

State vector elements	$^{12}\text{CH}_4$	$^{13}\text{CH}_4$	H_2O	CO_2	CO	Surface albedo
A priori values (x_a)	As model MIPAS atmosphere					Between 0.1 and 0.6 simulating vegetation and desert conditions
Covariance standard deviation	10 %	10–100 %	10 %	10 %	10 %	Not assessed