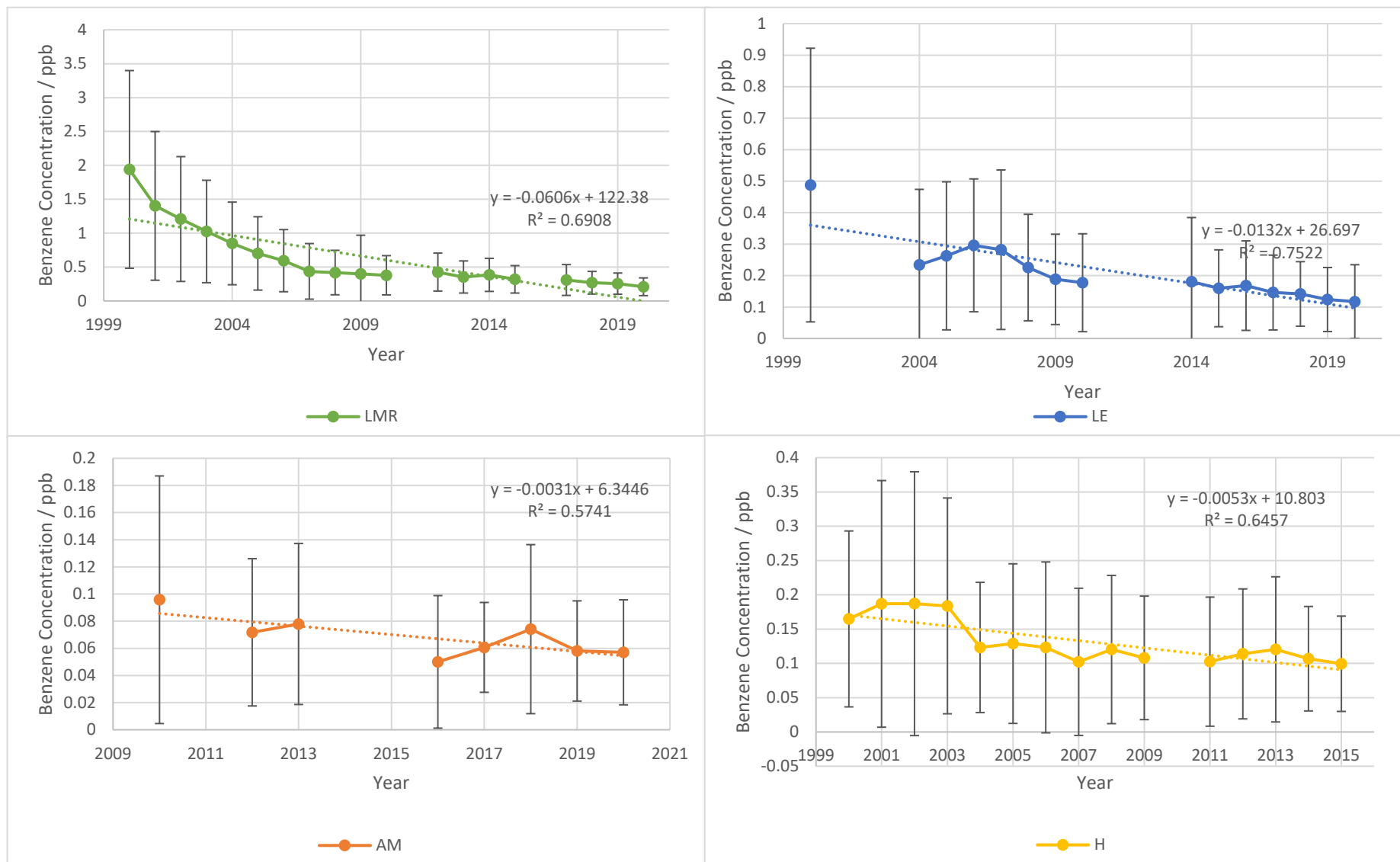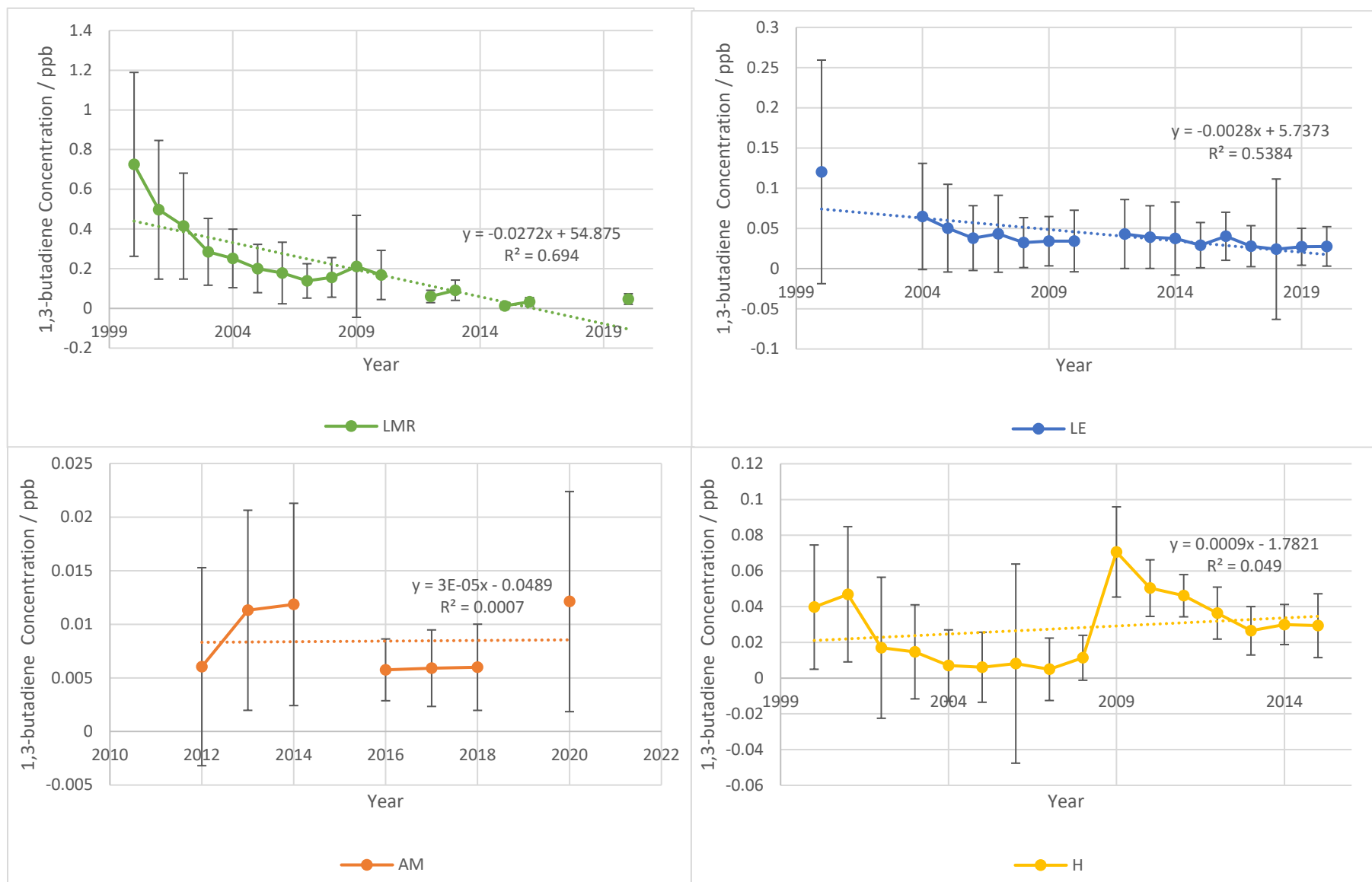**S1:** Line plots of hourly benzene concentrations averaged per year with sufficient data availability for each of the four sites. Linear lines of best fit across entire dataset, along with appropriate equations have been imposed on the graphs.
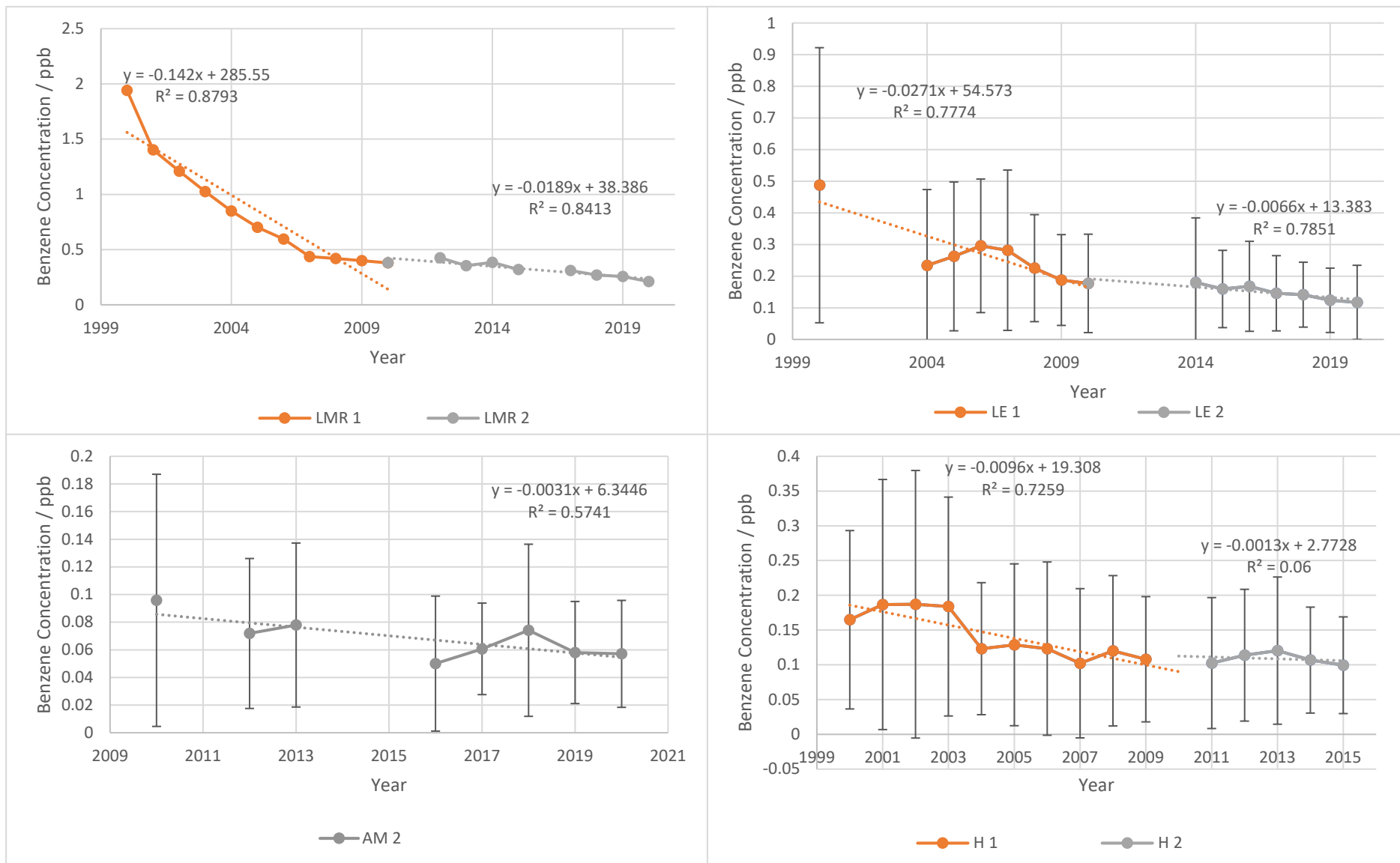
S2: Line plots of hourly 1,3-butadiene concentrations averaged per year with sufficient data availability for each of the four sites. Linear lines of best fit across entire dataset, along with appropriate equations have been imposed on the graphs.

Top-left panel (LMR): y-axis "1,3-butadiene Concentration / ppb", x-axis "Year"; equation $y = -0.0272x + 54.875$, $R^2 = 0.694$; legend: LMR

Top-right panel (LE): y-axis "1,3-butadiene Concentration / ppb", x-axis "Year"; equation $y = -0.0028x + 5.7373$, $R^2 = 0.5384$; legend: LE

Bottom-left panel (AM): y-axis "1,3-butadiene Concentration / ppb", x-axis "Year"; equation $y = 3E{-}05x - 0.0489$, $R^2 = 0.0007$; legend: AM

Bottom-right panel (H): y-axis "1,3-butadiene Concentration / ppb", x-axis "Year"; equation $y = 0.0009x - 1.7821$, $R^2 = 0.049$; legend: H

S3: Table presenting the relative statistical significance for each linear regression performed on dataset for each site and each pollutant

Site	Pollutant	p value	Statistical significance
LMR	Benzene	1.04E-05	$p < 0.05$
	1,3-butadiene	6.15E-05	$p < 0.05$
LE	Benzene	2.82E-05	$p < 0.05$
	1,3-butadiene	0.000800282	$p < 0.05$
AM	Benzene	0.029411926	$p < 0.05$
	1,3-butadiene	0.955889569	$p > 0.05$
H	Benzene	0.00030717	$p < 0.05$
	1,3-butadiene	0.41013216	$p > 0.05$

S4: Line plots of hourly benzene concentrations averaged per year with sufficient data availability for each of the four sites. Dataset has been split into two 10-year period (2000-2010, 2010-2020) where data is available. Linear lines of best fit across each decadal subsection, along with appropriate equations, have been imposed on the graphs.

S5: Line plots of hourly 1,3-butadiene concentrations averaged per year with sufficient data availability for each of the four sites. Dataset has been split into two 10-year period (2000-2010, 2010-2020) where data is available. Linear lines of best fit across each decadal subsection, along with appropriate equations, have been imposed on the graphs.