

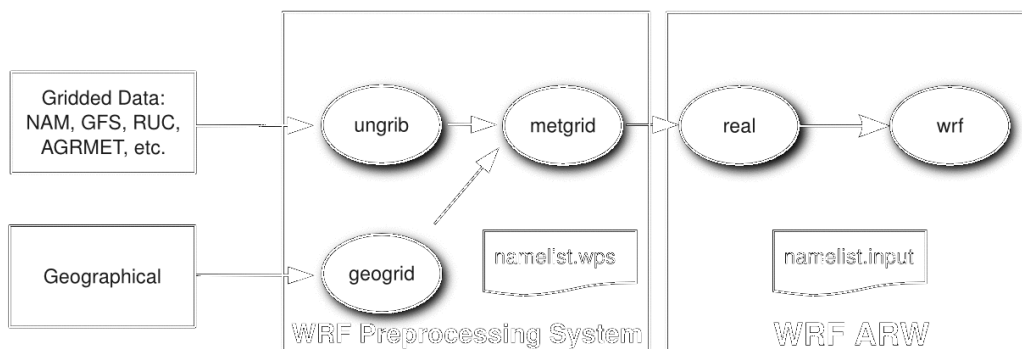
## Introduction

WRF for GRID (WRF4G) is a framework for the execution and monitoring of the WRF Modelling System (see [?this presentation](#) for an introduction to WRF) in distributed computer resources (see this presentation). It provides a flexible and easy way of designing complex experiments involving many simulations (multiple start/end dates, multi-parametric simulations, long climate runs, ...). The monitor allows a precise control of the experiment's state, where broken simulations are automatically detected and relaunched at the next submission.

Given a list of computer resources the user can access, WRF4G submits the experiment to them according to the experiment needs. Users can configure different DCIs such as local PCs, stand-alone servers, PBS or SGE Clusters, etc; and use them at the same time to run different simulations of a WRF experiment. Output files are centrally stored regardless the computing resources used to run the simulations.

WRF4G separates the experiment design from the execution environment. To prepare a experiment, users are required to fill in two files: [experiment.wrf4g](#) which defines the WRF experiment, and [resources.wrf4g](#), where running environment and storage resources are configured. WRF4G provides a [command line interface](#) that allow the users to prepare, run and monitor their experiments.

The following picture shows the main WRF4G components (see the following [?presentation](#) for further information) and the interaction among them.



## Documentation

- [Framework](#)
- [Installation Guide](#)
- Tutorials:
  - [How to run a simple experiment](#)
  - [Advanced tutorial](#)
    - [How to manage WRF4G errors](#)
    - [How to add new computing resources to WRF4G](#)
    - [How to add a new WRF geographical domain](#)
    - [How to reconfigure the features of an experiment](#)
    - [How to resubmit an experiment](#)

- [How to rerun a specific chunk of a realization](#)
- [How to use wrf4g\\_kill command](#)
- [Reforecast Tutorial](#)
- [Command Line Interface](#)
- [WRF Distributions](#)
- Configuration files:
  - Resources setup
    - [framework4g.conf](#)
  - Experiment setup
    - [experiment.wrf4g](#)
    - [resources.wrf4g](#)
- [FAQ](#)

## Problems

If you happen to have any problems, please [?send us a ticket!!](#)