ON PC SOLUTIONS OF PARMA(p, q) MODELS

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Abstract: This note is concerned with the existence of periodically correlated solutions for the PARMA(p, q) system

$$x_n = \phi_n^1 x_{n-1} + \phi_n^2 x_{n-2} + \ldots$$
$$+ \phi_n^p x_{n-p} + \xi_n + \theta_n^1 \xi_{n-1} \ldots + \theta_n^q \xi_{n-q}, \quad n \in \mathbb{Z},$$

where ξ_n is a white noise and the varying coefficients ϕ_n^i and θ_n^i are periodic in n with period T. Conditions which ensure the existence of periodically correlated solutions for such systems are obtained.

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