1015-13-17 **Adela Vraciu*** (vraciu@math.sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29208. *Chains of tightly closed ideals.*

We prove tight closure analogues of some results of Watanabe concerning integrally closed ideals.

More specifically, we show that if $I \subset J$ are tightly closed ideals with $\lambda(J/I) < \infty$, then there is a chain of tightly closed ideals $I = I_0 \subset I_1 \subset \ldots \subset I_n = J$ such that $\lambda(I_i/I_{i-1}) = 1$ for all $i = 1, \ldots, n$.

We also study family of all tightly closed ideals J' with $I \subset J' \subset J$ and $\lambda(J/J') = 1$. We show that this family is in one-to-one correspondence with a projective space of dimension $\ell - 1$, where ℓ denotes the $*$-spread of J modulo I. (Received December 08, 2005)