

Output data

Here we show an example of usual data acquisition :

- Instantaneous fields
- Statistical fields
- Time series from probes located at specific positions

The various parameters related to each type of output data are originally splitted by topic in the appropriate namelist. For a sake of clarity, they are directly regrouped for each type of output data as shown here :

For instantaneous fields

```
&Field_Recording_Setup          Precision_On_Instantaneous_Fields= 2 /
!--- option value for writing results in double precision (1 = single
precision)

&Simulation_Management
    InstantaneousFields_RecordingReset=.false.      ,      !--- Reset to zero
the file number ID
    InstantaneousFields_TimeRecordingRate= 5.0E-01  ,      !--- Recording
rate in "time unit"
    InstantaneousFields_RecordingStartTime= 1.D-00  ,      !--- Threshold
from which the recording begins (used with
InstantaneousFields_TimeRecordingRate only)
    ! InstantaneousFields_TimeIterationRecordingRate= 10 , !--- Recording
rate in "time-step iteration unit (number of time steps)"
    ! InstantaneousFields_StartTimeIterationRecording= 70 !--- Threshold
from which the recording starts (used with
InstantaneousFields_TimeIterationRecordingRate only)
    /
    &Instantaneous_Fields_Listing Name_of_Field = "U" /      !--- Recording of
the first velocity component enabled
    &Instantaneous_Fields_Listing Name_of_Field = "V" /      !--- Recording of
the second velocity component enabled
    &Instantaneous_Fields_Listing Name_of_Field = "W" /      !--- Recording of
the Third velocity component disabled
    &Instantaneous_Fields_Listing Name_of_Field = "T" /      !--- Recording
Temperature enabled
    &Instantaneous_Fields_Listing Name_of_Field = "P" /      !--- Recording
Pressure enabled
```

For statistical fields

```
&Simulation_Management Start_Time_For_Statistics= 1.D+2      ,
!--- Start time for computing the statistical fields
    Time_Range_Statistic_Calculation = 1.D+00      /
!--- time range over which the statistical field computation is performed.
When it has been covered, the results are recorded and a new statistical
```

```
computation starts again
&Field_Recording_Setup      Precision_On_Statistical_Fields= 2 ,
!--- option value for writing results in double precision (1 = single
precision)
                                Time_Statistics_Enabled= .true.      ,
!--- time statistics are performed (true) - classical statistics (false)
                                Sample_Rate_For_Statistics= 1          ,
!--- Sample rate (in time iteration unit)
                                Statistic_Space_Average_Type=
"NO_SPACE_AVERAGE" /      !--- option on spatial averaged fields
&Statistical_Fields_Listing Name_of_Field = "<U>" /      !---- Averaged I-
velocity component
&Statistical_Fields_Listing Name_of_Field = "<V>" /      !---- Averaged J-
velocity component
&Statistical_Fields_Listing Name_of_Field = "<P>" /      !---- Averaged
pressure
```

For time-series from probes

```
                                U
, V      , W      , T      , P      , RHO
&Probe_Quantities_Enabled Temporal_Series_For_Quantity_Enabled(:)= .true.
, .true., .false., .false., .true., .false. /      !--- Selection of
physical quantities
&Simulation_Management
    Probe_TimeIterationRecordingRate= 2 ,      !--- Recording rate in
"time-step iteration unit (number of time steps)"
    Probe_RecordingReset=.false. ,      !--- if True, Time series
are written in new files (with the same name), previous data are removed
    Probe_StartTimeIterationRecording= 20      !--- Threshold from which
the recording starts
    /
```

```
&Probe_Location Xi= 2.0 , Xj= 1.5 , Xk= 0.0 /      !---coordinates of
probe 1
&Probe_Location Xi= 3.0 , Xj= 1.0 , Xk= 0.0 /      !---coordinates of
probe 2
```

Any information about these namelist are available here :



- [Simulation_Management](#)
- [Field_Recording_Setup](#)
- [Instantaneous_Fields_Listing](#)
- [Statistical_Fields_Listing](#)
- [Probe_Quantities_Enabled](#)
- [Probe_Location](#)

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