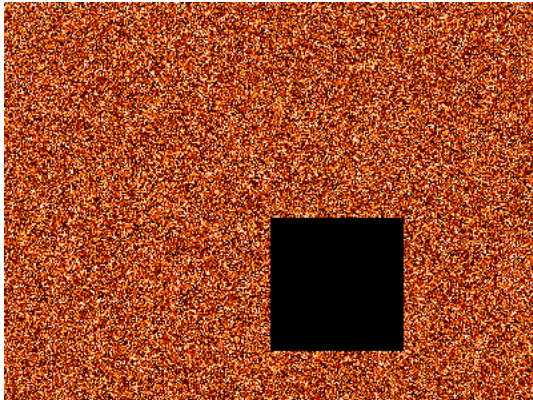QOE - Quality of Encryption
DM/RAL 11/21

We are concerned about being able to discern any regularities in the output of our Actors
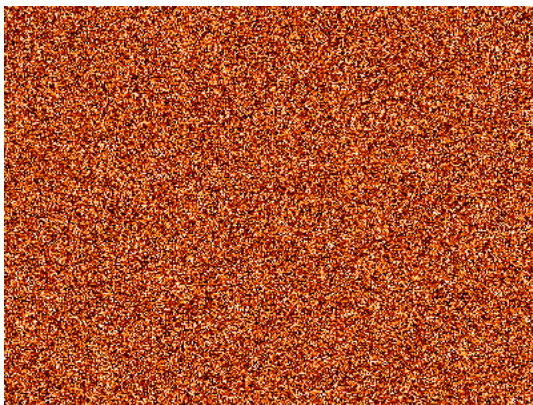ENCRYPTOR blocks.

Let's begin with a random field as input data, with a crisp hole punched into it. The noise was
derived via iterated SHA3/256 hashing:

And here is the result after encrypting through:

    (PIPE (MARSHAL-ENCODER) (ENCRYPTOR EKEY))

where EKEY was randomly generated via SHA3/256 hash:

As you can see there are no apparent regularities in the encrypted output. The hole leaves no
apparent artifacts in the encrypted output. Nothing to distinguish it from a random field. The
input and output random fields look similar, but not identical.

As a side note, the input data, generated via iterated SHA3/256 hashing, also looks very good as a totally random field. It is a statistically uniform distribution. The encrypted result is similarly from a uniform distribution.