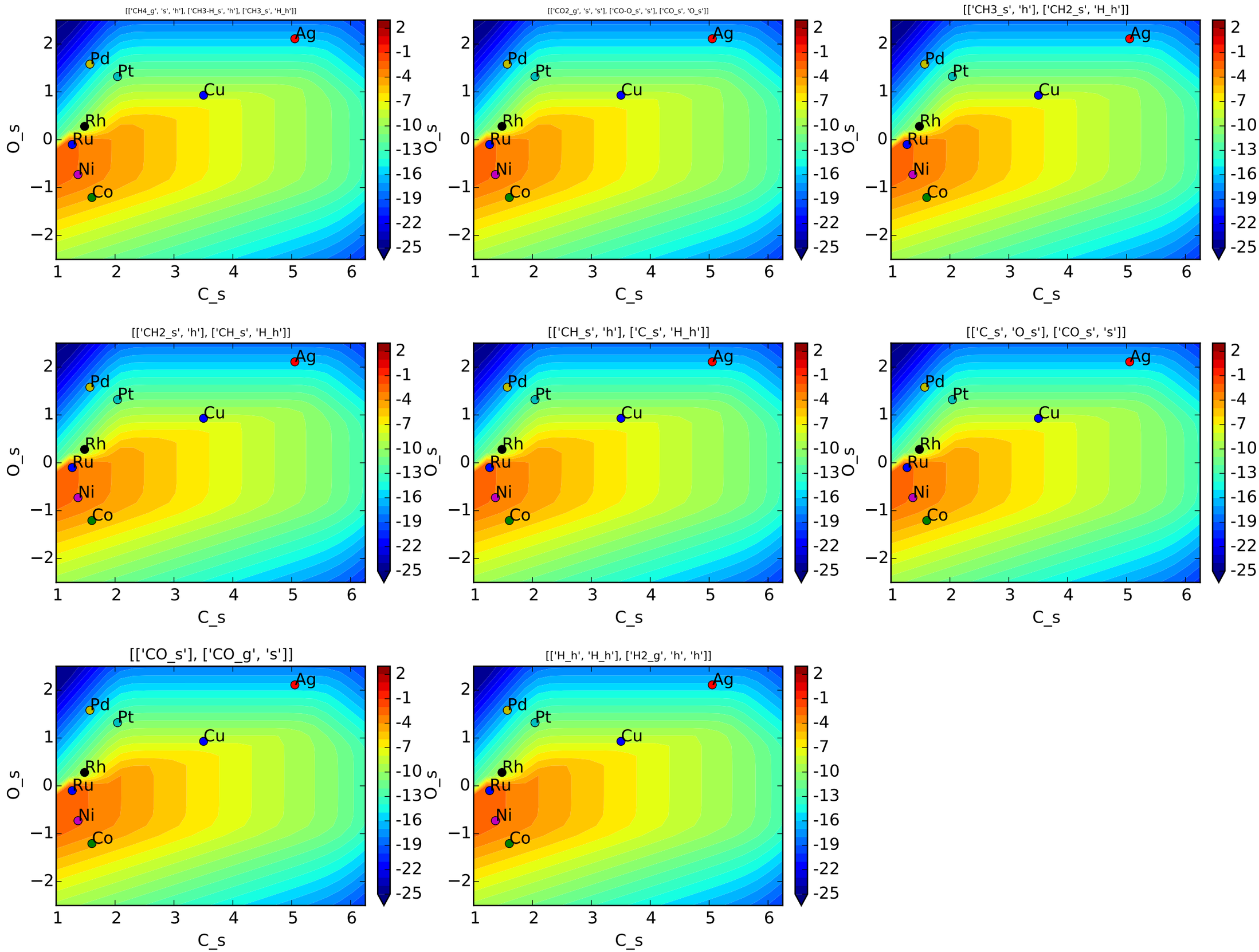
[['CH4_g', 's', 'h'], ['CH3-H_s', 'h'], ['CH3_s', 'H_h']]
[['CO2_g', 's', 's'], ['CO-O_s', 's'], ['CO_s', 'O_s']]
[['CH3_s', 'h'], ['CH2_s', 'H_h']]
[['CH2_s', 'h'], ['CH_s', 'H_h']]
[['CH_s', 'h'], ['C_s', 'H_h']]
[['C_s', 'O_s'], ['CO_s', 's']]
[['CO_s'], ['CO_g', 's']]
[['H_h', 'H_h'], ['H2_g', 'h', 'h']]
Ag
Pd
Pt
Cu
Rh
Ru
Ni
Co
O_s
C_s
2
-1
-4
-7
-10
-13
-16
-19
-22
-25