



# Volume 38, Issue 1

16 January 2011

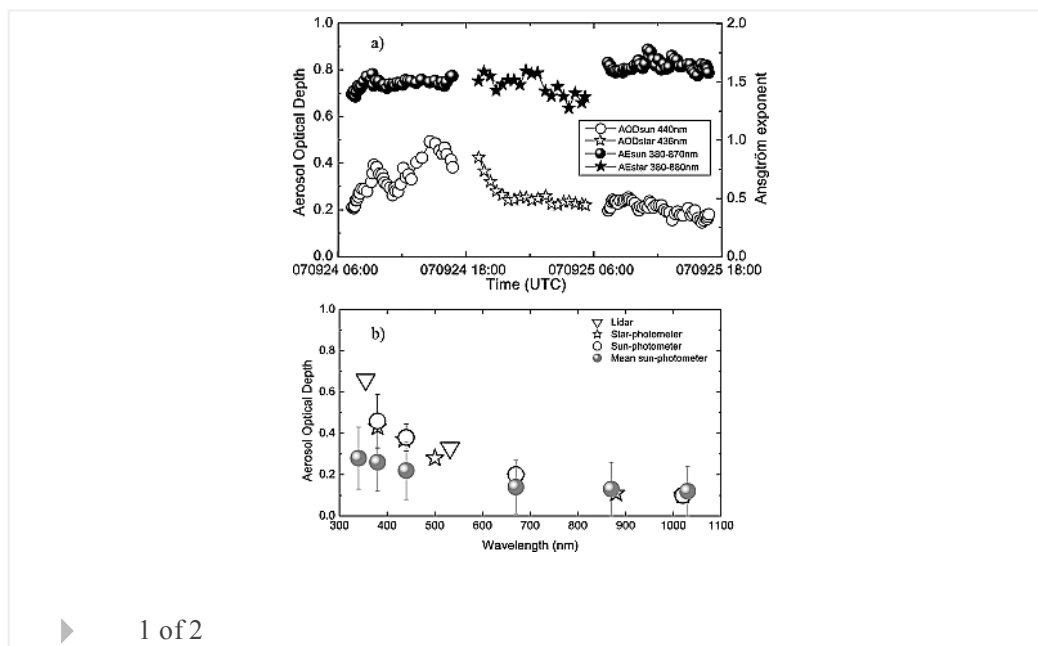
Brief  Detailed

## Atmospheric Science

### Optical and microphysical properties of fresh biomass burning aerosol retrieved by Raman lidar, and star-and sun-photometry

L. Alados-Arboledas, D. Müller, J. L. Guerrero-Rascado, F. Navas-Guzmán, D. Pérez-Ramírez, F. J. Olmo

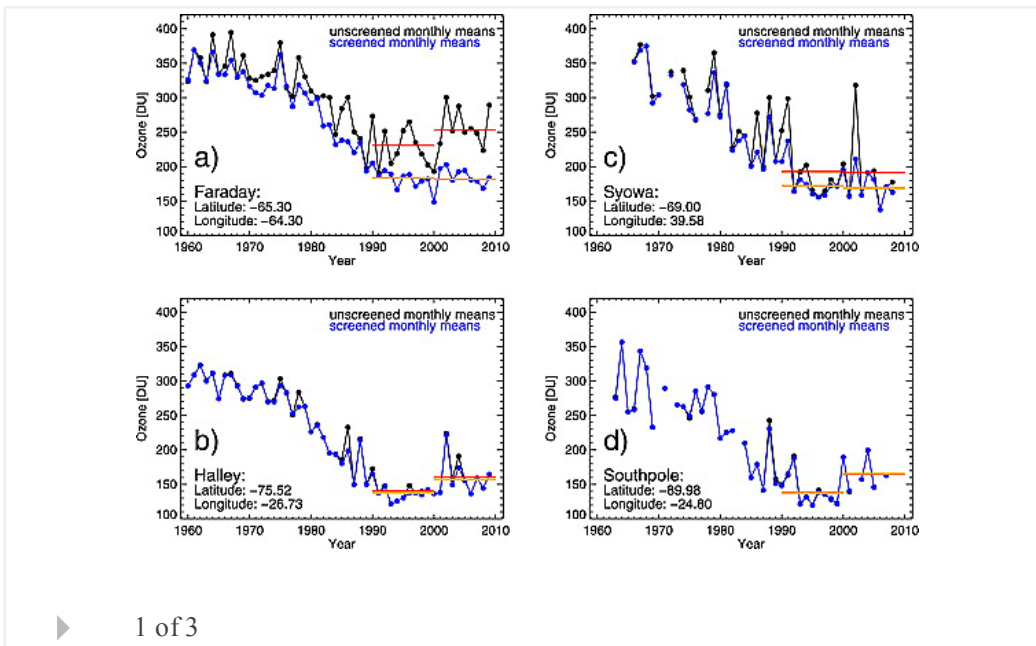
First Published: 14 January 2011 Vol: 38, L01807 | DOI: 10.1029/2010GL045999



### Changes in the polar vortex: Effects on Antarctic total ozone observations at various stations

B. Hassler, G. E. Bodeker, S. Solomon, P. J. Young

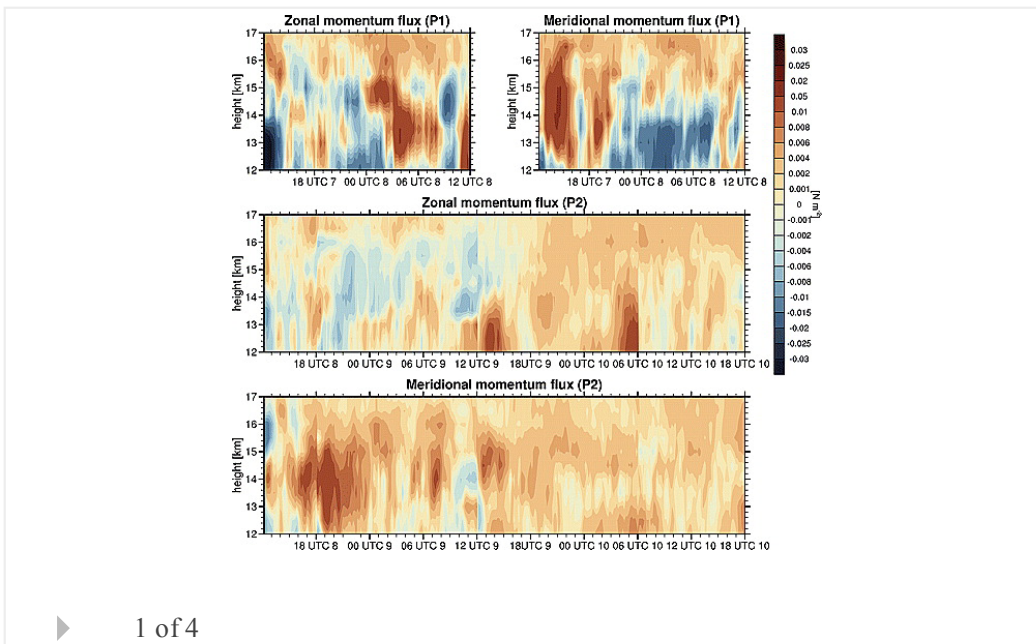
First Published: 12 January 2011 Vol: 38, L01805 | DOI: 10.1029/2010GL045542



## Impact of typhoon-generated gravity waves in the typhoon development

So-Young Kim, Hye-Yeong Chun

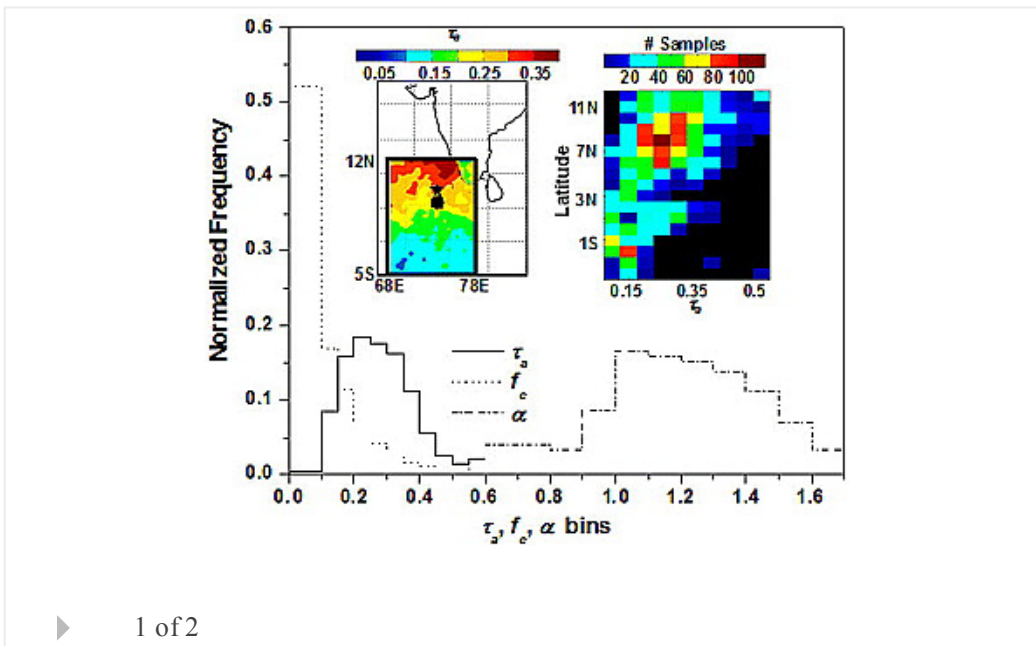
First Published: 12 January 2011 Vol: 38, L01806 | DOI: 10.1029/2010GL045719



## Satellite-observed relationships between aerosol and trade-wind cumulus cloud properties over the Indian Ocean

Sagnik Dey, Larry Di Girolamo, Guangyu Zhao, Alexandra L. Jones, Greg M. McFarquhar

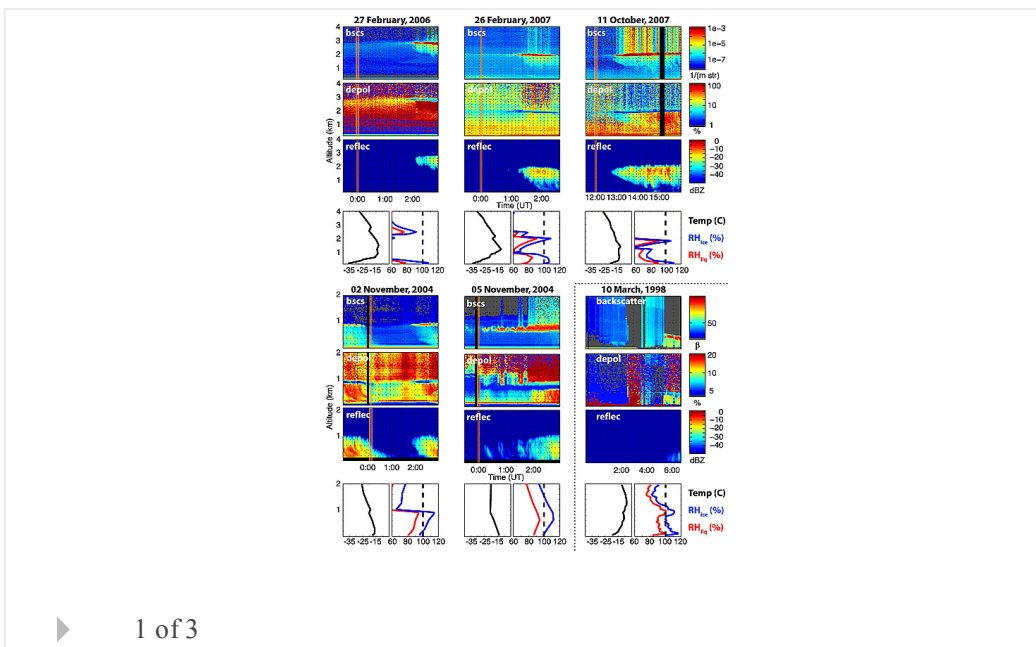
First Published: 11 January 2011 Vol: 38, L01804 | DOI: 10.1029/2010GL045588



### Evidence of liquid dependent ice nucleation in high-latitude stratiform clouds from surface remote sensors

G. de Boer, H. Morrison, M. D. Shupe, R. Hildner

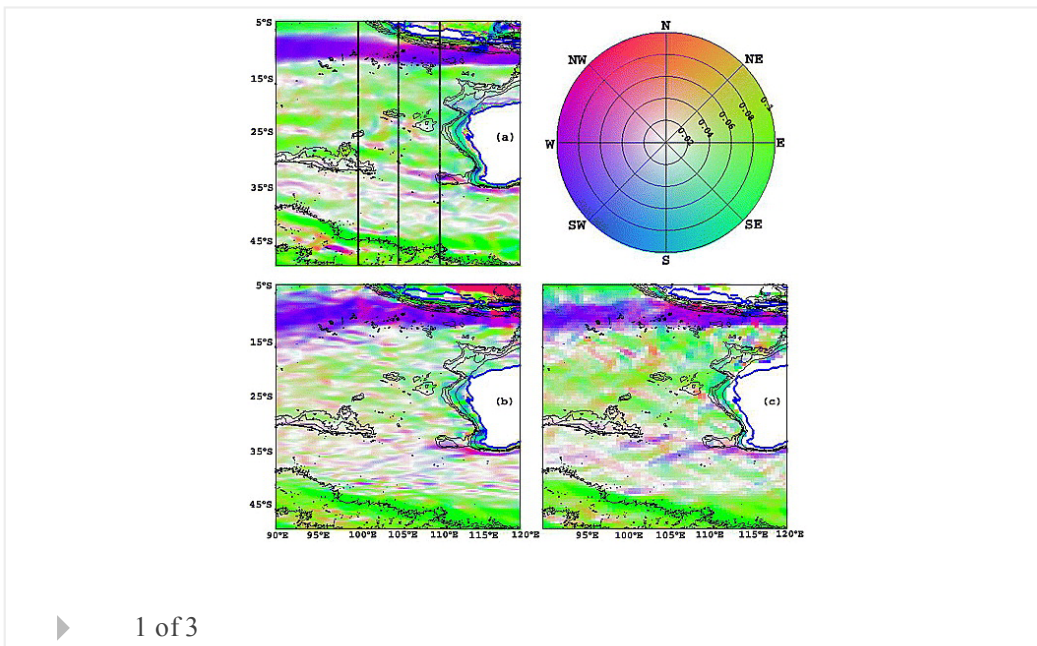
First Published: 6 January 2011 Vol: 38, L01803 | DOI: 10.1029/2010GL046016



### Arterial ocean circulation of the southeast Indian Ocean

Prasanth Divakaran, Gary B. Brassington

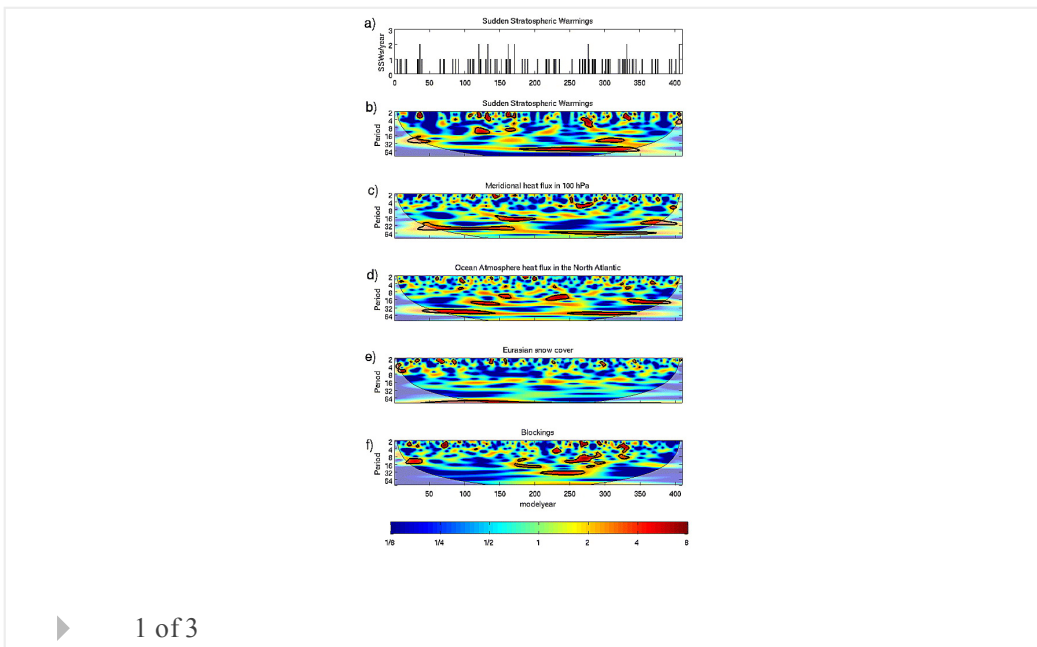
First Published: 5 January 2011 Vol: 38, L01802 | DOI: 10.1029/2010GL045574



### Multi-decadal variability of sudden stratospheric warmings in an AOGCM

S. Schimanke, J. Körper, T. Spanghel, U. Cubasch

First Published: 4 January 2011 Vol: 38, L01801 | DOI: 10.1029/2010GL045756



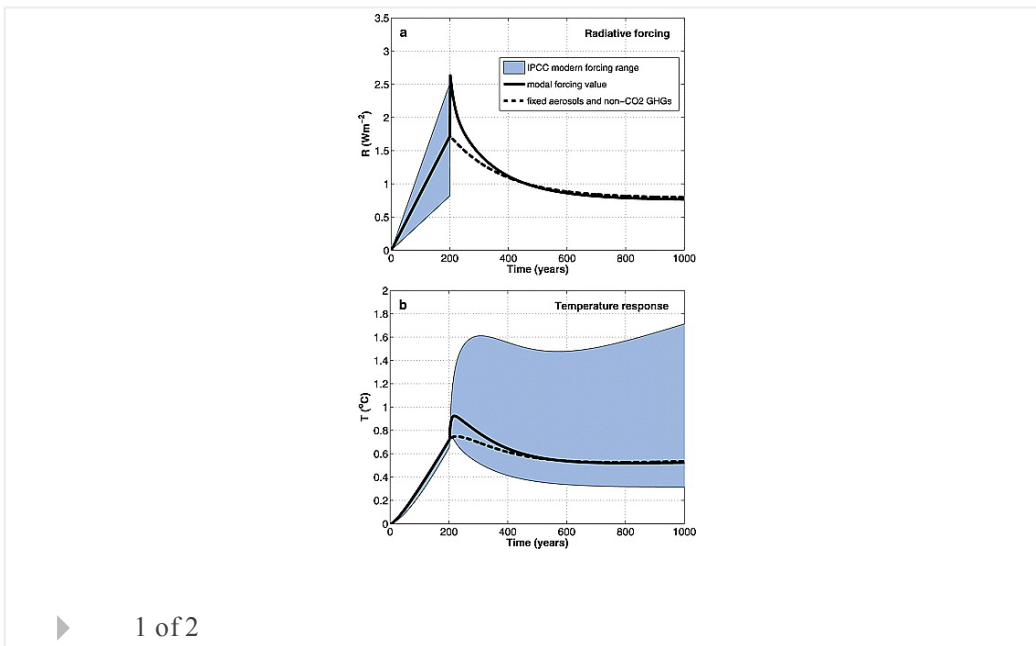
## Climate

### Climate commitment in an uncertain world

K. C. Armour, G. H. Roe

First Published: 15 January 2011 Vol: 38, L01707 | DOI: 10.1029/2010GL045850

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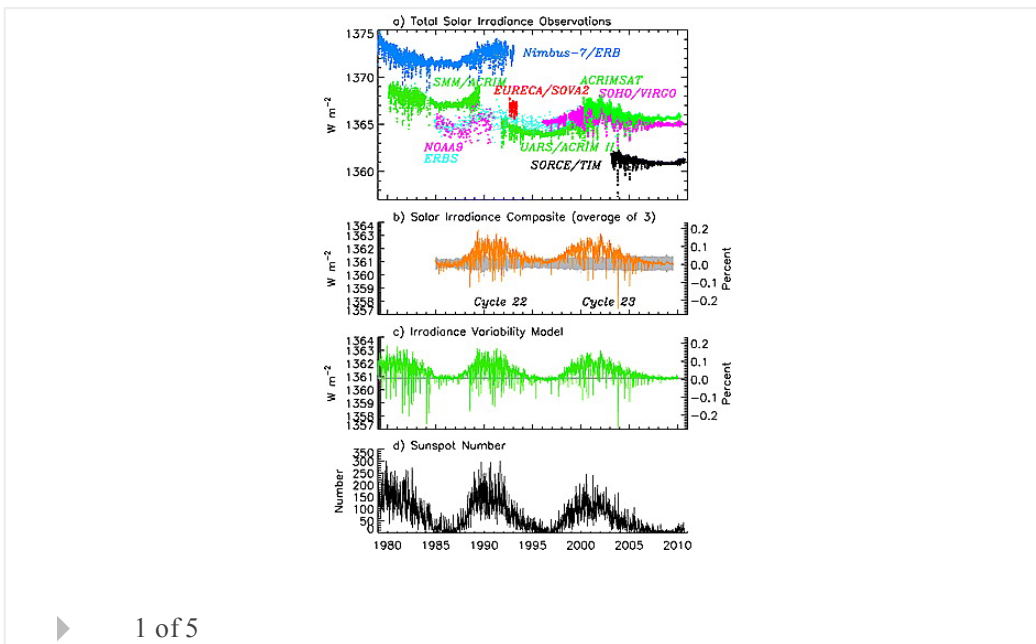
## A new, lower value of total solar irradiance: Evidence and climate significance

Greg Kopp, Judith L. Lean

First Published: 14 January 2011 Vol: 38, L01706 | DOI: 10.1029/2010GL045777

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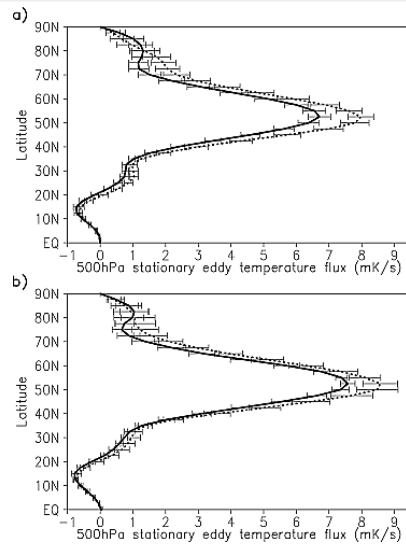
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## An inverse relationship between aggregate northern hemisphere tropical cyclone activity and subsequent winter climate

Robert E. Hart

First Published: 13 January 2011 Vol: 38, L01705 | DOI: 10.1029/2010GL045612

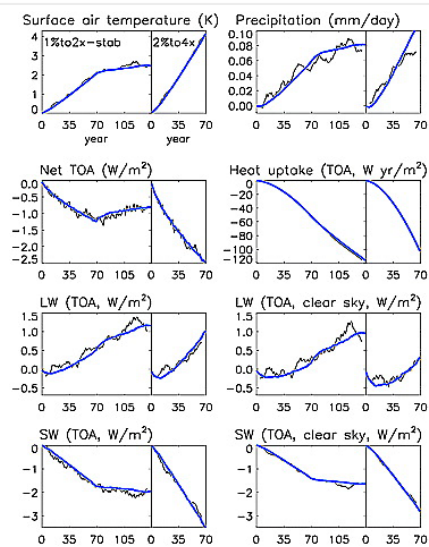


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## A step-response simple climate model to reconstruct and interpret AOGCM projections

Peter Good, Jonathan M. Gregory, Jason A. Lowe

First Published: 12 January 2011 Vol: 38, L01703 | DOI: 10.1029/2010GL045208

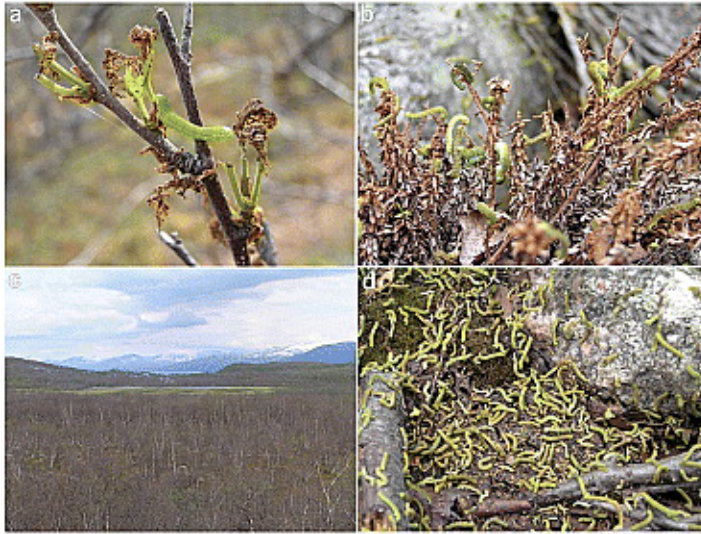


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## Quantification of C uptake in subarctic birch forest after setback by an extreme insect outbreak

Michał Heliasz, Torbjörn Johansson, Anders Lindroth, Meelis Mölder, Mikhail Mastepanov, Thomas Friberg, Terry V. Callaghan, Torben R. Christensen

First Published: 12 January 2011 Vol: 38, L01704 | DOI: 10.1029/2010GL044733

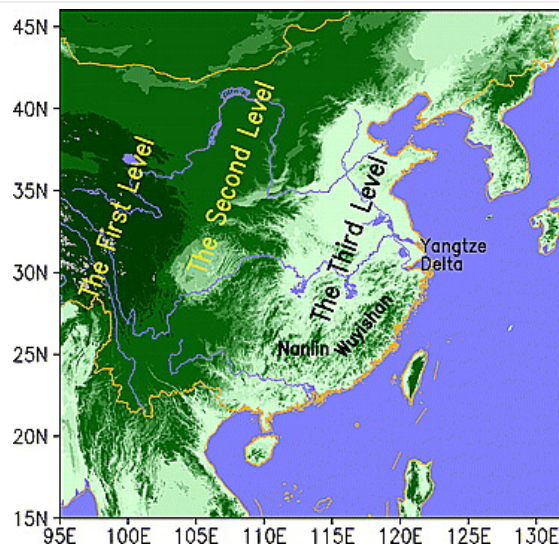


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## Climate trends in tropical cyclone-induced wind and precipitation over mainland China

Ming Ying, Baode Chen, Guoxiong Wu

First Published: 11 January 2011 Vol: 38, L01702 | DOI: 10.1029/2010GL045729

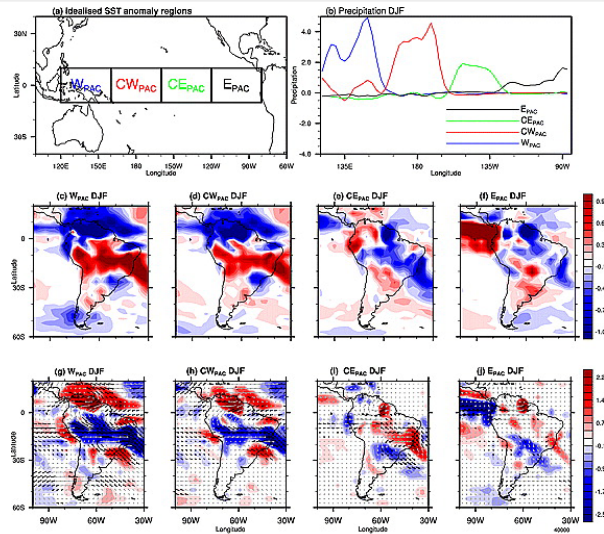


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## Sensitivity of South American summer rainfall to tropical Pacific Ocean SST anomalies

K. J. Hill, A. S. Taschetto, M. H. England

First Published: 5 January 2011 Vol: 38, L01701 | DOI: 10.1029/2010GL045571



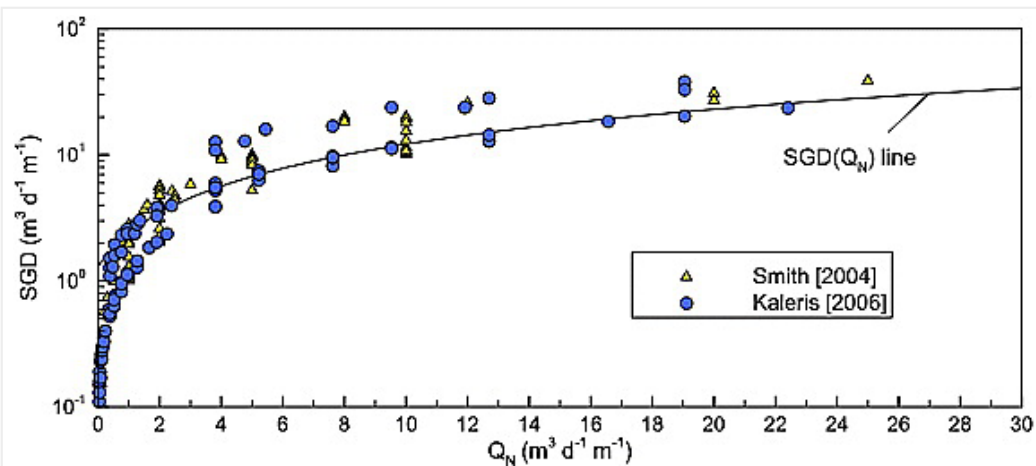
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## Hydrology and Land Surface Studies

### Is submarine groundwater discharge predictable?

Carmen Prieto, Georgia Destouni

First Published: 15 January 2011 Vol: 38, L01402 | DOI: 10.1029/2010GL045621



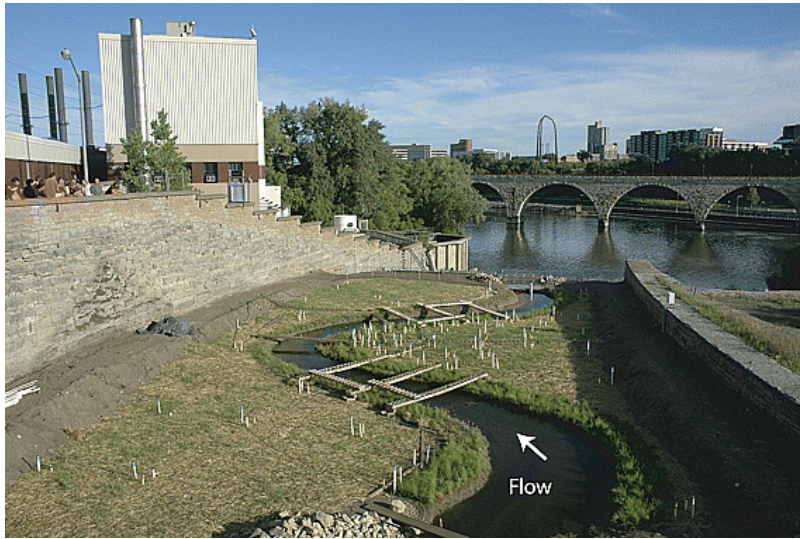
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## Evolution of hydraulic conductivity in the floodplain of a meandering river due to hyperheic transport of fine materials

John D. Nowinski, M. Bayani Cardenas, Anne F. Lightbody

First Published: 5 January 2011 Vol: 38, L01401 | DOI: 10.1029/2010GL045819





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## Oceans

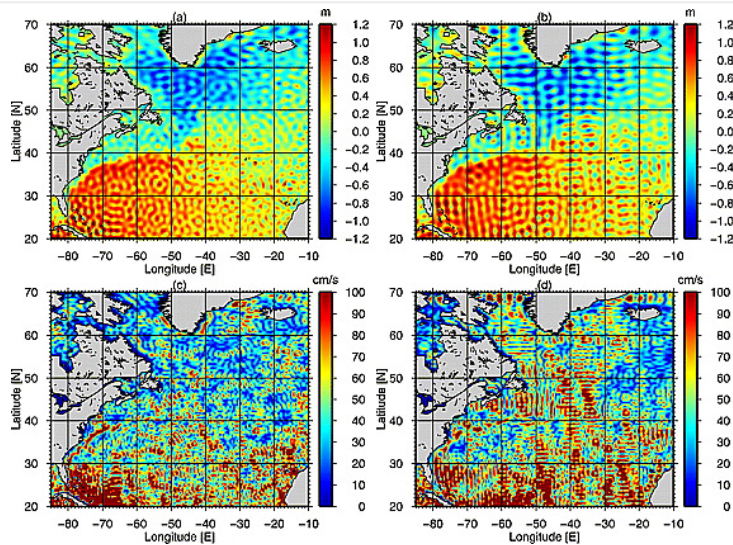
### An initial estimate of the North Atlantic steady-state geostrophic circulation from GOCE

R. J. Bingham, P. Knudsen, O. Andersen, R. Pail

First Published: 15 January 2011 Vol: 38, L01606 | DOI: 10.1029/2010GL045633

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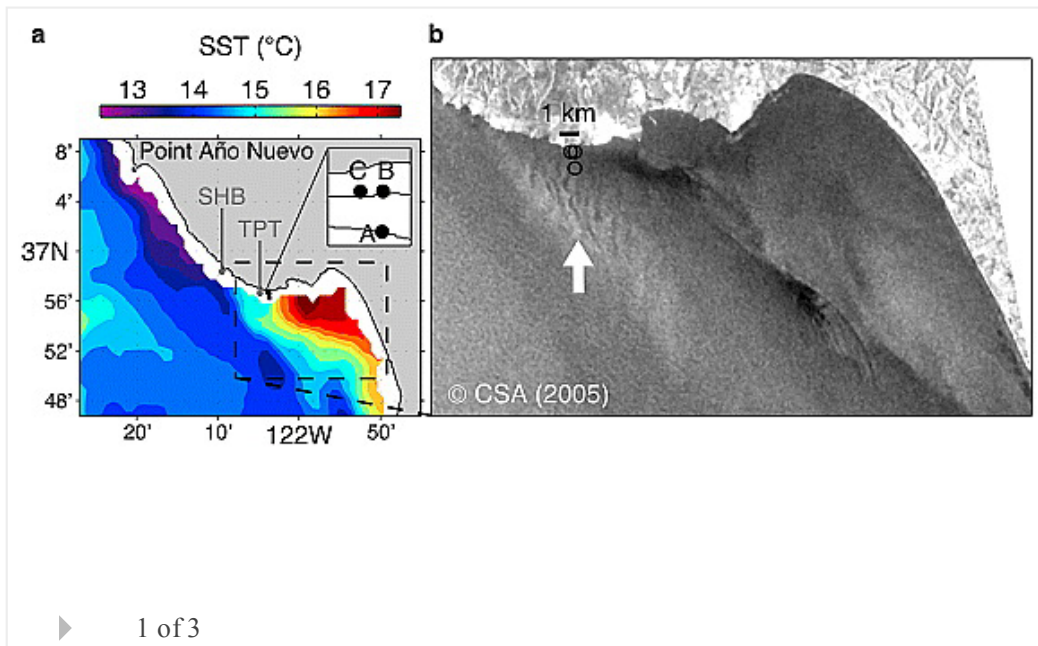
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### Observations of internal wave packets propagating along-shelf in northern Monterey Bay

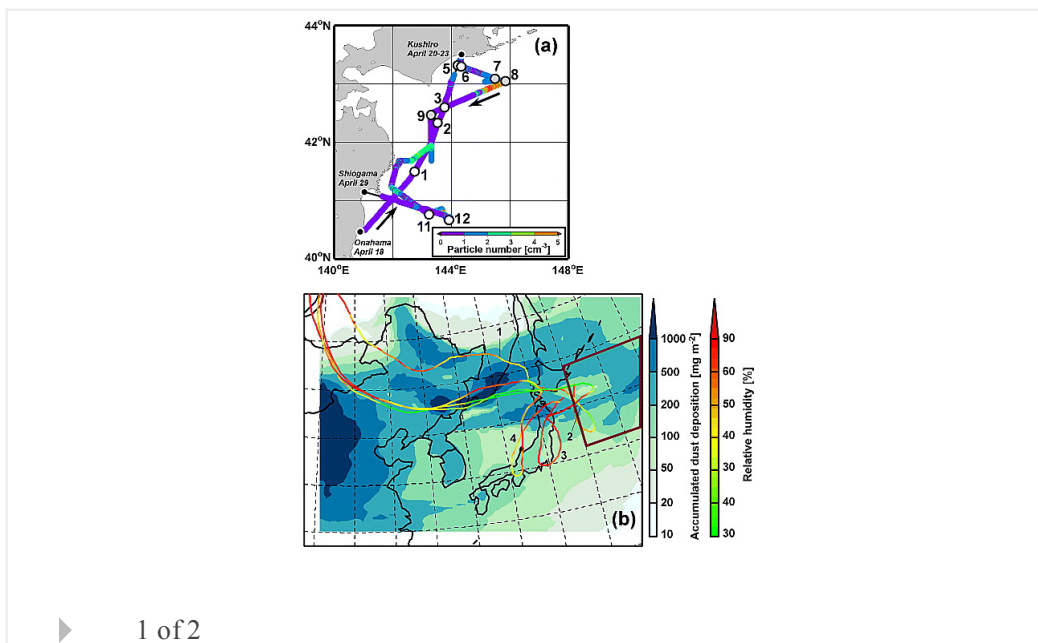
C. B. Woodson, J. A. Barth, O. M. Cheriton, M. A. McManus, J. P. Ryan, L. Washburn, K. N. Carden, B. S. Cheng, J. Fernandes, L. E. Garske, et al



### Biogeochemical implications of increased mineral particle concentrations in surface waters of the northwestern North Pacific during an Asian dust event

Yoko Iwamoto, Keiya Yumimoto, Mitsuhiro Toratani, Atsushi Tsuda, Kazuhiko Miura, Itsushi Uno, Mitsuo Uematsu

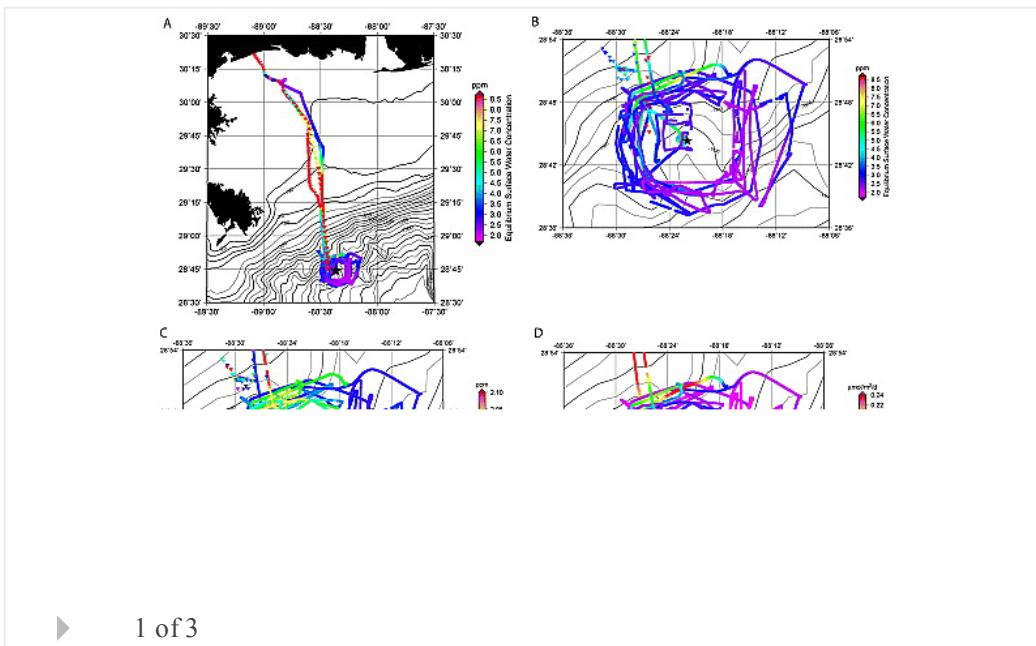
First Published: 12 January 2011 Vol: 38, L01604 | DOI: 10.1029/2010GL045906



### Methane flux to the atmosphere from the Deepwater Horizon oil disaster

Shari A. Yvon-Lewis, Lei Hu, John Kessler

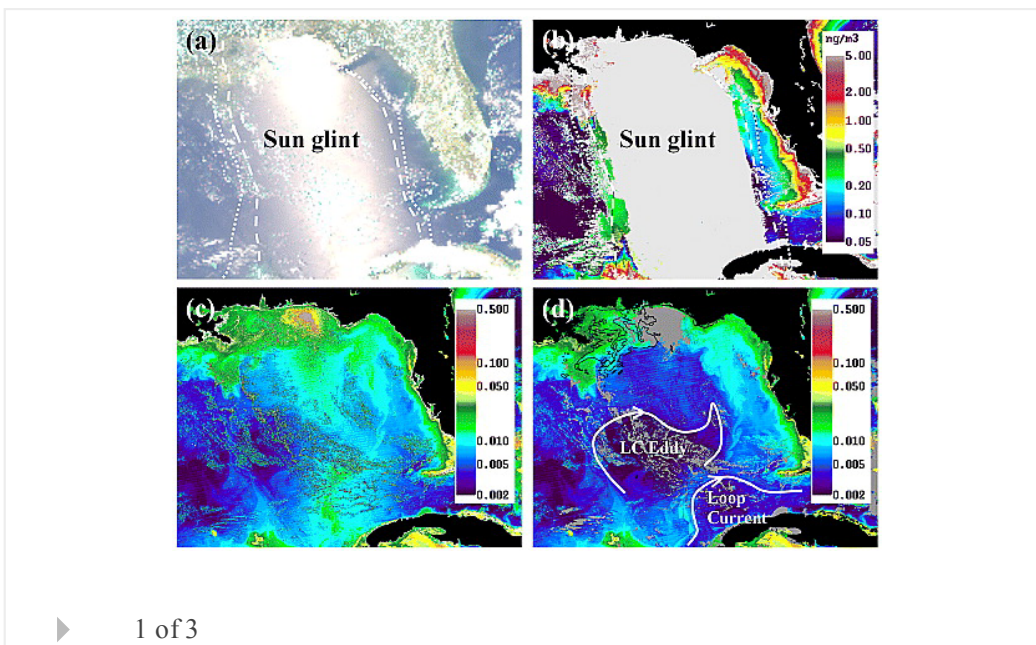
First Published: 11 January 2011 Vol: 38, L01602 | DOI: 10.1029/2010GL045928



## An empirical approach to derive MODIS ocean color patterns under severe sun glint

Chuanmin Hu

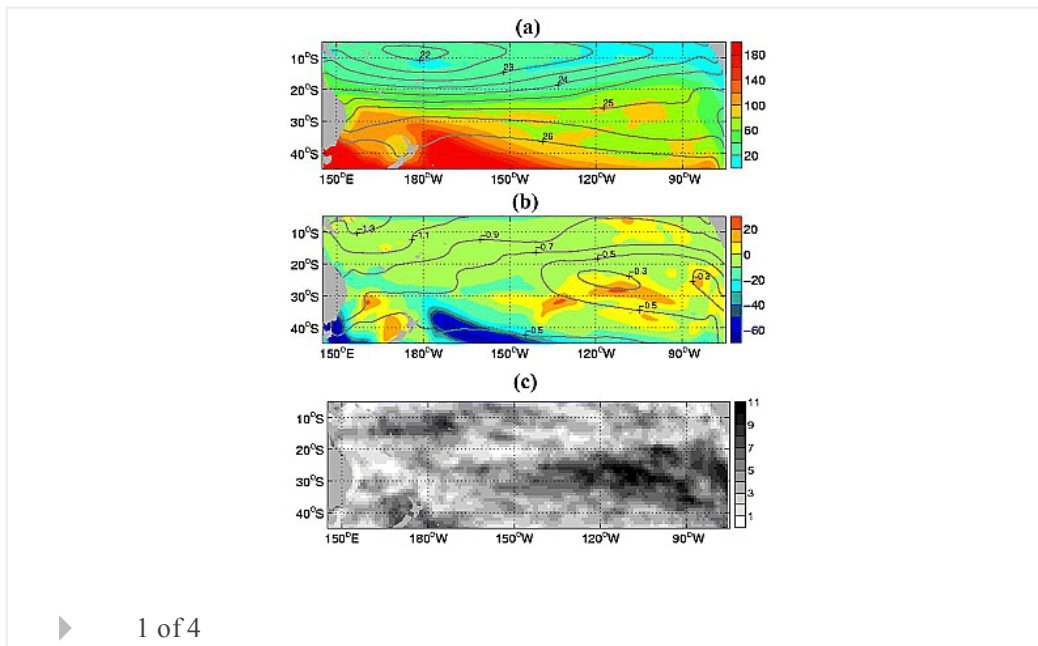
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## Increase of South Pacific eastern subtropical mode water under global warming

Yiyong Luo, Qinyu Liu, Lewis M. Rothstein

First Published: 6 January 2011 Vol: 38, L01601 | DOI: 10.1029/2010GL045878

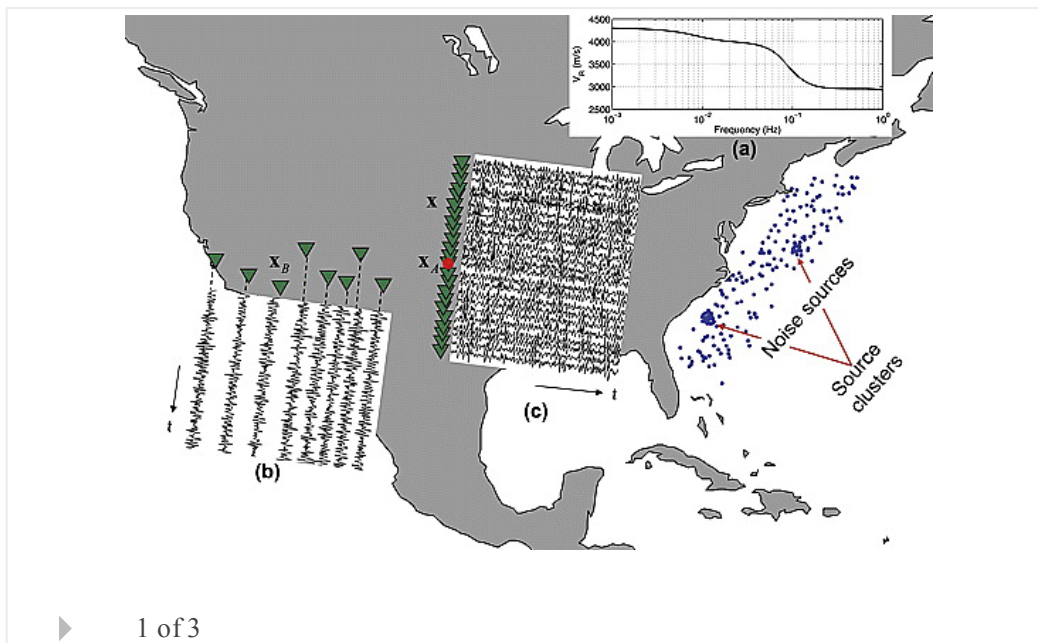


## Solid Earth

### Improved surface-wave retrieval from ambient seismic noise by multi-dimensional deconvolution

Kees Wapenaar, Elmer Ruigrok, Joost van der Neut, Deyan Draganov

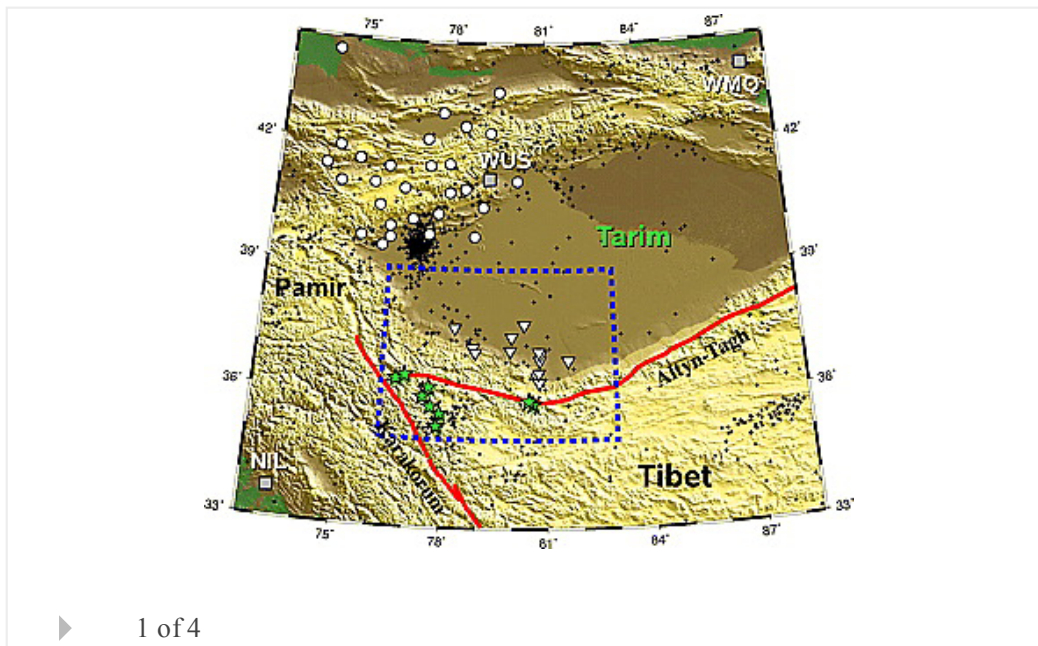
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### Lower-crustal earthquakes in the West Kunlun range

Guo-Chin Dino Huang, Steven W. Roecker, Vadim Levin

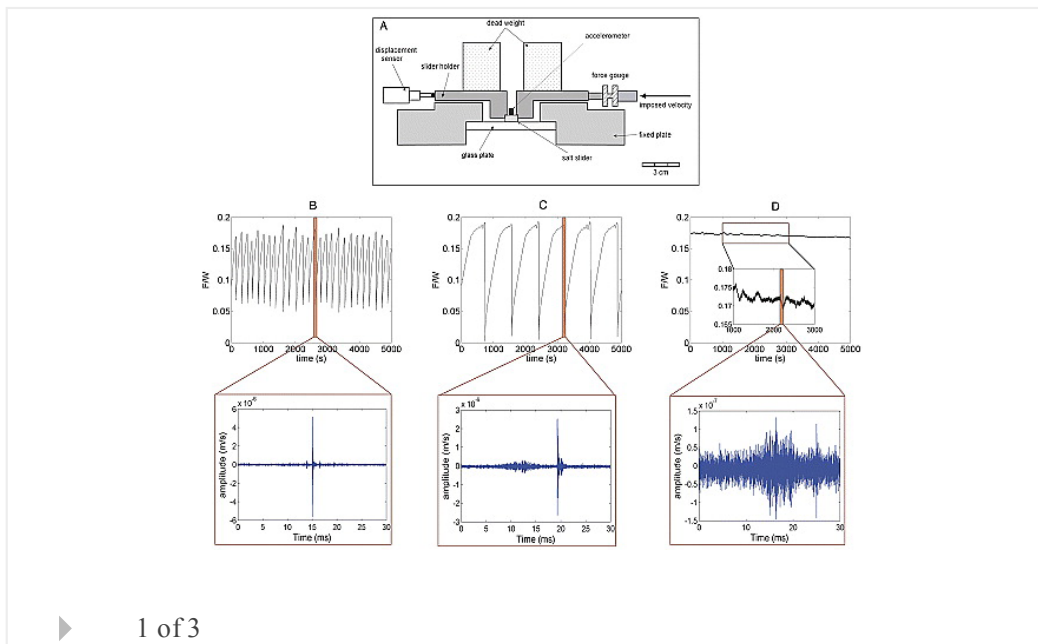
First Published: 15 January 2011 Vol: 38, L01314 | DOI: 10.1029/2010GL045893



### Slip acceleration generates seismic tremor like signals in friction experiments

Dimitri Zigone, Christophe Voisin, Eric Larose, François Renard, Michel Campillo

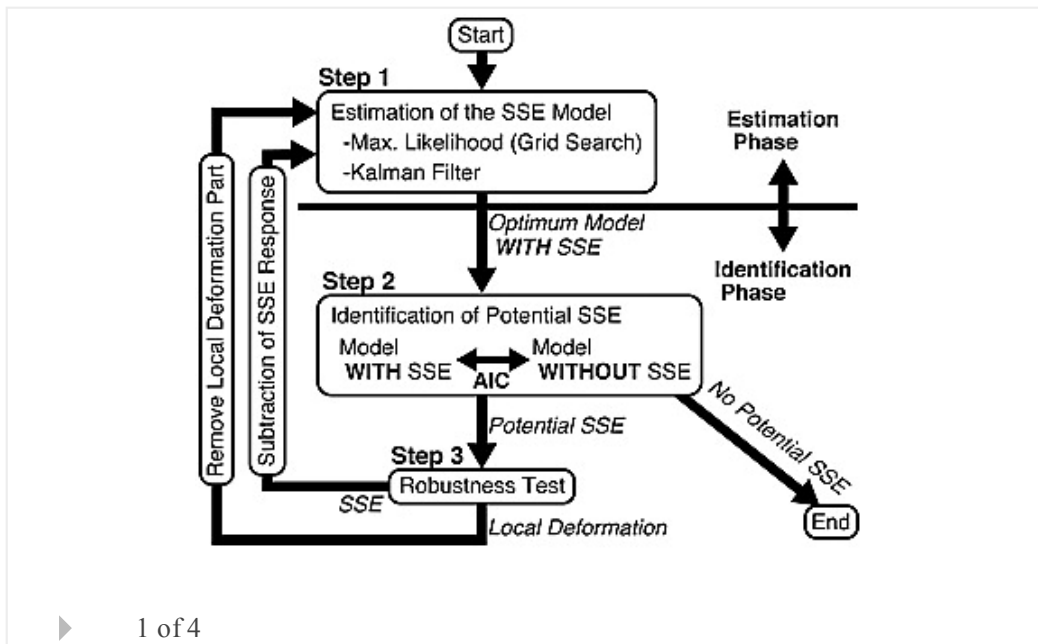
First Published: 15 January 2011 Vol: 38, L01315 | DOI: 10.1029/2010GL045603



### Automated detection of slow slip events within the Nankai subduction zone

Takeshi Kimura, Kazushige Obara, Hisanori Kimura, Hitoshi Hirose

First Published: 14 January 2011 Vol: 38, L01311 | DOI: 10.1029/2010GL045899

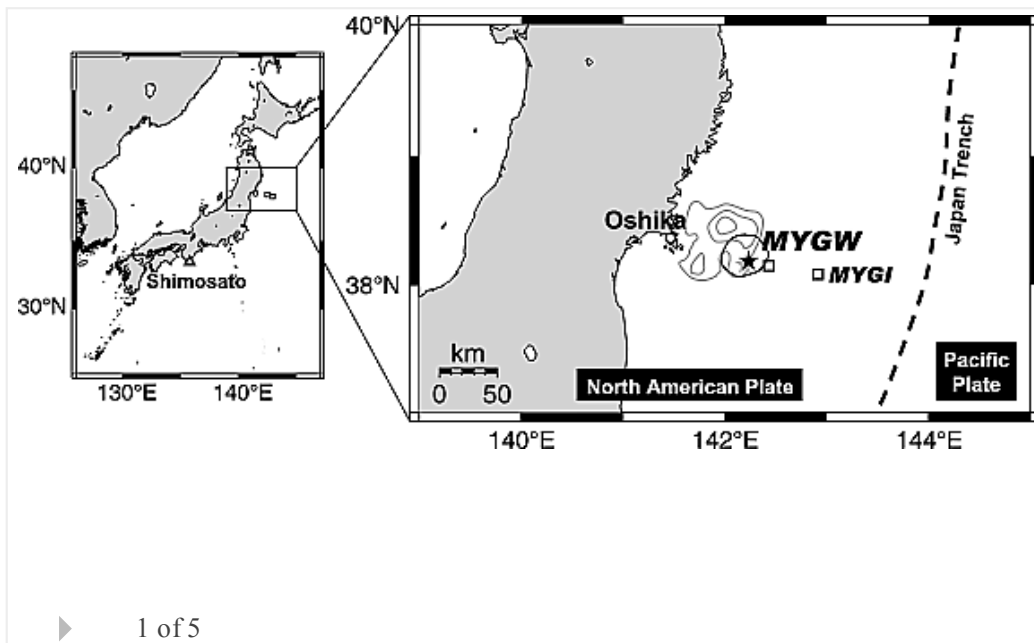


### Restoration of interplate locking after the 2005 Off-Miyagi Prefecture earthquake, detected by GPS/acoustic seafloor geodetic observation

Mariko Sato, Hiroaki Saito, Tadashi Ishikawa, Yoshihiro Matsumoto, Masayuki Fujita, Masashi Mochizuki, Akira Asada

First Published: 14 January 2011 Vol: 38, L01312 | DOI: 10.1029/2010GL045689

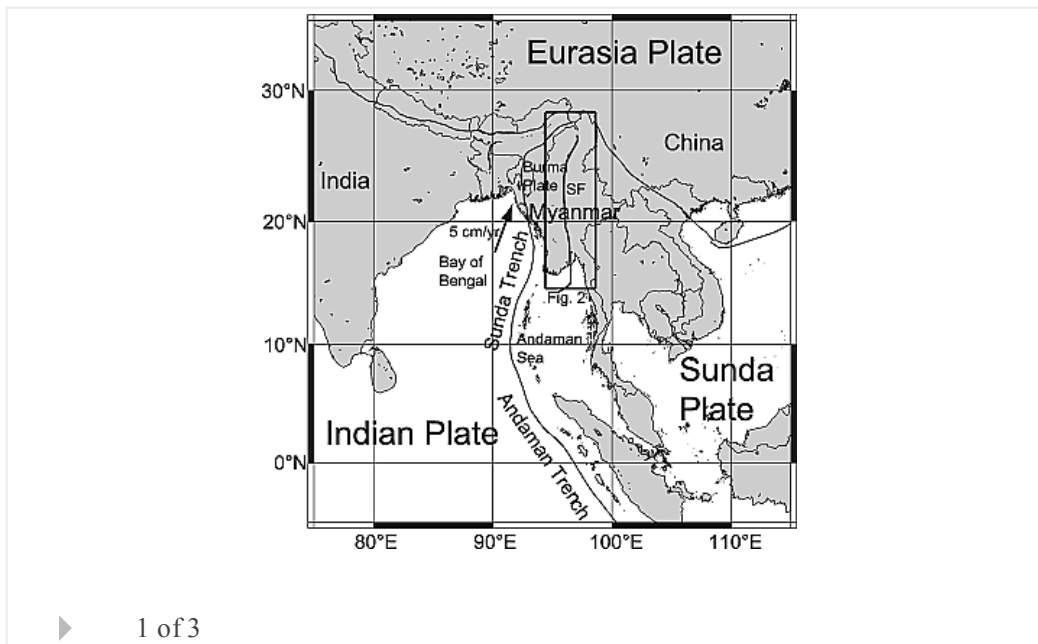
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### Two seismic gaps on the Sagaing Fault, Myanmar, derived from relocation of historical earthquakes since 1918

Nobuo Hurukawa, Phyo Maung Maung

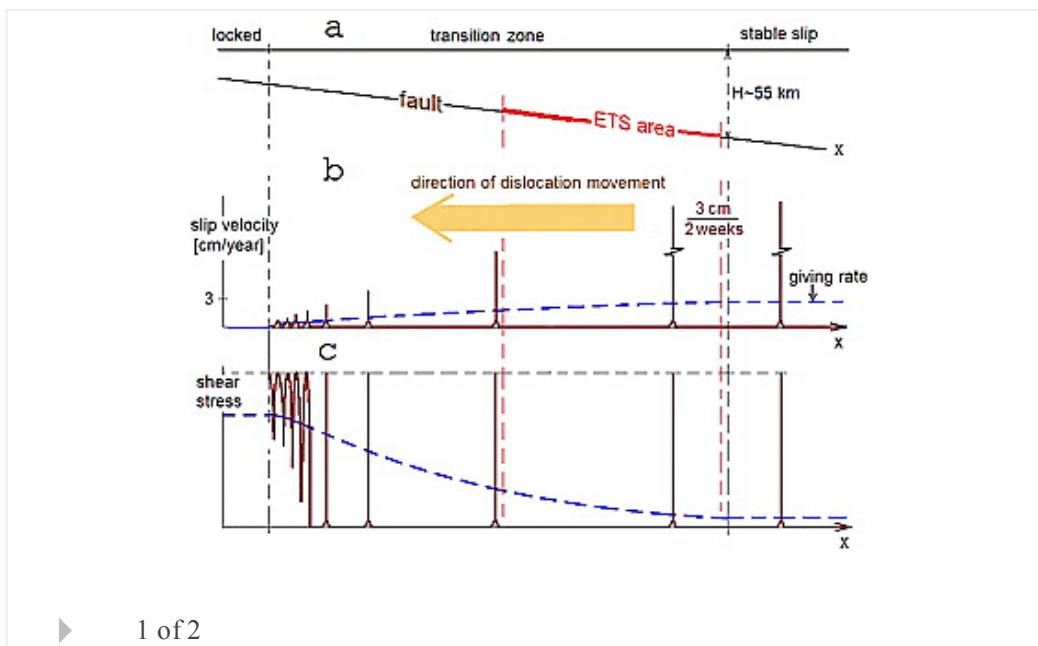
First Published: 14 January 2011 Vol: 38, L01310 | DOI: 10.1029/2010GL046099



**Episodic tremors and slip in Cascadia in the framework of the Frenkel-Kontorova model**

Naum I. Gershenzon, Gust Bambakidis, Ernest Hauser, Abhijit Ghosh, Kenneth C. Creager

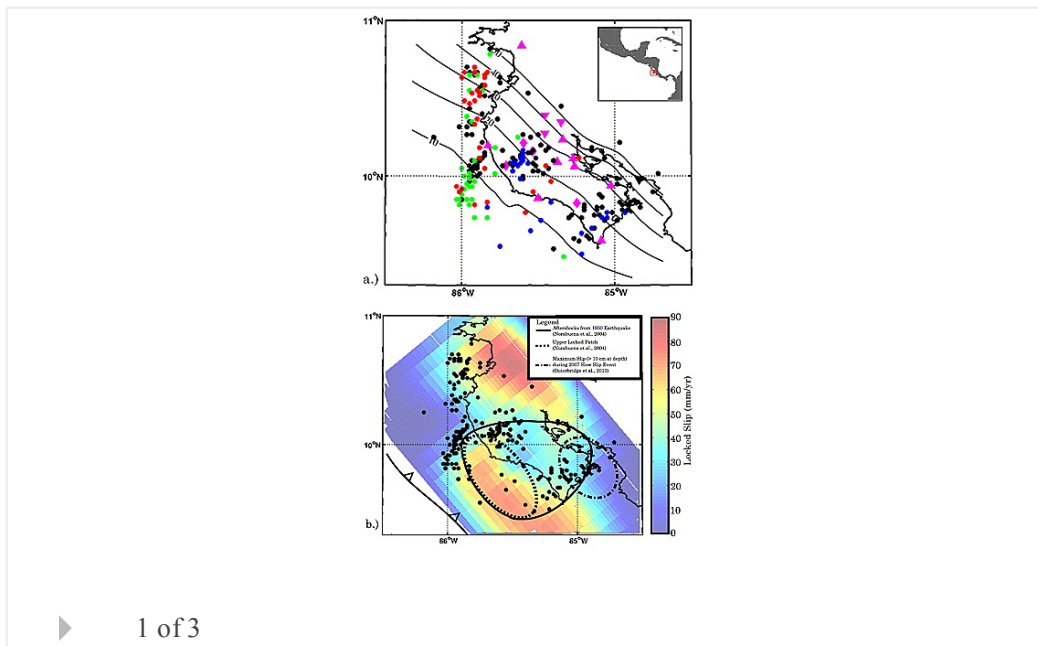
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**Persistent tremor within the northern Costa Rica seismogenic zone**

Jacob I. Walter, Susan Y. Schwartz, J. Marino Protti, Victor Gonzalez

First Published: 13 January 2011 Vol: 38, L01307 | DOI: 10.1029/2010GL045586

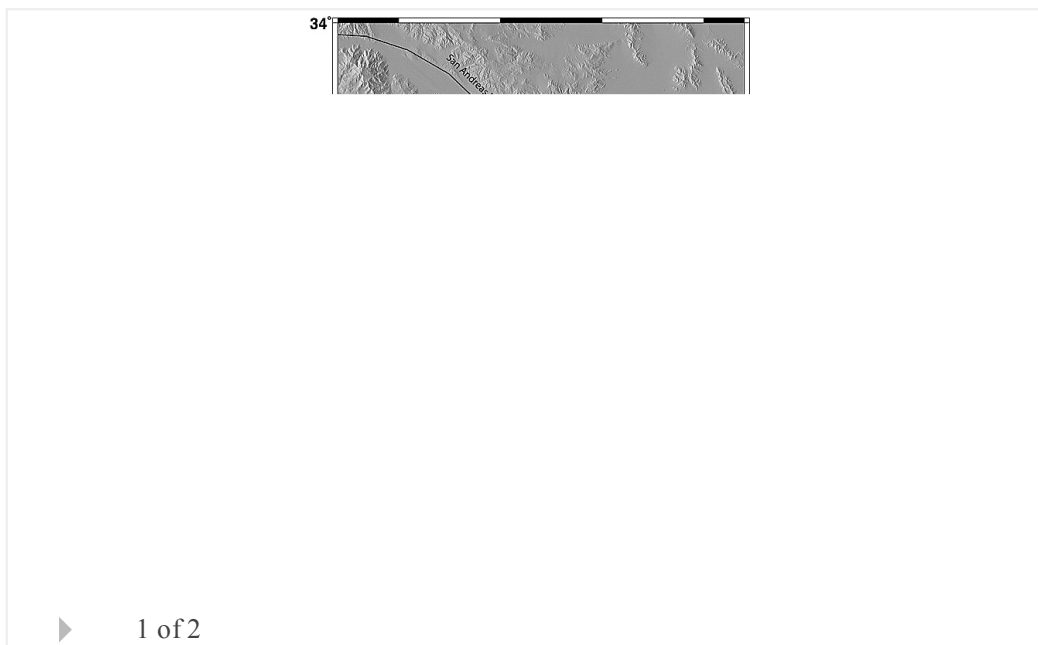


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## Slip on faults in the Imperial Valley triggered by the 4 April 2010 Mw 7.2 El Mayor-Cucapah earthquake revealed by InSAR

Meng Wei, David Sandwell, Yuri Fialko, Roger Bilham

First Published: 13 January 2011 Vol: 38, L01308 | DOI: 10.1029/2010GL045235



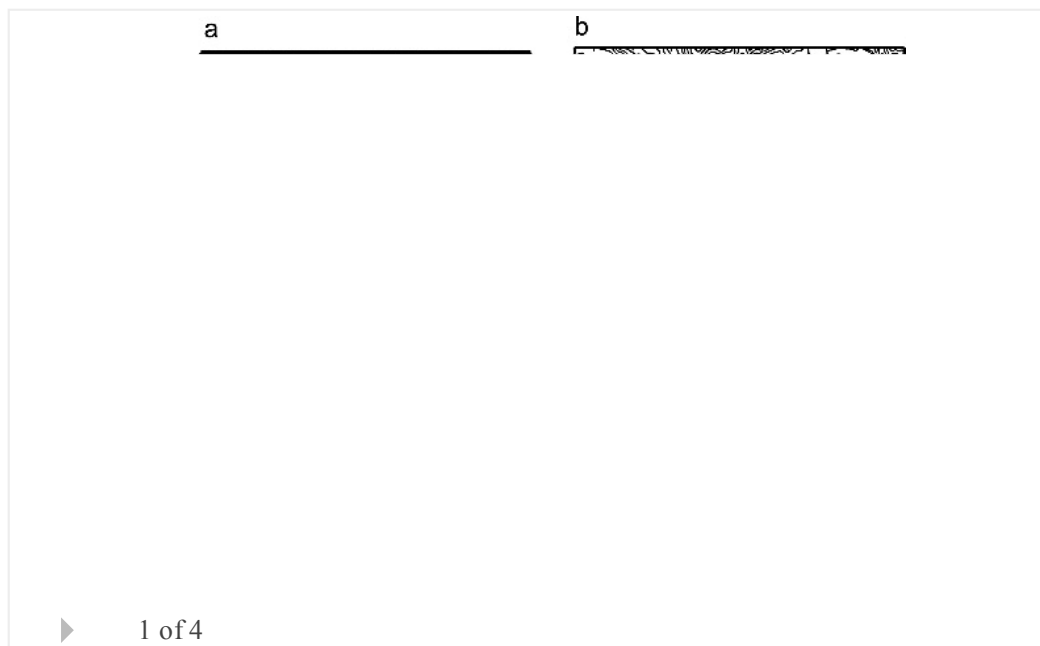
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## Ascending seismic source during an explosive eruption at Tungurahua volcano, Ecuador

Hiroyuki Kumagai, Pablo Placios, Mario Ruiz, Hugo Yepes, Tomofumi Kozono

First Published: 12 January 2011 Vol: 38, L01306 | DOI: 10.1029/2010GL045944

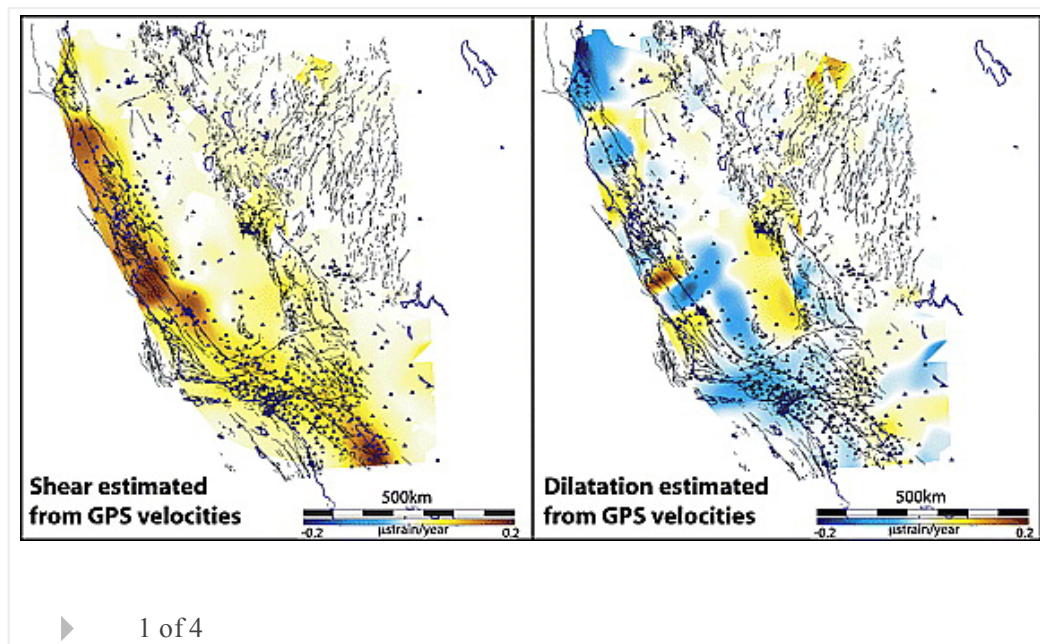




### Limitations of strain estimation techniques from discrete deformation observations

Sean C. Baxter, Sharon Kedar, Jay W. Parker, Frank H. Webb, Susan E. Owen, Ant Sibthorpe, Danan Dong

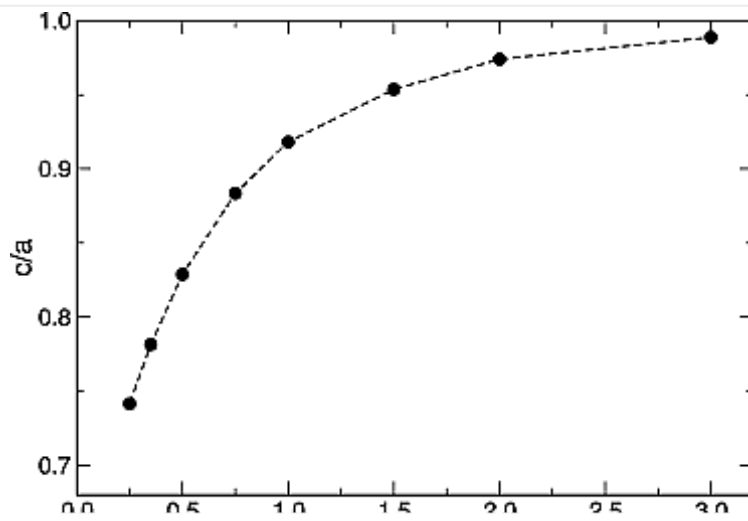
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### Modelling deformation due to a pressurized ellipsoidal cavity, with reference to the Campi Flegrei caldera, Italy

A. Amoruso, L. Crescentini

First Published: 7 January 2011 Vol: 38, L01303 | DOI: 10.1029/2010GL046030

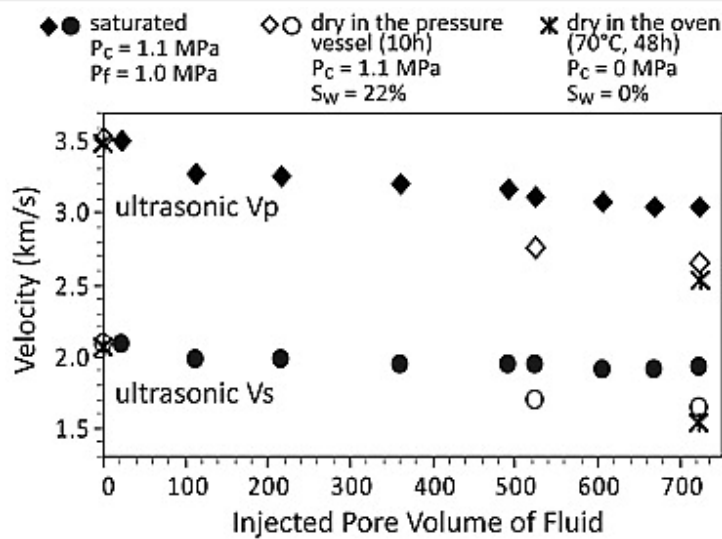


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## Laboratory measurements of elastic properties of carbonate rocks during injection of reactive CO<sub>2</sub>-saturated water

Stéphanie Vialle, Tiziana Vanorio

First Published: 7 January 2011 Vol: 38, L01302 | DOI: 10.1029/2010GL045606



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## Multiphase streaming potential in sandstones saturated with gas/brine and oil/brine during drainage and imbibition

J. Vinogradov, M. D. Jackson

First Published: 7 January 2011 Vol: 38, L01301 | DOI: 10.1029/2010GL045726

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## Linking volcanic tremor, degassing, and eruption dynamics via SO<sub>2</sub> imaging

Patricia A. Nadeau, José L. Palma, Gregory P. Waite

First Published: 6 January 2011 Vol: 38, L01304 | DOI: 10.1029/2010GL045820



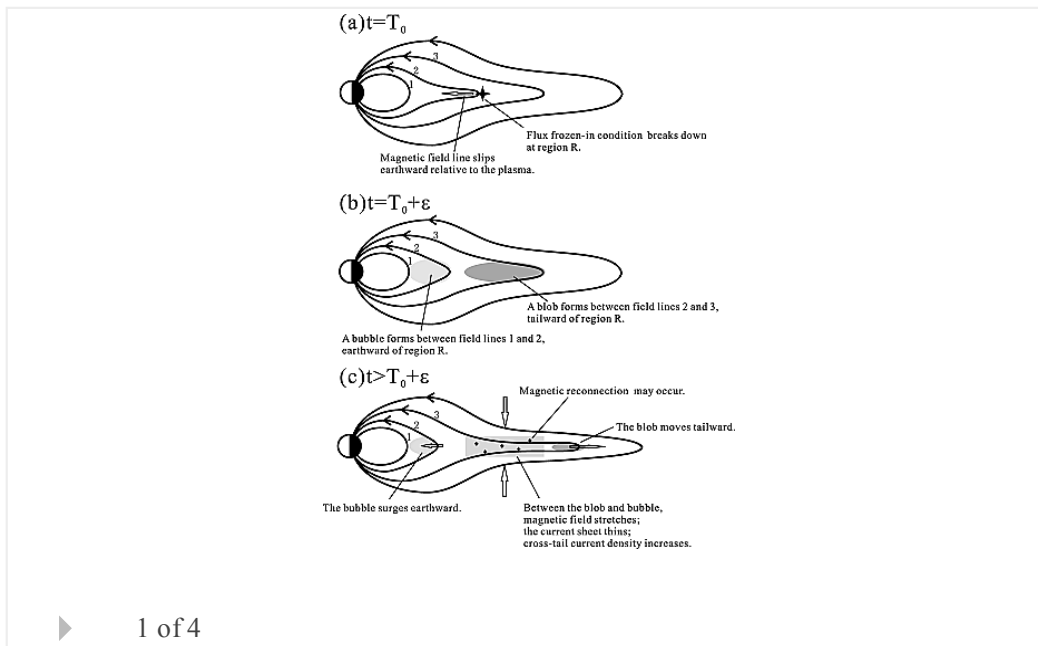
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## Space Sciences

### Accelerated thinning of the near-Earth plasma sheet caused by a bubble-blob pair

J. Yang, R. A. Wolf, F. R. Toffoletto

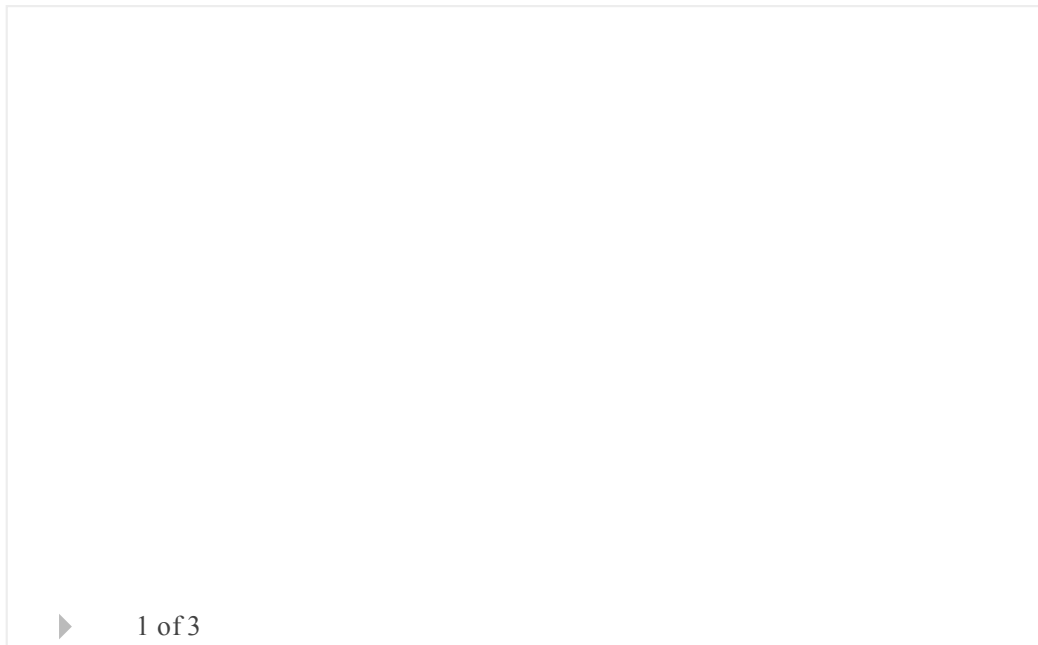
First Published: 14 January 2011 Vol: 38, L01107 | DOI: 10.1029/2010GL045993



## Observational evidence of the generation mechanism for rising-tone chorus

C. M. Cully, V. Angelopoulos, U. Auster, J. Bonnell, O. Le Contel

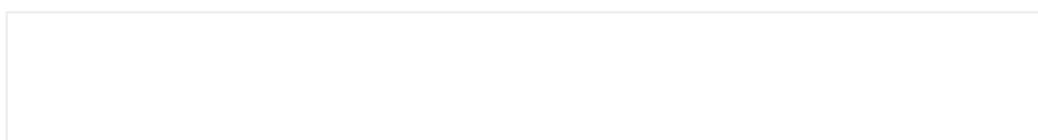
First Published: 13 January 2011 Vol: 38, L01106 | DOI: 10.1029/2010GL045793



## Ionizing wave via high-power HF acceleration

Evgeny Mishin, Todd Pedersen

First Published: 12 January 2011 Vol: 38, L01105 | DOI: 10.1029/2010GL046045



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### **On accelerated magnetosheath flows under northward IMF**

N. V. Erkaev, C. J. Farrugia, B. Harris, H. K. Biernat

First Published: 11 January 2011 Vol: 38, L01104 | DOI: 10.1029/2010GL045998

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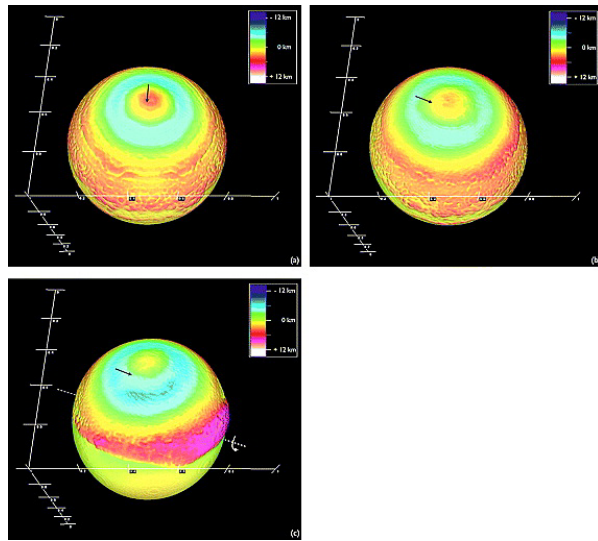
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### **Mega-ejecta on asteroid Vesta**

Martin Jutzi, Erik Asphaug

First Published: 8 January 2011 Vol: 38, L01102 | DOI: 10.1029/2010GL045517

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### Incoherent scatter radar observation of E-region vertical electric field at Arcibo

Q. H. Zhou, Y. T. Morton, C. M. Huang, N. Aponte, M. Sulzer, S. Gonzalez

First Published: 7 January 2011 Vol: 38, L01101 | DOI: 10.1029/2010GL045549

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### First radar observations in the vicinity of the plasmopause of pulsed ionospheric flows generated by bursty bulk flows

N. A. Frissell, J. B. H. Baker, J. M. Ruohoniemi, L. B. N. Clausen, Z. C. Kale, I. J. Rae, L. Kepko, K. Oksavik, R. A. Greenwald, M. L. West

First Published: 6 January 2011 Vol: 38, L01103 | DOI: 10.1029/2010GL045857

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## The Cryosphere

### Radar images of the bed of the Greenland Ice Sheet

Kenneth Jezek, Xiaoqing Wu, Prasad Gogineni, Ernesto Rodríguez, Anthony Freeman, Fernando Rodríguez-Morales, Chris D. Clark

First Published: 5 January 2011 Vol: 38, L01501 | DOI: 10.1029/2010GL045519

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