

## **freeze: set parameters as fixed**

Do not allow indicated model parameters to vary. (See also [thaw](#).)

**Syntax:**        **freeze** [ <param range>...]

where

<param range =:: [modelName:] <param#> | <param#> - <param#>.

**For response parameters** (see **gain** command):

**rfreeze** [ <param range>...]

where

<param range =:: [source number:] <param#> | <param#> - <param#>.

The indicated model parameter or range of model parameters will be marked so they cannot be varied by the `fit` command. By default, the range will be the last range input by either a **freeze** or **thaw** command.

Examples:

Currently there are six parameters, initially all unfrozen.

```
XSPEC12> freeze 2
```

```
//Parameter 2 is frozen
```

```
XSPEC12> freeze 4-6
```

```
//Parameters 4, 5, and 6 are frozen.
```

```
XSPEC12> thaw 2 3-5
```

```
//Parameters 2, 4, and 5 are thawed, parameter 3 is unaffected.
```

```
XSPEC12> freeze
```

```
//Parameters 3,4,5 are frozen (the last range input by a freeze
```

```
//or thaw command).
```

```
XSPEC12> rfreeze 4-6
```

```
//Response parameters 4, 5, and 6 are frozen.
```