Cloud infrared radiometers algorithm : improvement and perspectives

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With climate changes, observation of cloud cover became since few decades a key topic of interest for several purposes through which greenhouse effect study, freezing and de-freezing of roads and highways and atmospheric UV radiation transfer. Several instruments measuring thermal infrared radiation and releasing cloud base brightness temperature have been developed like CIR (Cloud Infrared Radiometer) instruments. We will show in this communication that several ways of research have been initialised to improve significantly the algorithm performances of the cloud brightness temperature and optimize the accuracy of cloud data released by CIR instruments.