t15_metric_2 (TMd7mFcokrgzLnza3BbnyR4mfvhQQvou4ov)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_metric\_1 : \iota \Rightarrow o$ be given. Let $k2\_metric\_2 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_metric\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0) \wedge (l1\_metric\_1\ X0)) \wedge (m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))) \Rightarrow (m1\_subset\_1\ (k1\_metric\_2\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_metric\_1\ X0)) \Rightarrow (k2\_metric\_2\ X0 = ReplSep\ (toset\ (\lambda X1 : \iota.m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\ (\lambda X1 : \iota.\exists X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \wedge (k1\_metric\_2\ X0\ X2 = X1))\ (\lambda X1 : \iota.X1)) \tag{2}$$

Theorem 1

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1) \wedge (l1\_metric\_1\ X1)) \Rightarrow ((X0 \in k2\_metric\_2\ X1) \Leftrightarrow (\exists X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1)) \wedge (X0 = k1\_metric\_2\ X1\ X2)))$$