Květen 2010: Srovnávací procedura
Projekty PRIMOALL + BalING51 + Baliky (HARP)

K výpočtům Ddepozice: v Baliky(HARP) je jen rozpad, E(t)=1
v PRIMOALL a BalING51 je méně konzervativní BUNZL

K výpočtům ingesce: 1) V PRIMO a BalING51: úbytek kořenové se děje jen podle rad rozpadu
v Baliky (HARP) : nejen rozpad, ale i migr a fixace, takže vypočty jsou méně konzervativní
viz dále: když dám `C natvrdo: RLAMK=7.326E-10, jsou výsledky OK s PRIMO`

2) Nový algoritmus ingesce pro děti (dítě stárne v kontaminované oblasti) je implementován pouze v HARP_EGP (testy ukázaly, že ve srovnání se starým způsobem dochází k malým rozdílům – ale pozor, to je zřejmě způsobeno též zadanou grupou nuklidů s totální převahou ^{131}I)

K výpočtům resuspenze: Délka celého výpočtu podstatně závisí na kroku numerické integrace.
V PRIMOALL je dán krok = 1 den, trvá tedy na př. 50ti letá dávka velmi dlouho.
V BalING51 je krok 150 dni, běží velmi rychle
V Baliky v HARP_EGP je krok resuspenze 10 dní = střední rychlost výpočtu, ale místo základního koef resuspenze používá dvousložkovou resuspenzi podle OSCAAR

Testy resuspenze v PRIMOALL (jen 137Cs, děti a=2):
skok LDEN= 50 dnů 50-ti letá dávka z resusp. = 1.50E-04 Sv
skok LDEN= 10 dnů 50-ti letá dávka z resusp. = 5.99E-05 Sv
skok LDEN= 1 den 50-ti letá dávka z resusp. = 4.50E-05 Sv
(to samé podle dvousložkového v HARP: 2.47E-05 Sv)
obecně příspěvek resuspenze je asi o 3 řády menší než sama 50ti letá eff

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A) Jen CS137: **CS137 3.00E+13**

PRIMOALL (smer6,dospeli, jen Cs137, 50ti letá), doba uniku=2hod

výběr ze SPAD.OUT:

```
Efektivni davky (Sv) podle cest pro: Dospeli         ,segment č.  1/ 1
 ********************************************************************


3SEGM_PARANO_PRIMO__CEZ_NJZrev2
May22_2010,jen CS137,1seg,6smer,D,prsi2MM

MODEL,KPS,KRK,      THAVhod     TBdny,     ING,    TSPD,   TING :
   2    6    0     2.0000E+00    1.8250E+04  T   1.82E+02   5.17E+02

 XREAL(K)   Efektivni      mrak      ddepo    inhalace  inh(resus.)  ingesce
            za dobu TB                za TB                 za TB       za TB
              (Sv)        (Sv)        (Sv)         (Sv)        (Sv)        (Sv)
    500.00;  1.43E+00;  1.81E-06;  6.46E-01;  2.32E-04;  5.55E-06;  7.87E-01;
   1500.00;  5.64E-01;  7.48E-07;  2.54E-01;  4.94E-05;  2.18E-06;  3.10E-01;
   2500.00;  3.62E-01;  3.87E-07;  1.63E-01;  2.12E-05;  1.40E-06;  1.99E-01;
   3500.00;  2.69E-01;  2.35E-07;  1.21E-01;  1.19E-05;  1.04E-06;  1.48E-01;
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   4500.00;  2.26E-01;  1.56E-07;  1.02E-01;  7.66E-06;  8.75E-07;  1.24E-01;
   5500.00;  1.78E-01;  1.10E-07;  8.02E-02;  5.35E-06;  6.90E-07;  9.78E-02;
   6500.00;  1.52E-01;  9.25E-08;  6.87E-02;  4.50E-06;  5.91E-07;  8.38E-02;
   7500.00;  1.33E-01;  8.05E-08;  6.00E-02;  3.92E-06;  5.16E-07;  7.31E-02;
   8500.00;  1.18E-01;  7.10E-08;  5.31E-02;  3.47E-06;  4.56E-07;  6.47E-02;
   9500.00;  1.05E-01;  6.33E-08;  4.75E-02;  3.11E-06;  4.08E-07;  5.79E-02;
  10500.00;  1.01E-01;  6.78E-08;  4.56E-02;  3.30E-06;  3.92E-07;  5.55E-02;
  11500.00;  9.40E-02;  6.89E-08;  4.24E-02;  3.35E-06;  3.64E-07;  5.16E-02;
  13000.00;  8.26E-02;  7.36E-08;  3.72E-02;  3.57E-06;  3.20E-07;  4.54E-02;
  15000.00;  6.72E-02;  5.06E-08;  3.03E-02;  2.49E-06;  2.60E-07;  3.69E-02;
  17000.00;  5.99E-02;  3.51E-08;  2.70E-02;  1.77E-06;  2.32E-07;  3.29E-02;
  19000.00;  5.40E-02;  3.15E-08;  2.43E-02;  1.59E-06;  2.09E-07;  2.97E-02;
  21000.00;  4.90E-02;  2.84E-08;  2.21E-02;  1.44E-06;  1.90E-07;  2.69E-02;
  23000.00;  4.65E-02;  2.57E-08;  2.09E-02;  1.31E-06;  1.80E-07;  2.55E-02;
  25000.00;  4.06E-02;  2.33E-08;  1.83E-02;  1.20E-06;  1.57E-07;  2.23E-02;
  27000.00;  3.73E-02;  2.13E-08;  1.68E-02;  1.10E-06;  1.44E-07;  2.05E-02;
  29000.00;  3.43E-02;  1.95E-08;  1.54E-02;  1.01E-06;  1.33E-07;  1.88E-02;
  32500.00;  2.99E-02;  1.61E-08;  1.35E-02;  8.46E-07;  1.16E-07;  1.64E-02;
  37500.00;  2.45E-02;  1.31E-08;  1.11E-02;  6.93E-07;  9.51E-08;  1.35E-02;
  42500.00;  1.80E-02;  1.59E-08;  8.13E-03;  8.32E-07;  6.99E-08;  9.91E-03;
  47500.00;  1.47E-02;  1.20E-08;  6.65E-03;  6.37E-07;  5.71E-08;  8.10E-03;
  52500.00;  1.06E-02;  9.17E-09;  4.76E-03;  4.90E-07;  4.09E-08;  5.80E-03;
  57500.00;  8.21E-03;  7.07E-09;  3.70E-03;  3.81E-07;  3.18E-08;  4.51E-03;
  62500.00;  6.41E-03;  5.47E-09;  2.89E-03;  2.98E-07;  2.48E-08;  3.52E-03;
  67500.00;  5.02E-03;  4.25E-09;  2.26E-03;  2.33E-07;  1.95E-08;  2.76E-03;
  72500.00;  3.94E-03;  3.31E-09;  1.78E-03;  1.83E-07;  1.53E-08;  2.17E-03;
  77500.00;  3.11E-03;  2.59E-09;  1.40E-03;  1.44E-07;  1.20E-08;  1.71E-03;
  82500.00;  2.45E-03;  2.03E-09;  1.10E-03;  1.14E-07;  9.49E-09;  1.35E-03;
  87500.00;  1.94E-03;  1.59E-09;  8.72E-04;  8.99E-08;  7.50E-09;  1.06E-03;
  92500.00;  1.66E-03;  8.51E-10;  7.48E-04;  4.92E-08;  6.43E-09;  9.12E-04;
  97500.00;  1.33E-03;  1.08E-09;  5.97E-04;  6.15E-08;  5.13E-09;  7.28E-04;

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BalING51 (smer6,dospeli, jen Cs137, 50ti letá)

výběr ze SPAD.OUT:
EFF DOSP podle cest: Suma pres segm.: SMER= 6
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```
MODEL,KPS,KRK,       THAV,       TBLONG(rok),    ING,     TSPD,    TING :
   2   6   0      7.2000E+03     5.0E+01         T   2.00E+00   5.17E+02

 XREAL(K)   Efektivni       mrak       depo      inhalace  inh(resus.)  ingesce : celkova az do
r.50.
   (m)          (SV)         (Sv)           (Sv)         (Sv)

    500.00;  1.44E+00;  1.81E-06;  6.46E-01;  2.32E-04;  6.59E-06;  7.91E-01;
   1500.00;  5.65E-01;  7.48E-07;  2.54E-01;  4.94E-05;  2.59E-06;  3.11E-01;
   2500.00;  3.63E-01;  3.87E-07;  1.63E-01;  2.12E-05;  1.67E-06;  2.00E-01;
   3500.00;  2.70E-01;  2.35E-07;  1.21E-01;  1.19E-05;  1.24E-06;  1.49E-01;
   4500.00;  2.26E-01;  1.56E-07;  1.02E-01;  7.66E-06;  1.04E-06;  1.25E-01;
   5500.00;  1.79E-01;  1.10E-07;  8.02E-02;  5.35E-06;  8.20E-07;  9.83E-02;
   6500.00;  1.53E-01;  9.25E-08;  6.87E-02;  4.50E-06;  7.02E-07;  8.41E-02;
   7500.00;  1.33E-01;  8.05E-08;  6.00E-02;  3.92E-06;  6.12E-07;  7.34E-02;
   8500.00;  1.18E-01;  7.10E-08;  5.31E-02;  3.47E-06;  5.42E-07;  6.50E-02;
   9500.00;  1.06E-01;  6.33E-08;  4.75E-02;  3.11E-06;  4.85E-07;  5.82E-02;
  10500.00;  1.01E-01;  6.78E-08;  4.56E-02;  3.30E-06;  4.65E-07;  5.58E-02;
  11500.00;  9.42E-02;  6.89E-08;  4.24E-02;  3.35E-06;  4.33E-07;  5.19E-02;
  13000.00;  8.28E-02;  7.36E-08;  3.72E-02;  3.57E-06;  3.80E-07;  4.56E-02;
  15000.00;  6.73E-02;  5.06E-08;  3.03E-02;  2.49E-06;  3.09E-07;  3.71E-02;
  17000.00;  6.00E-02;  3.51E-08;  2.70E-02;  1.77E-06;  2.76E-07;  3.30E-02;
  19000.00;  5.41E-02;  3.15E-08;  2.43E-02;  1.59E-06;  2.49E-07;  2.98E-02;
  21000.00;  4.91E-02;  2.84E-08;  2.21E-02;  1.44E-06;  2.25E-07;  2.70E-02;
  23000.00;  4.66E-02;  2.57E-08;  2.09E-02;  1.31E-06;  2.14E-07;  2.56E-02;
  25000.00;  4.07E-02;  2.33E-08;  1.83E-02;  1.20E-06;  1.87E-07;  2.24E-02;
  27000.00;  3.74E-02;  2.13E-08;  1.68E-02;  1.10E-06;  1.72E-07;  2.06E-02;
  29000.00;  3.44E-02;  1.95E-08;  1.54E-02;  1.01E-06;  1.58E-07;  1.89E-02;
  32500.00;  3.00E-02;  1.61E-08;  1.35E-02;  8.46E-07;  1.38E-07;  1.65E-02;
  37500.00;  2.46E-02;  1.31E-08;  1.11E-02;  6.93E-07;  1.13E-07;  1.35E-02;
  42500.00;  1.81E-02;  1.59E-08;  8.13E-03;  8.32E-07;  8.30E-08;  9.95E-03;
  47500.00;  1.48E-02;  1.20E-08;  6.65E-03;  6.37E-07;  6.79E-08;  8.14E-03;
```

```
  52500.00;  1.06E-02;  9.17E-09;  4.76E-03;  4.90E-07;  4.86E-08;  5.83E-03;
  57500.00;  8.24E-03;  7.07E-09;  3.70E-03;  3.81E-07;  3.78E-08;  4.53E-03;
  62500.00;  6.43E-03;  5.47E-09;  2.89E-03;  2.98E-07;  2.95E-08;  3.54E-03;
  67500.00;  5.03E-03;  4.25E-09;  2.26E-03;  2.33E-07;  2.31E-08;  2.77E-03;
  72500.00;  3.95E-03;  3.31E-09;  1.78E-03;  1.83E-07;  1.82E-08;  2.18E-03;
  77500.00;  3.11E-03;  2.59E-09;  1.40E-03;  1.44E-07;  1.43E-08;  1.71E-03;
  82500.00;  2.46E-03;  2.03E-09;  1.10E-03;  1.14E-07;  1.13E-08;  1.35E-03;
  87500.00;  1.94E-03;  1.59E-09;  8.72E-04;  8.99E-08;  8.91E-09;  1.07E-03;
  92500.00;  1.66E-03;  8.51E-10;  7.48E-04;  4.92E-08;  7.64E-09;  9.16E-04;
  97500.00;  1.33E-03;  1.08E-09;  5.97E-04;  6.15E-08;  6.10E-09;  7.31E-04;
-----------------------------------------------------------------------
```

Baliky z HARP - staceni (smer6,dospeli, jen Cs137, 50ti letá)

výběr ze IMPLICIT.OUT:

```
#DDT:aot=613 Totální úvazky z časné i pozdější fáze         Sv          Čas TRVing= 50.rok;

   1.75E+00  7.57E-01  4.71E-01  3.36E-01  2.72E-01  2.06E-01  1.73E-01  1.48E-01  1.30E-01
   1.14E-01  9.42E-02  7.88E-02  4.65E-02  5.35E-02  6.18E-02  5.40E-02  4.63E-02  4.51E-02
   3.92E-02  3.63E-02  3.36E-02  3.14E-02  2.63E-02  2.08E-02  1.89E-02  1.50E-02  1.30E-02
   1.12E-02  9.72E-03  8.38E-03  6.23E-03  4.14E-03  2.41E-03  9.78E-04  2.23E-04

   #DDG:aot=614 Vnitřní ozáření z dlouhodobé ingesce           Sv          Čas TRVing= 67.roku
   po spadu;
   26    2.10E-01  9.09E-02  5.65E-02  4.04E-02  3.27E-02  2.47E-02  2.07E-02  1.78E-02  1.55E-
   02  1.37E-02  1.13E-02  9.46E-03  5.59E-03  6.42E-03  7.43E-03  6.47E-03  5.55E-03  5.42E-03
   4.71E-03  4.36E-03  4.04E-03  3.77E-03  3.16E-03  2.49E-03  2.27E-03  1.80E-03  1.55E-03
   1.35E-03  1.17E-03  1.01E-03  7.48E-04  4.97E-04  2.89E-04  1.17E-04  2.68E-05

   #DDD:aot=016 Dlouhodobé externí ozáření z depozice          Sv          Čas TBlong= 18250.den
   (50 roku);

   26    1.54E+00  6.66E-01  4.14E-01  2.96E-01  2.40E-01  1.81E-01  1.52E-01  1.30E-01  1.14E-
   01  1.00E-01  8.29E-02  6.93E-02  4.09E-02  4.71E-02  5.44E-02  4.75E-02  4.07E-02  3.97E-02
   3.45E-02  3.19E-02  2.96E-02  2.76E-02  2.31E-02  1.83E-02  1.66E-02  1.32E-02  1.14E-02
   9.86E-03  8.55E-03  7.37E-03  5.48E-03  3.64E-03  2.12E-03  8.61E-04  1.96E-04


   Pozor, zde jsem do Baliky.for (pro HARP) dal pro ingesci natvrdo:
   C
   C  vek=6 , A1ING pro kazdy vek jiz vypoctena
   C  T2 -rok spadu+dalsi rok:
   C natvrdo:
         RLAMK=7.326E-10
   ------------  misto:
         DO 222 R=1,IPRVKU
   C  ==========MIGR+FIX - (pridej CO60+... ?) ==================
   C   T1/2 pro vsecny nuklidy = 100 roku, LAMB=0.693/T:
         TPUL=100.0*365.0*86400.0
   C  RLAMK ve 1/sec:
       RLAMK=0.693/TPUL
         JCL=IND(R)
         RADLAM=ALAM(JCL)
         RLAMK=RLAMK+RADLAM
         NUKX=NUK(R)
   C CS: pridam pripadnou migraci a fixaci, necham FCMXX:
         IF ((MIGRCS.EQ.1).AND.
       1   ((CHNUK.EQ.'CS').OR.(CHNUK.EQ.'CO').OR.(CHNUK.EQ.'PU')))
        *     RLAMK=RLAMK + 0.693/(TCSMIG * 365.0*86400.0*FCMXX(3))
   C   pro ingesci fixace musi byt nepodminene
         IF (CHNUK.EQ.'CS')
        *   RLAMK=RLAMK + 0.693/(TCSFIX * 365.0*86400.0 *FCMXX(3))
   C
   C SR: pridam pripadnou migraci a fixaci:
         IF ((MIGRSR.EQ.1).AND.
       1   ((CHNUK.EQ.'SR').OR.(CHNUK.EQ.'BA').OR.(CHNUK.EQ.'MO')))
        *     RLAMK=RLAMK + 0.693/(TSRMIG * 365.0*86400.0 *FCMXX(3))
   C
         IF (CHNUK.EQ.'SR')
        *   RLAMK=RLAMK + 0.693/(TSRFIX * 365.0*86400.0 *FCMXX(3))
   C
   C   =========konec MIGR+FIX==========================
   C  Feb2010: T=1
   C
   C     T1 -rok spadu: pro vsechny veky stejne, jen prislusne A1ING
   C!!!!!!
   ===============
```

když dám natvrdo, pak vyjde:

```
#DDT:aot=613 Totální úvazky z časné i pozdější fáze          Sv          Čas TRVing= 50.rok;
26    2.31E+00  9.98E-01  6.20E-01  4.44E-01  3.59E-01  2.71E-01  2.28E-01  1.95E-01  1.71E-
01  1.50E-01  1.24E-01  1.04E-01  6.13E-02  7.05E-02  8.15E-02  7.11E-02  6.10E-02  5.95E-02
5.17E-02  4.78E-02  4.43E-02  4.13E-02  3.46E-02  2.74E-02  2.49E-02  1.98E-02  1.71E-02
1.48E-02  1.28E-02  1.10E-02  8.21E-03  5.45E-03  3.18E-03  1.29E-03  2.94E-04

#DDG:aot=614 Vnitřní ozáření z dlouhodobé ingesce            Sv          Čas TRVing= 67.roku
po spadu;
7.66E-01  3.32E-01  2.06E-01  1.48E-01  1.19E-01  9.03E-02  7.55E-02  6.49E-02  5.65E-02
4.99E-02  4.13E-02  3.45E-02  2.04E-02  2.34E-02  2.71E-02  2.36E-02  2.03E-02  1.98E-02
1.72E-02  1.59E-02  1.47E-02  1.37E-02  1.15E-02  9.10E-03  8.28E-03  6.58E-03  5.67E-03
4.91E-03  4.26E-03  3.67E-03  2.73E-03  1.81E-03  1.06E-03  4.28E-04  9.76E-05

#DDD:aot=016 Dlouhodobé externí ozáření z depozice           Sv          Čas TBlong=
18250.den;
1.54E+00  6.66E-01  4.14E-01  2.96E-01  2.40E-01  1.81E-01  1.52E-01  1.30E-01  1.14E-01
1.00E-01  8.29E-02  6.93E-02  4.09E-02  4.71E-02  5.44E-02  4.75E-02  4.07E-02  3.97E-02
3.45E-02  3.19E-02  2.96E-02  2.76E-02  2.31E-02  1.83E-02  1.66E-02  1.32E-02  1.14E-02
9.86E-03  8.55E-03  7.37E-03  5.48E-03  3.64E-03  2.12E-03  8.61E-04  1.96E-04
```

TYTO VYSLEDKY HEZKY KORESPONDUJI s PRIMOALL, kde je stejne ALAMI neboli RLAMK.

========== konec natvrdo ==========

B) dále: 1 segment, všechny nuklidy:

```
SR90          5.00E+12
RU103         3.00E+12
TE131M        2.00E+13
I131O         5.00E+13
I131          9.00E+14
I131A         5.00E+13
XE133         7.70E+17
CS137         3.00E+13
BA140         1.00E+14
LA140         5.00E+12
CE141         4.00E+12
KONEC
```

z PRIMOALL:

```
Effektivní dávka podle cest: Dospeli
 Suma pres segmenty: !!!! musi byt v jedinem smeru=   6
 ++++++++++++++++++++++++++++++++++++++++


MODEL,KPS,KRK,       THAVhod,      TBLONGden    ING,     TSPD,    TING :
   2    6    0      2.0000E+00      1.8250E+04  T    1.82E+02  5.17E+02

 XREAL(K)    Efektivni      mrak       ddepo      inhalace  inh(resus.)  ingesce : celkova az do
r.50.
   (m)           (SV)        (Sv)        (Sv)         (Sv)        (Sv)        (Sv)

    500.00;  2.86E+00;  3.40E-03;  7.10E-01;  3.28E-02;  4.52E-05;  2.12E+00;
   1500.00;  1.01E+00;  1.19E-03;  2.74E-01;  6.71E-03;  1.45E-05;  7.33E-01;
   2500.00;  6.25E-01;  6.06E-04;  1.74E-01;  2.83E-03;  8.51E-06;  4.47E-01;
   3500.00;  4.55E-01;  3.71E-04;  1.29E-01;  1.58E-03;  6.04E-06;  3.24E-01;
   4500.00;  4.15E-01;  2.51E-04;  1.10E-01;  1.00E-03;  6.12E-06;  3.04E-01;
   5500.00;  2.93E-01;  1.81E-04;  8.50E-02;  6.89E-04;  3.76E-06;  2.07E-01;
   6500.00;  2.50E-01;  1.55E-04;  7.28E-02;  5.77E-04;  3.20E-06;  1.77E-01;
   7500.00;  2.18E-01;  1.39E-04;  6.35E-02;  5.03E-04;  2.79E-06;  1.54E-01;
   8500.00;  1.93E-01;  1.25E-04;  5.62E-02;  4.44E-04;  2.46E-06;  1.36E-01;
   9500.00;  1.72E-01;  1.14E-04;  5.03E-02;  3.97E-04;  2.20E-06;  1.22E-01;
  10500.00;  1.82E-01;  1.26E-04;  4.91E-02;  4.18E-04;  2.64E-06;  1.33E-01;
  11500.00;  1.70E-01;  1.32E-04;  4.57E-02;  4.17E-04;  2.48E-06;  1.24E-01;
  13000.00;  1.53E-01;  1.53E-04;  4.04E-02;  4.39E-04;  2.28E-06;  1.12E-01;
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15000.00;	1.09E-01;	1.12E-04;	3.20E-02;	3.03E-04;	1.38E-06;	7.68E-02;
17000.00;	9.63E-02;	8.16E-05;	2.85E-02;	2.15E-04;	1.20E-06;	6.76E-02;
19000.00;	8.67E-02;	7.66E-05;	2.57E-02;	1.93E-04;	1.08E-06;	6.08E-02;
21000.00;	7.85E-02;	7.24E-05;	2.33E-02;	1.75E-04;	9.72E-07;	5.50E-02;
23000.00;	8.00E-02;	6.88E-05;	2.24E-02;	1.56E-04;	1.09E-06;	5.74E-02;
25000.00;	6.44E-02;	6.55E-05;	1.93E-02;	1.40E-04;	7.85E-07;	4.50E-02;
27000.00;	5.90E-02;	6.27E-05;	1.77E-02;	1.28E-04;	7.17E-07;	4.12E-02;
29000.00;	5.42E-02;	6.01E-05;	1.62E-02;	1.18E-04;	6.57E-07;	3.78E-02;
32500.00;	5.06E-02;	5.62E-05;	1.44E-02;	9.72E-05;	6.74E-07;	3.60E-02;
37500.00;	4.06E-02;	5.17E-05;	1.17E-02;	7.55E-05;	5.24E-07;	2.87E-02;
42500.00;	2.81E-02;	7.71E-05;	8.52E-03;	9.00E-05;	3.29E-07;	1.94E-02;
47500.00;	2.50E-02;	7.20E-05;	7.08E-03;	6.91E-05;	3.31E-07;	1.77E-02;
52500.00;	1.60E-02;	6.76E-05;	4.96E-03;	5.40E-05;	1.79E-07;	1.09E-02;
57500.00;	1.25E-02;	6.39E-05;	3.86E-03;	4.45E-05;	1.39E-07;	8.50E-03;
62500.00;	9.75E-03;	6.06E-05;	3.01E-03;	3.70E-05;	1.09E-07;	6.64E-03;
67500.00;	7.65E-03;	5.77E-05;	2.36E-03;	3.13E-05;	8.53E-08;	5.20E-03;
72500.00;	6.03E-03;	5.51E-05;	1.85E-03;	2.67E-05;	6.70E-08;	4.09E-03;
77500.00;	4.76E-03;	5.28E-05;	1.46E-03;	2.31E-05;	5.28E-08;	3.22E-03;
82500.00;	3.77E-03;	5.07E-05;	1.15E-03;	2.02E-05;	4.17E-08;	2.54E-03;
87500.00;	2.99E-03;	4.88E-05;	9.10E-04;	1.79E-05;	3.30E-08;	2.01E-03;
92500.00;	2.52E-03;	2.93E-05;	7.79E-04;	1.05E-05;	2.74E-08;	1.70E-03;
97500.00;	2.06E-03;	4.55E-05;	6.23E-04;	1.49E-05;	2.26E-08;	1.38E-03;

z BalING51:

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EFF DOSP podle cest: Suma pres segm.: SMER=   6
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MODEL,KPS,KRK,	THAV,	TBLONG(rok),	ING,	TSPD,	TING :
2 6 0	7.2000E+03	5.0E+01	T	2.00E+00	5.17E+02

XREAL(K) (m)	Efektivni (SV)	mrak (Sv)	depo (Sv)	inhalace (Sv)	inh(resus.)	ingesce : celkova az do r.50.
500.00;	2.87E+00;	3.40E-03;	7.10E-01;	3.28E-02;	4.43E-04;	2.12E+00;
1500.00;	1.02E+00;	1.19E-03;	2.74E-01;	6.71E-03;	1.32E-04;	7.35E-01;
2500.00;	6.26E-01;	6.06E-04;	1.74E-01;	2.83E-03;	7.48E-05;	4.48E-01;
3500.00;	4.56E-01;	3.71E-04;	1.29E-01;	1.58E-03;	5.20E-05;	3.24E-01;
4500.00;	4.16E-01;	2.51E-04;	1.10E-01;	1.00E-03;	5.71E-05;	3.04E-01;
5500.00;	2.93E-01;	1.81E-04;	8.50E-02;	6.89E-04;	3.13E-05;	2.07E-01;
6500.00;	2.51E-01;	1.55E-04;	7.28E-02;	5.77E-04;	2.67E-05;	1.77E-01;
7500.00;	2.19E-01;	1.39E-04;	6.35E-02;	5.03E-04;	2.32E-05;	1.54E-01;
8500.00;	1.93E-01;	1.25E-04;	5.62E-02;	4.44E-04;	2.05E-05;	1.37E-01;
9500.00;	1.73E-01;	1.14E-04;	5.03E-02;	3.97E-04;	1.82E-05;	1.22E-01;
10500.00;	1.83E-01;	1.26E-04;	4.91E-02;	4.18E-04;	2.42E-05;	1.33E-01;
11500.00;	1.71E-01;	1.32E-04;	4.57E-02;	4.17E-04;	2.29E-05;	1.24E-01;
13000.00;	1.53E-01;	1.53E-04;	4.04E-02;	4.39E-04;	2.14E-05;	1.12E-01;
15000.00;	1.09E-01;	1.12E-04;	3.20E-02;	3.03E-04;	1.13E-05;	7.70E-02;
17000.00;	9.65E-02;	8.16E-05;	2.85E-02;	2.15E-04;	9.70E-06;	6.77E-02;
19000.00;	8.69E-02;	7.66E-05;	2.57E-02;	1.93E-04;	8.69E-06;	6.09E-02;
21000.00;	7.87E-02;	7.24E-05;	2.33E-02;	1.75E-04;	7.83E-06;	5.51E-02;
23000.00;	8.02E-02;	6.88E-05;	2.24E-02;	1.56E-04;	9.62E-06;	5.75E-02;
25000.00;	6.46E-02;	6.55E-05;	1.93E-02;	1.40E-04;	6.22E-06;	4.51E-02;
27000.00;	5.91E-02;	6.27E-05;	1.77E-02;	1.28E-04;	5.67E-06;	4.13E-02;
29000.00;	5.43E-02;	6.01E-05;	1.62E-02;	1.18E-04;	5.18E-06;	3.79E-02;
32500.00;	5.07E-02;	5.62E-05;	1.44E-02;	9.72E-05;	5.80E-06;	3.61E-02;
37500.00;	4.06E-02;	5.17E-05;	1.17E-02;	7.55E-05;	4.40E-06;	2.88E-02;
42500.00;	2.81E-02;	7.71E-05;	8.52E-03;	9.00E-05;	2.52E-06;	1.94E-02;
47500.00;	2.50E-02;	7.20E-05;	7.08E-03;	6.91E-05;	2.85E-06;	1.78E-02;
52500.00;	1.60E-02;	6.76E-05;	4.96E-03;	5.40E-05;	1.30E-06;	1.10E-02;
57500.00;	1.25E-02;	6.39E-05;	3.86E-03;	4.45E-05;	1.01E-06;	8.53E-03;
62500.00;	9.77E-03;	6.06E-05;	3.01E-03;	3.70E-05;	7.89E-07;	6.66E-03;
67500.00;	7.67E-03;	5.77E-05;	2.36E-03;	3.13E-05;	6.19E-07;	5.22E-03;
72500.00;	6.04E-03;	5.51E-05;	1.85E-03;	2.67E-05;	4.87E-07;	4.10E-03;
77500.00;	4.77E-03;	5.28E-05;	1.46E-03;	2.31E-05;	3.84E-07;	3.23E-03;
82500.00;	3.77E-03;	5.07E-05;	1.15E-03;	2.02E-05;	3.04E-07;	2.55E-03;
87500.00;	3.00E-03;	4.88E-05;	9.10E-04;	1.79E-05;	2.41E-07;	2.02E-03;
92500.00;	2.52E-03;	2.93E-05;	7.79E-04;	1.05E-05;	1.94E-07;	1.70E-03;
97500.00;	2.07E-03;	4.55E-05;	6.23E-04;	1.49E-05;	1.64E-07;	1.38E-03;

HARP (projekt Baliky)

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   #DDT:aot=613 Totální úvazky z časné i pozdější fáze          Sv          Čas TRVing= 50.rok;
   26    2.87E+00  1.12E+00  6.73E-01  4.74E-01  4.15E-01  2.84E-01  2.37E-01  2.03E-01  1.77E-
   01  1.57E-01  1.44E-01  1.20E-01  7.14E-02  7.33E-02  8.47E-02  7.39E-02  6.34E-02  6.80E-02
   5.33E-02  4.92E-02  4.56E-02  4.63E-02  3.81E-02  2.72E-02  2.68E-02  1.93E-02  1.66E-02
   1.43E-02  1.24E-02  1.07E-02  7.97E-03  5.28E-03  3.08E-03  1.25E-03  2.84E-04

   #DDG:aot=614 Vnitřní ozáření z dlouhodobé ingesce            Sv          Čas TRVing= 67.roku
   po spadu
   1.23E+00  4.26E-01  2.44E-01  1.68E-01  1.66E-01  9.69E-02  8.08E-02  6.94E-02  6.05E-02
   5.31E-02  5.75E-02  4.74E-02  2.86E-02  2.47E-02  2.86E-02  2.50E-02  2.14E-02  2.67E-02
   1.77E-02  1.63E-02  1.51E-02  1.77E-02  1.41E-02  8.46E-03  9.52E-03  5.68E-03  4.88E-03
   4.22E-03  3.65E-03  3.13E-03  2.32E-03  1.53E-03  8.90E-04  3.59E-04  8.21E-05

#DDD:aot=016 Dlouhodobé externí ozáření z depozice           Sv          Čas TBlong= 18250.den
26    1.60E+00  6.87E-01  4.25E-01  3.04E-01  2.48E-01  1.86E-01  1.55E-01  1.33E-01  1.16E-01
1.03E-01  8.57E-02  7.16E-02  4.23E-02  4.82E-02  5.57E-02  4.86E-02  4.17E-02  4.10E-02  3.53E-
02  3.27E-02  3.03E-02  2.84E-02  2.38E-02  1.86E-02  1.71E-02  1.35E-02  1.16E-02  1.00E-02
8.70E-03  7.50E-03  5.58E-03  3.70E-03  2.16E-03  8.75E-04  1.99E-04

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ještě se nelíbí BalING51 a PRIMOALL – propočet pro 1. rok:

pro PRIMOALL:

Effektivní dávka podle cest: Dospeli
Suma pres segmenty: !!!! musi byt v jedinem smeru= 6
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MODEL,KPS,KRK,      THAVhod,     TBLONGden   ING,    TSPD,   TING :
   2   6   0      2.0000E+00      3.6500E+02  T   1.82E+02  5.17E+02

 XREAL(K)   Efektivni     mrak      ddepo     inhalace  inh(resus.)  ingesce : celkova az do r.
1.
   (m)          (SV)        (Sv)        (Sv)         (Sv)       (Sv)        (Sv)

    500.00;  1.31E+00;  3.40E-03;  1.20E-01;  3.28E-02;  3.91E-05;  1.15E+00;
   1500.00;  4.03E-01;  1.19E-03;  4.14E-02;  6.71E-03;  1.21E-05;  3.54E-01;
   2500.00;  2.32E-01;  6.06E-04;  2.52E-02;  2.83E-03;  6.97E-06;  2.03E-01;
   3500.00;  1.63E-01;  3.71E-04;  1.82E-02;  1.58E-03;  4.90E-06;  1.42E-01;
   4500.00;  1.70E-01;  2.51E-04;  1.71E-02;  1.00E-03;  5.16E-06;  1.52E-01;
   5500.00;  9.95E-02;  1.81E-04;  1.16E-02;  6.89E-04;  3.00E-06;  8.70E-02;
   6500.00;  8.47E-02;  1.55E-04;  9.94E-03;  5.77E-04;  2.55E-06;  7.41E-02;
   7500.00;  7.38E-02;  1.39E-04;  8.66E-03;  5.03E-04;  2.22E-06;  6.45E-02;
   8500.00;  6.51E-02;  1.25E-04;  7.66E-03;  4.44E-04;  1.96E-06;  5.69E-02;
   9500.00;  5.81E-02;  1.14E-04;  6.84E-03;  3.97E-04;  1.75E-06;  5.08E-02;
  10500.00;  7.27E-02;  1.26E-04;  7.49E-03;  4.18E-04;  2.20E-06;  6.46E-02;
  11500.00;  6.85E-02;  1.32E-04;  7.01E-03;  4.17E-04;  2.08E-06;  6.09E-02;
  13000.00;  6.36E-02;  1.53E-04;  6.34E-03;  4.39E-04;  1.93E-06;  5.67E-02;
  15000.00;  3.63E-02;  1.12E-04;  4.32E-03;  3.03E-04;  1.09E-06;  3.16E-02;
  17000.00;  3.13E-02;  8.16E-05;  3.80E-03;  2.15E-04;  9.43E-07;  2.73E-02;
  19000.00;  2.81E-02;  7.66E-05;  3.41E-03;  1.93E-04;  8.46E-07;  2.44E-02;
  21000.00;  2.54E-02;  7.24E-05;  3.09E-03;  1.75E-04;  7.63E-07;  2.20E-02;
  23000.00;  2.96E-02;  6.88E-05;  3.23E-03;  1.56E-04;  8.96E-07;  2.61E-02;
  25000.00;  2.04E-02;  6.55E-05;  2.52E-03;  1.40E-04;  6.12E-07;  1.76E-02;
  27000.00;  1.86E-02;  6.27E-05;  2.31E-03;  1.28E-04;  5.58E-07;  1.61E-02;
  29000.00;  1.70E-02;  6.01E-05;  2.12E-03;  1.18E-04;  5.11E-07;  1.47E-02;
  32500.00;  1.81E-02;  5.62E-05;  2.03E-03;  9.72E-05;  5.46E-07;  1.59E-02;
  37500.00;  1.39E-02;  5.17E-05;  1.61E-03;  7.55E-05;  4.20E-07;  1.22E-02;
  42500.00;  8.50E-03;  7.71E-05;  1.09E-03;  9.00E-05;  2.52E-07;  7.25E-03;
  47500.00;  8.95E-03;  7.20E-05;  9.98E-04;  6.91E-05;  2.68E-07;  7.81E-03;
  52500.00;  4.55E-03;  6.76E-05;  6.12E-04;  5.40E-05;  1.34E-07;  3.82E-03;
  57500.00;  3.56E-03;  6.39E-05;  4.76E-04;  4.45E-05;  1.04E-07;  2.98E-03;
  62500.00;  2.80E-03;  6.06E-05;  3.72E-04;  3.70E-05;  8.14E-08;  2.33E-03;
  67500.00;  2.20E-03;  5.77E-05;  2.91E-04;  3.13E-05;  6.39E-08;  1.82E-03;
  72500.00;  1.75E-03;  5.51E-05;  2.29E-04;  2.67E-05;  5.02E-08;  1.44E-03;
  77500.00;  1.39E-03;  5.28E-05;  1.80E-04;  2.31E-05;  3.96E-08;  1.13E-03;
  82500.00;  1.11E-03;  5.07E-05;  1.42E-04;  2.02E-05;  3.13E-08;  8.96E-04;
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  87500.00;  8.90E-04;  4.88E-05;  1.13E-04;  1.79E-05;  2.48E-08;  7.10E-04;
  92500.00;  7.15E-04;  2.93E-05;  9.49E-05;  1.05E-05;  2.03E-08;  5.80E-04;
  97500.00;  6.23E-04;  4.55E-05;  7.71E-05;  1.49E-05;  1.69E-08;  4.86E-04;
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pro BalING51:

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EFF DOSP podle cest: Suma pres segm.: SMER=   6
 ++++++++++++++++++++++++++++++++++++++++++++


MODEL,KPS,KRK,      THAV,      TBLONG(rok),   ING,    TSPD,   TING :
   2   6   0      7.2000E+03    1.0E+00        T   1.82E+02   5.17E+02

 XREAL(K)   Efektivni      mrak      depo     inhalace  inh(resus.)  ingesce : celkova az do r.
1.
    (m)          (SV)         (Sv)           (Sv)         (Sv)

    500.00;  1.31E+00;  3.40E-03;  1.20E-01;  3.28E-02;  4.37E-04;  1.15E+00;
   1500.00;  4.03E-01;  1.19E-03;  4.14E-02;  6.71E-03;  1.30E-04;  3.54E-01;
   2500.00;  2.32E-01;  6.06E-04;  2.52E-02;  2.83E-03;  7.33E-05;  2.03E-01;
   3500.00;  1.63E-01;  3.71E-04;  1.82E-02;  1.58E-03;  5.09E-05;  1.42E-01;
   4500.00;  1.70E-01;  2.51E-04;  1.71E-02;  1.00E-03;  5.62E-05;  1.52E-01;
   5500.00;  9.95E-02;  1.81E-04;  1.16E-02;  6.89E-04;  3.06E-05;  8.70E-02;
   6500.00;  8.48E-02;  1.55E-04;  9.94E-03;  5.77E-04;  2.60E-05;  7.41E-02;
   7500.00;  7.38E-02;  1.39E-04;  8.66E-03;  5.03E-04;  2.26E-05;  6.45E-02;
   8500.00;  6.51E-02;  1.25E-04;  7.66E-03;  4.44E-04;  2.00E-05;  5.69E-02;
   9500.00;  5.81E-02;  1.14E-04;  6.84E-03;  3.97E-04;  1.78E-05;  5.08E-02;
  10500.00;  7.27E-02;  1.26E-04;  7.49E-03;  4.18E-04;  2.38E-05;  6.46E-02;
  11500.00;  6.85E-02;  1.32E-04;  7.01E-03;  4.17E-04;  2.25E-05;  6.09E-02;
  13000.00;  6.36E-02;  1.53E-04;  6.34E-03;  4.39E-04;  2.10E-05;  5.67E-02;
  15000.00;  3.63E-02;  1.12E-04;  4.32E-03;  3.03E-04;  1.10E-05;  3.16E-02;
  17000.00;  3.14E-02;  8.16E-05;  3.80E-03;  2.15E-04;  9.45E-06;  2.73E-02;
  19000.00;  2.81E-02;  7.66E-05;  3.41E-03;  1.93E-04;  8.46E-06;  2.44E-02;
  21000.00;  2.54E-02;  7.24E-05;  3.09E-03;  1.75E-04;  7.62E-06;  2.20E-02;
  23000.00;  2.96E-02;  6.88E-05;  3.23E-03;  1.56E-04;  9.43E-06;  2.61E-02;
  25000.00;  2.04E-02;  6.55E-05;  2.52E-03;  1.40E-04;  6.05E-06;  1.76E-02;
  27000.00;  1.86E-02;  6.27E-05;  2.31E-03;  1.28E-04;  5.51E-06;  1.61E-02;
  29000.00;  1.70E-02;  6.01E-05;  2.12E-03;  1.18E-04;  5.04E-06;  1.47E-02;
  32500.00;  1.81E-02;  5.62E-05;  2.03E-03;  9.72E-05;  5.68E-06;  1.59E-02;
  37500.00;  1.39E-02;  5.17E-05;  1.61E-03;  7.55E-05;  4.30E-06;  1.22E-02;
  42500.00;  8.51E-03;  7.71E-05;  1.09E-03;  9.00E-05;  2.44E-06;  7.25E-03;
  47500.00;  8.95E-03;  7.20E-05;  9.98E-04;  6.91E-05;  2.79E-06;  7.81E-03;
  52500.00;  4.56E-03;  6.76E-05;  6.12E-04;  5.40E-05;  1.25E-06;  3.82E-03;
  57500.00;  3.56E-03;  6.39E-05;  4.76E-04;  4.45E-05;  9.74E-07;  2.98E-03;
  62500.00;  2.80E-03;  6.06E-05;  3.72E-04;  3.70E-05;  7.62E-07;  2.33E-03;
  67500.00;  2.21E-03;  5.77E-05;  2.91E-04;  3.13E-05;  5.98E-07;  1.82E-03;
  72500.00;  1.75E-03;  5.51E-05;  2.29E-04;  2.67E-05;  4.70E-07;  1.44E-03;
  77500.00;  1.39E-03;  5.28E-05;  1.80E-04;  2.31E-05;  3.71E-07;  1.13E-03;
  82500.00;  1.11E-03;  5.07E-05;  1.42E-04;  2.02E-05;  2.94E-07;  8.96E-04;
  87500.00;  8.90E-04;  4.88E-05;  1.13E-04;  1.79E-05;  2.33E-07;  7.10E-04;
  92500.00;  7.15E-04;  2.93E-05;  9.49E-05;  1.05E-05;  1.87E-07;  5.80E-04;
  97500.00;  6.23E-04;  4.55E-05;  7.71E-05;  1.49E-05;  1.59E-07;  4.86E-04;


**************************************************
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```

C) dále: 3 segmenty, všechny nuklidy:

```
3SEGM_PARANO_PRIMO__CEZ_NJZrev2,3seg*1/3
May24_2010,3seg,6smer,DCF,,prsi2MMproD
  2
  6
 35 35
  0  0  3
  0  0
D   0
      45.0  8
    86400.     180.0     180.0
     1.0
    2.0000
  6  6  6
    5.0000    4.0000    1.0000
D C F
    2.0000    2.0000    2.0000
```

```
       0.0       0.0       0.0
       0.0       0.0       0.0
      45.0      45.0      45.0
  45.
 507.
     200.0
F
T   1
       0.0
       1.6
       0.0
 1.0 2.0 2.0 2.0 2.0 1.0
   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  6
  0
  1
     0.00070     0.00150     0.00200     0.00750     0.00050
     0.00080     0.00250     0.00300     0.00850     0.00080
     0.00100     0.01500     0.02000     0.07300     0.00500
     0.00050     0.00015     0.00020     0.00075     0.00050

SEGMENT  1  : srazky a uniky: prsi jen 1., source=3*1/3
    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00
    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00
    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00    2.00
    2.00    2.00    2.00    2.00    2.00
SR90         1.80E+12
RU103        1.00E+12
TE131M       7.00E+12
I131O        1.80E+13
I131         3.00E+14
I131A        1.80E+13
XE133        2.60E+17
CS137        1.00E+13
BA140        3.30E+13
LA140        1.80E+12
CE141        1.33E+12
KONEC
SEGMENT  2  : srazky a uniky:
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00
SR90         1.80E+12
RU103        1.00E+12
TE131M       7.00E+12
I131O        1.80E+13
I131         3.00E+14
I131A        1.80E+13
XE133        2.60E+17
CS137        1.00E+13
BA140        3.30E+13
LA140        1.80E+12
CE141        1.33E+12
KONEC
SEGMENT  3  : srazky a uniky:
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00
SR90         1.80E+12
RU103        1.00E+12
TE131M       7.00E+12
I131O        1.80E+13
I131         3.00E+14
I131A        1.80E+13
XE133        2.60E+17
CS137        1.00E+13
BA140        3.30E+13
LA140        1.80E+12
CE141        1.33E+12
KONEC
--------------------------------------------------------------------------------
```

PRIMOALL:

Roční:

```
Effektivní dávka podle cest: Dospeli
 Suma pres segmenty: !!!! musi byt v jedinem smeru=   6
 ++++++++++++++++++++++++++++++++++++++++++++
```

```
MODEL,KPS,KRK,      THAVhod,     TBLONGden   ING,    TSPD,   TING :
   2   6   0     2.0000E+00      3.6500E+02  T   1.82E+02  5.17E+02

 XREAL(K)   Efektivni     mrak      ddepo     inhalace  inh(resus.)  ingesce : celkova az do r. 1.
   (m)         (SV)       (Sv)       (Sv)        (Sv)       (Sv)       (Sv)

    500.00;  6.67E-01;  8.63E-03;  5.31E-02;  2.30E-02;  1.96E-05;  5.82E-01;
   1500.00;  4.28E-01;  3.08E-03;  3.10E-02;  1.80E-02;  1.26E-05;  3.76E-01;
   2500.00;  2.48E-01;  1.99E-03;  1.88E-02;  1.02E-02;  7.27E-06;  2.17E-01;
   3500.00;  1.61E-01;  1.64E-03;  1.27E-02;  6.39E-03;  4.71E-06;  1.40E-01;
   4500.00;  2.46E-01;  1.35E-03;  1.93E-02;  3.46E-03;  7.44E-06;  2.22E-01;
   5500.00;  6.41E-02;  1.14E-03;  6.13E-03;  2.05E-03;  1.87E-06;  5.48E-02;
   6500.00;  5.08E-02;  9.80E-04;  5.00E-03;  1.54E-03;  1.48E-06;  4.33E-02;
   7500.00;  4.17E-02;  8.54E-04;  4.20E-03;  1.20E-03;  1.21E-06;  3.54E-02;
   8500.00;  3.51E-02;  7.52E-04;  3.61E-03;  9.65E-04;  1.02E-06;  2.97E-02;
   9500.00;  3.01E-02;  6.68E-04;  3.15E-03;  7.96E-04;  8.77E-07;  2.55E-02;
  10500.00;  5.66E-02;  7.73E-04;  5.63E-03;  7.72E-04;  1.69E-06;  4.94E-02;
  11500.00;  4.84E-02;  7.99E-04;  5.06E-03;  6.73E-04;  1.44E-06;  4.19E-02;
  13000.00;  4.39E-02;  9.07E-04;  4.74E-03;  6.53E-04;  1.29E-06;  3.76E-02;
  15000.00;  1.66E-02;  5.92E-04;  1.88E-03;  4.17E-04;  4.75E-07;  1.37E-02;
  17000.00;  1.34E-02;  3.77E-04;  1.55E-03;  2.81E-04;  3.90E-07;  1.12E-02;
  19000.00;  1.20E-02;  3.42E-04;  1.40E-03;  2.52E-04;  3.50E-07;  1.01E-02;
  21000.00;  1.09E-02;  3.25E-04;  1.27E-03;  2.33E-04;  3.16E-07;  9.10E-03;
  23000.00;  1.68E-02;  3.09E-04;  1.88E-03;  2.11E-04;  4.96E-07;  1.44E-02;
  25000.00;  8.82E-03;  2.96E-04;  1.04E-03;  1.94E-04;  2.54E-07;  7.29E-03;
  27000.00;  8.11E-03;  2.84E-04;  9.57E-04;  1.82E-04;  2.33E-07;  6.69E-03;
  29000.00;  7.49E-03;  2.73E-04;  8.84E-04;  1.72E-04;  2.15E-07;  6.16E-03;
  32500.00;  1.10E-02;  2.56E-04;  1.25E-03;  1.52E-04;  3.22E-07;  9.30E-03;
  37500.00;  8.73E-03;  2.36E-04;  1.01E-03;  1.28E-04;  2.55E-07;  7.36E-03;
  42500.00;  4.73E-03;  3.89E-04;  5.42E-04;  1.79E-04;  1.27E-07;  3.62E-03;
  47500.00;  7.85E-03;  3.63E-04;  9.04E-04;  1.56E-04;  2.23E-07;  6.42E-03;
  52500.00;  2.75E-03;  3.40E-04;  3.04E-04;  1.39E-04;  6.90E-08;  1.97E-03;
  57500.00;  2.34E-03;  3.21E-04;  2.52E-04;  1.28E-04;  5.73E-08;  1.63E-03;
  62500.00;  2.01E-03;  3.03E-04;  2.11E-04;  1.19E-04;  4.82E-08;  1.37E-03;
  67500.00;  1.75E-03;  2.88E-04;  1.78E-04;  1.11E-04;  4.09E-08;  1.17E-03;
  72500.00;  1.53E-03;  2.74E-04;  1.52E-04;  1.04E-04;  3.51E-08;  1.00E-03;
  77500.00;  1.36E-03;  2.61E-04;  1.31E-04;  9.77E-05;  3.05E-08;  8.72E-04;
  82500.00;  1.22E-03;  2.50E-04;  1.14E-04;  9.24E-05;  2.67E-08;  7.65E-04;
  87500.00;  1.10E-03;  2.39E-04;  1.01E-04;  8.75E-05;  2.36E-08;  6.77E-04;
  92500.00;  7.15E-04;  1.30E-04;  6.83E-05;  5.09E-05;  1.62E-08;  4.66E-04;
  97500.00;  9.41E-04;  2.22E-04;  8.22E-05;  7.96E-05;  1.94E-08;  5.58E-04;
```

50ti letá:

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Effektivní dávka podle cest: Dospeli
 Suma pres segmenty: !!!! musi byt v jedinem smeru=   6
 +++++++++++++++++++++++++++++++++++++++++++

MODEL,KPS,KRK,      THAVhod,     TBLONGden   ING,    TSPD,   TING :
   2   6   0     2.0000E+00      1.8250E+04  T   1.82E+02  5.17E+02

 XREAL(K)   Efektivni     mrak      ddepo     inhalace  inh(resus.)  ingesce : celkova az do r.50.
   (m)         (SV)       (Sv)       (Sv)        (Sv)       (Sv)       (Sv)

    500.00;  1.24E+00;  8.63E-03;  2.69E-01;  2.30E-02;  2.19E-05;  9.43E-01;
   1500.00;  7.03E-01;  3.08E-03;  1.34E-01;  1.80E-02;  1.37E-05;  5.48E-01;
   2500.00;  4.34E-01;  1.99E-03;  8.84E-02;  1.02E-02;  8.02E-06;  3.33E-01;
   3500.00;  2.99E-01;  1.64E-03;  6.45E-02;  6.39E-03;  5.26E-06;  2.26E-01;
   4500.00;  4.38E-01;  1.35E-03;  9.14E-02;  3.46E-03;  8.22E-06;  3.42E-01;
   5500.00;  1.52E-01;  1.14E-03;  3.90E-02;  2.05E-03;  2.22E-06;  1.10E-01;
   6500.00;  1.25E-01;  9.80E-04;  3.28E-02;  1.54E-03;  1.78E-06;  8.97E-02;
   7500.00;  1.06E-01;  8.54E-04;  2.82E-02;  1.20E-03;  1.47E-06;  7.55E-02;
   8500.00;  9.12E-02;  7.52E-04;  2.46E-02;  9.65E-04;  1.25E-06;  6.48E-02;
   9500.00;  7.99E-02;  6.68E-04;  2.18E-02;  7.96E-04;  1.08E-06;  5.66E-02;
  10500.00;  1.39E-01;  7.73E-04;  3.64E-02;  7.72E-04;  2.02E-06;  1.01E-01;
  11500.00;  1.27E-01;  7.99E-04;  3.43E-02;  6.73E-04;  1.75E-06;  9.08E-02;
  13000.00;  1.20E-01;  9.07E-04;  3.33E-02;  6.53E-04;  1.60E-06;  8.53E-02;
  15000.00;  4.89E-02;  5.92E-04;  1.40E-02;  4.17E-04;  6.05E-07;  3.39E-02;
  17000.00;  4.03E-02;  3.77E-04;  1.16E-02;  2.81E-04;  4.99E-07;  2.80E-02;
  19000.00;  3.62E-02;  3.42E-04;  1.04E-02;  2.52E-04;  4.47E-07;  2.52E-02;
  21000.00;  3.30E-02;  3.25E-04;  9.52E-03;  2.33E-04;  4.05E-07;  2.29E-02;
  23000.00;  4.78E-02;  3.09E-04;  1.35E-02;  2.11E-04;  6.21E-07;  3.38E-02;
  25000.00;  2.72E-02;  2.96E-04;  7.90E-03;  1.94E-04;  3.28E-07;  1.88E-02;
  27000.00;  2.50E-02;  2.84E-04;  7.29E-03;  1.82E-04;  3.02E-07;  1.73E-02;
  29000.00;  2.31E-02;  2.73E-04;  6.74E-03;  1.72E-04;  2.78E-07;  1.60E-02;
  32500.00;  3.21E-02;  2.56E-04;  9.19E-03;  1.52E-04;  4.08E-07;  2.26E-02;
  37500.00;  2.60E-02;  2.36E-04;  7.48E-03;  1.28E-04;  3.25E-07;  1.82E-02;
  42500.00;  1.46E-02;  3.89E-04;  4.23E-03;  1.79E-04;  1.66E-07;  9.78E-03;
  47500.00;  2.36E-02;  3.63E-04;  6.79E-03;  1.56E-04;  2.87E-07;  1.63E-02;
```

52500.00;	8.40E-03;	3.40E-04;	2.42E-03;	1.39E-04;	9.19E-08;	5.50E-03;
57500.00;	6.99E-03;	3.21E-04;	2.00E-03;	1.28E-04;	7.62E-08;	4.55E-03;
62500.00;	5.89E-03;	3.03E-04;	1.66E-03;	1.19E-04;	6.39E-08;	3.80E-03;
67500.00;	5.01E-03;	2.88E-04;	1.40E-03;	1.11E-04;	5.41E-08;	3.21E-03;
72500.00;	4.31E-03;	2.74E-04;	1.19E-03;	1.04E-04;	4.64E-08;	2.74E-03;
77500.00;	3.75E-03;	2.61E-04;	1.02E-03;	9.77E-05;	4.01E-08;	2.37E-03;
82500.00;	3.29E-03;	2.50E-04;	8.89E-04;	9.24E-05;	3.51E-08;	2.06E-03;
87500.00;	2.92E-03;	2.39E-04;	7.79E-04;	8.75E-05;	3.10E-08;	1.81E-03;
92500.00;	1.94E-03;	1.30E-04;	5.25E-04;	5.09E-05;	2.12E-08;	1.23E-03;
97500.00;	2.41E-03;	2.22E-04;	6.32E-04;	7.96E-05;	2.54E-08;	1.48E-03;

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BalING51:

Roční:

EFF DOSP podle cest: Suma pres segm.: SMER= 6
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MODEL,KPS,KRK,	THAV,	TBLONG(rok),	ING,	TSPD,	TING :
2 6 0	7.2000E+03	1.0E+00	T	1.82E+02	5.17E+02

XREAL(K) (m)	Efektivni (SV)	mrak (Sv)	depo (Sv)	inhalace (Sv)	inh(resus.) (Sv)	ingesce : celkova az do r. 1.
500.00;	6.67E-01;	8.63E-03;	5.29E-02;	2.30E-02;	2.07E-04;	5.82E-01;
1500.00;	4.28E-01;	3.08E-03;	3.14E-02;	1.80E-02;	1.38E-04;	3.76E-01;
2500.00;	2.48E-01;	1.99E-03;	1.90E-02;	1.02E-02;	7.92E-05;	2.17E-01;
3500.00;	1.61E-01;	1.64E-03;	1.29E-02;	6.39E-03;	5.08E-05;	1.40E-01;
4500.00;	2.46E-01;	1.35E-03;	1.96E-02;	3.46E-03;	8.02E-05;	2.22E-01;
5500.00;	6.41E-02;	1.14E-03;	6.17E-03;	2.05E-03;	1.92E-05;	5.48E-02;
6500.00;	5.08E-02;	9.80E-04;	5.04E-03;	1.54E-03;	1.50E-05;	4.33E-02;
7500.00;	4.17E-02;	8.54E-04;	4.23E-03;	1.20E-03;	1.22E-05;	3.54E-02;
8500.00;	3.51E-02;	7.52E-04;	3.63E-03;	9.65E-04;	1.02E-05;	2.97E-02;
9500.00;	3.01E-02;	6.68E-04;	3.16E-03;	7.96E-04;	8.74E-06;	2.55E-02;
10500.00;	5.67E-02;	7.73E-04;	5.69E-03;	7.72E-04;	1.68E-05;	4.94E-02;
11500.00;	4.85E-02;	7.99E-04;	5.10E-03;	6.73E-04;	1.39E-05;	4.19E-02;
13000.00;	4.39E-02;	9.07E-04;	4.78E-03;	6.53E-04;	1.22E-05;	3.76E-02;
15000.00;	1.66E-02;	5.92E-04;	1.88E-03;	4.17E-04;	4.52E-06;	1.37E-02;
17000.00;	1.34E-02;	3.77E-04;	1.56E-03;	2.81E-04;	3.72E-06;	1.12E-02;
19000.00;	1.21E-02;	3.42E-04;	1.40E-03;	2.52E-04;	3.33E-06;	1.01E-02;
21000.00;	1.09E-02;	3.25E-04;	1.27E-03;	2.33E-04;	3.00E-06;	9.10E-03;
23000.00;	1.68E-02;	3.09E-04;	1.88E-03;	2.11E-04;	4.60E-06;	1.44E-02;
25000.00;	8.82E-03;	2.96E-04;	1.04E-03;	1.94E-04;	2.38E-06;	7.29E-03;
27000.00;	8.12E-03;	2.84E-04;	9.58E-04;	1.82E-04;	2.18E-06;	6.69E-03;
29000.00;	7.49E-03;	2.73E-04;	8.85E-04;	1.72E-04;	2.00E-06;	6.16E-03;
32500.00;	1.10E-02;	2.56E-04;	1.26E-03;	1.52E-04;	2.91E-06;	9.30E-03;
37500.00;	8.74E-03;	2.36E-04;	1.01E-03;	1.28E-04;	2.27E-06;	7.36E-03;
42500.00;	4.73E-03;	3.89E-04;	5.43E-04;	1.79E-04;	1.11E-06;	3.62E-03;
47500.00;	7.85E-03;	3.63E-04;	9.09E-04;	1.56E-04;	1.88E-06;	6.42E-03;
52500.00;	2.75E-03;	3.40E-04;	3.05E-04;	1.39E-04;	5.91E-07;	1.97E-03;
57500.00;	2.34E-03;	3.21E-04;	2.52E-04;	1.28E-04;	4.86E-07;	1.63E-03;
62500.00;	2.01E-03;	3.03E-04;	2.11E-04;	1.19E-04;	4.05E-07;	1.37E-03;
67500.00;	1.75E-03;	2.88E-04;	1.79E-04;	1.11E-04;	3.41E-07;	1.17E-03;
72500.00;	1.53E-03;	2.74E-04;	1.53E-04;	1.04E-04;	2.90E-07;	1.00E-03;
77500.00;	1.36E-03;	2.61E-04;	1.32E-04;	9.77E-05;	2.49E-07;	8.72E-04;
82500.00;	1.22E-03;	2.50E-04;	1.15E-04;	9.24E-05;	2.16E-07;	7.65E-04;
87500.00;	1.11E-03;	2.39E-04;	1.01E-04;	8.75E-05;	1.89E-07;	6.77E-04;
92500.00;	7.15E-04;	1.30E-04;	6.85E-05;	5.09E-05;	1.33E-07;	4.66E-04;
97500.00;	9.42E-04;	2.22E-04;	8.25E-05;	7.96E-05;	1.54E-07;	5.58E-04;

50ti letá:

EFF DOSP podle cest: Suma pres segm.: SMER= 6
++

MODEL,KPS,KRK,	THAV,	TBLONG(rok),	ING,	TSPD,	TING :
2 6 0	7.2000E+03	5.0E+01	T	2.00E+00	5.17E+02

```
 XREAL(K)   Efektivni      mrak      depo     inhalace  inh(resus.)  ingesce : celkova az do r.50.
   (m)         (SV)        (Sv)          (Sv)        (Sv)

    500.00;  1.24E+00;  8.63E-03;  2.68E-01;  2.30E-02;  2.10E-04;  9.44E-01;
   1500.00;  7.05E-01;  3.08E-03;  1.35E-01;  1.80E-02;  1.39E-04;  5.49E-01;
   2500.00;  4.35E-01;  1.99E-03;  8.91E-02;  1.02E-02;  7.99E-05;  3.33E-01;
   3500.00;  3.00E-01;  1.64E-03;  6.49E-02;  6.39E-03;  5.14E-05;  2.27E-01;
   4500.00;  4.40E-01;  1.35E-03;  9.26E-02;  3.46E-03;  8.10E-05;  3.43E-01;
   5500.00;  1.52E-01;  1.14E-03;  3.93E-02;  2.05E-03;  1.95E-05;  1.10E-01;
   6500.00;  1.25E-01;  9.80E-04;  3.30E-02;  1.54E-03;  1.53E-05;  8.99E-02;
   7500.00;  1.06E-01;  8.54E-04;  2.83E-02;  1.20E-03;  1.25E-05;  7.56E-02;
   8500.00;  9.15E-02;  7.52E-04;  2.47E-02;  9.65E-04;  1.05E-05;  6.50E-02;
   9500.00;  8.01E-02;  6.68E-04;  2.19E-02;  7.96E-04;  8.93E-06;  5.68E-02;
  10500.00;  1.40E-01;  7.73E-04;  3.69E-02;  7.72E-04;  1.71E-05;  1.01E-01;
  11500.00;  1.27E-01;  7.99E-04;  3.47E-02;  6.73E-04;  1.42E-05;  9.10E-02;
  13000.00;  1.21E-01;  9.07E-04;  3.37E-02;  6.53E-04;  1.25E-05;  8.55E-02;
  15000.00;  4.90E-02;  5.92E-04;  1.40E-02;  4.17E-04;  4.65E-06;  3.40E-02;
  17000.00;  4.04E-02;  3.77E-04;  1.17E-02;  2.81E-04;  3.83E-06;  2.81E-02;
  19000.00;  3.63E-02;  3.42E-04;  1.05E-02;  2.52E-04;  3.42E-06;  2.52E-02;
  21000.00;  3.31E-02;  3.25E-04;  9.55E-03;  2.33E-04;  3.09E-06;  2.29E-02;
  23000.00;  4.80E-02;  3.09E-04;  1.36E-02;  2.11E-04;  4.72E-06;  3.38E-02;
  25000.00;  2.72E-02;  2.96E-04;  7.93E-03;  1.94E-04;  2.45E-06;  1.88E-02;
  27000.00;  2.51E-02;  2.84E-04;  7.32E-03;  1.82E-04;  2.24E-06;  1.73E-02;
  29000.00;  2.32E-02;  2.73E-04;  6.77E-03;  1.72E-04;  2.06E-06;  1.60E-02;
  32500.00;  3.23E-02;  2.56E-04;  9.27E-03;  1.52E-04;  2.99E-06;  2.26E-02;
  37500.00;  2.61E-02;  2.36E-04;  7.55E-03;  1.28E-04;  2.33E-06;  1.82E-02;
  42500.00;  1.46E-02;  3.89E-04;  4.25E-03;  1.79E-04;  1.15E-06;  9.81E-03;
  47500.00;  2.37E-02;  3.63E-04;  6.87E-03;  1.56E-04;  1.94E-06;  1.63E-02;
  52500.00;  8.43E-03;  3.40E-04;  2.43E-03;  1.39E-04;  6.12E-07;  5.52E-03;
  57500.00;  7.02E-03;  3.21E-04;  2.01E-03;  1.28E-04;  5.04E-07;  4.56E-03;
  62500.00;  5.91E-03;  3.03E-04;  1.67E-03;  1.19E-04;  4.20E-07;  3.81E-03;
  67500.00;  5.03E-03;  2.88E-04;  1.41E-03;  1.11E-04;  3.53E-07;  3.22E-03;
  72500.00;  4.33E-03;  2.74E-04;  1.20E-03;  1.04E-04;  3.00E-07;  2.75E-03;
  77500.00;  3.76E-03;  2.61E-04;  1.03E-03;  9.77E-05;  2.58E-07;  2.37E-03;
  82500.00;  3.31E-03;  2.50E-04;  8.97E-04;  9.24E-05;  2.24E-07;  2.07E-03;
  87500.00;  2.93E-03;  2.39E-04;  7.87E-04;  8.75E-05;  1.96E-07;  1.82E-03;
  92500.00;  1.94E-03;  1.30E-04;  5.29E-04;  5.09E-05;  1.37E-07;  1.23E-03;
  97500.00;  2.42E-03;  2.22E-04;  6.38E-04;  7.96E-05;  1.59E-07;  1.48E-03;

**********************************************************************
```

2-D zobrazení pro PRIMOALL:

Zobrazovací software je umístěn v podadresáři:

c:\ PRIMO\PRIMO_2D_GUI

Zobrazovací funkce se vyvolají postupem:

- nakopíruj c:\ PRIMO\PRIMOEXE\SPAD.OUT a GRAFH00.OUT do c:\PRIMO\PRIMO_2D_GUI\data*.*
- spuštění c:\PRIMO\PRIMO_2D_GUI\dist\PRIMO_2D_GUI.exe

OK

****
****

Definice scenaře pro HARP, který by byl co nejvíce podobný předchozímu 3-segmentovému PRIMO:

3 segm o trvání 4 , 4, 8 hodin (kat D (5m/s, prsi), C (4m/s, ne), F (1m/s, ne)
Takze celkem HARP udela 16 hodinovych segmentu:
v HAVIN (HARP) : May24_2010_KRK1_3SEGM_sm6.xml
udelal havin.dat a meteo.wea:

```
3SEGM_PARANO_HARPKRK1_CEZ_NJZrev2,3seg*1/3
May24_2010,3seg,6smer,DCF,,prsi2MMproD, max 16 hodinovych segm
  2
  6
```

```
 35 35
  0  0  3
  1  0
D   0
      45.0  8
    86400.     180.0     180.0
     1.0
    4.0000
  6  6  6
    5.0000    4.0000    1.0000
D C F
    4.0000    4.0000    8.0000
       0.0       0.0       0.0
       0.0       0.0       0.0
      45.0      45.0      45.0
  45.
 507.
     200.0
F
T   1
       0.0
       1.6
       0.0
 1.0 2.0 2.0 2.0 2.0 1.0
   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  6
  0
  1
     0.00070     0.00150     0.00200     0.00750     0.00050
     0.00080     0.00250     0.00300     0.00850     0.00080
     0.00100     0.01500     0.02000     0.07300     0.00500
     0.00050     0.00015     0.00020     0.00075     0.00050

SEGMENT  1  : srazky a uniky:
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00
SR90         1.80E+12
RU103        1.00E+12
TE131M       7.00E+12
I131O        1.80E+13
I131         3.00E+14
I131A        1.80E+13
XE133        2.60E+17
CS137        1.00E+13
BA140        3.30E+13
LA140        1.80E+12
CE141        1.33E+12
KONEC
SEGMENT  2  : srazky a uniky:
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00
SR90         1.80E+12
RU103        1.00E+12
TE131M       7.00E+12
I131O        1.80E+13
I131         3.00E+14
I131A        1.80E+13
XE133        2.60E+17
CS137        1.00E+13
BA140        3.30E+13
LA140        1.80E+12
CE141        1.33E+12
KONEC
SEGMENT  3  : srazky a uniky:
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00
SR90         1.80E+12
RU103        1.00E+12
```

```
TE131M       7.00E+12
I131O        1.80E+13
I131         3.00E+14
I131A        1.80E+13
XE133        2.60E+17
CS137        1.00E+13
BA140        3.30E+13
LA140        1.80E+12
CE141        1.33E+12
KONEC
```

meteo.wea:

```
3segm: kat DCF, D prsi, 5,4,1 m/s
    1.00    1.00  292.50    5.00   D    2.00  400.00
    1.00    2.00  292.50    5.00   D    2.00  400.00
    1.00    3.00  292.50    5.00   D    2.00  400.00
    1.00    4.00  292.50    5.00   D    2.00  400.00
    1.00    5.00  292.50    4.00   C    0.00  400.00
    1.00    6.00  292.50    4.00   C    0.00  400.00
    1.00    7.00  292.50    4.00   C    0.00  400.00
    1.00    8.00  292.50    4.00   C    0.00  400.00
    1.00    9.00  292.50    1.00   F    0.00  400.00
    1.00   10.00  292.50    1.00   F    0.00  200.00
    1.00   11.00  292.50    1.00   F    0.00  200.00
    1.00   12.00  292.50    1.00   F    0.00  200.00
    1.00   13.00  292.50    1.00   F    0.00  200.00
    1.00   14.00  292.50    1.00   F    0.00  200.00
    1.00   15.00  292.50    1.00   F    0.00  200.00
    1.00   16.00  292.50    1.00   F    0.00  200.00
    1.00   17.00  292.50    1.00   F    0.00  200.00
    1.00   18.00  292.50    1.00   F    0.00  200.00
    1.00   19.00  292.50    1.00   F    0.00  200.00
    1.00   20.00  292.50    1.00   F    0.00  200.00
    1.00   21.00  292.50    1.00   F    0.00  200.00
    1.00   22.00  292.50    1.00   F    0.00  200.00
    1.00   23.00  292.50    1.00   F    0.00  200.00
    1.00   24.00  292.50    1.00   F    0.00  200.00
    1.00   25.00  292.50    1.00   F    0.00  200.00
    1.00   26.00  292.50    1.00   F    0.00  200.00
    1.00   27.00  292.50    1.00   F    0.00  200.00
    1.00   28.00  292.50    1.00   F    0.00  200.00
    1.00   29.00  292.50    1.00   F    0.00  200.00
    1.00   30.00  292.50    1.00   F    0.00  200.00
    1.00   31.00  292.50    1.00   F    0.00  200.00
    1.00   32.00  292.50    1.00   F    0.00  200.00
    1.00   33.00  292.50    2.00   F    0.00  200.00
    1.00   34.00  292.50    2.00   F    0.00  200.00
    1.00   35.00  292.50    2.00   F    0.00  200.00
    1.00   36.00  292.50    2.00   F    0.00  200.00
    1.00   37.00  292.50    2.00   F    0.00  200.00
    1.00   38.00  292.50    2.00   F    0.00  200.00
    1.00   39.00  292.50    2.00   F    0.00  200.00
    1.00   40.00  292.50    2.00   F    0.00  200.00
    1.00   41.00  292.50    2.00   F    0.00  200.00
    1.00   42.00  292.50    2.00   F    0.00  200.00
    1.00   43.00  292.50    2.00   F    0.00  200.00
    1.00   44.00  292.50    2.00   F    0.00  200.00
    1.00   45.00  292.50    2.00   F    0.00  200.00
    1.00   46.00  292.50    2.00   F    0.00  200.00
    1.00   47.00  292.50    2.00   F    0.00  200.00
    1.00   48.00  292.50    2.00   F    0.00  200.00
**********************************************************
```

HARP: 50ti leté:

```
#DDT:aot=613 Totální úvazky z časné i pozdější fáze         Sv          Čas TRVing= 50.rok;
   26  1.22E+00  6.45E-01  3.80E-01  2.50E-01  3.21E-01  1.30E-01  1.05E-01  8.83E-02  7.55E-02
       6.54E-02  9.48E-02  7.75E-02  5.29E-02  2.80E-02  3.10E-02  2.70E-02  2.32E-02  4.07E-02
       1.90E-02  1.75E-02  1.62E-02  2.93E-02  2.42E-02  9.03E-03  1.83E-02  5.49E-03  4.73E-03
       4.17E-03  3.71E-03  3.31E-03  2.75E-03  2.08E-03  1.49E-03  9.41E-04  2.52E-04
   ---------------------------------------
```

```
#DDG:aot=114 Vnitřní ozáření z dlouhodobé ingesce           Sv          Čas TRVing= 67.roku
po spadu

26   5.99E-01  3.40E-01  1.89E-01  1.18E-01  1.71E-01  5.32E-02  4.24E-02  3.51E-02  2.97E-02
     2.55E-02  4.39E-02  3.46E-02  2.32E-02  1.04E-02  1.15E-02  1.01E-02  8.80E-03  1.80E-02
     7.13E-03  6.59E-03  6.12E-03  1.28E-02  1.03E-02  3.32E-03  7.70E-03  1.95E-03  1.73E-03
     1.56E-03  1.42E-03  1.28E-03  1.06E-03  7.93E-04  5.39E-04  2.99E-04  8.08E-05
-------------------------------------------------------

#DDD:aot=016 Dlouhodobé externí ozáření z depozice          Sv          Čas TBlong=
18250.den;
26    5.93E-01  2.87E-01  1.81E-01  1.26E-01  1.46E-01  7.39E-02  6.09E-02  5.15E-02  4.44E-
02  3.87E-02  4.98E-02  4.20E-02  2.89E-02  1.69E-02  1.89E-02  1.63E-02  1.39E-02  2.22E-02
1.14E-02  1.04E-02  9.59E-03  1.61E-02  1.35E-02  5.35E-03  1.03E-02  3.21E-03  2.68E-03
2.30E-03  1.98E-03  1.73E-03  1.42E-03  1.07E-03  7.79E-04  5.20E-04  1.39E-04
=====================================
=====================================
```

ještě HARP-roční:

```
#DDT:aot=611 Totální úvazky z časné i pozdější fáze         Sv          Čas TRVing=  1.rok;
26    6.10E-01  3.54E-01  1.94E-01  1.20E-01  1.72E-01  5.26E-02  4.15E-02  3.42E-02  2.88E-
02  2.48E-02  4.31E-02  3.38E-02  2.29E-02  1.02E-02  1.11E-02  9.84E-03  8.63E-03  1.76E-02
7.02E-03  6.52E-03  6.09E-03  1.26E-02  1.01E-02  3.40E-03  7.58E-03  2.10E-03  1.91E-03
1.75E-03  1.63E-03  1.49E-03  1.26E-03  9.65E-04  6.75E-04  3.90E-04  1.05E-04

#DDG:aot=611 Vnitřní ozáření z dlouhodobé ingesce           Sv          Čas TRVing=  0.roku
po spadu;
26    5.33E-01  3.09E-01  1.68E-01  1.04E-01  1.55E-01  4.49E-02  3.55E-02  2.92E-02  2.46E-
02  2.11E-02  3.83E-02  2.98E-02  2.00E-02  8.44E-03  9.31E-03  8.26E-03  7.22E-03  1.55E-02
5.83E-03  5.40E-03  5.03E-03  1.10E-02  8.81E-03  2.71E-03  6.54E-03  1.58E-03  1.42E-03
1.29E-03  1.19E-03  1.08E-03  9.02E-04  6.73E-04  4.51E-04  2.39E-04  6.48E-05

#DDD:aot=014 Dlouhodobé externí ozáření z depozice          Sv          Čas TBlong=
365.den;
26    4.98E-02  2.67E-02  1.53E-02  9.92E-03  1.34E-02  4.92E-03  3.97E-03  3.32E-03  2.83E-
03  2.45E-03  3.77E-03  3.04E-03  2.06E-03  1.02E-03  1.14E-03  9.96E-04  8.58E-04  1.60E-03
6.99E-04  6.43E-04  5.94E-04  1.14E-03  9.30E-04  3.25E-04  6.97E-04  1.92E-04  1.66E-04
1.46E-04  1.30E-04  1.15E-04  9.52E-05  7.09E-05  4.94E-05  2.95E-05  7.93E-06
=======================================
```

HARP vysledky takto naladene vypadaji OK

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úmyslné rozdíly: DEPO: HARP ma E(t)=1.0, zatimco PRIMO= BUNZL
INGESCE: naopak: HARP(Baliky) bere pro koren v dalsich letech rozpad + migr+fix..
PRIMO+ING51: zde konzervativne jen rozpad v dalsich letech pro korenový transport

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