Real-Time Flood Forecast and Warning: The US Experience

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In this paper two reviews of the end-to-end river flood and flash-flood forecasting system in the United States will be reviewed. One review dates to 1996 and another to 2006. The progress made during this decade will be examined. The end-to-end system includes observing systems, data transmission, data processing, data products generation, model initialization, model forecasting and warnings dissemination. The underlying tools and techniques used in the end-to-end system were evaluated in the context of available and modernized techniques at the time of the review. The progress in incorporating the modernized techniques will be reviewed. The focus will be on observing systems and modeling techniques.