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The ESO Large Program on Transneptunian Objects and Centaurs *

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Transneptunian Objects (TNOs) and Centaurs are among the most pristine, least evolved objects, originating from the formation period of the planetary system, that are accessible to observations from Earth. By Sept. 2000 (start of our project), i.e. 8 years after the discovery of the first Transneptunian Object, only a small sample of such objects was observed (30/12 visible/IR photometry, 8/5 visible/IR spectroscopy). During an observing period of 2 years the ESO Large Program on TNOs&Centaurs contributed a large number of new data (altogether 84/22 objects with visible/IR photometry and 23/13 objects with visible/IR spectroscopy). Based upon the now significantly increased database, the project team aimed at the discovery of 'true' populations in the Kuiper Belt and their characterization in terms of surface properties (colours, chemistry) in order to identify likely correlations between physical and dynamical properties as well as evolutionary tracks among the objects. Secondary goals were the search for intrinsic variability, coma activity and satellites. The paper describes the key results and conclusions achieved.

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