

CURRICULUM VITAE ET STUDIORUM

Annalisa Cherchi

Birth Date: 13/07/1974

Nationality: Italian

Living Address: Via Cuscini 50, 40059 Medicina (BO), Italy

Working Address: Via Aldo Moro, 44, 40127 Bologna, Italy

Education:

- Degree in Physics in 1998 at Bologna University (Italy) with an Italian thesis titled: “Modelli idealizzati della circolazione monsonica (Idealized models of monsoon circulation)”.
- PhD in Geophysics in 2004 at Bologna University (Italy) with an English thesis titled: “The Asian monsoon system and its teleconnections”.
-

Foreign Languages:

English (good) and French (from high school).

About my experience and activity

My professional experience started in 1999 with research collaboration contracts at the National Research Council (CNR) in Bologna. During that period I started to work with climate models and to develop routines for the analysis of model results and data. In 2000 I moved to the National Institute of Geophysics and Volcanology (INGV) in Bologna as a technical collaborator for research activities, where in 2003 I got a permanent position. During that period I have been in charge of the management of the computing activity of the Bologna division. In the same period I started the research activity of my PhD, which I concluded in 2004. In 2006 I have been involved in the activity of the Euro-Mediterranean Centre for Climate Change (CMCC) in Bologna as a junior scientist.

My scientific activity focuses mainly on the climate variability of the tropical sector with specific emphasis on the Indo-Pacific region, where the dominant events are the Asian summer monsoon and the El Nino Southern Oscillation (ENSO). Up to now I have focused my studies on the simulation of the Asian and Indian summer monsoon with general circulation models. I have tested the sensitivity of a higher horizontal resolution model on the mean climate and variability of the simulated monsoon with respect to the observations. By means of a coupled ocean-atmosphere general circulation model I focused on the impact of the Indian Ocean and of ENSO on the Indian summer monsoon precipitation.

My studies have been included in the INGV activities for international projects, like ENSEMBLES and the Italy-USA cooperation.

At the moment, I'm involved in the INGV activities for the DYNAMITE EU-Project in two important lines: the analysis of the processes influencing the irregularity and amplitude of ENSO and the study of the tropical-extratropical interactions in the Pacific Ocean.

I'm in charge to follow the activity of INGV/CMCC in the C20C (Climate of the 20th century) CLIVAR framework, where we are involved in the study of the connection between the Asian summer monsoon and ENSO.

Peer-Reviewed Publications:

- **Cherchi, A.**, and A. Navarra, 2003: Reproducibility and predictability of the Asian summer monsoon in the Echem4 GCM. *Climate Dynamics*, **20**, 365-379.

- **Cherchi**, A., S. Gualdi, , S. Behera, J.-J. Luo, S. Masson, T. Yamagata and A. Navarra, 2006: The influence of Tropical Indian Ocean SST on the Indian summer monsoon. *J. Climate*, **20(13)**, 3083-3105.
- **Cherchi**, A., and A. Navarra, 2007: Sensitivity of the Asian summer monsoon to the horizontal resolution: Differences between Amip-type and coupled model experiments. *Climate Dynamics*, **28(2-3)**, 273-290.
- Carril, A.F., S. Gualdi, **A. Cherchi** and A. Navarra, 2008: Heatwaves in Europe: Areas of homogeneous variability and links with the regional to large-scale atmospheric and SSTs anomalies. *Climate Dynamics*, **30(1)**, 77-98.
- **Cherchi**, A., S. Masina and A. Navarra, 2007: Impact of increased CO2 level on tropical and extra-tropical mean climate: A CGCM study. Under review on *Climate Dynamics*.

Peer-Review Experiences:

2005: *Journal of Climate*; *Climate Dynamics*

2006: *Climate Dynamics*

2007: *Quaternary Research*; *International Journal of Climatology*