

Solve Warning Messages

A series of error checks have been built into the program to assist the user in correct data preparation. The following is a list of the current warning messages provided in XPRafts together with more detailed explanations and possible solutions to problems. These warnings may appear in the solve window during analysis. The warnings that appear grey and crossed out are no longer relevant.

Message	Description	Possible Solution
Warning 1 – DT does not divide equally	Routing increment (DT) doesn't equally divide into storm temporal pattern partition.	Change Routing Increment to a value that does equally divide into temporal pattern.
Warning 2 – DT possibly too small	Present routing increment may not allow complete generation of hydrograph recession. This may or may not be a problem.	If this is a problem then increase Routing Increment. Remember however ERROR1 comments when resetting Routing Increment.
Warning 3 – Total Temporal adds to 1	The total temporal partition fractions do not add up to unity. (Only when AVINT = -1).	Check individual values and adjust so as total is unity.
Warning 4 – No. of links >200	More than 200 link records have been found. A max of 200 is allowable.	Reduce number of links in run by re-subdividing the catchment.
Warning 5 – Link? Not found in link addition record	When adding links together one of the link numbers has not been found.	Check link numbers.
Warning 6 – Attempted addition of same hydrograph in link addition record	Two link numbers the same have been found in the addition record.	Check link numbers.
Warning 7 – More than 10 hydrographs needed to be stored at once	More than 10 hydrographs are needed to be stored at once. A maximum of 10 allowed.	Examine link ordering with the view to reducing the max. number of hydrographs to be stored at any one time.
Warning 8 – Losses possibly exceed rain	Total rainfall losses – initial plus continuing could exceed storm rainfall. RAFTS will not run with zero excess rainfall.	Check losses and adjust if necessary.
Warning 9 – Reach division possibly insufficient Maximum X desirable sub-reach length metres	In Muskingum-Cunge channel routing the number of sub-reaches selected with the current Routing Increment may cause instability in the routing.	Divide the channel into more sub-reaches so as sub-reaches length is equal to or less than the value shown. Alternatively set SLPX (2) = 99999 and JX = 3 and the calculated minimum reach length will be used. A maximum of 55 sub-reaches is allowable. If this is insufficient increase Routing Increment.
Warning 10 – SF or QF 0	Starting stage/storage discharge data is not zero.	The starting co-ordinates of a stage/discharge or stage/storage curve must be 0.
Warning 11 – Subareas CA	Total isochronal areas do not add up to CA.	Check individual subareas.
Warning 12 – DRDH-ve	The rate of change of hydraulic radius to depth is computed as a negative value. This can occur when depth of flow is adjacent to diverging interface in channels such as a boundary of rectangular flat and overflow section. Program resets DRDH to 0 in this case and proceeds.	No action – only warning of potential error.
Warning 13 – IBFL selected with RET = 0	The 'B' multiplier and hence 'B' is set to zero because no return period has been entered.	Enter an appropriate value for return period.