

OTHER NEWS FROM ING

Dragons Breath Cooling for ING, TNG & NOT CCDs

Alan Chopping (Head of Site Services, ING)



As the nearest commercial supplier for liquid nitrogen for the Observatory is located in Tenerife, ING produces liquid nitrogen on the Roque site, to provide cooling for all its CCDs. This has enabled us to eliminate the logistic problems of transporting large liquid volumes of nitrogen between islands, and has been found to be more economical. Also from the surplus produced we have been able to supply our neighbouring institutions.

While this arrangement has worked successfully for the past decade, over the past couple of years demand for liquid nitrogen has grown to accommodate development work, larger CCDs and instrumentation at all the ORM institutions. This resulted in the existing plant working for long periods, leaving little time for maintenance and the threat of losing telescope time for us, and our ORM partners if a major breakdown occurred.

The justification for purchasing a second plant was made by an agreement between the ING, TNG and NOT in which each would pay a third of the provision of a second

hand plant. Fortunately the Dutch supply company "Sterling Cryogenics" were in the process of decommissioning a suitable plant in Hong Kong. There, the plant had been used as part of a theme park attraction called "The Dark Ride" providing liquid nitrogen as simulated smoke for a large dragons breath.

The plant was then flow back to Holland where it was fully serviced before arriving on La Palma during March. Since then the plant has been installed and connected to a new 3,000 litre storage vessel. This unit in tandem with the original plant now ensures sufficient liquid nitrogen for our entire site needs at the ORM. □

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The ING liquid nitrogen plant.

WHT Scientific Impact

Chris Benn (ING)

In the March 2001 *ING Newsletter*, we reported a citations-based analysis of the scientific impact of telescopes worldwide for 1995–8. Amongst 4-m optical telescopes, WHT ranked second only to CFHT in impact.

Georges Meylan of STScI has now carried out a similar analysis (unpublished) of astronomy papers which appeared in 1999. He finds the top 10 telescopes that year to be, in decreasing order of citation impact, HST, JCMT/SCUBA, ROSAT, CGRO, Keck, BeppoSAX, SOHO, CTIO 4-m, WHT and RXTE, i.e. the WHT remains one of the two most-cited 4-m telescopes. The WHT citation fraction for 1999 is approximately double that for 1995–8, and both the most-cited and second-most-cited papers of 1999 were based in part on WHT data. The first of these papers, by Perlmutter et al. (1999, *ApJ*, 517, 565) reported measurement of cosmological parameters from observations of Type Ia supernovae. The second, by Steidel et al. (1999, *ApJ*, 519, 1) reported a survey for Lyman-break galaxies at redshift >4 . Both teams used imaging cameras at the WHT. □

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A New Look for the INT

As part of the regular maintenance of the telescope, the INT has recently been repainted in white. Furthermore, a new motorized counterweight has been installed to facilitate the change-over between IDS and the WFC (or CIRSI). To compensate the additional weight added by this system, two old finders have been removed and it is planned to remove FOS before the end of the year.

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