

Contents

Discussion meeting issue: The impact of the 2015/2016 El Niño on the terrestrial tropical carbon cycle: patterns, mechanisms and implications

	Article ID		Article ID
INTRODUCTION		Tropical land carbon cycle responses to 2015/16 El Niño as recorded by atmospheric greenhouse gas and remote sensing data	
New insights into the variability of the tropical land carbon cycle from the El Niño of 2015/2016 Y Malhi, L Rowland, LEOC Aragão and RA Fisher	20170298	E Gloor, C Wilson, MP Chipperfield, F Chevallier, W Buermann, H Boesch, R Parker, P Somkuti, LV Gatti, C Correia, LG Domingues, W Peters, J Miller, MN Deeter and MJP Sullivan	20170302
ARTICLES		ENSO Drives interannual variation of forest woody growth across the tropics	
A successful prediction of the record CO ₂ rise associated with the 2015/2016 El Niño RA Betts, CD Jones, JR Knight, RF Keeling, JJ Kennedy, AJ Wiltshire, RM Andrew and LEOC Aragão	20170301	SW Rifai, CAJ Girardin, E Berenguer, J del Aguila-Pasquel, CAL Dahlsjö, CE Doughty, KJ Jeffery, S Moore, I Oliveras, T Riutta, LM Rowland, AA Murakami, SD Addo-Danso, P Brando, C Burton, FE Ondo, A Duah-Gyamfi, FF Amézquita, R Freitag, FH Pacha, WH Huasco, F Ibrahim, AT Mbou, VM Mihindou, KS Peixoto, W Rocha, LC Rossi, M Seixas, JE Silva-Espejo, KA Abernethy, S Adu-Bredu, J Barlow, ACL da Costa, BS Marimon, BH Marimon-Junior, P Meir, DB Metcalfe, OL Phillips, LJT White and Y Malhi	20170410
Inter-comparison and assessment of gridded climate products over tropical forests during the 2015/2016 El Niño C Burton, S Rifai and Y Malhi	20170406	The role of satellite observations in understanding the impact of El Niño on the carbon cycle: current capabilities and future opportunities PI Palmer	20170407
Spatio-temporal patterns of thermal anomalies and drought over tropical forests driven by recent extreme climatic anomalies JC Jimenez, J Barichivich, C Mattar, K Takahashi, A Santamaría-Artigas, JA Sobrino and Y Malhi	20170300	The impact of the 2015/2016 El Niño on global photosynthesis using satellite remote sensing X Luo, TF Keenan, JB Fisher, J-C Jiménez-Muñoz, JM Chen, C Jiang, W Ju, N-V Perakalapati, Y Ryu and JM Tadić	20170409
Impact of the 2015/2016 El Niño on the terrestrial carbon cycle constrained by bottom-up and top-down approaches A Bastos, P Friedlingstein, S Sitch, C Chen, A Mialon, J-P Wigneron, VK Arora, PR Briggs, JG Canadell, P Ciais, F Chevallier, L Cheng, C Delire, V Haverd, AK Jain, F Joos, E Kato, S Lienert, D Lombardozzi, JR Melton, R Myneni, JEMS Nabel, J Pongratz, B Poulter, C Rödenbeck, R Séférian, H Tian, C van Eck, N Viovy, N Vuichard, AP Walker, A Wiltshire, J Yang, S Zaehle, N Zeng and D Zhu	20170304	Widespread reduction in sun-induced fluorescence from the Amazon during the 2015/2016 El Niño G Koren, E van Schaik, AC Araújo, K Folkert Boersma, A Gärtner, L Killaars, ML Kooreman, B Kruijt, IT van der Laan-Luijckx, C von Randow, NE Smith and W Peters	20170408
History of El Niño impacts on the global carbon cycle 1957–2017: a quantification from atmospheric CO ₂ data C Rödenbeck, S Zaehle, R Keeling and M Heimann	20170303		

- Monitoring emissions from the 2015 Indonesian fires using CO satellite data
N Nechita-Banda, M Krol, GR van der Werf, JW Kaiser, S Pandey, V Huijnen, C Clerbaux, P Coheur, MN Deeter and T Röckmann 20170307
- Quantifying immediate carbon emissions from El Niño-mediated wildfires in humid tropical forests
K Withey, E Berenguer, AF Palmeira, FDB Espírito-Santo, GD Lennox, CVJ Silva, LEOC Aragão, J Ferreira, F França, Y Malhi, LC Rossi and J Barlow 20170312
- Tree growth and stem carbon accumulation in human-modified Amazonian forests following drought and fire
E Berenguer, Y Malhi, P Brando, A Cardoso Nunes Cordeiro, J Ferreira, F França, L Chesini Rossi, M Maria Moraes de Seixas and J Barlow 20170308
- Drought-induced Amazonian wildfires instigate a decadal-scale disruption of forest carbon dynamics
CVJ Silva, LEOC Aragão, J Barlow, F Espírito-Santo, PJ Young, LO Anderson, E Berenguer, I Brasil, I Foster Brown, B Castro, R Farias, J Ferreira, F França, PMLA Graça, L Kirsten, AP Lopes, C Salimon, MA Scaranello, M Seixas, FC Souza and HAM Xaud 20180043
- Vulnerability of Amazonian forests to repeated droughts
LO Anderson, G Ribeiro Neto, AP Cunha, MG Fonseca, Y Mendes de Moura, R Dalagnol, FH Wagner and LEOC Aragão 20170411
- Changes in surface hydrology, soil moisture and gross primary production in the Amazon during the 2015/2016 El Niño
E van Schaik, L Killaars, NE Smith, G Koren, LPH van Beek, W Peters and IT van der Laan-Luijkx 20180084
- ENSO effects on the transpiration of eastern Amazon trees
M Brum, J Gutiérrez López, H Asbjornsen, J Licata, T Pypker, G Sanchez and RS Oliveira 20180085
- Modelling tropical forest responses to drought and El Niño with a stomatal optimization model based on xylem hydraulics
CB Eller, L Rowland, RS Oliveira, PRL Bittencourt, FV Barros, ACL da Costa, P Meir, AD Friend, M Mencuccini, S Sitch and P Cox 20170315
- Interactive effects of tree size, crown exposure and logging on drought-induced mortality
A Shenkin, B Bolker, M Peña-Claros, JC Licona, N Ascarrunz and FE Putz 20180189
- Dry and hot: the hydraulic consequences of a climate change-type drought for Amazonian trees
CG Fontes, TE Dawson, K Jardine, N McDowell, BO Gimenez, L Anderegg, R Negrón-Juárez, N Higuchi, PVA Fine, AC Araújo and JQ Chambers 20180209
- Short-term effects of drought on tropical forest do not fully predict impacts of repeated or long-term drought: gas exchange versus growth
P Meir, M Mencuccini, O Binks, AL da Costa, L Ferreira and L Rowland 20170311

CORRECTIONS

- Correction to 'State-of-the-art and future directions for extinction as a translational model for fear and anxiety'
MG Craske, D Hermans and B Vervliet 20180432