The blocks that correspond to each of these sections are

卫星下行链路

1. [Bernoulli Binary Generator](https://ww2.mathworks.cn/help/comm/ref/bernoullibinarygenerator.html) -

（Generate a Bernoulli random binary number）Creates a random binary data stream.

Probability of a zero:0.5

Sample time:1/64000

1. Convolutional Encoder - The Convolutional Encoder block encodes a sequence of binary input vectors to produce a sequence of binary output vectors.
2. [Rectangular QPSK Modulator Baseband](https://ww2.mathworks.cn/help/comm/ref/rectangularqammodulatorbaseband.html) - Maps the data stream to QPSK constellation.
3. [Raised Cosine Transmit Filter](https://ww2.mathworks.cn/help/comm/ref/raisedcosinetransmitfilter.html) - Upsamples and shapes the modulated signal using the square root raised cosine pulse shape.The Raised Cosine Transmit Filter block upsamples and filters the input signal using a normal raised cosine FIR filter or a square root raised cosine FIR filter.
4. FDMA - 频分多址（frequency division multiple access，FDMA），是把总[带宽](https://baike.baidu.com/item/%E5%B8%A6%E5%AE%BD/266879)被分隔成多个正交的信道，每个用户占用一个信道。
5. Mixer-The Mixer block generates a complex baseband model
6. Amplifer-The Amplifier block generates a complex baseband model of an amplifier with thermal noise
7. paraboloidal reflector antennas- 抛物面反射面天线,天线参数设置如图
8. Free Space Path Loss-模拟太空信号损失The Free Space Path Loss block simulates the loss of signal power due to the distance between transmitter and receiver. The block reduces the amplitude of the input signal by an amount that is determined in either of two ways:By the Distance (km) and Carrier frequency (MHz) parameters, if you specify Distance and Frequency in the Mode field.By the Loss (dB) parameter, if you specify Decibels in the Mode field.This block accepts a column vector input signal. The input signal to this block must be a complex signal.

地面基站接受链路

1. paraboloidal reflector antennas- 抛物面反射面天线,天线参数设置如图
2. Receiver system noise temperature-模拟接受系统的噪声污染，天空温度设置在10K，表面温度设置在300K，光束效率为0.72，接收器的噪声温度为250K

3.Mixer-The Mixer block generates a complex baseband model