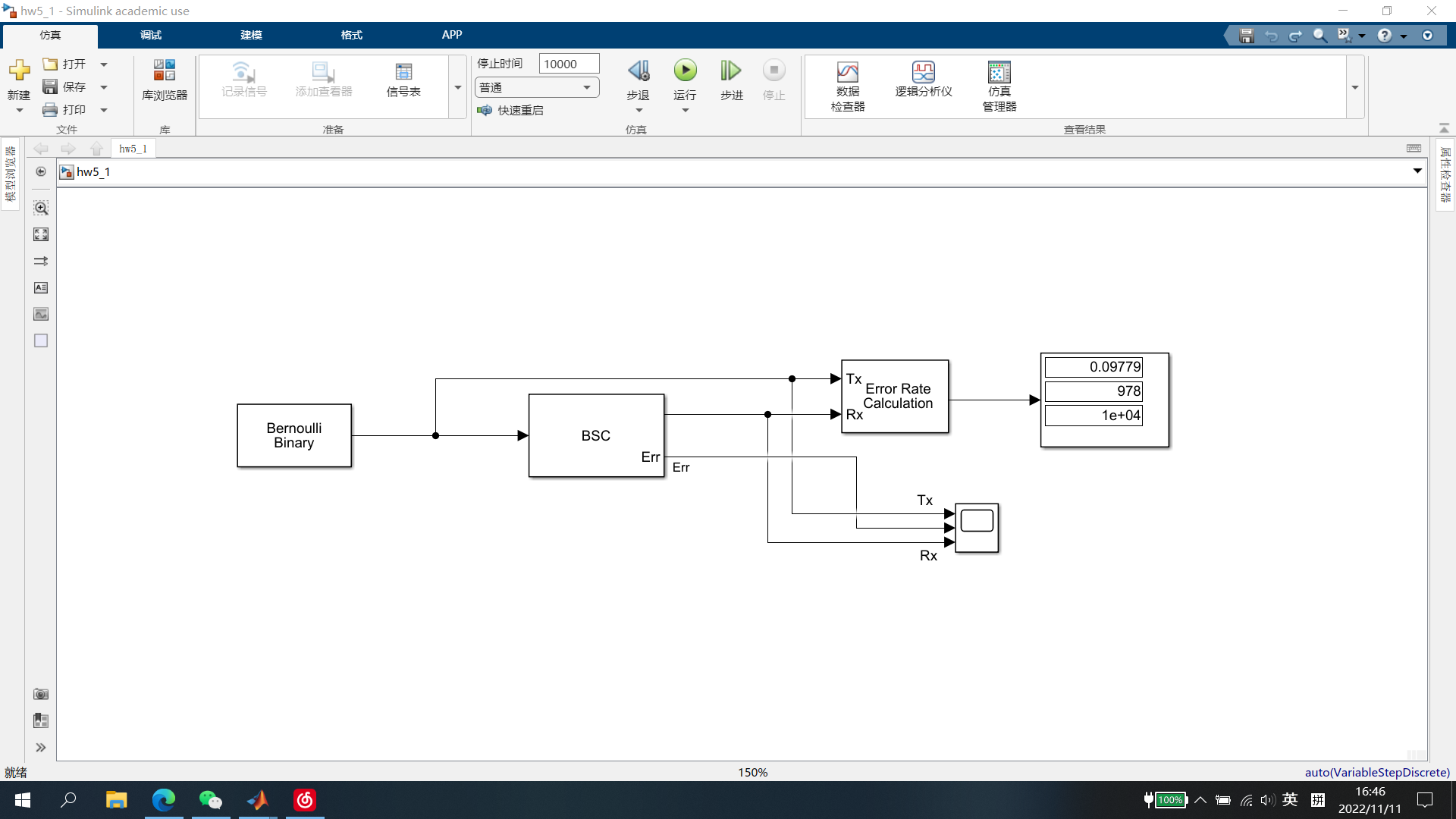
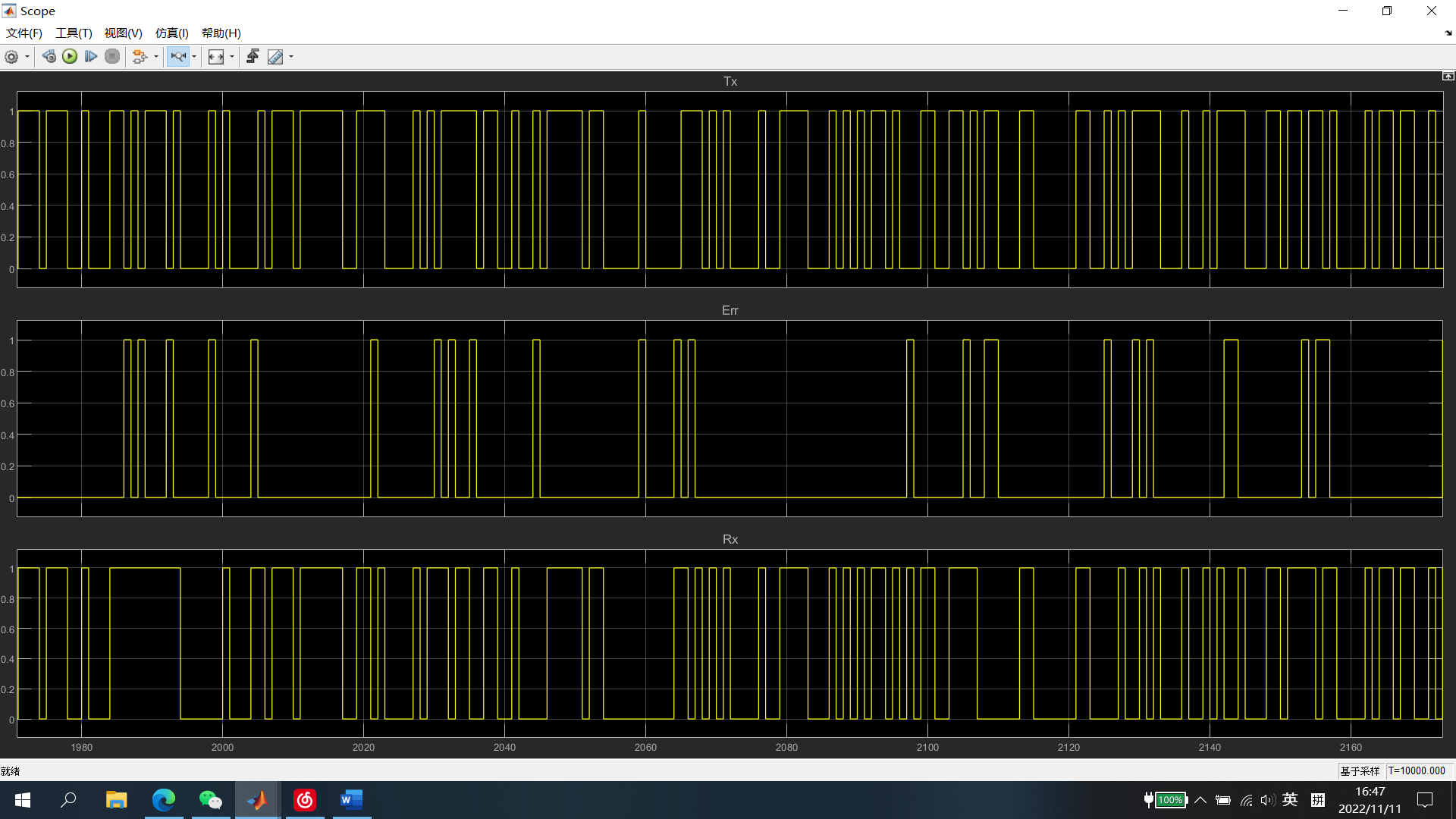
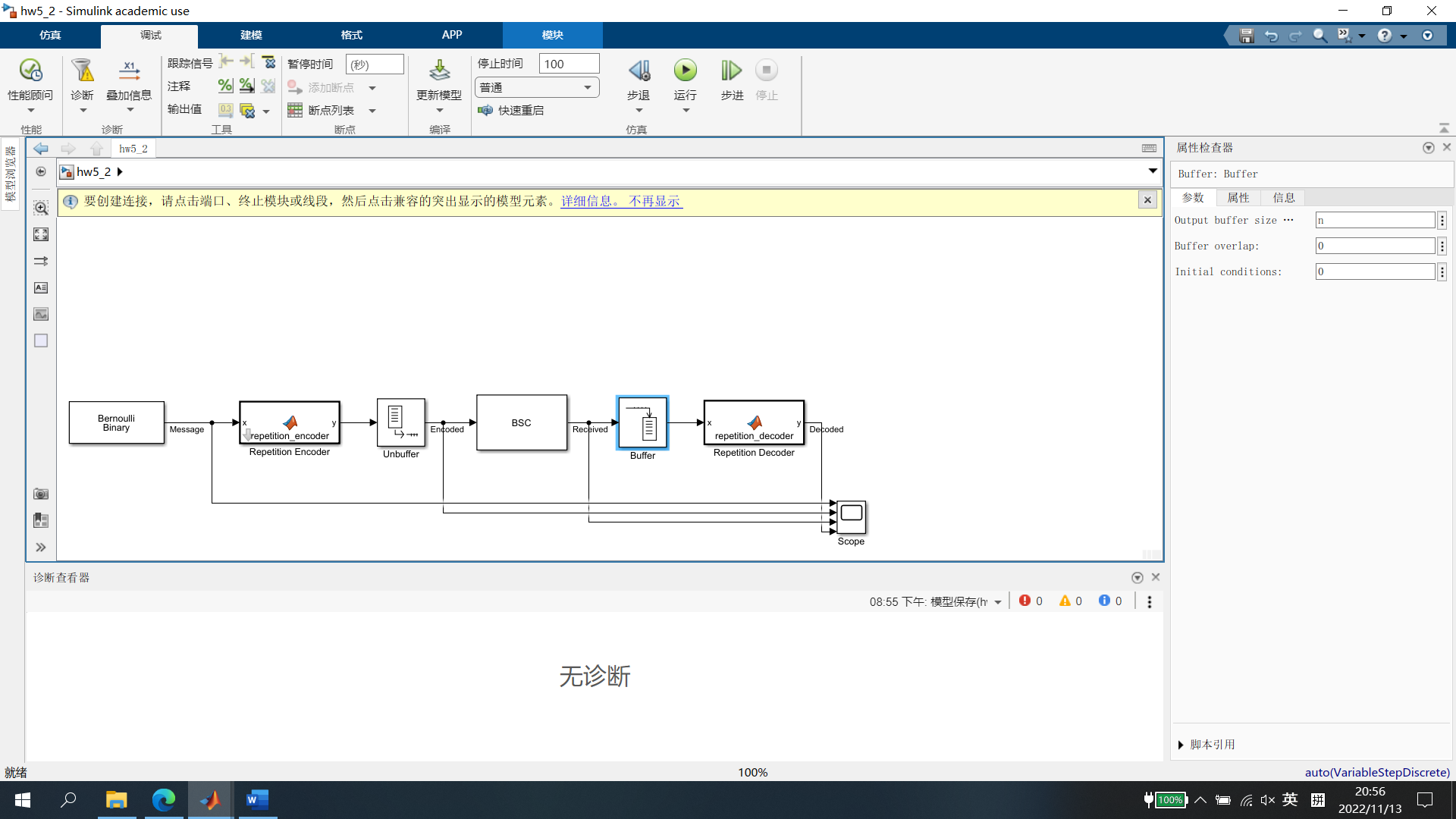
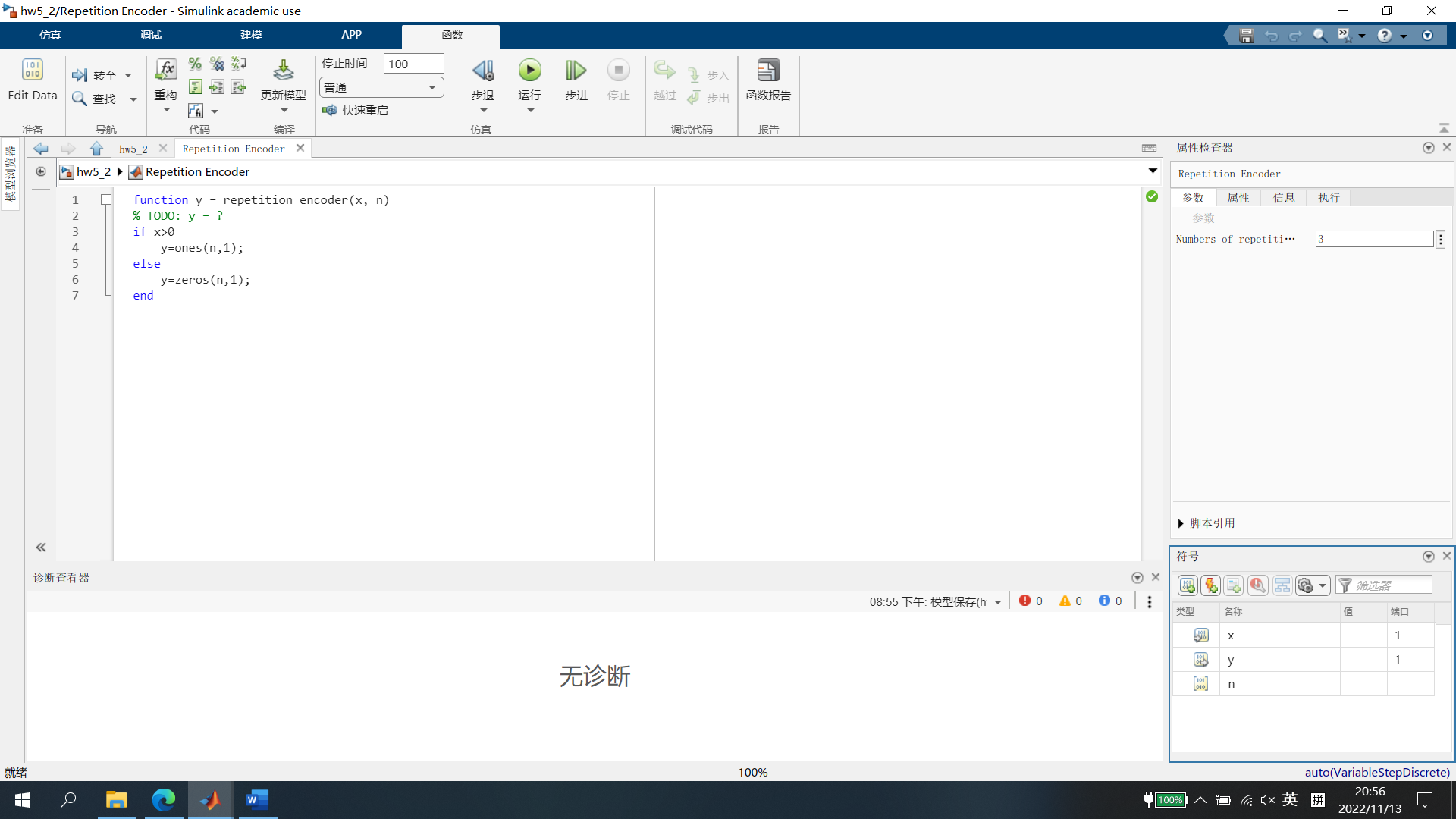
**5.1**

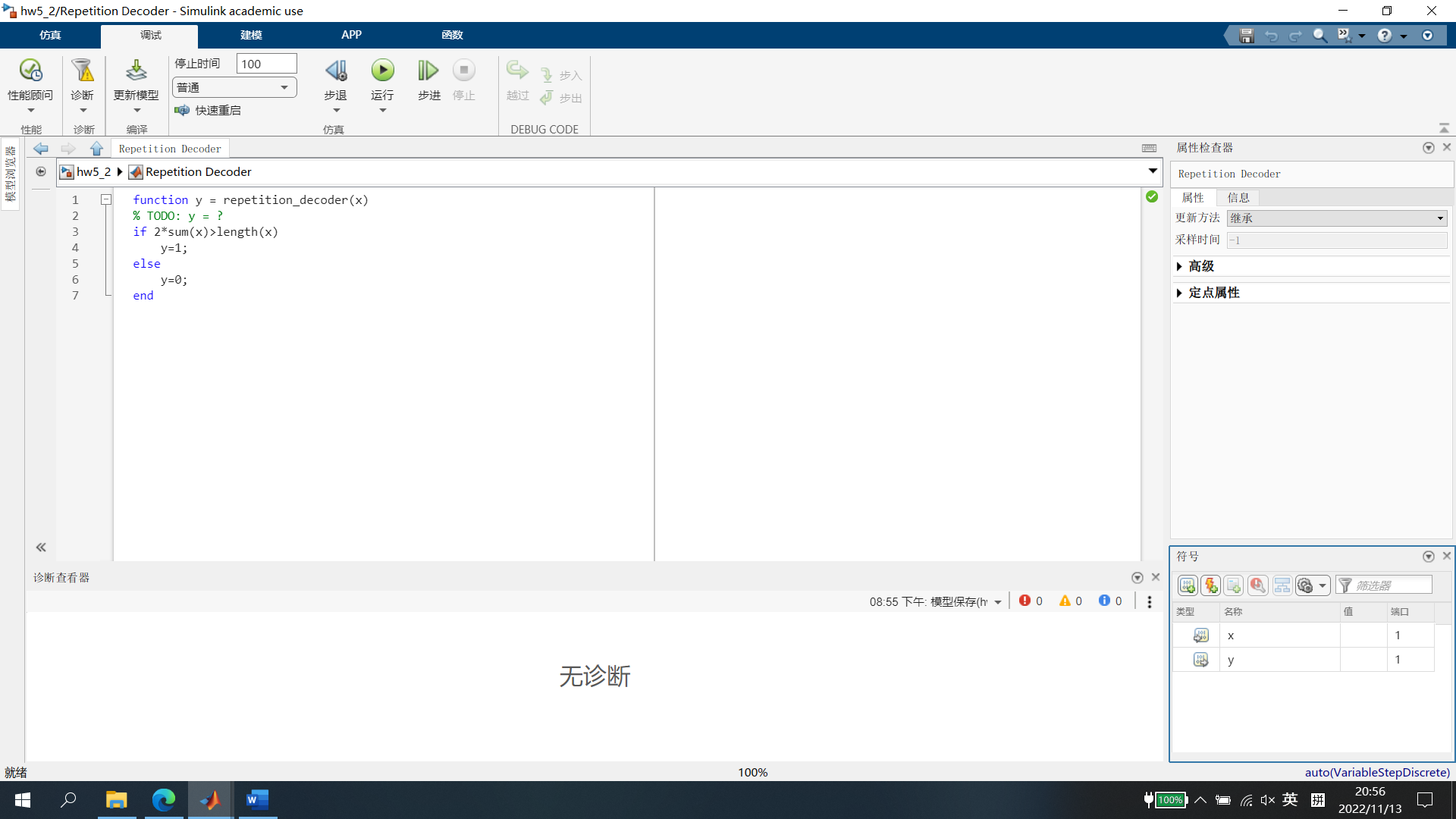


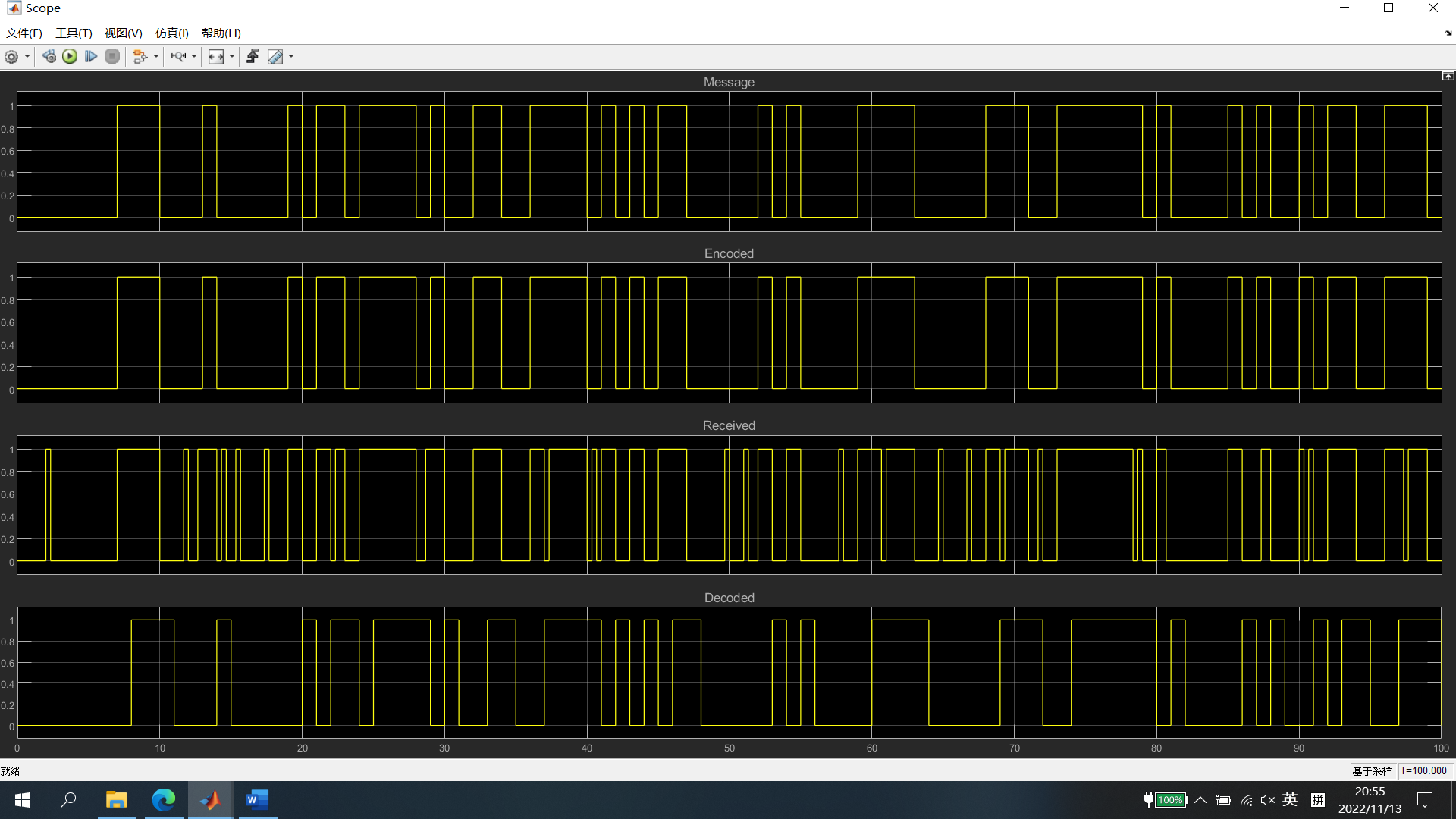


**5.2**

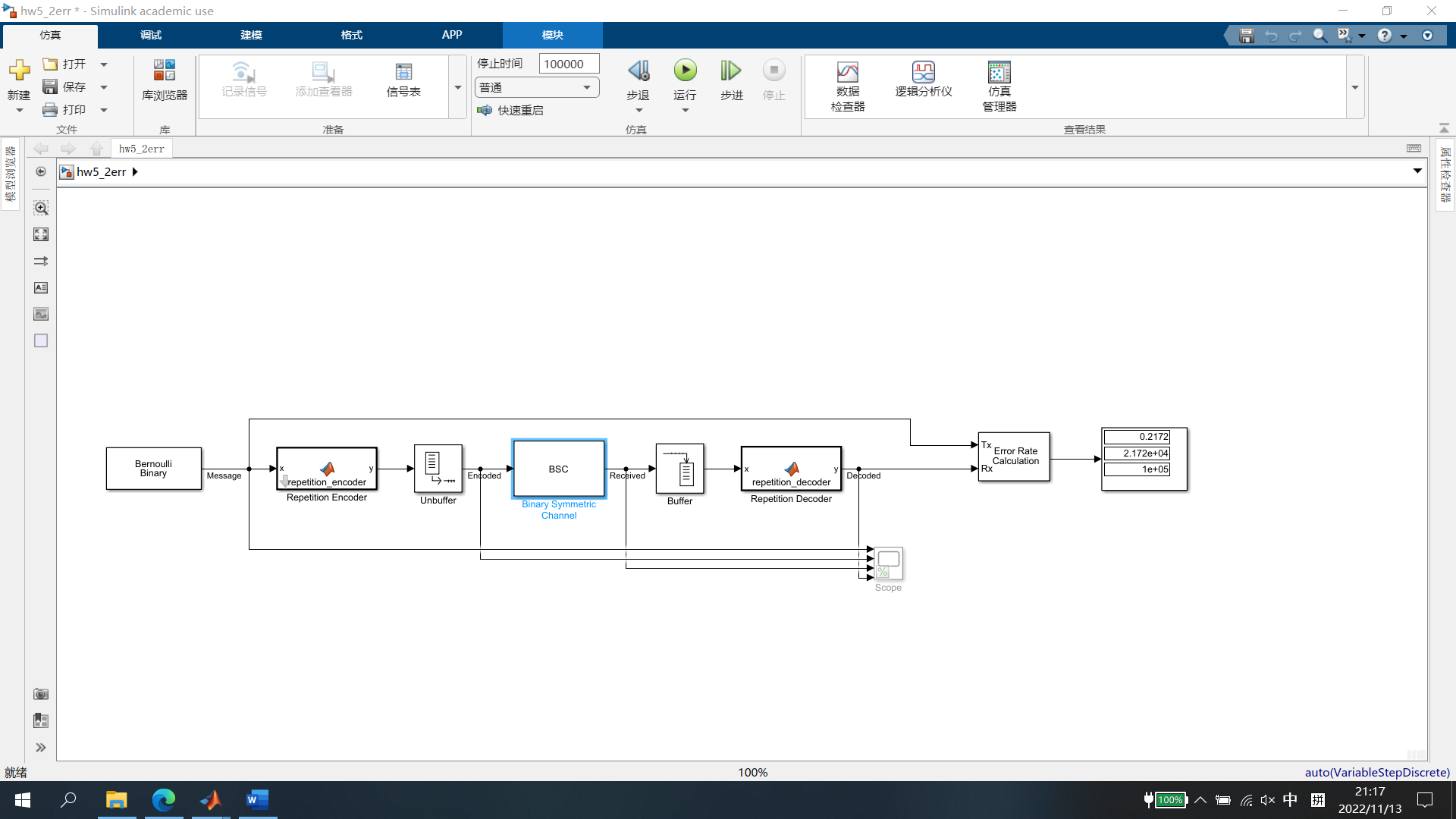


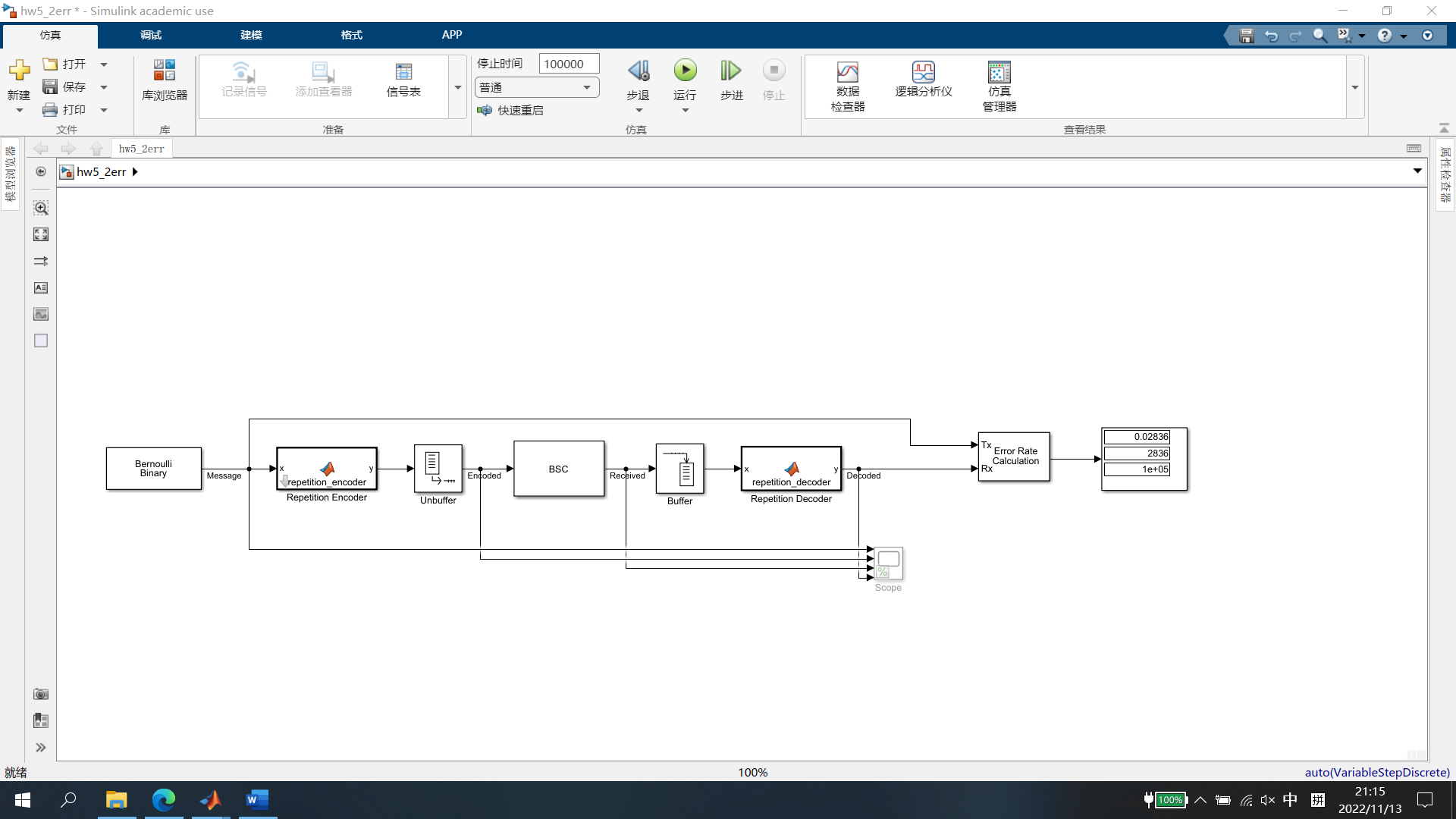


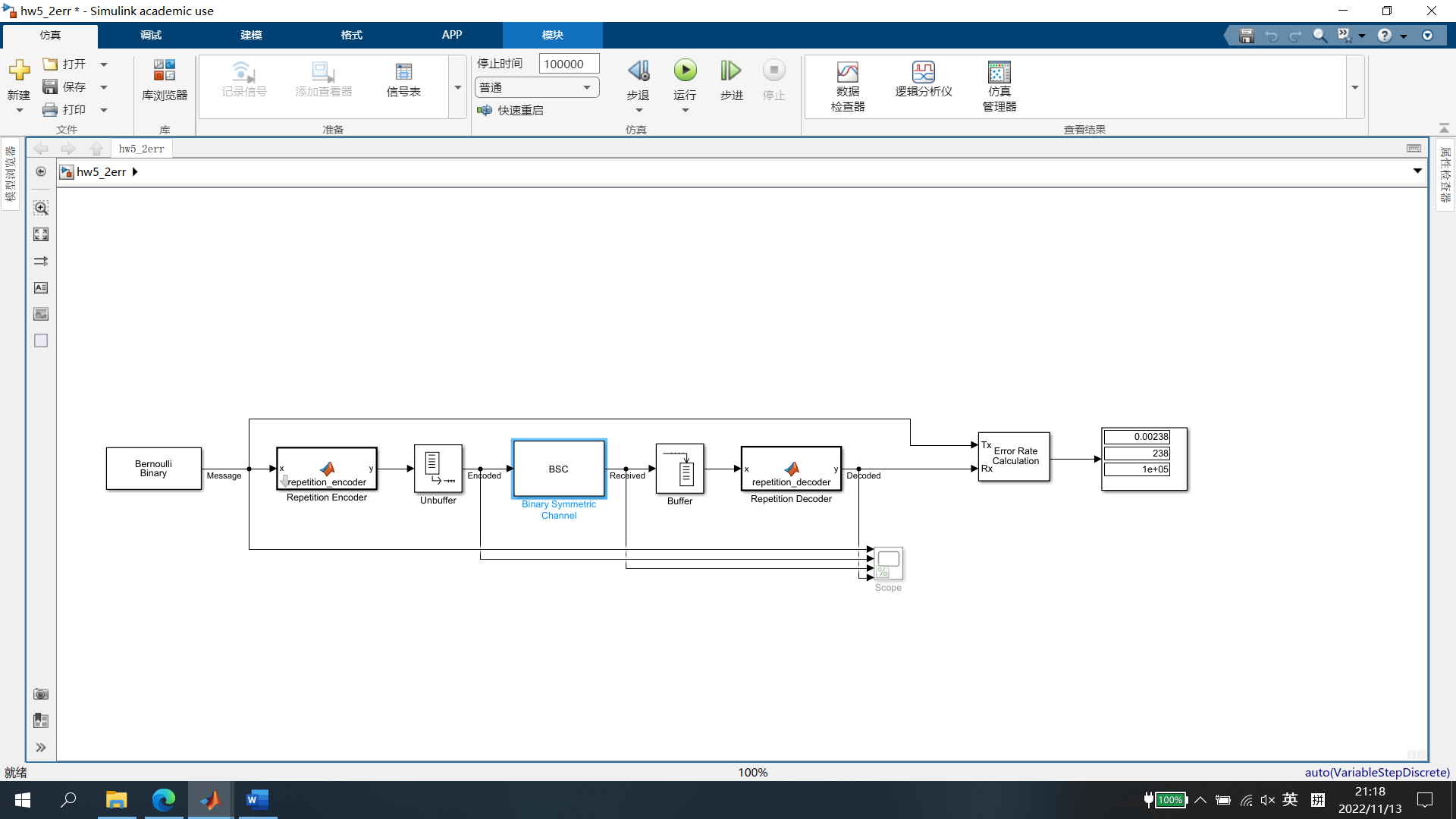


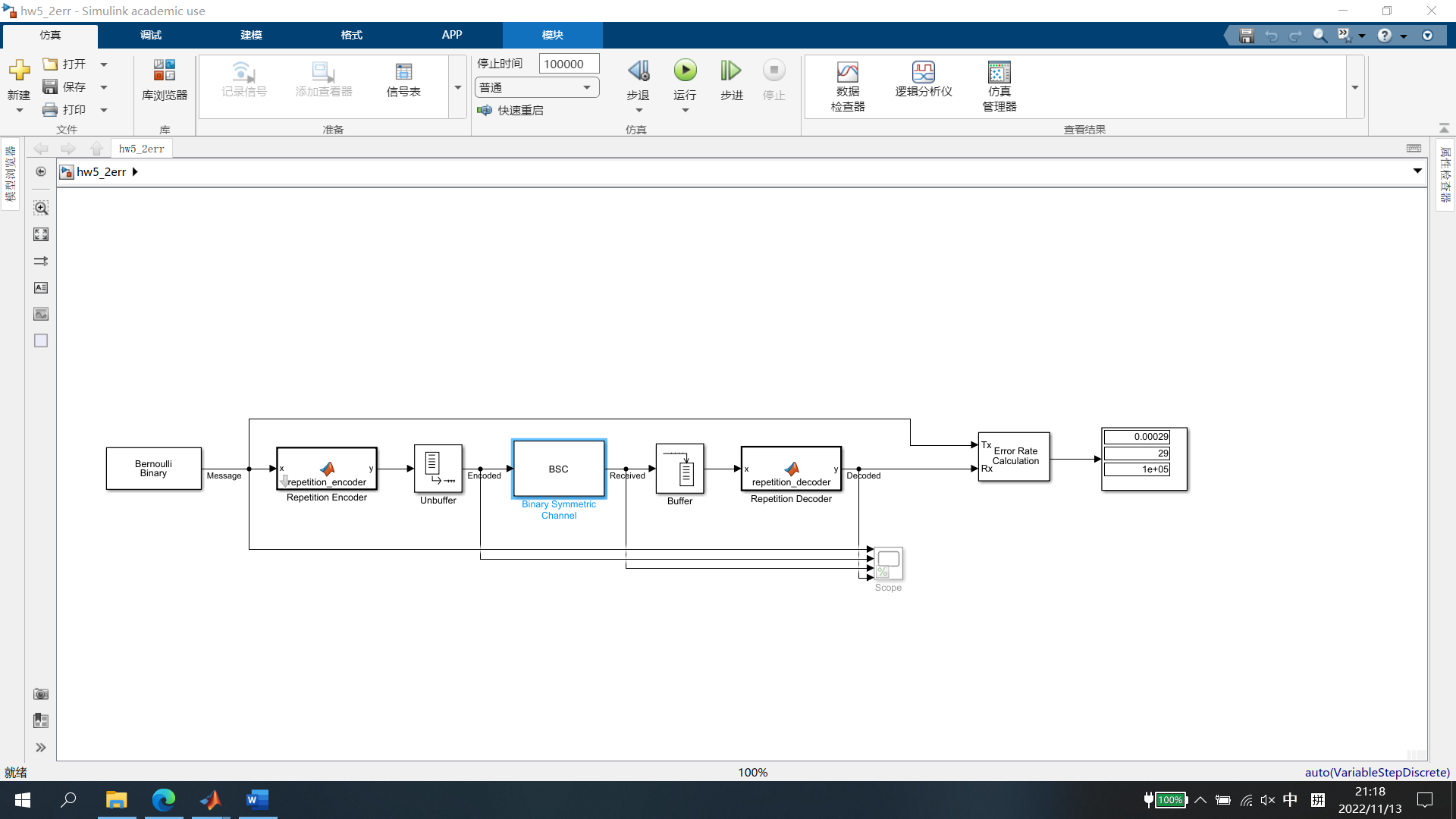


**以下是计算误比特率部分**

**0.3**

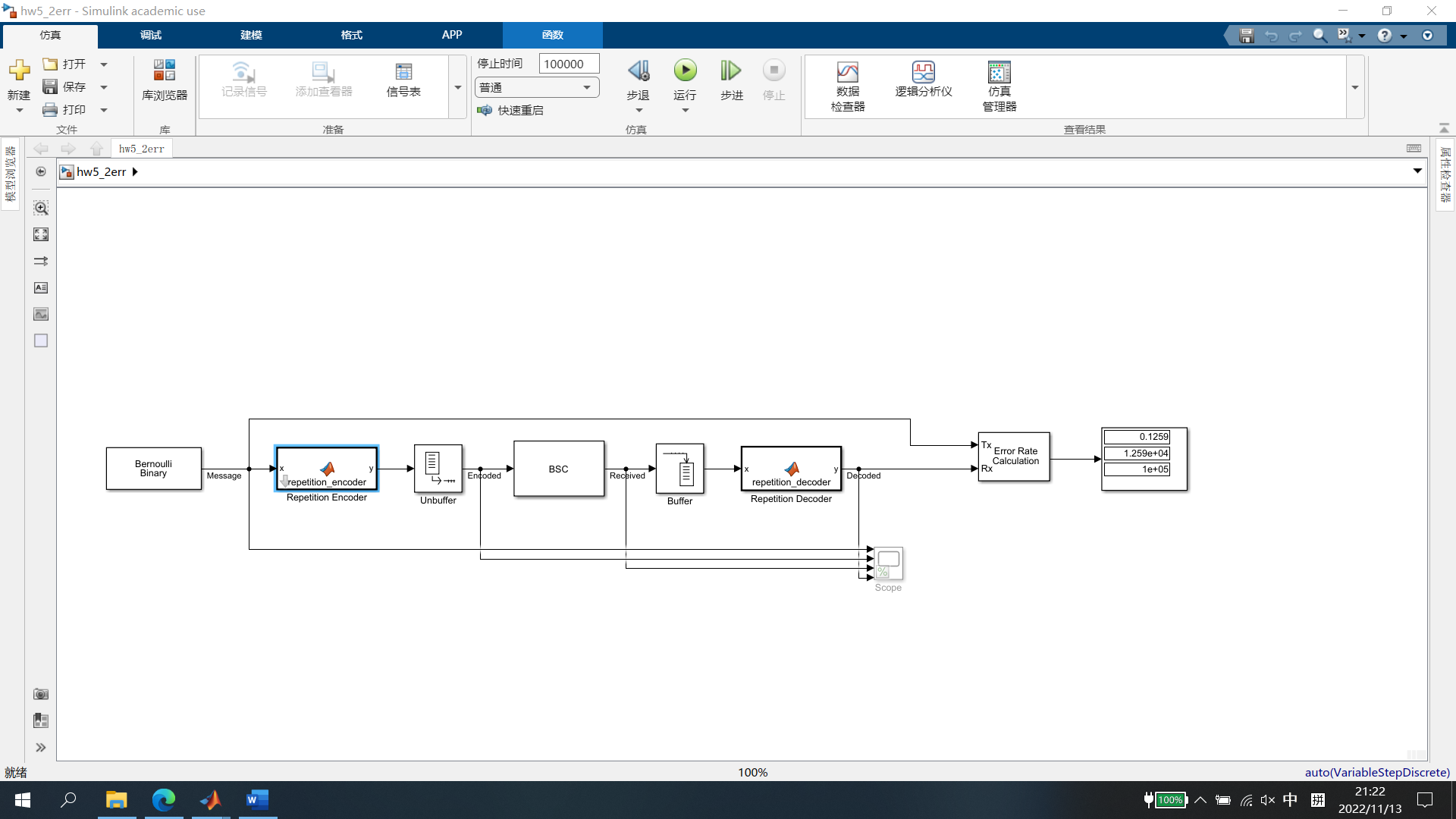
 **0.1**

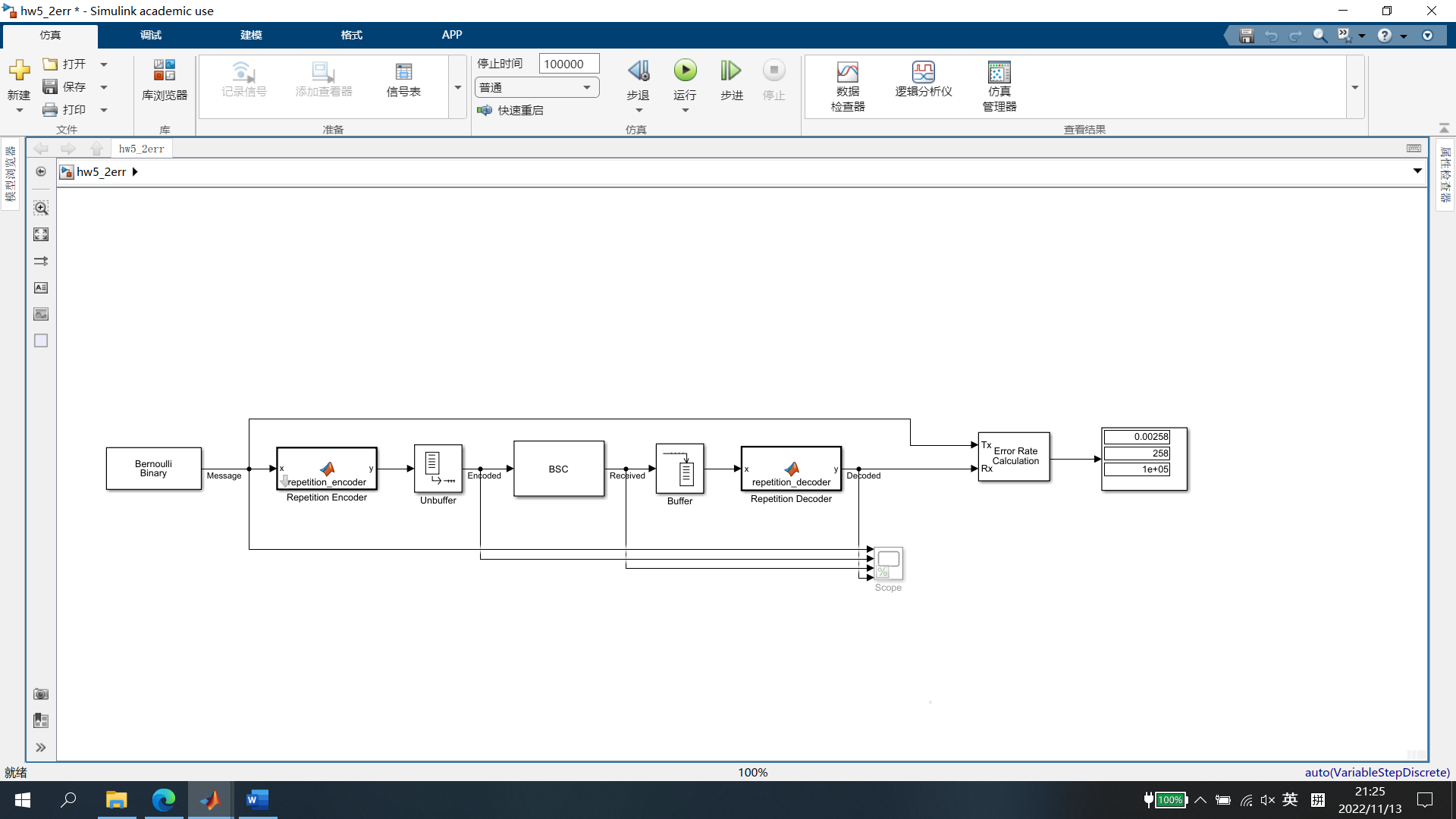
**0.03**

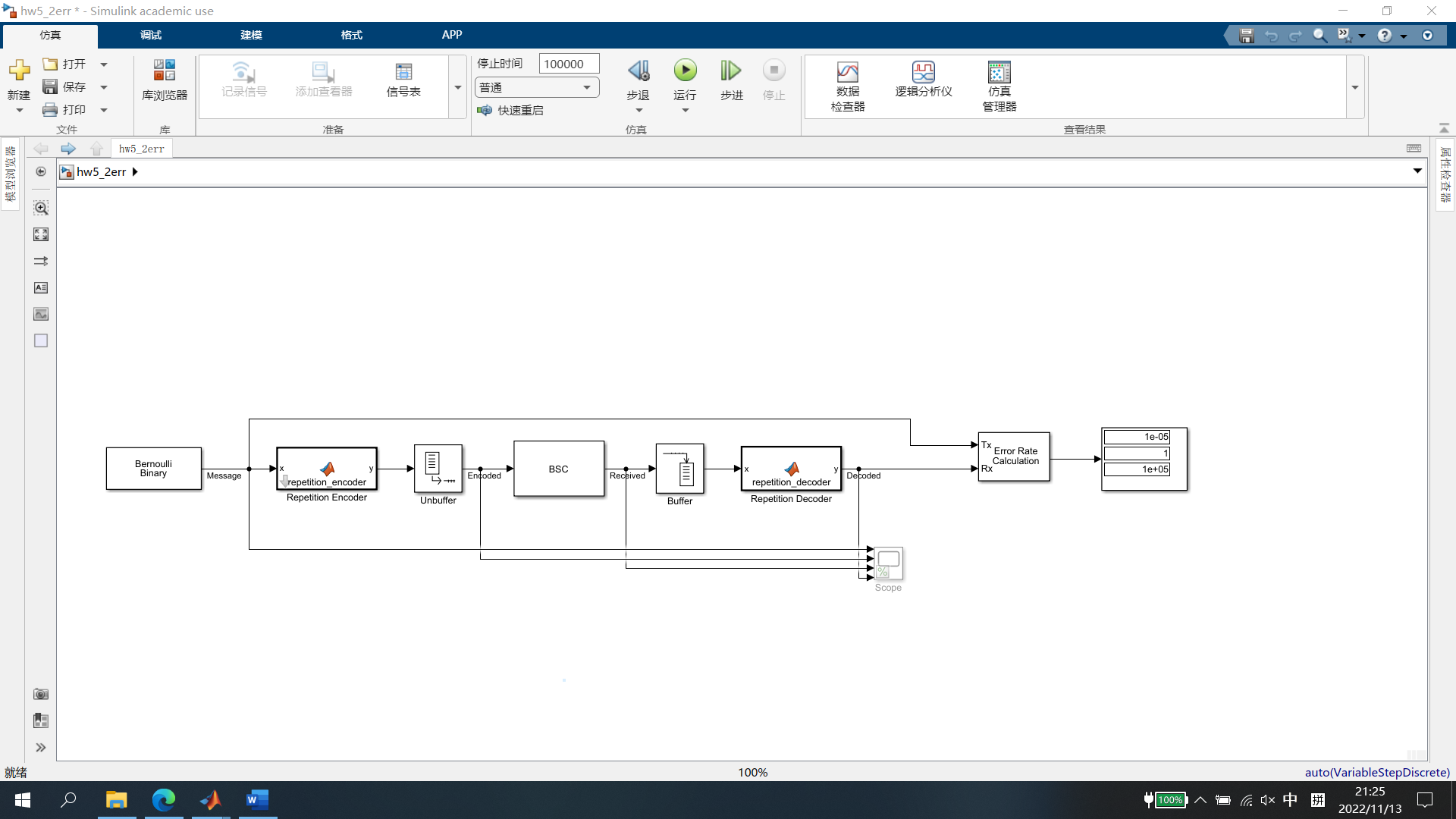
**0.01**

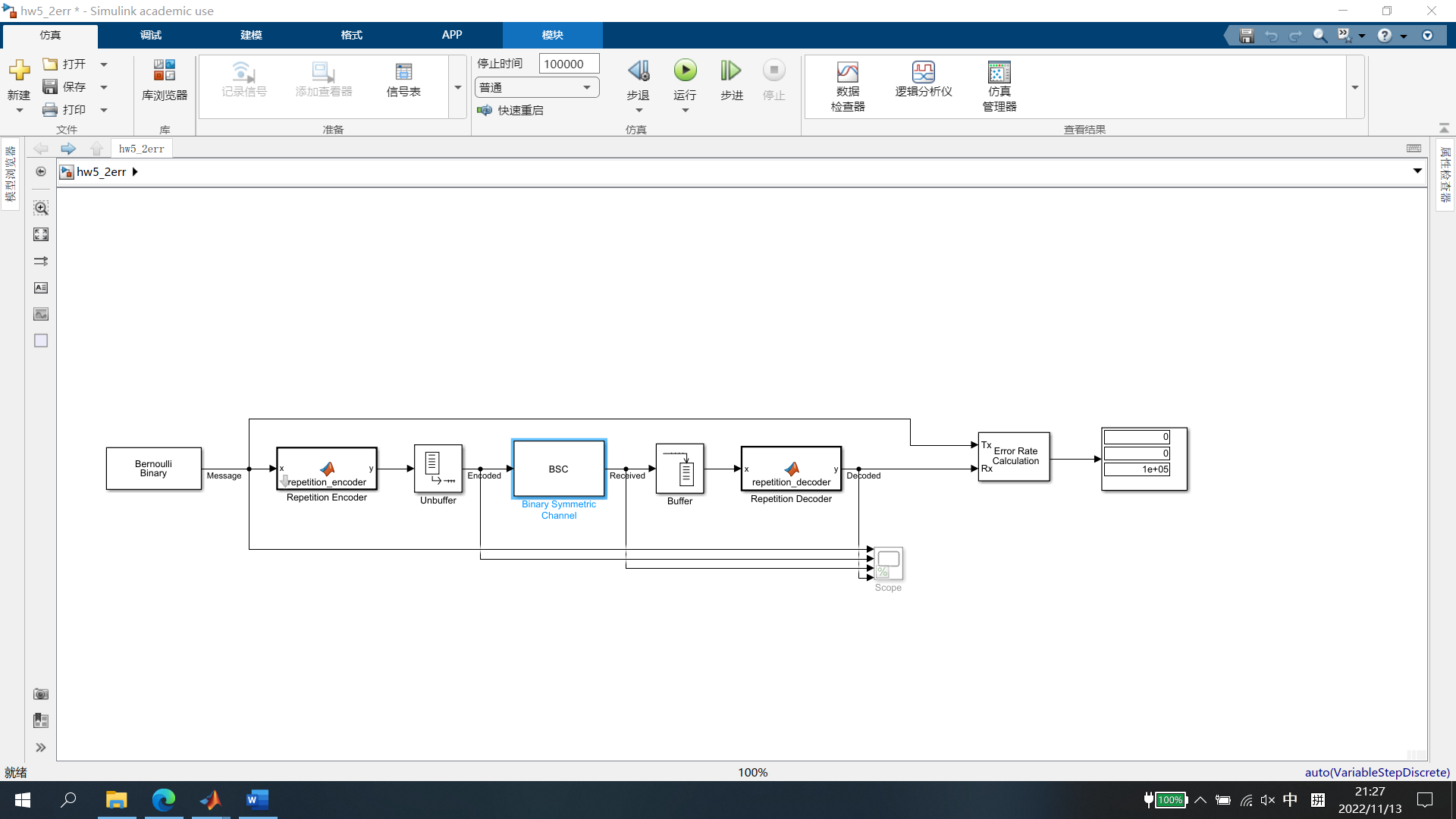
**0.003**

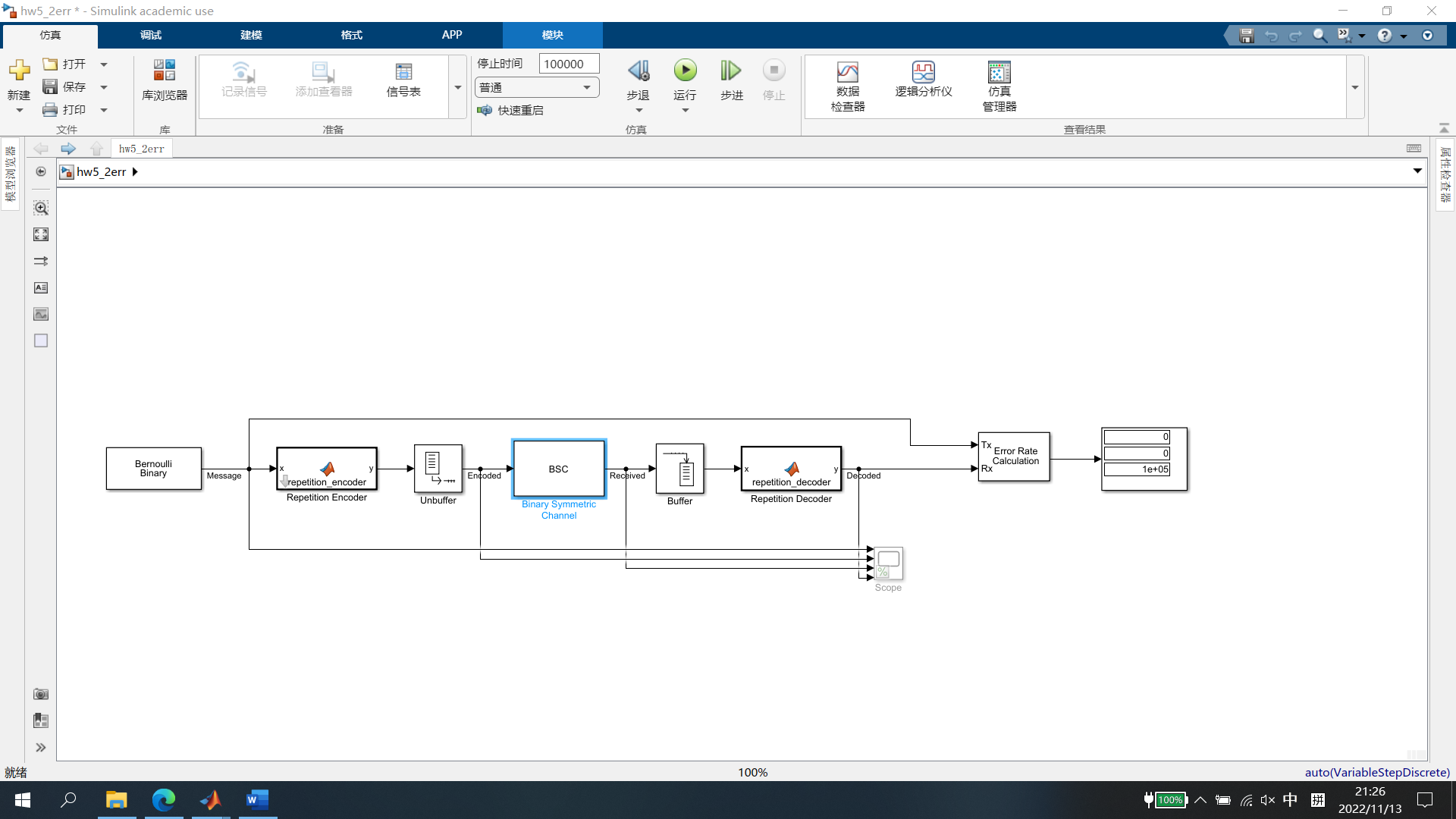
**下面变(7,1)码**

**0.3**

**0.1**

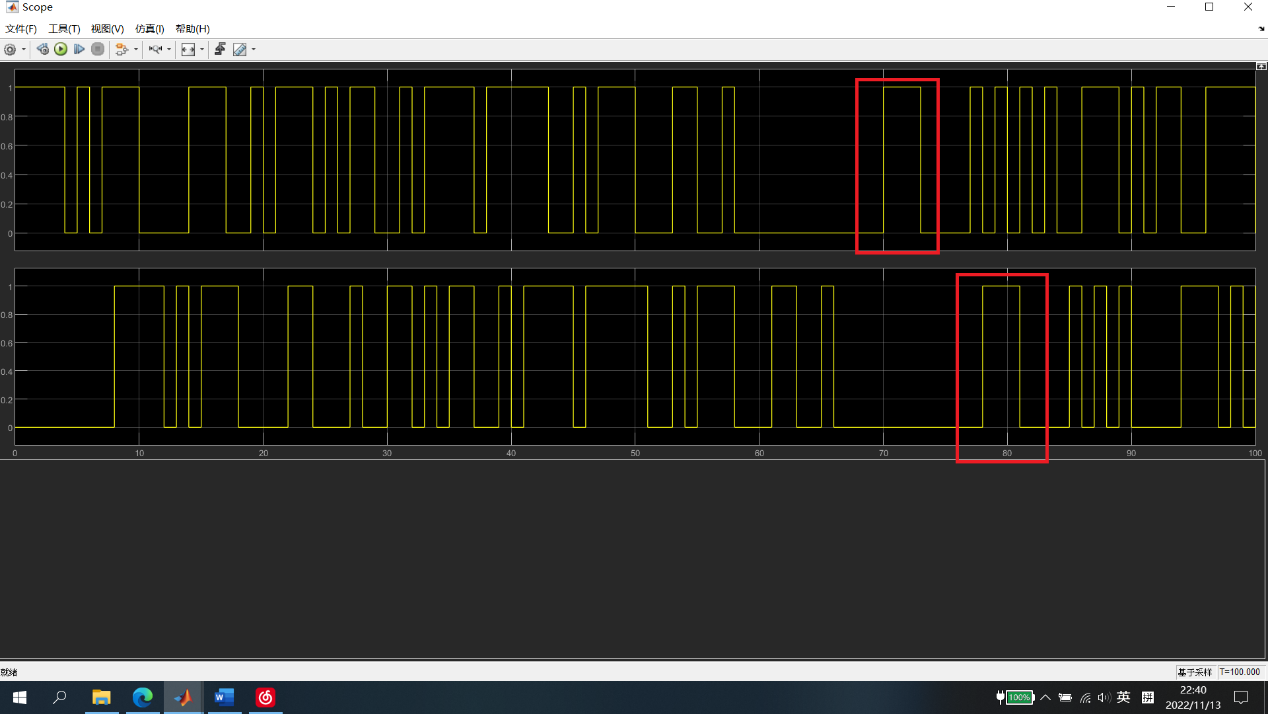
**0.03**

**0.01**

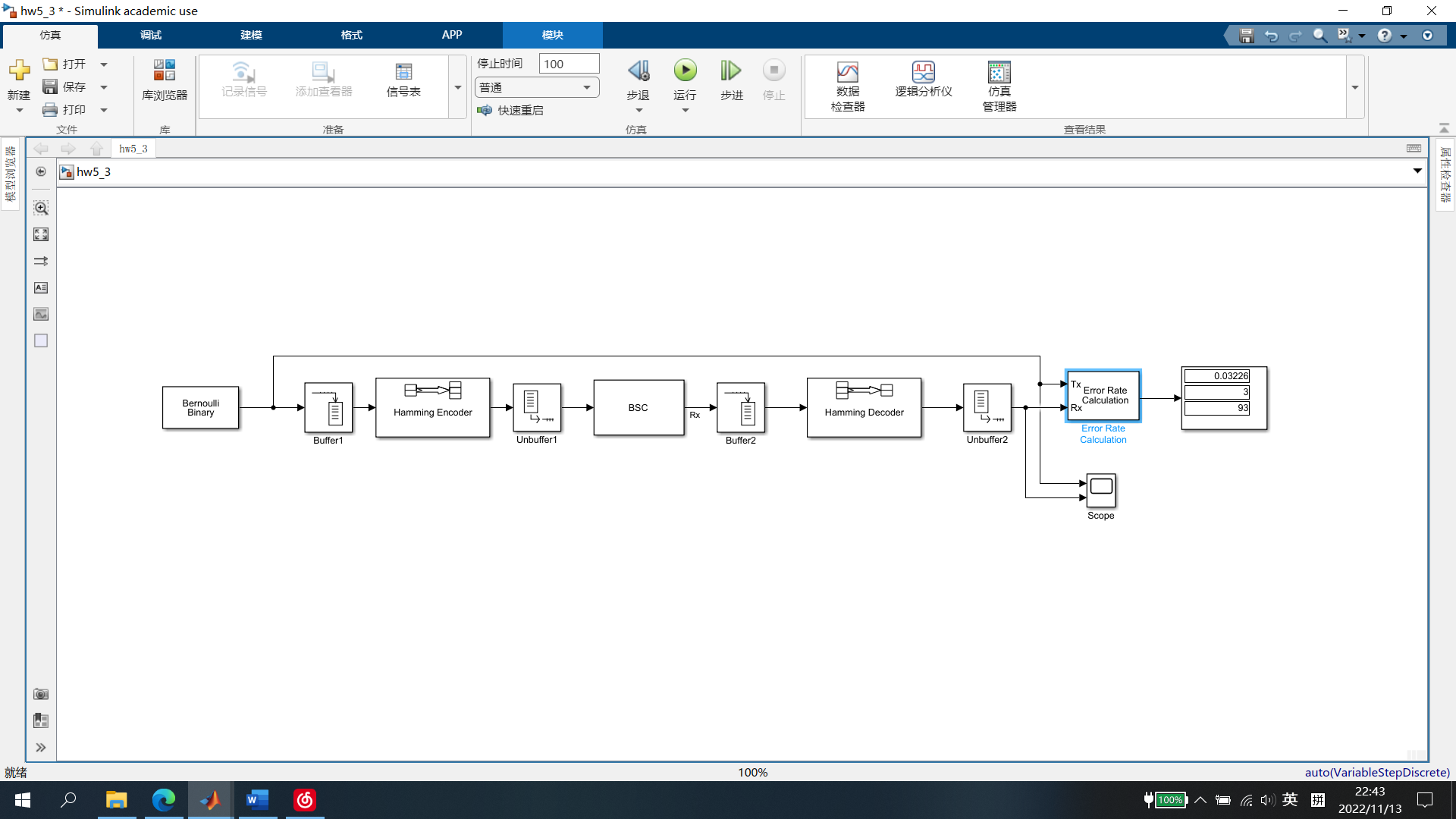
**0.003**

**5.3**

**a)**



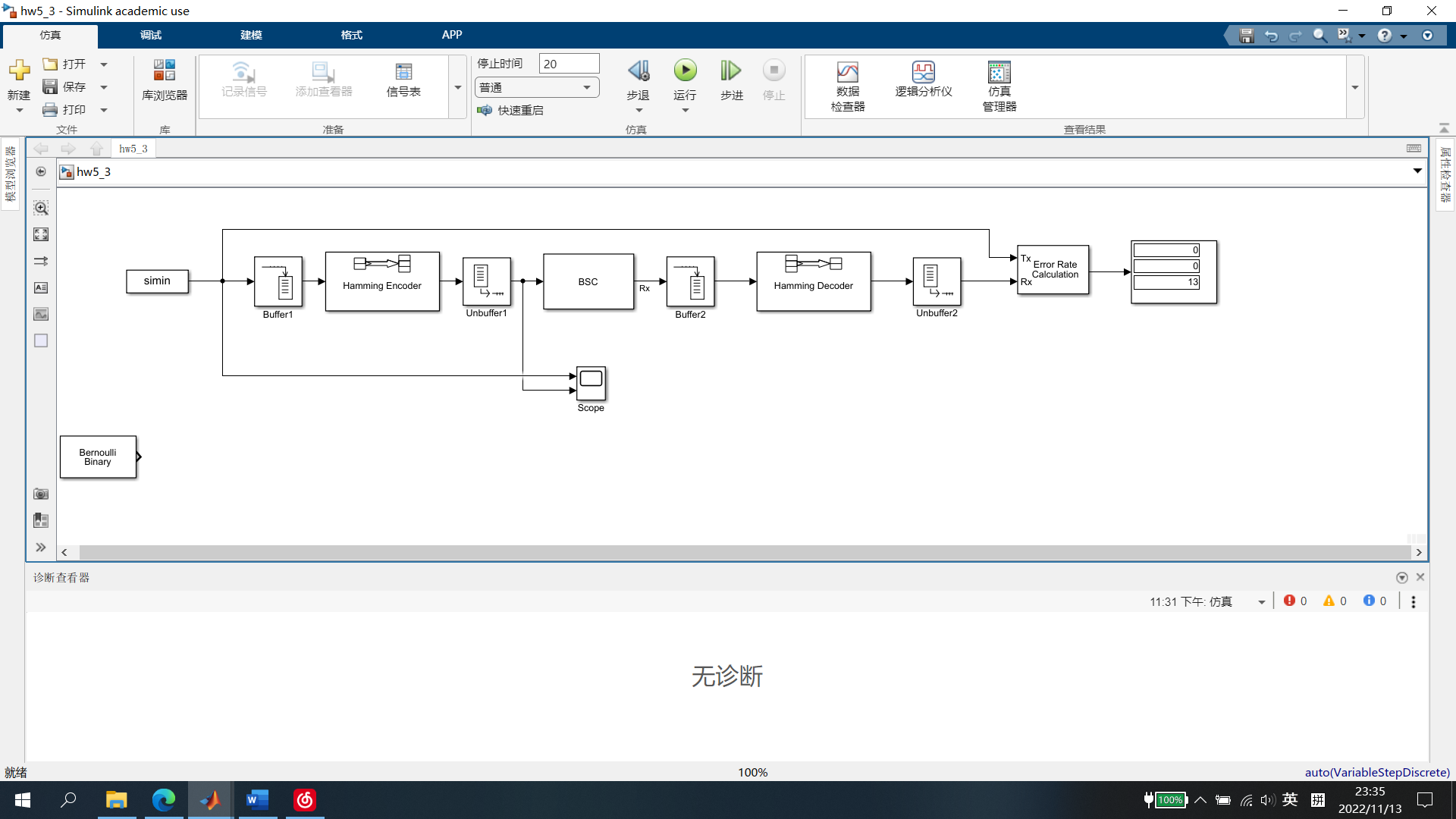
**观察圈起来的部分，延时是8**



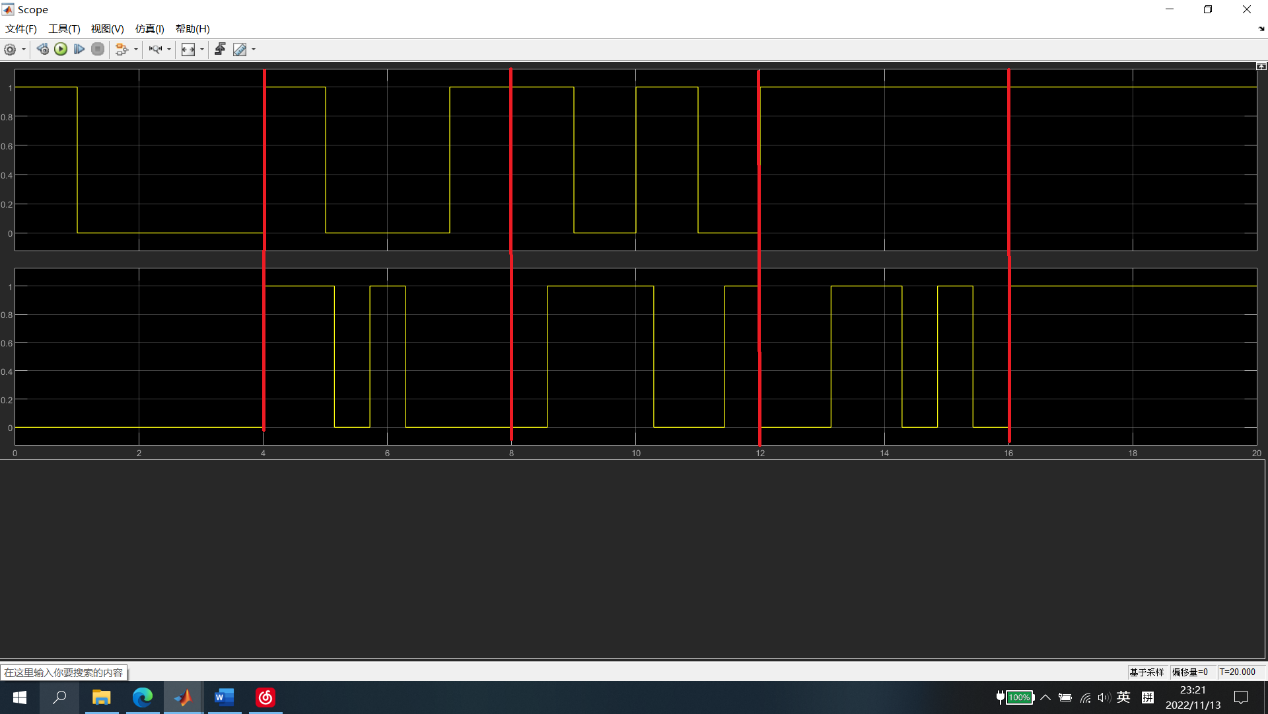
**设置延时=8后误比特率很小，佐证了延时=8的正确性**

**Buffer1设置4，Buffer2设置7**

**b)**



**>> simin=[0:15;1,0,0,0,1,0,0,1,1,0,1,0,1,1,1,1]';**



**输入 输出**

**1000 1101000**

**1001 0111001**

**1010 0011010**

**1111 1111111**

**输入四个信息是线性无关的，因此直接求逆得到**

**G=**

**1 1 0 1 0 0 0**

**0 1 1 0 1 0 0**

**1 1 1 0 0 1 0**

**1 0 1 0 0 0 1**

**HT=**

**1 0 1 1**

**1 1 1 0**

**0 1 1 1**

**1 0 0 0**

**1 0 0 0**

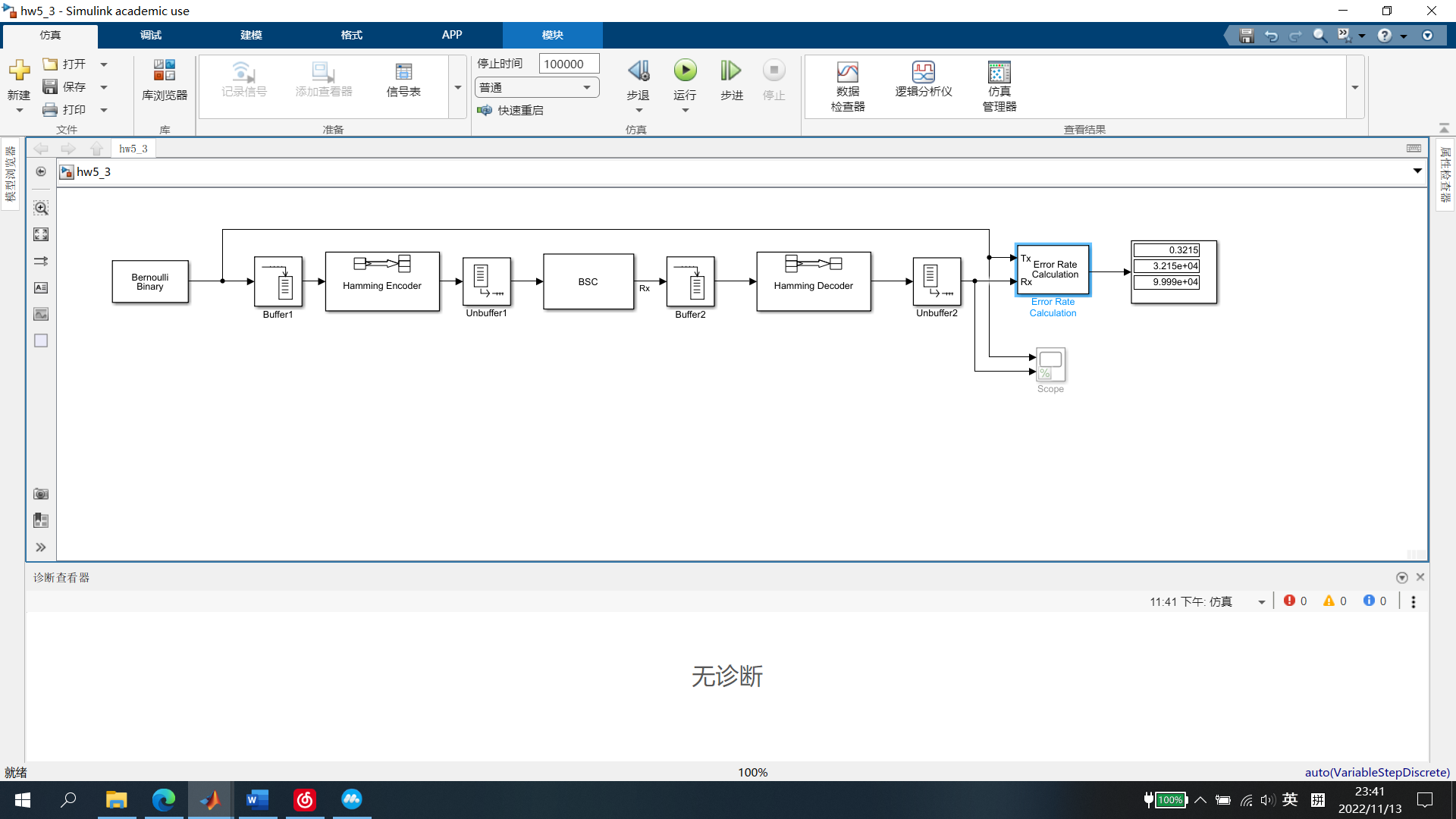
**0 1 0 0**

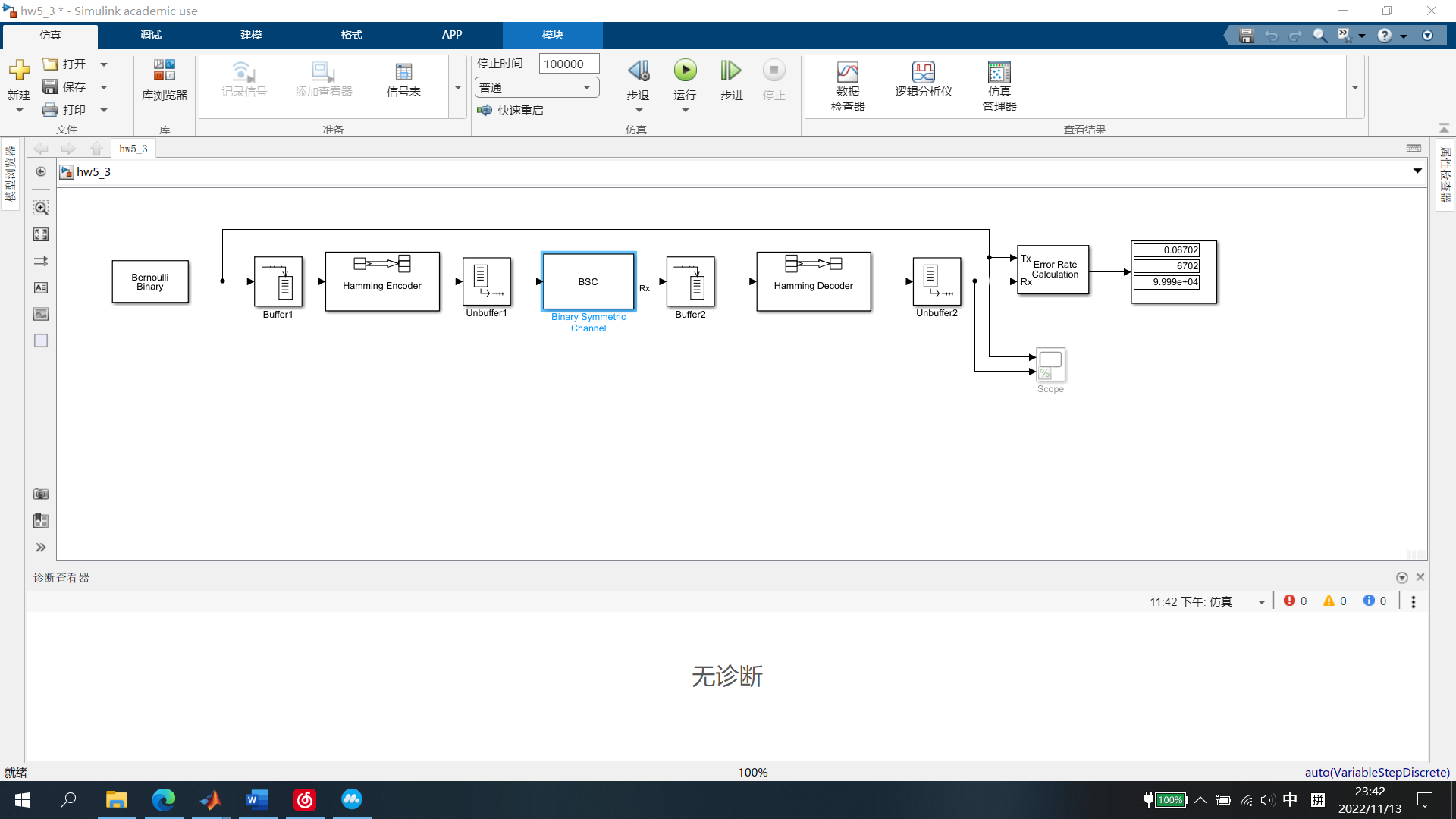
**0 0 1 0**

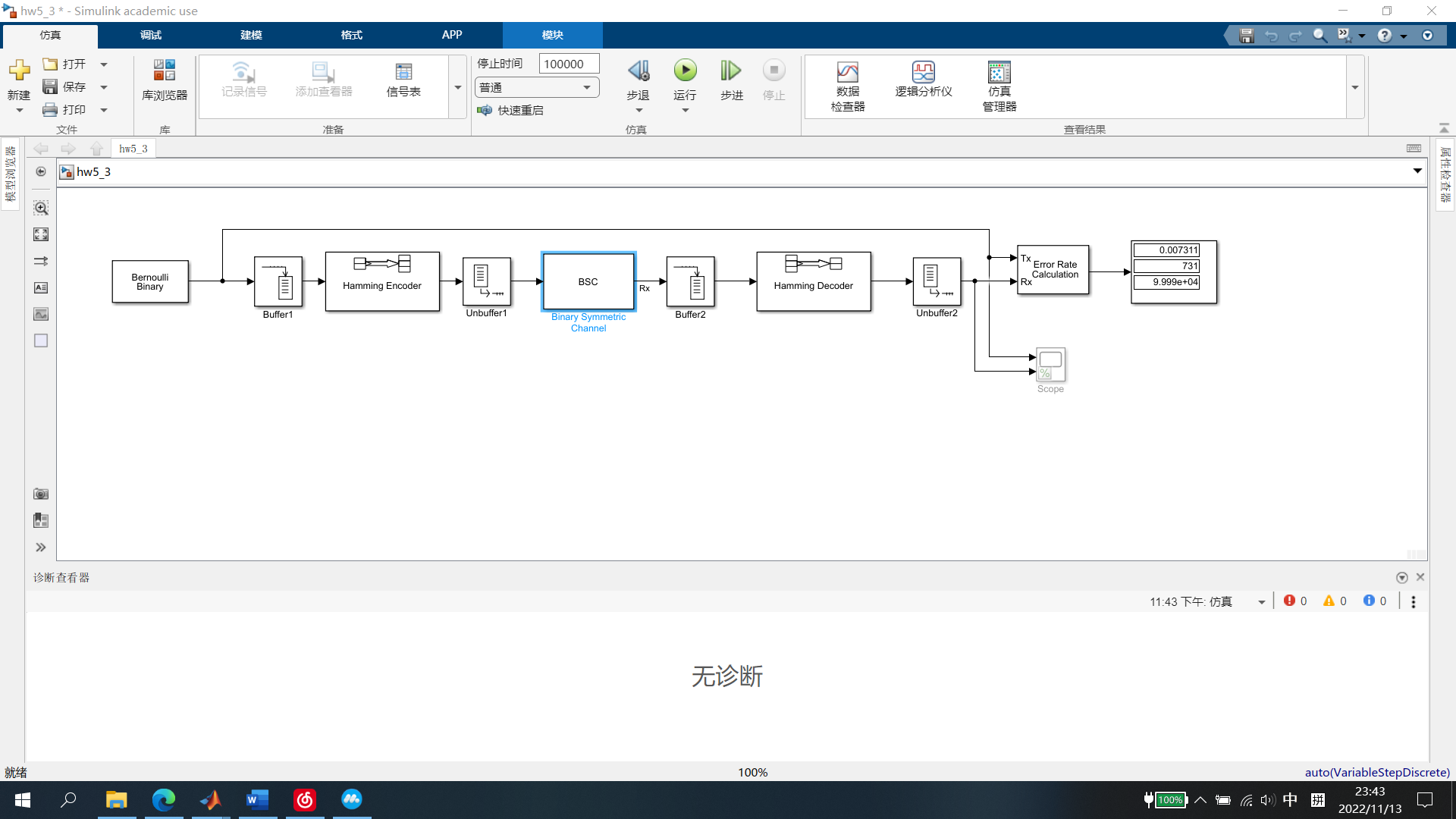
**0 0 0 1**

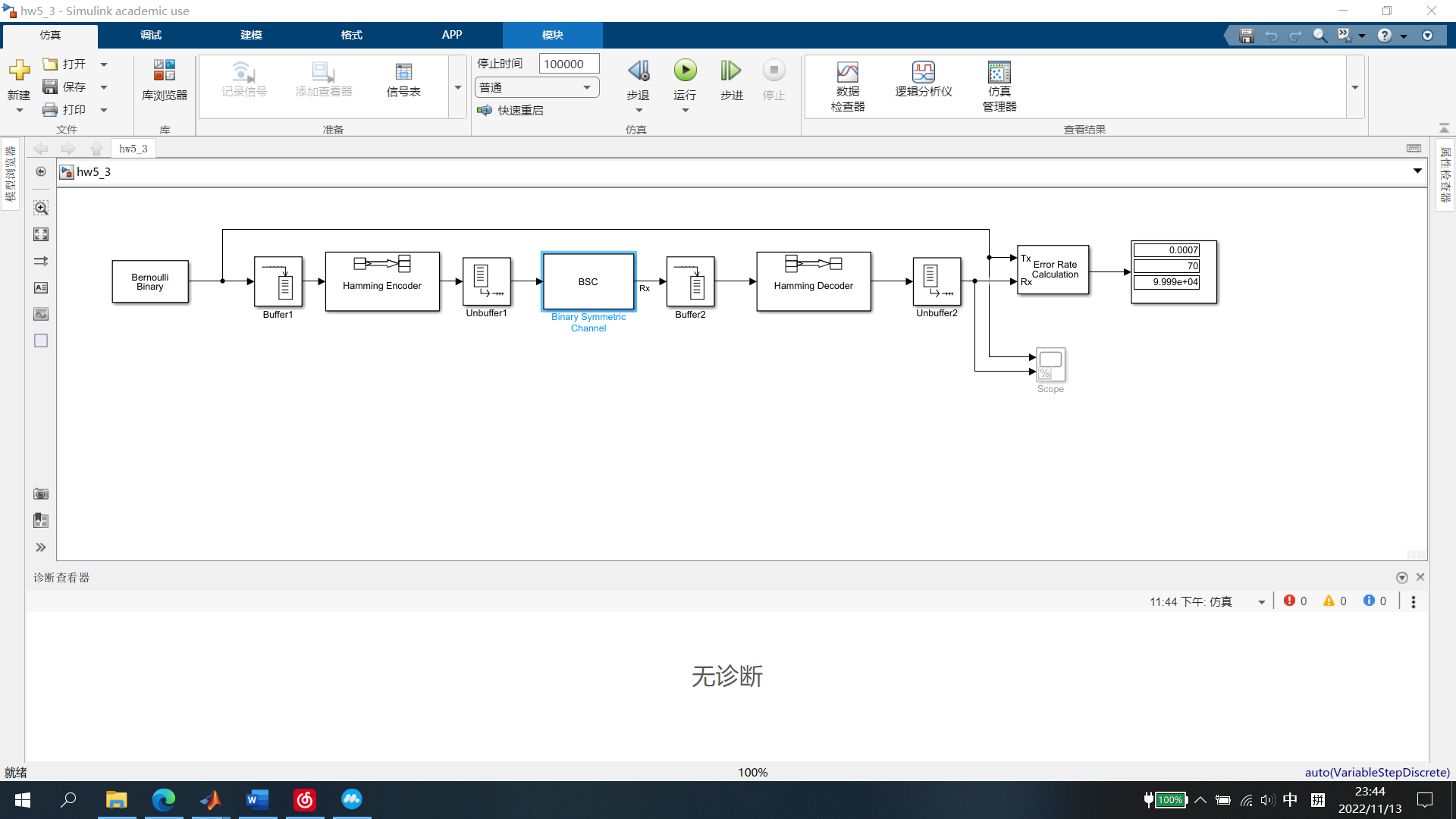
**c)**

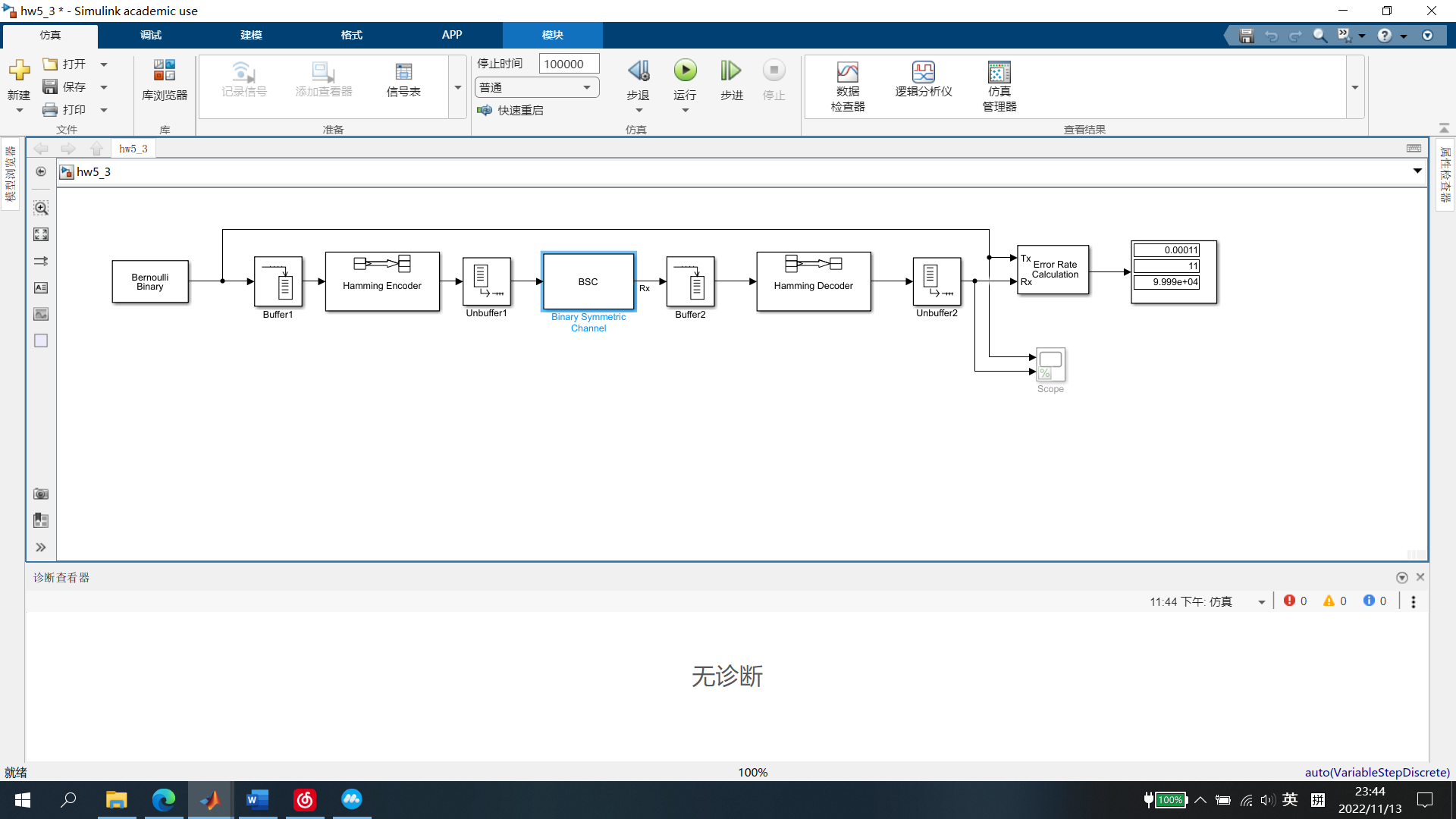
**(7,4)码 设置延时=8**

**0.3**

**0.1**

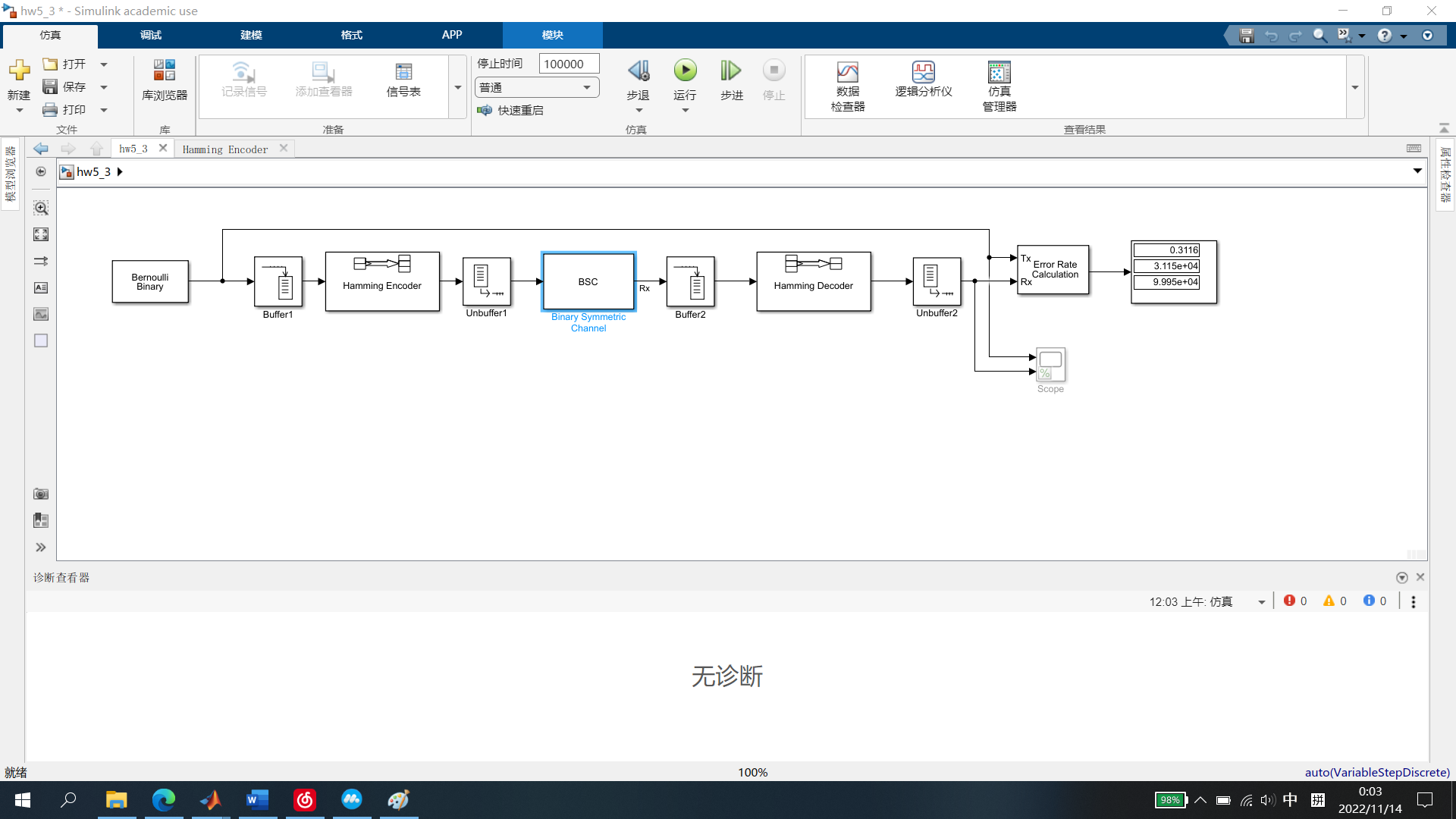
**0.03**

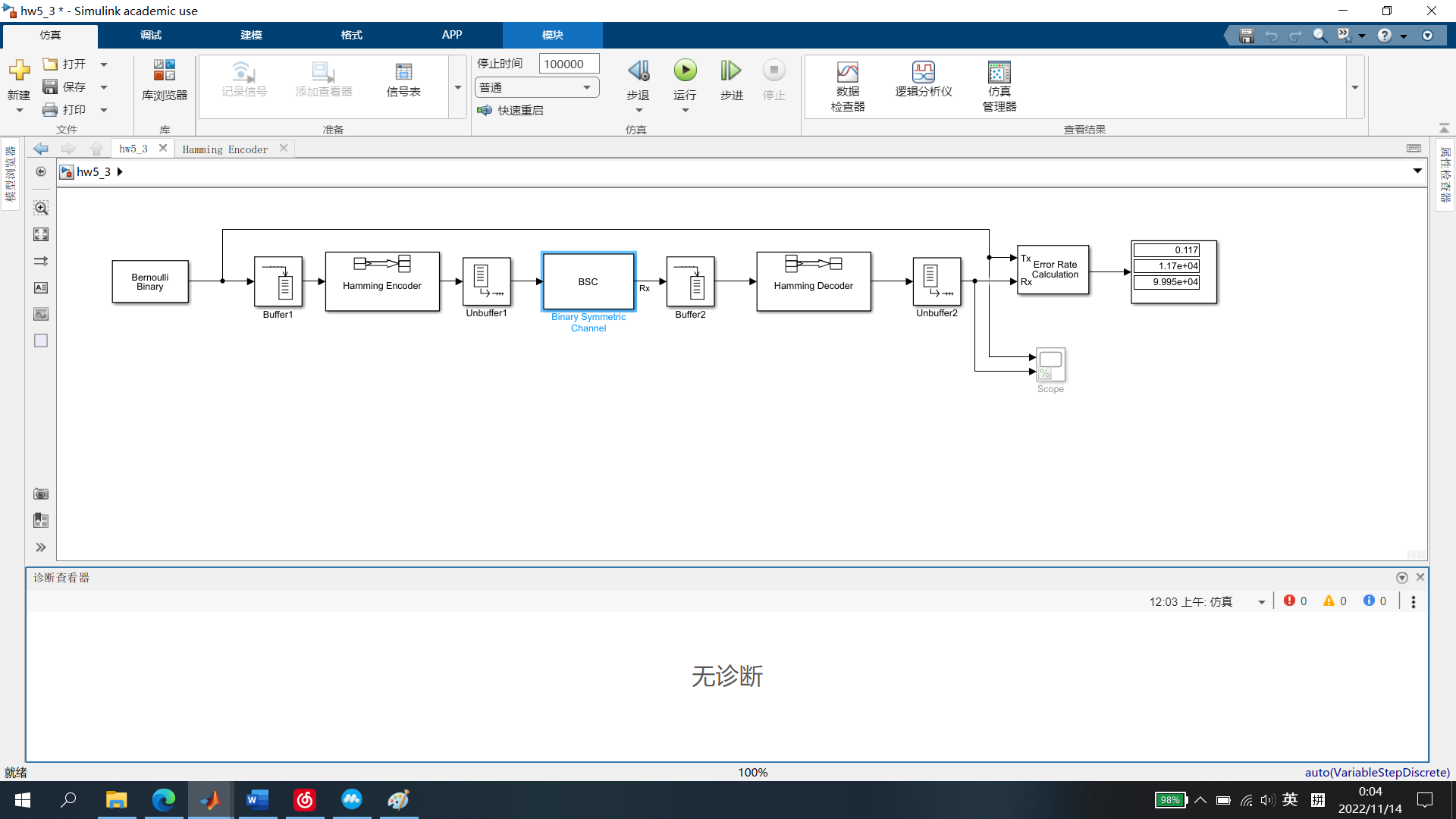
**0.01**

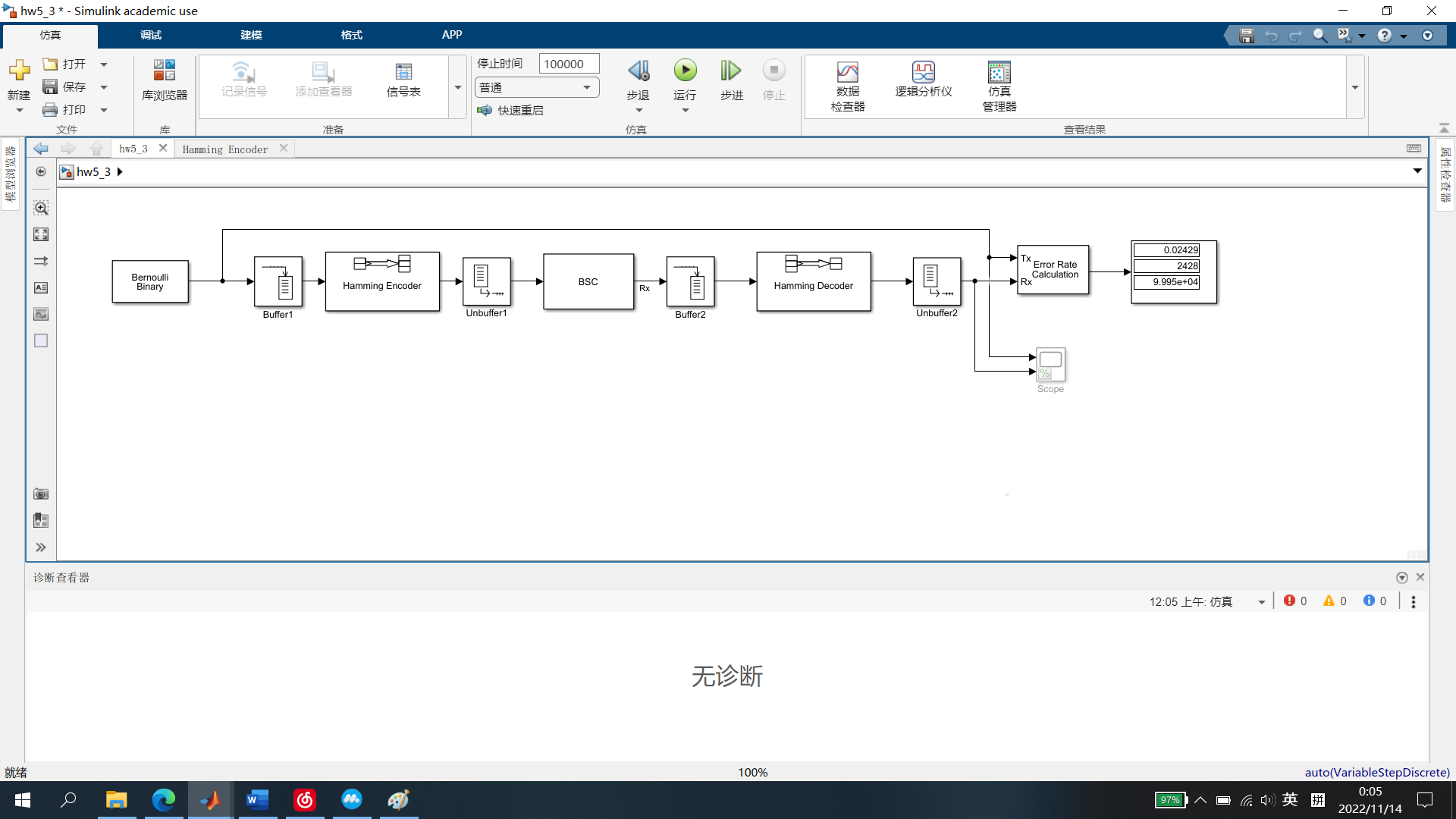
**0.003**

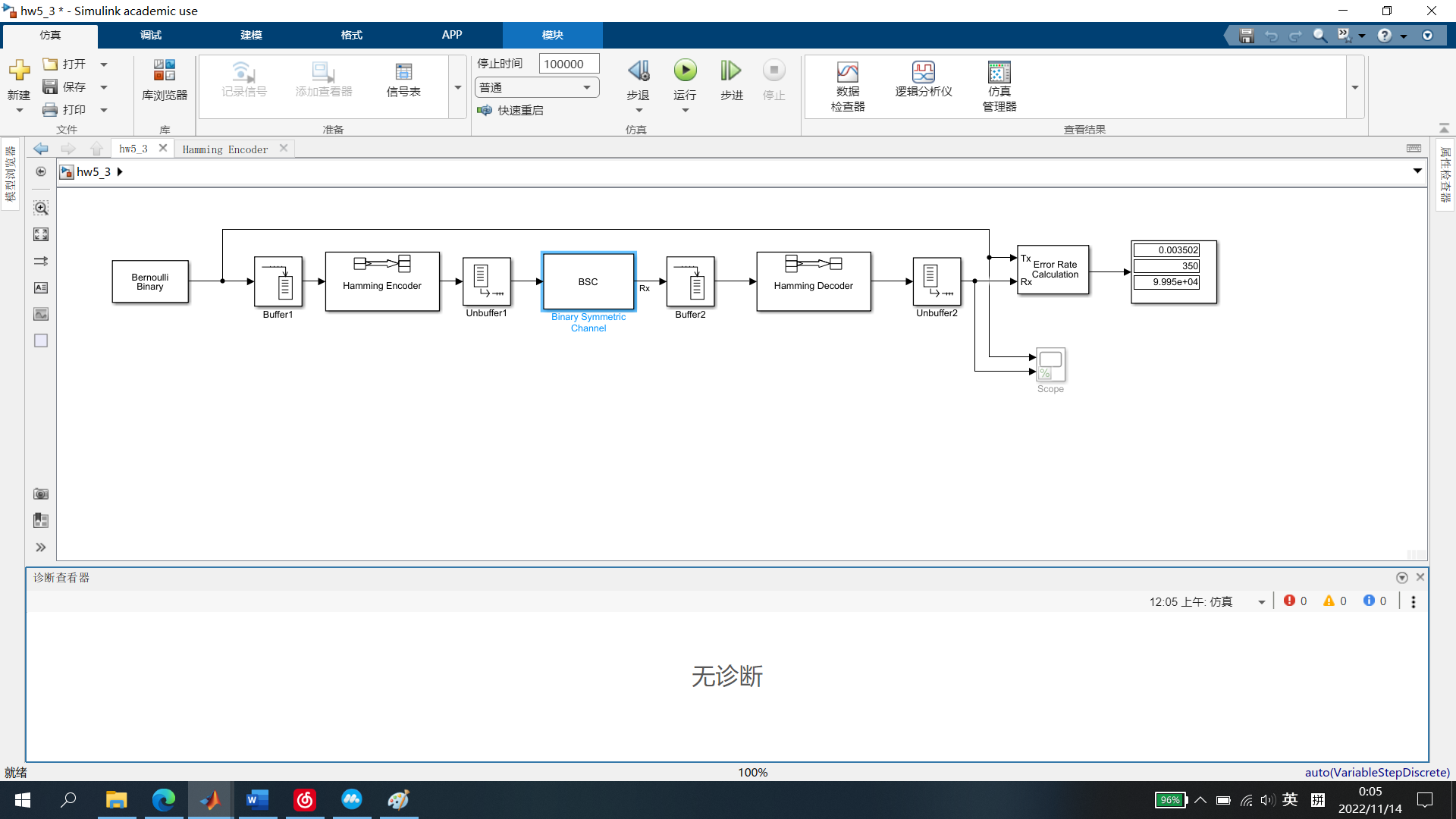
**(31,26)码**

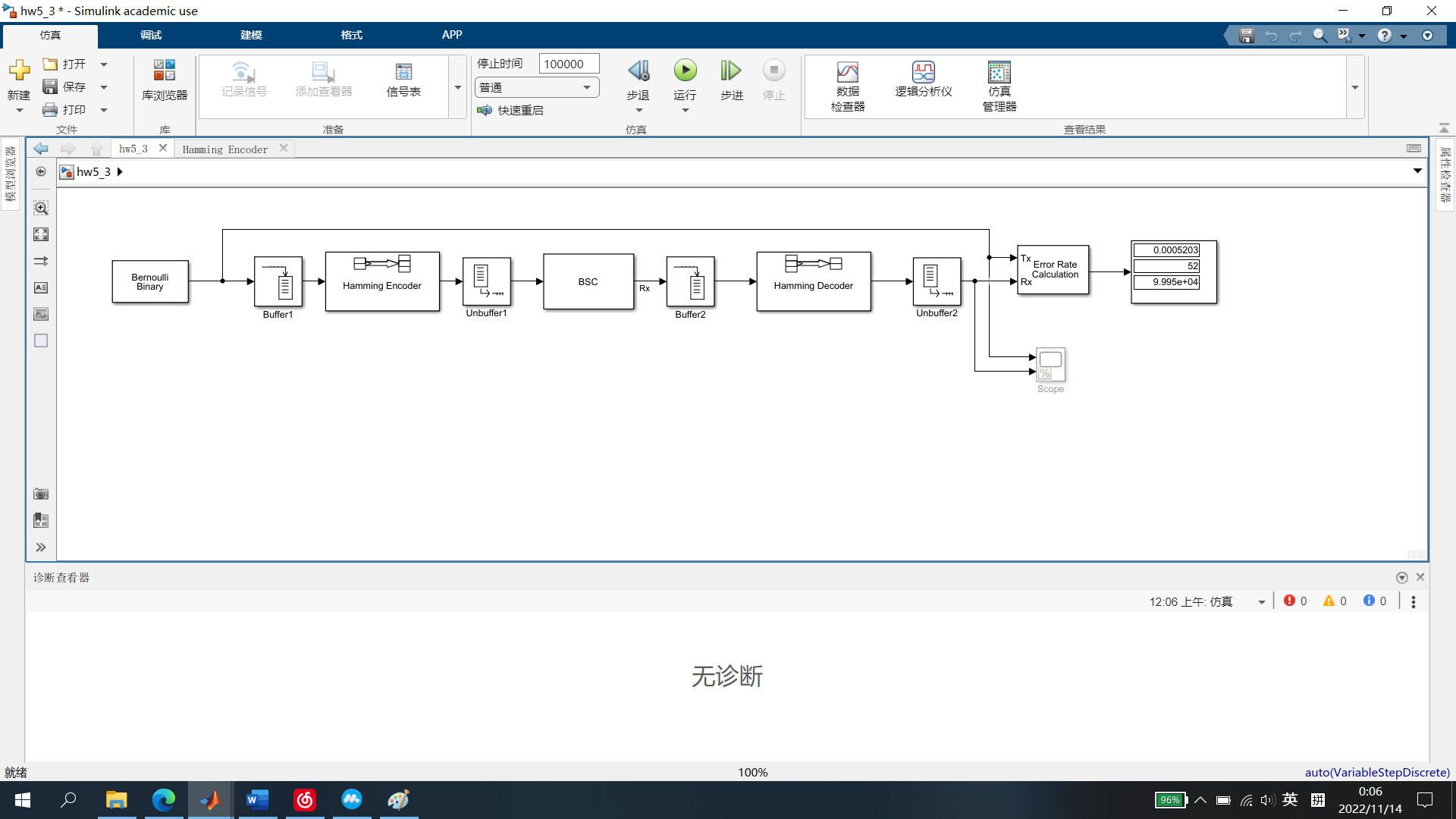
**两个buffer引起延时=52**

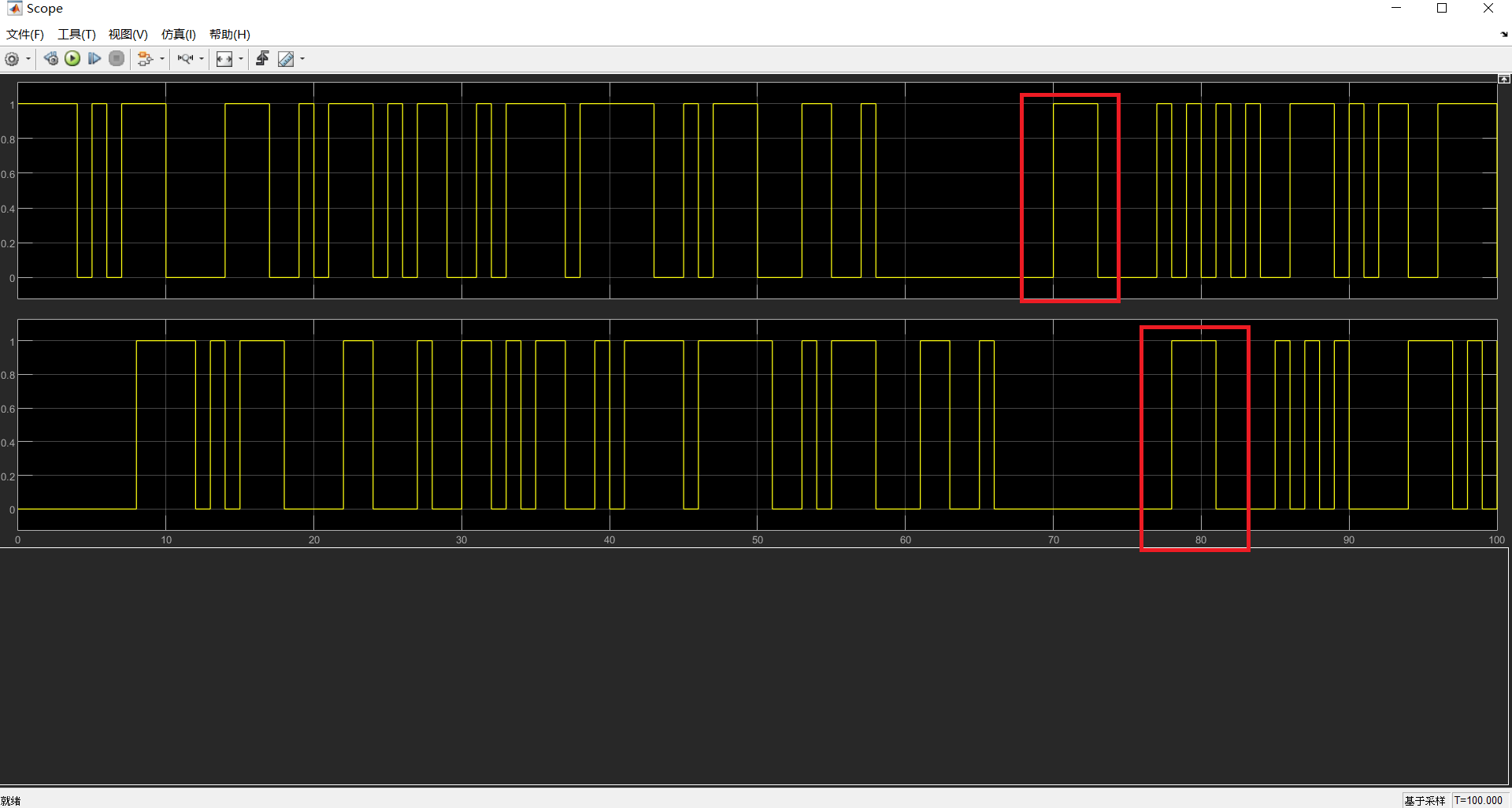
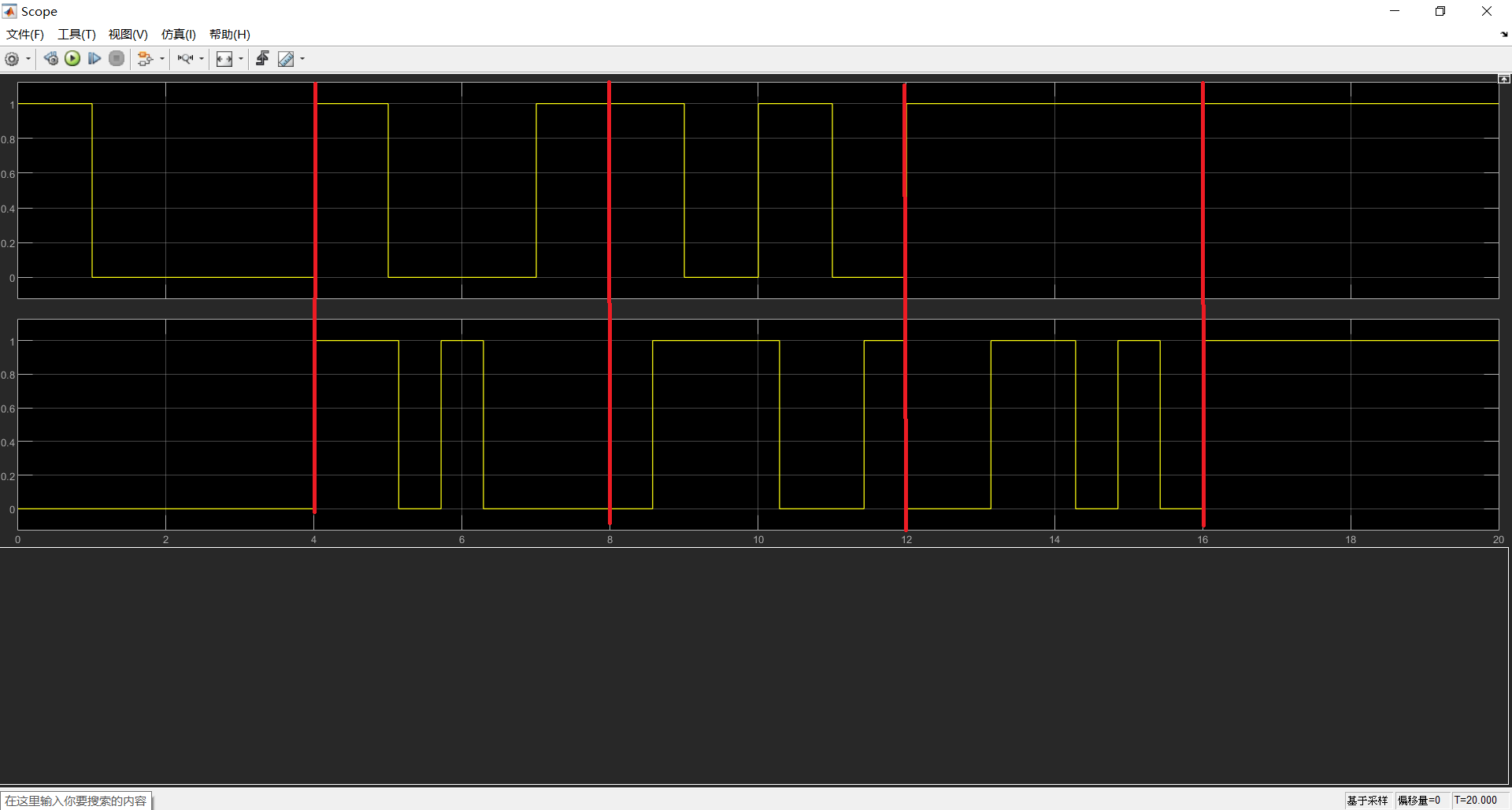
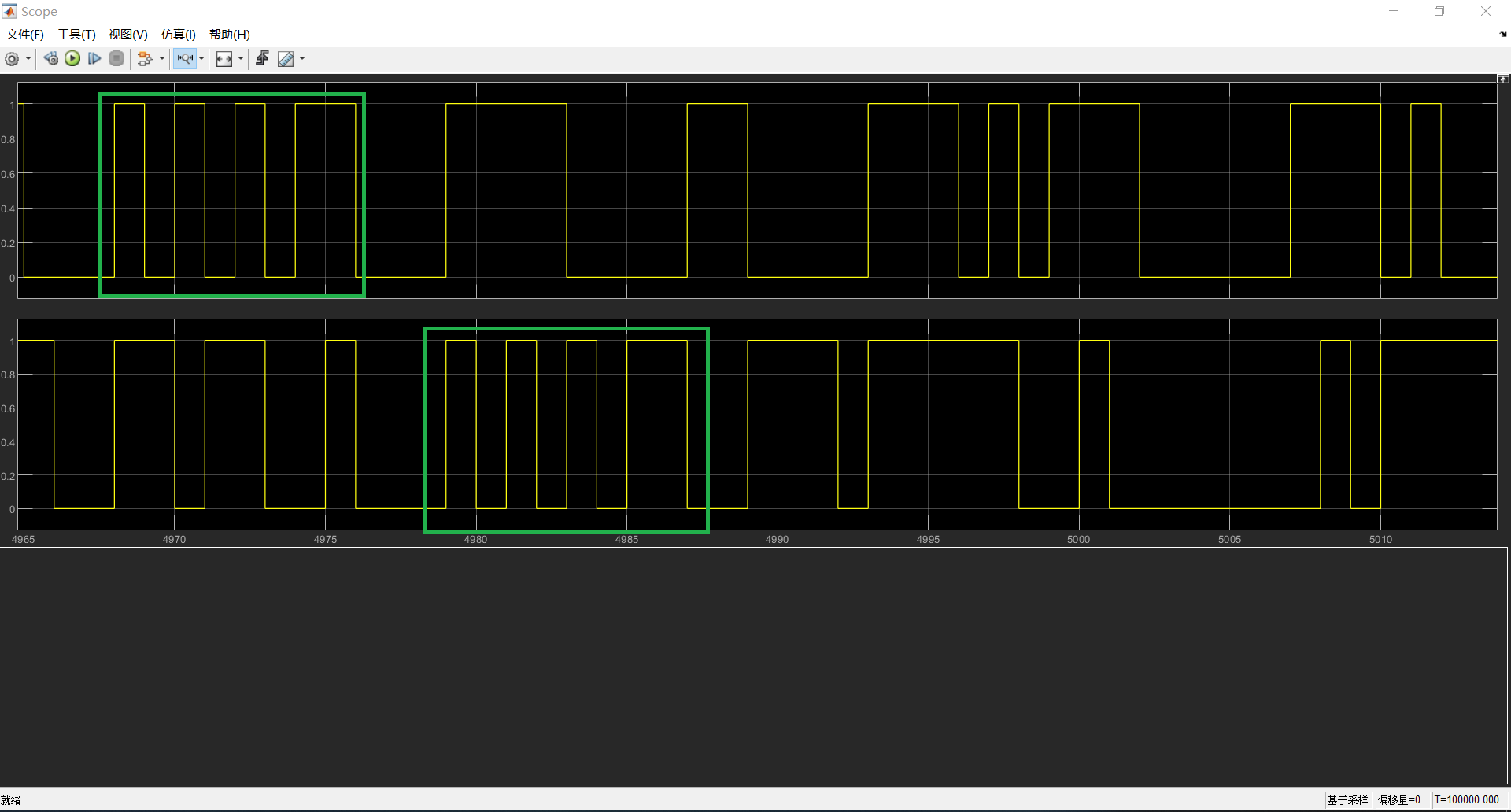
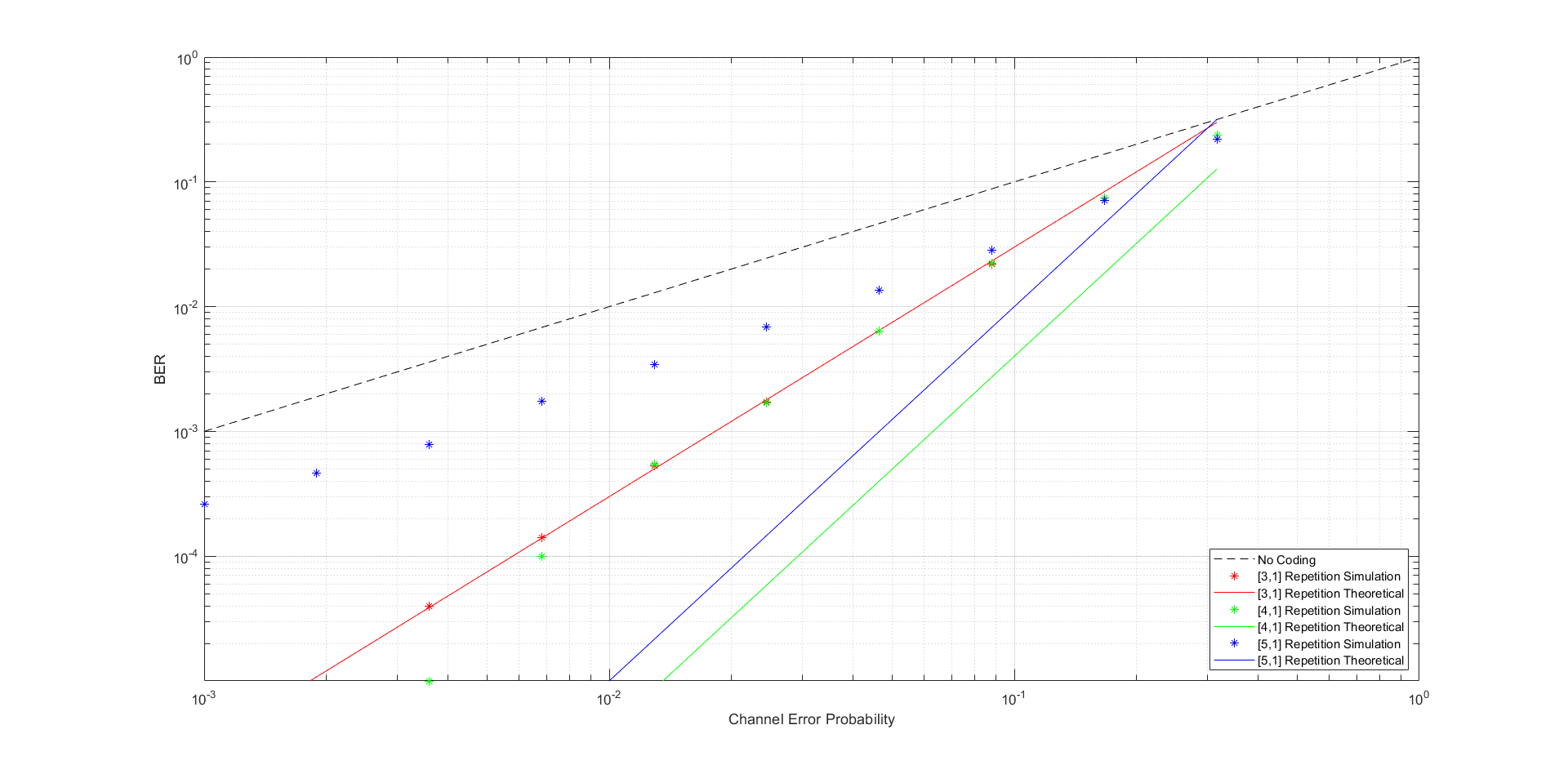
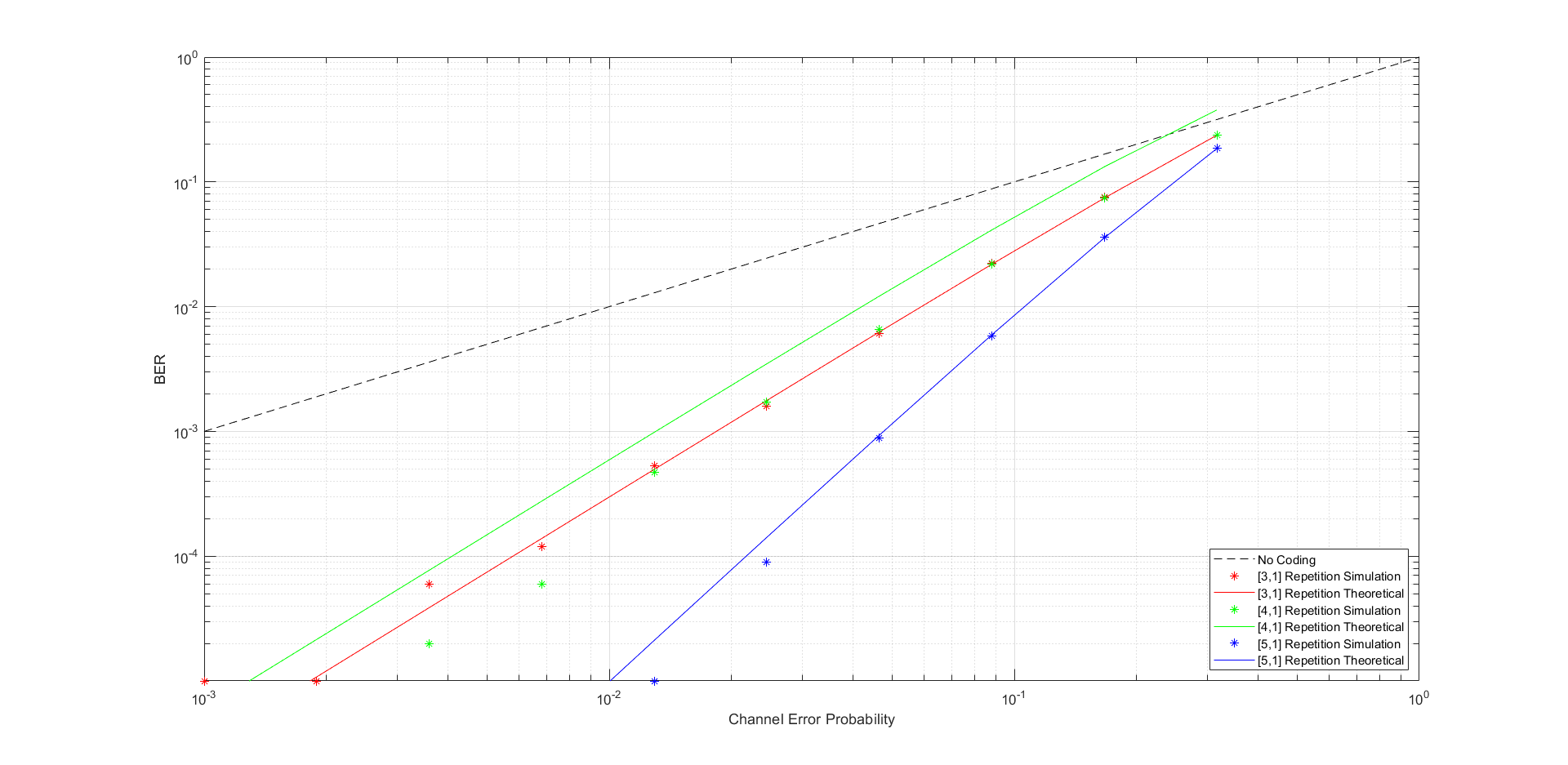
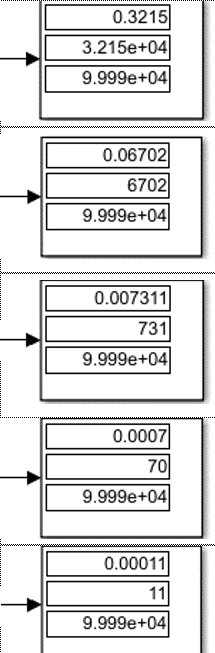
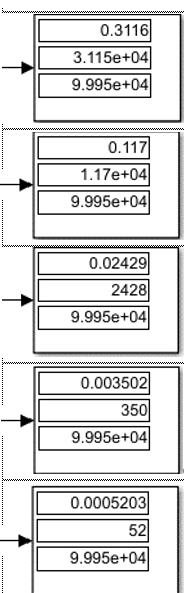
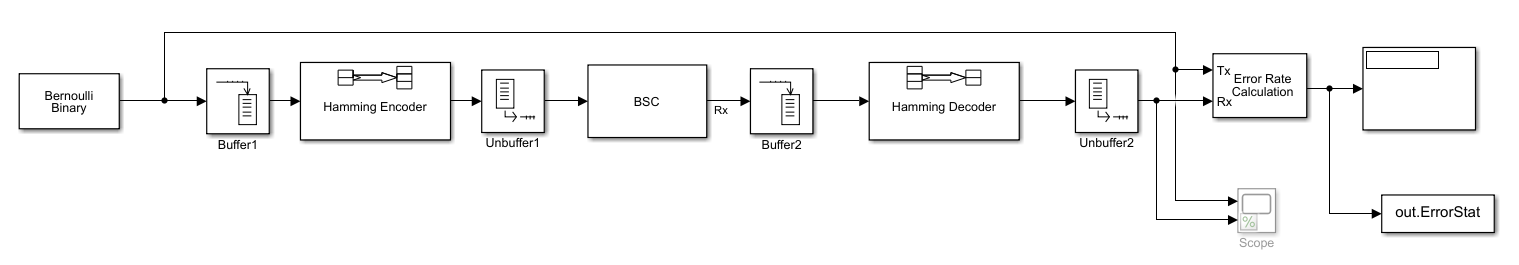
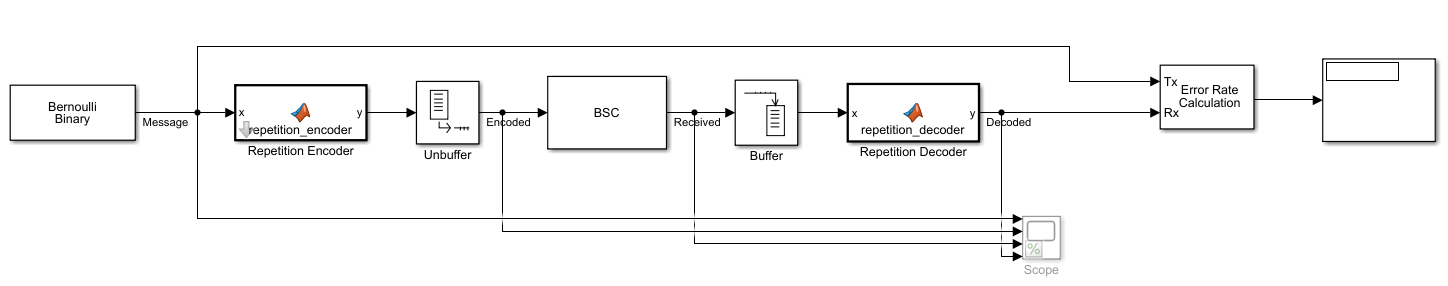
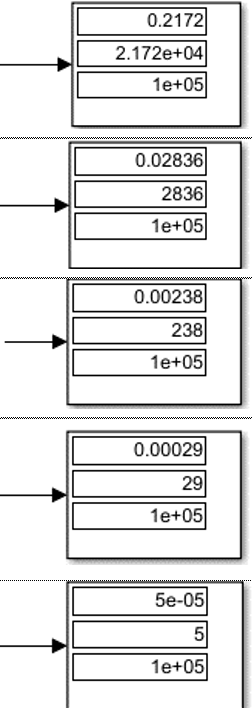
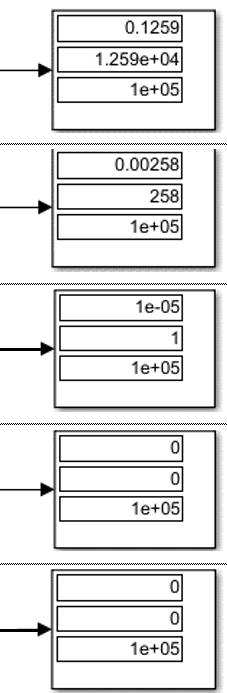
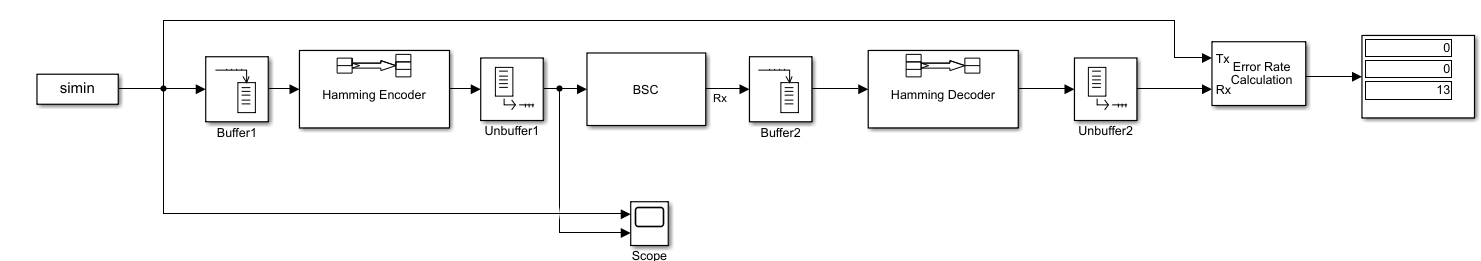
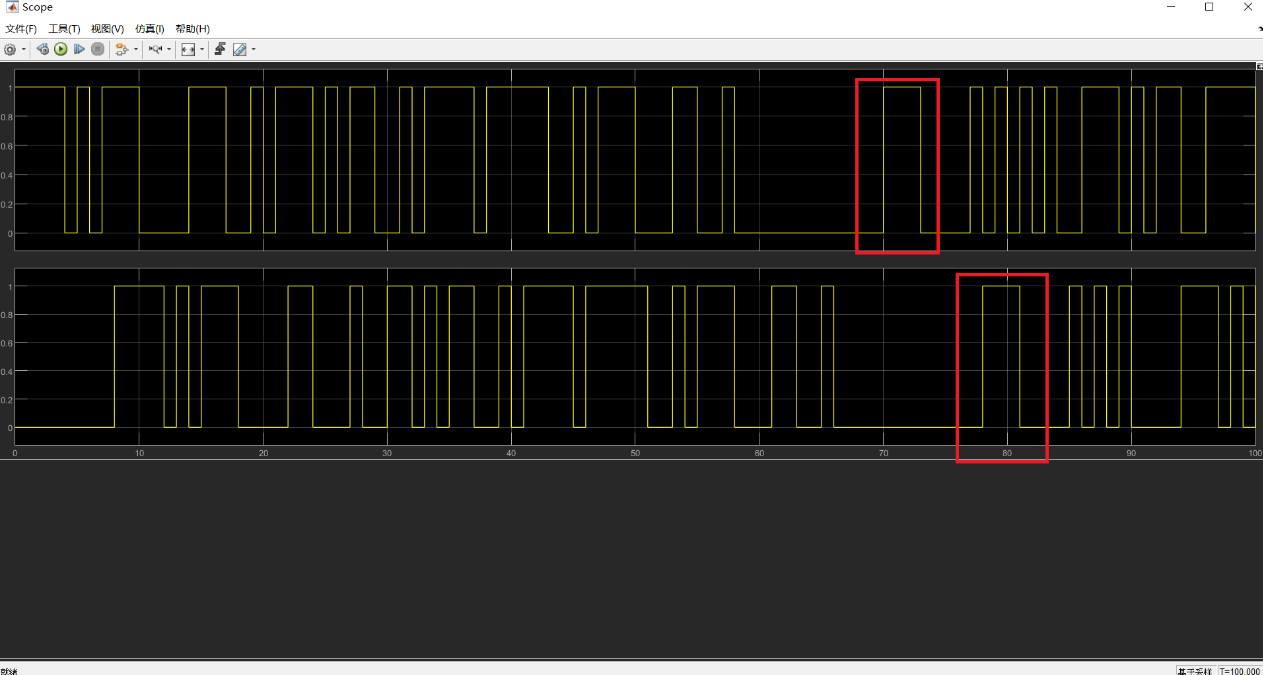
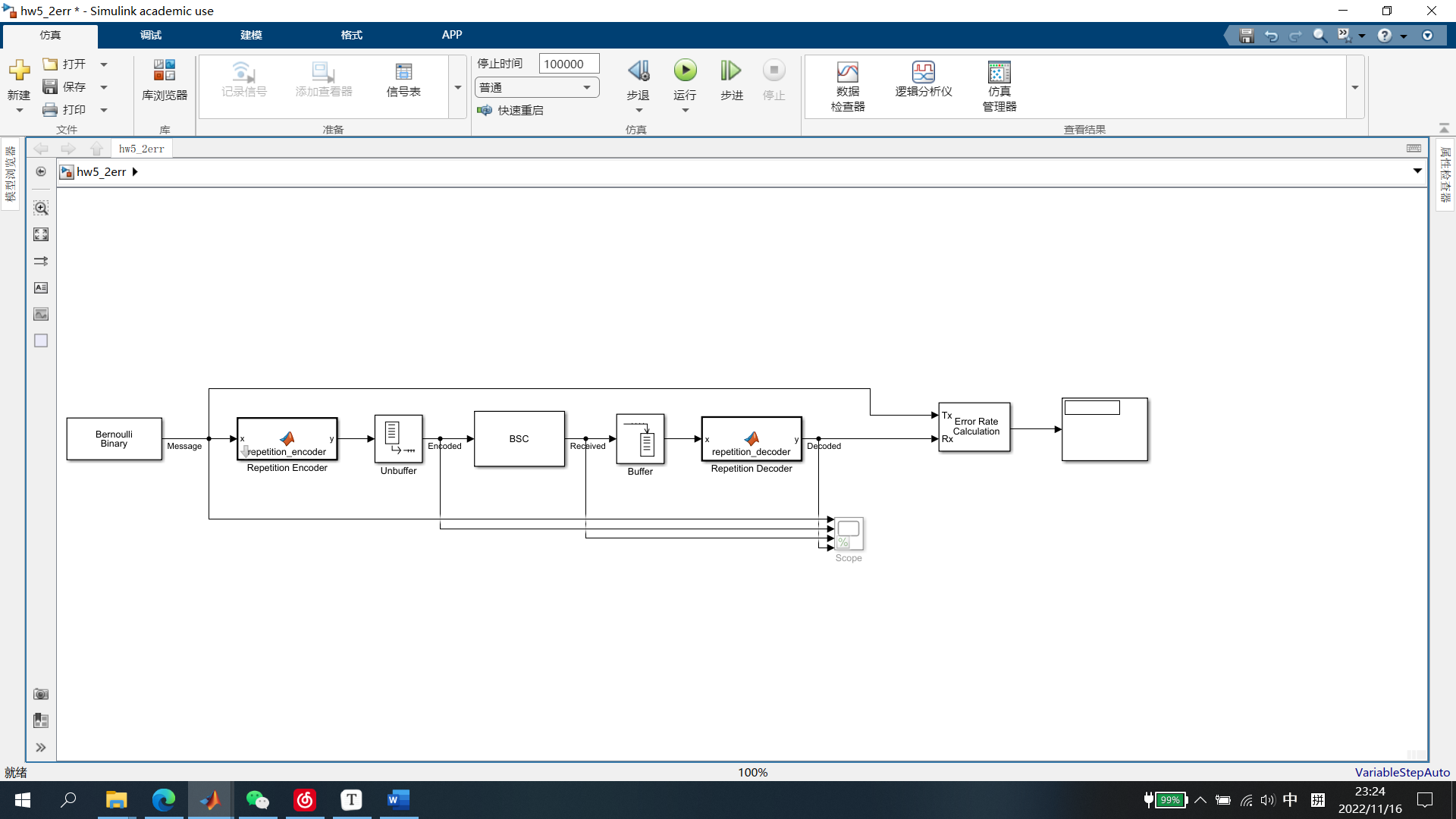
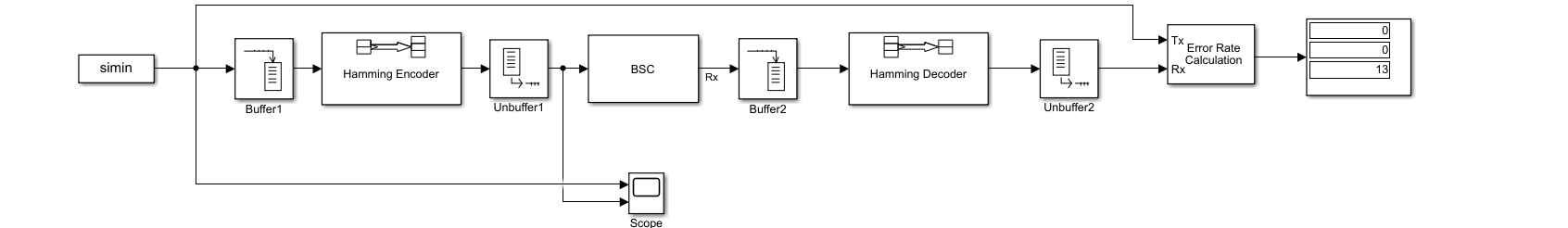
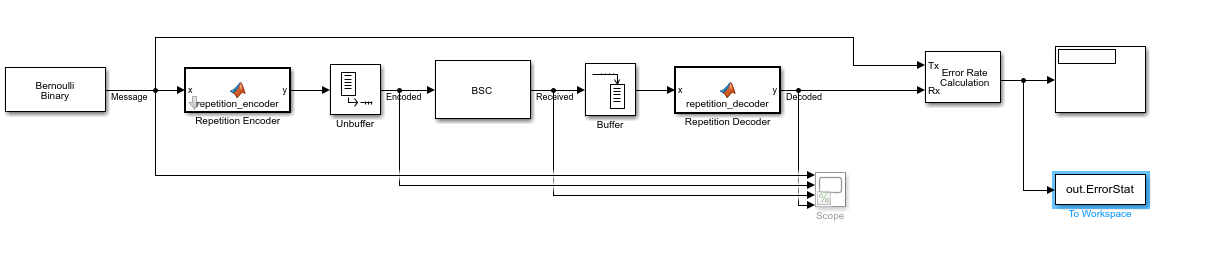
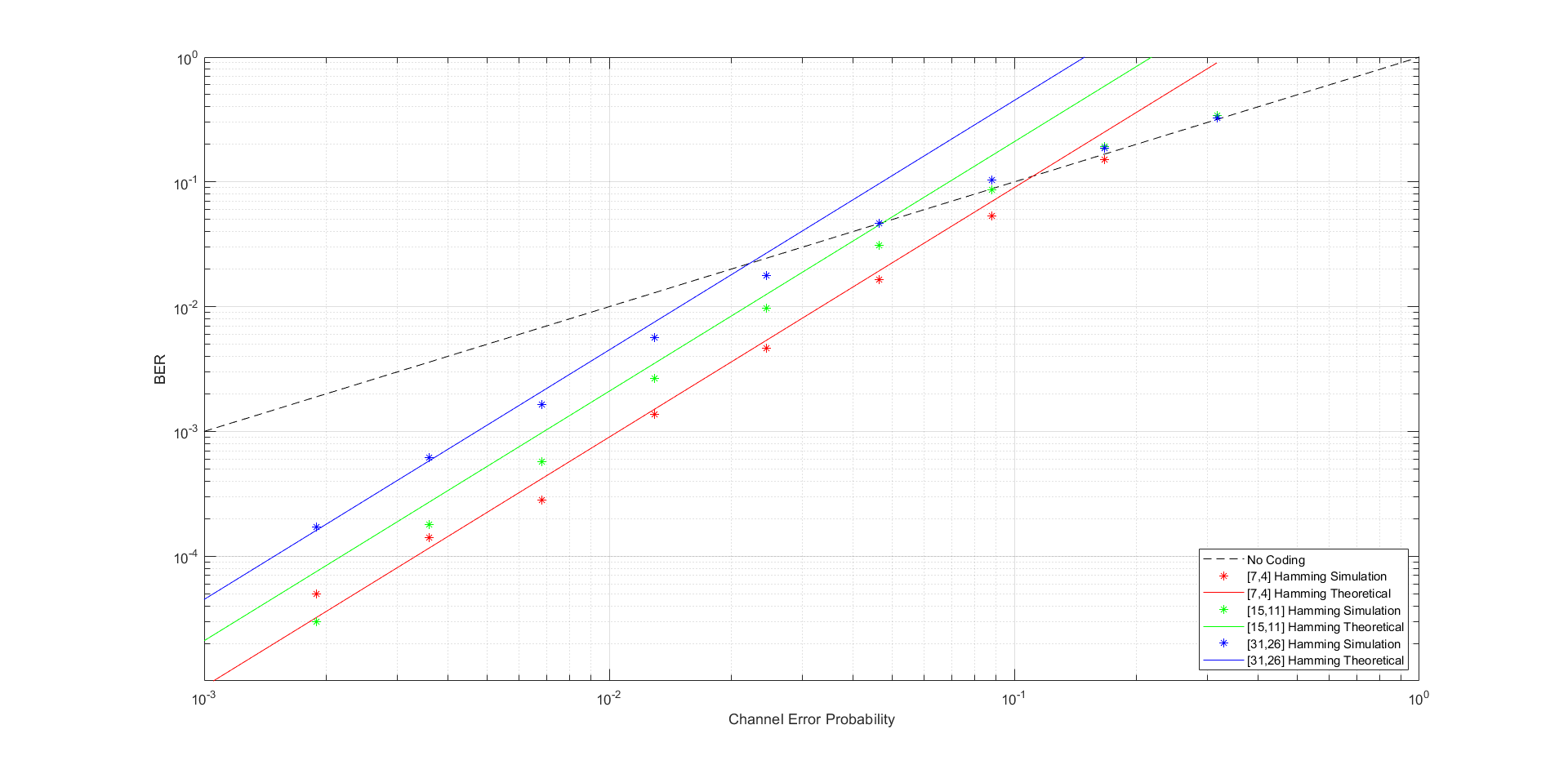
**0.3**

**0.1**

**0.03**

**0.01**

**0.003**

********