Supporting Information

Aircraft measurements of total mercury and monomethyl mercury in summertime marine stratus cloud water from coastal California, USA

AUTHORS: WEISS-PENZIAS, Peter [1 *]; SOROOSHIAN, Armin [2,3]; COALE, Kenneth [4]; HEIM, Wesley [4]; CROSBIE, Ewan [5]; DADASHAZAR, Hossein [2]; MACDONALD, Alexander B. [2]; WANG, Zhen [2]; JONSSON, Haflidi [6]

(1) *Department of Microbiology and Environmental Toxicology, UC Santa Cruz, Santa Cruz, CA 95064, United States;* ***(2)*** *Department of Chemical and Environmental Engineering, University of Arizona, Tucson, AZ 85721, United States;* ***(3)*** *Department of Hydrology and Atmospheric Sciences, University of Arizona, Tucson, AZ 85721, United States;* ***(4)*** *Moss Landing Marine Labs, Moss Landing, CA 95039, United States;* ***(5)*** *NASA Langley Research Center, Hampton, VA 23666, United States;* ***(6)*** *Naval Postgraduate School, Monterey, CA 93943, United States*

[*]Corresponding author: Peter Weiss-Penzias (University of California, Santa Cruz, 1156 High St. Santa Cruz, CA 95064, pweiss@ucsc.edu)

Supporting Information Summary: 4 Pages including cover page and 2 figures

Figure S-1: HYSPLIT back trajectory ensembles representative of the air mass histories for each flight (Stein et al., 2015[1]; Rolph et al., 2017[2]). Flights classified as continental based on [nss-Ca^{2+}] were # 4, 10, 15-1, and 16.

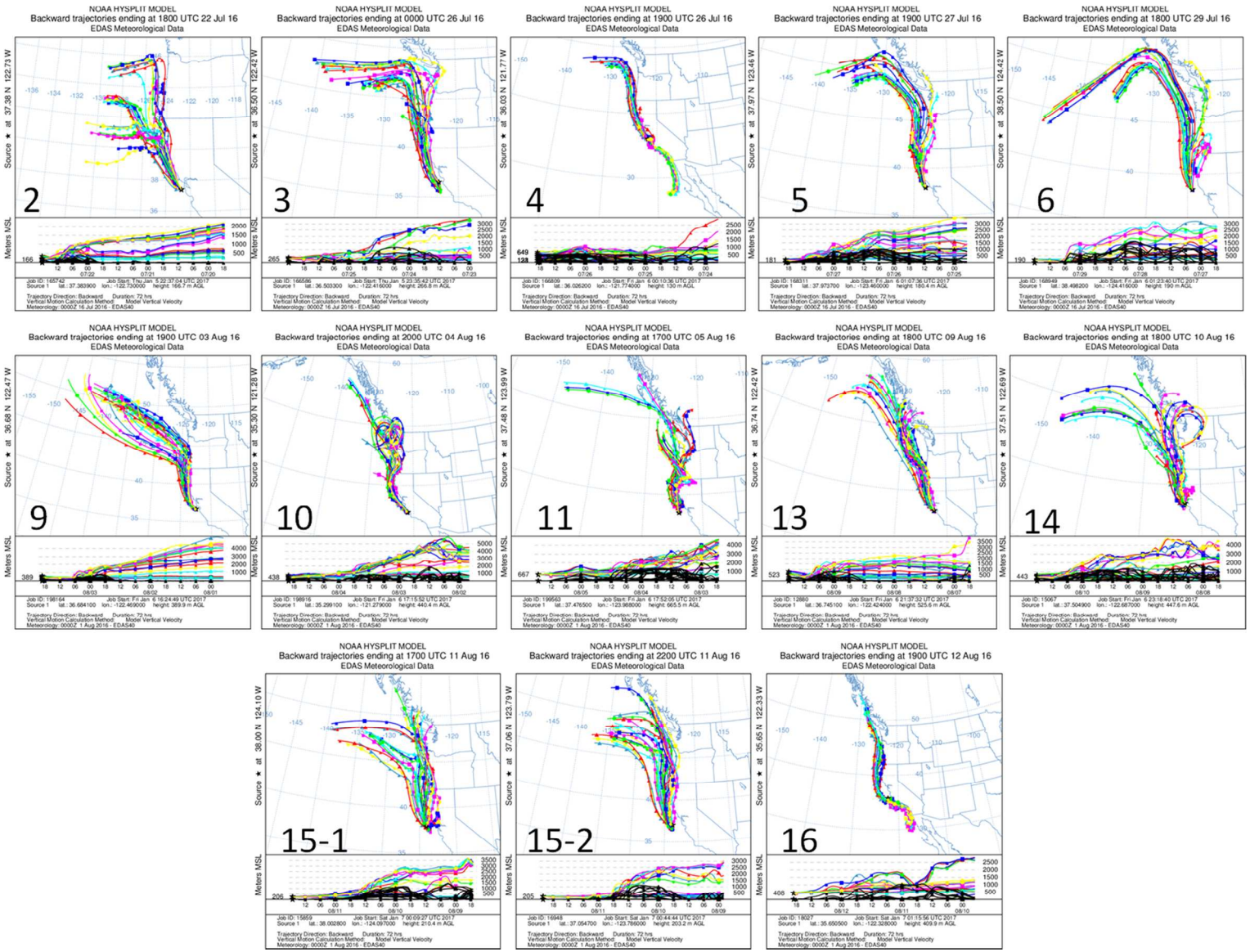
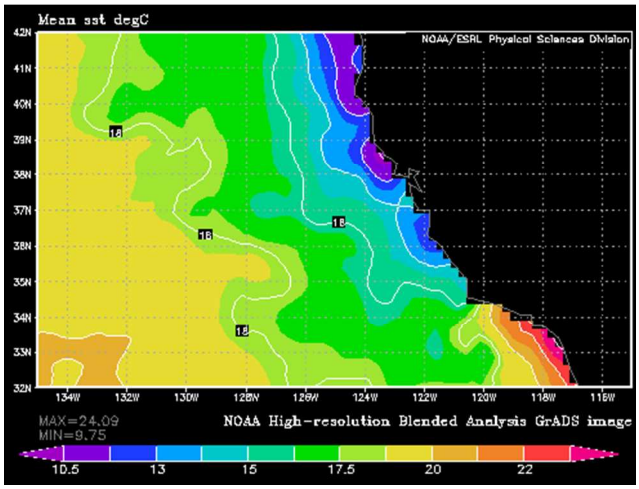
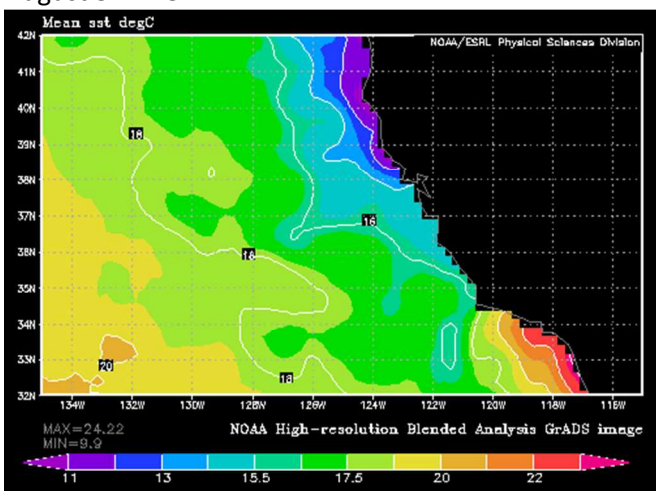


Figure S-2: Sea surface temperature from NOAA/ESRL for selected research flights (RF5, RF9, RF16).

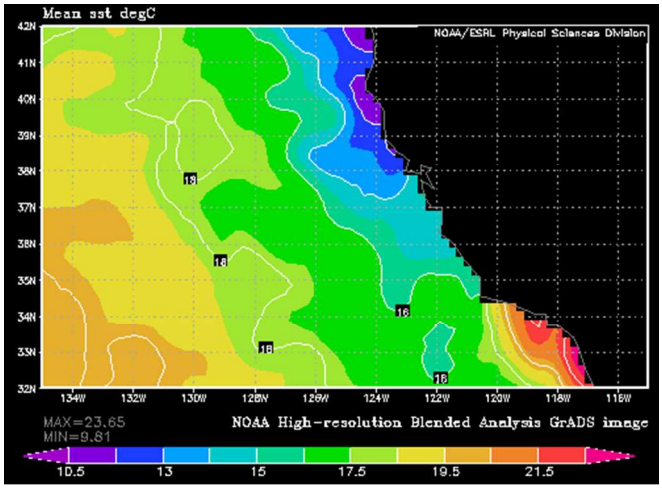
July 27 – RF5



August 3 – RF9



August 12 – RF16



References:

1. Stein, A.F., Draxler, R.R, Rolph, G.D., Stunder, B.J.B., Cohen, M.D., and Ngan, F., (**2015**). NOAA's HYSPLIT atmospheric transport and dispersion modeling system, *Bull. Amer. Meteor. Soc.*, 96, 2059-2077, http://dx.doi.org/10.1175/BAMS-D-14-00110.1

2. Rolph, G., Stein, A., and Stunder, B., (**2017**). Real-time Environmental Applications and Display sYstem: READY. *Environmental Modelling & Software*, 95, 210-228, https://doi.org/10.1016/j.envsoft.2017.06.025