

Project Name: GMSK Data transfer

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Summary:

GMSK is gaussian minimum shift keying. It is a digital modulation scheme commonly used for amateur satellites. It is both spectrally narrow and constant amplitude. It is similar to minimum shift keying (MSK).

We want to be able to send and receive data using SDRs, using the GMSK modulation blocks in GNU radio or else by implementing GMSK modulator and demodulator in a flow graph.

There is prior work in the open source community:

<https://github.com/gnuradio/gnuradio/blob/master/gr-digital/python/digital/gmsk.py>

and academically:

<https://pdfs.semanticscholar.org/2339/db2c2cbec91c57779c2c0ae3f3fe95e14722.pdf>

Once this functionality is complete we can try receiving GMSK signal from existing satellite.