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Rapidity and p_T **distributions in pp at** $\sqrt{s} = 62.4$ and 200 GeV and comparison to pQCD and PYTHIA calculation¹ FLEMMING VIDEBAEK, Brookhaven National Laboratory — The BRAHMS experiment has measured minimum bias distributions of identified charged hadrons in pp collisions at $\sqrt{s} = 62.4$ and 200 GeV at RHIC. The data obtained in 2005 and 2006 are compared to older measurements at ISR. Systematic features of rapidity distributions are presented, in particular those on net-protons and net-baryons. Extended longitudinal scaling is observed to hold up up to $\sqrt{s} = 200$ GeV. The rapidity distributions are compared to PYTHIA, and an observations on different modern tunes are made. Net-proton distributions are poorly described in all cases raising the issue where underlying events may be different than min-bias and if models describing the central production region well are valid in the full rapidity range. Finally the high rapidity identified p_T distributions are compared to NLO pQCD calculations.

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