**FUNCTION** **RRATE**,C,**PM**

RR=PM\***0.** ;Initialize RR with same dimensions as PM

jj=**where**(PM-c[**3**] **LE** **0.**,COMPL=kk) ;C[3] is threshold value for impact

;PM is the gridmap (or scalar) with PM concentrations

**IF** **max**(jj) **GE** **0** **then** RR[JJ]=**1. ;**Gridcells where PM < C[3] get RR=1

RR[KK]=**1**+C[**0**]\*(**1**-**exp**(-c[**1**]\*(PM[kk]-c[**3**])^c[**2**])) ;Other gridcells: RR as a function of 4   
 C[i] function parameter

**RETURN**,RR ;returned RR is gridmap (or scalar) with same dimension as PM

**end**