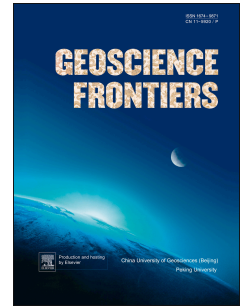


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Field Report: Exploring the Doonerak fenster of the central Brooks Range, Alaska, USA

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# 1 **Field Report: Exploring the Doonerak fenster of the central Brooks**

## 2 **Range, Alaska, USA**

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### 13 **ABSTRACT**

14 Arctic Alaska is a ‘suspect’ terrane that encompasses approximately 20% of Alaska,  
15 stretching from the southern Brooks Range all the way to the continental shelves of the Chukchi  
16 and Beaufort Seas. Although the origin and subsequent travels of this large crustal fragment are  
17 debated among geologists, most researchers agree upon its composite nature and exotic origin.  
18 To constrain the early geological history of this terrane, we describe a recent expedition to the  
19 Doonerak fenster of the central Brooks Range. This area has long been regarded as a key locality  
20 for understanding the structural evolution of the Mesozoic–Cenozoic Brooks Range orogen;  
21 however, our target was different: a unique sequence of volcanic and siliciclastic rocks (Apoon  
22 assemblage) exposed beneath a profound pre-Mississippian unconformity, which we argue is of

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