

## Two Sample Kolmogorov-Smirnov Test

Original samples		Sorted samples		Ssize =		P_value =		
Sample 1	Sample 2	Sample ID	Sample 1	Sample 2	14	32	98.87%	
					x	F1(x)	Dmax =	
							14.29%	
						F2(x)	D(-)	
							D(+)	
20.0	19.6	1	18.3	18.2	18.2	0.00%	3.13%	3.13%
18.6	21.5	2	18.6	18.4	18.3	7.14%	3.13%	4.02%
21.0	18.4	3	19.1	18.4	18.4	7.14%	9.38%	2.23%
21.6	21.2	4	19.3	18.6	18.6	14.29%	15.63%	1.34%
19.5	18.6	5	19.5	18.6	18.9	14.29%	18.75%	4.46%
20.7	18.6	6	19.8	18.9	19.0	14.29%	21.88%	7.59%
21.6	20.7	7	19.9	19.0	19.1	21.43%	21.88%	0.45%
19.8	21.5	8	20.0	19.2	19.2	21.43%	25.00%	3.57%
19.1	20.0	9	20.3	19.3	19.3	28.57%	31.25%	2.68%
19.9	20.5	10	20.6	19.3	19.4	28.57%	34.38%	5.80%
20.3	18.2	11	20.7	19.4	19.5	35.71%	37.50%	1.79%
19.3	19.5	12	21.0	19.5	19.6	35.71%	40.63%	4.91%
20.6	19.9	13	21.6	19.6	19.8	42.86%	40.63%	2.23%
18.3	19.2	14	21.6	19.9	19.9	50.00%	43.75%	6.25%
	20.5	15		20.0	20.0	57.14%	46.88%	10.27%
	19.4	16		20.3	20.3	64.29%	50.00%	14.29%
	20.8	17		20.4	20.4	64.29%	53.13%	11.16%
	20.3	18		20.5	20.5	64.29%	65.63%	1.34%
	19.3	19		20.5	20.6	71.43%	65.63%	5.80%
	19.3	20		20.5	20.7	78.57%	71.88%	6.70%
	20.4	21		20.5	20.8	78.57%	81.25%	2.68%
	20.5	22		20.7	21.0	85.71%	81.25%	4.46%
	18.4	23		20.7	21.2	85.71%	87.50%	1.79%
	20.8	24		20.8	21.2	85.71%	87.50%	1.79%
	21.2	25		20.8	21.3	85.71%	93.75%	8.04%
	20.7	26		20.8	21.5	85.71%	100.00%	14.29%
	18.9	27		21.2	21.6	100.00%	100.00%	0.00%
	21.3	28		21.2				14.29%
	21.3	29		21.3				
	20.8	30		21.3				
	20.5	31		21.5				
	19.0	32		21.5				

$$N_e = \frac{N_1 \cdot N_2}{N_1 + N_2}$$

$$\lambda = \left[ \sqrt{N_e} + 0.12 + \frac{0.11}{\sqrt{N_e}} \right] \cdot D_{max}$$

$$P\_value = 2 \sum_{j=1}^{\infty} (-1)^{j-1} \exp[-2(j\lambda)^2]$$