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César Galindo and **Yiby Morales***, yk.morales964@uniandes.edu.co. *Kac cohomology as relative group cohomology*. Preliminary report.

Let F and G be finite groups. The group $Opext(kF, k^G)$ of equivalence classes of abelian extensions of the Hopf algebra kF by the Hopf algebra k^G can be described using the cohomology of a double complex, which is known as Kac cohomology. We use relative group cohomology to describe this group and the five-term exact sequence associated to Kac's double complex, which we use for some computations of groups of abelian extensions of finite dimensional Hopf algebras. This is joint work with César Galindo. (Received September 25, 2018)