Probability Management

Getting Started With

Chance Calc™

| | SIP Input | Chance of Whatever | Graphs | Insert Average | Insert Percentile | Insert Tail Risk | Insert Std Dev | Save as CSV | ChanceCalc Settings | About |

File Home Insert Draw Page Layout Formulas Data Review View Developer

E3 =COUNTIF(Output_1, ">" & Budget) / PM_Trials

	A	B	C	D	E
1		Under Average	Simulated	Chance of	
2		Assumptions	Average	Being	
3	Operating Costs	$0	$160	Beyond Budget	75%
4	Revenue	$1,000,000	$600,000	Below Projection	50%
5	Project completion	10 weeks	15 Weeks	Behind Schedule	88%

Contents

1. Basic Commands
   a) SIP Input
   b) Chance of Whatever
   c) Graphs
   d) Insert Average, Standard Deviation, & Percentile
   e) Insert Tail Risk
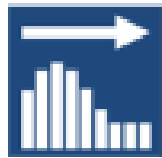   f) Save as CSV
   g) Settings and About
2. Reading Libraries

Probability Management

Determine the chance that any formula is greater or less than any specified target

Determine the simulated average of any formula

Determine the simulated average of results beyond a specified target

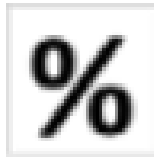Settings, including number of trials & Chance percent rounding
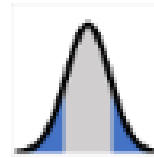
SIP Input	Chance of Whatever	Graphs ∨	Avg Insert Average	% Insert Percentile	Insert Tail Risk	σ Insert Std Dev	Save as CSV	ChanceCalc Settings	About

Select SIP Libraries and input into your model

Create histograms or cumulative charts of any formula or scatter plots of any pair of formulas

Determine a specified percentile of any formula

Standard Deviation

Save simulated results in CSV format

Check version number

-1-

a. SIP Input

Insert SIPs ✕

Destination
`C1`

Library
`Gaussian Copula Development Time Library` ▼

Open Local Lib...   **Use Clipboard**

Filter
`[                    ]`

☐ Sort alphabetically

```
Accounts
Products
Orders
Fulfillment
Marketing
```

☐ Insert Name   `To Left` ▼

Sparkline Location
`C1`

OK   **Cancel**

1. Select destination cells. It saves time to do this before clicking SIP Input

2a. Open a copied SIP library or link to library

2b. Open a SIP library on your local machine

3. Select SIPs to Insert

Optionally insert SIP names

Optionally specify Sparkline location

Information on active library appears in A1:A4. If these cells are not empty, you are prompted for an alternate location.

	A	B	C	D
1	Trial ▼		Electricity	8.61791
2	1		Parking	49047
3	Permits_Approval_Timeframe_Library		Sewer	88064
4	S...-10-22		Water	9388

SIPs appear here. SIPs may have distribution graphs if included in library metadata. Italics are reminder that this number a single trial of multiple trials.

A1: Data to display. May be changed to metadata.
A2: Specifies trial number when A1 set to Trial
A3: Name of active library
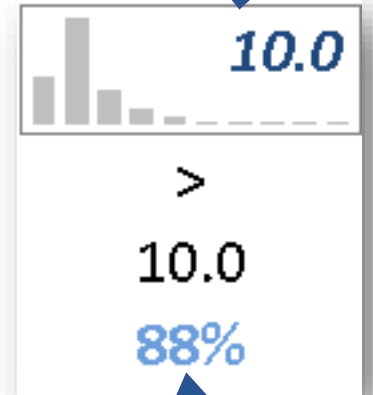**A4: Library provenance**

b. Chance of Whatever

3. You may optionally name formulas when you get statistics on them. This is useful if you plan to save your outputs.

Formula will be simulated with a resulting sparkline histogram. Text will be *Italics* to indicate a single trial of many.

1. Select location of Chance cell before clicking button

2. Fill in fields and click **OK**

4. The optional Sparkline Destination will be auto-filled based on the Formula address and the Default Sparkline Position in the Settings dialog. You may also manually adjust it.
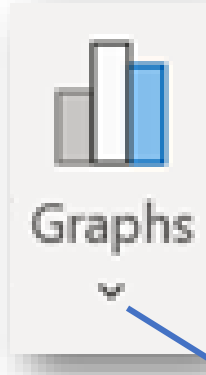
Chance appears in Blue to indicate a statistic calculated over all trials.

c. Graphs

1. Select formula cell to graph before clicking button

2. Click button to create histograms, cumulative graphs

3. You may optionally name formulas when you graph them. This is useful if you plan to save your outputs.

4. Click down arrow for scatter plots

Graphs

○ Chart Selected
● Chart SIPmath Out

Names (optional)

Outputs to Graph
$D$8

Number of Bins: 50

○ Sparkline
● Excel chart
○ Chart data only   □ Integer Charts?

Histogram Starting Location

Cumulative Chart Starting Location
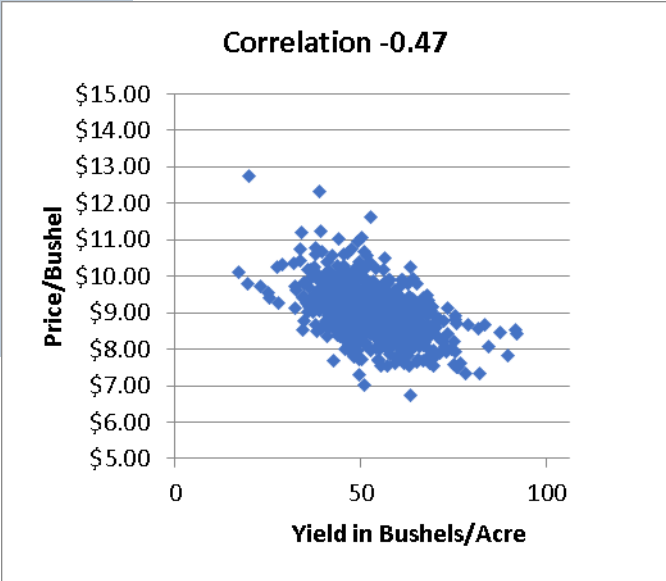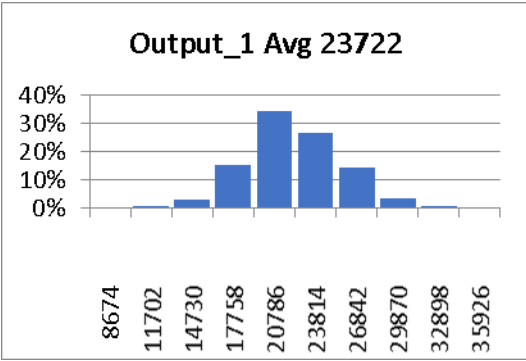
● Put multiple charts in rows
○ Put multiple charts in columns

OK   Cancel   Chart Controls

X output cell   Sheet1!$D$3
Y output cell   Sheet1!$D$4
Optional Correl Cell   Sheet1!$D$14

OK   Cancel

Output_1 Avg 23722

| | 40% 30% 20% 10% 0% |
8674 11702 14730 17758 20786 23814 26842 29870 32898 35926

Correlation -0.47

$15.00 $14.00 $13.00 $12.00 $11.00 $10.00 $9.00 $8.00 $7.00 $6.00 $5.00

Price/Bushel

0   50   100

Yield in Bushels/Acre

d. Insert Avg, Standard Deviation, & Percentile

Avg Insert Average

σ Insert Std Dev

% Insert Percentile

Average / Standard Deviation (same syntax)

Names (optional)

Average of   Sheet1!$D$8

Stats Destination $D$9

Sparkline Destination   D8

OK   Cancel

Percentile

Names (optional)

Output   Sheet1!$D$8

Desired %

Stats Destination $D$9

Sparkline Destination   D8

OK   Cancel

2. Select Formula you want the Stats for

1. Select location of Stats before clicking button

Reminder: You may optionally name formulas when you get statistics on them. This is useful if you plan to save your outputs.

4. The optional Sparkline Destination will be auto-filled based on the Formula address and the Default Sparkline Position in the Settings Dialog. You may also manually adjust it.

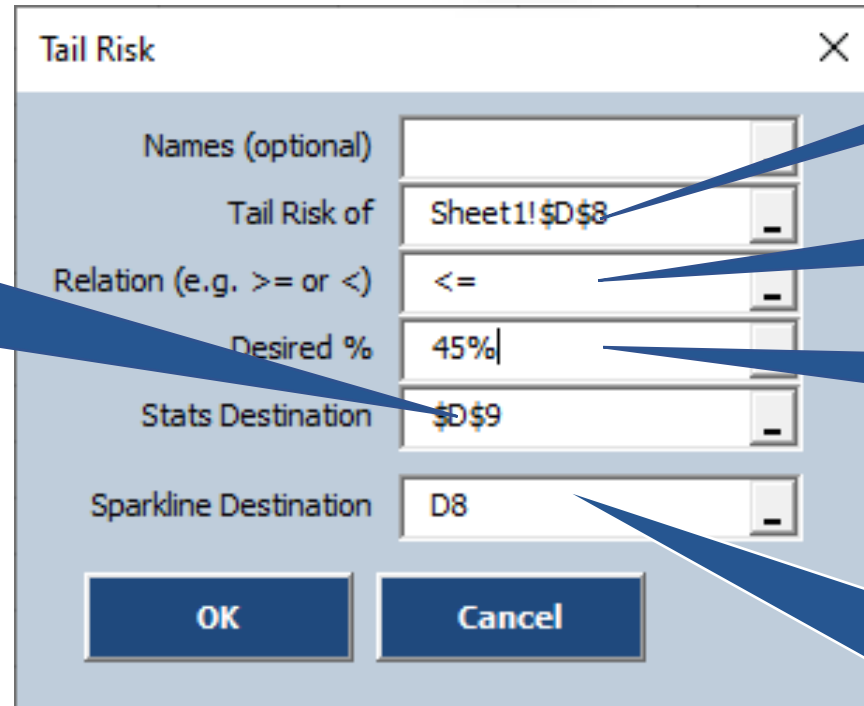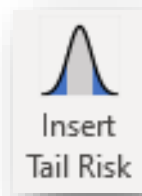**Stats appears in blue to indicate a statistic calculated over all trials.**

3. Select desired percent

e. Insert Tail Risk

(The Average Above or Below a Specified Percentile)

Insert Tail Risk

Tail Risk ✕

Names (optional)	
Tail Risk of	Sheet1!$D$8
Relation (e.g. >= or <)	<=
Desired %	45%
Stats Destination	$D$9
Sparkline Destination	D8

OK **Cancel**

2. Select Formula you want the Tail Risk for

3. Relation may be typed directly or refer to a cell or range

1. Select location of Tail Risk result before clicking button

4. Desired percent may be typed directly or refer to a cell or range.

5. The optional Sparkline Destination will be auto-filled based on the Formula address and the Default Sparkline Position in the Settings Dialog. You may also manually adjust it.
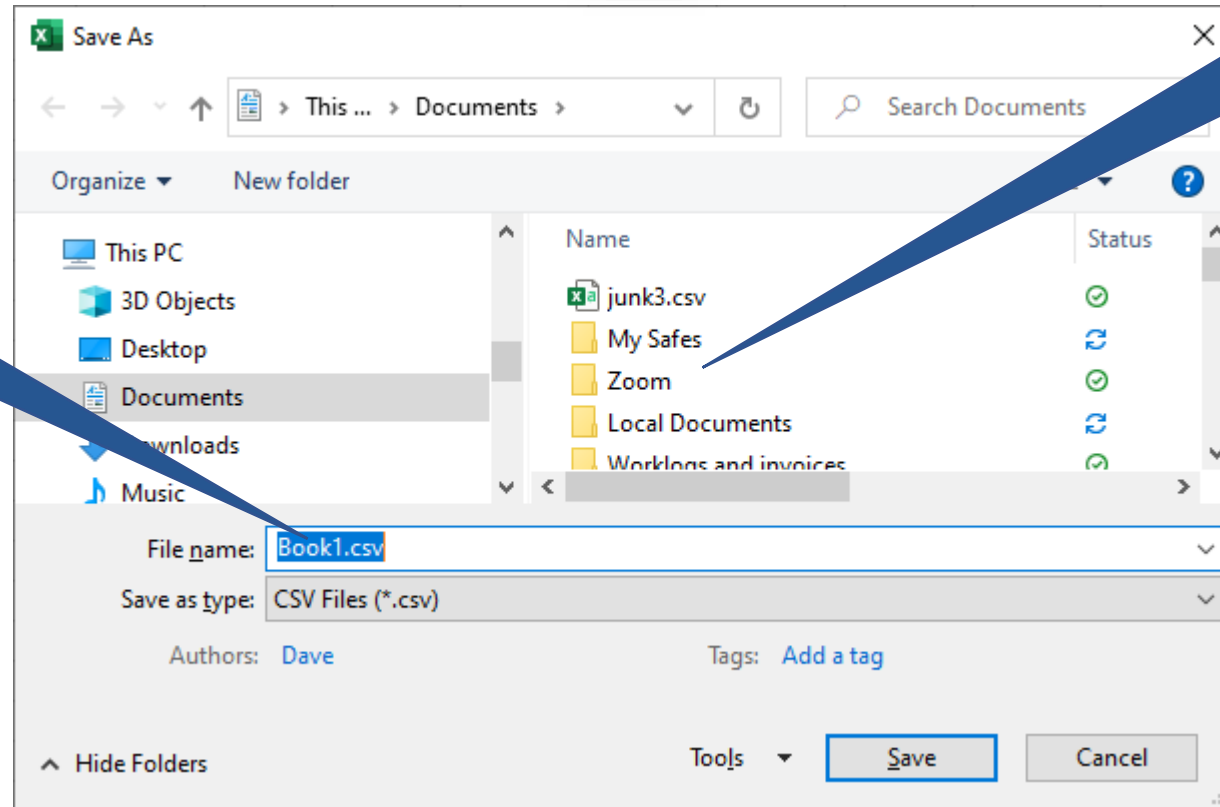
Reminder: You may optionally name formulas when you get statistics on them. This is useful if you plan to save your outputs.

Stats appears in blue to indicate a statistic calculated over all trials.

f. Save as CSV

Save as CSV

2. Select folder to save data

1. Enter file name under which to save data

Save As

This ... > Documents >

Search Documents

Organize ▼   New folder

This PC
  3D Objects
  Desktop
  Documents
  ownloads
  Music

Name	Status
junk3.csv	⊘
My Safes	↻
Zoom	⊘
Local Documents	↻
Worklogs and invoices	⊘

File name: Book1.csv

Save as type: CSV Files (*.csv)

Authors: Dave   Tags: Add a tag

Simulated Data from the PMTable Tab will be saved with the name you specify

∧ Hide Folders   Tools ▾   Save   Cancel

g. Settings and About
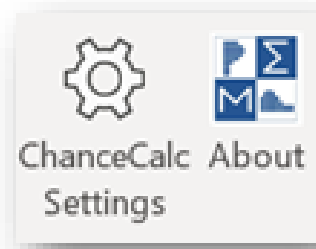
Version Number

ChanceCalc Settings ✕

☐ Warn before over-writing data

Number of Trials [1000]

Choose number of trials (3.0 Libraries only). 2.0 Libraries are pre-specified.

☐ Round Chance of Whatever to…

[5] percent

Limit precision on Chance of Whatever to avoid over specificity.

Default Sparkline Location
- ○ Above
- ○ Left ● Formula Cell ○ Right
- ○ Below
- ○ **No sparkline**

Set default position of sparklines as relative to formula cells used in SIP Input, Chance of Whatever, Avg, Percentile, and Tail Risk.

OK   **Cancel**

About ChanceCalc ✕

ChanceCalc Calculator Release v Beta 1.5.25 full
Designed by Sam Savage
Programmed by David Empey
Based on the SIPmath Network Technology Stack
For help or questions email us at
info@probabilitymanagement.org

SIPMath™ 3.0 Standard
Powering The Arithmetic of Uncertainty

Metalog™ System
Quantifying Uncertainty
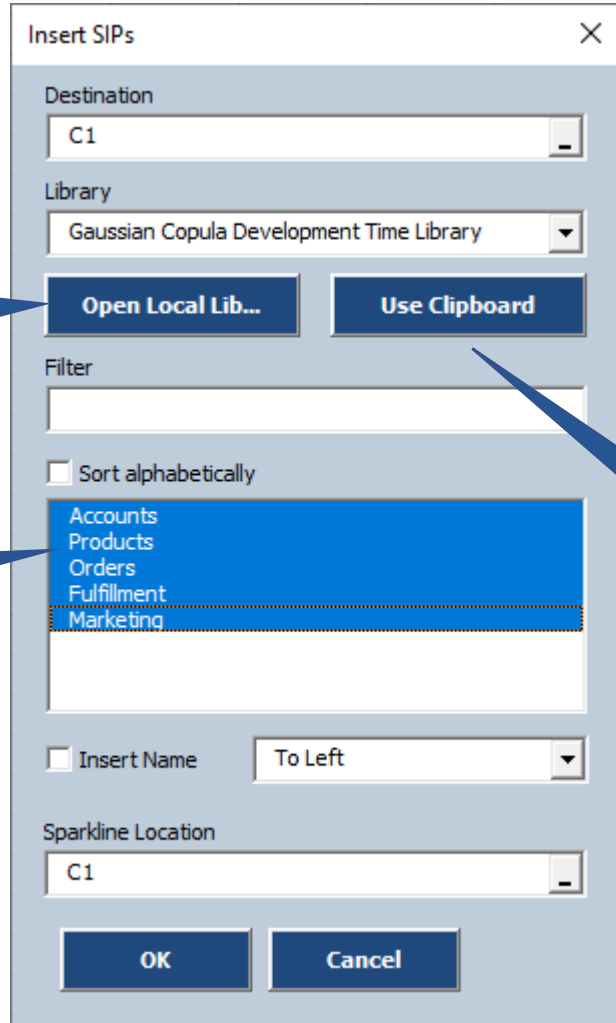
HDR™ Generator
Ensuring Coherence

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www.probabilitymanagement.org

OK

2. Reading Libraries

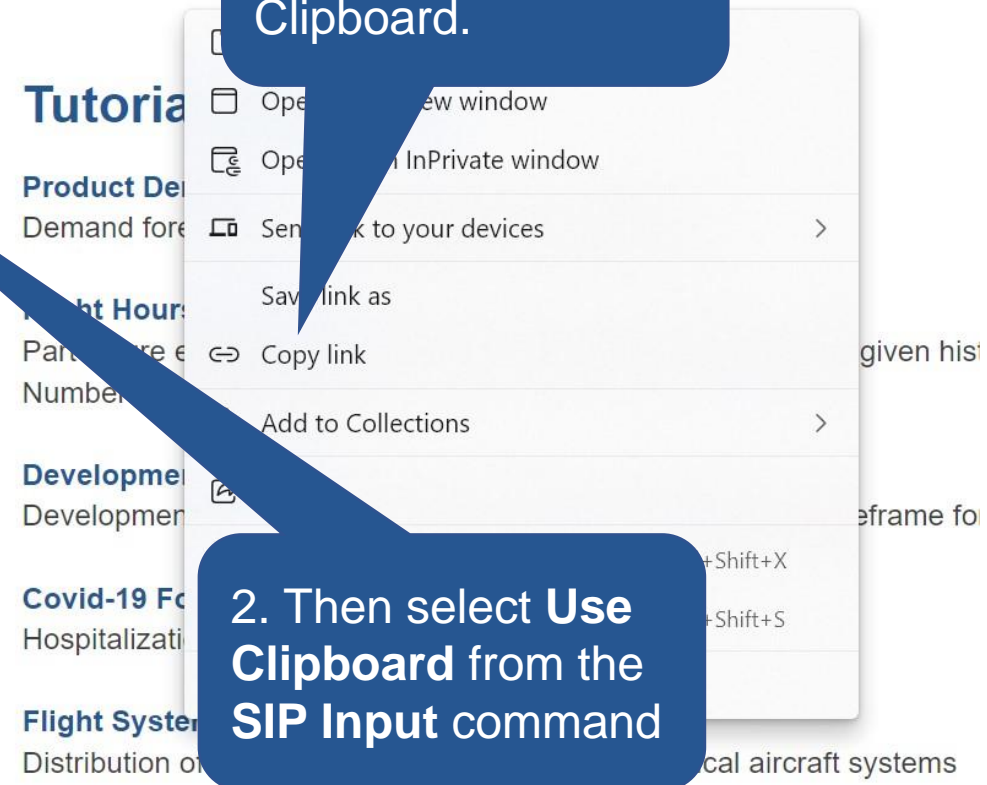Libraries types supported are CSV, SIPmath™ 2.0 and 3.0 Standard and may be accessed from the web or your computer

From Your Computer

From the Web

Insert SIPs

Destination
C1

Library
Gaussian Copula Development Time Library

Click Open Local Lib…

Then browse to the desired file.

Open Local Lib…   **Use Clipboard**

Filter

☐ Sort alphabetically

Accounts
Products
Orders
Fulfillment
Marketing

DON'T FORGET to select desired variables.

☐ Insert Name   To Left

Sparkline Location
C1

OK   **Cancel**

1. Right Click web link and Copy to the Clipboard.

Tutoria

Product De
Demand fore

Ope   w window

Ope   InPrivate window

Sen   k to your devices

Sav   link as

⌐ Copy link

Add to Collections

ht Hour
Part   re e
Number

given his

Developmer
Developmen

eframe fo

+Shift+X

Covid-19 Fc
Hospitalizati

+Shift+S

2. Then select **Use Clipboard** from the **SIP Input** command

Flight Syster
Distribution o

cal aircraft systems