

## **Chapter 9 - Remote sensing of climate variability and flooding**

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### **Abstract**

This chapter focuses on the application of remote sensing in monitoring climate variability and flooding. The chapter provides background on flooding and climate variability across the globe, including occurrence, impact as well as the potential of remote sensing in this field. The chapter also highlights in detail the application of different remote sensing datasets, from airborne to spaceborne, as well as analytical approaches in the remote sensing of climate variability and flooding. Furthermore, it also highlights some of the case studies that were conducted across the globe on the remote sensing of climate variability and flooding. Lastly, although remote sensing provides valuable information, the chapter also highlights some of the strengths and weaknesses of remote sensing applications for climate variability and flooding.