

## عنوان مقاله:

A Reynolds Stress Closure for Compressible Turbulent Flow

## محل انتشار:

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## خلاصه مقاله:

Several studies of compressible flows show that the pressure-strain is the main indicator of the structural compressibility effects. Undoubtedly, this term controls the change in the Reynolds stress anisotropy. Regarding the model of Adumitroaie et al., the slow part of the pressure strain correlation like the Rotta model uses the standard coefficient  $C_1$ . The model predictions do not show large differences when compressibility increases. Correction of this coefficient using the turbulent Mach number is proposed. The two forms model of Adumitroaie et al. (with and without correction of  $C_1$ ) are considered to study compressible mixing layers. The obtained results show that the predictions of the proposed compressibility correction model agree with the experiment results of Goebel and Dutton.

## کلمات کلیدی:

Turbulence flow, Compressible, Pressure, strain, Models of turbulence, Mixing layer

## لینک ثابت مقاله در پایگاه سیویلیکا:

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