

# ○Development of an automatic FLR identification code

The computer code for automatic FLR identification uses the following criteria:

- For a maximum in the power ratio (rPwMax), find the closest minimum in the power ratio (rPwMin).
- A maximum in the power ratio (rPwMax) should be larger than the adjacent two rPwMax's (at lower and higher frequencies).
- In the following, we call the frequency difference between the paired rPwMax and rPwMin as **dist\_rPwMaxMin**. Then,
- The rPwMin should be smaller than its adjacent two rPwMin's (at lower and higher frequencies).  
✕ Exception: adjacent rPwMin which is farther than (**NtimesA** × **dist\_rPwMaxMin**) is ignored; the rest(s) are used.

- We discard events for which there exist  $dPhMax(s)$  in the  $(NtimesB \times dist\_rPwMaxMin)$  range, where  $NtimesB$  is a parameter to be determined by comparison with observations.
- There should be only one minimum in the phase difference ( $dPhMin$ ) between the  $(rPwMax, rPwMin)$  pair.
- The  $dPhMin$  should be smaller than its adjacent two  $dPhMin$ 's (at lower and higher frequencies.)  
 ※ Exception to this: adjacent  $dPhMin$  which is farther than  $(NtimesB \times dist\_rPwMaxMin)$  is ignored; the rest(s) are used.