




Correction

Correction: Sachhin et al. Darcy–Brinkman Model for Ternary Dusty Nanofluid Flow across Stretching/Shrinking Surface with Suction/Injection. *Fluids* 2024, 9, 94

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Figures: In Section 5, we aligned Figures 14–18 by consistently adding all the modelling parameters inside the labels [1]. We also revised the captions for Figures 14–18 to clearly state what they represent [1]. The correct Figures 14–18 appears below.

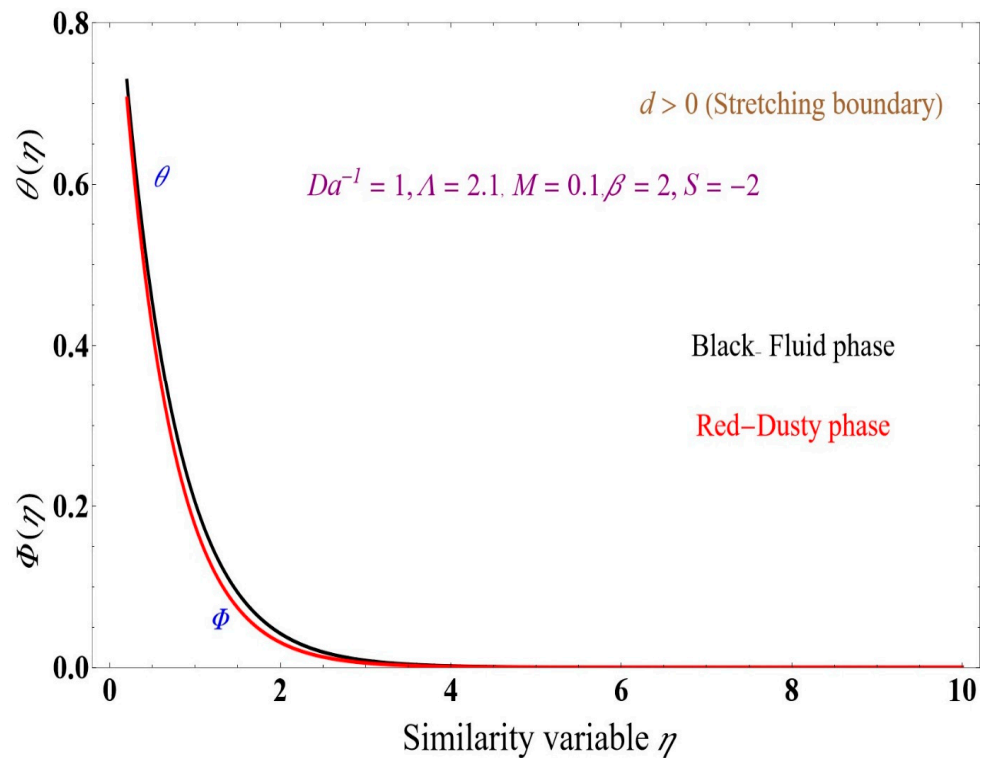


Figure 14. Temperature profiles for the dusty and fluid phases versus similarity variable for $S = -2$.



Citation: Sachhin, S.M.; Mahabaleshwar, U.S.; Laroze, D.; Drikakis, D. Correction: Sachhin et al. Darcy–Brinkman Model for Ternary Dusty Nanofluid Flow across Stretching/Shrinking Surface with Suction/Injection. *Fluids* 2024, 9, 94. <https://doi.org/10.3390/fluids9100241>

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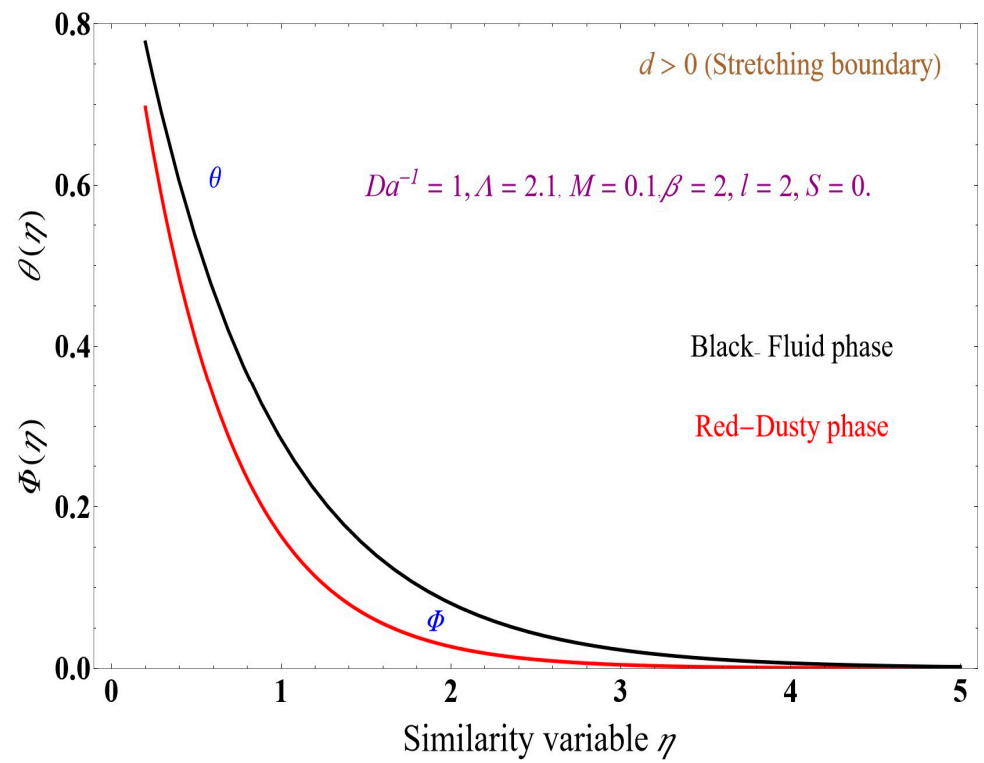


Figure 15. Temperature profiles for the dusty and fluid phases versus similarity variable for $S = 0$.

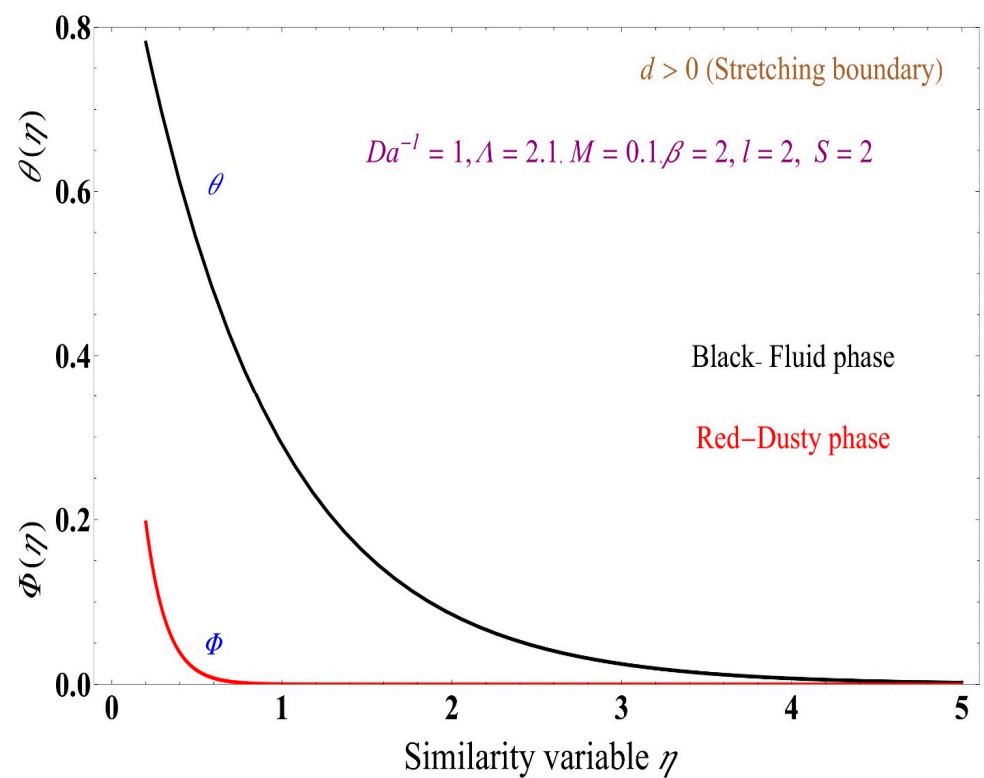


Figure 16. Temperature profiles for the dusty and fluid phases versus similarity variable for $S = 2$.

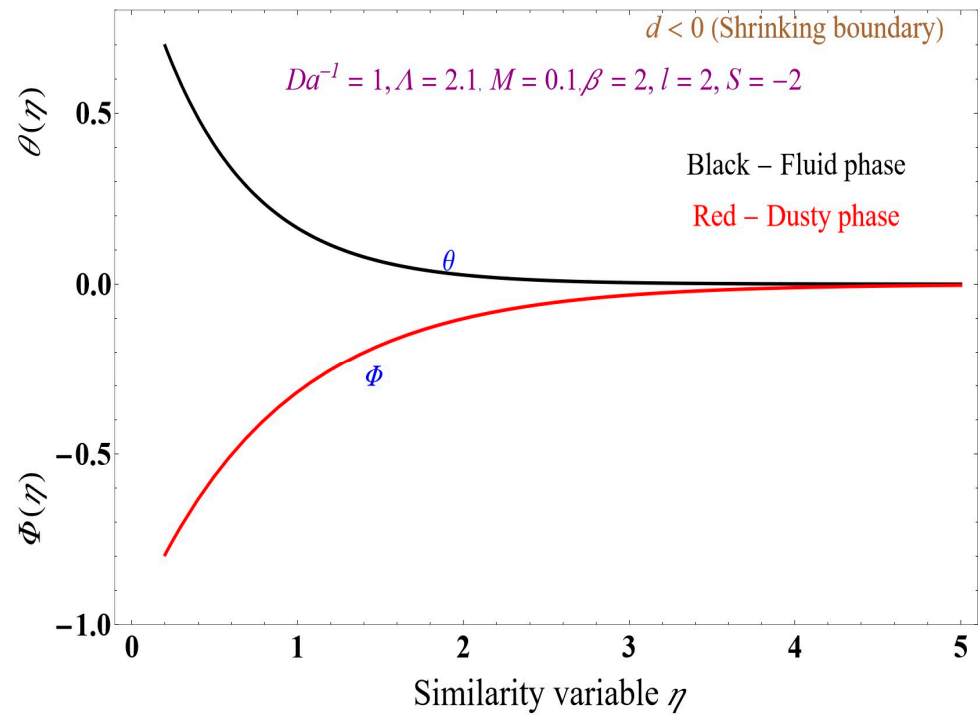


Figure 17. Temperature profile versus similarity variable for a shrinking boundary.

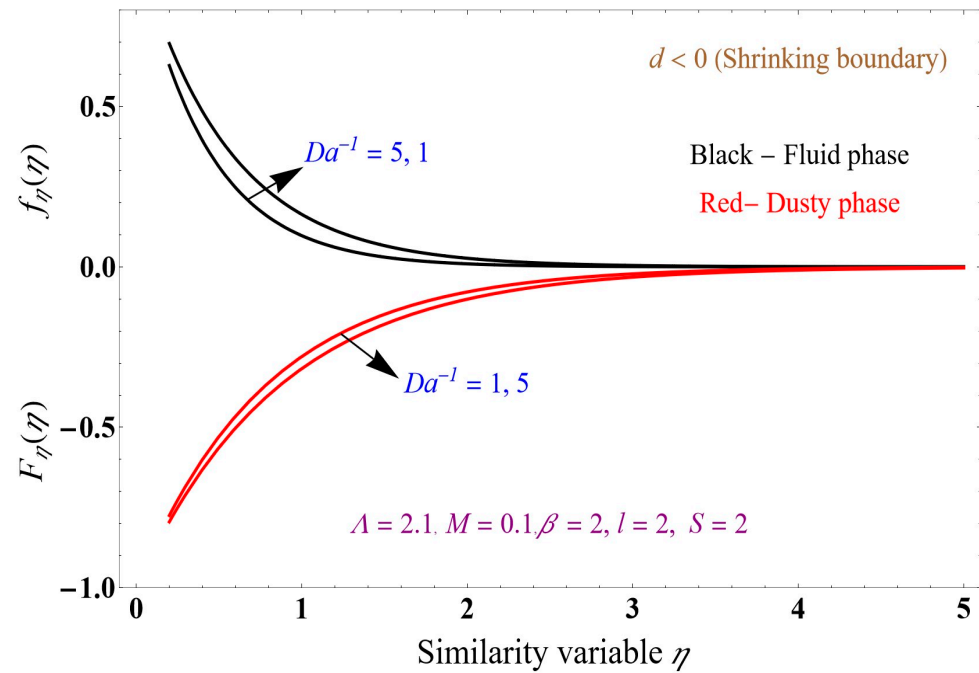


Figure 18. Velocity profile versus similarity variable variation in Da^{-1} .

Text Correction: In Section 2, the following text was added: “Similar to previous studies [2]”, “ b is a parameter that is $b > 0$ for heated and $b < 0$ for cooled plate”. The correct text appears below.

Similar to previous studies [2], here, u , v , u_p , and v_p are the velocity components of a fluid and dusty fluid phase along the x - and y -directions, respectively; the dusty and fluid phase temperatures are T_p and T ; μ is the dynamic viscosity; ρ is the effective density; κ is the thermal conductivity; b is a parameter that is $b > 0$ for heated and $b < 0$ for cooled plate; σ is the electrical conductivity; C_p and C_m are the specific heat coefficients; τ_T is the

heat equilibrium time; L_1 is the Stokes drag/resistance term; ν is the kinematic viscosity of nanoparticles N ; k_1 is the flow permeability; and $\tau_v = \frac{m}{L_1}$ is a relaxation time parameter, where m denotes the mass of dusty particles [2].

In Section 2, we corrected the typographical error in the definition of the Prandtl number. The correct one is $Pr = \frac{\mu C_p}{\kappa_f}$.

In Section 5, we revised the text to avoid ambiguity regarding the results of Figures 14–16 [1]. The correct text appears below.

Figures 14–16 show the temperatures for the fluid and dusty phases for different values of $S = -2, 0$ and 2 , respectively. Increasing S value increases the thermal boundary layer thickness of the fluid phase. The dusty phase exhibits an increase in the thermal boundary layer when S increases from -2 to 0 , while decreases for $S = 2$.

Equations: In Equations (35)–(39), there are typographical errors. We revised the subscript $thnf$ to tnf . In Equation (38), we also revised the κ_{nf} to κ_f . The correct equations appears below:

$$\mu_{tnf} = \frac{1}{(1 - \phi_{Ag})^{2.5} (1 - \phi_{Cu})^{2.5} (1 - \phi_{TiO_2})^{2.5}}. \tag{35}$$

$$\frac{\rho_{tnf}}{\rho_f} = (1 - \phi_{Ag}) \left\{ (1 - \phi_{Cu}) \left[\frac{(1 - \phi_{TiO_2})}{\rho_f} + \phi_{TiO_2} \frac{\rho_{TiO_2}}{\rho_f} \right] + \phi_{Cu} \frac{\rho_{Cu}}{\rho_f} \right\} + \phi_{Ag} \frac{\rho_{Ag}}{\rho_f}. \tag{36}$$

$$\frac{(\rho C_p)_{tnf}}{(\rho C_p)_f} = (1 - \phi_{Ag}) \left\{ \begin{aligned} & \left((1 - \phi_{Cu}) \times \left[\frac{(1 - \phi_{TiO_2})}{(\rho C_p)_f} + \phi_{TiO_2} \frac{(\rho C_p)_{TiO_2}}{(\rho C_p)_f} \right] \right) \\ & + \phi_{Cu} \frac{(\rho C_p)_{Cu}}{(\rho C_p)_f} \end{aligned} \right\} + \phi_{Ag} \frac{(\rho C_p)_{Ag}}{(\rho C_p)_f}. \tag{37}$$

$$\left. \begin{aligned} \frac{\kappa_{tnf}}{\kappa_{hnf}} &= \frac{\kappa_{Ag} + 2\kappa_{hnf} - 2\phi_{Ag}(\kappa_{hnf} - \kappa_{Ag})}{\kappa_{Ag} + 2\kappa_{hnf} + \phi_{Ag}(\kappa_{hnf} - \kappa_{Ag})}, \\ \frac{\kappa_{hnf}}{\kappa_{nf}} &= \frac{\kappa_{Cu} + 2\kappa_{nf} - 2\phi_{Cu}(\kappa_{nf} - \kappa_{Cu})}{\kappa_{Cu} + 2\kappa_{nf} + \phi_{Cu}(\kappa_{nf} - \kappa_{Cu})}, \\ \frac{\kappa_{nf}}{\kappa_f} &= \frac{\kappa_{TiO_2} + 2\kappa_f - 2\phi_{TiO_2}(\kappa_f - \kappa_{TiO_2})}{\kappa_{TiO_2} + 2\kappa_f + \phi_{TiO_2}(\kappa_f - \kappa_{TiO_2})}. \end{aligned} \right\} \tag{38}$$

$$\left. \begin{aligned} \frac{\sigma_{tnf}}{\sigma_{hnf}} &= 1 + \frac{3\left(\frac{\sigma_{Ag}}{\sigma_{hnf}} - 1\right)\phi_{Ag}}{\left(\frac{\sigma_{Ag}}{\sigma_{hnf}} + 2\right) - \left(\frac{\sigma_{Ag}}{\sigma_{hnf}} - 1\right)\phi_{Ag}}, \\ \frac{\sigma_{hnf}}{\sigma_{nf}} &= 1 + \frac{3\left(\frac{\sigma_{Cu}}{\sigma_{nf}} - 1\right)\phi_{Cu}}{\left(\frac{\sigma_{Cu}}{\sigma_{nf}} + 2\right) - \left(\frac{\sigma_{Cu}}{\sigma_{nf}} - 1\right)\phi_{Cu}}, \\ \frac{\sigma_{nf}}{\sigma_f} &= 1 + \frac{3\left(\frac{\sigma_{TiO_2}}{\sigma_f} - 1\right)\phi_{TiO_2}}{\left(\frac{\sigma_{TiO_2}}{\sigma_f} + 2\right) - \left(\frac{\sigma_{TiO_2}}{\sigma_f} - 1\right)\phi_{TiO_2}}. \end{aligned} \right\} \tag{39}$$

Nomenclature: We added the units that were missing in several parameters and corrected the typographical errors in some of the parameters [1]. The correct Nomenclature appears below.

The authors state that the scientific conclusions are unaffected. These corrections were approved by the Academic Editor. The original publication has also been updated.

Nomenclature

A_1, A_2, A_3, A_4, A_5	Constants
a	Stretching coefficient (s^{-1})
B_0	Magnetic parameter (Tesla)
C_m, C_p	Specific heat coefficient ($JK^{-1}kg^{-1}$)
d	Stretching/shrinking parameter
Da^{-1}	Inverse Darcy number
Ec	Eckert number
$f(\eta)$	Velocity function fluid phase
$F(\eta)$	Velocity function dusty phase
k_1	Permeability of porous medium (m^2)
l	Mass number
L_1	Stokes drag term (kg/s)
m	Mass of the dusty particles (kg)
M	dimensionless magnetic parameter
Ni	Heat source/sink parameter
Nr	Thermal radiation parameter
N	Quantity of nanoparticles (m^{-3})
Pr	Prandtl number
p	Pressure (Nm^{-2})
q_r	Radiative heat flux (Wm^{-2})
Q_0	Heat source/sink ($Wm^{-3}K^{-1}$)
S	Dimensionless mass suction/injection parameter
$S > 0$	Mass suction parameter
$S = 0$	No permeability
T_p	Dusty-phase temperature (K)
T_w	Surface temperature (K)
T	Fluid temperature (K)
T_∞	Ambient temperature (K)
u, v	x, y-axis velocity of fluid phase (ms^{-1})
u_p, v_p	x, y-axis velocity of dusty phase (ms^{-1})
u_w	Wall velocity (ms^{-1})
v_w	Wall mass transfer velocity (ms^{-1})
x	Coordinate along the plate (m)
y	Coordinate normal to the plate (m)
Greek symbols	
α	Stretching speed of dust particles (ms^{-1})
β_T	Fluid-particle interaction parameters
β	Solution parameters
$\lambda_1, \lambda_2, \lambda_3$	Solution roots
$\zeta_1, \zeta_2, \zeta_3, \zeta_4$	Constants
η	Similarity variable
γ	Heat coefficient
Λ	Brinkman number
κ	Thermal conductivity ($Wm^{-1}K^{-1}$)
κ^*	Absorption coefficient (m^{-1})
μ_{eff}	Effective dynamic viscosity ($kg(ms)^{-1}$)
μ, μ_p	Dynamic viscosity of the fluid and dusty phase ($kg(ms)^{-1}$)
ν, ν_p	Kinematic viscosity of fluid and dusty phase (m^2s^{-1})
ρ	Fluid density (kgm^{-3})

ρ_p	Particle phase density (kgm^{-3})
ψ	Stream function
σ, σ_p	Electrical conductivity (<i>Siemens/m</i> = $\text{A}^2\text{s}^3\text{m}^{-3}\text{kg}^{-1}$)
σ^*	Stephen–Boltzmann constant ($\text{Wm}^{-2}\text{K}^{-4}$)
τ_T	Heat equilibrium time (s)
τ_v	Relaxation time parameter (s)
φ	Fluid nanoparticle volume fraction ratio
$\theta(\eta)$	Dimensionless temperature of fluid phase
$\Phi(\eta)$	Dimensionless temperature of dusty phase

Abbreviations

HNF	Hybrid nanofluid
ODE	Ordinary differential equation
PDE	Partial differential equation
MHD	Magnetohydrodynamics
BCs	Boundary conditions
TNF	Ternary nanofluid

Reference

1. Sachhin, S.M.; Mahabaleshwar, U.S.; Laroze, D.; Drikakis, D. Darcy–Brinkman Model for Ternary Dusty Nanofluid Flow across Stretching/Shrinking Surface with Suction/Injection. *Fluids* **2024**, *9*, 94. [[CrossRef](#)]

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