Table 2: Parameter setting of competitors

	FastHyDe	NAILRMA	SSTV	LRMR	AdeHyDe	L1HyMixDe
			Washinton DC Mall dataset			
Case 1	k = 8	b = 20, s = 8	$\lambda_{SSTV} = 0.0032$, $\mu_{SSTV} = 0.0032$	r = 8, p = 0.0100	$k_{init} = 8$	k = 8
Case 2			$\lambda_{SSTV} = 0.1000$, $\mu_{SSTV} = 0.3162$	r = 3, p = 0.0300		
Case 3			$\lambda_{SSTV} = 0.0316$, $\mu_{SSTV} = 0.0316$	r = 6, p = 0.0100		
Case 4			$\lambda_{SSTV} = 0.1000$, $\mu_{SSTV} = 0.3162$	r = 3, p = 0.0300		
			Pavia University dataset			
Case 1	k = 8	b = 20, s = 8	$\lambda_{SSTV} = 0.0100$, $\mu_{SSTV} = 0.01$	r = 6, p = 0.0100	$k_{init} = 8$	k = 8
Case 2			$\lambda_{SSTV} = 0.1000$, $\mu_{SSTV} = 0.3162$	r = 2, p = 0.0300		
Case 3			$\lambda_{SSTV} = 0.0316$, $\mu_{SSTV} = 0.0316$	r = 6, p = 0.0100		
Case 4			$\lambda_{SSTV} = 0.1000$, $\mu_{SSTV} = 0.3162$	r = 2, p = 0.0300		
			TERRAIN dataset			
	k = 6	b = 20, s = 8	$\lambda_{SSTV} = 0.0316$, $\mu_{SSTV} = 0.1000$	r = 3, p = 0.0900	$k_{init} = 6$	k = 6
			Hyperion Cuprite dataset			
	k = 7	b = 20, s = 8	$\lambda_{SSTV} = 0.0316$, $\mu_{SSTV} = 0.0316$	r = 2, p = 0.0100	$k_{init} = 7$	k = 7
			Tiangong-1 dataset			
	k = 3	b = 20, s = 8	$\lambda_{SSTV} = 0.0032$, $\mu_{SSTV} = 0.0032$	r = 2, p = 0.0100	$k_{init} = 3$	k = 3

Note:
k: dimension of subspace used in FastHyDe, AdeHyDe and L1HyMixDe
b: block size
s: step size
r: the upper bound of the rank of each patch
p: the percentage of the sparse noise. True values of p are assigned in LRMR when denoising the simulated images.
λ_{SSTV} : parameter of regularization imposing on sparse noise
μ_{SSTV} = parameter of regularization imposing on clean image
k_{init}: inital dimension of subspace in AdeHyDe, which can update the dimension of subspace automatically