The students' draft

In the first set of experiments, we varied CCR from 0.1 to 1 to examine the performance impacts of CCR on TADVS. Figs. 3 and 4 demonstrate that, when CCR increases from 0.1 to 1, TADVS consumes less energy when compared with NDS. As CCR increases, the power consumption gradually increases. This can be explained by the fact that a high CCR results in high communication cost, which in turn leads to the increased total energy consumption.

Fig. 5. shows the energy consumption caused by the Gaussian application (see Fig. 2) on the cluster with Intel Pentium 4 processors under the TADVS and NDS scheduling algorithms. Fig. 6 reveals the energy savings achieved by TADVS with respect to the Gaussian application. The experimental results reveal that TADVS can save energy consumption for the Gaussian application by up to 15%.