



National Research Council



***Institute of Atmospheric Sciences
and Climate (ISAC)***

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***IV HyMex Workshop
Bologna, 8 - 10 June 2010***



The Institute of Atmospheric Sciences and Climate of the National Research Council is the largest Institute in this field of science operating within the Earth and Environment Department (DTA).

Over 80 permanent scientists (more than 200 people in total) work in the Institute, whose headquarter is located in Bologna while other six branches are spread over the Country.



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A wide range of experimental and modelling expertises are present in ISAC, which can be summarised in the following headlines:

- Climate modelling, climate historical reconstruction and its variation, impacts of climate change on environment and society

- Atmospheric composition: observations and processes from the local to the global scale and their effects on air quality, climate, ecosystems and human health

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- *Theory and models of atmospheric transport processes at different scales and their connections to air quality and climate***
- *Natural, environmental and anthropic risks of cultural heritage***
- *Satellite observations of sea surface and system development for the sustainable use of marine resources***
- *Meteorology: theory, observations and models***

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The Institute carries out both experimental observational and modelling studies and is part of numerous national, European and international projects, in several cases with a coordinating role.

<i>Year</i>	<i>Project funding (kEuro)</i>
2004	3.383
2005	3.404
2006	3.500
2007	4.231
2008	3.804
2009	6.548

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Furthermore, the Institute manages four Observatories for atmospheric studies around the Country, as well as the highest Observatory in the world located at 5000 m a.s.l. in the Himalayas. All these facilities are part of European and international Networks for regional and global air quality and climate change studies.



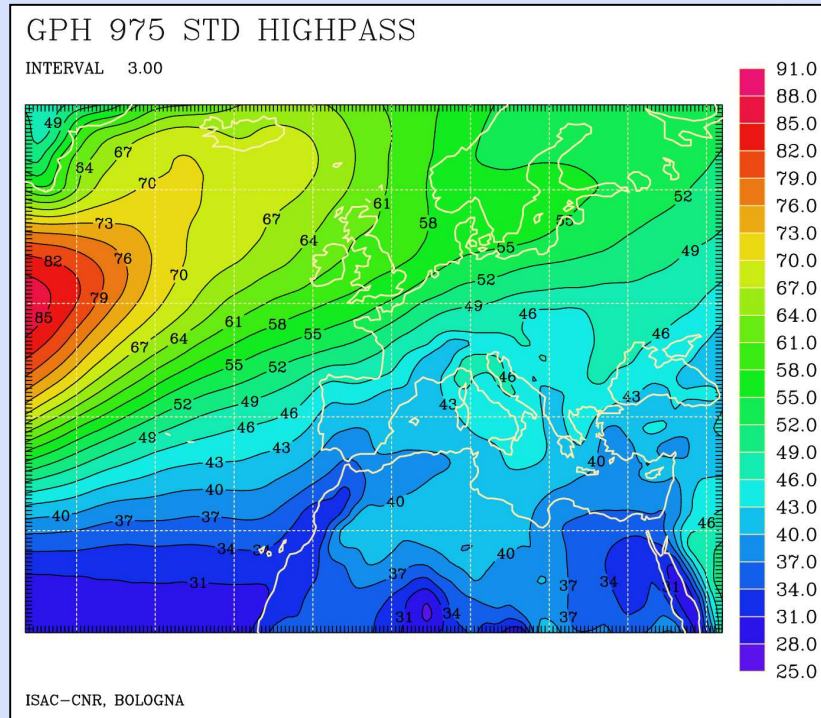
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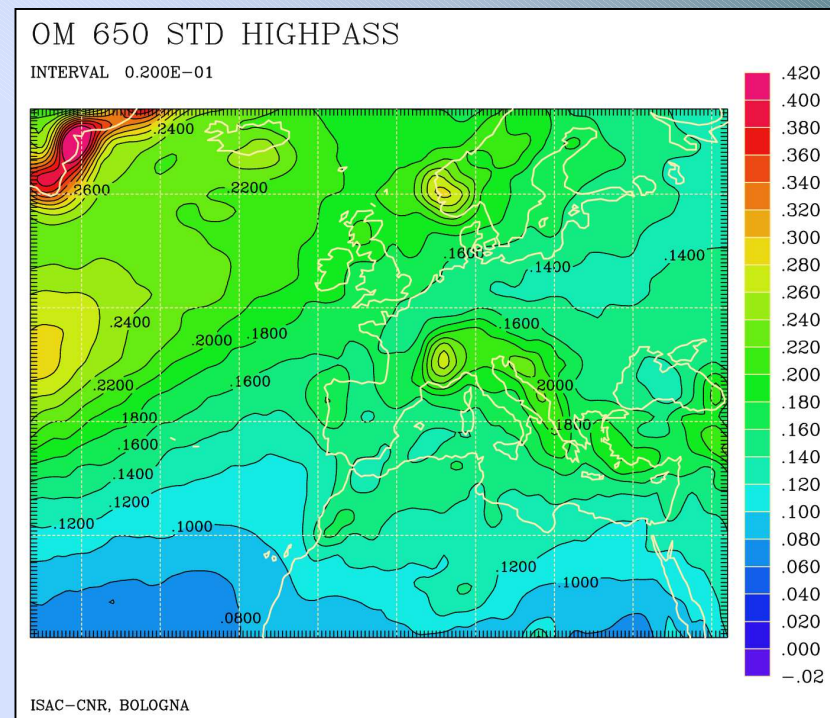
ISAC obtained a score of excellence in the evaluation process just concluded within the National Research Council (March 2010), resulting the second Institute in the Earth and Environment Department, which is the largest one among the 11 CNR Departments

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ERA Interim (1989-2009) high-pass (9-day cutoff) filtered data (Oct. to Apr. semester)



Standard deviation of geopotential height at 975 hPa



Standard deviation of vertical velocity ω at 650 hPa

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So, welcome to
Bologna: have fruitful
scientific exchange and
project planning!

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