-7-87 To 7-7-87

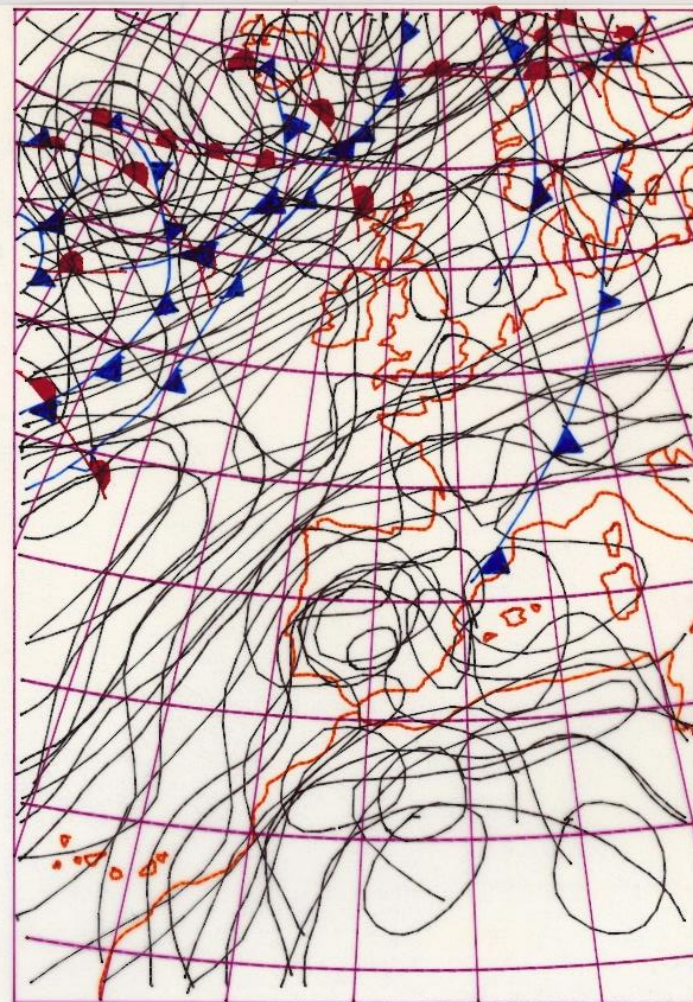


12.00 h

From 2-7-87 To 7-7-87



06.00 h

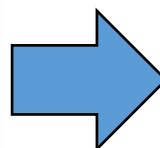
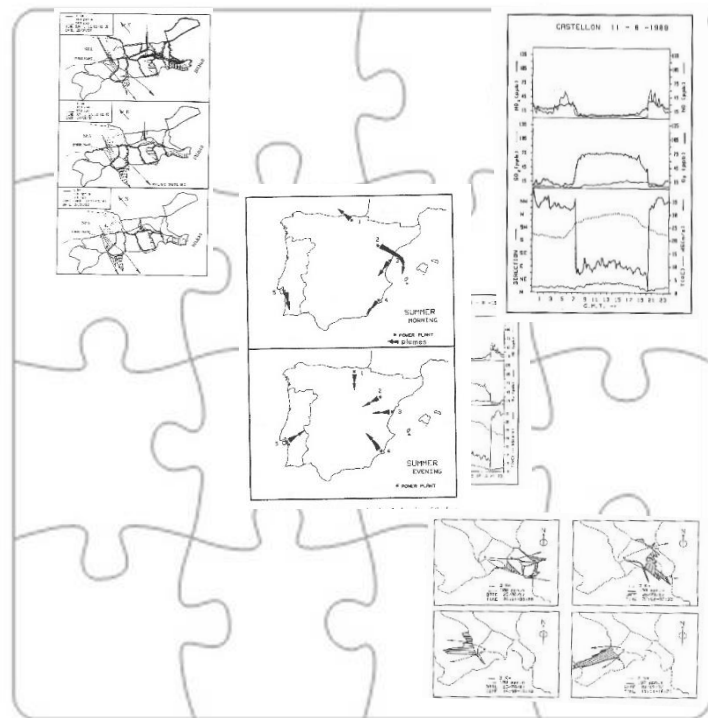


18.00 h

4º Programa de Acción en Medio Ambiente UE 1987-1992



Meso- Meteorological Cycles of Air Pollutants in the Iberian Peninsula (MECAPIP) 1988-1991



COMMISSION OF THE EUROPEAN COMMUNITIES
Directorate-General for Science,
Research and Development
Directorate G
200, rue de la Loi
B-1049 BRUSSELS

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No _____
Post mark _____
Acknowledgement sent on _____

PROPOSAL FOR PARTICIPATION IN A RESEARCH AND DEVELOPMENT PROGRAMME IN THE FIELD OF THE ENVIRONMENT (1986-1990)

ENVIRONMENT
PROTECTION



CLIMATOLOGY AND
NATURAL HAZARDS



1. TITLE OF THE PROJECT: Meso Mesometeorological Cycles of Air Pollution
in the Iberian Peninsula.

2. Name of the proposer (firm/organization): CIEMAT-JEN (Centro de Investigación Ener
gética Medio Ambiental y Tecnológica - JEN).

Division Medio Ambiente Convencional

Full address: Avda. Complutense, 22, E-28040-MADRID (Spain)

Telephone: 34-1-2432200, 2441200 Telex 23555 JUVIG-E

3. Name(s) and address(es) of bodies cooperating in the project:

Escuela Nacional de Sanidad (NSPH) Ciudad Universitaria, E-28040,
Madrid(E)
Universidad Complutense, (UM), Cátedra de Física del Aire E-28040,
Madrid (E)
Escuela T.S. Ingenieros Industriales (ES), Cátedra de Tecnología
Química E-48013, Bilbao (E)
ISPRA Joint Research Centre (Chemistry Division), I-21020, ISPRA
(Varese)(I)
CERL, Kelvin Avenue Leatherhead, Surrey, KT227SE (UK) (Presently
under discussion for their participation in phases III and IV.

4. Name of the scientist responsible for the proposal, address, telephone number and telex number (if
different from the above):

Millán M. Millán, Ph. D. P.Eng.

COMMISSION
OF THE
EUROPEAN COMMUNITIES
DIRECTORATE-GENERAL
FOR SCIENCE, RESEARCH
AND DEVELOPMENT
JOINT RESEARCH CENTRE

Environment and
non-nuclear energy sources

Brussels, 17.08.1987 022139
GA/LB
XII/E-1

Dr. Millán M. Millán
CIEMAT-JEN
Medio Ambiente Convencional
Avda. Complutense, 22
E - 28040 MADRID

Dear Dr. Millán Millán,

Subject: 4th Environmental R&D Programme.

Ref.: Proposal No. EV4V00158.

I am pleased to inform you that, after receiving the advice of the Ad-
visory Committee for Management and Coordination (CGC), the Commission
of the European Communities has selected for possible support your proposal entitled:

"Mesometeorological Cycles of Air Pollution in the Iberian Peninsula".

To enable the Commission to examine the possibility of participating
financially in this research project would you please complete and return the
two enclosed administrative and financial forms.

On the basis of the figures and information indicated in your proposal and in
view of budget limitations, the financial participation of the Commission in
the above research would be up to a maximum of 150,000 ECU for a period of 24
months (Phases I and II of your proposal). Phases III and IV could be
considered, if supplementary funds become available.

/...

#2

Provisional address:
Rue de la Loi 165
B-1049 Brussels

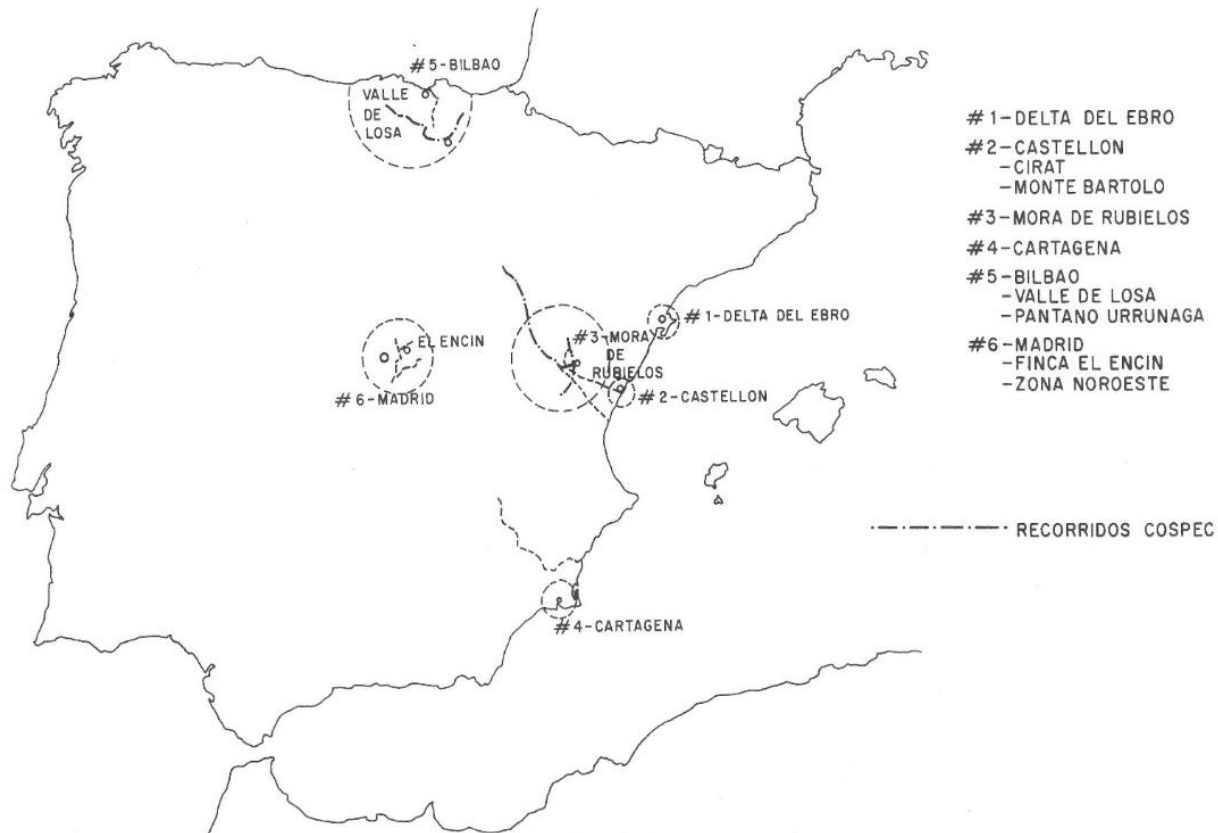
Telephone:
Direct line: 23
Telephone exchange: 235 11 11

Telex:
COMEU B 21877

Telegraphic address:
COMEUR Brussels

Meso- Meteorological Cycles of Air Pollutants in the Iberian Peninsula (MECAPIP) 1988-1991

CAMPAÑA EXPERIMENTAL JULIO 1989

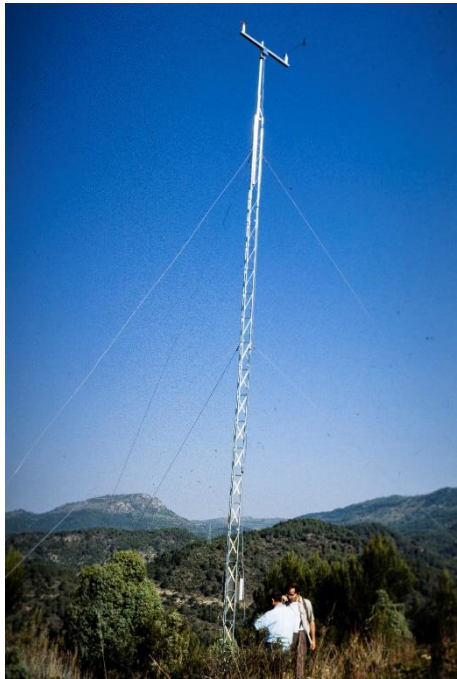


CIEMAT+ ETSII- BILBAO+ UCM+CNSA
HE+ AYUNTAMIENTO DE CARTAGENA





Mora de Rubielos, Julio 1989



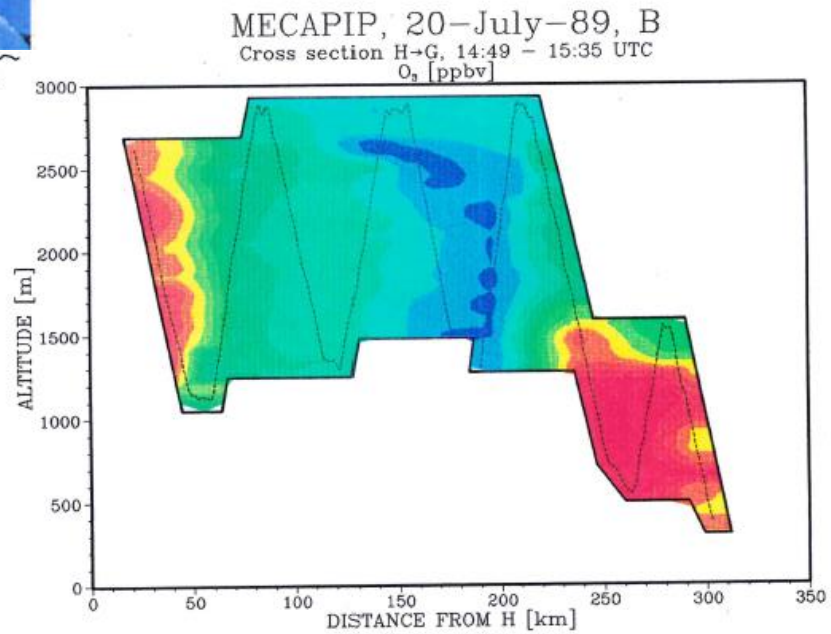
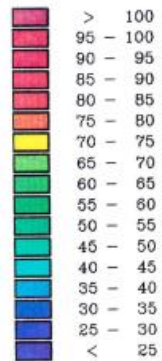
Aeropuerto de Valencia, Julio 1989



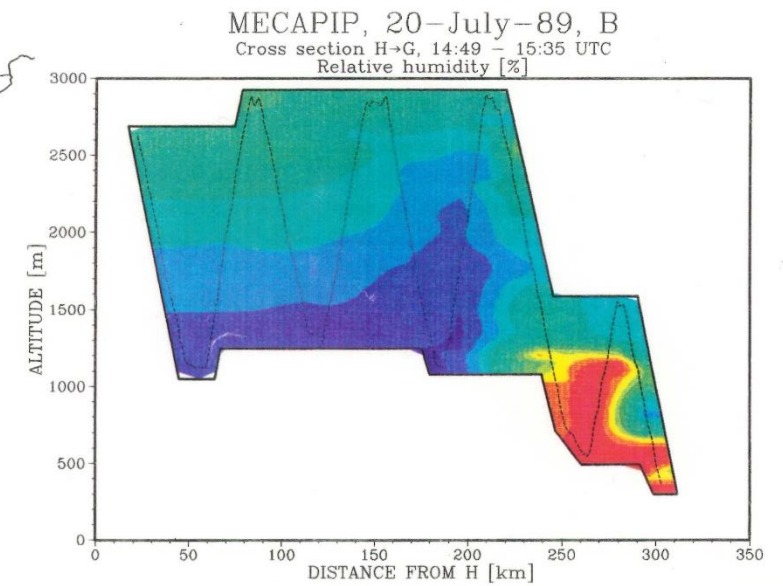
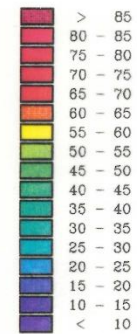
Vuelos con avión instrumentado de IFU Julio 1989



FhG - IFU
aerodata



FhG - IFU
aerodata



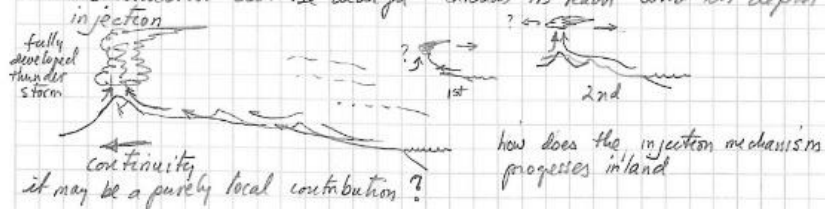
CEC PROJECT

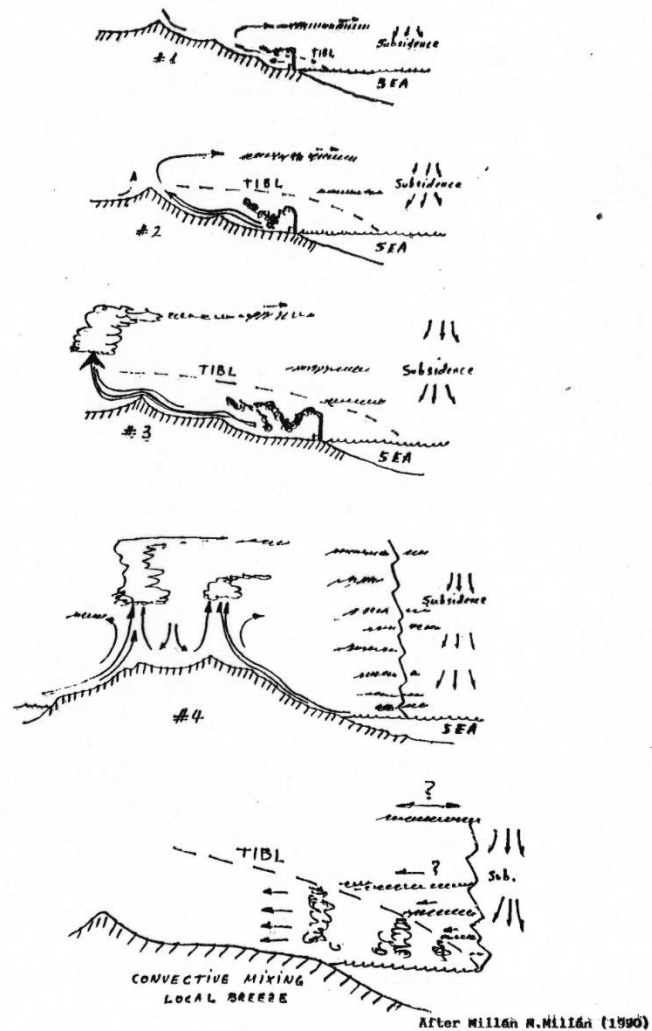
→ Where do we stand NOW - what do we want to do

- * Local circulations and episodes known to exist in many areas they still require detailed study
- * Continuity of the flows from the local to the large scale.
- * Large scale effects on local phenomena
 - 1st the dynamics of the flows.
 - 2nd the chemical evolution within these polluted air masses. constituents, reactions, and products
 - 3rd the effects caused by the pollutants as they move in these flows. Areas of impact, time of day, etc.
 - 4th which ^{physical} models describe the observed flow dynamics
 - 5th which chemical models reproduce the observed pollutant cycles
 - 6th where do the pollutants go upon episode lift up
- * Convergence has been documented with wind and plume tracking measurements, and it has been ^{further} verified (confirmed) by tracer experiments and aircraft measurements of the same tracers as far as 150 km inland
→ Released in the shore line ←

Questions raised = the pollutants ^{continuously} are injected into the mid Troposphere as they progress inland

= the convective cell as always extends its reach and its depth of





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THE EFFECT OF MESO-SCALE FLOWS ON REGIONAL
AND LONG-RANGE ATMOSPHERIC TRANSPORT IN THE
WESTERN MEDITERRANEAN AREA

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CIEMAT-Ipryma, Av. Complutense 22, E-28040, Madrid, Spain

L. ALONSO and M. NAVAZO
E.T.S.I.L y T., Aldea de Urquijo S/N, E-48013, Bilbao, Spain

and
M. CASTRO
Universidad Complutense de Madrid, Facultad de Física, Ciudad Universitaria, E-28040, Madrid, Spain

(First received 30 November 1989 and in final form 8 August 1990)



COMMISSION OF THE
EUROPEAN COMMUNITIES

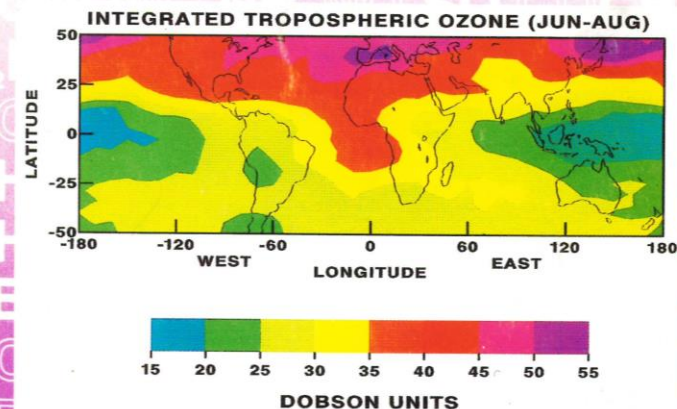


CENTRO DE ESTUDIOS
AMBIENTALES DEL
MEDITERRANEO

Air Pollution Research Report 44

MESOMETEOROLOGICAL CYCLES OF AIR POLLUTION IN THE IBERIAN PENINSULA

Contract EV4V-0097-E



TO BE CONTINUED...