

Supporting Information for

**Temporal and spatial variability of daytime land surface temperature in Houston:  
Comparing DISCOVER-AQ aircraft observations with the WRF model and  
satellites**

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## Contents of this file

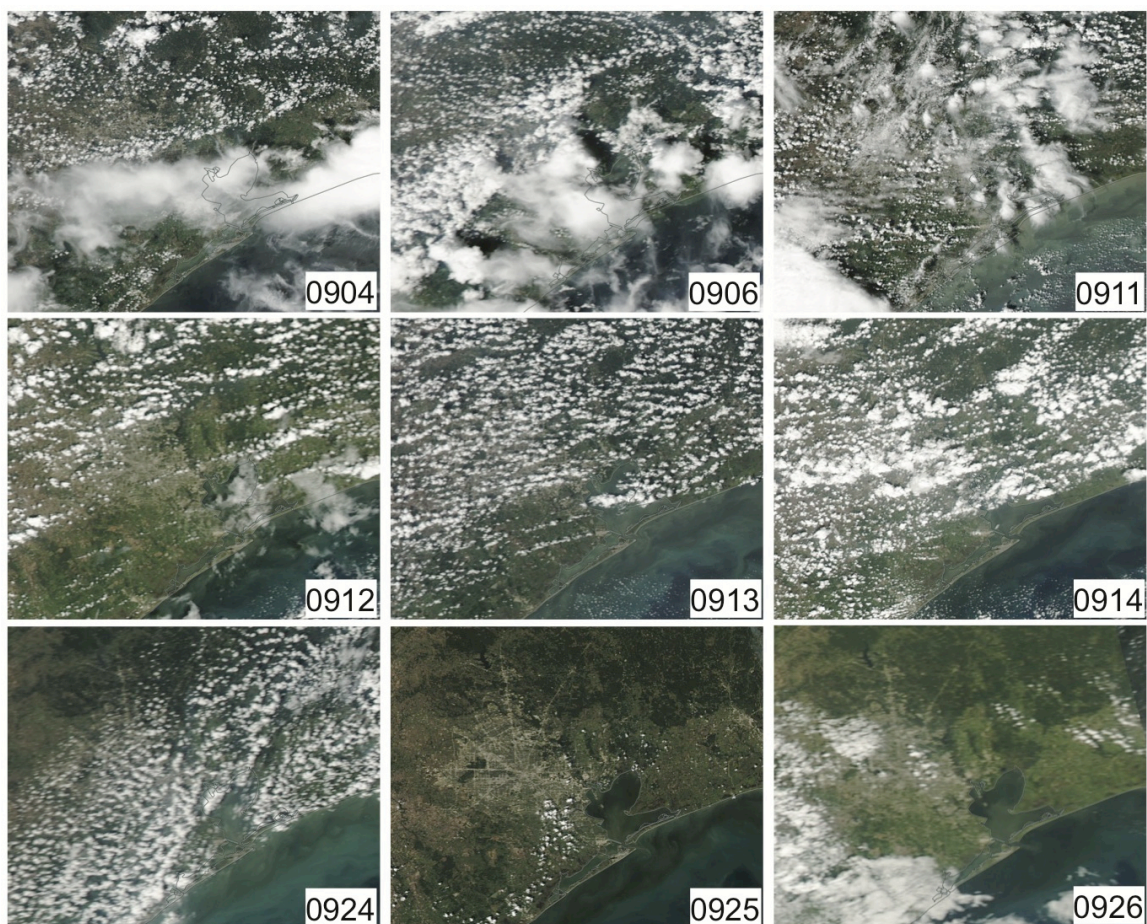
Figure S1

Figure S2

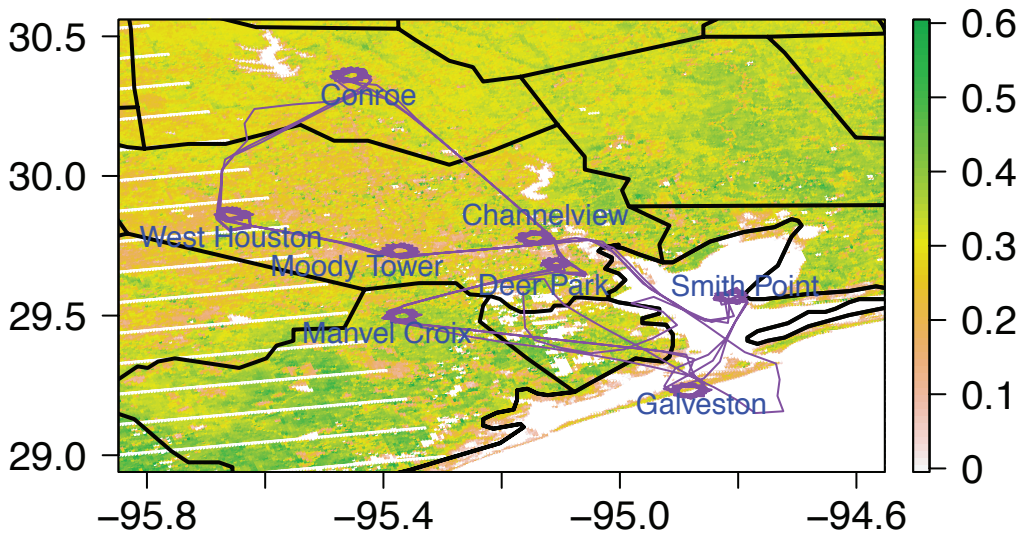
Figure S3

## Introduction

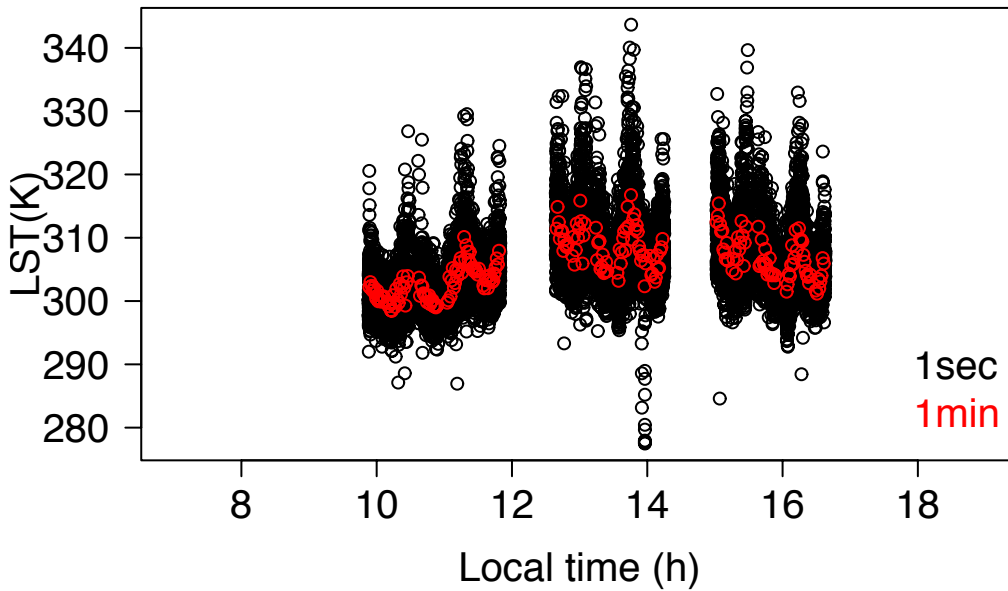
This supporting information includes the cloud and surface conditions indicated by the true-color Aqua MODIS images (Figure S1) on all flight days during the DISCOVER-AQ Houston period introduced in Sections 1 and 2.1. The VIIRS EVI is shown in Figure S2 to complement the VIIRS NDVI in Figure 1, and it is mentioned in Sections 2.2 and 3.2. The comparison of surface temperatures from the 1-second and the 1-minute averaged datasets is shown in Figure S3 and cited in Section 3.2 of the main text.



**Figure S1.** Cloud and surface conditions indicated by the true-color Aqua MODIS images on all flight days during the DISCOVER-AQ Houston campaign period, adapted from the EOSDIS Worldview (<https://earthdata.nasa.gov/labs/worldview/>).



**Figure S2.** VIIRS EVI on September 25, 2013 with the P-3B flight track overlaid in purple line and the focused sites labeled in dark blue. Coastal lines and county borders are shown in black lines.



**Figure S3.** Time series of surface temperature measurements from P-3B at six inland locations in the Greater Houston area on September 25, 2013. Black and red dots represent surface temperature measurements from the 1-second and 1-minute averaged datasets, respectively.