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Pathways of Influence of the Northern Hemisphere Mid-high Latitudes on East Asian Climate: A Review

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This paper reviews recent progress made by Chinese scientists on the pathways of influence of the Northern Hemisphere mid-high latitudes on East Asian climate within the framework of a “coupled oceanic-atmospheric (land-atmospheric or seaice-atmospheric) bridge” and “chain coupled bridge”. Four major categories of pathways are concentrated upon, as follows: Pathway A—from North Atlantic to East Asia; Pathway B—from the North Pacific to East Asia; Pathway C—from the Arctic to East Asia; and Pathway D—the synergistic effects of the mid-high latitudes and tropics. In addition, definitions of the terms “combined effect”, “synergistic effect” and “antagonistic effect” of two or more factors of influence or processes and their criteria are introduced, so as to objectively investigate those effects in future research.