



Supplement of

Impacts of aviation fuel sulfur content on climate and human health

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55 **Figure S1: Flight tracks aircraft field campaigns used to evaluate the nitrate-extended version of TOMCAT-**
 56 **GLOMAP-mode coupled model – taken from Heald et al. (2011).**

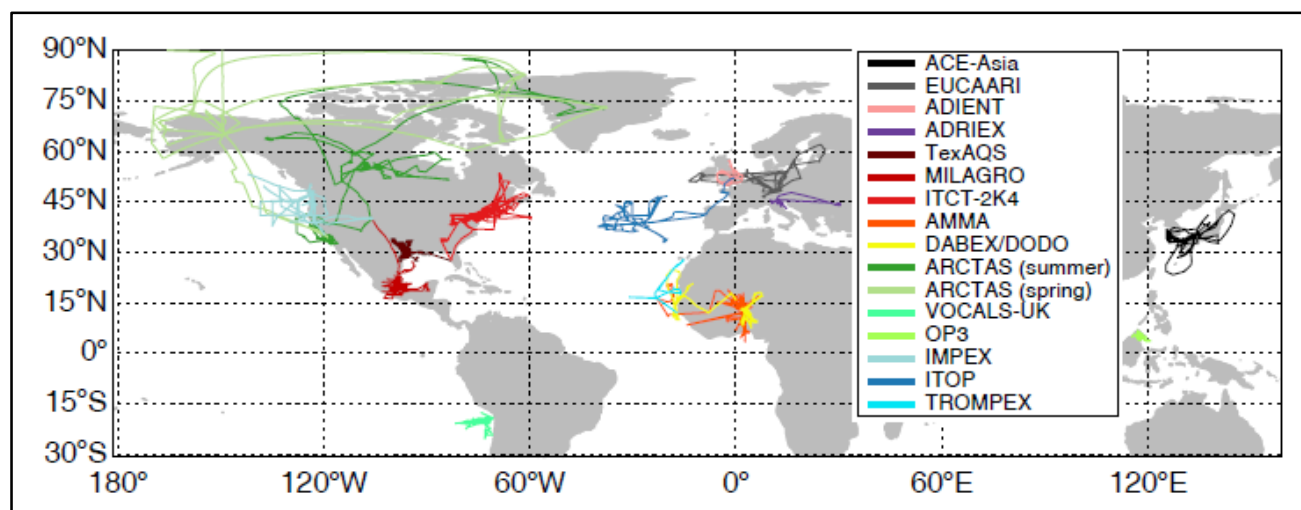


Table S1: Aircraft campaigns collated used to obtain sulfate, nitrate, ammonium and organic carbon observational data – adapted from Heald et al. (2011).

Campaign	Aircraft	Location	Date	Regional Class	Reference
ACE-Asia	C-130	NW Pacific, near Japan	30/03 – 04/05/01	Pollution (mid-latitude)	(Maria et al., 2004)
ITCT-2K4	NOAA P3	E North America	05/07 – 15/08/04	Pollution/Fire (mid-latitude)	(Sullivan et al., 2006)
ITOP	BAE-146	Azores	12/07 – 03/08/04	Remote (mid-latitude)	(Lewis et al., 2007)
ADRIEX	BAE-146	N Italy; Adriatic & Black Sea	27/08 – 06/09/04	Pollution (mid-latitude)	(Crosier et al., 2007)
DABEX	BAE-146	W Africa	13/01 – 01/02/06	Fire (tropics)	(Capes et al., 2008)
DODO	BAE-146	W Africa	03/02 – 16/02/06	Fire (tropics)	(Capes et al., 2008)
MILAGRO	C130	Mexico city	04/03 – 31/03/06	Pollution/Fire (sub-tropics)	(DeCarlo et al., 2008)
IMPEX	C130	W North America & E Pacific	17/04 – 15/05/06	Remote + aged (mid-latitude)	(Dunlea et al., 2009)
AMMA	BAE-146	W Africa	20/07 – 25/08/06	Fire (tropics)	(Capes et al., 2009)
TexAQS	NOAA P3	Texas	11/09 – 13/10/06	Pollution (mid-latitudes)	(Bahreini et al., 2009)
ADIENT	BAE-146	EU/Atlantic	18/12/07 -25/09/08	Pollution (mid-latitudes)	(Morgan et al., 2010)
EUCAARI	BAE-146	N EU	06/05 – 22/05/08	Pollution (mid-latitudes)	(Morgan et al., 2010)
ARCTAS	DC-8	Arctic/N EU	01/04/ - 20/04/08 18/06 – 13/07/08	Fire (high-latitudes)	(Cubison et al., 2011)
OP3	BAE-146	Borneo	10/07 – 20/07/08	Remote (tropical)	(Robinson et al., 2011)
VOCALS-UK	BAE-146	Eastern S Pacific	27/10 – 13/11/08	Remote (tropical)	(Allen et al., 2011)

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