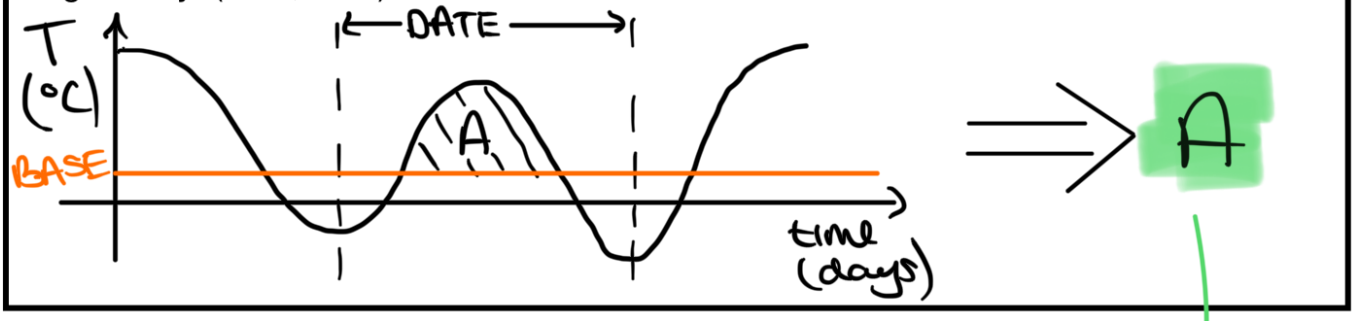
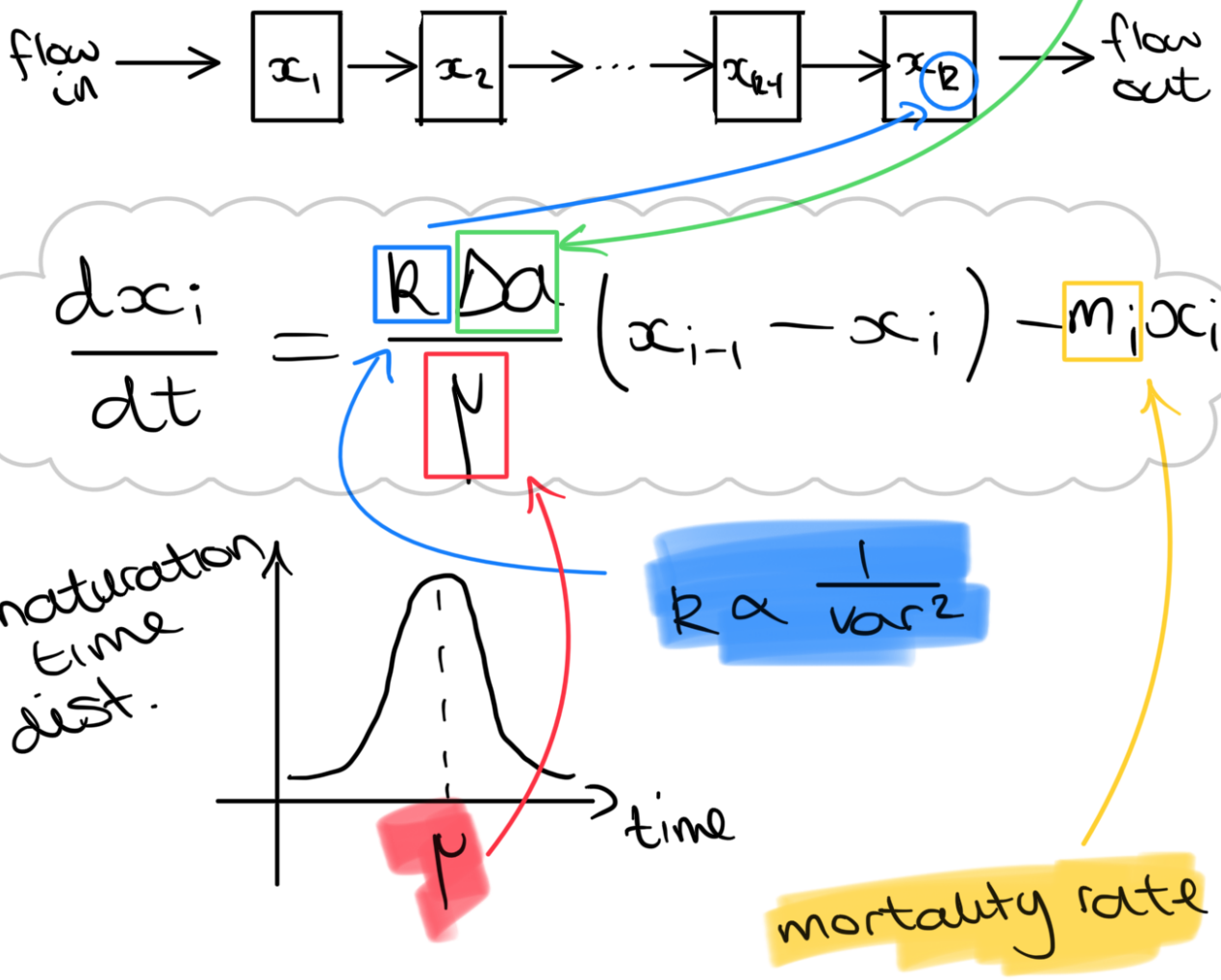
DegreeDays(date,base)



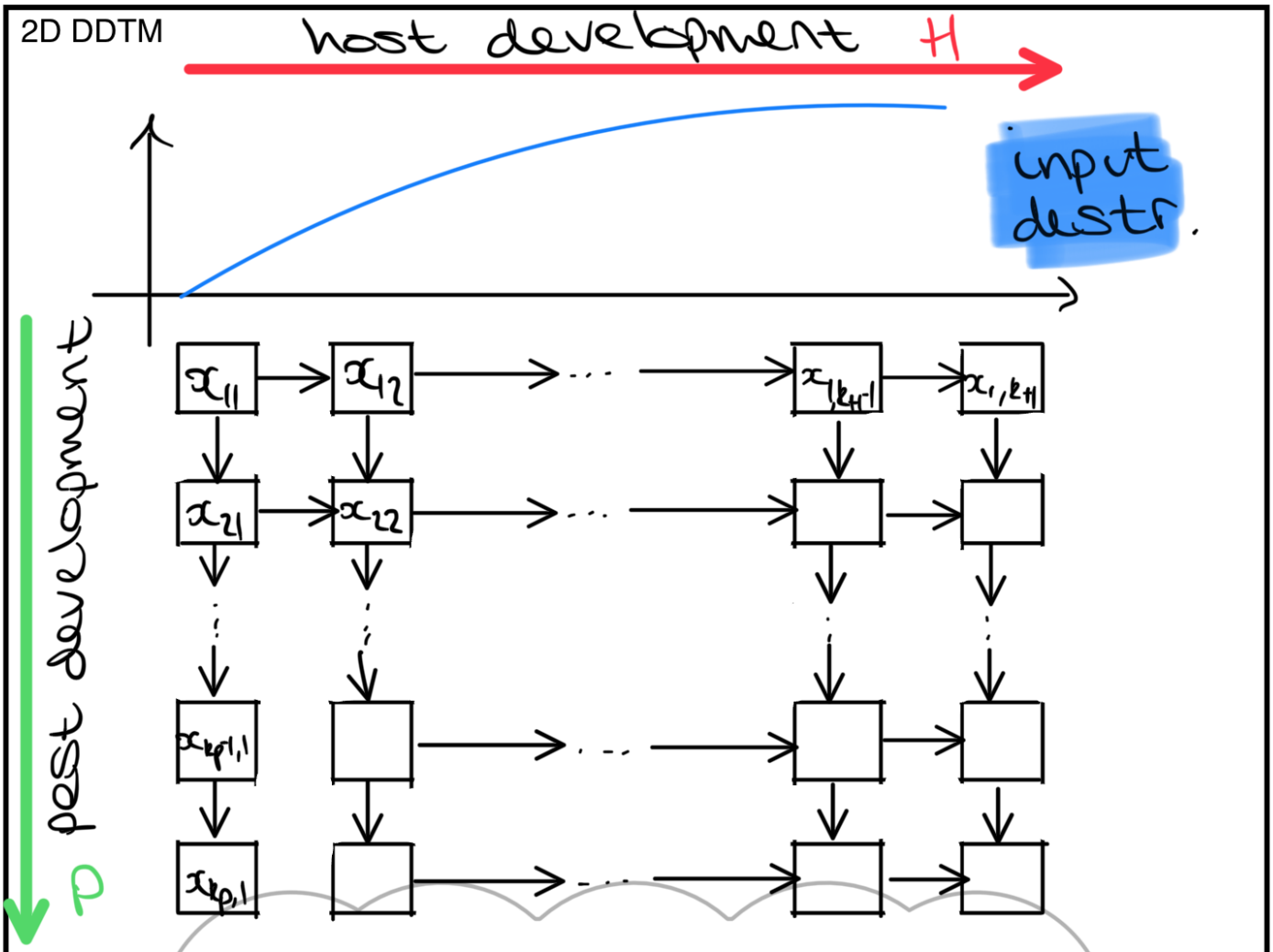

Single Distributed Development Time Model (DDTM)




Example parameters

| name | R | $\nu$ | $\Delta a$ (7-21°C) |
|---|---|---|---|
| olive fly eggs | 40 | 47.2 | 9.8 (7, 9.1) |
| olive fly adults | | 500 | 9.8 (7, 9.1) |
| olive fruit | | 1500 | 11 (7, 8) |

2D DDTM




$$\frac{dx_{ij}}{dt} = \frac{k_H (\Delta a)_H}{\gamma_H} \left( x_{i,j-1} - x_{ij} \right) + \frac{k_P (\Delta a)_P}{\gamma_P} \left( x_{i-1,j} - x_{ij} \right) - \boxed{m_{ij}} x_{ij}$$