HOW TO MEASURE MORE THAN 110 SATELLITES. G. Kirchner¹ and F. Koidl¹, ¹Austrian Academy of Sciences, Lustbuehelstrasse 46, A-8042 Graz, AUSTRIA, Georg.Kirchner@oeaw.ac.at, Franz.Koidl@oeaw.ac.at.

Abstract: Besides the targets defined by ILRS, Graz is routinely measuring distances to a lot of old, defunct satellites; the main purpose it to explore their spin parameters: Once out of control, most of these objects start to spin, some due to external forces – magnetic / gravitational / radiation etc. - , some due to internal forces - reaction wheel momentums, escaping gas / fuel remnants etc. The collected data is used for theoretical research, as well as for practical purposes – e.g. definition of expected spin values during satellite design stage, selection of possible targets for planned active debris removals like e.Deorbit (ESA)..