Documentation of the MATLAB function `Psiwt.m`

The function's arguments and returned quantities are listed in the help section of the function which is reproduced below.

```
function [Psi,Phih]=Psiwt(Phi,p,m,h)
% Given m-VAR(p) coefficients Phi_1,...,Phi_p in Phi and lead time h
% returns impulse response coefficients I,Psi_1,...,Psi_{h-1} in Psi
% and coefficients Phih_1,...,Phih_p of multistep predictor in Phih.
```

To be specific, the given array `Phi` has elements `Phi(i,j,k)` which are coefficients $\Phi_{i\,j\,k}$ for $i, j = 1 \dots m$ and $k = 1 \dots p$ of matrices Φ_k. These are the coefficients of a VAR(p) model for a process x_t, whose dimension m and order p are inferred from the size of `Phi`. The model is:

$$x_t = \Phi_1 x_{t-1} + \Phi_2 x_{t-2} + \cdots + \Phi_p x_{t-p} + e_t. \tag{1}$$

The returned quantity `Psi` has elements `Psi(i,j,k+1)` for $i, j = 1 \dots m$ and $k = 0 \dots h-1$ that are coefficients $\Psi_{i,j,k}$ of matrices Ψ_k in the expansion:

$$\Psi(z) = I + \Psi_1 z + \Psi_2 z^2 + \cdots = (I - \Phi_1 z - \cdots - \Phi_p z^p)^{-1}.$$

The returned quantity `Phih` has elements `Phih(i,j,k)` for $i, j = 1 \dots m$ and $k = 1 \dots p$ that are coefficients $\Phi^h_{i,j,k}$ of matrices Φ^h_k in the expression for the multi-step prediction $\hat{x}_{t,h}$ of x_{t+h} in terms of $x_t \dots x_{t-p+1}$ implied by the VAR(p) model:

$$\hat{x}_{t,h} = \Phi^h_1 x_t + \Phi^h_2 x_{t-1} + \cdots + \Phi^h_p x_{t-p+1}.$$

See Section 2.3 of the book for further explanation.