The necessity of identity

Consider the wff:

$$\forall x \forall y (x = y \rightarrow \Box(x = y))$$

This is valid given our system of SQML. But is it true? Is this the kind of system we want?

Consider ‘Hesperus = Phosphorus’. *That* was an empirical discovery, and one is tempted to think that it might not have been true – i.e., that it was contingent.
The necessity of existence

Consider the Barcan Formula

\( \forall x \Box Fx \rightarrow \Box \forall x Fx \)

Consider the Converse Barcan Formula

\( \Box \forall x Fx \rightarrow \forall x \Box Fx \)
A little bit of philosophy is a dangerous thing. Consider my favorite argument:

1. Brandon = Brandon
A little bit of philosophy is a dangerous thing. Consider my favorite argument:

1. \( \text{Brandon} = \text{Brandon} \)
2. \( \exists x \ x = \text{Brandon} \)
A little bit of philosophy is a dangerous thing. Consider my favorite argument:

1. Brandon = Brandon
2. ∃x x = Brandon
3. □∃x x = Brandon
A little bit of philosophy is a dangerous thing. Consider my favorite argument:

1. Brandon = Brandon
2. \( \exists x \ x = \text{Brandon} \)
3. \( \Box \exists x \ x = \text{Brandon} \)
4. God = a necessarily existing being
A little bit of philosophy is a dangerous thing. Consider my favorite argument:

1. Brandon = Brandon
2. ∃x x = Brandon
3. □∃x x = Brandon
4. God = a necessarily existing being
5. ∴ Brandon = God