

NFDRSFEMS Updates and Tips-20251015_140208-Meeting Recording

October 15, 2025, 7:02PM

54m 59s

● **Scott Linn** started transcription

SL **Scott Linn** 0:08

If not, let me know. I'm trying to get them posted as well on the SharePoint site. So, but if you're not having access to the recordings for these, please let me know. So today, let's see here, looking at early October and I guess I'm just gonna open it up real quick and see how transition is working with everyone. Any major concerns issues that are occurring? Problems people have been seeing. I'm gonna give a minute or two just to get some feedback and. See what? See what people are feeling out there. If anybody. Willing to share. Fairly quiet, all right. That's what I've been hearing on this side too, so. All right. Well, if you have things that come up, please shoot them in a chat during the call or raise your hand. Whatever you would like to, we can hopefully work through those. Any issues you may be having? Just a reminder, so whims went. End of life as of October 1st. All the data is still or the information is still available. Well, through the data warehouse, if you need at least the weather information, you wanna grab it that way you can still grab it for the for service individuals. Other than that, we do have archive records of it. You know that are available in like a emergency type of scenario situation. But other than that hopefully everybody has moved over to Fems. We're working on continuing some some. Development and I guess I want to highlight some of the stuff that we're currently

working on.

So hopefully if you have, if you have a username and login, you should have gotten a message yesterday from famot that we will be down out of service for a couple hours tomorrow morning.

There is also a message on the FEMS website at the very top that says we'll be doing some data maintenance tomorrow from 8:00 till 10:00 Eastern Time.

And that will be for our fems for 3.4.

Yeah, 3.41 release, which is gonna try and take care of some bugs that were identified that occurred during the last release.

So a few things that we have going on right now and I'll just kind of give a quick example of what these what the issues are. So you can see what's going to be fixed tomorrow.

It's not a lot.

It's just a real a very short release.

That we wanted to get completed because.

Because there were some issues occurring again with just the the the data we were showing.

So we wanna just get those corrected so.

And then I wanna get into some other quick things.

But let's see here.

There we go. Alright so.

Quick example. One thing that was occurring when you click on a station.

And when you were on fire danger, if you went to the expand charts view, you can see that we were only showing basically one day of information.

With with this one station so air with all station. So there was a bug that got introduced in our last release that shortened this view up.

When, with the new fix, we'll be going back to having the full view of the forecast time.

So you'll see through, I believe it's a three day previous and in three day extended forecast time frame to help you just get a little more graphical view for these stations.

So one small change, but I don't know if anybody had noticed it, but that had been occurring in the previous or in our current environment.

The second information.

That we were looking at or that came around with the last release.

Was there was a a bug issue when we had missing data in a station for the current observations. It was translating that into the historical data as well.

So the trend charts weren't weren't formatting properly.

And it was really impacting a lot of the areas now just starting to get into fire season across the east.

Great Plains and the South.

So that you will see now as you go to those charts, you will see that the data for the current year is still missing as evident.

You know right here with this solid connection. But the historical trend lines are still relevant to our period of record datasets.

So that is what that those are really the two fixes that are occurring with this release.

Again, those are bugs that were introduced during our last release.

And they're just gonna be doing a quick release of of that to fix these two issues occurring that we have.

The next planned release after that will be mid-december, around December 17th.

And that will have a little bit more information going forward.

We're going to be ingesting or hopefully the plan is to have all the Mesa net stations that we had in wims and more available to the units.

Again, we're we're crossing our fingers. We can get all of those work through.

We'll also be able to do some.

NFDRS parameter catalog management.

As for the fems admin, so we can make adjustments to to catalogs as we need to.

So we don't just have one national catalog right now. We have Texas has some some catalogs and then we have a national catalog and we hope to be able to begin to expand those into needs for geographic areas, so.

Those are really gonna be the big releases for.

For the December release, there's also one other bug happening with the FEM, with the bulk upload and field sample, we're not able to actually bring in bulk data at this time.

It's it's giving us an error.

They do have the fix in place, but we're just waiting to get that released into the three five release.

So if you guys, I know there's a couple of people units out there that have been trying to have bulk data uploaded and I just want to pass it on that.

That's why we haven't been able to get that in there just yet, because we have that

error and it's really in a fuel identification piece where it the system for some reason. Is not recognizing even the existing fuels.

That were out there. So we, so they have the fix in place, but we are getting that fixed and that will be released in the December time.

Release.

So questions on where we are going or what is currently in FEMS and where we are moving towards?

Yes, Steve.

VS **Volmer, Stephen@CALFIRE** 7:49

Yeah. Hi.

Thanks for all the office hours stuff.

Has there been any more discussion on?

The.

Fuel samples.

And are they actually populating now or is that a fix coming in December as well?

SL **Scott Linn** 8:09

You mean?

VS **Volmer, Stephen@CALFIRE** 8:12

I know there was a maybe.

SL **Scott Linn** 8:12

Go back 'cause. I know that you had sent me a few stuff.

VS **Volmer, Stephen@CALFIRE** 8:15

A month.

A month or two ago.

A month or two ago, the the fuel moistures were you were not being able to be saved or something like that. A month or two ago, or has that been corrected?

SL **Scott Linn** 8:27

Yeah, that got corrected back in. I think July, August, time frame when we. Yeah, with that last release, we were able to do that.

VS **Volmer, Stephen@CALFIRE** 8:31
OK.

SL **Scott Linn** 8:34
So you should be able you can manually go in and and save all the fuel moistures there was a double database that happened in our late June release that was kind of throwing things off and so they got that all remedied.
And so yeah, you can go in there and do manual entries of of fuels and and save sites.
The main piece with the field sample information.
Is to remember when you let me see. I have to log in now.
Is when you're adding a site, you need to make sure the longitude is negative and that was where a lot of problems were coming in as people were not adding the negative.
In for that information.
So that that was really a lot of the issue that we had.
I can.
Let me see if I can show you what I mean on that one.
If you give me a second.

VS **Volmer, Stephen@CALFIRE** 9:27
Yeah, I know that makes sense. 'cause if you don't add that negative, it puts it out in the middle of the ocean or over in Asia.

SL **Scott Linn** 9:33
Yep, and that was why I was saying, hey, it doesn't recognize it.
Was because of that reason so.
Let's see here.
All right. So yeah, so when you went to do like an add a site, now we have the negative pre populated in here?
There's really, like, you know, the only place that we don't have negatives is Guam.
And I don't think we have any field sample sites out in Guam as of right now.
So we can make this adjustments for I think Eric Johnson be the only one who'd be doing any fuel sampling out there. But I don't think he has any sites out there.

So you'll see that we already do have the longitude already pre populated and that was usually issue that was occurring was there was no negative and that was why the site wasn't being able to be saved.

'Cause it wasn't recognizing it.

So.

So that should be all fixed for you.

VT **Verdegan, Travis (DNR)** 10:29

Hey, Scott, just one thing, just to remind folks on, so we did have the issue with the double database. If you haven't heard this, what that actually resulted in is?

SL **Scott Linn** 10:37

OK.

VT **Verdegan, Travis (DNR)** 10:43

Some samples showing up on people's sites that.

Weren't actually there, so I've got a site that has Gran Fur and Douglas fir in it in Minnesota, and we don't even have those species.

So those were things that got crossed up from a sample site.

In Colorado.

And there really was no way to undo what was done there.

Those those errors still exist in your database.

So if you have a site and you see something that looks like it shouldn't be there.

There we can clean that up.

But really, we have to do that as a piece by piece as we find them.

Clean em up.

SL **Scott Linn** 11:28

Yeah, I think we, how many did?

I can't remember what that number was.

Thanks for that update, Trevor. That reminder.

Yeah, that was like 50 something sites, I think that got that we were.

VT **Verdegan, Travis (DNR)** 11:38

Yes, it was hard to say because like each each issue correspondence to two sites and the report we got only showed my site.

SL **Scott Linn** 11:46

Mm-hmm.

VT **Verdegan, Travis (DNR)** 11:49

It didn't show the issue. Basically coming from the other site.

It's pretty clear when you when you're looking at it, but it's really hard to even know exactly where they are. And I I can show just share my screen here quick so people can see what that looks like.

So this is my site in in Minnesota.

These two showed up here.

And if I look at them, one of the really interesting pieces here is.

This value here doesn't even correspond to the sub samples. So when we talk about things getting.

Crossed over?

It's it's really crossed over. So as far as I can tell, these sub samples were actually entered by the intern I had doing the work and these are the values from this date that should show up here for either Jack or Red pine. I can't remember which one.

Was which.

But they did.

They came in and got crossed up with Doug Fir.

So if you see something that looks like it's off, it very likely is.

I haven't cleaned this up.

It's actually something I use just as a helpful example.

It's not anything that's throwing me off, but if I mean other than it just being there, but it is something that is erroneous and we're gonna have to do a manual clean up on it as you see them.

SL **Scott Linn** 13:18

Again by that Travis, you mean just the users can go in and delete that species off of there so.

VT **Verdegan, Travis (DNR)** 13:24

Yep. So what I could do is I would just delete this whole thing.
I'd save the sub samples, go back with the date and everything.
I've got the notes from from him doing this too, and I would just go back and actually enter those in where they should be and that would be the fix we'd be looking for.
One thing too, if you do hit this, delete that.
Actually archives.
It's not full on delete, so there is still record and we do have this audit log.
It's not showing anything because it's outside of the time span here, but I think if I go back, let's just do this.
Yeah. So there is some bread crumbs crumbs in here as to what happened.
So there's my intern.
Here's Kyle somewhere around this time period is when this error occurred.

SL **Scott Linn** 14:27

Stacy, have your hand up.

T **Tyler, Stacy - FS, ID** 14:30

Yep. So maybe bear with me, but I think I've found a couple sites field sample sites where the average value.
In the and I'm looking at the chart.
So like when you click on the fuel.
I don't know.
Maybe I should share my screen?
The average comes up identical to.
The actual value.
Right current sample would be this year's values.
And they identically match the average line. So like.
Sample average right?
Am I and I have sites where this is not the case?
And I also have, you know, like OK.
Maybe this could just be a weird anomaly.
Where this year attract exactly on average.
But that's not true based on like a local spreadsheet that I keep.
And I I don't know how often this occurs, but I feel like I found one while I was on a

fire earlier this summer as well, and I was very skeptical.

You know that the average line was tracking correctly.

So like this one, this one's on the sawtooth. I've got another one on the sawtooth.

Where that didn't happen.

So there there's like, you know, the average was 11 1/2, but the actual this year was 18.

So anyway, I haven't dove into the data a lot other than like I said, I have a spreadsheet that contradicts what should be showing up on that average line for this site in particular.

VT **Verdegan, Travis (DNR)** 16:26

So Stacy, what that looks like to me knowing the data.

If you never took a sample on that same exact date, the month and day.

There is nothing else to average against, so it's just literally averaging.

The one value that you have in there.

It it's a problem because we have such disparate data.

T **Tyler, Stacy - FS, ID** 16:49

OK.

VT **Verdegan, Travis (DNR)** 16:53

You know, if we go out two weeks or every month, we don't have a consistent.

So even charting this, there's the reason we don't have the Max or the min.

In addition to the average is because we don't have that consistent data.

The solution to that would be some sort of data interpolation between the points in the historic record.

We just don't have that as part of what we've got right now.

T **Tyler, Stacy - FS, ID** 17:20

I gotcha.

Yeah, 'cause.

Like in my spreadsheet, I just grouped them by two week periods, right? And did the average that way.

So so when I looked at this chart, that's what I was like gleaning.

So I just.

I guess I would just point out then that this chart could be misinterpreted, but.

VT **Verdegan, Travis (DNR)** 17:40

I think what we could do, Scott, is a bug fix is to just pull from the tool tip. Anything that is related to the average and just display the current values at that time, and then you get kind of a visual of how the trends are compared to.

The average until we get a better handle on charting the the field sample.

SL **Scott Linn** 18:01

Correct. And the other option is I I did put in there.

The link to one of the other sites that.

Kristen Allison had built, and it should be available, and it's put in the same. It pulls directly out of the the FEMS database and it has a little bit more of a user-friendly display that she had built up.

So I think that would also be a good option for you if you're looking for a little more, you know a little bit better charts right now.

Again, our developers had a tougher time with getting that.

Built up in the time constraints that we had and I was trying to do that at the same time trying to basically replace Wim.

So yeah, we can easily get that.

I think that's one of the good pieces in power BI that we can probably have built in fairly quickly.

So.

T **Tyler, Stacy - FS, ID** 18:54

Thank you.

SL **Scott Linn** 18:56

Yep, not good.

Thank you for pointing that out.

OK. A couple of other things that have been brought to my attention over the past couple of weeks.

Is. Let's see here.

So we're gonna go back into firefamily plus, all right?

So if you remember.

On the fems portal.

On here you have, you know, the transition materials. You click on that and you can get a copy of the Firefox database version.

To I had version three on here for a couple of weeks and I was having quite a few bug issues associated with the changes that I had done with that, so I really pulled version three off of there.

The reason why?

Version three was built was I tried to add in all the ASA stations as well as making some default changes.

At the request of 491.

And with all the changes that I did trying to make.

Basically 9 digit station IDs into 7 digit station IDs, which is what Firefall found plus accepts and then again some of the default major changes in the access database it it threw some bugs into the system and so I just pulled it down and I brought back version.

Two, it didn't seem like many people were having issues with.

Version two since I heard.

That's that was the difference between version 2 version three. If you do have version three and it's still working for you.

Great. It's not gonna change your your outputs, it just has a larger list of.

Stations in it is, is really the main piece.

So when we go back into Fighter family plus and I want to thank.

Matt Giddner about this one.

So in the options we have.

Sorry in the in the in the weather when you have the NFDRS calculator. So in here if you were to go in and want to find values and verify your values and your outputs you know compare them between like what you see in fems or where you put.

In some you know your inputs and itself directly and you start adjusting your kpdi.

The background programming inside this calculator, right?

Here this individual utility, the kbdi threshold for transferring dead fuel, is still defaulted to 100.

So if you adjust and put your fuel or your kbdi at 4:50, your ERC values are going to change and that will impact. So you will have different outputs than what fems shows because we have ours defaulted.

To our kbdi threshold defaulted to 800.

So so there are different.

You know, if you are running some individual numbers you will get different values between that individual utility.

In Firefamily plus and what you would see in so I just want to make sure that was that was brought up and I have not found a way yet to get in there and actually change. Change that. Yet I am still looking into it.

Both Matt and Faithann are furloughed at the time, so I can't reach out to them.

But my guess is it would take a new build of firefamy plus and we're trying to stay away from having too many builds of Firefly plus occurring at this time so.

Anyways, just be aware of that. If you do use this little calculator to to run numbers, you will see some differences.

If you just run your climatology the normal way, you will and you have all your station catalog set. You know the same way or if you get this data database from the fems portal you will get the same outputs as we have in fems.

So just be aware of that, that little change or that little idiosyncrasy in in Firefly plus one other piece that I do want to bring up that has been brought up to me.

Numerous times, I think, and I don't.

I've really highlighted this enough.

Is that when you do a download?

From Fems and you can choose whether you can choose when when you choose.

Let's just say your observation and your hourly observation. The data set being in either an FW21 or a CSV, these two data sets are interchangeable.

The file structure is exactly the same. The only thing different is one has a dot FW 21 and the other one has a dot CSV.

Once you actually download these, you can copy it and save it as the opposite file and it will either import into Firefox perfectly if you change it from a CSV to an FW21, or it will if you go from an FW21 and change it.

To A dot CSV you can.

Upload, you know, use Excel to view the information. The main piece.

Again, that's really important to understand though.

Is that the time format and the timestamp is different in the FW21?

So if you import and you download a CSV and then you change it to an FW21, you will be seeing things in in UTC and your time will not be at the local station time.

That's why this highlights this is because of the timestamp that's associated with the

FW 21 information.

Why that's important is because a lot of people are downloading the two different files.

And then when they import the information.

Into Firefly plus and they go to a data or weather and view all observations.

At times, individuals are seeing hey, wait a second. The two files don't line up.

There is data missing inside the FW 21 that was not missing in the CSV or if I OK.

And so what's happening is Firefly Plus does a sneaky thing of it throws out values.

That it views or it knows are will break the calculator, so it will literally delete entire rows of data without you knowing it.

It doesn't recognize you and tell you that it's doing it.

It just gets rid of it.

So if there's a temperature over 145°, it just throws it out.

If the RH I believe is over 100, it just throws out that entire record.

It doesn't change it to 100, it just throws out the entire record. So and it does the same thing with precip values.

I think it's over like 5 inches or 6 inches in an hour.

It just throws out that entire record, the hourly record, because it's saying it's not feasible. You can't do that.

And so then you'll start looking at it and saying, well, how come I have in my CSV a record of, you know, 64 inches in the one hour and and when I look at the FW21, it doesn't exist.

Well, it actually just deleted that entire hour for that record.

So again, just be aware of how firefly plus is what it does background so that you don't get tricked and understand you know, OK do I need to change this and or what's going on with the two different file types.

There is no difference between these two file types.

It's just actually what firefly Plus is doing with the information when you import it.

So questions on any of that information I just shared.

OK.

Kristen had a question in there for the 491 data help material. There was a PRISM data tool pulled.

And so I think, Kristen, what you're talking about and jump on, if you have a question or if I got this wrong, but the old way we used to do things was in order to get.

Our updated annual so in a station.

Let's see here.

In the station average annual precip, this information we would recommend going in every few years every year and updating the average annual preset for each station.

And that was off of the PRISM data. Is that correct?

That's what you're referencing, I assume.

A Allison, Kristen - FS, CA 27:48

Yep, Yep, I and I.

SL Scott Linn 27:50

Yes.

A Allison, Kristen - FS, CA 27:50

Yeah, that's exactly it.

And I I said Wyatt, have we done this?

And he's all he. I know he hit you up and he's like, we don't have to do that anymore.

Like what? That's amazing.

SL Scott Linn 27:58

Right, right.

Yep, so this is.

That's exactly part of what we did.

So Chuck Maxwell, he took care of all of that for us and Cheryl Bray. They did all of that for us when we did the master station list that's inside FEM.

So they went through, updated all the average annual precip.

They updated all the lat longs.

And so those are those are really updated within the past. I didn't want to say the past years.

That we did update all of those, so you don't need to go in there and worry about redoing those.

It's not gonna change significantly in the past, you know, year and so and we will be working, getting those continual updates for you and as we get those new updates for lat, longs and average annual precip and such, I'll be adding new.

I'll be adding new versions of that database available so everybody have to worry about going in and redoing it themselves.

R **Reynar, Charleton - FS, CO** 28:54
Great.

SL **Scott Linn** 28:56
I plan to give master station databases out as we get those updates.

R **Reynar, Charleton - FS, CO** 28:57
I'm on a I'm on a call on the side.

SL **Scott Linn** 29:00
So somebody on.

R **Reynar, Charleton - FS, CO** 29:00
Yeah. And half of it, I don't understand. So.

SL **Scott Linn** 29:04
Somebody we got on.

R **Reynar, Charleton - FS, CO** 29:06
Call doctor.

SL **Scott Linn** 29:07
Not mute.
Not mute.
Check your mute button.
So let's hear.
Yeah. So that's that one, Kristen.
So yeah, we hopefully you're taking some workload off yet we use the PRISM data.
I know that.
Kevin, he made some changes up on the up in the North OPS because there were some areas that prison doesn't work and I think we made few other changes in other parts of the country as well based on some direct feedback, but it should hopefully save you a.
Little bit of time so.

A **Allison, Kristen - FS, CA** 29:36

Yeah, I was just wondering too is in that material.

I know that there's a lot of the 491 material within the the help thing was that pulled out that kind of that tech tip. That's really what I was asking is, has that been removed or has there been like a note added like hey you Don? Need to do this.

SL **Scott Linn** 29:53

In the 491 material, I'm not sure ask.

A **Allison, Kristen - FS, CA** 29:56

Yeah. So if you go to the, if you go to the, I think it's where is the help material. It's on the Fems home page. There's a whole bunch of the tech tips. Oh where a scroll.

SL **Scott Linn** 30:08

Oh, I think I know where you're at.

A **Allison, Kristen - FS, CA** 30:09

Yeah, yeah.

So I was just curious if that had been.

If there had been a little note added there so that people realize that I was like, oh, that's awesome.

But yeah, there was a whole bunch of NFTR stuff.

So I was like ha, I wonder if that's been updated, yeah.

SL **Scott Linn** 30:23

So is that in this site here?

A **Allison, Kristen - FS, CA** 30:25

Yeah, that's also part of, yeah. And I think that there was a whole bunch of material in there and the tech tips and I just didn't know if it was in there still and if it was, if

maybe that's something that needs to be updated or.
Or something just added as a reference.

SL **Scott Linn** 30:41

Yeah, I'll have to run through these.

A **Allison, Kristen - FS, CA** 30:43

Yeah.

SL **Scott Linn** 30:44

I don't think they did bring these over, but I will double check these tech tips and make sure and if we do need to update them, I can get those updated.

I think Faithan has all the latest tech tips for Firefly plus.

A **Allison, Kristen - FS, CA** 30:56

Yeah, yeah.

SL **Scott Linn** 30:58

Updated. That's why we brought this in and saying right up front that this all this material was brought over from the Foreign Subcommittee website.

And that some of it may or may not be relevant at this time.

Time this was just trying to get us a new place to start, you know, gathering this information so that we had much more ease of access and changing it. And so I will make sure that we kind of run through and that's actually a really good plan would. Be I'll see if I can get those.

Get all those new tech tips and I'll have I'll have our I'll have Paul update this entire piece for all the tech tips and get all the newest stuff on here that fit. Anne just worked on.

So, excellent. Thank you for.

Bringing that up.

Other questions popping up yet?

OK.

All right. So we, I know I've talked about this one in the past.

So we have this power BI page that we've been working on and so it had some very basic information 1st and some very basic reports. We are just now starting to get to

where these are additional and and being a little bit or being more visually appealing and.

More interactive so you can start seeing what these will look like. You know moving forward where again the very simple simple.

Station information report for you, but we now have interactive map that you can pan through.

You can choose if you want to understand, you know which stations are just for Forest Service. You'll get your your summary of information. If you want to know what stations are just in.

We'll just, you know, we'll go through. Let's try.

Oh, we don't.

Puerto Rico.

Let's do Washington. OK, so, you know, we have our total summary of 38 that are owned by the Forest Service.

Within there you have your information of what stations these are counties the average annual precip for these stations. The average value for those average annual precipit what time these stations transmit, which is going to be important into the next topic that I'm going to show, and then also.

What period of record these have for each?

You'll see some of them have, or are all populated. Actually for this area they are all populated except for this one station.

And so you'll know when the period of record has for each one station.

So again, some basic information but just wanted to show you the interaction that we're starting to build.

Into these reports and and the plans are again to continue enhancement of these reports going forward.

So just kind of keep checking over on the.

Power BI reports or on the reports page once in a while to start seeing new reports as we get them built.

Additionally.

I am going to go.

Second here so inside.

So now I have to remember where I have it all.

Man.

So the data ingest timing so under getting started, you'll see there's, there's quite a

few questions that have been occurring.

Around hey windows, when does everything happen inside?

So. So really, what's the background that's going on?

So you can see if this is any current moment in time. Our historical snowflakes come in, we get our, we got our snowflakes directly from DRI.

That's for the forecast information and then the observed.

And that comes in at 1600 UTC on a daily timeframe.

So those are updated once daily and you know it's about 10:00 Pacific Time.

In the morning that that you get the changeover of your daily snow flag.

So if it's season observation at midnight, you will change from snow covered or not snow covered to the opposite.

Historical record or observations are coming in from WXX.

Those are coming in. We look at those every 5 minutes.

And those those are just populated.

So it's just coming in.

We don't do any change to that. If you see a break in the system.

It would be because there's a.

Issue with the weather feed from WX weather and we're working on getting it where we look back on a daily basis to see if there's any gaps that we have maybe missed due to an ingest time, an ingest process to do some back fill of what data may.

Be existing inside WX weather.

Then we also get our NOAA forecast currently, once daily at 0400 UTC, you will get an 8 day.

It's really a 7 1/2 day forecast.

Asked and you have to remember that your current day is considered a forecast day.

So when you come in at 6:00 AM seven 8:00 AM in the morning, you will have the latest forecast for that time frame.

And so you'll be getting the latest forecast if you come once you come in in the morning, that does not get updated throughout the day. It is only that one time that we are bringing in.

Currently we are looking at adjusting that in just time frame.

And we will get that. You know, once we do, if we do make those adjustments, we will get that information out there as make those changes so.

Let's see here, Mr. Turner asks.

How far back do you currently backfill and correct weather forecast fire danger

indices?

Right now we don't do any corrections at this time.

In the December release, that's where we'll be looking back. Really just a one day period.

And we're only gonna be grabbing that information from from one day WX if, and that again is only if the sensor was missing data or if the if there was an issue that occurred.

Between when we ingest.

In what WX is recording?

So sometimes it the sensor delays on getting it transmitted to WX, weather it might have delayed an hour or whatever. We're not gonna pick that up.

So then at the end of the day, WX weather catches up.

We will actually then go back and look at that data.

So but other than that, we are not going back yet.

OK. That's that's one of the further out discussions that we can have.

Going back to fancy chart here, so weather forecast come in.

Historical fire record also comes in.

We are calculating fire danger every 5 minutes again.

So again, you don't have to wait for a certain time for it to ingest. It just comes in when your weather in when your.

Weather station updates and it will calculate fire danger at that time.

Forecasts for the day are calculated at the same time the weather forecast is populated, so once we get the weather forecast, it then calculates fire danger and populates that for those seven days.

And then our daily min Max values. Again, this is a 24 hour daily min Max. So it runs from midnight to midnight when we are looking at today's daily Max.

We are always looking at a forecast because we do not know what the daily Max is at for the absurd for this current 24 hour period.

And this this says UTC.

It is actually at local station time, so this is I gotta get one correction in here that this is once daily at midnight local station time is when we do the calculations for the fire danger.

We when we do the calculations of the observed fire danger.

And then again, it forecasts at when the 0400 runs. It also runs the daily Max for the forecast at that same time.

So questions on and I guess one other one Kristen had was what's the time?
What is the time frame for 2324?
Say that one again, Kristen.

A **Allison, Kristen - FS, CA** 39:34
Gap fill data gap fill data.

SL **Scott Linn** 39:37
Ah Yep.

So what we are we're hoping that.

We're hoping that Tim is gonna be working on that.

The problem with us is that we are not the problem.

The discussion that we've been really currently trying to have is is what's the proper way to do this gap fill and doing the data integrity piece because there's a much broader discussion with the current thresholds that we have set for when a station gets gap filled or when.

The data quality is considered.

Not good, you know.

So if you get over an inch of rain in a site, is that OK?

Is that a 10% threshold that?

Things are good or not good, and so we need to have, I think that broader discussion first with a lot of the Mets across the country in order to really start saying, hey, this would be a good threshold that we could use for temperature, RH, precip, and wind. And then if it's beyond that threshold, we're going to use the gap filled data.

So once we have that discussion, we're going to have a much better sense of when we're going to actually be able to give Tim that information and then he can produce the the new gap filled for us.

If we, you know, for the time being, the also the other discussion or decision point is do we just use the current thresholds that we have and then know that we'd then have to go redo the full data set again and you know six months or a year.

Or whatever it may be.

But that at least populate you the 2324 possibly 25 data so.

So we're looking at it.

I don't have a final timeline just yet, but we are trying to get that.

We are having that discussion moving forward.
So.

A **Allison, Kristen - FS, CA** 41:22
So Scott, that brings up a point.

SL **Scott Linn** 41:25
Mm-hmm.

A **Allison, Kristen - FS, CA** 41:25
Not to belabor this conversation, but if there is going to be something different on the 2324, is that going to be?

SL **Scott Linn** 41:28
No, there's yeah.

A **Allison, Kristen - FS, CA** 41:33
Go back through the whole rest of that time frame as well to make sure that it's all kind of the same.

SL **Scott Linn** 41:40
Well, that would be like if we changed that would be exactly that.
So like if we wanted to change the snow flag threshold or if we wanted to change those thresholds, that's the thing, then you're, yes, we want to keep it consistent for the entire period of record.

A **Allison, Kristen - FS, CA** 41:44
Yeah.
Perfect.

SL **Scott Linn** 41:52
We don't want to just do one small time frame. If we change these thresholds, that's where that whole piece comes into because you know, we're like, hey, we see all these values that are like, way off on wind and the temperature in RH. It's like we have so.

Many stations that have like 2-3 hundred percent RH and it's like.

OK. But they're in there.

And but they didn't get thrown out for whatever reason.

What do you do with those?

So. So yeah, those would be.

That would be the piece. It would be. Again, getting a new threshold for us. Would it have that much impact and everybody's like, oh, great, a new weather data set. Yes, a new weather data set.

A Allison, Kristen - FS, CA 42:24
Yeah.

SL Scott Linn 42:25

Is it going to have that significant of impact on your overall thresholds and your breakpoints?

I I would.

I don't think so.

Honestly, I think we're really close to where we're gonna be, and I think you'd see small scale changes.

I do not think you'd see the large scale.

Changes in. You know that that we kind of have seen somewhat with these datasets. I know in certain parts of the country their values didn't change at all once we get this new data set, other parts of the country have had a more significant impact. So I think.

It's gonna be a little bit more even. That's gonna even narrow down more as we just make these smaller refinements.

So.

A Allison, Kristen - FS, CA 43:02
Yeah. And I would just.

I mean I I mean the math is obviously there.

So maybe if that does happen, we could find a way to visually like say hey, your data set has statistically moved in such a way that you might need to do a real analysis.

SL **Scott Linn** 43:17

Correct.

A **Allison, Kristen - FS, CA** 43:17

And you know, the other ones are like, cool, you're good.

I like it, you know.

SL **Scott Linn** 43:21

Yes, yes.

A **Allison, Kristen - FS, CA** 43:21

So yeah, I mean that.

That's all. I would you know that hope for is that you know, we're able to use the tools that we have in our disposal to make sure that.

If that is completed, or force those places that either don't have a very long record where it's the data is itself, wait a lot more heavily where there could be changes because they don't have that 30 years or whatever it is.

SL **Scott Linn** 43:45

Mm-hmm.

A **Allison, Kristen - FS, CA** 43:46

That we somehow figure out a way to make sure that that's very easily and visually done so that when they have to do their next step, revision or whatever they're doing that they know.

That they're gonna have to relook at some of those things again.

SL **Scott Linn** 44:01

Yes.

Yep, and that's that's where we're, you know, I guess now that everybody that we're starting to get to feds everybody's really kind of digging more and more into the data and we're getting some more that analysis that the field is able to do that that we just.

Don't have time on our side, honestly, to run through too heavily. And so we're

getting a much better data scrub of the data which is actually very helpful for us in that I think will help out with when we make these changes, what it actually entails down.

The road.

So and how that impacts your outputs so.

Mr. Turner asks, is there a current issue with wind speeds in relation to forecast versus observe?

Boy, that that wind speeds are going to be the.

That that is going to be everlasting issue. If you really want my blunt opinion on this one.

That opinion it is going to be a huge problem as you start getting into real analysis, understanding many of the stations.

They are not cited properly.

The we are we are utilizing systems that.

Are one observed versus a modeled system, so we're comparing.

Gridded information versus observed information which is never going to correlate 100%, and so when we talk about wind speeds as a whole, we have some very. Juicy topics.

To be discussing as an agency overall because.

One, they're back in the early 90s, there were several.

There was a report that was made for the raw system in national standards that went in to say that we need weather station standards are seven times the OR the clearing width to get accurate wind speeds is 7 times the height of the nearest canopy.

And so somehow we have.

Gotten to now where we're at like one times the.

Height of the nearest canopy and many of the stations have fairly poorly sited wind information.

So you have a station that has maybe 6:00 to 8:00 or 10 years worth of encroachment or was not cited properly in the first time and your wind speeds were dramatically less than what are modelled in the area. Now if you go in and open up that site.

And say I want to get it to meet the standard you now have.

Changed your full on historical analysis because.

Those wind speeds are going to be dramatically less than.

What you would have or what you are currently seeing? Same thing with happening now. If you have a model wind speed in your station that is doing this and the

forecast is pulling and saying this is what your wind speeds are and you have a site that is.

Not accurately measuring winds.

Yes, you're going to see some some large changes, especially in BI and large impacts to BI for that station.

And so that's really where I think a lot of the crux of the issue with wind speeds is going to be coming into is the sighting of these stations and how these models and how how our observed information is working versus the modeled information. And so it will.

Also impact, especially when we do finally move to or we get into having grid work done completely as well and gridded fire danger.

In overlaying points versus overlaying grided information.

Are going to be very different and we should be expecting some changes with this and that's going to be a full on.

Change in our perceptions of how we view and visualize and utilize fire danger going forward.

So a lot of education moving forward with this, Scott, if you have a specific examples of where you're seeing issues, I know that Kelly had brought that up to me as well yesterday. But if you're seeing specific issues with the forecast, please.

Please let me know what that is so you can.

Let me know how that is going forward so.

ST **Scott Turner** 48:13

Yeah, will do. I appreciate it though.

SL **Scott Linn** 48:19

Jamie asked when looking into doing a fresh QA QC, would it be possible to consider backfilling mision at stations if data quality can meet criteria?

Examples by years, I think that discussion is still.

I think there is still some options for that one, but I have got to explore that conversation going forward as well.

So what that would look like, but I think that it is still feasible.

But I need to, I'm guessing going to have to ask more questions on it, Jamie.

To let you know, but I I don't say it's out of the realm of possibilities.

Because it's not.

It's just gonna be to ask the ask Tim to be able to do that for us, so.

DL **Dunbar, Jamie L** 48:59

OK.

I appreciate it.

VT **Verdegan, Travis (DNR)** 49:00

Hey, Jamie, it's Travis.

SL **Scott Linn** 49:01

Yep.

VT **Verdegan, Travis (DNR)** 49:02

Just since you're on, if you can hang out after the call, I'd like to compare a calendar with you.

Trying to.

Kind of schedule something here related to that topic.

DL **Dunbar, Jamie L** 49:13

OK.

Yeah, great.

SL **Scott Linn** 49:18

OK. And I'm going to Travis, you might help me out on the next one 'cause I my my brain is failing me at the moment.

I believe that the forecasted winds are 10m, but they are adjusted to the 20 foot.

Isn't that correct?

We do a calculate, we do a correction for them in there.

VT **Verdegan, Travis (DNR)** 49:40

Umm.

I.

I.

I believe so as well.

That's one of those ones where.

SL **Scott Linn** 49:52

Chuck would help us out on that one.

VT **Verdegan, Travis (DNR)** 49:53

Yeah, truck would be tremendously helpful on that question.

I it is.

SL **Scott Linn** 49:56

I know.

VT **Verdegan, Travis (DNR)** 49:58

It is definitely a pertinent question in one way or the other.

Those are things that we do need to be cognitive to like what you were saying before.

SL **Scott Linn** 50:06

Thank you.

VT **Verdegan, Travis (DNR)** 50:07

So if it's coming in at 10 meters and being applied a wind adjustment factor, in theory it should match up closer to 20 foot winds and then all the stuff related to the siding.

So actually.

What was interesting, Scott, you sent out some of that work that Ben Gannon was doing, looking at the variability.

Related to ERC's and Bi's, and if you looked at that, you saw a higher percentage of stations had more variability for BI.

SL **Scott Linn** 50:36

Mm-hmm.

VT **Verdegan, Travis (DNR)** 50:41

Totally makes sense with wind. When I was doing my transition work, I was comparing my 97th and 90th.

SL **Scott Linn** 50:42

Correct. Yep.

VT **Verdegan, Travis (DNR)** 50:52

For bi.

I and for ERC and I was seeing things to the point now where what I know I was seeing stations that I know are like socked in, like they're just in a small clearing and. They had the lowest BI, but they didn't have the lowest ERC.

So those are things that that tend to make sense when you start to put these pieces together.

SL **Scott Linn** 51:18

Yeah, yeah. There have been some definitely good stuff that really good analysis that Ben was able to get and show us across the country where those impacts were so.

VT **Verdegan, Travis (DNR)** 51:27

Yeah. And I think I mean just really that that whole thing that we haven't even had a chance to fully talk about that.

But when I was looking at that, I was like, that's gonna be that type of variability analysis is really gonna start to hone in on what are the stations that are gonna represent the best. Not that these other stations aren't aren't worthwhile, but you may not wanna look.

SL **Scott Linn** 51:35

Yeah.

VT **Verdegan, Travis (DNR)** 51:49

At them for wind or any any indices that's related to wind.

SL **Scott Linn** 51:58

All right, Kelly, to give Mal. I'm gonna shoot Nick and Chuck a message just to verify. I think it is a just.

I think it is adjusted in the forecast that we have from NOAA, but let me verify and I will respond in the chat to everybody.

So I don't wanna.

I don't wanna give the misnomer that I definitely know.

Because I just don't remember exactly, and it there's just so many so many specifics floating around in my brain.

So.

Let me verify for you and I'll get back to you.

All right.

Uh. Other questions going forward?

Excellent. Well, I appreciate everybody taking the time out of their day today to listen in again, as you have questions, please, please reach out to me if you see issues with fems.

This is how we find a lot of the bugs is because.

You guys are reporting the information to us.

And as we continue our development, we'll you know we'll keep continue to have these calls going forward. Don't have any plan on stopping them unless you guys don't feel the need for them.

So, but so far it seems like we have good conversations going forward, so.

That's all I had for this month and we will chat in November. Thanks everyone.

A Allison, Kristen - FS, CA 53:38

Hey, Scott, you got one more question.

Nathan put it in there.

SL Scott Linn 53:40

Oh yeah.

A Allison, Kristen - FS, CA 53:40

It's about the API and it is available, so you might wanna share within that.

SL Scott Linn 53:42

Oh, yes, exactly. Yep, perfect.

Yeah, that was one of the OK.

So it says Fem's request API.

Yes. So Nathan just sent me a e-mail if you don't mind, and I'll get you through phamoth to give you the request. So.

With the API the I think in October maybe now that user roles are going to be requestable, but I gotta find out when that's becoming live through fam auth and then you will be able to request that role and I'll actually get the the e-mail that says yeah.

This person has requested API access.

We are not limiting API access to anyone, it's just a way for us to.

Be able to e-mail out to that specific user.

Group and know who is using it so that if we have changed the system we can contact you directly as opposed to how things were going in with wiiims in the WXMLS. We didn't know who was plugged into that and who wasn't.

And so that's really why we're just asking for or we have that role in FAM auth.

It's it's not lockdown for any specific reason, so.

All right.

Thanks everyone.

● **Scott Linn** stopped transcription