

1. Record Nr.	UNINA9910346899303321
Autore	Grams Christian Michael Warnfrid
Titolo	Quantification of the Downstream Impact of Extratropical Transition for Typhoon Jangmi and Other Case Studies
Pubbl/distr/stampa	KIT Scientific Publishing, 2015
ISBN	1000024940
Descrizione fisica	1 online resource (VII, 334 p. p.)
Collana	Wissenschaftliche Berichte des Instituts für Meteorologie und Klimaforschung des Karlsruher Instituts für Technologie
Soggetti	Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The impact of extratropical transition on the midlatitude flow is quantified based on potential vorticity inversion. The detailed study of Typhoon Jangmi (2008) reveals the diabatically enhanced net transport of low-PV air to the tropopause as the key physical process determining the direct impact of ET. Relocation experiments and further case studies show the crucial role of the relative position of the TC and the midlatitude flow for the downstream impact of ET and the reduced predictability.