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| October 2, 2013 | Matt Landreman |

# Relating quantities in the 1-species and multi-species versions of SFINCS

In these notes, superscripts will be used to denote the old (1-species) and new (multi-species) normalizations.

### Normalization speed

,

,

so

.

### Delta

,

,

Therefore

.

### Potential normalization

.

,

so

.

### Collisionality

In the 1-species code,



with

.

In the new code,



where

.

Therefore

.

### Perturbed density and pressure





### Flow and FSABFlow



### Radial fluxes

To relate the fluxes, we first observe



Then



Similarly,

