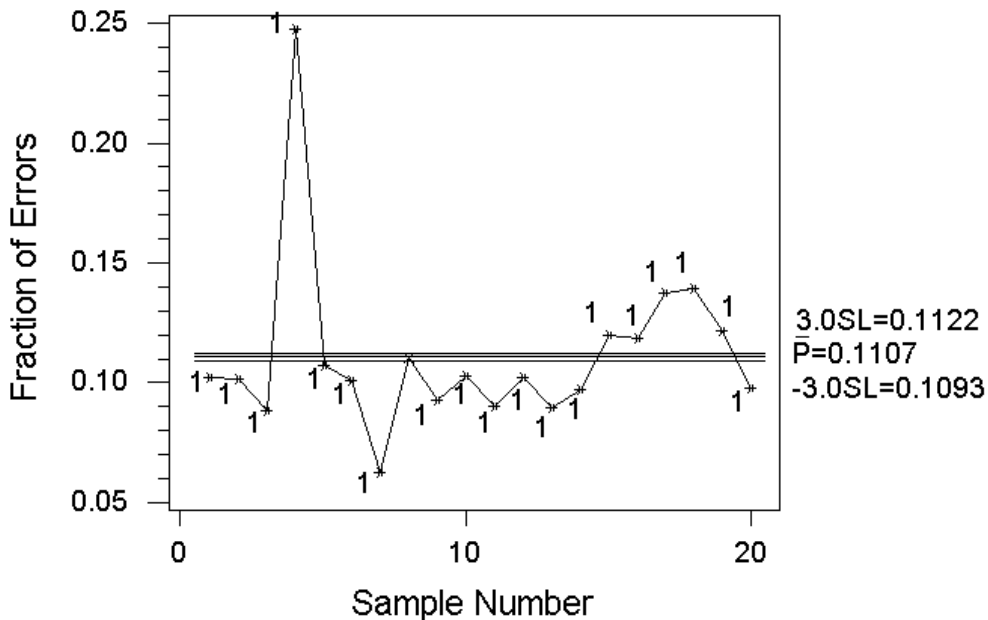


## Special cause or Common cause?

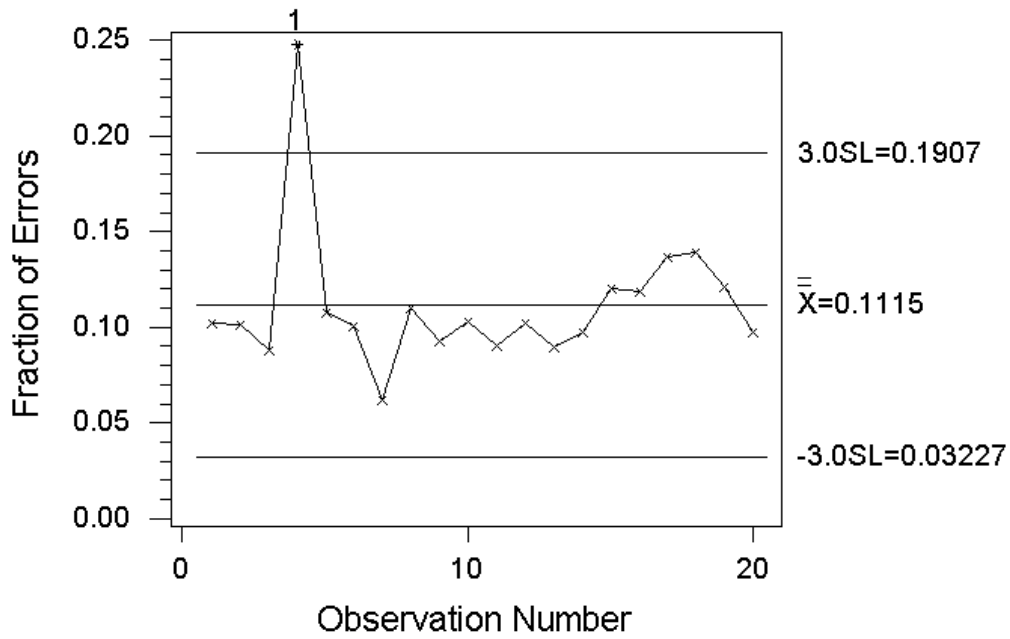
A student in STAT 495 conducted a study on the performance and reliability of an Internet access system. The study focused on the question: "How often do users get the requested answer from a company's Internet access system?" Specifically, proxy servers for a company handle all Internet access requests and count the number of successful (and unsuccessful) attempts. The table below gives the daily number of Internet access attempts and the number of such attempts that resulted in an error message for 20 consecutive days.

Day	Attempts	Errors	Faction	Day	Attempts	Errors	Fraction
1	412,670	42,104	0.102	11	446,823	40,405	0.090
2	395,736	40,286	0.102	12	431,661	44,198	0.102
3	401,765	35,399	0.088	13	434,353	39,047	0.090
4	395,422	97,981	0.248	14	406,232	39,455	0.097
5	422,223	45,346	0.107	15	402,454	48,292	0.120
6	433,234	43,699	0.101	16	403,312	47,720	0.118
7	396,788	24,752	0.062	17	387,782	53,173	0.137
8	411,383	45,391	0.110	18	355,500	49,474	0.139
9	423,348	39,179	0.093	19	372,441	45,222	0.121
10	474,053	48,680	0.103	20	415,813	40,583	0.098
Total						8,222,993	910,386

p-Chart for Fraction of Errors



Individuals Chart for Fraction of Errors



Moving Range Chart for Fraction of Errors

