

330 | 26 | 0
Views CrossRef citations to date Altmetric

Original Articles

Designs of moving average control chart

H. B. Wong*, F. F. Gan & T. C. Chang‡

Pages 47-62 | Received 13 Jun 2002, Accepted 24 Feb 2003, Published online: 13 May 2010

Cite this article <https://doi.org/10.1080/0094965031000105890>

Sample our
Computer Science
Journals

>> Sign in here to start your access
to the latest two volumes for 14 days

[Full Article](#) [Figures & data](#) [References](#) [Citations](#) [Metrics](#)[Reprints & Permissions](#)[Read this article](#)

Abstract

The cumulative sum (CUSUM) and exponentially weighted moving average (EWMA) charts are often recommended for process monitoring when a quick detection of small or moderate sustained shifts in the process mean is desired. In general, the moving average (MA) chart is slightly less sensitive than the EWMA or CUSUM chart in detecting the intended shift but the overall performance is quite similar. The in-control run length distributions of the MA chart and the corresponding EWMA chart are nearly identical. The MA chart is much simpler to understand because it is based on the simple average, and the EWMA chart is more complex because it is based on the exponentially weighted moving average.

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

*Ms Wong is a graduate student in the Department of Statistics and Applied Probability.

‡Dr Chang is an Assistant Professor in the Faculty of Business Administration.

Additional information

Notes on contributors

H. B. Wong*

*Ms Wong is a graduate student in the Department of Statistics and Applied Probability.

T. C. Chang‡

‡Dr Chang is an Assistant Professor in the Faculty of Business Administration.

Related research ⓘ

People also read

Recommended articles

Cited by 26



About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

Information for

Authors

R&D professionals

Editors

Librarians

Societies

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Help and information

Help and contact

Newsroom

All journals

Books

Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2024 Informa UK Limited Privacy policy Cookies Terms & conditions

Accessibility



Taylor & Francis Group
an informa business

Registered in England & Wales No. 3099067
5 Howick Place | London | SW1P 1WG

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings