Complex behaviour in complex terrain. Modelling bird migration in a high resolution wind field across mountainous terrain to simulate observed patterns

Annika Aurbach , Baptiste Schmid , Felix Liechti , Ndaona Chokani , Reza Abhari

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Highlights

- Topographical barriers (obstacles) can induce large detour for migratory birds
- Detours are induced by changes in wind support rather than costs for climbing
- Behavioural response leads to accumulation of bird intensity in lowlands
- Predicted intensity patterns can improve renewable energy development/operation