Dark Energy Spectroscopic Survey [DESpec] - Bug #3524

limited by the number of galaxies

02/24/2013 10:06 AM - Brian Nord

Status:	Closed		**Start date:**	02/24/2013
Priority:	Urgent		**Due date:**	
Assignee:			**% Done:**	0%
Category:	Speed		**Estimated time:**	0.00 hour
Target version:	February 2013			

Description

We need a plan to deal with large numbers of galaxies

The pipeline slows at Sim Gal Spec Clean when creating enough memory to put all the reconstructed/simulated spectra into :
Ngal = len(id_fiber)
Nwave = len(tspec_v0[0,:])
flux = np.zeros((Nwave, Ngal)) #!!! The program takes a long time just to instantiate this 2d array

first fix: reduce the number of galaxies for testing purposes
second fix: append to empty array, instead of instantiate full array at beginning; this will probably only kick the can down the road.
longer-term fix: how do we do this for millions of galaxies by Friday?

History

#1 - 02/26/2013 02:51 AM - Laurenz Gamper

It is trying to allocate approx. 4.3 TB of Ram (on my system, where a int is 24 bytes). Which is a lot, we are working to split them in parts which can be processed sequentially.

#2 - 04/18/2013 07:39 AM - Brian Nord

- Status changed from New to Closed