

Tracing Tokyo's air sources to identify Kawasaki Disease's etiological triggers

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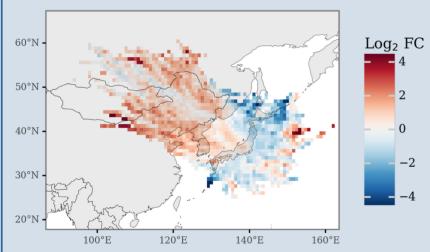




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Kev message

Winds sourced from **Northeastern continental Asia** are associated to yearly **KD maxima**.



Outlook: air masses from that source might carry the etiologic agent of Kawasaki disease.

Data Source

22nd to 25th nationwide epidemiological surveys of Kawasaki disease in Japan:

Date of hospital admission and symptom onset of **13790 KD cases** in **Tokyo** prefecture from 2011 to 2018.

Methods

2012 2011 Tokyo 2013 2014 cases 2015 2016 Daily KD 2018 2017 10 20 30 40 50 0 10 20 30 40 50

Week of the year

Determination of yearly **KD max/min** Computation of **source trajectories**

- **96h** backward trajectories from Tokyo.
- 4 daily trajectories separated by 6h.
- 2240 total trajectories, 50% per group.
- Differential trajectory intersection analysis.

