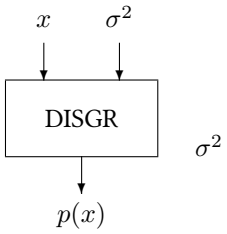
## Block DISGR

The DISGR block calculates the Gordon Reddy distribution.




| | |
|---|---|
| **Name** | DISGR |
| **Function** | em0023 |
| **Inputs** | 1 . . . [2] |
| **Outputs** | 1 |
| **Parameters** | 1 |
| **Strings** | 0 |
| **Group** | S |

### Inputs

| | |
|---|---|
| 1 | Independent variable $x$ |
| 2 | Variance $\sigma^2(x)$ |

### Outputs

| | |
|---|---|
| 1 | Probability density $p(x)$ |

### Parameters

| | |
|---|---|
| 1 | Variance $\sigma^2(x)$ |

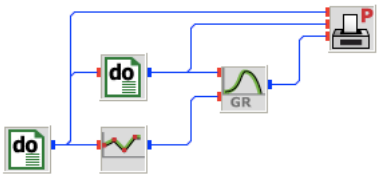
### Strings

None

### Remarks

If a second input is connected to a DISGR block, the value of the block parameter $\sigma^2$ is ignored.

disgr.vseit




Two nested DO blocks count from one to six (outer block), and vary the Gordon Reddy variable from zero to two in steps of 0.01 (inner block), respectively. The POLYG block delivers different variance values due the parameter setting

```
6
1 0.01
2 0.02
3 0.04
4 0.06
5 0.1
6 0.15
```

The PLOTP block shows the probability density functions for the different variances.

