

Effects of National Affiliations and International Collaboration on Scientific Findings:

The Case of Transboundary Air Pollution in Northeast Asia

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Abstract: In Northeast Asia, the debate among key policy actors regarding air pollution attribution is due to the issue's political sensitivity, but it could also be the result of variance in the scientific research. For example, we know that the springtime winds carry desert-originating dust laden with contaminants from industry and energy production out of China eastward to the Korean peninsula and Japan, but domestic contribution from South Korea and Japan must also be recognized. Science is politicized when scientific findings are handpicked and argued over by politicians, advocacy groups, and pundits, leading key actors, including the general public, to prioritize particular results over others. Yet, if the atmospheric science literature itself produces research that varies as a function of funding source and international research collaboration, we may be dealing with an even more serious problem than simply the politicization of science. We survey 174 published atmospheric science studies and use scientometric methods to show that researchers based in both Japan and Korea focus significantly more on China as the source of transboundary air pollution. China's researchers neither highlight China's air pollution contributions nor minimize them.

Keywords: atmospheric science; air pollution; politicization of science; Northeast Asia; environmental policy

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