

START

Input configuration

User Input

Read Ephemeris  
Observation file headers

Ephemeris  
{RINEX or SP3}

{headers}

Rinex  
observations  
{observations}

Raw data input &  
Preprocessing

Loop over data epochs

Read all data files  
in time order

Autonomous pseudorange  
solution ( $\Rightarrow$  raw clock  
a priori position)

EphemerisStore  
Tropospheric models

DD Processing

Edit raw data  
(Clk jumps, slips, ..)

Clock modeling  
and  
synchronization of data

Compute  
double differences

Edit DDs  
check slips,  
remove multipath,  
other (?)

Solution algorithm

Linearized Estimation

Modify State  
e.g. add or fix biases

Apply  
a priori constraints

Construct partials matrix,  
data residual vector

Stochastic model

Solution update

iterate

END

ARL:UT / GSTSS  
DDBase - Double Difference  
Carrier Phase Processor

Initial Design 3/05, rev 4/05  
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