4) CONCLUSION

From the previous chapters, we can conclude that :

- the BIH/IERS system has been globally realized in a unified improved way within 20 cm (maximum change),

- globally the first realizations (84 to 87) had small changes, especially in scale or orientation which could reach 20 cm,

- recent solutions are much more consistent, at 2 cm level,

- individual station positions can have changes which can also reach 10 to 20 centimeters, and are not due to global effects, but local ones (changes in survey excentricities or in individual position estimations from analysis centers).

Consequently, one must be careful when using the BIH/IERS terrestrial system at centimetric level.

It is of course a major objective for IERS to keep and even improve this level of consistency, considering in particular the increasing number of applications which require centimetric or subcentimetric accuracy (sea level changes, global geodynamics, GPS fiducials...).