

## Curriculum vitae for Mr. FLAVIO BARBARA

Personal profile: Technician, system manager and software and data specialist

Languages: Italian, English

Instruction: Diploma di Maturità scientifica / university studies

Activities and experiences: Since February 2011 he collaborates with atmospheric research group at IFAC as system manager of the group data center. Scientific studies. His main skills are system management, shell script programming, software development (mainly in FORTRAN and python languages), data visualization and text composition, some skills in other programming languages (C, perl, Matlab/octave). He has experience in data handling of various file formats, such as NetCDF, HDF5 and MIPAS official PDS format. He has been involved in the following projects:

- Capacità Tecnologica e Operativa della Toscana per l' Utilizzo dello Spazio (CTOTUS, Regione Toscana)
- Sensitivity Analysis and Application of KLIMA Algorithms to GOSAT and OCO validation (ESA-ESRIN and JAXA)
- Support to MIPAS Level 2 validation (ESA-ESRIN)
- Support to MIPAS Level 2 processor Verification and Validation - Phase F (ESA-ESRIN)

Employment history

Since February 2011: Earth Observation section at IFAC (ex-IROE) – CNR, Florence Temporary technician

### *Most relevant publications*

Ugo Cortesi, Samuele Del Bianco, Marco Gai, Lucia Maria Laurenza, Simone Ceccherini, Bruno Carli, Flavio Barbara, Michael Buchwitz, ***KLIMA-IASI Final Report: Sensitivity analysis and application of KLIMA algorithm to GOSAT and OCO validation, ESA-ESRIN/Contract n. 21612/08/I-OL, IFAC Technical, scientific and research reports***, 2014, ISSN: 2035-5831

Piera Raspollini, Enrico Arnone, Flavio Barbara, Bruno Carli, Elisa Castelli, Simone Ceccherini, Bianca Maria Dinelli, Anu Dudhia, Michael Kiefer, Enzo Papandrea, and Marco Ridolfi, ***Comparison of the MIPAS products obtained by four different level 2 processors. Annals of Geophysics***, [S.l.], v. 56, jan. 2014. ISSN 2037-416X. Available at: <<http://www.annalsofgeophysics.eu/index.php/annals/article/view/6338>>. Date accessed:09 Feb. 2016. doi:10.4401/ag-6338.

Lucia Maria Laurenza, S. Del Bianco, M. Gai, F. Barbara, G. Schiavon, and U. Cortesi, ***Comparison of Column-Averaged Volume Mixing Ratios of Carbon Dioxide Retrieved From IASI/METOP-A Using KLIMA Algorithm and TANSO-FTS/GOSAT Level 2 Products, IEEE j. sel. top. appl. earth obs. remote sens.***, vol.7, no.2, pp.389-398, Feb. 2014, doi: 10.1109/JSTARS.2013.2276125

Piera Raspollini, Ginette Aubertin, F. Barbara, Marc Bernau, Manfred Birk, Bruno Carli, Massimo Carlotti, Elisa Castelli, Simone Ceccherini, Angelika Dehn, Marta De Laurentis, Bianca M. Dinelli, Anu Dudhia, Jean-Marie Flaud, Michael Kiefer, David Moore, Gaetan Perron, Manuel Lopez-Puertas, John Remedios, Marco Ridolfi, Luca Sgheri and Georg Wagner, ***New MIPAS V7 products, ATMOS 2015 - Advances in Atmospheric Science and Applications***, 8-12 June 2015, Heraklion (Greece)

P. Raspollini, F. Barbara, B. Carli, M. Carlotti, E. Castelli, S. Ceccherini, A. Dehn, M. De Laurentis, B.M. Dinelli, A. Dudhia, T. Fehr, H. Fischer, J.-M. Flaud, B. Funke, M. Höpfner, M. Kiefer, M. Lopez-Puertas, H. Oelhaf, F. Niro, J. Remedios, M. Ridolfi, H. Sembhi, L. Sgheri, T. von Clarmann and H. Weber, ***Ten years of MIPAS measurements with ESA Level 2 processor V6, ATMOS 2012 - Advances in Atmospheric Science and Applications***, 18-22 June 2012, Bruges (Belgium)

Ugo Cortesi, Samuele Del Bianco, Marco Gai, Lucia Maria Laurenza and Flavio Barbara, ***Comparison of XCO2 total column retrieved from IASI/MetOp-A using KLIMA algorithm and TANSO-FTS/GOSAT Level 2 products, ESA Living Planet Symposium 2013***, 09-13 September 2013, Edinburgh, UK