1046-03-786   **S. Ali Dashti*** (`samdashti@gmail.com`), Department of Mathematics, P.O. Box 118105, University of Florida, Gainesville, FL 32611-8105, and **Douglas Cenzer**. *Computable dynamics of real functions.* Preliminary report.

The iteration of a continuous function F on 2^N defines for each $X \in 2^N$ an *itinerary* $It(X)$: the sequence $< F^n(X)(0) >$. Then IT_F is the (closed) set of all itineraries; this is the *symbolic dynamics* of F. The set IT_F is always a *subshift*, that is IT_F is closed under the shift operator σ, where $\sigma(X(0), X(1), ...) = (X(1), X(2), ...)$. The authors recently showed (Math. Logic Quarterly, 2008) that for a computable F, IT_F is a decidable Π_1^0 class, that is, the set of intervals which meet IT_F is a computable set. Furthermore, any decidable subshift is the set of itineraries of some computable function. The present paper continues the investigation of the symbolic dynamics of computable real functions. (Received September 11, 2008)