CGNS/SIDS proposal for extensions – 2008/06/26 – v0.1 – Family RigidMotion IterativeData 1/1

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## Modification of BaseIterativeData and ZoneIterativeData for reference frame and family motion

The time dependent data is located at the CGNSBase\_t and the zone\_t levels. The CGNSBase\_t level defines the steps to take into account and the family based information, this SIDS part is extended with the family reference frame and the rigid motion. The zone\_t iterative data holds the pointers to the zone members for each iteration. We add the pointers to the reference frame.

Base iterative data extension pattern:

```
BaseIterativeData_t:=
{
    DataArray_t<char, 3, [32, MaxNumberOfFamilies, NumberOfSteps]> RigidGridMotionPointers; (0)
    DataArray_t<char, 3, [32, MaxNumberOfFamilies, NumberOfSteps]> ReferenceFramePointers; (0)
...
    other SIDS BaseIterativeData_t existing attributes
}
```

- Base iterative data extension requirements list:
  - 1. The motion pointer is the name of the GridRigidMotion t node.
  - 2. The frame pointer is the name of the ReferenceFrame\_t node.
- Zone iterative data extension pattern:

```
BaseIterativeData_t:=
{
    DataArray_t<char, 3, [32, MaxNumberOfFamilies, NumberOfSteps]> ReferenceFramePointers; (o)
...
    other SIDS BaseIterativeData_t existing attributes
}
```

- Zone iterative data extension requirements list:
  - 1. The pointer is the name of the ReferenceFrame t node.