Obtaining rad\_calc in the proper unit: MJ/m2

**var** rad\_calc = -1;

**var** rad\_calc\_display = 'NA';

**var** rad\_calc\_MJm2 = -1;

**var** rad\_calc\_Jcm2 = -1;

**if** (rad[row] == '<b><span style="color:red">NA</span></b>'

|| rad[row] == -1

|| **typeof** rad[row] == 'undefined')

{

rad[row] = 'NA';

**var** inv = 1.00011 - (0.03258 \* csd) - (0.00755 \* snd)

+ (0.00064 \* cs2d) + (0.00034 \* sn2d);

rad\_calc = (0.16 + (0.62 \* (((sun[row]) / hrday)))) \* c2 \* inv \* ((csl \* csdecl \* snhass) + (snl \* sndecl \* hass)); // rad\_cal is in J/m2

**rad\_calc\_MJm2** = rad\_calc / 1000000; // --> Expresses RAD as MJ/m2(04/12/2018 Tony Scott)

rad\_calc\_Jcm2 = rad\_calc / 10000; //rad\_calc = rad\_calc / 10000; // e-RA units for RAD are J/cm2

// we therefore have to divide by 10000 to give J/cm2(04/12/2018 Tony Scott)

rad\_flag\_s = '<b><span style="color:red">';

rad\_flag\_e = '</span></b>'; // we toggle the flags that the calculated values are used

} **else**

{

**if** (rad[1] === "J/cm2") {

rad\_calc\_Jcm2 = Number(rad[row]);

**rad\_calc\_MJm2** = rad\_calc\_Jcm2/100;

}

**if**(rad[1] === "MJ/m2")

{

**rad\_calc\_MJm2** = Number(rad[row]);

rad\_calc\_Jcm2 = rad\_calc\_MJm2 \* 100;

}

}

Using Rad\_calc

**var** hj\_g = d0g \* (1000000 \* **rad\_calc\_MJm2**) - fnt2;

**var** evapg = (hj\_g \* ev1 + (0.66 \* ea\_grass)) / (delta + 0.66);

**var** hmm = (hj\_g \* ev1) / 0.66;

**var** hj\_w = d0w \* (1000000 \* **rad\_calc\_MJm2**) - fnt2;

**var** evapw = ((hj\_w \* ev1) + (0.66 \* ea\_water)) / (delta + 0.66);

<.. displaying values .. >

**if** (isNaN(rad\_calc)) {

**var** display\_rad\_calc = '<b><span style="color:red">NA</span></b>';

} **else** {

**if** (rad[1] === "J/cm2") {

display\_rad\_calc = rad\_calc\_Jcm2; }

**if** (rad[1] === "MJ/m2")

{

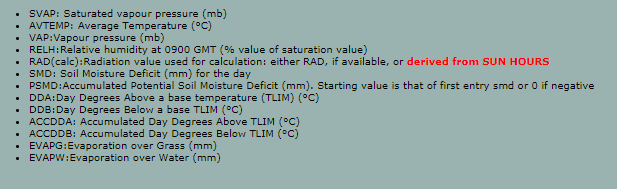
display\_rad\_calc = rad\_calc\_MJm2;

}

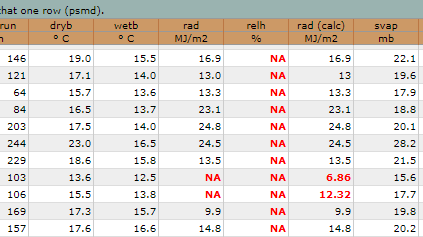
}

We display;

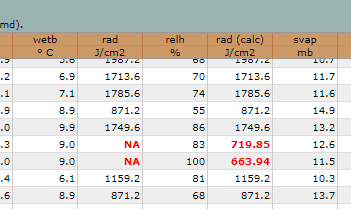
Rad\_flag\_s + display\_rad\_calc + rad\_flag\_e



For Broomet, extract of year 1996



For Rothmet: extract of year 1975 (before flags added)



For Wobmet: extract of year 2006

